



GOVERNMENT GAZETTE

OF THE

REPUBLIC OF NAMIBIA

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General Notices

MINISTRY OF WORKS, TRANSPORT AND COMMUNICATION

No. 173 2007

**PROPOSED AMENDMENT OF THE NAMIBIAN CIVIL
AVIATION REGULATIONS, 2001
AVIATION ACT 1962 (ACT NO. 74 OF 1962)**

Pursuant to regulation 11.03.2 of the Namibian Civil Aviation Regulations, 2001 the chairperson of the Civil Aviation Regulations Committee hereby notifies the general public that the Minister of Works, Transport and Communication intends, under section 22 of the Aviation Act 1962 (Act No. 74 of 1962) and after consultation with the Minister of Finance, to amend the Namibian Civil Aviation Regulations 2001 to the extent set out in the Schedule.

The Committee hereby invites interested parties to comment on the proposed amendments to the Regulations within 30 days commencing from the 12th of July 2007. The Committee will consider the comments and any representations received at the end of the stated

period after which it will make recommendations to the Director who will in turn if satisfied, with the recommendations, submit them to the Minister for approval in terms of regulation 11.03.4.

Comments or representations should be lodged in writing and should reach the Ministry no later than 30 days from the publication of this notice and should be addressed to:

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SCHEDULE

Definition

1. In these regulations “the principal regulations” means the Namibian Civil Aviation Regulations Government Notice No. 1 of 2 January 2001 as amended by Government Notices No. 57 of 1 April 2006 and No. 201 of 20 November 2006.

Amendment of the table of contents to the Schedule

2. The table of contents to the Schedule to the principal regulations is amended by the insertion after the title “Part 135” Air Transport Operations - Free Balloons of the title “Part 136”.

Amendment of regulation 1.00.1 of the principal regulations

3. Regulation 1.00.1 of the principal regulations is amended by the insertion after the definition of “Document NAM-CATS-OPS 135” of the following definition:

“Document NAM-CATS-OPS 136” means a document on the Namibian Civil Aviation Technical Standards relating to Free Balloon Operations, which is published by the Director in terms of section 22A of the Act;”

Amendment of Part 61 of the principal regulations

4. Part 61 of the principal regulations is amended by:

(a) the substitution for regulation 61.01.20 of the following regulation:

“**61.01.20** (1) Subject to subregulations (3) and (4), the Director may by written notice to the holder of a pilot licence, rating, validation or designated examiner certificate vary, suspend or cancel the licence, rating, validation or certificate if the Director is satisfied that -

- (a) fails to comply with any condition of the licence, rating, validation or certificate;
- (c) fails to comply with the Act or these regulations; or
- (d) the variation, suspension or cancellation is necessary in the interests of aviation safety.

- (2) The notice referred to in subregulation (1) shall -
- (a) specify the reasons why the licence, rating, validation or certificate is being varied, suspended or cancelled;
 - (b) request the holder to rectify the defect within the period specified in the notice;
 - (c) invite the holder to make any representations he or she may wish to make in relation to the variation, suspension or cancellation to the Director within the period specified in the notice; and
 - (d) be delivered to the holder by the quickest possible means available to the Director.

(3) If the holder makes representations to Director as requested the Director shall consider the representations and may confirm or revoke the variation, suspension or cancellation and advise the holder within the shortest possible time after receiving the representations.

(4) If the holder fails to comply with a notice issued in terms of subregulation (1) within the specified period the Director shall confirm the variation, suspension or cancellation and inform the holder in writing of the decision and the holder's right to appeal against the decision.

(5) The Director may disregard the procedures set out in subregulations (1) to (3) in circumstances where the immediate variation, suspension or cancellation of the licence, rating, validation or certificate is necessary to prevent serious harm, injury or damage to any person or property or is in the interest of aviation safety in general.

(6) A person who is aggrieved by a decision made by the Director in terms of this regulation may appeal against that decision to the High Court of Namibia.

(7) An appeal in terms of subregulation (6) shall be made in the same manner and within the same periods that appeals in civil matters are made in cases arising from the magistrates courts established by the Magistrates Courts Act, 1944 (Act No of 1944).

(8) An appeal in terms of subregulation (6) shall not suspend the operation of a decision of the Director made in terms of this regulation unless the High Court determines otherwise.

(9) Regardless of subregulation (6), the Director may revoke or vary a decision made in terms of this regulation if the Director is satisfied that the reason for the initial decision no longer exists and that the continuation of operations by the holder will not endanger aviation safety.”;

- (b) in regulation 61.03.5 by the substitution for subregulation (1) of the following subregulation:

“(1) An applicant for the issue of a private pilot licence (aeroplane) shall have demonstrated to a designated examiner, the ability to

perform as pilot-in-command of an aeroplane, the procedures and manoeuvres as prescribed in Document NAM-CARS-FCL 61, with a degree of competency appropriate to the privileges granted to the holder of a private pilot licence (aeroplane).”;

- (c) in regulation 61.04.5 by the substitution for subregulation (1) of the following subregulation:

“(1) An applicant for the issue of a private pilot licence (helicopter) shall have demonstrated to a designated examiner, the ability to perform as pilot-in-command of a helicopter, the procedures and manoeuvres as prescribed in Document NAM-CARS-FCL 61, with a degree of competency appropriate to the privileges granted to the holder of a private pilot licence (helicopter).”;

- (d) the substitution for regulation 61.19.9 of the following regulation:

“61.19.9. The holder of a valid Grade II aeroplane flight instructor rating shall be entitled to -

- (a) exercise all the privileges of a Grade III aeroplane flight instructor rating;
- (b) send the holder of a student pilot license in respect of an aeroplane, on his or her initial solo flight;
- (c) conduct the training required for a notification for the addition of an aeroplane type or variant, as the case may be, to a type rating; and
- (d) conduct multi-engine training, if he or she holds the appropriate valid type rating, and has completed -
 - (i) the appropriate training as prescribed in Document NAM-CATS-FCL61; and
 - (ii) the multi-engine instructor skill test as prescribed in Document NAM-CATSFCL 61.”;

- (e) the substitution for regulation 61.23.9 of the following regulation:

“61.23.9. The holder of a valid Grade II helicopter flight instructor rating shall be entitled to -

- (a) exercise all the privileges of a Grade III helicopter flight instructor rating;
- (b) send the holder of a student pilot license in respect of a helicopter, on his or her initial solo flight;
- (c) conduct the training required for a notification for the addition of a helicopter type or variant, as the case may be, to a type rating; and

- (d) conduct multi-engine training, if he or she holds the appropriate valid type rating, and has completed -
 - (i) the appropriate training as prescribed in Document NAM-CATS-FCL 61; and
 - (ii) the multi-engine instructor skill test as prescribed in Document NAM-CATS FCL 61.”.

Insertion of new Part into the principal regulations

5. The following Part is inserted after Part 135 of the Schedule to the principal regulations:

“PART 136 AIR TRANSPORT OPERATIONS-FREE BALLOONS

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SUBPART 1 GENERAL

Applicability

136.01.1 (1) This Part shall apply to -

- (a) manned free balloons engaged in commercial air transport operations within Namibia;
- (b) manned free balloons registered in Namibia and engaged in international commercial air transport operations;
- (c) the issue of air operator certificates for Namibian operators, and matters related thereto;
- (d) persons acting as crew members of manned free balloons registered in Namibia; and
- (e) persons who are on board a manned free balloon operated under this Part.

(2) For the purposes of this Part, a manned free balloon registered in another State and operated by the holder of an air operator certificate issued in Namibia, shall be deemed to be registered in Namibia.

Authority of pilot-in-command

136.01.2 All persons on board a manned free balloon shall obey all lawful commands given by the pilot-in-command of the free balloon for the purpose of securing the safety of such manned free balloon and of persons or property carried therein.

Authority of personnel to operate free balloon

136.01.3 No operator or pilot-in-command, as the case may be, of a free balloon, shall permit the operation of or operate, and no person shall operate, a free balloon unless the person at the controls of such free balloon -

- (a) is the holder of a valid free balloon licence issued in terms of Subpart 11 or 12 of Part 61; or
- (b) has received instruction in the operation of free balloon from, and has been declared competent to operate by, the holder of a flight instructor rating or, in the case of a foreign registered a free balloon, a person authorised by an appropriate authority;
- (c) is authorised to use the radio apparatus on the free balloon, if any; and
- (d) is conversant with the layout of the approved operations area of the free balloon, routes, signs, markings, lighting, air traffic service signals and instructions, phraseology and procedures, if required, and is able to conform to the standards required for safe operation of the free balloon in that area.

Search and rescue information

136.01.4 The operator or pilot-in-command, as the case may be, of a free balloon, shall ensure that all essential information concerning the search and rescue

services in the area over which it is intended that the free balloon will be flown, is available on board such free balloon.

Information on emergency and survival equipment carried

136.01.5 (1) The operator of a free balloon shall have available for immediate communication to rescue co-ordination centres, a list containing information regarding the emergency and survival equipment carried on board the free balloon.

(2) The minimum information to be contained in the list referred to in subregulation (1) shall be as prescribed in Document NAM-CATS-OPS 136.

Method of carriage of persons

136.01.6 No person shall be in any part of a free balloon in flight which is not a part designed for the accommodation of persons, unless temporary permission has been granted by the pilot-in-command to access such part of the free balloon -

- (a) for the purpose of taking action necessary for the safety of such free balloon or of any person, animal or goods therein; and
- (b) in which cargo or stores are carried, being a part which is designed to enable a person to have access thereto while such free balloon is in flight.

Admission to pilot's compartment

136.01.7 (1) The operator of a free balloon shall ensure that no person is admitted to, or carried on the pilot's compartment of a partitioned basket free balloon, unless such person is -

- (a) a flight crew member assigned to the flight;
- (b) an authorised officer, inspector or authorised person; or
- (c) permitted by, and carried in accordance with, the instructions contained in the operations manual referred to in regulation 136.06.3.

(2) The final decision regarding the admission of any person to the pilot's compartment shall be the responsibility of the pilot-in-command: Provided that in the case of an authorised officer, inspector or authorised person on an official inspection, such admission shall not be unreasonably withheld.

(3) The admission of any person to the pilot's compartment shall not interfere with the operation of the free balloon.

(4) Any person carried on the pilot's compartment, shall be made familiar with the applicable safety procedures.

Unauthorised carriage

136.01.8 No person shall conceal himself or herself, or any animals or cargo on board a free balloon.

Endangering safety

136.01.9 No person shall, through any act or omission -

- (a) endanger the safety of a free balloon or person therein; or
- (b) cause or permit the free balloon to endanger the safety of any person or property.

Intoxication

136.01.10 (1) The operator of a free balloon shall not permit, and no person shall enter or be in, the free balloon while under the influence of any alcohol or psychoactive substance, to the extent where the safety of such free balloon or its occupants is, or is likely to be, endangered.

(2) The operator shall establish procedures to ensure that any person referred to in subregulation (1) -

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

Operational Directives

136.01.11 (1) The Director may direct by means of an operational directive that an operation shall be prohibited, limited or subject to certain conditions, in the interests of safe operations.

(2) An operational directive shall state -

- (a) the reason for its issue;
- (b) its applicability and duration; and
- (c) action required to be taken by the operator.

(3) Operational directives issued in terms of subregulation (1) are supplementary to the provisions of Part.

(4) The operator shall ensure that all operational directives are brought to the attention of personnel engaged, employed or contracted by the operator in his or her operations.

Power to inspect

136.01.12 An operator shall ensure that any person authorised by the Director is permitted at any time to board and fly in any free balloon operated in accordance with an air operator certificate issued by the Director and to enter and remain on the pilot's compartment provided that the commander may refuse access to the pilot's compartment if, in his or her opinion, the safety of the free balloon would thereby be endangered.

