

(6) Despite subregulation (4), the operator may appoint two quality managers, one for flight operations and one for maintenance but the operator must designate one single quality management unit to ensure that the quality system is applied uniformly throughout the entire operation.

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

SUBPART 12 SECURITY

Aviation security for domestic and international air transport operations

121.12.1 Despite the security requirements specified under this Part, an operator, owner or pilot-in-command, as the case may be, must ensure that the security requirements specified in Parts 108 to 114 in respect of all domestic and international air transport operations are complied with.

SUBPART 13 DANGEROUS GOODS

Transportation of dangerous goods

121.13.1 When transporting dangerous goods the operator, owner or pilot-in-command must comply with the requirements of Part 92.”.

Substitution of Part 127 of Regulations

6. The Regulations are amended by the substitution for Part 127 of the following Part:

“PART 127 COMMERCIAL HELICOPTER OPERATIONS: PASSENGERS, CARGO AND MAIL

LIST OF REGULATIONS

SUBPART 1: GENERAL

127.01.1	Applicability
127.01.2	Admission to flight crew compartment
127.01.3	Passenger intoxication and unruly behaviour
127.01.4	Compliance with laws, regulations and procedures
127.01.5	Regulatory infractions during emergency situations
127.01.6	Language proficiency

SUBPART 2: OPERATIONS PERSONNEL REQUIREMENTS

Division one: Minimum crew requirements

127.02.1	Composition of flight crew
127.02.2	Minimum requirements for assignment as pilot-in-command
127.02.3	Flight and cabin crew member emergency duties
127.02.4	Cabin crew member complement
127.02.5	Senior cabin crew member
127.02.6	Cabin crew emergency evacuation stations

127.02.7 Seating of cabin crew members during flight

Division two: Qualification requirements

127.02.8 Flight crew member qualifications

127.02.9 Cabin crew member qualifications

127.02.10 Crew members, other than flight and cabin crew members

127.02.11 Flight operations officer or flight follower qualifications

127.02.12 Ground personnel and service providers qualifications

Division three: flight time and duty limitations

127.02.13 Flight time and duty scheme

127.02.14 Fatigue risk management system

127.02.15 Approval of fatigue risk management system

127.02.16 Fatigue risk management system manual

SUBPART 3: TRAINING AND CHECKING

Division one: General

127.03.1 Operator approved training and checking programme

127.03.2 Publication of approved training programme

127.03.3 Approval of training programme

Division two: Flight crew member training

127.03.4 Flight crew member training

Division three: Training of cabin crew members

127.03.5 Initial training

127.03.6 Type and differences training

127.03.7 Operator induction training

127.03.8 Familiarisation flights

127.03.9 Recurrent training

127.03.10 Refresher and requalification training

Division four: Training of personnel other than flight and cabin Crew members

127.03.11 Training of personnel other than flight and cabin crew

Division five: Training, checking, certification and validity

127.03.12 Training, checking, certification and validity periods

SUBPART 4: DOCUMENTATION AND RECORDS

127.04.1 Documentary requirements

127.04.2 Operations manual

127.04.3 Aircraft operating manual

127.04.4 Aircraft flight manual

127.04.5 Operational flight plan

127.04.6 Flight time and duty period records

127.04.7 Records of emergency and survival equipment

127.04.8 Crew member training records

127.04.9 Mass and balance sheet

127.04.10 Fuel and oil records

127.04.11 Helicopter search procedure checklist

127.04.12 Preservation of documents

SUBPART 5: HELICOPTER INSTRUMENTS AND EQUIPMENT

- 127.05.1 Approval and use of instruments and equipment
- 127.05.2 Flight, navigation and associated equipment for helicopters operated under visual flight rules
- 127.05.3 Flight, navigation and associated equipment for helicopters operated under instrument flight rules
- 127.05.4 Airborne weather radar equipment
- 127.05.5 Flight crew interphone system
- 127.05.6 Crew interphone system
- 127.05.7 Public address system
- 127.05.8 Life jackets and other flotation devices
- 127.05.9 Survival suits
- 127.05.10 Cabin attendant seats
- 127.05.11 Emergency locator transmitters
- 127.05.12 Microphones
- 127.05.13 Passenger cabin signs and placards
- 127.05.14 Flight recorders
- 127.05.15 Pressure-altitude reporting transponder
- 127.05.16 Vibration health monitoring system
- 127.05.17 Electronic navigation data management

SUBPART 6: AIR OPERATOR CERTIFICATE

- 127.06.1 Requirement to hold air operator certificate
- 127.06.2 Application for issue or amendment of an air operator certificate and operations specifications
- 127.06.3 Application for, consideration of and issue of air operator certificate or operations specifications
- 127.06.4 Validity and status of air operator certificate
- 127.06.5 Safety and security inspections and audits
- 127.06.6 Administrative duties of air operator certificate holder
- 127.06.7 Register of air operator certificates⁴⁴⁴⁴
- 127.06.8 Demonstration flights
- 127.06.9 Foreign air operator certificates

SUBPART 7: FOREIGN AIR OPERATOR PERMIT

- 127.07.1 Requirement for foreign air operator permit
- 127.07.2 Application for foreign air operator permit or amendment of foreign air operator permit
- 127.07.3 Assessment of application and issue of permit
- 127.07.4 Period of validity
- 127.07.5 Transferability
- 127.07.6 Duties of holder of permit
- 127.07.7 Renewal of permit
- 127.07.8 Safety inspections and audits
- 127.07.9 Suspension, revocation and variation of air operator certificate and foreign air operator permit
- 127.07.10 Register of permits

SUBPART 8: FLIGHT OPERATIONS**Division one: General**

- 127.08.1 Routes and areas of operation and aerodrome facilities

- 127.08.2 Establishment of procedures
- 127.08.3 Hazardous flight conditions and unlawful interference
- 127.08.4 Competence of operations personnel
- 127.08.5 Use of air traffic services
- 127.08.6 Minimum flight altitudes
- 127.08.7 Aerodrome operating minima
- 127.08.8 Offshore operations
- 127.08.9 Refueling and defueling with passengers on board
- 127.08.10 Fuel and oil policy
- 127.08.11 Instrument meteorological conditions or night flight without a second-in-command
- 127.08.12 Instrument approach and departure procedures
- 127.08.13 Noise abatement procedures
- 127.08.14 Operation of helicopter in icing conditions
- 127.08.15 Surface contamination programme
- 127.08.16 Mass and balance control
- 127.08.17 Performance based navigation
- 127.08.18 Operations with head-up displays, enhanced vision systems or night vision goggles
- 127.08.19 Operations with electronic flight bags
- 127.08.20 Single-engine helicopter instrument meteorological conditions and night operations
- 127.08.21 In-flight simulation of emergency situations and instrument meteorological conditions

Division two: Operational control

- 127.08.22 Operational control and supervision of flight operations
- 127.08.23 Contracted services for operational control system
- 127.08.24 Operational flight plans
- 127.08.25 Familiarity with weather conditions and technical data
- 127.08.26 Retention of flight operations documents and reports
- 127.08.27 Maintenance status
- 127.08.28 Incidents and defects
- 127.08.29 Minimum equipment list

Division three: Cabin safety

- 127.08.30 Carriage of infants
- 127.08.31 Carriage of persons with a disability
- 127.08.32 Limitations on carriage of infants, children and passengers with disability
- 127.08.33 Carriage of inadmissible passengers, deportees or persons in custody
- 127.08.34 Carry-on baggage
- 127.08.35 Securing of passenger cabin and galley
- 127.08.36 Passenger services
- 127.08.37 Briefing of passengers
- 127.08.38 Safety features card
- 127.08.39 Securing of passengers

SUBPART 9: HELICOPTER PERFORMANCE OPERATING LIMITATIONS

Division one: General

- 127.09.1 Classification
- 127.09.2 General provisions for all classes of helicopters

Division two: Class 1 helicopter

- 127.09.3 Take-off
- 127.09.4 En-route with one or more engines inoperative
- 127.09.5 Approach and landing

Division three: Class 2 helicopter

- 127.09.6 General
- 127.09.7 Take-off
- 127.09.8 En-route with one or more engines inoperative
- 127.09.9 Landing

Division four: Class 3 helicopter

- 127.09.10 General
- 127.09.11 Take-off
- 127.09.12 En-route
- 127.09.13 Landing

SUBPART 10: MAINTENANCE

- 127.10.1 General
- 127.10.2 Helicopter maintenance programme
- 127.10.3 Maintenance contracted to approved aircraft maintenance organisation
- 127.10.4 Operator's maintenance responsibilities
- 127.10.5 Operator's maintenance control manual
- 127.10.6 Maintenance records
- 127.10.7 Continuing airworthiness information
- 127.10.8 Modifications and repairs
- 127.10.9 Maintenance release
- 127.10.10 Records

SUBPART 11: SAFETY AND QUALITY MANAGEMENT SYSTEMS

- 127.11.1 Requirement for safety management system

SUBPART 12: SECURITY

- 127.12.1 Aviation security for domestic and international air transport operations

SUBPART 13: DANGEROUS GOODS

- 127.13.1 Transportation of dangerous goods

**SUBPART 1
GENERAL****Applicability**

- 127.01.1** (1) This Part applies to –
 - (a) any operator of a helicopter registered in Namibia and operated in terms of the Air Services Act;
 - (b) any approved aviation training organisation engaged in the provision of flight training and operating more than five helicopters for flight training;
 - (c) all persons employed or otherwise engaged by the operator, referred to in paragraph (a) or (b), and who perform functions essential to the operation of a helicopter operated under this Part; and
 - (d) all persons, mail or cargo on board a helicopter operated under this Part.

(2) For the purposes of this Part a helicopter registered in another State and operated by the holder of an air operator certificate issued in Namibia, is considered to be registered in Namibia.

(3) Part 91 applies with the necessary changes to any helicopter operated in terms of this Part.

(4) Unless the context suggests otherwise, throughout this Part the expression “operator” means an operator referred to in paragraph (a) or (b) of subregulation (1) and in the absence of the operator referred to in paragraph (a) or (b) of that subregulation, it means the owner of the helicopter operated in Namibia.

(5) Throughout this Part the expression “aerodrome” includes any site used for the take-off or landing of a helicopter, whether licensed, approved or not.

Admission to flight crew compartment

127.01.2 (1) An operator and the pilot-in-command of a helicopter must ensure that a person is not admitted to or carried on the flight crew compartment of the helicopter unless the person is –

- (a) a flight crew member assigned to the flight;
- (b) an authorised officer, inspector or authorised person in accordance with subregulation (2) or (3); or
- (c) permitted by, and carried in accordance with, the instructions contained in the operations manual referred to in regulation 127.04.2.

(2) Where the Executive Director has authorised an authorised officer, inspector or authorised person in terms of regulation 13.01.2 to carry out in-flight inspections of a helicopter engaged in an air service operation and the authorised officer, inspector or authorised person indicates to the pilot-in-command that he or she wishes to carry out such an in-flight inspection, the pilot-in-command must give the authorised officer, inspector or authorised person free and uninterrupted access to the flight crew compartment of the helicopter.

(3) The pilot-in-command must make available for the use of the authorised officer, inspector or authorised person the seat most suitable to perform the official duties, as determined by the authorised officer, inspector or authorised person, whether such seat is located on or off the flight crew compartment.

(4) Despite subregulation (2) or (3), the final decision regarding the admission of any person to the flight crew compartment must be the responsibility of the pilot-in-command.

(5) The admission of any person to the flight crew compartment must not interfere with the operation of the helicopter.

(6) The pilot-in-command must ensure that any person carried on the flight crew compartment is made familiar with the applicable safety equipment and operational procedures.

Passenger intoxication and unruly behaviour

127.01.3 (1) An operator or pilot-in-command must not permit a person to enter or be in a helicopter while under the influence of alcohol or a drug having a narcotic effect, to the extent where the safety of such helicopter or its occupants is, or is likely to be, endangered.

(2) An operator must establish procedures to ensure that any person referred to in subregulation (1) is –

- (a) refused embarkation; or
- (b) if such person is on board, restrained or disembarked.

(3) Each passenger on board a helicopter must obey any command issued by a crew member in the performance of his or her duties.

Compliance with laws, regulations and procedures

127.01.4 (1) An operator must ensure all crew members, while operating within foreign airspace, comply with all air traffic rules and regulations of the State concerned and the local aerodrome and heliport rules, except where any regulation of this Part is more restrictive and may be followed without violating the rules or regulations of that State.

(2) An operator must publish in the operations manual referred to in regulation 127.04.2, such information, procedures and instructions to ensure its personnel are familiar with, and in compliance with the laws, regulations and procedures pertinent to their duties with respect to –

- (a) flight operations into or within domestic and foreign airspace;
- (b) the area over which the operation will occur;
- (c) the aerodromes to be used; and
- (d) air navigation facilities to be used.

(3) Despite subregulation (2), each operator, including its employees or agents, must comply with all applicable provisions of these regulations.

Regulatory infractions during emergency situations

127.01.5 (1) Where the pilot-in-command of a helicopter takes action, considered necessary to ensure the safety of the helicopter, which results in a violation of any regulation of the State in, or over which the helicopter is being operated, he or she must comply with the requirements in regulation 91.01.2 and, where possible, cause the event to be marked on the cockpit voice recorder, if fitted.

(2) Despite any requirement to file a report in terms of regulation 91.01.2, a pilot-in-command must submit a full report of a violation referred to in subregulation (1), to a person responsible for operations within 48 hours after the conclusion of flight concerned in the manner specified in a concerned operator's operations manual.

(3) Despite any requirement to file a report in terms of regulation 91.02.7, the pilot-in-command must submit a full report of the event to the person responsible for operations within 48 hours after the conclusion of the flight in the manner specified in the operations manual referred to in regulation 127.04.2.

Language proficiency

127.01.6 (1) In addition to the English Language Proficiency referred to in Part 61 an operator may not assign a flight crew to duty unless at least one member of the flight crew has, demonstrated to the operator, his or her ability to speak and understand the language used for

radiotelephony communications over any route and aerodrome named in the operational flight plan for that flight.

(2) The level of language proficiency required to be demonstrated to the operator must be as provided for in Document NAM-CATS-OPS 127.

SUBPART 2 OPERATIONS PERSONNEL REQUIREMENTS

DIVISION ONE: MINIMUM CREW REQUIREMENTS

Composition of flight crew

127.02.1 (1) The minimum number and composition of the flight crew of a helicopter must not be less than the minimum number and composition specified in the operations manual referred to in regulation 127.04.2 or in the helicopter's aircraft flight manual referred to in regulation 91.03.2, whichever is the greater, and must take account of the type of helicopter used, the type of operation involved and the duration of flight between points where flight crews are changed.

(2) An operator must allocate additional flight crew members when it is required by the type of operation, and the number of such additional flight crew members must not be less than the number specified in the operations manual referred to in regulation 127.04.2.

(3) An operator may not assign a person, and a person may not act, as a flight crew member on a helicopter type or variant unless the person meets the qualification requirements in regulation 127.02.7.

(4) Each required flight crew member must hold a valid radiotelephony operator licence or equivalent document issued by an appropriate authority, authorising such member to operate the type of radio transmitting equipment to be used.

(5) The flight crew must be proficient in navigating over the route or within the area to be operated.

(6) An operator must ensure that –

(a) in the case of operations under instrument flight rules or by night, when carrying passengers in a helicopter certified for the transport of more than nine passengers; or

(b) in the case of any operation, when 20 or more passengers are carried, the minimum flight crew of such helicopter is two pilots.

(7) A helicopter, other than a helicopter referred to in subregulation (6), may be operated by a single pilot if –

(a) the requirements in Document NAM-CATS-OPS 127 are complied with; or

(b) the minimum flight crew of such helicopter is two pilots.

(8) An operator must designate one pilot among the flight crew as pilot-in-command and the pilot-in-command may delegate the conduct of the flight to another suitably qualified pilot.

(9) A flight crew member may be relieved in flight of his or her flight crew duties by another flight crew member qualified in accordance with regulation 127.02.7.

(10) An operator may not assign flight crew members to any helicopter required to be operated with two flight crew members unless such flight crew meet the crew pairing requirements in document NAM-CATS-OPS 127.

(11) An operator may not assign a person, and a flight crew member may accept any assignment, to act as a flight crew member of any helicopter operated in terms of this Part not unless such person meets the requirements in document NAM-CATS-OPS 127.

(12) An operator must publish procedures in its operations manual referred to in regulation 127.04.2 to ensure flight crew members who do not meet the requirements in subregulations (1) and (2) are not assigned to flight duty.

Flight and cabin crew member emergency duties

127.02.2 (1) An operator and, where appropriate, the pilot-in-command, must assign to each flight and cabin crew member concerned the necessary functions to be performed in an emergency or a situation requiring emergency evacuation, and the operator must establish emergency evacuation procedures based on such assignment.

(2) The functions referred to in subregulation (1) must be such as to ensure that any reasonably anticipated emergency can be adequately dealt with and must take into consideration the possible incapacitation of individual flight and cabin crew members.

(3) With respect to the emergency evacuation procedures required by subregulation (1) –

- (a) the operator must prove to the satisfaction of the Executive Director that the procedures to accomplish the evacuation have been adopted and are adequate; and
- (b) the procedures must be demonstrated by the operator's flight and cabin crew members and carried out in accordance with the requirements in Document NAM-CATS-OPS 127.

(4) An operator must carry out an emergency evacuation demonstration referred to in subregulation (3)(b) when a new type or variant of helicopter or new configuration of an existing helicopter is introduced for use and for any helicopter type which has not been certified under a certification process acceptable to the Executive Director, as provided for in Document NAM-CATS-OPS 127.

(5) The emergency evacuation procedures referred to in subregulation (1) must be contained in the operator's operations manual referred to in regulation 127.04.2 and must form part of the operator's emergency training programme.