Definitions in this Part

136.01.13 For the purposes of this Part, unless the context indicates otherwise -

“operations area” means any area or proposed area of operation for free balloons which has been approved by the Director; and

“operations base” in relation to an operator’s free balloon operations means the place or site which serves as that operator’s administrative and operational base and where information required to be kept in terms of this Part is kept; and

“operations site” in relation to free balloon flight operations means any launching or landing site which is used or intended to be used for free balloon or proposed free balloon operations pursuant to this Part.

SUBPART 2 AIR OPERATOR CERTIFICATE

Requirement for air operator certificate

136.02.1 (1) No person or organisation shall operate a free balloon for commercial air transport purposes in Namibia and no Namibian operator shall operate a free balloon for commercial air transport purposes except under the authority of, and in accordance with the conditions of, an air operator certificate issued under this Subpart.

Application for issue or amendment of air operator certificate

136.02.2. (1) An application for the issue of an air operator certificate, or any amendment thereof, shall be -

- (a) made to the Director in the appropriate form as prescribed in Document NAM-CATS-OPS 136; and
- (b) accompanied by -
 - (i) the appropriate fee prescribed in Part 187;
 - (ii) the operations manual referred to in regulation 136.06.3;
 - (iii) a valid air service licence issued under the Air Services Act, 1949 (Act No. 51 of 1949);
 - (iv) proof that the applicant is financially capable of conducting the type of operation, and the maintenance of the type of the free balloon, covered by the application;
 - (v) in respect of the operator’s maintenance system, and for each type of free balloon to be operated -
 - (aa) the maintenance management manual referred to in regulation 136.09.6;
 - (bb) the operator’s free balloon maintenance programme referred to in regulation 136.09.5;
 - (cc) the free balloon technical log referred to in regulation 136.09.7;
 - (dd) the technical specifications of the maintenance contract between the applicant and a free balloon maintenance organisation approved in terms of Part 145, if applicable;

- (vi) the operator's safety management system manual referred to in regulation 136.03.9;
- (vii) an indication of the number of free balloons to be used in the operation; and
- (viii) a detailed map showing the proposed operations area.

(2) An application for the issue of an air operator certificate, shall be submitted to the Director at least 90 days before the date of commencement of the intended operation.

(3) An application for the amendment of an air operator certificate, shall be submitted to the Director at least 30 days before the date of commencement of the intended amendment.

(4) An applicant for the issue of an air operator certificate shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of any application made in terms of this regulation.

Assessment of application and issue of air operating certificate

136.02.3 (1) In considering an application for the issue of an air operator certificate, or an amendment thereof, the Director may conduct any investigation he or she deems necessary.

- (2) An applicant will not be granted an air operator certificate unless:
 - (a) the free balloons operated have valid certificates of airworthiness issued in terms of Part 21, or in the case of a foreign registered free balloon the foreign certificate of airworthiness has been validated in terms of Part 21;
 - (b) the maintenance system referred in regulation Subpart 9 has been approved by the Director;
 - (c) the applicant has satisfied the Director that he or she has the ability to -
 - (i) establish and maintain an adequate organisation referred to in Subpart 3;
 - (ii) establish and maintain the quality system referred to in regulation 136. 03.7;
 - (iii) comply with training programmes required in terms of Subpart 5;
 - (iv) comply with maintenance requirements, consistent with the nature and extent of the operations specified;
 - (d) the applicant has the financial capability to conduct the operation; and
 - (e) the Director is satisfied that the applicant will not conduct the operation concerned contrary to any provision of the Act or the Civil Aviation Offences Act, 1972 (Act No. 10 of 1972) or any other law.

(3) An air operator certificate shall be issued on the appropriate form as prescribed in Document NAM-CATS-OPS 136, under such conditions which the Director may determine.

- (5) An air operator certificate shall specify -
- (a) the name and principal place of business of the operator;
 - (b) the date on which the certificate was issued and its period of validity;
 - (c) a description of the type of operation authorised;
 - (d) the type of free balloons authorised for operation;
 - (e) the nationality and registration marks of each free balloon authorised for operation;
 - (f) the approved operations area; and
 - (g) the conditions of the certificate.

Period of Validity

136.02.4 (1) An air operator certificate shall be valid for the period determined or authorised by the Director, which period shall not exceed 12 months, calculated from the date of issue or renewal thereof.

(2) The certificate shall remain in force until it expires or is varied, suspended or cancelled by the Director in terms of regulation 136.02.10.

(3) The holder of a certificate which expires, shall as soon as is reasonably practicable, surrender the certificate to the Director.

(4) The holder of a certificate which is varied or suspended, shall forthwith produce the certificate upon variation or suspension thereof, to the Director for the appropriate endorsement.

(5) The holder of a certificate which is cancelled, shall within 30 days from the date on which the certificate is cancelled, surrender such certificate to the Director.

Renewal of air operator certificate

136.02.5 (1) The holder of an air operator certificate shall at least 30 days immediately before the date on which the certificate expires, apply for the renewal of such certificate.

(2) The provisions of regulations 136.02.2 and 136.02.3 shall, subject to necessary changes required by context, apply to an application for renewal of a certificate made in terms of this regulation.

Duties of holder of air operator certificate

136.02.6 The holder of an air operator certificate shall -

- (a) engage, employ or contract -

- (i) adequate flight crew for the type of operation authorised, who are trained and checked in accordance with the provisions of Subpart 3;
 - (ii) adequate ground personnel for the nature and scale of the type of operation authorised, who have a thorough understanding of their responsibilities within the organisation of the operator;
 - (iii) adequate supervisors for the structure of the operator and the number of personnel engaged, employed or contracted, who possess experience and personal qualities sufficient to ensure the attainment of the standards specified in its approved operations manual;
- (b) ensure that-
- (i) each flight is conducted in accordance with the approved operations manual;
 - (ii) the type of free balloon authorised for use, is equipped, and its crew qualified, as required for the area and type of operation authorised;
 - (iii) arrange appropriate ground handling facilities to ensure the safe handling of its flights;
 - (iv) if the provision of certain of its services is contracted to another organisation, retain responsibility for the maintenance of the standards for such services, specified in its approved operations manual;
 - (v) maintain operational support facilities at the main operating base, appropriate for the area and type of operation authorized; and
 - (vi) maintain each free balloon in accordance with the requirements of subpart 9.

Display of air operator certificate

136.02.7 The holder of an operator certificate shall display the certificate in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the certificate is displayed, shall produce the original certificate to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

Advertisements

136.02.8 Any advertisement by an organisation indicating that it is the operator of a free balloon, shall reflect the number of the air operator certificate issued by the Director.

Transfer of air operator certificate

136.02.9 (1) Subject to the provisions of subregulation (2), an air operator certificate shall not be transferable.

(2) A change in ownership of the holder of a certificate shall be deemed to be a change of significance referred to in regulation 136.03.8.

Variation, Suspension and Revocation of Certificate

136.02.10 (1) Subject to subregulations (3) and (4), the Director may by written notice to the holder of an air operator certificate vary, suspend or cancel an air operator certificate if the Director is satisfied that -

- (a) the operator can no longer maintain an adequate organisation to ensure safe operations;
- (b) fails to comply with any condition of the certificate;
- (c) fails to comply with the Act or these regulations;
- (d) is convicted of an offence in terms of the Act or these regulations; or
- (e) the variation, suspension or cancellation is necessary in the interests of aviation safety.

(2) The notice referred to in subregulation (1) shall -

- (a) specify the reasons why the certificate is being varied, suspended or cancelled;
- (b) request the holder to rectify the defect within the period specified in the notice;
- (c) invite the holder to make any representations he or she may wish to make in relation to the variation, suspension or cancellation to the Director within the period specified in the notice; and
- (d) be delivered to the holder by the quickest possible means available to the Director.

(3) If the holder makes representations to Director as requested the Director shall consider the representations and may confirm or revoke the variation, suspension or cancellation and advise the holder within the shortest possible time after receiving the representations.

(4) If the holder fails to comply with a notice issued in terms of subregulation (1) within the specified period the Director shall confirm the variation, suspension or cancellation and inform the holder in writing of the decision and the holder's right to appeal against the decision.

(5) The Director may disregard the procedures set out in subregulations (1) to (3) in circumstances where the immediate variation, suspension or cancellation of the certificate is necessary to prevent serious harm, injury or damage to any person or property or is in the interest of aviation safety in general.

(6) A person who is aggrieved by decision made by the Director in terms of this regulation may appeal against that decision to the High Court of Namibia.

(7) An appeal in terms of subregulation (6) shall be made in the same manner and within the same periods that appeals in civil matters are made in cases arising from the magistrates courts established by the Magistrates Courts Act, 1944 (Act No of 1944).

(8) An appeal in terms of subregulation (6) shall not suspend the operation of a decision of the Director made in terms of this regulation unless the High Court determines otherwise.

(9) Regardless of subregulation (6), the Director may revoke or vary a decision made in terms of this regulation if the Director is satisfied that the reason for the initial decision no longer exists and that the continuation of operations will not endanger aviation safety.

Loss of air operator certificate

136.02.11 If an air operator certificate is lost, mutilated or destroyed, the operator shall within five days of such loss, mutilation or destruction notify the Director in writing and may at the same time apply for issue of a duplicate certificate which the Director shall issue subject to payment of the fee set out in Part 187.

Register of certificates

136.02.12 (1) The Director shall maintain a register of all air operator certificates issued, amended or renewed in terms of the regulations in this Subpart.

(2) The register shall contain the following particulars:

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

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

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

(5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in part 187, to any person who requests the register.

Dry lease of free balloon

136.02.13 (1) A Namibian operator who intends to dry lease a foreign registered free balloon for operation under this Part, shall -

- (a) ensure that the free balloon can be operated and is operated in accordance with the requirements prescribed in this Part; and

(b) obtain prior approval from the Director to operate such free balloon.

(2) The approval referred to in subregulation (1)(b) shall, subject to such condition as the Director may determine, be granted if such free balloon is -

(a) type certificated in accordance with the requirements prescribed in Part 21;

(b) maintained in accordance with the operator's maintenance system referred to in regulation 136 09.2;

(c) operated under the air operator certificate held by the operator referred to in subregulation (1).

(3) The conditions of approval referred to in subregulation (2) shall be part of the lease agreement between the operator referred to in subregulation (1) and the operator from whom the foreign registered free balloon is leased.

(4) Subject to the provisions of subregulation (5), the operator of a Namibian registered free balloon may dry lease the free balloon to any operator of another contracting State to the Convention.

(5) On request of the operator of a Namibian registered free balloon, the Director may, subject to subregulation (6), remove the free balloon from the air operator certificate held by such operator.

(6) The Director may effect a removal referred to in subregulation (5) if -

(a) the appropriate authority of the state of the operator has accepted in, writing, the responsibility for the surveillance of the maintenance and operation of such free balloon; and

(b) such free balloon is maintained according to an approved operator's maintenance system.

Wet lease of free balloon

136. 02.14 (1) A Namibian operator who intends to wet lease a foreign registered free balloon for operations under this Part, shall obtain prior approval from the Director to operate such free balloon.

(2) The approval referred to in subregulation (1) shall, subject to such conditions as the Director may determine, be granted if such free balloon -

(a) is wet leased from an operator who is the holder of an air operator certificate or equivalent authorisation issued by an appropriate authority;

(b) has been type certificated by the appropriate authority;

(c) holds a valid certificate of airworthiness or similar document issued by such appropriate authority;

(d) is maintained and operated in accordance with safety standards prescribed in this Part; and

(e) will be operated in terms of the air operator certificate held by the operator referred to in subregulation (1).

(3) The operator referred to in subregulation (1) shall -

(a) satisfy the Director that the safety standards of the lessor are not less than the safety standards prescribed in this Part;

(b) ensure that any law applicable to the maintenance and operation of the free balloon to be wet leased, is complied with.

(4) The operator of a Namibian registered free balloon who intends to wet lease the free balloon to any operator, other than an operator of another contracting state to the Convention, shall remain the operator of the free balloon for the purposes of this Subpart, and the responsibility for the surveillance of the maintenance and operation of such free balloon shall not be transferred to the appropriate authority of the State of the operator.

Leasing of free balloon between two Namibian operators

136.02.15 (1) A Namibian operator who intends to lease a free balloon and complete crew from another Namibian operator, shall become the operator of the free balloon and shall assume the functions and responsibilities prescribed in this Subpart.

(2) A Namibian operator intending to utilise a free balloon leased from, or to lease it to, another Namibian operator shall obtain prior approval from the Director for the operation, and the conditions of approval shall be part of the lease agreement between the operators.

(3) The terms of an approved lease agreement, other than an agreement in terms of which a free balloon together with crew is leased, and where no transfer of function and responsibilities is intended, shall include -

(a) the arrangement concerning the air operator certificate under which the flights with the leased free balloon shall be operated; and

(b) any deviation from the air operator certificate under which the flights with the leased free balloon shall be operated.

Subchartering

136.02.16 (1) In the exceptional circumstances as prescribed in Document NAM-CATS-OPS 136, an operator may subcharter a free balloon and crew from any operator who holds a valid air operator certificate, or similar document, for the free balloon, issued by an appropriate authority; Provided that -

(a) the subcharter period does not exceed five consecutive days; and

(b) the operator of the free balloon so subchartered, informs the Director, within 24 hours, of such subcharter.

(2) The provisions of regulation 136.02.13, 136.02.14 and 136.02.15 shall subject to necessary changes required by context, apply to any subcharter referred to in this regulation.

SUBPART 3
ORGANISATION AND GENERAL DUTIES OF CERTIFICATE HOLDER

Management and executive staff

136.03.1 (1) The operator shall establish an effective management structure consisting of suitably experienced and competent personnel whose duties and responsibilities shall be clearly defined in writing.

(2) The positions of key personnel including that of the senior person identified as the accountable manager and compliance officer of the operator concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the operator are carried out in accordance with the applicable requirements prescribed in this Subpart shall be listed in the operations manual for approval by the Director.

(3) The accountable manager referred to in subregulation (2) shall, in addition to any other powers or duties imposed on him or her, be vested with the following powers and duties in respect of the compliance with such requirements:

- (a) unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering services under contract with the operator;
- (b) full rights of consultation with any such person in respect of such compliance by him or her;
- (c) power to order cessation of any activity where such compliance is not effected;
- (d) duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director and the operator concerned; and
- (e) powers to report directly to the management of the operator on his or her investigations and consultations generally, and in cases contemplated in subregulation (3)(c), and with regard to the results of the liaison contemplated in subregulation (3)(d).

Adequacy and supervision of staff

136.03.2 (1) The operator shall engage, employ or contract competent persons who are responsible for -

- (a) quality assurance, and who have direct access to the accountable manager and compliance officer referred to in regulation 136.03.1 on matters affecting airworthiness, free balloon maintenance and aviation safety;
- (b) flight operations;
- (c) the maintenance system;
- (d) crew training; and
- (e) ground operations.

who shall be approved in writing by the Director.

(2) The operator shall engage, employ or contract competent persons who are responsible for the planning, performance, supervision and inspection of the type of operation and the maintenance of the type of free balloons operated by the operator.

(3) Depending on the nature and size of the operator's operation arrangements shall be made for the appointment of a chief pilot who shall be responsible for the training and supervision of the operator's pilots to ensure the maintenance of high professional standards.

(4) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competency of those personnel involved in planning, performing or supervising the type of operation, and the maintenance of the type of free balloon, covered by the certificate.

Office facilities and accommodation

136.03.3 The operator shall ensure that -

- (a) working space available at each operations base is sufficient for personnel pertaining to the safety of flight operations, taking into account the needs of ground personnel, personnel concerned with operational control the storage and display of essential records and flight planning by crew;
- (b) office services are capable, without delay, of distributing operational instructions and other information to all concerned; and
- (c) suitable office accommodation are available at appropriate locations for the personnel referred to in regulation 136.03.2(1).

Operations balloons library

136.03.4 (1) The operator shall, at the operations base, keep and maintain in an orderly manner, an adequate library of maps, charts, flight guides, operations manuals and other documents and information to be used by personnel at the operations base and in flight operations.

(2) Any amendments made to the documents or information referred to in subregulation (1) shall be timeously made in the records and brought to the notice of pilots and other operating staff.

Balloons library

136.03.5 The operator shall ensure that each free balloon used in his or her operations is equipped with an adequate supply of manuals, maps and flight guides and other necessary documents to be used for operations and supported by an efficient amendment service.

Minimum equipment lists-operator's responsibilities

136.03.6 (1) An operator shall establish, for each free balloon, a Minimum Equipment List (MEL) approved by the Director and this list shall be based upon, but no less restrictive than, the relevant Master Minimum Equipment List (MMEL)(if this exists) accepted by the Director.

(2) An operator shall not operate a free balloon other than in accordance with the MEL unless permitted by the Director and any such permission will in no circumstance permit operation outside the constraints of the MMEL.

Quality assurance system

136.03.7 (1) An operator shall establish one quality assurance system and designate one quality manager to monitor compliance with, and the adequacy of, procedures required to ensure safe operational practices and airworthy free balloons. Compliance monitoring must include a feed-back system to the accountable manager to ensure corrective action as necessary.

(2) The quality assurance system must include a quality assurance programme that contains procedures designed to verify that all operations are being conducted in accordance with all applicable requirements, standard and procedures.

(3) The quality assurance system and the quality manager must be approved to the Director.

(4) The minimum standards for a quality assurance system shall be as prescribed in Document NAM-CATS-OPS 136.

Changes in quality management system

136.03.8 (1) If the holder of an air operator certificate desires to make any change in the quality assurance system referred to in regulation 136.03.7 which is significant to the showing of compliance with the appropriate requirements prescribed in this Part, including -

- (a) any particulars on the certificate
- (b) the identity of the accountable manager and compliance officer;
- (c) the identities of the persons referred to in regulation 136.03.1 or 136.03.2; and
- (d) the conditions of the certificate,

such holder shall apply to the Director for the approval of such change.

(2) The provisions of regulation 136.02. 2 and 136.02.3 shall, subject to necessary changes required by the context, apply to an application for the approval of a change in the quality assurance system.

(3) An application for the approval of a change in the quality assurance system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to its operations manual, that it will continue to comply with the provisions of regulations 136.03.1 to 136.03.7 inclusive after the implementation of such approved change.

Safety management

136.03.9 (1) The operator shall establish a safety management system which shall enable both the operator and the Director to assess the operator's approach to safety and the risk to which his or her operation is open to.

(2) An operator's safety management system shall be incorporated into and become part of the operator's operations manual if approved by the Director.

(3) The Director may establish guidelines for safety management systems for free balloon operators in Document NAM-CATS-OPS 136 and may require such guidelines to be incorporated into the operator's safety management system.

Safety Inspection and Audits

136.03.10 (1) The holder of an air operator certificate shall 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 prescribed in this Part.

Preservation of documents

136.03.11 The operator of a free balloon, who is required to retain any of the documents for the specified period referred to in Subpart 6, shall retain such documents for such specified period irrespective of the fact that such operator, before the expiry of such specified period, ceases to be the operator of the free balloon concerned.

Occurrence reporting

136.03.12 (1) If a flight incident occurs -

- (a) the operator or pilot-in-command of a free balloon shall submit a report to the Director of any incident that has endangered or may have endangered safe operation of the flight; and
- (b) the report shall be dispatched within 72 hours of the event, unless exceptional circumstances prevent this.

(2) The pilot-in-command of a free balloon shall ensure that all technical defects and exceedance of technical limitations occurring while he or she was responsible for the flight are recorded in the free balloon's technical log.

(3) The pilot-in-command of a free balloon shall submit an air traffic incident report in accordance with ICAO PANS RAC whenever a free balloon in flight has been endangered by -

- (a) a near collision with any other flying device;
- (b) faulty air traffic procedures or lack of compliance with applicable procedures by air traffic services or by the flight crew; or
- (c) a failure of air traffic services facilities.

(4) If a free balloon encounters a bird hazard or strike the pilot-in-command of the balloon shall -

- (a) immediately inform the appropriate ground station whenever a potential bird hazard is observed; and
- (b) submit a written bird-strike report after landing whenever a bird strike occurs.

(5) If an in-flight emergency occurs and the situation permits, the pilot-in-command of a free balloon shall inform the appropriate air traffic services unit of any dangerous goods on board.

(6) Following an act of unlawful interference on board a free balloon, the pilot-in-command of a free balloon shall submit a report, as soon as practicable, to the Director.

(7) The pilot-in-command of a free balloon shall notify the appropriate ground station as soon as practicable whenever a potentially hazardous condition such as -

- (a) an irregularity in a ground or navigational facility;
- (b) a meteorological phenomenon;
- (c) a volcanic ash cloud; or
- (d) a high radiation level,

is encountered during flight.

Accident reporting

136.03.13 An operator shall establish procedures to ensure that the nearest appropriate authority is notified by the quickest available means of any accident, involving a free balloon, resulting in serious injury (as defined in the Regulations Regarding the Investigation of Aircraft Accidents, 2000), or death of any person or substantial damage to the free balloon or property.

Statistical information

136.03.14 The holder of an air operator certificate shall furnish the Director with the statistical information, within the appropriate period, as prescribed in Document NAM-CATS-OPS 136.

Documentation

136.04.15 The holder of an air operator certificate shall make the necessary arrangements for the production of manuals amendments and other documents.

SUBPART 4 CREW MEMBERS

Composition of crew

136.04.1 (1) The minimum number and composition of the crew shall not be less than the minimum number and composition specified in the free balloon flight manual referred to in regulation 136.06.5.

(2) If the crew consists of more than one pilot the operator shall designate one pilot among the flight crew as pilot-in-command of the free balloon who may delegate the conduct of the flight to another suitably qualified pilot.

(3) The operator of a free balloon shall allocate additional crew members when it is required by the type of operation, and the number of such additional crew members shall not be less than the number specified in the operations manual referred to in regulation 136.06.3.

- (4) The operator shall ensure that the crew members -
- (a) are competent to perform the duties assigned to them; and
 - (b) hold the appropriate valid licences and ratings.

(5) Any flight crew member operating the radio installation in the free balloon shall be the holder of a valid radiotelephony operator certificate or similar document, authorising such member to operate the type of radio transmitting equipment to be used.

(6) When deemed necessary for the safe conduct of a flight, the flight crew shall include at least one member who is proficient in navigating over the route to be flown.

Crew member responsibilities

136.04.2 (1) No person shall act as a crew member of a free balloon -

- (a) while under the influence of any psychoactive substance;
- (b) within 24 hours, following scuba diving by such crew member;
- (c) within 48 hours, following blood donation by such crew member;
- (c) if the crew member knows or suspects that he or she is suffering from or, having due regard to the circumstances of the flight to be undertaken, is likely to suffer from fatigue to such an extent that it may endanger the safety of the free balloon or its occupants; or
- (d) if the crew member is in any doubt of being able to accomplish his or her assigned duties on board such free balloon.

(2) No crew member shall -

- (a) engage in any kind of problematic use of substances;
- (b) use any alcohol or psychoactive substance less than eight hours prior to commencing standby for flight duty or flight, which flight duty shall be deemed to commence at the specified reporting time, if applicable;
- (c) commence flight duty with a blood alcohol level exceeding 0,02 gram per 100 milliliters; or
- (d) use any alcohol or psychoactive substance during flight duty or whilst on standby, or within eight hours after an accident or incident involving the free balloon, unless the accident or incident was not related to his or her duties.

(3) No person shall act as a flight crew member of a free balloon if, prior to each flight, the planned flight time exceeds, or is likely to exceed, the permissible flight time and duty period as specified in the flight time and duty scheme referred to in regulation 136.04.7.

(4) If a flight crew member expects his or her cumulative flight hours projected for a particular operation, to exceed the appropriate limit specified in such flight time and duty scheme, the flight crew member shall inform the operator accordingly.