(6) A flight or cabin crew member may not accept an assignment of emergency functions unless such flight or cabin crew member has been trained to perform emergency functions in accordance with the requirements in Subpart 3.

Cabin crew member complement

127.02.3 (1) An operator may not operate a helicopter with a certificated passenger seating capacity of 20 or 20 or more in a passenger-carrying service unless –

- (a) one or more cabin crew members have been assigned to duty, if one or more passengers are carried; and

- (b) the minimum number of cabin crew members assigned to a flight is not less than that specified in Document NAM-CATS-OPS 127, despite the actual number of passengers on board the helicopter.
- (2) A cabin crew member must give priority to the performance of duties relating to the safety of passengers as may be assigned by the operator or the pilot-in-command.
- (3) In unforeseen circumstances, the operator may reduce the required minimum number of cabin crew members but –
 - (a) the number of passengers must be reduced in accordance with the procedures specified in the operations manual referred to in regulation 127.04.2; and
 - (b) a report on the reduction of the cabin crew members and passengers must be submitted to the Executive Director after completion of the flight.

Senior cabin crew member

- 127.02.4** (1) An operator must appoint a senior cabin crew member whenever more than one cabin crew member is carried on board a helicopter operated under this Part.
- (2) The senior cabin crew member is responsible to the pilot-in-command for the conduct of cabin operations and the coordination and performance of cabin crew duties.
- (3) An operator must establish procedures to select the next most suitably qualified cabin crew member to operate as a senior cabin crew member in the event of the nominated senior cabin crew member being unable to perform his or her duties.

Cabin crew emergency evacuation stations

- 127.02.5** A cabin crew member assigned to perform evacuation duties must occupy the seat provided for that purpose during take-off and landing or when so directed by the pilot-in-command for safety purposes.

Seating of cabin crew members during flight

- 127.02.6** During take-off and landing, and whenever considered necessary by the pilot-in-command in the interest of aviation safety, cabin crew members must be seated at their assigned stations or seats with the full safety harness or, except for take-off and landing, the seat belt fastened.

DIVISION TWO: QUALIFICATION REQUIREMENTS

Flight crew member qualifications

- 127.02.7** (1) An operator may not permit a person to act and a person may not act as a flight crew member of a helicopter unless, in addition to the recency requirements of regulation 91.02.4, the person –
- (a) holds valid licences, certificates and ratings as required by Part 61 and Part 63 appropriate to the assignment;
 - (b) meets the type and variant training and checking requirements in Subpart 3 and has otherwise fulfilled all applicable training requirements in Document NAM-CATS-OPS 127; and

- (c) in the case of the pilot-in-command of a helicopter operated in accordance with regulation 127.01.1, assigned to duty on a passenger-carrying flight, meets the area, route and aerodrome familiarisation requirements in Document NAM-CATS-OPS 127.
- (2) A pilot who does not meet the recency requirements of regulation 91.02.4 or whose training and checking validity periods have lapsed must regain competency as provided for in the regaining competency requirements in Subpart 3.
- (3) An operator must ensure that a holder of a commercial pilot licence (helicopter) does not operate as a pilot-in-command of a helicopter –
 - (a) certificated for single-pilot operations when operating under instrument flight rules unless the requirements in regulation 127.02.1 (7) are complied with or unless –
 - (i) when conducting operations in accordance with regulation 127.01.1 under visual flight rules outside a radius of 50 nautical miles from a place of departure, the pilot has a minimum of 300 hours total flight time on helicopter or holds a valid instrument rating; or
 - (ii) when operating under instrument flight rules, the pilot has a minimum of 400 hours total flight time on helicopters, which includes 200 hours as pilot-in-command, of which 100 hours have been under instrument flight rules but the 200 hours as pilot-in-command may be substituted by hours operating as second-in-command on the basis of two hours as second-in-command being equivalent to one hour as pilot-in-command and these hours must be gained within an established multi-pilot flight crew system specified in the operations manual referred to in regulation 127.04.2;
 - (iii) the minimum required recent experience for a pilot engaged in a single-pilot operation under instrument flight rules must be 5 instrument flight rules flights, including 3 instrument approaches, carried out during the preceding 90 days on a helicopter approved in the single-pilot role and this requirement may be replaced by an instrument flight rules instrument approach check on the helicopter or in a flight simulator training device approved for the purpose..
 - (iv) 25 hours total instrument flight rules flight experience in the relevant operating environment;
 - (v) 25 hours flight experience on the specific type of helicopter, approved for single-pilot instrument flight rules, of which 10 hours is as pilot-in-command or pilot-in-command-under-supervision, including 5 sectors of instrument flight rules line flying under supervision using the single-pilot procedures;
 - (b) in multi-pilot flight crew operations, and prior to operating as pilot-in-command, the command course specified in paragraph 127.03.4 (1) (f) is completed.
- (4) Where a flight crew member operates more than one helicopter or variant of a helicopter under this Part the provisions of Document NAM-CATS-OPS 127 applies.
- (5) An operator may not utilise a pilot as pilot-in-command of a helicopter on a route, route segment or area for which that pilot is not currently qualified until such pilot has –

- (a) gained route and area qualification by demonstrating adequate knowledge of
 - (i) the route to be flown, and the aerodromes which are to be used and this must include knowledge of –
 - (aa) the terrain and minimum safe altitudes;
 - (bb) the seasonal meteorological conditions;
 - (cc) the meteorological, communication and air traffic facilities, services and procedures;
 - (dd) the search and rescue procedures; and
 - (ee) the navigational facilities and procedures, including any long-range navigation procedures, associated with the route along which the flight is to take place; and
 - (ii) procedures applicable to flight paths over heavily populated areas and areas of high air traffic density, special navigation and communication requirements, terrain and obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures, hazardous meteorological and atmospheric conditions, and applicable operating minima.
- (b) gained aerodrome qualification by making an actual approach into and departure from each aerodrome of landing on the route, accompanied by a pilot who is qualified for the aerodrome, as a member of the flight crew or as an observer in the flight crew compartment, unless –
 - (i) the approach to or departure from the aerodrome is not over difficult terrain and the instrument approach procedures and aids available are similar to those with which the pilot is familiar, and a margin to be approved by the Executive Director is added to the normal operating minima, or there is reasonable certainty that approach and landing can be made in visual meteorological conditions; or
 - (ii) the descent from the initial approach altitude can be made by day in visual meteorological conditions; or
 - (iii) the operator qualifies the pilot-in-command to land at the aerodrome concerned by means of an adequate pictorial method approved by the Executive Director; or
 - (iv) the flight procedures specified in subregulation (5)(b) are conducted in a flight simulator for the applicable helicopter type and approved by the Executive Director for such purpose; or
 - (v) the flight procedures specified in subregulation (5)(b) are conducted in a helicopter, or in a flight simulator for the applicable helicopter type and approved by the Executive Director for such purpose, as part of a training programme specified by the State of the aerodrome where special pilot-in-command qualification for use of that aerodrome is required by that State.
- (6) The pilot-in-command's route and aerodrome qualification referred to in subregulation (5) must –

- (a) for aerodrome qualification, remain valid for 12 months from the date of completion of the requirements in subregulation (5)(b);
 - (b) for route qualification, remain valid for 12 months from the date of completion of the requirements in subregulation (5)(a), or subsequently from the date of the last flight within the applicable route or area, such flight being conducted as an operating flight crew member, instructor, examiner or observer;
 - (c) in the event of a pilot-in-command's route or aerodrome qualification expiring, be renewed by completion of the requirements in subregulation (5).
- (7) Unless otherwise approved by the Executive Director, an operator may not assign a person to act, and a person may not act, as the pilot-in-command or second-in-command on more than –
- (a) two different types of helicopters, for which a separate licence endorsement is required, under this Part;
 - (b) one type of helicopter under this Part and an additional two aeroplane types of a maximum certificated take-off mass in excess of 5 700 kilogrammes, for which a separate licence endorsement is required, if operating under Parts 93, 121 or 135; or
 - (c) two different types of helicopters for which a separate licence endorsement is required under this Part and one additional different aeroplane type of maximum certificated take-off mass in excess of 5 700 kilogrammes, for which a separate licence endorsement is required, if operating under Parts 93, 121 or 135.
- (4) A pilot operating on more than one type of helicopter under this Part must meet the requirements in Document NAM-CATS-OPS 127.

Cabin crew member qualifications

127.02.8 An operator may not assign a person to act, and a person may not act, as a cabin crew member on board a helicopter unless the person –

- (a) holds a valid licence and appropriate ratings issued in terms of Part 64;
- (b) has successfully completed the operator's approved training programme outlined in Subpart 3, except that a person may act as a cabin crew member while undergoing operator induction training if the person is carried in addition to the number of cabin crew members required by regulation 127.02.2 (1) and is under the supervision of a cabin crew member; and
- (c) has successfully completed operator induction training within 90 days after completing the operator's training programme or has regained competency in accordance with Subpart 3.

Crew members, other than flight and cabin crew members

127.02.9 An operator may not assign a person to act, and a person may not act, as a specialist crew member, other than a flight or cabin crew member, on board a helicopter unless the person has successfully completed the operator's approved training programme for such specialists outlined in Subpart 3.

Flight operations officer or flight follower qualifications

127.02.10 (1) An owner or operator must ensure that all personnel assigned to, or directly involved in ground and flight operations, are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.

(2) An operator must exercise operational control over all flight operations and thereto establish and maintain an approved method of supervision over all flights and if necessary, the operator must employ additional personnel as flight operations officers or flight followers.

(3) An operator may not permit a person to act, and a person may not act, as a flight operations officer, other than a person holding or having held a valid flight crew licence, unless he or she meets the training and checking requirements in Subpart 3.

(4) An operator may not permit a person to act, and a person may not act, as a flight follower unless he or she has successfully completed the training and checking requirements in Subpart 3, but this requirement does not apply to any person holding or having held a valid flight crew licence.

Ground personnel and service providers qualifications

127.02.11 An operator licensed to operate in accordance with regulation 127.01.1, must employ sufficient ground personnel or service providers capable of delivering essential ground support services appropriate to the helicopters and type of service being operated.

DIVISION THREE: FLIGHT TIME AND DUTY LIMITATIONS**Flight time and duty scheme**

127.02.12 (1) An operator must –

- (a) establish a scheme for the regulation of flight time and duty periods, rest periods and days free of duty, as applicable, for each flight crew member and cabin crew member and that complies with –
 - (i) the flight time and duty period limitations, rest periods and days free of duty, specified in Document NAM-CATS-OPS 127; or
 - (ii) a system of flight time and duty period limitations, rest periods and days free of duty, proposed by the operator, where the Executive Director is of the opinion that an equivalent level of safety may be achieved by the operator's proposed scheme; and
- (b) publish the scheme referred to in subregulation (1)(a) in the operations manual referred to in regulation 127.04.2.

(2) An operator may not assign an assignment to a crew member, and a crew member may not accept an assignment, if the assignment is not in compliance with the scheme referred to in subregulation (1)(a) or if –

- (a) the operator or crew member knows or has been made aware that such flight assignment will cause the crew member to exceed the flight time and duty periods referred to in subregulation (1) (a) while on flight duty; or

- (b) the crew member is suffering, or having regard to the circumstances of the flight to be undertaken is likely to suffer, from fatigue, which may endanger the safety of the helicopter or its crew members and passengers.

(3) An operator may not schedule a flight crew member for active flight duty for a period exceeding the maximum hours specified in Document NAM-CATS-OPS 127 during any given flight time and duty period unless authorised in the scheme referred to in subregulation (1)(a).

(4) Where any flight crew member, cabin crew member or flight operations officer is aware of any reason they would be in violation of the scheme referred to in subregulation (1) (a), that person must, without delay, inform the person responsible for flight operations or his or her designated alternate.

(5) The provisions to be included in a flight time and duty scheme referred to in subregulation (1) must be as provided for in Document NAM-CATS-OPS 127.

Fatigue risk management system

127.02.13 (1) An operator who establishes a scheme for the regulation of flight time and duty periods in accordance with regulation 127.02.12 (1)(a)(ii) must establish a fatigue risk management system for the purpose of managing fatigue.

(2) An operator's fatigue risk management system must contain, as a minimum:

- (a) a fatigue risk management system policy;
- (b) a fatigue risk management process;
- (c) a safety assurance process; and
- (d) a fatigue risk management system promotion process:

specified in Document NAM-CATS-OPS 127.

(3) An operator must designate a person responsible for the fatigue risk management system who meets the qualifications and experience requirements and who will be responsible for the functions specified in Document NAM-CATS-OPS 127.

- (4) A fatigue risk management system established in terms of subregulation (1) must –
 - (a) be based upon scientific principles, knowledge and operational experience with the aim of ensuring that flight crew and cabin crew members are performing at an adequate level of alertness; and
 - (b) be integrated with the safety management system.

Approval of fatigue risk management system

121.02.14 (1) An operator must submit to the Executive Director their proposed fatigue risk management system which complies with regulation 127.02.13(2).

(2) The Executive Director must approve the commencement of a trial phase for implementation of the proposed fatigue risk management system for a trial period of up to 36 months if the Executive Director is satisfied that the operator has complied with regulation 127.02.13(2).

(3) At any time during the approved trial phase, the Executive Director may withdraw the approval if it becomes evident that the operator does not comply with the system or these regulations.

(4) During the trial phase, the operator may implement the proposed maximum and minimum flight time and duty values, as determined by the operator and approved by the Executive Director.

(5) After a 24 months period an operator, approved under subregulation (2) may apply to the Executive Director for full approval by providing evidence that the fatigue risk management system is delivering the required safety outcomes.

(6) Where the Executive Director is satisfied that the evidence provided under subregulation (5) is acceptable, the Executive Director must issue a full approval to implement the fatigue risk management system.

Fatigue risk management system manual

121.02.15 (1) An operator must draw up a fatigue risk management system containing all the information required under this Part and publish the content in their operations manual as provided for in Document NAM-CATS-OPS 127.

SUBPART 3 TRAINING AND CHECKING

DIVISION ONE: GENERAL

Operator approved training and checking programme

127.03.1 (1) An operator must establish, implement and maintain a training and checking programme for all personnel referenced in Divisions One to Four of this Subpart that will ensure the personnel are adequately trained and qualified to perform their assigned duties and the personnel must undergo the training from that operator, except as provided in Document NAM-CATS-OPS 121.

(2) The training programme referred to in subregulation (1) must be conducted by an aviation training organisation approved in accordance with Part 141 or by the operator if approved by the Executive Director as provided in regulation 127.03.3 but if approved to be conducted by the operator –

- (a) the programme must be conducted for the operator's employees only; and
- (b) with respect to any licence, rating or validation under Part 61 or 64, the training must be restricted to –
 - (i) training for an instrument rating revalidation;
 - (ii) initial type rating, familiarisation and differences training; and
 - (iii) training for licence renewals and proficiency checks; or
- (c) the training must be for any other qualification or certification required under this Part.

(3) The training programme referred to in subregulation (1) must be approved by the Executive Director as provided in regulation 127.03.3.

- (4) An operator must ensure that –
 - (a) prior to assignment to duty, each person required to receive training in accordance with this Subpart, must, whether employed on a full or part time basis, receive such training as appropriate to his or her duties;
 - (b) each person, receiving training in terms of subregulation (2) (a), must pass a written examination or other comprehension assessment acceptable to the Executive Director and where applicable, complete a skills test in accordance with Division five of this Subpart; and
 - (c) if training is provided in terms of subregulation (2) (a), the training facilities, equipment and personnel must be appropriate for the task to be performed and acceptable to the Executive Director and, in the case of training and checking personnel, their qualifications must meet the requirements specified in Document NAM-CATS-OPS 127.
- (5) The training and checking programme referred to in subregulation (1) must meet the content specified in Document NAM-CATS-OPS 127.
- (6) The training programme referred to in subregulation (1) must include a system of record keeping referred to in regulation 127.04.8.
- (7) The training records referred to in subregulation (6) must be retained as provided in regulation 127.04.8.

Publication of approved training programme

127.03.2 (1) An operator must publish the training programme referred to in regulation 127.03.1 (1) in the operations manual referred to in regulation 127.04.2.

Approval of training programme

127.03.3 (1) An operator must submit its ground and flight training programme and any amendments to its ground and flight training programme to the Executive Director for approval.

(2) The initial and final approval process must be as provided for in Document NAM-CATS-OPS 127.

(3) The Executive Director may approve an operator to have its training programme either in whole or in part contracted out to another organisation in accordance with Document NAM-CATS-OPS 127.

DIVISION TWO: FLIGHT CREW MEMBER TRAINING

Flight crew member training

127.03.4 (1) An operator must provide ground and flight training, as applicable to the operator's flight crew personnel appropriate to the helicopter types, equipment and routes they operate that includes at least the following training components –

- (a) company induction training on an initial basis;

- (b) crew resource management training including human factors, crew coordination, risk analysis and error management training;
 - (c) emergency procedures training including –
 - (i) the location, inspection schedules, testing as applicable and use of all emergency equipment required to be carried, or otherwise carried on board the helicopter;
 - (ii) emergency evacuation, and where applicable ditching training; and
 - (iii) training in the functions for which each flight crew member is responsible and the coordination of these functions with the functions of other crew members, particularly in regard to abnormal or emergency procedures;
 - (d) initial helicopter type training if applicable, including visual, instrument and special flight procedures, crew co-ordination in all types of emergency situations, normal, abnormal, emergency and supplementary procedures for the type of helicopter assigned to, including situations and procedures associated with engine, transmission, rotor, airframe or systems malfunctions, fire or other abnormalities;
 - (e) recurrent training;
 - (f) upgrade training;
 - (g) differences and familiarisation training where the operator intends to assign a flight crew member to variant types, in accordance with regulation 127.02.7 (1) (b);
 - (h) pilot qualification to operate in either pilot seat;
 - (i) regaining recency and requalification training when required;
 - (j) area, route and aerodrome familiarisation training,
 - (k) dangerous goods training if dangerous goods are authorised to be carried, or dangerous goods awareness training if they are not;
 - (l) any other course of studies required by the Executive Director as provided for in Document NAM-CATS-OPS 127 to ensure full competency of personnel on new or special equipment installed in the operator's helicopter, or for operations requiring specialised training.
- (2) Except where noted in Document NAM-CATS-OPS 127, all training components listed in subregulation (1), must be provided on an initial and an annual recurrent basis and meet the requirements in Document NAM-CATS-OPS 127.
- (3) Each training element specified in subregulation (1) must include a suitable assessment of competence.