Crew member emergency duties

136.04.3 (1) The operator and, where appropriate, the pilot-in-command of a free balloon shall assign to each crew member concerned, the necessary functions to be performed in an emergency or a situation requiring emergency evacuation.

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

Laws, regulations and procedures

136.04.4 (1) In an emergency situation which endangers a free balloon, crew members or passengers, the pilot-in-command may, in the interests of aviation safety -

- (a) take any action which he or she considers necessary under the circumstances; and
- (b) deviate from any law, regulation and operational procedure.

(2) If a pilot-in-command deviates from any law, regulation or operational procedure in an emergency situation referred to in subregulation (1), he or she shall forthwith notify the Director of such deviation.

(3) If the Director requests the pilot-in-command to submit a report on such deviation, the pilot-in-command shall submit the report to the Director within the period specified by the Director.

Duties of pilot-in-command regarding flight preparation

136.04.5 (1) The pilot-in-command of a free balloon shall not commence a flight unless he or she is satisfied that -

- (a) the free balloon is airworthy;
- (b) the instruments and equipment required for the particular type of operation to be undertaken, are installed and are serviceable, except as provided for in the MEL, if any;
- (c) the free balloon has been released to service in accordance with the provisions of Part 43;
- (d) the mass of the free balloon does not exceed the maximum certificated mass calculated from the performance information provided in the free balloon flight manual referred to in regulation 136.06.5;
- (e) the load carried by the free balloon is properly secured, fit to be conveyed in accordance with the provisions of Part 92 and is so distributed that the centre of gravity is within the limits prescribed in such free balloon flight manual;
- (f) all the document and forms required to be carried on board, current maps, charts and associated documents, are carried;
- (g) the search and rescue information, referred to in regulation 136.01.4, is available on board;

- (h) the requirements in respect of fuel and minimum safe altitudes, operating area minima and availability of alternate landing sites, are complied with;
- (i) the status of the free balloon and the relevant airborne systems are appropriate for the specific flight to be undertaken;
- (j) the external surfaces are clear of any deposit which might adversely affect the performance or controllability of the free balloon, unless otherwise permitted in the free balloon flight manual referred to in paragraph (d); and
- (k) according to the information available to him or her, the weather at the launching site concerned and the condition of the runway intended to be used, will not prevent a safe take-off and departure or a safe landing at the destination landing site or alternate landing site, as applicable.

(3) Where mass and balance documentation is required in terms of these Regulations, the mass and balance documentation shall be acceptable to and countersigned by the pilot-in-command before a flight commences: Provided that if the mass and balance documentation is submitted to the pilot-in-command by electronic data transfer, commencement of the flight shall be deemed to be the acceptance thereof by such pilot-in-command.

(4) Before take-off and landing, and whenever deemed necessary in the interests of aviation safety, the pilot-in-command shall ensure that all crew, passengers, equipment and baggage are properly secured and all exit and escape paths are unobstructed.

Duties of pilot-in-command regarding flight operations

136.04.6 (1) The pilot-in-command of a free balloon shall be responsible for -

- (a) the operation and safety of the free balloon;
 - (b) the conduct and safety of crew members and passengers carried; and
 - (c) the maintenance of discipline by all persons on board.
- (2) The pilot-in-command shall have the authority -
- (a) to give such commands he or she deems necessary in the interest of the safety of the free balloon, persons or property; and
 - (b) to restrain any person, using only reasonable or sufficient force, if necessary, or disembark any person or cargo which in his or her opinion, represents a potential hazard to the safety of the free balloon, persons or property.
- (3) The pilot-in-command shall -
- (a) ensure that the pre-flight inspection has been carried out, and that the checklists, and where applicable, the pilot's compartment procedures and other instructions regarding the operation of the free balloon, the limitations contained in the free balloon flight manual referred to in regulation 136.06.5, or equivalent certification document, are fully complied with at appropriate times during a flight;

- (b) decide whether or not to accept an free balloon with unserviceabilities allowed by the CDL or MEL, where applicable;
 - (c) before take-off, ensure that the passengers are briefed on the location and general manner of use of the relevant emergency equipment carried for collective or individual use and, when an emergency arises, instruct the passengers to take such emergency action as may be appropriate;
 - (d) ensure that during take-off and landing and whenever, by reason of turbulence or any emergency occurring during a flight, the precaution is considered necessary, all persons on board the free balloon are secured in their seats by means of shoulder restraint harnesses if available in the free balloon;
 - (e) report any accident or incident involving the free balloon in accordance with the provisions of the Regulations Regarding the Investigation of Aircraft Accidents, 2000;
 - (f) report any dangerous goods accident or incident involving the free balloon in accordance with the provisions of Part 92;
 - (g) if the free balloon is endangered in flight by a near collision with any other aircraft or object, faulty air traffic procedure or lack of compliance with applicable procedures by an air traffic service unit or a crew member, or a failure of air traffic service facilities, submit an air traffic service incident report in accordance with the Regulations Regarding the Investigation of the Aircraft Accidents, 2000;
 - (h) record any technical defect and the exceeding of any technical limitation which occurred while he or she was responsible for the flight, in the flight folio; and
 - (i) if a potentially hazardous condition such as bird accumulation, an irregularity in a ground or navigation facility , meteorological phenomena, a volcanic ash cloud or a greater than normal radiation level is observed during flight, notify an air traffic service unit as soon as possible.
- (4) The pilot-in-command shall ensure that -
- (a) oxygen is available to crew members and passengers if flights in a non-pressurised free balloon are contemplated above 10 000 feet up to 12 000 feet in excess of 60 minutes, or above 12 000 feet; and
 - (b) oxygen is carried in sufficient quantities for all flights at such altitude where a lack of oxygen might result in impairment of faculties of crew members, or harmfully affect passengers.
- (5) The pilot-in-command shall not -
- (a) require a crew member to perform any duties during a critical phase of the flight, except those duties required for the safe operation of the free balloon;
 - (b) permit any activity during a critical phase of the flight which could distract any crew member from the performance of his or her duties or which could interfere in any way with the proper conduct of those duties; and

- (c) continue a flight beyond the nearest suitable landing site, in the event of a crew member becoming unable to perform any essential duties as a result of fatigue, sickness, lack of oxygen or any other reason; and

(6) The pilot-in-command or, in his or her absence, the operator of the free balloon, shall report any act of unlawful interference with the operation of such free balloon, or the authority of the pilot-in-command -

- (a) if the act unlawful interference occurs within Namibia; or
- (b) if the act of unlawful interference occurs in a Namibian registered free balloon within or over the territory of a foreign State,

to the Director.

Flight time and duty scheme

136.04.7 (1) The operator of a free balloon shall -

- (a) establish a scheme for the regulation of flight time and duty periods for each crew member;
- (b) include the scheme in the operations manual referred to in regulation 136.06.3;
- (c) ensure that each crew member complies with the provisions of such scheme;
- (d) not cause or permit any crew member to be on flight duty in the free balloon if such operator knows or has been made aware than such crew member -
 - (i) will exceed the flight time and duty periods referred to in subregulation (1)(a) while on flight duty; or
 - (ii) is suffering from 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 free balloon or its crew members and passengers ; and
- (e) not schedule a crew member for active flight duty for a period exceeding eight consecutive hours during any given flight time and duty period unless authorised in the scheme referred to in paragraph (a).

(2) The provisions to be included in a flight time and duty scheme referred to in subregulation (1), shall be as prescribed in Document NAM-CATS-OPS 136.

SUBPART 5 FLIGHT CREW TRAINING AND TESTING

Training of crew members

136.05.1 (1) The operator shall establish and maintain a ground and flight training programme for use by crew members of such operator and such programme shall be contained in the operator's training manual based on the information prescribed under subregulation (3).

(2) An operator's training manual may be incorporated into and become part of the operator's operations manual if approved by the Director.

(3) The Director shall prescribe the appropriate training programmes and syllabi for crew members of free balloons in Document NAM-CATS-OPS 136.

(2) The operator shall ensure that -

(a) each crew member receives training in accordance with the training manual referred to in subregulation (1);

(b) the training shall only be provided by an aviation training organisation approved, by the Director; and

(c) each crew member passes a written examination with regard to all the subjects of the training syllabi prescribed in subregulation (3).

(3) The provisions of this Subpart shall apply in respect of full-time and part-time employed crew members.

Initial training of crew members

136.05.2 A crew member employed by the operator of a free balloon shall have successfully completed the initial training and appropriate skill test as prescribed in Part 61.

Conversion training

136.05.3 (1) The operator of a free balloon shall ensure that -

(a) a flight crew member completes a type conversion course in accordance with the applicable requirements prescribed in Part 61 when changing from one type of free balloon to another, for which a new type rating is required;

(b) a flight crew member completes the operator's type conversion course before commencing unsupervised line flying -

(i) when changing to a free balloon for which a new type rating is required; or

(ii) when employed by such operator;

(c) type conversion training is conducted by a competent person in accordance with the detailed course syllabus included in the operations manual referred to in regulation 136.06.3, and as prescribed in Document NAM-CATS-OPS 136;

(d) the amount of training required by the operator's type conversion course is determined after due note has been taken of the flight crew member's previous training as recorded in the training records referred to in regulation 136.06.8;

(e) the minimum standards of qualification and experience required of flight crew members before undertaking type conversion training are specified in the operations manual;

- (f) each flight crew member undergoes the checks referred to in regulation 136.05.5(2) and the training and checks referred to in regulation 136.05.5(6) before commencing line flying under supervision;
- (g) upon completion of line flying under supervision the check referred to in regulation 136.05.5(4) is undertaken; and
- (h) crew resource management training as prescribed in Document NAM-CATS-OPS 136, is included in the conversion course.

(2) In the case of changing from one type of free balloon to another the check referred to in regulation 136.05.5(2) may be combined with the type rating course prescribed in Part 61.

(3) The operator's type conversion course and the type rating course prescribed in Part 61 may be combined.

(4) The operator's type conversion course shall include the items, and shall be conducted in the order, as prescribed in Document NAM-CATS-OPS 136.

(5) When a flight crew member has not previously completed the operator's type conversion course, the operator shall ensure that, in addition to the provisions of subregulation (4), the flight crew member undergoes general first aid training and, if applicable, ditching procedure training using the appropriate equipment in water.

Differences training and familiarisation training

136.05.4 (1) The operator of a free balloon shall ensure that a flight crew member completes difference training when -

- (a) operating a variant of the type of free balloon currently operated; or
- (b) a change of equipment or procedures on types or variants currently operated, requires the acquisition of additional knowledge and training on an appropriate training device.

(2) The operator shall ensure that a flight crew member completes familiarisation training when -

- (a) operating another free balloon of the same type or variant; or
- (b) a change of equipment or procedures on types or variants currently operated, requires the acquisition of additional knowledge.

(3) The operator shall specify in the operations manual referred to in regulation 136.06.3, when differences training or familiarisation training is required.