DIVISION THREE: TRAINING OF CABIN CREW MEMBERS

Initial training

127.03.5 An operator, who is required to engage cabin crew in its operations, must ensure that each cabin crew member successfully completed the initial training as provided for in Part 64, before undertaking helicopter type and differences training.

Type and differences training

127.03.6 (1) A cabin crew member must complete a type training course when –

- (a) engaged by the operator as a cabin crew member; or
- (b) assigned to act as a cabin crew member on another helicopter type.

(2) An operator must ensure that each cabin crew member successfully completes the initial helicopter type training as provided for in Document NAM-CATS-OPS 127 before undertaking flight operations with the operator.

(3) A cabin crew member must complete a differences training course when acting as a cabin crew member –

- (a) in a variant of the current helicopter type; or
- (b) in a helicopter type with equipment, equipment location, or safety procedures which differ from the current helicopter type or variant.

(4) An operator must determine the content of the type or differences training course taking account of the cabin crew member's previous training as recorded in the cabin crew member's training records referred to in regulation 127.04.8.

(5) An operator must ensure that –

- (a) type training is conducted in a structured manner, in accordance with the requirements in Document NAM-CATS-OPS 127;
- (b) differences training is conducted in a structured manner; and
- (c) type training and differences training includes the use of all emergency and survival equipment and all emergency procedures applicable to the helicopter type or variant and involves training and practice on either a representative training device or on the actual helicopter.

Operator induction training

127.03.7 (1) An operator must ensure that each cabin crew member has completed the operator induction training, specified in the operations manual referred to in regulation 127.04.2, before undertaking duties assigned to them.

(2) A cabin crew member must complete an operator induction training course upon initial engagement by the operator.

(3) An operator induction training referred to in subregulation (1) must consist of the subject matter specified in Document NAM-CATS-OPS 127.

Familiarisation flights

127.03.8 An operator must ensure that upon completion of type training, differences training or requalification training, each cabin crew member undertakes familiarisation flights before acting as one of the minimum number of cabin crew members referred to in regulation 127.02.2.

Recurrent training

127.03.9 (1) An operator must ensure that each cabin crew member undergoes recurrent training, covering the actions assigned to each cabin crew member in evacuation and other appropriate normal and emergency procedures and drills relevant to the helicopter type or variant in accordance with the requirements as provided for in Document NAM-CATS-OPS 127.

(2) An operator must ensure that the recurrent training and checking programme syllabus includes the theoretical and practical instruction, as well as individual practice, as provided for in Document NAM-CATS-OPS 127.

(3) Upon successful completion of the recurrent training and checking, the operator must issue a certificate of competency to the cabin crew member concerned, which certificate must be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such certificate is issued.

Refresher and requalification training

127.03.10 (1) An operator must ensure that a cabin crew member who has not been absent from all flying duties, and has not acted as a cabin crew member on a particular helicopter type for a period of up to and including six months, completes –

- (a) requalification training in the helicopter type; or
- (b) two familiarisation flights during commercial air transport operations in such helicopter type,

before undertaking duties on the helicopter type.

(2) An operator must ensure that each cabin crew member who has been absent from all flying duties for more than six months completes the requalification training specified in the operations manual referred to in regulation 127.04.2 and as provided for in Document NAM-CATS-OPS 127.

DIVISION FOUR: TRAINING OF PERSONNEL OTHER THAN FLIGHT AND CABIN CREW MEMBERS**Training of personnel other than flight and cabin crew**

127.03.11 (1) An operator must provide initial, recurrent and requalification training and checking as provided for in Document NAM-CATS-OPS 127 for any person whose function is essential to safe operations in terms of this Part.

- (2) The training will be given to at least –
 - (a) flight operations officers and flight followers;
 - (b) ground service personnel whose function involves working in, on or around the operator's aeroplanes; and
 - (c) any other person considered necessary by the Executive Director.

DIVISION FIVE: TRAINING, CHECKING, CERTIFICATION AND VALIDITY**Training, checking, certification and validity periods**

127.03.13 (1) An operator must provide checks including an inflight proficiency line check or demonstration of competency as provided for in Document NAM-CATS-OPS 127.

(2) The issue of any certificate or other means of certifying competency must be as provided for in Document NAM-CATS-OPS 127.

(3) The following training, checking or demonstration of competency validity periods apply –

(a) for flight crew members –

- (i) training is valid to the first day of the thirteenth month following the month in which the training took place;
- (ii) an operator proficiency check is valid to the first day of the seventh month following the month in which a pilot proficiency check took place;

(b) for cabin crew members –

- (i) training is valid to the first day of the thirteenth month following the month in which the training took place;
- (ii) examinations and competency checks are valid to the first day of the thirteenth month following the month the examination or check took place;

(c) for persons other than flight or cabin crew members –

- (i) for flight operations officers, training and checks are valid to the first day of the thirteenth month following the month the training or demonstration of competency took place; and
- (ii) for all others, training and checks are valid to the first day of the twenty-fifth month following the month the training, check or demonstration of competency took place.

(4) Where any required training, check or demonstration of competency is renewed within the last 60 days of its validity period, its validity period commences from the date of expiry of the previous training, check or demonstration of competency.

(5) The Executive Director may extend the validity period of any required training, check or demonstration of competency by up to 30 days where the Executive Director is satisfied that the application is justified and that aviation safety is not likely to be compromised but the request for extension must be submitted prior to the expiration of the training, check or demonstration of competency.

(6) Completion of any required training, check or demonstration of competency at any time during the periods specified in paragraphs (3) or (4) must be considered as completed in the month due for calculation of the next due date.

DIVISION SIX: AVIATION SECURITY TRAINING**Crew member aviation security training programmes**

127.03.14 (1) An operator must establish and maintain approved initial and annual recurrent security training programmes which ensures crew members act in the most appropriate manner to minimize the consequences of acts of unlawful interference and as a minimum, this programme must include –

- (a) determination of the seriousness of any occurrence;
- (b) crew communication and coordination;
- (c) appropriate self-defence responses;
- (d) use of non-lethal protective devices assigned to crew members where use of such devices is approved by the Executive Director;
- (e) understanding of behaviour of terrorists so as to facilitate the ability of crew members to cope with hijacker behaviour and passenger responses;
- (f) live situational training exercises regarding various threat conditions;
- (g) flight crew compartment procedures to protect the helicopter; and
- (h) aeroplane search procedures and guidance on least-risk bomb locations where practicable.

Aviation security training programmes – other staff

127.03.15 An operator must establish and maintain a 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 a helicopter so that they contribute to the prevention of acts of sabotage or other forms of unlawful interference.

**SUBPART 4
DOCUMENTATION AND RECORDS****Documentary requirements**

127.04.1 (1) An operator must ensure that, in addition to the requirements in regulation 91.03.1, the following documents are carried on board the helicopter during flight –

- (a) a copy of the operational flight plan; if applicable;
- (b) the special loads notification (notification to captain) if applicable;
- (c) the insurance certificate or proof of insurance;
- (d) a certified copy of the latest updated air operator certificate and operations specifications;
- (e) a mass and balance sheet referred to in regulation 127.04.9; and
- (f) a copy of the relevant portions of the aircraft operations manual referred to in regulation 127.04.2 applicable to the flight to be undertaken.

(2) In the case of any other operation than the ones referred to in subregulation (1) those documents must be available on the ground at the point of operation.

(3) An operator must ensure that the following documents are retained in a safe place at the first point of departure in respect of each flight undertaken by the helicopter –

- (a) a copy of the operational flight plan, if applicable;
- (b) copies of the relevant parts of the flight folio;
- (c) the mass and balance sheet referred to in regulation 127.04.9;
- (d) the passenger list or cargo manifest, if applicable;
- (e) the notification to captain, if applicable; and
- (f) a general declaration in the case of a helicopter engaged in international flights.

(4) Except when otherwise instructed by the Executive Director, the documents referred to in subregulation (3) must be retained at the operator's main base of operations, or other location if approved by the Executive Director, for a period of at least 90 days.

Operations manual

127.04.2 (1) An operator must draw up an operations manual containing all information required under this Part and setting out the manner in which such operator will operate the air service for which the operator is licensed in terms of the Act and the Air Services Act.

(2) An operator must ensure that –

- (a) the operations manual and supporting documentation provide adequate instructions to operations personnel in their particular duties and responsibilities and the relationship of such duties to the operation as a whole;
- (b) all parts of the operations manual are consistent and compatible in form and content and must not contravene the conditions contained in the air operator certificate or operations specifications issued to the operator in terms of regulation 127.06.3;
- (c) the manual can be readily amended;
- (d) the operations manual contains an amendment control page and a list of effective pages showing the effective date for each page in the operations manual; and
- (e) the operations manual has the date of the last amendment to each page specified on that page that agrees with the list of effective pages.

(3) An operator must submit the operations manual in the English language in duplicate to the Executive Director for approval.

(4) If the Executive Director is satisfied that the operator –

- (a) will comply with the provisions of regulation 127.06.7; and
- (b) will not operate the air service concerned contrary to any provision of Act or the Air Services Act,

the Executive Director must certify in writing on both copies of the operations manual that the operations manual has been approved and must return one copy of the approved operations manual to the operator.

(5) An operator must amend its operations manual –

- (a) where there is a change in any aspect of an operator's operation;
- (b) where the operations manual no longer meets the requirements of these regulations or associated technical standards; or
- (c) when so required by the Executive Director.

(6) An operator must submit an amendment to its operations manual in duplicate to the Executive Director for approval and if the Executive Director is satisfied that the operator will comply with subregulation (4), the Executive Director must certify in writing on both copies of the amendment to the approved operations manual that such amendment has been approved and must return one copy of the approved amendment to the operator.

(7) An operator must at all times operate its helicopters in accordance with the approved operations manual or an approved amendment to its approved operations manual.

(8) An operator must –

- (a) ensure that all operations personnel are able to understand the technical language used and that the information provided will ensure that such personnel are properly instructed in their particular duties and responsibilities and the relationship of such duties to the operation as a whole;
- (b) ensure that every flight is conducted in accordance with the operations manual and that those parts of the operations manual which are required for the conduct of a flight are easily accessible to the crew members on board during flight time;
- (c) make the operations manual available for the use and guidance of operations personnel;
- (d) provide the crew members with their own personal copy of the sections of the operations manual which are relevant to the duties assigned to them and designating such crew members as operations manual holders;
- (e) provide each operations manual holder with copies of all amendments after approval by the Executive Director and ensure that operations manual holders do insert the amendments issued to them prior to their next flight assignment; and
- (f) keep the operations manual in a safe place.

(9) The structure and contents of the operations manual referred to in subregulation (1) must be as provided for in Document NAM-CATS-OPS 127.

(10) An operator may provide the operations manual in an electronic format if a means of accessing the information during flight time is also made available to any crew member who may have need to access such information.

Aircraft operating manual

127.04.3 (1) An operator must compile an aircraft operating manual for each helicopter type being operated and make it available during flight time to all flight crew members assigned to the helicopter and each flight crew member must operate the helicopter in accordance with the aircraft operating manual and the operator must also provide the portions of the aircraft operating manual to other operator's employees or agents where their need to know can be established.

(2) The aircraft operating manual must be approved by the Executive Director and contain the information specified in Document NAM-CATS-OPS 127.

(3) An operator must provide each flight crew member with any amendments to the aircraft operating manual.

(4) An operator may provide the aircraft operating manual in an electronic format provided a means of accessing the information during flight time has also been made available to any crew member who may have need to access the information therein.

(5) The aircraft operating manual may be included in the operations manual referred to in regulation 127.04.2 or be published as a stand-alone document as part of the manual system.

(6) The design of the manual must observe Human Factors principles.

Aircraft flight manual

127.04.4 (1) An operator must maintain and operate its helicopters in accordance with the approved aircraft flight manual required by regulation 91.03.2.

(2) An operator must maintain a system that ensures timely receipt and insertion of all aircraft flight manual revisions as published by the helicopter manufacturer or as required by the Executive Director.

(3) Where an operator provides an operations manual that meets the requirements of subregulation (2) an aircraft flight manual referred to in regulation 91.03.2 is not required to be carried on board the helicopter.

Operational flight plan

127.04.5 (1) An operator must ensure that an operational flight plan that meets the requirements in Document NAM-CATS-OPS 127 is completed for each flight undertaken by its helicopters in terms of this Part.

(2) The procedures for the use of the operational flight plan and a copy of it must be contained in the operations manual referred to in regulation 127.04.2.

(3) All entries in the operational flight plan must be current and permanent in nature.

(4) The operational flight plan must be retained by the operator for a period of at least 90 days.

Flight time and duty period records

127.04.6 (1) An operator must –

- (a) maintain current records of flight time, duty periods and rest periods of all crew members and flight operations officers engaged by such operator; and
- (b) retain the flight time and duty period records for a period of 15 calendar months calculated from the date of the last flight of each crew member or, for flight operations officers, from their last date of engagement.

(2) A flight crew member who is engaged by more than one operator or otherwise accumulates flight time outside of his or her employment, must maintain an accurate record of his or her flight time and duty periods and must provide copies of that record to all operators by whom the crew member is engaged.

(3) While a flight crew member is responsible to report all flight activity, each employer is responsible for ensuring that the crew member concerned does not exceed the limits specified in the flight time and duty scheme of the operator referred to in regulation 127.02.12.

Records of emergency and survival equipment

127.04.7 (1) An operator must compile a list of all the survival and emergency equipment to be carried in a commercial air transport helicopter and must have such list available at all times for immediate communication to rescue coordination centres.

(2) The survival and emergency equipment list must be included in the operations manual referred to in regulation 127.04.2.

(3) The format and minimum information to be included in the survival and emergency equipment list must be as specified in Document NAM-CATS-OPS 127.

Training records

127.04.8 (1) An operator must establish a training file for each person required to receive training and retain on the file a record of all training and checking required in terms of Subpart 3 and the records of training and checking must contain at least the information specified, and be retained for the period of time specified, in Document NAM-CATS-OPS 127.

(2) An operator must establish procedures to make a person's training file available for supervised review by such person, but all training files must remain in the custody of the operator.

Mass and balance sheet

127.04.9 (1) An operator operating helicopters subject to the provisions of this Part must ensure that no flight is undertaken by the helicopter unless the person superintending the loading of such helicopter has completed and certified a mass and balance sheet.

(2) A mass and balance sheet must be completed in duplicate and one copy must be carried in the helicopter and, one copy must be retained in accordance with regulation 127.04.1.

(3) The mass and balance sheet must be retained by the operator for a period of at least 90 days calculated from the date on which the flight was completed.

(4) The minimum contents of a mass and balance sheet must be as provided for in Document NAM-CATS-OPS 127.

Fuel and oil records

127.04.10 An operator must maintain records of the fuel and oil taken on board for flight and used during flight time and must keep such records for a period of at least 90 days following each flight or series of flights.

Helicopter search procedure checklist

127.04.11 (1) An operator must ensure that there is on board its helicopters a checklist of the procedures to be followed in searching for a bomb in case of suspected sabotage and for inspecting helicopters for concealed weapons, explosives or other dangerous devices when a well-founded suspicion exists that the helicopter may be the object of an act of unlawful interference.

(2) The checklist referred to in subregulation (1) must be supported by guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and information on the least-risk bomb location specific to the helicopter where such information is available from the manufacturer, including, where appropriate, any means of attenuating and directing the blast for use at the least-risk bomb location.

Preservation of documents

127.04.12 (1) An operator must retain any document required in terms of this Subpart for the period of time specified in this Subpart even where, prior to the expiry of the retention period, the operator ceases to maintain ownership or possession of the helicopter concerned or employ the personnel concerned.

(2) Completed flight preparation forms must be kept by the operator for a period of 90 days.

SUBPART 5 HELICOPTER INSTRUMENTS AND EQUIPMENT

Approval and use of instruments and equipment

127.05.1 (1) An operator must ensure that a flight does not commence unless the instruments and equipment required under this Subpart, or otherwise installed on a helicopter, are such that they will enable the flight crew to control the flight path of the helicopter, carry out any required procedural manoeuvres and observe the operating limitations of the helicopter in the expected operating conditions and are –

- (a) subject to the provisions of subregulation (2), approved and installed in accordance with the requirements, including operational and airworthiness requirements, applicable to such instruments and equipment; and
- (b) in a condition for safe operation of the kind being conducted, except as provided for in the minimum equipment list.

(2) Except as provided in subregulation (1)(b) and subregulation (4), a person may not conduct a take-off in a helicopter with instruments or equipment that are not serviceable or that have been removed, where such instruments or equipment are required by –

- (a) the standards of airworthiness that apply to the type of flight being undertaken;
- (b) any equipment list published by the helicopter manufacturer respecting helicopter equipment that is required for the intended flight;

- (c) an air operator certificate;
 - (d) an airworthiness directive; or
 - (e) these regulations.
- (3) An operator must not be required to obtain approval for the –
- (a) fuses referred to in regulation 91.04.2;
 - (b) intrinsically safe electric torches referred to in regulation 91.04.3(1)(d);
 - (c) accurate time piece referred to in regulations 91.04.4 and 91.04.5;
 - (d) first aid equipment referred to in regulation 91.04.13;
 - (e) megaphones referred to in regulation 91.04.21;
 - (f) survival equipment referred to in regulation 91.04.24 and 91.04.25; and
 - (g) sea anchors and equipment for the mooring, anchoring or manoeuvring of amphibious helicopters on water, referred to regulation 91.04.27.
- (4) A person may conduct a take-off in a helicopter that has instruments or equipment that are not serviceable or that have been removed where the helicopter is operated in accordance with the conditions of a flight permit that has been issued by the Executive Director specifically for that purpose.
- (5) A person may not conduct a take-off in a helicopter for which a minimum equipment list has not been approved and the helicopter has instruments and equipment, other than the instruments and equipment specified in subregulation (2), that are not serviceable or that have been removed unless –
- (a) where the unserviceable instrument or equipment is not removed from the helicopter, it is isolated or secured so as not to constitute a hazard to any other helicopter system or to any person on board the helicopter;
 - (b) the appropriate placards are installed as required by the maintenance control manual; and
 - (c) an entry recording the actions referred to in paragraphs (a) and (b) is made in the flight folio, as applicable.

Flight, navigation and associated equipment for helicopters operated under visual flight rules

127.05.2 (1) An operator may not operate the helicopter in accordance with visual flight rules by day, unless such helicopter is equipped with –

- (a) a magnetic compass;
- (b) an accurate time-piece on board indicating the time in hours, minutes and seconds;
- (c) a sensitive pressure altimeter with a subscale setting, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;

- (d) an airspeed indicator;
 - (e) a vertical speed indicator and an attitude indicator if operated at night but a helicopter with a maximum certificated take-off mass of 2 730 kilogrammes or less, does not have to comply with this requirement;
 - (f) a stabilised direction indicator if operated at night; and
 - (g) a means of indicating in the flight crew compartment the outside air temperature in degrees Celsius.
- (2) An operator may not operate the helicopter in accordance with visual flight rules by night, unless such helicopter is equipped with –
- (a) the equipment specified in subregulation (1);
 - (b) an attitude indicator (artificial horizon) for each required pilot and one additional attitude indicator;
 - (c) a slip indicator;
 - (d) a heading indicator (directional gyroscope or approved equivalent); and
 - (e) a vertical speed indicator.
- (3) If in terms of these regulations, other than for training or testing, or in terms of the type certificate of the helicopter two pilots are required to operate a helicopter, the second pilot's station must be equipped with –
- (a) a sensitive pressure altimeter with a subscale setting calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;
 - (b) an airspeed indicator;
 - (c) a vertical speed indicator;
 - (d) a turn-and-slip indicator or a turn coordinator, incorporating a slip indicator;
 - (e) an attitude indicator; and
 - (f) a stabilised Executive Director indicator.
- (4) A helicopter being operated in terms of subregulation (2) in accordance with visual flight rules by night –
- (a) outside a radius of 15 nautical miles from its point of departure; or
 - (b) if on a cross-country flight, for longer than 20 minutes; or
 - (c) over water at a distance from land corresponding to more than 10 minutes at normal cruise speed,

must be equipped with two attitude indicators, each powered by a different power source, and a radio altimeter with an audio warning operating below a pre-set height and a visual warning capable of operating at a height selectable by the pilot.

Flight, navigation and associated equipment for helicopters operated under instrument flight rules

127.05.3 (1) An operator may not operate a helicopter in accordance with instrument flight rules, unless the helicopter is equipped with –

- (a) a magnetic compass;
- (b) an accurate time-piece on board indicating the time in hours, minutes and seconds;
- (c) two sensitive pressure altimeters with subscale settings, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;
- (d) in the case of a helicopter having a maximum certificated mass exceeding 3 180 kilogrammes or a maximum passenger seating configuration of more than nine seats, a radio altimeter with an audio warning operating below a pre-set height and a visual warning capable of operating at a height selectable by the pilot;
- (e) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing, including a warning indicator of pitot heater failure;
- (f) a vertical-speed indicator;
- (g) a turn-and-slip indicator or instead an additional attitude indicator powered by a power source separate from that of the main attitude indicator;
- (h) an attitude indicator;
- (i) a single standby attitude indicator, capable of being used from either pilot's station, which –
 - (i) is powered continuously during normal operation and, after a total failure of the normal electrical generating system, is powered from a source independent of the normal electrical generating system;
 - (ii) provides reliable operation for a minimum of 30 minutes after total failure of the normal electrical generating system, taking into account other loads on the emergency power supply and operational procedures;
 - (iii) operates independently of any other attitude indicating system;
 - (iv) is operative automatically after total failure of the normal electrical generating system; and
 - (v) is appropriately illuminated during all phases of operation:but if the standby attitude instrument system is capable of being used through flight attitudes of 360° of pitch and roll, the turn-and-slip indicators may be replaced by slip indicators;
- (j) a stabilised direction indicator;
- (k) a means of indicating in the flight crew compartment the outside air temperature in degrees Celsius;

- (l) an alternate source of static pressure for the altimeter and the airspeed and vertical speed indicators;
- (m) a chart holder in an easily readable position which can be illuminated, if to be operated by night;
- (n) a means of indicating whether the electrical or pneumatic power supply to a gyroscope instrument is adequate;
- (o) a stabilisation system, unless it has been demonstrated to the satisfaction of the certificating authority that the helicopter possesses, by nature of its design, adequate stability without such a system; and
- (p) for helicopters with maximum certificated take-off mass in excess of 3 175 kilogrammes or a maximum passenger seating configuration of more than 9, a ground proximity warning system which has a forward-looking terrain avoidance function.

(2) An operator may not operate a helicopter in accordance with instrument flight rules, unless such helicopter is certified for instrument meteorological conditions operations and equipped with 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 indicating instrument (artificial horizon), clearly visible to the pilot-in-command and the emergency power supply must be automatically operative after the total failure of the main electrical generating system and clear indication must be given on the instrument panel that the attitude indicator(s) is being operated by emergency power.

(3) An operator may not operate a helicopter in instrument meteorological conditions or in accordance with instrument flight rules while carrying passengers unless such helicopter is a multi-engine helicopter and equipped with –

- (a) a power-failure warning device or vacuum indicator to show the power available for gyroscopic instruments from each power source;
- (b) two independent sources of energy (with means of selecting either), of which at least one is an engine-driven pump or generator, which are both able to drive all required gyroscopic instruments powered by, or to be powered by, that particular source and installed in such a manner that failure of one instrument or source does not interfere with the energy supply to the remaining instruments or the other energy source except where the rate-of-turn indicator of a single-engine helicopter involved in all-cargo operations only, has a source of energy separate from the bank and pitch and direction indicators and for the purpose of this subregulation, each engine-driven source of energy of a multi-engine helicopter must be on a different engine; and
- (c) at least two generators or alternators of which any combination of one-half of the total number are rated sufficiently to supply the electrical loads of all required instruments and equipment necessary for safe emergency operation of the helicopter (both units may be mounted on the main rotor drive train); and
- (d) either airborne weather radar equipment or other equipment, approved by the Executive Director, capable of detecting thunderstorms and other potentially hazardous weather conditions.

(4) If two pilots are required to operate the helicopter, other than for training or testing, the second pilot's station must be equipped with –

- (a) a sensitive pressure altimeter with a subscale setting, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight, which may be one of the two altimeters required under subregulation (1) (c);
 - (b) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunction due to either condensation or icing, including a warning indicator of pitot heater failure;
 - (c) a vertical-speed indicator;
 - (d) a turn-and-slip indicator, or instead an additional attitude indicator powered by a power source separate from that of the main attitude indicator;
 - (e) an altitude indicator; and
 - (f) a stabilised direction indicator.
- (5) In complying with subregulation (1)(i) it must be clearly evident to the flight crew members when such standby attitude indicator is being operated by emergency power.
- (6) Where the standby attitude indicator referred to in subregulation (1)(i) has its own dedicated power supply, there must be an associated indicator, either on the instrument or instrument panel, when such power supply is in use.
- (7) When a helicopter is operated with a single pilot in terms of regulation 127.02.1 (7) while carrying passengers at night or in instrument meteorological condition, the helicopter must furthermore be equipped with –
- (a) instrument flight rules -approved area navigation equipment that provides immediate identification and heading to the nearest suitable diversion;
 - (b) an approved stability augmentation or automatic flight control management system; and
 - (c) if the helicopter is fitted with a turbine engine –
 - (i) an auto-ignition system or use of continuous ignition during take-off, landing and flight during heavy precipitation; and
 - (ii) a manual throttle that bypasses the governing section of the fuel control unit, and permits continued unrestricted operation of the engine in the event of a fuel control unit failure.

Airborne weather radar equipment

127.05.4 An operator of a helicopter with a maximum approved passenger seating configuration of more than nine seats operated in terms of regulation 127.01.1, on a scheduled or non-scheduled public air transport service operation, may not operate the helicopter unless the helicopter is equipped with airborne weather radar or other equivalent equipment whenever the helicopter is being operated by night or in instrument meteorological conditions in areas where thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather radars, may be expected to exist along the route.

Flight crew interphone system

127.05.5 An operator of a helicopter, on which more than one flight crew member is required, may not operate the helicopter unless such helicopter is equipped with a flight crew interphone system, including headsets and microphones, not of a hand-held type, for use by all flight crew members.

Crew interphone system

127.05.6 (1) An operator of a helicopter with a maximum approved passenger seating configuration of 20 or more seats, may not operate the helicopter unless such helicopter is equipped with a crew interphone system.

- (2) The crew interphone system must –
- (a) operate independently of the public address system referred to in regulation 127.05.7 except for handsets, microphones, selector switches and signalling devices;
 - (b) provide a means of two-way communication between the flight crew compartment and each passenger compartment;
 - (c) be readily accessible for use from each of the required crew stations in the flight crew compartment;
 - (d) be readily accessible for use at the required cabin crew stations close to each emergency exit;
 - (e) have an alerting system incorporating aural or visual signals for use by flight crew members to alert the cabin crew and for use by cabin crew to alert the flight crew;
 - (f) have a means for the recipient of a call to determine whether it is a normal call or an emergency call; and
 - (g) provide on the ground a means of two-way communication between ground personnel and at least one flight crew member, if the design of the helicopter requires such interphone system.

Public address system

127.05.7 (1) An operator of a helicopter with a maximum approved passenger seating configuration of more than nine seats, may not operate the helicopter unless such helicopter is equipped with a public address system.

- (2) The public address system must –
- (a) operate independently of the interphone systems referred to in regulations 127.05.5 and 127.05.6, except for handsets, microphones, selector switches and signalling devices;
 - (b) be readily accessible for immediate use from each required flight crew member station;
 - (c) be readily accessible for use from at least one cabin crew station in the cabin;

- (d) in the case of a public address system microphone intended for cabin crew use, be positioned adjacent to a cabin crew seat located near each required emergency exit in the passenger compartment;
- (e) be capable of operation within 10 seconds by a cabin crew member at each of those stations in the compartment from which the use of such public address system is accessible;
- (f) be audible and intelligible in all phases of flight at all passenger seats, toilets and cabin crew seats and stations;
- (g) be powered continuously during normal operation; and
- (h) provide reliable operation for at least 10 minutes, following a total failure of the normal electrical generating system.

Life jackets and other flotation devices

127.05.8 (1) Regulations 91.04.23 to 91.04.26, both inclusive, apply with the necessary changes to helicopters operated in terms of this Part.

(2) Despite regulation 91.04.23 (1)(c), a Class 2 or Class 3 helicopter, operated in terms of this Part must, where any portion of the flight including the take-off or approach path is so disposed over water that in the event of a mishap there would be the likelihood of a ditching, be equipped with one life jacket or equivalent flotation device for each person on board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided.

(3) Despite regulation 91.04.23 (2)(b) and (c), a Class 1 or Class 2 helicopter, operated in terms of this Part, must be equipped with the equipment specified in regulation 91.04.24 whenever the helicopter is operated over water at such a distance that, in the event of a mishap there would be the likelihood of a ditching.

(4) Despite subregulation (2), helicopters operating in performance Class 3 when operating off shore or over water beyond autorotational or safe forced landing distance from land, must comply with regulation 91.04.24.

(5) For offshore operations, life jackets must be worn constantly during flight unless the occupant is wearing an integrated survival suit that includes the function of a life jacket.

(6) The contents of the life rafts are specified in regulation 91.04.24.

(7) On any helicopter for which the individual certificate of airworthiness was first issued on or after 1 January 1991, at least 50 percent of the life rafts carried must be deployable by remote control and the remainder, where they have a mass greater than 40 kilogrammes, must be equipped with some means of mechanically assisted deployment

(8) On any helicopter where two life rafts are fitted, each must be able to carry all occupants in a design overload state of 1.5 times the maximum capacity.

Survival suits

127.05.9 An operator may not operate a helicopter beyond 10 minutes flying time at normal cruising speed from land when the weather report or forecasts available to the pilot-in-command indicate that –

- (a) the water temperature will be less than 10°C during the flight; or
- (b) the estimated rescue time exceeds the calculated survival time, taking into consideration the sea state and the ambient light conditions,

unless each person on board is wearing a survival suit as specified in NAM-CATS-OPS 127 but this regulation does not apply to the flight crew where an operator received the prior written approval of the Executive Director to operate without such survival suits, for the reason that the elevation and strength of the sun results in a high temperature hazard in the flight crew compartment.

Cabin attendant seats

127.05.10 Where applicable, helicopters must be equipped with seats for cabin crew members, which must be forward or rearward facing within 15° of the longitudinal axis of the helicopter and located near floor-level emergency exits, where possible and each cabin crew member required to satisfy the emergency evacuation criteria must be provided with a seat equipped with a safety harness but a safety belt with one diagonal shoulder strap must be permitted if the fitting of a safety harness is not reasonably practical.

Emergency locator transmitters

127.05.11 (1) An operator may not operate a helicopter, classified as a performance Class 1 or 2 helicopter, in offshore operations or over water more than 30 minutes at normal cruising speed or 50 nautical miles, whichever is the lesser, away from land unless such helicopter is equipped with at least one automatic emergency locator transmitter and one survival emergency locator transmitter in a raft or life jacket.

(2) An operator may not operate a helicopter, classified as a performance Class 3 helicopter, beyond 10 minutes flying time at normal cruising speed from land unless such helicopter is equipped with at least one automatic emergency locator transmitter and one survival emergency locator transmitter in a raft or life jacket.

(3) The survival emergency locator transmitters required by this regulation must meet the requirements in Document NAM-CATS-OPS 91.

Microphones

127.05.12 All flight crew members required to be on flight crew compartment duty must communicate through boom or throat microphones.

Passenger cabin signs and placards

127.05.13 An operator must ensure the following information is conveyed to the passengers by means of signs or placards suitably conspicuous that will ensure each passenger on board the helicopter is aware –

- (a) when and how seat belts must be fastened;
- (b) when and how oxygen equipment is to be used if the carriage of oxygen is required;
- (c) that smoking is not permitted;
- (d) of the location and use of life jackets or equivalent individual flotation devices where their carriage is required; and

- (e) of the location and method of opening of emergency exits.

Flight recorders

127.05.14 (1) Part 91 applies with the necessary changes to helicopters operated in terms of this Part, but for purposes of this Part any reference to international general aviation operations is considered additionally to be a reference to domestic offshore operations.

(2) An operator may not allow the use of recordings or transcripts of cockpit voice recorder, cockpit audio recording system, Class A airborne image recorder and Class A airborne image recording system for purposes other than the investigation of an accident or incident except where the recordings or transcripts –

- (a) are related to a safety-related event identified in the context of an safety management system, are restricted to the relevant portions of a de-identified transcript of the recording, and are subject to the protections specified by the operator's safety management system;
- (b) are sought for use in criminal proceedings not related to an event involving an accident or incident investigation and are subject to the protections accorded by the safety management system and specified by the regulations relating to investigation of aircraft accidents and incidents; or
- (c) are used for inspections of flight recorder systems as provided for by regulation 91.04.10.

(3) An operator may not allow the use of recordings or transcripts of flight data recorder, aircraft data recording system as well as Class B and Class C airborne image recorder and airborne image recording system for purposes other than the investigation of an accident or incident in accordance with the regulations relating to investigation of aircraft accidents and incidents, except where the recordings or transcripts are subject to the protections accorded by the operator's safety management system and –

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

First-aid and universal precaution kits

127.05.15 (1) An operator may not operate a helicopter unless such helicopter is equipped with a first-aid kit consisting of the medical supplies as provided for in Document NAM-CATS-OPS 127.

(2) An operator must carry out periodical inspections of the first-aid kit specified in subregulation (1) to ensure that, as far as practicable, the contents of the first-aid kit are in a condition necessary for their intended use.

(3) The contents of the first-aid kit specified in subregulation (1) must be replenished at regular intervals, in accordance with instructions contained on their labels, or as circumstances require.

(4) The first-aid kit specified in subregulation (1) must be readily accessible to the crew or passengers.

(5) No operator of a helicopter for which the maximum certificated passenger seating is 20 or more and on which is carried a cabin crew member must operate such helicopter unless it is equipped with the universal precaution kit specified in Document NAM-CATS-OPS 127.

Pressure-altitude reporting transponder

127.05.16 Subject to provisions for the carriage of transponders as provided for by State and airspace requirements, all helicopters must be equipped with a pressure-altitude reporting transponder.

Vibration health monitoring system

127.05.17 A helicopter which has a maximum certificated take-off mass in excess of 3 175 kilogrammes or a maximum passenger seating configuration of more than nine should be equipped with a vibration health monitoring system.

Electronic navigation data management

127.05.18 (1) An operator may not employ electronic navigation data products that have been processed for application in the air and on the ground unless the Executive Director 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 equipment that will use them.

(2) An operator must implement procedures that ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aircraft that require it.