Recurrent training and checking

136.05.5 (1) The operator of a free balloon shall ensure that -

- (a) each flight crew member undergoes recurrent training and checking and that all such training and checking is relevant to the operation and the type or variant of free balloon for which the flight crew member is licensed and rated;

- (b) a recurrent training and checking programme is included in the operations manual referred to in regulation 136.06.3;
 - (c) recurrent training is conducted by -
 - (i) a competent person, in the case of ground and refresher training;
 - (ii) an appropriately type rated simulator free balloon flight instructor, in the case of simulator training;
 - (iii) competent personnel, in the case of emergency and safety equipment training and checking; and
 - (iv) competent personnel, in the case of crew resource management training;
 - (d) recurrent checking is conducted by-
 - (i) a designated examiner, in the case of operator proficiency checks; and
 - (ii) an appropriately type rated flight instructor qualified as pilot-in-command, designated by the operator, in the case of line checks; and
 - (e) each flight crew member undergoes such proficiency checks every six calendar months as part of a normal flight crew complement.
- (2) The operator shall ensure that, in the case of the operator proficiency checks referred to in subregulation (1)(e) -
- (a) each flight crew member undergoes such checks to demonstrate his or her competency in carrying out normal, abnormal and emergency procedures; and
 - (b) such checks are conducted without external visual reference when the flight crew member will be required to operate under IFR.
- (3) Upon successful completion of each operator proficiency check referred to in subregulation (1)(e), the operator shall issue a certificate of competency to the flight crew member concerned, which certificate shall be valid for a period of six calendar months calculated from the date on which such certificate is issued.
- (4) The operator shall ensure that, in the case of a line check, each flight crew member undergoes the line check in the free balloon to demonstrate his or her competency in carrying out normal line operations specified in the operations manual referred to in regulation 136.06.3.
- (5) Upon successful completion of a line check referred to in subregulation (4), the operator shall issue a certificate of competency to the flight crew member concerned, which certificate shall be valid for a period of 12 calendar months calculated from the date on which such certificate was issued.
- (6) The operator shall ensure that, in the case of emergency and safety equipment training and checking, each flight crew member undergoes training and checking on the location and use of all emergency and safety equipment carried.

(7) Upon successful completion of the emergency and safety equipment check referred to in subregulation (6), the operator shall issue a certificate of competency to the flight crew member concerned which certificate shall be valid for a period of 12 calendar months calculated from the date on which such certificate was issued

(8) The operator shall ensure that, in the case of crew resource management training, each flight crew member undergoes such training as part of the recurrent training.

(9) The operator shall ensure that, in the case of ground and refresher training, each flight crew member undergoes such training every 12 calendar months.

(10) The operator's recurrent training and checking programme shall include the items, and shall be conducted in the order, as prescribed in Document NAM-CATS-OPS 136.

SUBPART 6 DOCUMENTS AND RECORDS

Documents to be carried on board

136.06.1 The operator or pilot-in-command, as the case may be, of free balloon, shall ensure that the following documents, or certified true copies thereof, are carried on board the free balloon on each individual flight:

- (a) the certificate of registration;
- (b) the certificate of airworthiness;
- (c) the appropriate licenses, ratings and medical certificate of each crew member;
- (d) the journey logbook or general declaration;
- (e) if the passengers are carried, the passenger manifest, unless the information is included in the general declaration referred to in the paragraph (d);
- (f) the free balloon flight manual referred to in regulation 136.06 5, or similar document;
- (g) the mass and balance documentation referred to in regulation 136.08.7(9);
- (h) the technical log, or similar document;
- (i) proof of insurance liability required under regulation 136 10.1;
- (j) the air operator certificate;
- (k) those parts of the operation manual which are required for the conduct of a flight, and which must be accessible to the crew during flight; and
- (l) appropriate meteorological information.

Documents to be retained on ground

136.06.2 (1) The operator of a free balloon shall ensure that, at least for the duration of each flight or series of flights -

- (a) information relevant to the flight or series of flights, and appropriate to the type of operation, is preserved on the ground and is retained until it has been duplicated at the place at which it will be stored in accordance with regulation 136.03.11; or
 - (b) if the preservation and retention of such information contemplated in paragraph (a) is not practicable, such information is carried in a fire proof container in the free balloon.
- (2) The information referred to in subregulation (1) shall include -
- (a) copies of relevant parts of the technical log;
 - (b) the mass and balance documentation referred to in regulation 136 08 7(9); and
 - (c) the special loads notification, if applicable.

Operations manual

136.06.3 (1) The operator of a free balloon shall draw up an operations manual containing all information required under this Part and setting out the manner in which such operator will operate the commercial air transport operation to be authorised by the air operator certificate.

- (2) If the Director is satisfied that -
- (a) the operations manual complies with the provision of subregulation (7);
 - (b) the operator will comply with the provision of regulation 136.02.6; and
 - (c) the operator will not operate the commercial air transport operation concerned contrary to any provision of any law,

the Director shall certify in writing on such operations manual that it has been approved and shall return the approved operations manual to the operator.

(3) In the case of an amendment to the operations manual, if the Director is satisfied that the amendment and the operator comply with the provisions of subregulation (2), the Director shall certify in writing on such amendment that it has been approved, and shall return the approved amendment to the operator.

(4) The operator shall at all times operate the free balloon in accordance with the approved operations manual and any approved amendment thereto.

- (5) The operator shall -
- (a) ensure that all operations personnel are able to understand the technical language used in those sections of the operations manual which pertain to their duties;
 - (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;

- (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;
- (e) keep the operations manual up to date; and
- (f) keep the operations manual in safe place.

(6) The contents of the operations manual shall not contravene the conditions contained in the air operator certificate issued to the operator in terms of regulation 136.02.3.

(7) The structure and contents of the operations manual shall be as prescribed in Document NAM-CATS-OPS 136.

(8) The operator shall, upon receipt of the approved operations manual, or an amendment approved thereto, from the Director, furnish the Director with a copy thereof.

Free balloon operating manual

136.06.4 (1) The operator of a free balloon shall compile and make available a free balloon operating manual for use by the crew members employed by such operator.

- (2) The free balloon operating manual shall contain -
 - (a) the normal, abnormal and emergency procedures relating to the free balloon;
 - (b) details of the free balloon system; and
 - (c) the checklists to be used by the crew members.

(3) The operator shall provide each crew member with a copy of those parts of the free balloon operating manual which are relevant to the operational duties assigned to such crew member.

(4) The operator shall ensure that the free balloon operating manual is provided in a hard copy or in an approved electronic format.

(5) The free balloon operating manual may be included in the operations manual referred to in regulation 136.06.3.

Free balloon flight manual

136.06.5 (1) The operator of a free balloon shall keep an approved and current free balloon flight manual for each free balloon of which he or she is the operator.

(2) The crew members of the free balloons shall, on each flight, operate such free balloon in accordance with the free balloon flight manual, unless an emergency dictates otherwise.

(3) The free balloon flight manual may be included in the free balloon operating manual referred to in regulation 136.06.4.

Operational flight plan

136.06.6 (1) The operator of a free balloon shall ensure that an operational flight plan is completed for each flight undertaken by the free balloon.

(2) The operational flight plan and its use shall be included in the operations manual referred to in regulation 136.06.3.

(3) All entries in the operational flight plan shall be current.

(4) The items to be contained in the operational flight plan shall be as prescribed in Document NAM-CATS-OPS 136.

(5) Each operational flight plan shall be retained by the operator for a period of 90 days.

Technical log

136.06.7 (1) The operator or pilot-in-command, as the case may be, of a Namibian registered free balloon shall ensure that the free balloon carries a technical log, or any other similar document, which contains the information as prescribed in Document NAM-CATS-OPS 136, at all times.

(2) The technical log shall be kept up to date and maintained in a legible manner.

(3) All entries shall be made immediately upon completion of the occurrence to which they refer.

(4) In the case of rectification of defects having been undertaken on the free balloon, the entry shall be certified by the person taking responsibility for the maintenance performed.

(5) The operator shall retain the technical log for a period of five years calculated from the date of the last entry therein.

Free balloon checklist

136.06.8 (1) The operator or pilot-in-command, as the case may be, of a free balloon, shall, where applicable, establish and make available to the crew and other personnel needing the information, a checklist system for the free balloon, which shall be used by such crew and other personnel for all phases of the operation under normal, abnormal and emergency conditions.

(2) The operator shall, in addition to the checklist referred to in subregulation (1), compile and make available to such crew and other personnel, a checklist of the procedures to be followed by such crew and personnel when searching for concealed weapons, explosives or other dangerous devices.

Crew member training records

136.06.9 (1) The operator of a free balloon shall maintain the records of all training and proficiency checks undertaken by the crew members employed by such operator, and such records shall incorporate certificates indicating the successful completion of such training and proficiency checks.

(2) The operator shall retain the record of each flight crew member for a period of at least three years and the record of each cabin crew member for a period of at least 12 months from the date on which the crew member concerned has left the employ of such operator.

(3) The certificate referred to in subregulation (1) shall be made available by the operator to the crew member concerned on request.

Journey log

136.06.10 (1) An operator shall retain the following information for each flight in the form of a journey log:

- (a) free balloon registration;
- (b) date of registration;
- (c) names of crew members;
- (d) duty assignment of crew members;
- (e) place of departure;
- (f) place of arrival;
- (g) time of departure (off-block time);
- (h) time of arrival (on-block time);
- (i) hours of flight;
- (j) nature of flight;
- (k) incidents, observations (if any); and
- (l) commander's signature (or equivalent).

(2) An operator may be permitted not to keep a free balloon journey log, or parts thereof, by the Director if the relevant information is available in other documentation.

(3) An operator shall ensure that all entries are made concurrently and that they are permanent in nature.

Fuel records

136.06.11 (1) The operator of a free balloon shall maintain fuel records for each flight undertaken by the free balloon under the control of such operator for three months.

(2) The pilot-in-command of the free balloon shall enter the fuel records referred to in subregulation (1), in the technical log, or similar document.

Certificate of release to service

136.06.12 (1) No operator or pilot-in-command, as the case may be, of a free balloon, shall operate -

- (a) a Namibian registered free balloon without holding a valid certificate of release to service signed by an appropriately rated aircraft maintenance engineer or an approved aircraft maintenance organisation; or
 - (b) a foreign registered free balloon without holding a valid certificate, equivalent to the certificate referred to in paragraph (a), issued by an appropriate authority.
- (2) The operator or pilot-in-command of a free balloon shall -
- (a) ensure that one copy of such certificate of release to service, or equivalent certificate, is carried on board the free balloon to which it relates and, in the case of a Namibian registered free balloon, a second copy shall be filed at the operational base of such free balloon; and
 - (b) retain a copy of the certificate for a period of 12 months calculated from the date of issue of such certificate.

Flight time and duty period records

136.06.13 (1) The operator of a free balloon shall -

- (a) maintain current flight time and duty period records of all crew members employed 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.

(2) A crew member in the part-time employ of an operator shall maintain his or her own flight time and duty period records and shall provide copies thereof to the operator to enable such operator to ensure that the crew member does not exceed the limits prescribed in the flight time and duty scheme referred to in regulation 136.04.7.

Records of emergency and survival equipment

136.06.14. (1) The operator of a free balloon shall compile a list of all the survival and emergency equipment to be carried in the free balloon and shall have such list available at all times for immediate communication to rescue co-ordination centres.

(2) The survival and emergency equipment list shall be included in the operations manual referred to in regulation 136.06.3.

(3) The format and minimum information to be included in the survival and emergency equipment list, shall be as prescribed in Document NAM-CATS OPSS 136.

Document storage periods

136.06.15 An operator shall ensure that all records and all relevant operational and technical information for each individual flight, are stored for the periods prescribed in NAM-CATS-OPS 136.

Production of documentation and records

136.06.16 (1) An operator shall -

(a) give any person authorised by the Director access to any documents and records which are related to flight operations or maintenance; and

(b) produce all such documents and records, when requested to do so by the Director, within a reasonable period of time.

(2) The pilot-in-command of a free balloon shall, within a reasonable time of being requested to do so by a person authorised by the Director, produce to that person the documentation required to be carried on board.

**SUBPART 7
INSTRUMENTS AND EQUIPMENT**

Approval of instruments and equipment

136.07.1 The operator of a free balloon shall ensure that a flight does not commence unless the instruments and equipment required under this Subpart, or otherwise installed in the free balloon, are -

(a) subject to the provisions of subregulation (2), approved and installed in accordance with the requirements, including airworthiness requirements applicable to such instruments and equipments; and

(b) in a condition for safe operation of the kind being conducted, except as provided for in the MEL.

Use of instruments by pilot

136.07.2 (1) Instruments in a free balloon, which are used by a pilot, shall be arranged in such manner that the pilot can see their indication readily from his or her station, with the minimum practicable deviation from the position and line of vision which he or she normally assumes when looking forward along the flight path.