(3) The Executive Director must ensure that the operator continues to monitor both process and products.

(4) An operator's procedures for ensuring the integrity and compatibility of navigation products must be in accordance with NAM-CATS-OPS 121.05.26.

SUBPART 6 AIR OPERATOR CERTIFICATE

Requirement to hold air operator certificate

127.06.1 An operator may not operate a helicopter in terms of this Part unless the operator is the holder of, and complies with the conditions of, a valid air operator certificate including the operations specifications attached to that certificate, and the relevant air services licence issued in terms of the Air Services Act.

Application for issue or amendment of an air operator certificate and operations specifications

127.06.2 An application for, and the requirements pertaining to, the issue or amendment of an air operator certificate or operations specifications must be as specified in regulation 121.06.2,

wherein for the purposes of this regulation the term “helicopter” must be substituted for the term “aeroplane”.

Application for, consideration of and issue of air operator certificate or operations specifications

127.06.3 (1) In considering an application referred to in regulation 127.06.2 the Executive Director may conduct the investigation he or she considers necessary to determine the applicant’s ability to meet the requirements in this Part.

(2) An application must be granted and the air operator certificate issued, containing such conditions as the Executive Director determines, if the Executive Director is satisfied that –

- (a) the applicant will comply with its air operator certificate and operations specifications; and
- (b) the applicant will not operate the air service concerned contrary to any provision of the Act and the Air Services Act.

(3) Where in the opinion of the Executive Director an applicant has failed to provide satisfactory evidence of qualification for the document being sought, the applicant will be informed by the Executive Director as to the deficiencies and will be given a reasonable opportunity to rectify such deficiencies after which time the Executive Director must grant or refuse the application concerned.

(4) An air operator certificate and associated operations specifications must be issued in a form approved by the Executive Director and contain at least the information specified in Document NAM-CATS-OPS 127.

Validity and status of air operator certificate

127.06.4 (1) Unless otherwise specified by the Executive Director, an air operator certificate remains valid and in force for an indefinite period but –

- (a) the operator must submit on or before the anniversary date of initial issue, the appropriate annual fee specified in Part 187;
- (b) the operator must have satisfactorily –
 - (i) responded to the audits and inspections carried out by the Executive Director; and
 - (ii) resolved any findings reported to the operator by the Executive Director;
- (c) the air operator certificate must not have been suspended, cancelled or voluntarily returned to the Executive Director; and
- (d) the operator must continue to meet the requirements for issue of an air operator certificate.

(2) An air operator certificate is not transferable to any other entity.

(3) Where an operator is notified by the Executive Director that its air operator certificate has been suspended or cancelled, the operator must return the air operator certificate to the Executive Director within seven days of such notification.

Safety and security inspections and audits

127.06.5 (1) An applicant for the issue of an air operator certificate must permit an authorised officer, inspector or authorised person to carry out such safety and/or security inspections and audits which may be necessary to verify the validity of an application made in terms of regulation 127.06.2.

(2) The holder of an air operator certificate must permit an authorised officer, inspector or authorised person to carry out such safety and security inspections and audits as may be necessary to determine compliance with the appropriate requirements specified in this Part.

Administrative duties of air operator certificate holder

127.06.6 (1) The holder of an air operator certificate must keep the air operator certificate in a safe place and produce the air operator certificate to an authorised officer, inspector or authorised person for inspection if so requested by the officer or inspector.

(2) An operator must notify the Executive Director of any intended change in the personnel occupying a management position specified in regulation 127.06.2(5) and must submit the names and qualifications of a replacement person for the Executive Director's approval before effecting the change but in the case of a sudden departure of an incumbent, an operator must notify the Executive Director of its plan to ensure safety of operations while replacing the person.

(3) An operator must notify the Executive Director in the event of any change in the ownership of the operator, including the names and contact details of the new owners.

Register of air operator certificates

127.06.7 (1) The Executive Director must maintain a register of all air operator certificates issued in terms of these regulations.

(2) The register must contain the following particulars:

- (a) the full name and, if any, the business name of the holder of the air operator certificate;
- (b) the postal address of the holder of the air operator certificate;
- (c) the number of the air operator certificate issued to the holder;
- (d) particulars of the type of air service for which the air operator certificate was issued, including a list of operations specifications issued;
- (e) particulars of the category of helicopter for which the air operator certificate was issued; and
- (f) the date on which the air operator certificate was issued.

(3) The particulars, referred to in subregulation (2), must be recorded in the register within 30 days from the date on which the air operator certificate is issued by the Executive Director.

(4) The register must be kept in a safe place at the office of the Executive Director.

(5) A copy of the register must be furnished by the Executive Director, on payment of the appropriate fee specified in Part 187, to any person who requests the copy.

Demonstration flights

127.06.8 (1) The Executive Director may require an operator to conduct satisfactory demonstration flights if the helicopter is to be operated in a designated special area, or requires the use of a specialised navigation system, or the scope of the intended operation, in the opinion of the Executive Director, warrants such demonstration flights.

(2) The demonstration flights required in terms of subregulation (1) must be conducted in accordance with the regulations applicable to the type of operation and helicopter used.

Foreign air operator certificates

127.06.9 (1) The Executive Director must recognise as valid an air operator certificate issued by another Contracting State, but the requirements under which the certificate was issued must be at least equal to the applicable standards specified in ICAO Annex 6 and Annex 19.

(2) The Executive Director must establish a programme with procedures for the surveillance of operations in Namibian territory by foreign operators and for taking appropriate action when necessary to preserve safety.

(3) A foreign operator conducting operations in Namibia must meet and maintain any requirements established by the Executive Director.

**SUBPART 7
FOREIGN AIR OPERATOR PERMIT**

Requirement for foreign air operator permit

127.07.1 (1) A foreign operator may not operate a foreign registered aeroplane engaged in international commercial air transport operations to, from or within Namibia, except under the authority of, and in accordance with the conditions of, a foreign air operator permit issued under this Subpart.

(2) Transportation of passengers, cargo or mail within Namibia by a foreign operator may only be undertaken as provided for in NAM-CATS- 121.

Application for foreign air operator permit or amendment of foreign air operator permit

127.07.2 (1) An application for the issue of a foreign air operator permit must be –

- (a) made to the Executive Director in the appropriate form set out in Document NAM-CATS-OPS 127; and
- (b) accompanied by –
 - (i) a declaration of competency issued in respect of each helicopter concerned;
 - (ii) a copy of the valid air operator certificate or equivalent authorisation held by the applicant, which pertains to the operation covered by the application;
 - (iii) the appropriate fee specified in Part 187; and
 - (iv) a statement certifying the availability of insurance in respect of the obligations and liabilities of the applicant which may arise from the operation covered by the application.

(2) Subject to subregulation (5), an application for the issue of a foreign air operator permit must be submitted to the Executive Director at least 90 days before the date of commencement of the intended operation.

(3) If the holder of a foreign air operator permit wishes to amend –

- (a) its name or principal place of business;
- (b) the description of the type of operation;
- (c) the type of helicopter;
- (d) the nationality and registration marks of the helicopters;
- (e) the area of operation; or
- (f) any condition,

specified on the permit, such operator must apply to the Executive Director for such amendment.

(4) An application for the amendment of a foreign air operator permit must be –

- (a) made on the form specified in Document NAM-CATS-OPS 127; and
- (b) accompanied by –
 - (i) a declaration of competency issued in respect of each helicopter concerned;
 - (ii) a copy of the valid air operator certificate or equivalent authorisation held by the applicant, which pertains to the operation covered by the application;
 - (iii) the appropriate fee specified in Part 187; and
 - (iv) a statement certifying the availability of insurance in respect of the obligations and liabilities of the applicant which may arise from the operation covered by the application.

(5) Subject to subregulation (5), an application for the amendment of a foreign air operator permit must be submitted to the Executive Director at least 30 days before the date of commencement of the intended amended operation.

(6) The Executive Director may condone a shorter period within which an application referred to in subregulation (1) or (3), as the case may be, is received, if the Executive Director is satisfied that the object of the operation or amended operation will be defeated if such application is not adjudicated within the shorter period.

Assessment of application and issue of permit

127.07.3 (1) In considering the application for the issue of a foreign air operator permit, or an amendment of a foreign air operator permit, the Executive Director may conduct the investigation which he or she considers necessary.

(2) The application must be granted and the permit issued the Executive Director is satisfied that –

- (a) the applicant has the financial capability of conducting a safe operation within Namibia; and
- (b) the applicant will not conduct the operation concerned contrary to any provision of the Act or the Air Services Act.

(3) If the Executive Director is not satisfied with the application for a foreign air operator permit, the Executive Director must in writing notify the applicant and state the reasons for his or her dissatisfaction with the application, and the Executive Director must grant the applicant an opportunity to rectify or supplement the defect within the period determined by the Executive Director, after which period the Executive Director must grant or refuse the application.

(4) A foreign air operator permit must be issued on the form set out in Document NAM-CATS-OPS 127, under such conditions which the Executive Director may determine.

(5) A foreign air operator permit must specify –

- (a) the name, nationality and principal place of business of the operator;
- (b) the date on which the permit was issued and its period of validity;
- (c) a description of the type of operation authorised;
- (d) the type of helicopter authorised for operation;
- (e) the nationality and registration marks of each helicopter authorised for operation;
- (f) the authorised area of operation; and
- (g) the conditions of the permit.

Period of validity

127.07.4 (1) A foreign air operator permit is valid –

- (a) for the period determined by the Executive Director, which period must not exceed 12 months, calculated from the date of issue of the permit;
- (b) for the number of flights determined by the Executive Director; or
- (c) for the number of flights, which have to be undertaken within the period, determined by the Executive Director.

(2) If the holder of a foreign air operator permit applies at least 30 days prior to the expiry of the permit, for the renewal of the permit, such permit must, despite subregulation (1), remain valid until such holder is notified by the Executive Director of the result of the application for the renewal of such permit.

(3) The permit must remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Executive Director, in terms of regulation 127.07.9.

(4) The holder of a permit which expires, must forthwith surrender the permit to the Executive Director.

(5) The holder of a permit which is suspended, must forthwith produce the permit to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.

(6) The holder of a permit which is cancelled, must, within 30 days from the date on which the permit is cancelled, surrender the permit to the Executive Director.

Transferability

127.07.5 A foreign air operator permit must not be transferable.

Duties of holder of permit

127.07.6 (1) The holder of a foreign air operator permit must –

(a) at all times during the operation within Namibia –

(i) comply with –

(aa) the appropriate requirements in this Part; and

(bb) the conditions of the permit;

(ii) hold a valid air operator certificate or equivalent authorisation; and

(b) produce the permit to an authorised officer, inspector or authorised person for inspection, if so requested by such officer, inspector or person.

Renewal of permit

127.07.7 (1) The holder of a foreign air operator permit must at least 30 days immediately preceding the date on which the permit expires, apply for the renewal of the permit.

(2) Regulations 127.07.2(1) and 127.07.3 apply with the necessary changes to an application made in terms of this regulation.

Safety inspections and audits

127.07.8 The holder of a foreign air operator permit must permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements specified in this Part.

Suspension, revocation and variation of air operator certificate and foreign air operator permit

127.07.9 An air operator certificate or a foreign air operator permit may in accordance with regulation 13.01.4 be suspended, revoked or varied if the Executive Director is no longer satisfied that the operator can maintain an adequate organisation to ensure safe operations.

Register of permits

127.07.10 (1) The Executive Director must maintain a register of all foreign air operator permits issued, amended or renewed in terms of the regulations in this Subpart.

(2) The register must contain the following particulars:

(a) The full name of the holder of the permit;

- (b) the postal address of the holder of the permit;
- (c) the telephone and telefax numbers of the holder of the permit;
- (d) the date on which the permit was issued, amended or renewed;
- (e) the number of the permit issued, amended or renewed;
- (f) the conditions of the permit;
- (g) the nationality of the holder of the permit; and
- (h) the date on which the permit was suspended, if applicable.

(3) The particulars referred to in subregulation (2) must be recorded by the Executive Director in the register within seven days from the date on which the permit was issued, amended, renewed or cancelled, as the case may be.

(4) The register must be kept in a safe place at the office of the Executive Director.

(5) A copy of the register must be furnished by the Executive Director, on payment of the appropriate fee specified in Part 187, to any person who requests the copy.

SUBPART 8 FLIGHT OPERATIONS

DIVISION ONE: GENERAL

Routes and areas of operation and aerodrome facilities

127.08.1 (1) An operator operating in terms of regulation 127.01.1, must ensure that operations are only conducted along such routes for which –

- (a) it has been ascertained by every reasonable means available that the ground or water facilities and services, including meteorological services, are available as required for the safe operation of the helicopter and the protection of the passengers, are adequate for the type of operation being conducted and are functioning normally for their intended purpose;
- (b) appropriate maps and charts are available.

(2) An operator must ensure that operations are only conducted within such areas and along such routes for which approval or authorisation has been obtained, where required, from the appropriate authority concerned.

(3) An operator must ensure that –

- (a) the performance of the helicopter intended to be used is adequate to comply with minimum flight altitude requirements; and
- (b) the equipment of the helicopter intended to be used complies with the minimum requirements for the planned operation.

(4) An operator must operate all flights in accordance with such route, aerodrome or other approvals and conditions pertaining to flight operations as are contained in the air operator certificate.

(5) An operator must report without delay to the responsible authority any observed operational inadequacy of facilities referred to in subregulation (1)(a).

(6) Prior to conducting a passenger-carrying instrument flight rules or night visual flight rules flight in uncontrolled airspace, the operator must ensure that a navigational capability is able to be maintained while operating on any route used in such airspace.

(7) An operator must select a take-off alternate aerodrome and specify it in the operational flight plan if the weather conditions at the aerodrome of departure are at or below the applicable aerodrome operating minima but for the take-off alternate, the available information must indicate that, at the estimated time of use, the conditions will be at or above the aerodrome operating minima for that operation.

(8) An operator must select at least one destination alternate aerodrome and specify it in the operational flight plan for each instrument flight rules flight unless –

- (a) the duration of the flight and the meteorological conditions prevailing are such that there is reasonable certainty that, at the estimated time of arrival at the aerodrome of intended landing, and for a reasonable period before and after such time, the approach and landing may be made under visual meteorological conditions; or
- (b) the aerodrome of intended landing is isolated and no suitable alternate is available, in which case a point of no return must be determined.

(9) An operator must select at least two destination alternate aerodromes for each instrument flight rules flight and specify them in the operational flight plan when –

- (a) the appropriate weather reports or forecasts for the destination aerodrome, or any combination of such reports and forecasts, indicate that during a period commencing one hour before and ending one hour after the estimated time of arrival, the weather conditions will be below the applicable planning minima; or
- (b) meteorological information is not available at the destination aerodrome.

(10) For offshore operations as provided in regulation 127.08.8, the operator must select suitable offshore alternates and specify each in the operational flight plan for each instrument flight rules flight as provided in Document NAM-CATS-OPS 127.

(11) An operator may not permit, and a pilot-in-command may not operate, a flight that is to be conducted in accordance with instrument flight rules for which one or more destination alternate aerodromes are required, to be commenced unless the aerodrome meteorological forecast indicates that conditions for a period of at least one hour before until one hour after the estimated time of arrival at the destination alternate aerodrome(s) will meet or exceed those specified in Document NAM-CATS-OPS 127.

Establishment of procedures

127.08.2 (1) An operator must –

- (a) establish procedures and instructions, for each helicopter type, containing ground personnel and flight crew members' duties for all types of operations on the ground and in flight;
- (b) establish a checklist system to be used by flight crew members for all phases of operation under normal, abnormal and emergency conditions, to ensure that the

operating procedures in the flight manual and other documents associated with the certificate of airworthiness, and in the operations manual referred to in regulation 127.04.2, are followed; and

- (c) ensure that flight crew members do not perform any activities during critical phases of the flight other than those required for the safe operation of the helicopter.
- (2) The approved checklist system referred to in subregulation (1) (b) must be designed and used in accordance with human factors principles and must include –
- (a) an easy-to-use checklist for normal phases of flight operations;
 - (b) a quick reference-type checklist dealing with all malfunctions requiring the use of abnormal or emergency procedures;
 - (c) an amplified checklist that ensures all referenced check items are dealt with in accordance with the helicopter manufacturer's recommended procedures;
 - (d) an easy to locate and employ system of supplementary checks and/or procedures, if applicable; and
 - (e) any other check items relating to the use of equipment not installed at the time of helicopter manufacture or not included in the check system provided for in the approved helicopter flight manual.
- (3) The pilot-in-command must be responsible for ensuring all check procedures, including checklists, are managed in accordance with the procedures specified in the operator's operations manuals.

Hazardous flight conditions and unlawful interference

127.08.3 (1) The pilot-in-command of any helicopter that encounters flight conditions considered to be hazardous to his or her, or another helicopter, must report such conditions to any appropriate aeronautical station as soon as possible, giving such details as may be pertinent to the safety of other helicopters.

- (2) Following an act of unlawful interference, the pilot-in-command must –
 - (a) where, in his or her opinion the safety of persons on board the helicopter would not be jeopardized, report the events to the nearest air traffic services authority by the most discrete method possible, by the means devised for such communications; and
 - (b) submit, without delay, a report of such act to the Executive Director in a form acceptable to the Executive Director.

Competence of operations personnel

127.08.4 An operator must ensure that all personnel assigned to, or directly involved in, ground and flight operations, are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.

Use of air traffic services

127.08.5 An operator must ensure that air traffic services are used for all flights whenever available.

Minimum flight altitudes

127.08.6 (1) An operator must establish minimum flight altitudes for all operations carried out in accordance with instrument flight rules and the methods to determine such minimum flight altitudes for all route segments to be flown which provide the required terrain clearance, taking into account the performance operating limitations referred to in Subpart 8 of this Part and the minimum levels specified in regulation 91.06.37.

- (2) An operator must take into account, when establishing minimum flight altitudes –
- (a) the accuracy and reliability with which the position of the helicopter can be determined;
 - (b) the possible inaccuracies in the indications of the altimeters used;
 - (c) the characteristics of the terrain along the routes or in the areas where operations are to be conducted;
 - (d) the probability of encountering unfavourable meteorological conditions;
 - (e) possible inaccuracies in aeronautical charts; and
 - (f) airspace restrictions.

(3) An operator must specify in its operations manual the procedures used to determine the minimum flight altitudes to be flown in order to meet the obstacle clearance requirements specified in regulation 91.06.37 (3).

Aerodrome operating minima

127.08.7 (1) For operations under instrument flight rules, the operator must establish aerodrome operating minima in accordance with subregulations (2), (3) and (4) and in conjunction with the instrument approach and landing charts for each aerodrome and aerodrome intended to be used either as destination or alternate aerodrome.

(2) An operator must establish aerodrome operating minima for each aerodrome planned to be used, which must not be lower than the values specified in regulation 91.07.5.

(3) The method of determining aerodrome operating minima must be approved by the Executive Director.

(4) The aerodrome operating minima established by the operator must not be lower than any aerodrome operating minima established by the appropriate authority of the State in which the aerodrome is located but if the appropriate authority approves such lower aerodrome operating minima established by the operator, the higher aerodrome operating minima applies.

(5) In establishing the aerodrome operating minima which will apply to any particular operation, the operator must take full account of the factors specified in regulation 91.07.5 (3).

(6) Category II and Category III instrument approach operations must not be authorised unless runway visual range information is provided.

(7) An operator must ensure that a flight must not be continued towards the aerodrome of intended landing, unless the latest available information indicates that at the expected time of arrival, a landing can be effected at that aerodrome or at least one destination alternate aerodrome, in compliance with the published operating minima.

(8) An operator must ensure compliance with the requirements for approach ban, required under regulation 91.07.26.

Offshore operations

127.08.8 (1) The Executive Director must issue a specific approval for the operational use of offshore destination and offshore destination alternate heliports.

(2) To obtain approval referred to in subregulation (1) an operator must submit an application to the Executive Director and must demonstrate compliance with the requirements in NAM-CATS-OPS 127.

- (3) An operator must ensure that, in the case of flights over water –
- (a) the shore base or other flight-monitoring station must maintain a means of flight monitoring with the helicopter as approved by the Executive Director;
 - (b) a full complement of crew members to operate the helicopter and its safety equipment under normal, abnormal or emergency conditions is carried on board; and
 - (c) the helicopter is equipped for flights over water in terms of these regulations.
- (4) An operator must ensure that, in the case of a single-reciprocating-engine helicopter –
- (a) other than an amphibian helicopter or a helicopter with approved flotation gear flights must be limited to five nautical miles seaward from base; and
 - (b) no flights must be undertaken except by day and under visual meteorological conditions and no flight must be commenced which cannot be completed at least one hour before night.
- (5) An operator must ensure that, in the case of a single-turbine-engine helicopter –
- (a) other than an amphibian helicopter or a helicopter with approved flotation gear flights must be limited to 50 nautical miles seaward from base;
 - (b) no flights must be undertaken except by day and under visual meteorological conditions;
 - (c) for flights over water from five up to 15 nautical miles, sufficient survival dinghies are carried in such a manner that they will be instantly accessible at the time of ditching.
- (6) An operator must ensure that, in the case of multi-engine helicopters, subregulation (2) is complied with and, in addition, if a flight is to be undertaken by night or under instrument meteorological conditions, that –
- (a) the helicopter is equipped for instrument flight rules operations; and
 - (b) functioning area or on-board navigation aids are available.
- (7) An operator may not, when planning flight for over-water operations, consider off-shore alternates when it is possible to carry enough fuel to plan for an on-shore alternate landing site but off-shore alternate landing sites may be considered in exceptional circumstances, where

approved by the Executive Director, for purposes other than for landing and for the purpose of payload enhancement in adverse weather conditions.

(8) A helideck may be specified as an offshore destination alternate heliport when the closest onshore destination alternate is not within achievable range of the helicopter and the specification is subject to the following conditions:

- (a) a helideck must only be used as an offshore destination alternate heliport after the point of no return and when an onshore aerodrome is not geographically available and prior to the point of no return, an onshore destination alternate aerodrome must be used;
- (b) the operator must have a risk assessment process detailed in the operations manual for the utilization of helidecks as offshore destination alternate heliports and conduct such an assessment prior to their selection and use;
- (c) the operator has established specific procedures and appropriate training programmes in the operations manual for offshore destination alternate heliport operations;
- (d) the operator must have pre-surveyed, and assessed for suitability, any helideck intended to be used as an offshore destination alternate heliport and with the information published in an appropriate form in the operations manual (including the orientation of the helideck);
- (e) the helicopter must have a one engine inoperative landing capability at the offshore alternate heliport; and
- (f) the minimum equipment list must contain specific provisions for this type of operation.

(9) The use of an offshore alternate heliport should be restricted to helicopters which can achieve one engine inoperative in ground effect hover at an appropriate power rating at the offshore alternate heliport.

(10) Where the surface of the helideck, or prevailing conditions, especially wind velocity, precludes a one engine inoperative in ground effect, one engine inoperative out of ground effect hover performance at an appropriate power rating should be used to compute the landing mass.

(11) The landing mass should be calculated from graphs provided in the operations manual and when calculating this landing mass, due account should be taken of helicopter configuration, environmental conditions and the operation of systems that have an adverse effect on performance.

(12) The planned landing mass of the helicopter, including crew, passengers, baggage, cargo and 30 minutes final reserve fuel, should not exceed the one engine inoperative landing mass at the time of approach to the offshore alternate heliport.

(13) The operator's risk assessment process must take into consideration at least the following:

- (a) the type and circumstances of the operation;
- (b) the area over which the operation is being conducted, including sea conditions, survivability and search and rescue facilities;

- (c) the availability and suitability of the helideck for use as an offshore destination alternate heliport including the physical characteristics, dimensions, configuration and obstacle clearance, the effect of wind direction, strength and turbulence;
- (d) the type of helicopter being used;
- (e) mechanical reliability of the helicopter engines and critical control systems and components;
- (f) the training and operational procedures, including mitigation of the consequences of helicopter technical failures;
- (g) specific mitigation measures;
- (h) helicopter equipment;
- (i) spare payload capacity for the carriage of additional fuel;
- (j) weather minima, taking into account the accuracy and reliability of meteorological information; and
- (k) communications and aircraft tracking facilities.

(14) Training programmes must ensure that the requirements in Document NAM-CATS-OPS 127 are complied with in relation to route qualification, flight preparation, concept of operations with offshore alternates and criteria for their use and that training programmes refer to the training for pilots and other relevant personnel, including as required meteorological observers and helideck personnel involved in such operations.

(15) When the use of an offshore alternate heliport is planned, the meteorological observations, both at the offshore destination and the offshore alternate heliport, should be taken by an observer acceptable to the designated meteorological authority.

(16) Offshore alternates should not be used for payload enhancement.

(17) To demonstrate the mechanical reliability of critical control systems and critical components of the helicopter, the operator should install and utilize a health and usage monitoring system with tailored criteria for this type of operation.

(18) The heliport operating minima for the offshore destination and offshore destination alternate heliport required under 127.08.7 must make do allowance for the availability and reliability of weather information and the geographic environment.

(19) An operator must specify cloud ceiling and visibility criteria relevant to the helideck elevation and location.

(20) To use an offshore destination alternate helideck, it must be ensured that, within 60 nautical miles of the destination helideck and alternate helideck, fog is not present nor forecasted during the period commencing one hour before and ending one hour after the expected time of arrival at the offshore destination or alternate helideck.

(21) An offshore alternate should be more than 30 nautical miles from the original destination to reduce the likelihood of a localized weather event precluding landings at both the destination and the alternate.

(22) An operator must ensure that, before passing the point of no return, the following actions have been completed:

- (a) confirmation that navigation to the destination and offshore alternate heliport is assured;
- (b) radio contact with the destination and offshore alternate heliport (or master station) is established;
- (c) the landing forecast at the destination and offshore alternate heliport are obtained and confirmed to be at or above the required minima;
- (d) the requirements for one engine inoperative landing are verified against the latest reported weather conditions to ensure that they can be met; and
- (e) to the extent possible, having considered information on current and forecast use of the offshore destination alternate heliport, and on conditions prevailing, the availability of the offshore alternate heliport will be guaranteed by the helideck provider until the landing at the destination, or the offshore destination alternate heliport, is achieved.

(23) For the purposes of this regulation “shore base” means the site from which the flight over water is commenced or supported.

Refueling and defueling with passengers on board

127.08.9 A person may not refuel or defuel a helicopter when passengers are embarking, disembarking or on board unless the fuelling is carried out in accordance with the procedures specified in Document NAM-CATS-OPS 127 and such procedures are included in the operator’s operations manual referred to in regulation 127.04.2.

Fuel and oil policy

127.08.10 (1) An operator must establish a fuel and oil policy and procedures for the purpose of flight planning and in-flight re-planning and fuel management to ensure that every flight carries sufficient fuel and oil for the planned operation and reserve fuel to cover deviations from the planned operation.

- (2) An operator must ensure that the planning of a flight is only based upon –
 - (a) procedures, tables or graphs which are contained in or derived from the operations manual referred to in regulation 127.04.2, or current helicopter-specific data; and
 - (b) the operating conditions under which the flight is to be conducted including –
 - (i) realistic helicopter fuel consumption data;
 - (ii) anticipated masses;
 - (iii) expected meteorological conditions;
 - (iv) air traffic service procedures and restrictions;
 - (v) for instrument flight rules flight, one instrument approach at the destination aerodrome, including a missed approach;

- (vi) the procedures specified in the operations manual for failure of one power-unit while en-route; and
 - (vii) any other conditions that may delay the landing of the helicopter or increase fuel consumption.
- (3) An operator must ensure that the calculation of usable fuel required by such helicopter for a flight meets the requirements specified in Document NAM-CATS-OPS 127.
- (4) An operator must ensure that in-flight re-planning procedures for calculating usable fuel required when a flight has to proceed along a route or to a destination aerodrome other than originally planned includes –
 - (a) trip fuel for the remainder of the flight;
 - (b) reserve fuel consisting of –
 - (i) contingency fuel;
 - (ii) alternate fuel, if a destination alternate aerodrome is required, including selection of the departure aerodrome as the destination alternate aerodrome;
 - (iii) final reserve fuel; and
 - (iv) additional fuel, if required; and
 - (c) extra fuel, if required by the pilot-in-command.
- (5) The policies and procedures required by subregulation (1) must, as a minimum, include the requirement that –
 - (a) in-flight fuel checks are to be performed at least hourly by or on behalf of the pilot-in-command to ensure that the amount of usable fuel remaining in flight is not less than the fuel required to proceed to a landing site where a safe landing can be made with the planned final reserve fuel remaining; and
 - (b) the pilot-in-command must request delay information from air traffic control when unanticipated circumstances may result in landing at the destination aerodrome with less than the final reserve fuel plus any fuel required to proceed to an alternate aerodrome or the fuel required to operate to an isolated aerodrome.
 - (c) the pilot-in-command must advise air traffic control of a minimum fuel state by declaring minimum fuel when, having committed to land at a specific landing site, the pilot calculates that any change to the existing clearance to that landing site, or other air traffic delays, may result in landing with less than the planned final reserve fuel.
 - (d) the pilot-in-command must declare a situation of fuel emergency by broadcasting MAYDAY MAYDAY MAYDAY FUEL, when the calculated usable fuel predicted to be available upon landing at the nearest landing site where a safe landing can be made is less than the planned final reserve fuel.

Instrument meteorological conditions or night flight without a second-in-command

127.08.11 An operator may not operate a helicopter without a second-in-command during flight in instrument meteorological conditions or at night unless –

- (a) the helicopter is –
 - (i) of a certificated maximum mass of less than or equal to 3 180 kilogrammes and
 - (ii) not certificated to carry more than nine passengers;
- (b) the operator is authorised to do so in his or her operations specifications; and
- (c) the operator meets the requirements in Document NAM-CATS-OPS 127.

Instrument approach and departure procedures

127.08.12 An operator may implement instrument approach and departure procedures other than instrument approach and departure procedures referred to in regulation 91.07.15, if required but such instrument approach and departure procedures must have been approved by –

- (a) the appropriate authority of the State in which the aerodrome to be used, is located; and
- (b) the Executive Director.

Noise abatement procedures

127.08.13 (1) An operator must establish take-off and landing procedures that take into account the need to minimise the effect of helicopter noise.

(2) Take-off and climb procedures for noise abatement specified by the operator for any one helicopter type must be the same for all aerodromes.

Operation of helicopter in icing conditions

127.08.14 (1) A person may not conduct a take-off or continue a flight in a helicopter when icing conditions are reported to exist or are forecast to be encountered along the route to be flown unless the helicopter is equipped to be operated in such conditions and the helicopter type certificate authorises flight in such conditions.

(2) In no case must a flight be initiated or continued in icing conditions where in the opinion of the pilot-in-command, the conditions experienced may adversely affect the safety of the flight.

(3) A person may not operate a helicopter in icing conditions at night unless the helicopter is equipped with a means to illuminate a representative surface or otherwise detect the formation of ice.

Surface contamination programme

127.08.15 (1) A person may not conduct or attempt to conduct a take-off in a helicopter that has frost, ice or snow adhering to any of its critical surfaces.

(2) Where conditions are such that frost, ice or snow may reasonably be expected to adhere to the helicopter, A person may not conduct or attempt to conduct a take-off in a helicopter unless the operator has established a helicopter inspection programme in accordance with a surface contamination programme approved by the Executive Director and the dispatch and take-off of the helicopter are in accordance with that programme.

- (3) The inspection referred to in subregulation (2) must be performed by—
 - (a) the pilot-in-command;
 - (b) a qualified flight crew member of the helicopter who is designated by the pilot-in-command; or
 - (c) a person, other than a person referred to in paragraph (a) or (b), who—
 - (i) is designated by the operator of the helicopter; and
 - (ii) has successfully completed a helicopter surface contamination training programme approved for such operator.

(4) Where, before commencing take-off, a crew member of a helicopter observes that there is frost, ice or snow adhering to any critical part of the helicopter, the crew member must immediately report that observation to the pilot-in-command and the pilot-in-command, or a flight crew member designated by the pilot-in-command, must inspect the affected part of the helicopter before take-off.

(5) Before a helicopter is de-iced or anti-iced, the pilot-in-command of the helicopter must ensure that the crew members and passengers are informed of the decision to do so.

(6) An operator is not required to have a programme as required by subregulation (2) if it includes a statement in its operations manual that the operator will not dispatch its helicopters into any region or country where it could be reasonably expected that surface contamination could at any time form or remain on the helicopter, while parked or operating on the ground.

Mass and balance control

127.08.16 (1) A person may not operate a helicopter unless, during every phase of the flight, the load restrictions, mass and centre of gravity of the helicopter conform to the limitations specified in the aircraft flight manual.

(2) An operator must have a mass and balance programme that complies with regulation 91.07.11.

(3) An operator must specify in its operations manual its mass and balance programme and instructions to employees regarding the preparation and accuracy of mass and balance forms and the mass and balance sheet in accordance with regulation 127.04.9.

Performance based navigation

121.08.17 An operator operating a helicopter in airspace where a navigation specification for performance-based navigation has been specified must comply with regulation 91.05.4.

Operations with head-up displays, enhanced vision systems or night vision goggles

127.08.18 (1) An operator may not use a head-up display, enhanced vision system, synthetic vision system or combined vision system unless the operator –

- (a) is authorised to do so in its operations specifications;
- (b) has carried out a safety risk assessment of the operations in accordance with the safety management system; and

- (c) complies with the head-up display, enhanced vision system, synthetic vision system or combined vision system requirements, as applicable, specified in regulation 91.07.33.
- (2) An operator may not use a night vision goggles system unless the operator –
 - (a) is authorised to do so in its operations specifications;
 - (b) has carried out a safety risk assessment of the operations in accordance with the safety management system; and
 - (c) complies with the night vision goggle requirements in Document NAM-CATS-OPS 127.
- (3) An operator must include the procedures for use of such equipment in the operations manual referred to in regulation 127.04.2.

Operations with electronic flight bags

- 127.08.19** (1) An operator may not use an electronic flight bag unless the operator –
- (a) is authorised to do so in its operations specifications; and
 - (b) complies with the electronic flight bag requirements in NAM-CATS-OPS 91.
- (2) An operator must include the procedures for use of such equipment in the operations manual referred to in regulation 127.04.2.

Single-engine helicopter instrument meteorological conditions and night operations

- 127.08.20** (1) In the case of operations conducted in accordance with regulation 127.01.1, an operator may not operate a single-engine helicopter or performance class 3 helicopter with passengers or cargo on board in instrument meteorological conditions or night flight, except for special visual flight rules flights by day.

In-flight simulation of emergency situations and instrument meteorological conditions

- 127.08.21** An operator must ensure that when passengers or cargo are being carried, no emergency or abnormal situations, or instrument meteorological conditions must be simulated.

DIVISION TWO: OPERATIONAL CONTROL

Operational control and supervision of flight operations

- 127.08.22** (1) An operator must establish and maintain an operational control system that meets the requirements in regulation 121.07.14, and which provides operational control services appropriate to the flights being operated.
- (2) An operator who wishes to use flight operations officers in their operational control system must comply with the requirements of regulation 127.03.11.
- (3) For the purposes of this regulation the term “helicopter” must be substituted for the term “airplane” where used in regulation 121.07.14.

Contracted services for operational control system

127.08.23 An operator may use the operational control system of an agent whether domestic or foreign but the operator must comply with regulation 121.07.15.