(2) If a single instrument or item of equipment in the free balloon is required to be seen or operated by more than one pilot, such single instrument or item of equipment shall be installed in such manner that it can be readily seen or operated from each pilot station.

(3) The free balloon shall be equipped with means for indicating the adequacy of the power being supplied to the required flight instruments.

Standard first aid kit

136.07.3 (1) No operator or pilot-in-command, as the case may be, of a free balloon, shall operate the free balloon unless such free balloon is equipped with an appropriate first aid kit as prescribed in Document NAM - CATS - OPS 136.

(2) The operator or pilot-in-command shall ensure that the content of the first aid kit is in a condition necessary for its intended use.

Hand held fire extinguishers

136.07.4 No operator or pilot-in-command, as the case may be, of a free balloon shall operate the free balloon unless such free balloon is equipped with the appropriate hand fire extinguishers as prescribed in Document NAM-CATS-OPS 136.

Survival equipment

136.07.5 (1) No operator or pilot-in-command, as the case may be, of a free balloon, shall operate the free balloon over areas where search and rescue would be especially difficult, unless such free balloon is equipped with the appropriate survival equipment as prescribed in Document NAM-CATS-OPS 136.

(2) The conditions, rules requirements procedures or standards for survival equipment shall be as prescribed in Document NAM-CATS-OPS 136.

Communications equipment

136.07.6 (1) Except with the prior approval of the Director, no operator or pilot-in-command, as the case may be, of a free balloon, shall operate the free balloon unless such free balloon is equipped with radio communication equipment capable of maintaining two way communication with an air traffic service unit.

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

(3) The radio communication equipment installed in the free balloon shall be type as prescribed in Document NAM-CATS-OPS 136.

(4) The installation, bonding and screening of the radio communication equipments, shall be in accordance with the requirements as prescribed in Document NAM-CATS-OPS 136.

Life Jackets

136.07.7 Except as otherwise authorised by the Director, no operator or pilot-in-command of free balloon shall operate a free balloon for a flight that involves one or more of the following:

- (a) flying over water where it is reasonably possible that the balloon might be forced to land onto water;
- (b) taking off or landing at a site where the take off or approach path is so disposed over water that in the event of a mishap there would be a likelihood of ditching; or
- (c) when the wind is less than 5 knots onshore at take off from a site located within one nautical mile of water measured at the ordinary high water mark,

unless life jackets are provided for all persons on board the free balloon.

SUBPART 8 FLIGHT OPERATIONS

Routes and areas of operation

136.08.1 The operator of a free balloon shall ensure that operations are only conducted along such routes, or within such areas, for which -

- (a) ground facilities and services, including meteorological services, are provided which are adequate for the planned operation;
 - (b) appropriate maps and charts are available; and
 - (c) approval or authorisation has been obtained, where required.
- (2) The operator shall ensure that-
- (a) the performance of the free balloon intended to be used, is adequate to comply with minimum and maximum flight altitude requirements as prescribed in Document NAM-CATS-OPS 136; and
 - (b) the equipment of the free balloon intended to be used, complies with the minimum requirements for the planned operation.

Establishment of procedures

136.08.2 The operator of a free balloon shall establish -

- (a) procedures and instructions, for each free balloon type, containing ground personnel and crew member duties for all types of operations on the ground and in flight; and
- (b) procedures to ensure that crew members do not perform any activities during critical phases of the flight other than those required for the safe operation of the free balloon.

Operational control and supervision

136.08.3 (1) The operator of a free balloon shall exercise operational control and establish and maintain an approved method of supervision of flight operations, which shall be contained in the operations manual referred to in regulation 136.06.3.

(2) When considering the approval referred to in subregulation (1), the Director shall give due consideration to the matters as prescribed in Document NAM-CATS-OPS 136.

Competency of operations personnel

136.08.4 (1) The operator of a free balloon shall ensure that all personnel assigned to, or directly involved in, ground and flight operations -

- (a) are properly instructed;
- (b) have demonstrated their abilities and experience appropriate to their positions and the type of operation conducted by such operator; and

- (c) are aware of their responsibilities and the relationship of such responsibilities to the operation as a whole.

(2) The operator shall ensure that all employees, when operating outside Namibia, know that they have to comply with the laws, regulations and procedures of the State in or over which operations are conducted.

Minimum flight altitudes

136.08.5 (1) The operator of a free balloon shall establish minimum flight altitudes and the methods to determine such minimum flight altitudes, which methods shall be approved by the Director, for all route segments to be flown which provide for the required terrain clearance, taking into account the appropriate performance operating limitations prescribed in Document NAM-CATS-OPS 136.

(2) The operator shall take into account the following factors when establishing minimum flight altitudes:

- (a) the accuracy with which the position of the free balloon 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) In complying with the provisions of sub regulation (2), the operator shall give due consideration to -

- (a) corrections for temperature and pressure variations from standard values;
- (b) the air traffic service requirements;
- (c) any contingencies which may reasonably occur along the planned route; and
- (d) free balloon mass and configuration.

Meteorological conditions

136.08.6 (1) On a flight to be conducted in accordance with IFR, the pilot-in-command of a free balloon shall not -

- (a) commence take-off; or
- (b) continue beyond the in-flight decision point,

unless information is available indicating that conditions will, at the estimated time of arrival of such free balloon, be at or above the applicable landing site minima -

- (i) at the destination landing site; or
- (ii) where a destination alternate landing site is required, at the destination landing site and one destination alternate landing site, or at destination alternate landing sites.

(2) On a flight conducted in accordance with VFR, the pilot-in-command of the free balloon shall not commence take-off unless current meteorological reports, or a combination of current reports and forecasts, indicate that the meteorological conditions along the route, or that part of the route to be flown under VFR, shall, at the appropriate time, be such as to render compliance with the provisions of the regulations in this Part possible.

Mass and balance

136.08.7 (1) The operator or pilot-in-command, as the case may be, of a free balloon, shall ensure that, during any phase of operation, the loading mass and the centre of gravity of the free balloon complies with the limitations specified in the free balloon flight manual referred to in regulation 136.06.5, or the operations manual referred to in regulation 136.06.3, if the limitations therein are more restrictive.

(2) The operator or pilot-in-command of a free balloon shall establish the mass and the centre of gravity of the free balloon by actual weighing prior to initial entry into operation and thereafter, at intervals of five years.

(3) The accumulated effects of modifications and repairs on the mass and balance of the free balloon shall be accounted for and properly documented by the operator or pilot-in-command.

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

(5) The operator or pilot-in-command of a free balloon shall determine the mass of all operating items and crew members included in the dry operating mass of the free balloon, by weighing or by using the appropriate standard mass as prescribed in Document NAM-CATS-OPS 136.

(6) The influence of the mass of the operating items and crew members referred to in subregulation (5), on the centre of gravity of the free balloon, shall be determined by the operator or pilot-in-command of such free balloon.

(7) The operator or pilot-in-command of a free balloon shall establish the mass of the traffic load, including any ballast, by actual weighing, or determine the mass of its traffic load in accordance with appropriate standard passenger and baggage mass as prescribed in Document NAM-CATS-OPS 136.

(8) The operator or pilot-in-command shall determine the mass of the fuel load by using the actual specific gravity or, if approved by the Director a standard specific gravity.

(9) The operator or pilot-in-command shall establish mass and balance documentation as prescribed in Document NAM-CATS-OPS 136.

Smoking in free balloons

136.08.8 (1) No person shall smoke in a Namibian registered free balloon when carrying passengers.

(2) No person shall smoke in a foreign registered free balloon, when carrying passengers, which is operated to or from any operating site located in Namibia, while the free balloon is in Namibian airspace.

Fuel policy

136.08.9 (1) The operator of a free balloon shall establish a fuel policy for the purpose of flight planning and in-flight replanning to ensure that every flight carries sufficient fuel for the planned operation and reserve fuel to cover deviations from the planned operation.

- (2) The operator shall ensure that the planning of a flight is only based on -
- (a) procedures, tables or graphs which are contained in or derived from the operations manual referred to in regulation 136.06.3, or current free balloon-specific data;
 - (b) the operating conditions under which the flight is to be conducted, including-
 - (i) realistic free balloon fuel consumption data;
 - (ii) anticipated masses;
 - (iii) expected meteorological conditions; and
 - (iv) air traffic service procedures and restrictions.

(3) The operator shall ensure that the calculation of usable fuel required by such free balloon for a flight includes -

- (a) start up fuel;
- (b) trip fuel;
- (c) reserve fuel consisting of -
 - (i) contingency fuel as prescribed in Document NAM-CATS-OPS 136;
 - (ii) alternate fuel, if a destination alternate landing site is required;
 - (iii) two-hours isolated landing site holding fuel in situations where the destination is remote or no suitable alternate landing site exists;
 - (iv) final reserve fuel;
 - (v) additional fuel, if required by the type of operation ; and
 - (vi) extra fuel, if required by the pilot-in-command.

(4) The operator shall ensure that in-flight replanning procedures for calculating usable fuel required when a flight has to proceed along a route or to a destination other than originally planned, includes -

- (a) trip fuel for the remainder of the flight to destination;
- (b) reserve fuel consisting of -
 - (i) contingency fuel;
 - (ii) alternate fuel, if a destination alternate landing site is required, including selection of the departure landing site as the destination alternate landing site;
 - (iii) final reserve fuel; and
 - (iv) additional fuel, if required by the type of operation, and
- (c) extra fuel, if required by the pilot-in-command.

Fuel supply

136.08.10 (1) The pilot-in-command of a free balloon shall not commence a flight unless he or she is satisfied that the free balloon carries at least the planned amount of fuel to complete the flight safely, taking into account the following:

- (a) meteorological conditions forecast;
- (b) expected air traffic control routing and traffic delays;
- (c) the procedure prescribed in the operations manual for loss of pressurisation, where applicable, or failure of one power unit while en route; and
- (d) any other conditions that may delay the landing of the free balloon or increase fuel consumption.

(2) If the usable fuel on board the free balloon is less than the final reserve fuel the pilot-in-command shall declare an emergency.

(3) The amount of fuel to be carried for each flight, shall be calculated according to the method as prescribed in Document NAM-CATS-OPS 136.

(4) The operator shall establish a procedure to ensure that in-flight fuel checks and fuel management are carried out.

Passenger briefing

136.08.11 (1) The operator or pilot-in-command, as the case may be, of a free balloon, shall ensure that -

- (a) passengers are verbally briefed about safety matters, parts or all of which may be given by an audio-visual presentation;
- (b) passengers are provided with a safety briefing card on which picture type instructions indicate the operation of emergency equipment and exists likely to be used by passengers; and

- (c) in an emergency during flight, passengers are instructed in such emergency action as may be appropriate to the circumstances.
- (2) The operator or pilot-in-command shall ensure that, before take-off -
 - (a) passengers are briefed, to the extent applicable, on -
 - (i) the prohibition of smoking;
 - (ii) the stowage of carry-on baggage;
 - (iii) any restrictions on the use of electronic devices;
 - (iv) the location and contents of the safety briefing card;
 - (v) when and how oxygen equipment is to be used, if the carriage of oxygen is required;
 - (vi) the location and use of life jackets, if any;
 - (vii) the location and method of opening emergency exits; and
 - (viii) when seat belts or harnesses, if any, are to be fastened, and
 - (b) passengers receive, to the extent applicable demonstrations of -
 - (i) the use of safety belts or safety harnesses, if any, including the manner in which safety belts or safety harnesses, if any, are to be fastened or unfastened;
 - (ii) the location and use of oxygen equipment and the extinguishing of all smoking material when oxygen is being used; and
 - (iii) the location and use of life jackets.
- (3) The operator or the pilot-in-command shall ensure that, after take-off, passengers are reminded about -
 - (a) the prohibition of smoking; and
 - (b) the use of safety belts or safety harnesses, if any, are fitted on the free balloon.
- (4) The operator or pilot-in-command shall ensure that, before landing, passengers are reminded about -
 - (a) the prohibition of smoking;
 - (b) the use of safety belts or safety harnesses;
 - (c) the stowage of carry-on baggage; and
 - (d) any restrictions on the use of electronic devices.
- (5) The operator or pilot-in-command shall ensure that, after landing passengers are reminded about -

- (a) the prohibition of smoking; and
- (b) the use of safety belts or safety harnesses.

Emergency Equipment

136.08.12 (1) The operator or pilot-in-command of a free balloon, as the case may be, shall ensure that emergency equipment, carried or installed in the free balloon in order to meet the requirements prescribed in this Part and the MEL, is in such condition that it will satisfactorily perform its design function.

(2) The pilot-in-command of the free balloon shall ensure that the emergency equipment concerned is always accessible for immediate use by the crew members.

Carriage of children and aged or infirm or handicapped passengers

136.08.13 (1) The operator of a free balloon shall establish procedures for the carriage of children and aged or infirm or handicapped passengers to ensure that such passengers when carried when are properly secured with appropriate restraint devices and necessary measures are taken to ensure their safety.

(2) The Director may prescribe any special requirements, limitations or other measures for the carriage of children and aged or infirm or handicapped passengers in Document NAM-CATS-OPS 136 and once so prescribed, the operator shall incorporate them into its operations manual.

Carry-on baggage

136.08.14 (1) The operator of a free balloon shall establish adequate procedures to ensure that only such baggage is carried onto the free balloon and taken into the passenger compartment as can be adequately and securely stowed.

(2) The minimum requirements for the procedures referred to in subregulation (1) shall be as prescribed in Document NAM-CATS-OPS 136.

SUBPART 9 BALLOON MAINTENANCE SUPPORT ARRANGEMENTS

General

136.09.1 (1) This Subpart prescribes the free balloons maintenance requirements for compliance with the air operator certificate requirements prescribed in Subpart 2.

(2) The operator of a free balloon shall not operate the free balloon unless such free balloon is maintained and released to service by an aircraft maintenance organisation approved in terms of Part 145.

Operator's maintenance system

136.09.2 (1) An applicant for the issue of an air operator certificate, or an amendment or renewal thereof, shall submit an operator's maintenance system to the Director for approval.

- (2) The operator's maintenance system shall include -

- (a) the maintenance management manual referred to in regulation 136.09.6;
- (b) the operator's free balloon maintenance programme referred to in regulation 136.09.5;
- (c) the free balloon's technical log referred to in regulation 136.09.7; and
- (d) the technical specifications of the maintenance arrangements referred to in regulation 136.09.4(2), if applicable.

(3) The Director shall approve the maintenance system if the applicant complies with the requirements prescribed in this Subpart, in conjunction with the manual of procedure of an aircraft maintenance organisation approved in terms of Part 145.

Maintenance responsibility

136.09.3 (1) The operator of a free balloon shall ensure the airworthiness of the free balloon and the serviceability of both its operational and emergency equipment by -

- (a) the accomplishment of pre-flight inspections;
- (b) the rectification to an approved standard, of any defect and damage affecting safe operation, taking into account the MEL and the CDL, if available for the free balloon type;
- (c) the accomplishment of all maintenance in accordance with the approved operator's free balloon maintenance programme referred to in regulation 136.09.5;
- (d) the analysis of the effectiveness of such programme;
- (e) the accomplishment of any operational directive, airworthiness directive and any other continued airworthiness requirement issued or prescribed in terms of the Regulations; and
- (f) the accomplishment of modifications in accordance with any approved standard and, for modifications which are not required in terms of the Regulations, the establishment of an embodiment policy.

(2) The operator shall ensure that the certificate of airworthiness for each free balloon operated, remains valid in respect of -

- (a) the requirements prescribed in paragraph (1); and
- (b) any expiry date, or other maintenance condition, specified on such certificate of airworthiness.

(3) The requirements prescribed in paragraph (1) shall be performed in accordance with procedures approved by the Director.

Maintenance management

136.09.4 (1) The operator of a free balloon shall be the holder of an aircraft organisation approval issued in terms of Part 145, in order to perform the requirements

prescribed in regulation 136.09.3(1)(b) to (f) inclusive, unless the Director is satisfied that the maintenance can be contracted to an aircraft maintenance organisation approved in terms of Part 145.

(2) If the operator is not an aircraft maintenance organisation approved in terms of Part 145, appropriate arrangements shall be made with such organisation to perform the requirements referred to in subregulation (1).

(3) The operator shall submit a copy of the arrangements referred to in subregulation (2), to the Director for approval.

Operator's maintenance management programme

136.09.5 (1) The operator of a free balloon shall establish a free balloon maintenance programme according to which the free balloon shall be maintained.

(2) The free balloon management programme shall include -

- (a) details of the frequency of all maintenance required to be carried out; and
- (b) a reliability programme.

(3) The free balloon management programme, and any subsequent amendment thereto, shall be submitted to the Director for approval.

Operator's maintenance management manual

136.09.6 The operator of a free balloon shall compile a maintenance management manual which shall -

- (a) comply with the requirements prescribed in this Subpart and Subpart 2, and
- (b) contain the information as prescribed in Document NAM-CATS-OPS 136.

(2) If the operator is an aircraft maintenance organisation approved in terms of part 145, the maintenance management manual may be included in the manual of procedure referred to in regulation 145.02.1.

(3) The maintenance management manual, and any subsequent amendment thereto, shall be submitted to the Director for approval.

Operator's free balloon technical log

136.09.7 (1) The operator of a free balloon shall establish a free balloon technical log system containing the following information for each free balloon:

- (a) particulars of each flight necessary to ensure continued flight safety;
- (b) the current certificate of release to service;
- (c) the current maintenance statement giving the free balloon maintenance status of which maintenance required in terms of Part 43, is next due;
- (d) all outstanding deferred defects which affect the operation of the free balloon; and

(e) any necessary guidance instructions on maintenance support arrangements.

(2) The free balloon technical log, and any subsequent amendment thereto, shall be submitted to the Director for approval.

Maintenance records

136.09.8 (1) The operator of a free balloon shall ensure that the free balloon technical log referred to in regulation 136.09.7, is retained for a period of 24 months after the date of the last entry.

(2) The operator shall ensure that a system has been established to keep the following records for the following period:

- (a) all detailed maintenance records in respect of the free balloon, and any free balloon component fitted thereto, for 24 months after such free balloon, or free balloon component, has been released to service;
- (b) the total time and flight cycles, as appropriate, of the free balloon and all life-limited free balloon components, for 12 months after the free balloon has been permanently withdrawn from service;
- (c) the time and flight cycles, as appropriate, since the last overhaul of the free balloon, or free balloon component subjected to an overhaul life, until the free balloon or free balloon component overhaul has been superseded by another overhaul of equivalent work scope and detail;
- (d) the current free balloon inspection status to prove compliance with the free balloon maintenance programme referred to in regulation 136.09.5, until the free balloon or free balloon component inspection has been superseded by another inspection of equivalent work scope and detail;
- (e) the current status of airworthiness directives applicable to the free balloon and free balloon components, for 12 months after the free balloon has been permanently withdrawn from service; and
- (f) details of current modifications and repair to the free balloon, or any free balloon component vital to flight safety, for 12 months after the free balloon has been permanently withdrawn from service.

(3) The operator shall ensure that, if the free balloon is permanently transferred to another operator, the records referred to in subregulations (1) and (2) are also transferred to such operator.

Continued validity of air operator certificate in respect of maintenance system

136.09.9 The operator of a free balloon shall comply with the requirements prescribed in Subpart 2, to ensure the continued validity of the air operator certificate in respect of the maintenance system.

Quality Assurance System

136.09.10 (1) For maintenance purposes, the operator's quality assurance system, as required by regulation 136.03.7, must additionally include at least the following functions:

- (a) monitoring that the activities of regulation 136.09.3 are being performed in accordance with the accepted procedures;
 - (b) monitoring that all contracted maintenance is carried out in accordance with the contract; and
 - (c) monitoring the continued compliance with the requirements of this Subpart.
- (2) Where the operator is approved in accordance with Part 145, the quality assurance system may be combined with that required by Part 145.

SUBPART 10 INSURANCE REQUIREMENTS FOR BALLOON OPERATORS

Requirement for free balloons to be insured

136.10.1. (1) An operator of a free balloon shall be insured in accordance with this Subpart as regards aviation specific liability in respect of passengers, baggage, cargo and third parties and the extent of the acts covered by the insurance as well as the minimum insurance cover shall be as prescribed in regulation 136.10.2.

(2) The operator of a free balloon shall ensure that insurance cover exists for each and every flight, regardless of whether the free balloon operated is owned by him or her or through any form of leasing as contemplated in regulations 136.02. 13 to 16.

(3) The operator shall when applying for an air operator certificate under regulation 136.02.2 or for renewal of a certificate provide the Director with documentary proof that each free balloon to be used in the operation is insured as required under this Subpart.

(4) Where the Director, an inspector or an authorized officer or person has reason to believe that a free balloon is intended or likely to be flown in such circumstances that the requirements of this regulation will be contravened he or she shall -

- (a) give to the person appearing to him or her to be in command of the free balloon a direction that he or she shall not permit the free balloon to take off until further notice; and
- (b) take such steps as are necessary to detain the free balloon until the requirements of this regulation are complied with.

(5) The operator or any person in charge of free balloon used for commercial air transport shall on request by the Director, an inspector, an authorised officer or person authorised by the Director produce proof of insurance in respect of the free balloon to the Director, inspector or officer.

Insurance liability

136.10.2 (1) For liability in respect of -

- (a) passengers, the minimum insurance cover shall be N\$ 1 000 000 per passenger but for non-commercial air transport purposes it shall be N\$500 000;
- (b) baggage, the minimum insurance cover shall be N\$ 15 000 per passenger; and

(c) cargo, the minimum insurance cover shall be N\$150 per kilogram.

(2) In respect of liability for third parties, the minimum insurance cover per accident, for each and every free balloon shall be -

Category	MTOM (kg)	minimum insurance(million N\$)
1	<500	2 000 000
2.	<1000	2 000 000
3	<2700	4 500 000
4.	<6000	10 000 000
5.	<12000	26 000 000
6.	<25000	120 000 000
7.	<50000	240 000 000
8.	<200000	480 000 000
9.	<500000	750 000 000
10.	>500000	1 050 000 000

Amendment of Part 187 of the Schedule to the principal regulations

6. Part 187 of the Schedule to the principal regulations is amended -

(a) in regulation 187.00.6 by the insertion of the following subregulation, the existing opening paragraph accordingly being numbered subregulation (1):

“(2) In addition to the application fee payable under subregulation (1), the following fees shall be payable for any skills test pursuant to Part 61.....N\$1200.”;

(b) by the insertion after regulation 187.00.15 of the following regulation:

“Fees relating to Part 136

187.00.15A The following fees shall be payable upon application -

N\$

- (a) for the issuing of an air operator certificate (regulation 136.02.2(1)(b)(i)).....3000,00
- (b) for amendment of an air operator certificate (regulation 136.02.2(1)(b)(i)).....1000,00
- (c) for the renewal of an air operator certificate (regulation 136.02.5(2)).....2000,00
- (d) for a copy of the register of air operator certificate (regulation 136.02.12 (5) and 136.02.11) (N\$ 1,00 per page up to a maximum of)100,00

MINISTRY OF WORKS, TRANSPORT AND COMMUNICATION

No. 174

2007

**PROPOSED CIVIL AVIATION TECHNICAL STANDARDS
NAM-CATS-FCL 61 "DESIGNATION OF EXAMINERS"**

Pursuant to regulation 11.03.2 of the Namibian Civil Aviation Regulations, 2001 the chairperson of the Civil Aviation Regulations Committee hereby notifies that the Director: Civil Aviation intends, under section 22A of the Aviation Act 1962 (Act No. 74 of 1962), to issue the technical standards NAM-CATS-FCL 61 "Designation of Examiners" set out in the Schedule.