Operational flight plans

127.08.24 (1) An operator must prepare an operational flight plan for its flights as provided in Document NAM-CATS-OPS 127.

(2) The signatures or alternative means of signifying acceptance of the operational flight plan by the pilot-in-command and flight operations officer, if applicable, as required in Document NAM-CATS-OPS 127, must constitute a flight release and certifies that –

- (a) the operational flight plan has been prepared and accepted in accordance with the procedures specified in the operations manual; and
- (b) the flight is safe to proceed.

Familiarity with weather conditions and technical data

127.08.25 A flight operations officer may not release a flight unless he or she is thoroughly familiar with –

- (a) reported and forecast weather conditions on the route to be flown and at all planned destination and alternate aerodromes;
- (b) the navigational requirements for the planned routes and aerodromes; and
- (c) any other technical data relevant to the proposed flight including aerodrome operating minima, helicopter performance, maintenance status, notice transmissions, bulletins or operational directives issued by the operations manager,

and that nothing in such information indicates there is a threat to the safety of the flight.

Retention of flight operations documents and reports

127.08.26 (1) Unless otherwise specified by the Executive Director, every operator must retain all flight documents made in terms of this Subpart, for a period of not less than three months.

(2) All flight documentation required by this Subpart to be prepared with respect to a flight and which was carried on board that flight must be returned to the company's main base specified in the air operator certificate and such documentation must include weather maps and printed information, notice to airmissions, cargo and fuel loading sheets and manifests and all paperwork used to record the flight's progress or diversion and irregular or emergency situations.

Maintenance status

127.08.27 (1) A person may not dispatch or release a helicopter unless it is airworthy and all known defects have been rectified and appropriately certified by an helicopter maintenance engineer except where the dispatch of the helicopter is in accordance with an approved minimum equipment list issued in terms of regulation 127.08.29, a configuration deviation list approved by the State of Manufacture or as otherwise permitted in the aircraft flight manual referred to in regulation 91.03.2.

(2) Under a co-authority dispatch system the pre-flight briefing issued by the flight operations officer must include a full review of the helicopter maintenance status.

Incidents and defects

127.08.28 (1) An operator must establish adequate inspection and reporting procedures to ensure that defective equipment is reported to the pilot-in-command of the helicopter before take-off.

(2) The procedures referred to in subregulation (1) must be extended to include the reporting to the operator of all incidents or the exceeding of limitations which may occur while the flight crew is embarked on the helicopter and of defective equipment found on board.

(3) Upon receipt of the reports referred to in subregulation (2), the operator must compile a report and submit such report on a monthly basis to the Executive Director.

Minimum equipment list

127.08.29 (1) Except as provided in subregulations (2) and (5), a person may not conduct a take-off in a helicopter with instruments or equipment that are not serviceable or that have been removed, where such instruments or equipment are required by –

- (a) the standards of airworthiness that apply today or night visual flight rules or instrument flight rules flight, as applicable;
- (b) any equipment list published by the helicopter manufacturer respecting aeroplane equipment that is required for the intended flight;
- (c) an air operator certificate;
- (d) an airworthiness directive; or
- (e) these regulations.

(2) A person may conduct a take-off in a helicopter with instruments or equipment that are not serviceable or that have been removed but the helicopter must be operated in accordance with the conditions or limitations specified in a minimum equipment list, which has been approved by the Executive Director as provided for in Document NAM-CATS-OPS 127 and, in the opinion of the pilot-in-command, aviation safety will not be affected.

(3) An operator must establish a minimum equipment list for each type of helicopter for which a master minimum equipment list has been established by the organisation responsible for the aircraft type design in conjunction with the State of Design but the State of Design must be an ICAO Contracting State and the manufacturing standards used by such State must at least be equal to the ICAO standards for manufacturing.

(4) A person may not operate a helicopter in accordance with a minimum equipment list unless such minimum equipment list is carried on board the helicopter.

(5) A person may conduct a take-off in a helicopter that has instruments or equipment that are not serviceable or that have been removed where the helicopter is operated in accordance with the conditions of a flight permit that has been issued by the Executive Director or his or her delegate specifically for that purpose.

(6) A person may not conduct a take-off in a helicopter for which a minimum equipment list has not been approved and the helicopter has instruments and equipment, other than the

instruments and equipment specified in subregulation (1), that are not serviceable or that have been removed unless –

- (a) where the unserviceable instrument or equipment is not removed from the helicopter, it is isolated or secured so as not to constitute a hazard to any other helicopter system or to any person on board the helicopter;
- (b) the appropriate placards are installed as required by the maintenance control manual; and
- (c) an entry recording the actions referred to in paragraphs (a) and (b) is made in the flight folio, as applicable.

DIVISION THREE: CABIN SAFETY

Carriage of infants

127.08.30 (1) An operator must ensure that an infant is only carried when properly secured in the arms or on the lap of an adult passenger, or with a child restraint device or in a sky cot provided the sky cot is –

- (a) restrained so as to prevent it from moving under the maximum accelerations to be expected in flight; and
 - (b) fitted with a restraining device so as to ensure that the infant will not be thrown from such sky cot under the maximum accelerations to be expected in flight.
- (2) An operator must ensure that precautions are taken to ensure that, at the times seat belts are required to be worn in flight, the infant carried in the sky cot will not be thrown from such sky cot under the maximum accelerations to be expected in flight.
- (3) A passenger may be responsible for the safety of more than one infant on board a helicopter.
- (4) A infant may not be carried behind a bulkhead unless a child restraint device is used during critical phases of flight and during turbulence.
- (5) Sky cots may not be used during critical phases of flight.
- (6) Sky cots must be positioned in such a way that they do not prevent or hinder the movement of adjacent passengers or block exits.
- (7) When an infant is carried in the arms or on the lap of a passenger, the seat belt, when required to be worn, must be fastened around the passenger carrying or nursing the infant, but not around the infant.
- (8) When an infant is carried in the arms or on the lap of a passenger, the name of the infant must be bracketed on the passenger list with the name of the person carrying or nursing the infant.
- (9) An infant may be seated in a car-type infant seat where approved for use in a helicopter, which is secured to the helicopter seat, provided –
- (a) the infant's seat is secured to the helicopter seat in accordance with the instructions provided with the child seat;

- (b) the infant's seat is designed to be secured to a passenger seat by means of a single lap strap and face the same direction as the passenger seat;
 - (c) the lower part of the shell does not unreasonably extend beyond the forward position of the passenger seat cushion on which it rests;
 - (d) the infant's seat is secured to the passenger seat at all times during flight, even when it is unoccupied by the child;
 - (e) only the infant must be removed from the aircraft in an emergency evacuation, not the infant's seat;
 - (f) the infant's seat is positioned in such a way that it does not prevent or hinder the movement of adjacent passengers or block exits;
 - (g) the infant's seat is not placed in an aisle seat, depending on cabin configuration;
 - (h) the infant's seat is used in accordance with infant weight limitations specified for such device; and
 - (i) the infant's seat is fitted with a single release harness, which secures the infant's lap, torso and shoulders, but designed that the child can easily be secured in or removed from it.
- (10) An infant or a car-type infant seat referred to in subregulation (9) may not be located in –
- (a) the same row or row directly forward or aft of an emergency exit; or
 - (b) in the same row as any other exit unless such exit and row are separated by a bulkhead.

Carriage of persons with a disability

127.08.31 (1) An operator must establish procedures, including identification, seating positions and handling in the event of an emergency, for the carriage of passengers with a disability.

- (2) An operator must ensure that –
 - (a) the pilot-in-command of the helicopter is notified when a passenger with a disability is to be carried on board;
 - (b) a passenger with a disability is not seated in the same row or a row directly forward or aft of an emergency exit;
 - (c) individual briefings on emergency procedures are given to a passenger with a disability and his or her able-bodied assistant, appropriate to the needs of such passenger; and
 - (d) the person giving the briefing must enquire as to the most appropriate manner of assisting the passenger with a disability so as to prevent pain or injury to such passenger.
- (3) In the case of the carriage of a person on a stretcher in the helicopter –

- (a) the stretcher must be secured in such helicopter so as to prevent it from moving under the maximum accelerations likely to be experienced in flight and in an emergency alighting such as ditching;
 - (b) the person must be secured by an approved harness to the stretcher or helicopter structure; and
 - (c) an able-bodied assistant must accompany each person carried on a stretcher.
- (4) A person with a certified mental disability may not be carried in the helicopter unless –
- (a) accompanied by an able-bodied assistant; and
 - (b) a medical certificate has been issued by a medical practitioner certifying that the person with the mental disability is suitable for carriage by air, and confirming that there is no risk of violence from such person.
- (5) An operator must undertake the carriage of a person with a mental disability who, according to his or her medical history, may become violent, only after special permission has been obtained from the Executive Director by such operator.
- (6) A passenger with a splinted or artificial limb may travel unaccompanied provided he or she is able to assist himself or herself.
- (7) The affected limb or supporting aids of a passenger referred to in subregulation (6), must not obstruct an aisle or any emergency exit or equipment.
- (8) If a passenger with a splinted or artificial limb cannot assist himself or herself, the passenger must be accompanied by an able-bodied assistant.

Limitations on carriage of infants, children and passengers with disability

127.08.32 (1) Unless otherwise authorised by the Executive Director, the maximum number of passengers with a disability, unaccompanied minors, or a combination of such passengers and minors, which may be carried by the operator, is limited to one per unit of 20 passengers capacity or part thereof.

(2) At least one able-bodied assistant must be carried for every group of five passengers with a disability or unaccompanied minors, or a part or combination of that group, and that assistant must be assigned with the responsibility for the safety of those passengers or minors except if the persons with a disability can assist themselves.

(3) In addition to subregulation (2), for each one passenger with a disability who cannot assist himself or herself, an able-bodied assistant must be assigned to solely assist such passenger.

(4) An operator may establish procedures instead of the provisions of subregulations (2) and (3), for the carriage of children and persons with a disability but –

- (a) those procedures must not jeopardise aviation safety; and
- (b) prior written approval must be obtained from the Executive Director.

Carriage of inadmissible passengers, deportees or persons in custody

127.08.33 (1) An operator must establish procedures for the carriage of inadmissible passengers, deportees or persons in custody to ensure the safety of the helicopter and its occupants.

(2) The pilot-in-command of the helicopter must be notified by the operator of such helicopter prior to departure, of the intended carriage and the reason for carriage, of any of the persons referred to in subregulation (1).

(3) For the purposes of this regulation, “inadmissible passenger” means any person who is not entitled to board the helicopter and includes those persons who are not in the possession of a valid passenger ticket, passport, or visa.

Carry-on baggage

127.08.34 (1) An operator must establish adequate procedures to ensure that only such baggage is carried onto the helicopter and taken into the passenger cabin as can be adequately and securely stowed.

(2) The minimum requirements for the procedures referred to in subregulation (1) must be as provided for in Document NAM-CATS-OPS 127.

Securing of passenger cabin and galley

127.08.35 (1) Before take-off and landing and whenever considered necessary in the interests of aviation safety, the pilot-in-command must ensure that –

(a) all equipment, baggage and loose articles in the cabin of the helicopter, including passenger service items and crew members’ and passengers’ personal effects, are properly secured and stowed so as to avoid the possibility of injury to persons or damage to such helicopter through the movement of such articles caused by in-flight turbulence or by unusual accelerations or manoeuvres; and

(b) all aisles, passage ways, exits and escape paths are kept clear of obstructions.

(2) All solid articles must be placed in approved stowage areas in the helicopter at all times whenever the seat belt signs are illuminated or when so directed by the pilot-in-command of such helicopter.

(3) For the purposes of subregulation (2), “approved stowage area” means—

(a) the area under a passenger seat; or

(b) a locker, overhead or other, in accordance with the placarded mass limitation of the locker.

(4) A pilot-in-command of the helicopter may not commence a take-off or landing unless he or she has been informed of the safe condition of the cabin.

Passenger services

127.08.36 (1) Except when in use, all items provided for passenger services, including food containers, thermos flasks and servicing trays, must be carried in their respective stowages and secured against movement likely to cause injury to persons or damage to the helicopter.

(2) All items referred to in subregulation (1) must be stowed during take-off and landing or during emergency situations, as directed by the pilot-in-command of the helicopter.

(3) Any item which cannot be accommodated in the stowage referred to in subregulation (1) must not be permitted in the cabin of the helicopter.

(4) The cabin crew members must complete the securing of the cabin before the approach for landing of the helicopter is commenced, if cabin crew members are carried.

(5) If passenger services are provided while the helicopter is on the ground, no passenger service equipment must obstruct the aisles or exits of the helicopter.

Briefing of passengers

127.08.37 (1) The pilot-in-command must ensure that passengers are given a safety briefing in accordance with Document NAM-CATS-OPS 127.

(2) Where the safety briefing referred to in subregulation (1) is insufficient for a passenger because of that passenger's physical, sensory or comprehension limitations or because that passenger is responsible for another person on board the helicopter, the pilot-in-command must ensure that the passenger is given an individual safety briefing that is appropriate to the passenger's needs.

(3) The pilot-in-command must ensure that each passenger who is seated next to an emergency exit is made aware of how to operate that exit.

Safety features card

127.08.38 An operator must ensure that passengers are aware of the safety features on board the helicopter in pictographic form and any wording must be in English or as required by the Executive Director and must contain such information as provided for by Document NAM-CATS-OPS 127.

Securing of passengers

127.08.39 An operator must ensure that, during take-off and landing and whenever considered necessary by reason of turbulence or any emergency occurring during flight, all passengers on board a helicopter must be secured in their seats by means of the seat belts or harnesses provided.

SUBPART 9 HELICOPTER PERFORMANCE OPERATING LIMITATIONS

DIVISION ONE: GENERAL

Classification

127.09.1 (1) The classification of helicopters for performance limitations purposes is specified in regulation 91.08.3.

(2) An air operator must ensure that –

(a) a Class 1 helicopter is operated in accordance with the performance operating limitations specified in Division One;

(b) a Class 2 helicopter is operated in accordance with the performance operating limitations specified in Division Two; and

- (c) a Class 3 helicopter is operated in accordance with the performance operating limitations specified in Division Three.

(3) Where specific design characteristics of a helicopter prevent compliance with the regulations in Division two, Three or Four of this Subpart, the operator must, despite subregulation (2), ensure that the helicopter is operated in accordance with such standard that a level of safety equivalent to the level of safety specified in the appropriate Division in this Subpart is maintained.

General provisions for all classes of helicopters

127.09.2 (1) An operator must ensure that –

- (a) the mass of the helicopter, at the start of the take-off, is not greater than the mass at which the requirements in the appropriate Division can be complied with for the flight to be undertaken, allowing for expected reductions in mass as the flight proceeds; and
- (b) the approved performance data contained in the aircraft flight manual referred to in regulation 127.03.2, is used to determine compliance in the appropriate Division.

(2) In complying with any of the provisions in this Subpart, all factors that significantly affect the performance of the helicopter, as applicable to the phase of flight, must be taken into account and which must include as a minimum –

- (a) the mass of the helicopter;
- (b) the operating procedures employed by the operator;
- (c) the pressure altitude appropriate to the elevation of the aerodrome;
- (d) the ambient temperature;
- (e) the wind;
- (f) the condition of the surface; and
- (g) any other factors that may be reasonably identified or anticipated by the operator.

(3) The factors specified in subregulation (2) must be taken into account either directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the comprehensive and detailed code of performance in accordance with which the helicopter is being operated.

(4) An operator must ensure helicopter operations are conducted in a manner that gives appropriate consideration for achieving a safe forced landing in the event the safe continuation of flight is not assured following a critical power-unit failure.

(5) An operator of helicopters operating to or from aerodromes in a congested hostile environment must be approved by the Executive Director to do so and must publish procedures in the operations manual referred to in regulation 127.04.2 that ensure, to the extent possible, the safety of the helicopter, its occupants and persons and property on the ground and such operations must be performed only in Class 1 helicopters.

(6) A helicopter must be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual.

(7) A flight may not be commenced unless the performance information provided in the flight manual, supplemented as necessary with other data acceptable to the Executive Director, indicates that the standards specified in this Subpart can be complied with for the flight to be undertaken.

(8) An operator must adopt obstacle data sufficient to make accurate and safe performance calculations to comply with the requirements in this Part for take-off, initial climb, approach and landing.

(9) In no case must the mass of the helicopter at the start of take-off, or at the expected time of landing at the destination and at any alternate, exceed the relevant maximum mass at which compliance has been demonstrated with the applicable noise certification standards, unless otherwise approved by the Executive Director in exceptional circumstances for a certain operating site where there is no noise disturbance problem.

(10) An operator must issue operating instructions and provide information on helicopter climb performance with all engines operating to enable the pilot-in-command to determine the climb gradient that can be achieved during the take-off and initial climb phase for the existing take-off conditions and intended take-off technique and this information must be based on the helicopter manufacturer's or other data, acceptable to Executive Director, and must be included in the operations manual referred to in regulation 127.04.2.

DIVISION TWO: CLASS 1 HELICOPTER

Take-off

127.09.3 (1) An operator of a Class 1 helicopter must ensure that the take-off mass of the helicopter does not exceed the maximum permitted take-off mass for the pressure altitude and the ambient temperature at the place of departure.

(2) The take-off mass referred to in subregulation (1) must be such that in the event of the critical power-unit failing –

- (a) at or before the DPATO, the helicopter can discontinue the take-off and stop within the rejected take-off area available; or
- (b) at or past the DPATO, the helicopter can continue the take-off and the climb, clearing all obstacles along the flight path by a vertical margin of at least 35 feet until such helicopter can comply with regulation 127.09.4.

(3) For the purposes of subregulation (2)(a), “rejected take-off area” means an elevated aerodrome.

(4) For the purposes of complying with subregulation (2), account must be taken of –

- (a) the local pressure altitude;
- (b) the ambient temperature;
- (c) the take-off technique to be used; and
- (d) not more than 50 percent of the reported head-wind component or, if such data is provided, not less than 150 percent of the reported tail-wind component but if approved wind measuring equipment must be used, the head-wind component may be increased to 80 percent of the headwind reported.

(5) The part of the take-off prior to the DPATO must be so conducted in sight of the surface that a rejected take-off can be carried out.

(6) An operator must ensure that the take-off flight path clears all obstacles as specified in Document NAM-CATS-OPS 127.

En-route with one or more engines inoperative

127.09.4 (1) An operator of a Class 1 helicopter must ensure that, in the event of the critical power unit becoming inoperative at any point in the en-route flight path, appropriate to the meteorological conditions expected for the flight, the helicopter can comply with subregulation (2) or (3) at all points along the route.

(2) An operator must ensure that, when it is intended that the flight will be conducted at any time out of sight of the surface, the mass of the helicopter permits a rate of climb of at least 50 feet per minute with one engine inoperative at any point along the route at the obstacle clearance altitude computed in accordance with regulation 91.07.2.

(3) An operator must ensure that –

- (a) the flight path permits the helicopter to continue flight from the cruising altitude to a height of 1 000 feet above the aerodrome where a landing can be made in accordance with regulation 127.09.5;
- (b) the flight path clears all obstacles vertically at the obstacle clearance margins referred to in regulation 91.07.2;
- (c) the engine is assumed to fail at the most critical point along the route:

but when it is intended that the flight will be conducted by day, visual meteorological conditions and in sight of the surface, only obstacles within 900 metres on either side of the route need to be considered.

(4) Account must be taken of the effects of winds on the flight path.

(5) In the event of any two power units becoming inoperative in the case of a helicopter having three or more power units, the helicopter must be able to continue the flight to a suitable landing site and make a landing thereat.

Approach and landing

127.09.5 (1) An operator of a Class 1 helicopter must ensure that the landing mass of the helicopter at the estimated time of landing does not exceed the maximum landing mass specified for the pressure altitude and the ambient temperature expected for the estimated time of landing at the aerodrome at which it is intended to land and, when required, at any alternate aerodrome.

(2) When determining the landing mass, in the event of the critical power-unit becoming inoperative at any point during the approach and landing phase –

- (a) before the landing decision point, the helicopter must, at the destination and at any alternate aerodrome, after clearing all obstacles in the approach path by a margin of 35 feet, be able to land and stop within the landing distance available or perform a balked landing and clear all obstacles in the flight path by a margin of 35 feet until the helicopter has reached safe take-off speed with a positive rate of climb; or

- (b) at or after the landing decision point, the helicopter must, at the destination and at any alternate aerodrome, after clearing all obstacles in the approach path by a margin of 35 feet, be able to land and stop within the landing distance available;
- (3) For the purposes of complying with this regulation, account must be taken of –
 - (a) the pressure altitude at the destination;
 - (b) the expected air temperature at the destination;
 - (c) the landing technique to be used;
 - (d) not more than 50 percent of the forecast head-wind component unless otherwise approved; and
 - (e) any expected variation in the mass of the helicopter during flight.
- (4) An operator must ensure that the part of the landing from the specified landing decision point to touchdown is conducted in sight of the surface.

DIVISION THREE: CLASS 2 HELICOPTER

General

127.09.6 (1) An operator of a Class 2 helicopter must ensure that the part of the take-off prior to the defined point after take-off and after the defined point before landing, is conducted only in conditions of weather and light and over such routes and diversions which permit a safe forced landing to be executed in the event of engine failure.

(2) A Class 2 helicopter must not be permitted to operate from elevated structures in built-up areas.

Take-off

127.09.7 (1) An operator of a Class 2 helicopter must ensure that the take-off mass of the helicopter does not exceed the maximum permitted take-off mass specified for a rate of climb for the pressure altitude and ambient temperature at the aerodrome of departure which allows the helicopter, in the event of the critical power unit becoming inoperative at any time after reaching the defined point after take-off, to continue the take-off and initial climb and clear all obstacles along its flight path by a margin of 35 feet, until such helicopter can comply regulation 127.09.8.

(2) An operator must ensure that for an elevated aerodrome, the take-off mass is such that the helicopter is capable of –

- (a) rejecting the take-off and landing on the elevated aerodrome; or
- (b) continuing the take-off and clearing the elevated aerodrome until such helicopter can comply with regulation 127.09.8, or carry out a safe forced landing.
- (3) For the purposes of complying with subregulation (2), account must be taken of –
 - (a) the pressure altitude at the elevated aerodrome;
 - (b) the ambient temperature at the elevated aerodrome;

- (c) the take-off technique to be used; and
 - (d) not more than 50 percent of the reported head-wind component or, if such data is provided, not less than 150 percent of the reported tail-wind component except that when approved wind measuring equipment is used, the headwind component may be increased to 80 percent of the headwind reported.
- (4) An operator must ensure that the part of the take-off up to the commencement of the take-off flight path is conducted in sight of the surface.
- (5) An operator must ensure that the take-off flight path clears all obstacles as specified in Document NAM-CATS-OPS 127.

En-route with one or more engines inoperative

127.09.8 (1) An operator of a Class 2 helicopter must ensure that, in the event of one engine becoming inoperative at any point in the en-route flight path, appropriate to the meteorological conditions expected for the flight, the helicopter can comply with this regulation at all points along the route.

- (2) When it is intended that the flight must be conducted –
 - (a) at any time out of sight of the surface, the mass of the helicopter must permit a rate of climb of at least 50 feet per minute with one engine inoperative at any point along the route at the obstacle clearance altitude computed in accordance with regulation 91.07.2;
 - (b) when it is intended that the flight will be conducted by day, in visual meteorological conditions and in sight of the surface, only obstacles within 900 metres on either side of the route need to be considered.
- (3) An operator must ensure that –
 - (a) the flight path permits the helicopter to continue flight from the cruising altitude to a height of 1 000 feet above the aerodrome where a landing can be made in accordance with regulation 127.09.9;
 - (b) the flight path clears all obstacles vertically by at least the obstacle clearance margins specified in regulation 91.07.2; and
 - (c) the engine is assumed to fail at the most critical point along the route:

but when it is intended that the flight will be conducted by day, visual meteorological conditions and in sight of the surface, only obstacles within 900 metres on either side of the route need to be considered.

- (4) Account must be taken of the effects of winds on the flight path.

Landing

127.09.9 (1) An operator of a Class 2 helicopter must ensure that the landing mass of the helicopter at the estimated time of landing does not exceed the maximum mass specified for the pressure altitude and ambient temperature expected for the estimated time of landing at the aerodrome at which it is intended to land and at any alternate aerodrome, which must allow the helicopter, in the event of the critical power unit becoming inoperative before the DPBL, after

clearing all obstacles by a safe margin, to either land and stop within the landing distance available or to perform a balked landing and clear all obstacles in the flight path by a margin of 35 feet.

(2) If the becoming inoperative of the critical power unit after the DPBL may cause the helicopter to force land, the helicopter must only be operated in conditions of weather and light and over such routes and diversions which permit a safe forced landing to be executed in the event of an engine failure.

(3) When determining the landing mass for elevated aerodromes, the landing mass must be such that the helicopter is capable of –

- (a) landing on the elevated aerodrome; or
 - (b) rejected the landing and clearing the elevated aerodrome, thereafter continuing the flight or carrying out a safe forced landing.
- (4) For the purposes of complying with subregulation (3)(b), account must be taken of –
- (a) the pressure altitude of the elevated aerodrome;
 - (b) the expected air temperature at the elevated aerodrome;
 - (c) the landing technique to be used;
 - (d) not more than 50 percent of the forecast headwind component unless otherwise approved; and
 - (e) any expected variation in the mass of the helicopter expected during the flight.

DIVISION FOUR: CLASS 3 HELICOPTER

General

127.09.10 (1) An operator of a Class 3 helicopter must ensure that operations are only conducted in conditions of weather and light, and from those aerodromes and over such routes and diversions therefrom, which will permit a safe forced landing to be executed in the event of a power unit failure.

(2) A Class 3 helicopter must not be permitted to operate from elevated aerodromes in built-up urban areas.

(3) An operator of a Class 3 helicopter may not operate such helicopter under instrument meteorological conditions, except for flights operated under special visual flight rules .

Take-off

127.09.11 (1) An operator of a Class 3 helicopter must ensure that the take-off mass of the helicopter does not exceed the maximum permitted take-off mass specified for a hover-inside-ground-effect with all power units operating at take-off power at the pressure altitude and ambient temperature at the take-off site.

(2) For the purposes of this regulation, hover-inside-ground-effect performance data must include consideration of loss of ground cushion as a result of strong winds.

(3) The helicopter must be able, with all engines operating, to clear all obstacles along its flight path by a margin of 35 feet until such helicopter can comply with regulation 127.09.12.

En-route

127.09.12 An operator of a Class 3 helicopter must ensure that the helicopter is able, with all power-units operating, to continue along its intended route or to a planned diversion without flying at any point below the appropriate minimum flight altitude.

Landing

127.09.13 (1) An operator of a Class 3 helicopter must ensure that the landing mass of the helicopter at the estimated time of landing does not exceed the maximum landing mass specified for a hover inside ground effect or hover outside ground effect, whichever is the greater, with all power units operating at take-off power at the pressure altitude and ambient temperature expected for the estimated time of landing at a destination aerodrome and at any alternate aerodrome, if required.

(2) For the purposes of this regulation, hover inside ground effect performance data must include consideration of loss of ground cushion as a result of strong winds.

(3) With all engines operating, the helicopter must, at the destination aerodrome and at any alternate aerodrome, after clearing all obstacles in the approach path by a safe margin, be able to land and stop within the landing distance available or to perform a balked landing and clear all obstacles in the flight path by a margin of 35 feet.

**SUBPART 10
MAINTENANCE****General**

127.10.1 An operator of a commercial air transport helicopter may not operate the helicopter unless such helicopter is maintained in accordance with the regulations in Part 43.

Helicopter maintenance programme

127.10.2 (1) An operator of a commercial air transport helicopter must ensure that the helicopter is maintained in accordance with a helicopter maintenance programme established by the operator.

(2) The programme must contain details, including frequency, of all maintenance required to be carried out on the helicopter and when applicable, a continuing structural integrity programme and Maintenance tasks and intervals that have been specified as mandatory in approval of the type design must be identified as such; and

(3) The programme must include a reliability programme if the Executive Director determines that such a reliability programme is necessary; and

(4) The helicopter maintenance programme referred to in subregulation (1) and any subsequent amendment of the helicopter maintenance programme must be approved by the Executive Director.

(5) An operator of a commercial air transport Class C helicopter, to be operated at night or in instrument meteorological conditions while carrying passengers, must include in the schedule, referred to in subregulation (1) –

- (a) either the manufacturer's recommended engine trend monitoring programme, which includes an oil analysis, if appropriate; or

- (b) an engine trend monitoring programme, approved by the Executive Director, that includes an oil analysis at each 100 hours interval or at the manufacturer's suggested interval, whichever is more frequent.

(6) The results of each test, observation, and inspection, required by the applicable engine trend monitoring programme specified by subregulation (5) must be recorded and maintained in the engine maintenance records.

(7) The programme must contain, in respect of any helicopter referred to in subregulation (5), written maintenance instructions containing the methods, techniques, and practices necessary to maintain the equipment specified in regulation 127.05.3.

(8) The maintenance programme must be based on maintenance programme information made available by the State of Design or by the organisation responsible for the type design, and any additional applicable experience, where such information is available.

Maintenance contracted to approved aircraft maintenance organisation

127.10.3 If maintenance on a commercial air transport helicopter is carried out by the holder of an aircraft maintenance organisation approval with the appropriate rating issued in terms of Part 145, the operator of the helicopter must ensure that all contracted maintenance is carried out in accordance with the regulations in Part 43.

Operator's maintenance responsibilities

127.10.4 (1) An operator must establish procedures acceptable to the Executive Director that ensure –

- (a) each helicopter they operate is maintained in an airworthy condition;
- (b) the operational and emergency equipment necessary for an intended flight are serviceable; and
- (c) the Certificate of Airworthiness of each helicopter they operate, and any appropriate special conditions, remains valid.

(2) An operator may not operate a helicopter unless it is maintained and released to service by an organisation approved in accordance with Part 145 in the manner referred to in regulation 127.09.3.

(3) An operator must be resourced sufficiently to ensure that all maintenance is carried out in accordance with the maintenance control manual referred to in regulation 127.095.

(4) An operator must ensure that the maintenance of its helicopters is performed in accordance with the maintenance programme referred to in regulation 127.09.2.

Operator's maintenance control manual

127.10.5 (1) An operator must provide a maintenance control manual that meets the requirements in Document NAM-CATS-OPS 43 for the use and guidance of maintenance and operational personnel concerned.

(2) The maintenance control manual referred to in subregulation (1) must incorporate relevant principles of human factors.

(3) An operator must provide two copies of its proposed maintenance control manual to the Executive Director and one copy of the approved maintenance control manual must remain in the custody of the Executive Director.

(4) An operator must amend its maintenance control manual as necessary in accordance with the amendment procedures contained in the maintenance control manual, in order to keep the information contained therein up-to-date and accurately reflect company policy with respect to the maintenance of its helicopters and the operator must forward two copies of all amendments to the maintenance control manual to the Executive Director for approval.

(5) Upon receipt of any approved amendments, each holder of an maintenance control manual must be furnished a copy of such amendment with clear instructions to insert the amended pages in a timely manner into the maintenance control manual.

(6) The Executive Director may require an operator to produce an amendment where he or she is of the opinion that the maintenance control manual requires updating.

Maintenance records

127.10.6 (1) An operator must ensure that the following records are kept for the periods specified in subregulation (2) –

- (a) the total time in service (hours, calendar time and cycles, as appropriate) of the helicopter and all life limited components;
- (b) the current status of compliance with all 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 helicopter or its components subject to a mandatory overhaul life;
- (e) the current status of the helicopter'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 subregulation (1) (a) to (e) must be kept for a minimum period of 6 months after the unit to which they refer has been permanently withdrawn from service and the records in subregulation (1) (f) for a minimum period of five years after the signing of the maintenance release.

(3) In the event of a temporary change of operator, the records must be made available to the new operator and in the event of any permanent change of operator, the records must be transferred to the new operator.

(4) The Executive Director must determine whether a transfer under subregulation (4) is to be considered temporary, in the light of the need to exercise control over the records, which will depend on access to them and the opportunity to update them.

Continuing airworthiness information

127.10.7 (1) An operator must monitor and assess maintenance and operational experience with respect to continuing airworthiness and provide such information as required by the Executive Director and must report said information to him or her using a reporting system the Executive Director has developed for that purpose.

(2) The Executive Director must transmit all mandatory continuing airworthiness information reported to him or her in accordance with subregulation (1) to the State of Design of any helicopter that has been issued a Namibian Certificate of Airworthiness and operated in terms of this Part.

(3) An operator must obtain and assess continuing airworthiness information and recommendations issued by a helicopter manufacturer, the organisation responsible for the helicopter type design or by the State of Design, or any additional requirements issued by the Executive Director for each type of helicopter operated under this Part and must implement resulting actions considered necessary in accordance with a procedure acceptable to the Executive Director.

Modifications and repairs

127.10.8 (1) All modifications and repairs must comply with Part 43.

(2) Procedures must be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.

Maintenance release

127.10.9 (1) A maintenance release must be completed and signed to certify that the maintenance work has been completed satisfactorily and in accordance with approved data and the procedures described in the maintenance organisation's procedures manual.

(2) A maintenance release must contain a certification including –

- (a) basic details of the maintenance carried out including detailed reference of the approved data used;
- (b) date such maintenance was completed;
- (c) when applicable, the identity of the approved maintenance organisation; and
- (d) the identity of the person or persons signing the release.

Records

127.10.10 (1) An operator must ensure that the following records are kept –

- (a) in respect of the entire helicopter: the total time in service;
- (b) in respect of the major components of the helicopter –
 - (i) the total time in service;
 - (ii) the date of the last overhaul;
 - (iii) the date of the last inspection;

- (c) in respect of those instruments and equipment, the serviceability and operating life of which are determined by their time in service –
 - (i) such records of the time in service as are necessary to determine their serviceability or to compute their operating life; and
 - (ii) the date of the last inspection.
- (2) These records must be kept for a period of 90 days after the end of the operating life of the unit to which they refer.

SUBPART 11 SAFETY AND QUALITY MANAGEMENT SYSTEMS

DIVISION ONE: SAFETY MANAGEMENT SYSTEM

Requirement for safety management system

127.11.1 (1) An operator must ensure that it maintains an acceptable level of safety by establishing and maintaining a safety management system that meets the requirements of this Subpart and is approved by the Executive Director.

(2) The size and complexity of an approved safety management system must be determined by the Executive Director and measured in terms of scope and size as well as the hazards and risks associated with the activities being carried out by the certificate holder.

(3) The holder of an air operator certificate issued in terms of this Part who is also the holder of an approved maintenance organisation certificate issued under Part 145, must adhere to the requirements referred to in Part 145 with regard to a safety management system when undertaking maintenance control activities.

(4) An operator's safety management system must include a safety management documents system.

(5) An operator's safety management system must comply with the requirements of Part 140 of these regulations.

SUBPART 12 SECURITY

Aviation security for domestic and international air transport operations

127.12.1 Despite the security requirements specified under this Part, an operator, owner or pilot-in-command, as the case may be, must ensure that the security requirements specified in Parts 108 to 114 in respect of all domestic and international air transport operations are complied with.

SUBPART 13 DANGEROUS GOODS

Transportation of dangerous goods

127.13.1 When transporting dangerous goods the operator, owner or pilot-in-command must comply with the requirements of Part 92.”.