The Committee hereby invites interested parties to comment on the proposed technical standards within 30 days commencing from the date of publication of this notice. The Committee will consider the comments and any representations received at the end of the stated period after which it will make recommendations to the Director who will in turn if satisfied, with the recommendations, issue the technical standards in terms of regulation 11.03.5.

Comments or representations should be lodged in writing and should reach the Ministry no later than 30 days from the publication of this notice and should be addressed to:

Mr L. Makanza
No. 4 Rudolph Street
Windhoek
Namibia

Tel: (061) 702253
Fax: (061) 702244
e-mail Larry.Makanza@Gmail.com

**NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO
DESIGNATION OF EXAMINERS****1. GENERAL**

Section 22A of the Aviation Act, 1982 (as amended by section 5 of the Aviation Amendment Act, 1998) empowers the Director: Civil Aviation to issue technical standards for civil aviation on the matters which are prescribed by regulation.

The Director: Civil Aviation has pursuant to the empowerment provision mentioned above, on (date) issued technical standards relating to designation of examiners to be known as Document NAM-CATS-FCL 61.

2. PURPOSE

Document NAM-CATS-FCL 61 contains the standards, rules, requirements, methods, specifications, characteristics and procedures which are applicable in respect of designation of examiners.

Each reference to a technical standard in this document, is a reference to the corresponding regulation in the Namibian Civil Aviation Regulations, 2001, for example, technical standard 61.01.26 refers to regulation 26 of Subpart 1 of Part 61 of the Regulations.

The abbreviation "CAR" is used throughout this document when referring to any regulation.

The abbreviation "TS" refers to any technical standard.

3. SCHEDULES AND NOTES

Guidelines and recommendation in support of any particular technical standard, are contained in schedules to, and/or notes inserted throughout the technical standards.

LIST OF TECHNICAL STANDARDS

61.01.26 DESIGNATED EXAMINERS

1. General requirements and qualifications
2. Circumstances where no designated examiner is available
3. Application for designation
4. Determination of application
5. Designation reference number
6. Stamp
7. Duties of designated examiner
8. Period of validity
9. Renewal
10. Variation, suspension or cancellation of designated examiner certificate
11. Crew member status of designated examiner
12. Special circumstances
13. Monitoring of system
14. Procedure for applications under Part 61
15. Appointment of examiner by Director
16. Conduct of test by examiner
17. Payment of the fee

ANNEXURES

- ANNEXURE A: DESIGNATED EXAMINERS FLIGHT TEST CODES
- ANNEXURE B: APPLICATION FOR APPOINTMENT/RENEWAL AS DESIGNATED EXAMINER
- ANNEXURE C: CERTIFICATE OF APPOINTMENT AS DESIGNATED EXAMINER
- ANNEXURE D: THREE MONTHLY REPORT OF DESIGNATED EXAMINER

61.01.26 DESIGNATED EXAMINERS

1. General requirements and qualifications

- (1) Subject to paragraph 2, a person may only be designated by the Director as an examiner pursuant to CAR 61.01.26 if that person meets the conditions, requirements and standards set out in Annexure A.
- (2) In addition to meeting the conditions, requirements and standards referred to in item (1) the person shall -

- (a) be in good standing with the Director;
 - (b) have played an active role in assisting the Director with aviation safety workshops;
 - (c) have attended an examiner's initial qualification course;
 - (d) have passed the practical flight test and the pre-designation knowledge examination; and
 - (e) have been found suitable for appointment as a designated examiner by the Director.
- (3) A person designated as an examiner in terms of these standards is entitled to conduct the skills and proficiency tests for the issue of ratings and certificates and to issue reports, as specified in Annexure A.

2 Circumstances where no designated examiner is available

- (1) Where no qualified examiner is available, the Director may, through the issue of a letter of authorisation, appoint a suitable pilot to act in the capacity of designated examiner for a specific purpose.
- (2) The applicant seeking the authorisation, referred to in item (1), shall demonstrate his or her proficiency to conduct such tests to the Director prior to the authorisation being granted.
- (3) The authorisation, referred to in item (1) shall be granted for a specified period of time and purpose only.

3. Application for designation

An application for appointment or for renewal of appointment as a designated examiner shall be made on the appropriate part of Annexure B and be submitted to the Director.

4. Determination of application

On receipt of an application made in terms of paragraph 1 the Director shall consider the application and may -

- (a) grant the application with or without conditions and issue to the applicant the document referred to in CAR 61.01.26(3) in the form Annexure C; or
- (b) reject the application and notify applicant in writing of the rejection and the reasons thereof.

5 Designation reference number

A designation number shall be allocated to an examiner. This number together with other relevant information as indicated on the document referred to in CAR 61.01.26(3) must be reflected on all the relevant documents signed by the examiner.

6 Stamp

An examiner must, on receiving the document referred to in paragraph 4 have a stamp made that reflects the following information:

- (a) Name of examiner
- (b) License number
- (c) Type rating
- (d) Designation number
- (e) Expiry date

7. Duties of designated examiners

Designated examiners are required to:

- (a) ensure that the original form for each test conducted, whether such test was successful or not, is submitted to the Director;
- (b) keep a record of each test carried out with suitable notes explaining the outcome of the test;
- (c) submit a three monthly report of tests conducted on the appropriate form as prescribed in Annexure D;
- (d) have access to current Civil Aviation Regulations, Technical Standards, AIP, AIC, applicable NOTAMs; current Federal Aviation Administration Practical Flight Test Standards of the United States of America and the Joint Aviation Requirements (JAR) Flight Examiners Manual of the European Union;
- (e) be conversant with the type of approach charts in use;
- (f) conduct a skill or proficiency test under the supervision of a flight inspector authorized by the Director, if required;
- (g) charge no more than the maximum fees specified in Part 187;
- (h) attend standardisation workshops at least once every year;
- (i) administer all flight tests using the designated examiner guidelines as published by the Director as technical standards, Federal Aviation Administration Practical Flight Test Standards of the United States of America and the Joint Aviation Requirements (JAR) Flight Examiners Manual of the European Union;
- (j) sign all forms, clearly indicating his or her reference number and the date of the test; and
- (k) sign the appropriate sections of the tested pilot's license and logbook where and when required, indicating the date, nature and outcome of the test.

8. Period of Validity

- (1) An appointment as a designated examiner shall be for a period not exceeding 12 months, or for the validity period of the applicant's instructor rating, whichever period is the lesser.
- (2) The Director may, when required in terms of paragraph 2, appoint a suitable pilot as a designated examiner for a specific period only, in order to accomplish a specific task.

9. Renewal

- (1) In order to renew certificate as a designated examiner, the applicant shall within the previous 12 months—
 - (a) have attended a standardization workshop; and
 - (b) have conducted a least three tests.
- (2) The applicant shall submit an application for renewal of his or her designated examiner authorization within 60 days preceding the date of expiry.
- (3) The application for renewal of appointment as a designated examiner shall be made on the appropriate form of Annexure B and be submitted to the Director.
- (4) The requirements for application for appointment as a designated examiner referred to in paragraph 1 shall, subject to necessary changes required by context, apply to an application for renewal of certificate as a designated examiner under this paragraph.

10. Variation, suspension or cancellation of designated examiner certificate

- (1) The variation, suspension or cancellation of a designated examiner certificate shall be done in accordance with CAR 61.01.20.
- (2) The provisions of CAR 61.01.20 in respect of the procedures to be followed, and actions to be taken in the case of suspension and appeal shall, subject to necessary changes required by context, apply to suspension and appeal under this paragraph.

11. Crew member status of the designated examiner

- (1) Except as specified item (2), the designated examiner shall not act as pilot-in-command during a flight test. The designated examiner may act as a crewmember in a multi-crew aircraft, provided that he or she holds the appropriate category, class and type or group type rating.
- (2) A designated examiner shall, by prior agreement and confirmed in writing, act as pilot-in command of an aircraft during a flight test under the following circumstances:
 - (a) the flight test is for the initial issue of an instrument rating;
 - (b) the flight test is for an aircraft type rating and conducted from a pilot seat; or

- (c) the designated examiner considers this to be necessary in the interest of safety.

12. Special circumstances

Where the holder of a designated examiner authorization is exercising the privileges of that authorization as an observer in flight or in a simulator and not as a required crewmember, the holder is not required to hold a valid medical certificate.

13. Monitoring of the system

The Director may, at any time, require a designated examiner to subject himself or herself to a ground or skill test, should it become evident that such examiner is not maintaining the required standard of testing

14. Procedure for applications under Part 61

- (1) An application for the issue of pilot licences or the validation or conversion of licences or the issue of ratings or certificates specified in the CAR Part 61 shall be submitted to the Director for determination in terms of paragraph 16.
- (2) An application made under item (1) shall be accompanied by the application fee and the appropriate skill test fee set out in Part 187.

15. Appointment of examiner by Director

After an application made under paragraph 14 has been received the Director shall as soon as is reasonably possible -

- (a) appoint from among any of the designated examiners, a specific or specific examiners to test the applicant;
- (b) specify a place, date and time for the test; and
- (c) inform both the applicant and examiner of the appointment and place, date and time for the test.

16. Conduct of test by examiner

- (1) On the specified date the designated examiner shall carry out the examination having due regard to his or her duties as specified in TS 61.01.26 (7) and if satisfied that the applicant has demonstrated sufficient skill or competency for the relevant test the designated examiner shall so indicate in a written report to the Director.
- (2) Before carrying out the relevant test the examiner must ensure that the applicant has passed the relevant theoretical knowledge.
- (3) On receipt of a report by the designated examiner in terms of item (1) the Director shall, if satisfied of the propriety of the test, issue the appropriate licence, rating or certificate to the applicant and arrange for payment of the examiner's fees.

17. Payment of fees

Any fees payable in respect of an application made in terms of paragraph 14 shall be payable to the Director in the manner determined by the Director.

ANNEXURE A**EXPLANATORY NOTES**

This Annexure consists of two Tables with the following details:

1. Table 1 is an index to Table 2 and consists of four columns containing the information as detailed below:
 - (a) The first column titled "Code" read downwards contains the abbreviated forms of the various types of flight tests which can be performed by designated examiners;
 - (b) The second column titled "Flight Test" read downwards contains the full description of the flight tests corresponding to the abbreviated form of the test in the first column;
 - (c) The third column titled "NAMCARS" read downwards refers to the respective regulations under which the various tests contained in the corresponding first and second columns can be undertaken; and
 - (d) The fourth column titled "Aircraft Type" read downwards contains the various types of aircraft which can be flown during the corresponding flight test contained in the first and second columns.

ANNEXURE A1

TABLE 1

Designated Examiner Flight Test Codes

1	2	3	4
Code	Flight Test	NAMCARS	Aircraft Types
FE PPL	Flight Examiner for PPL Skill Test	61.03.5	
FE CPL	Flight Examiner for CPL Skill Test	61.05.5	
CPL VAL	Flight Examiner for CPL Validation Skill Test	61.16.4	
TRE SEP PPL	Type Rating Examiner-Single-Engine Piston-PPL Skill Test	61.16.4	C210, C206, C182, C172, PA28-235,
TRE SEP CPL	Type Rating Examiner-Single-Engine Piston-CPL Skill Test	61.16.4	C210, C206, C182, C172, PA28-235,
TRE MEP	Type Rating Examiner-Multi-Engine Piston Aircraft Skill Test	61.16.4	C310, C401, C404, C402, PA32-300, PA31-350, BE 58
TRE SET	Type Rating Examiner-Single-Engine-Turbine Skill Test	61.16.4	C208, C206 SOLOY, C207 SOLOY, PC-12
TRE MET	Type Rating Examiner-Multi-Engine Turbine Aircraft Skill Test	61.16.4	C406, BE 90, B190, PA31T, AC690
FE ATPL	Flight Examiner ATPL Issue Skill Test	61.07.5	
TRE MPA	Type Rating Examiner-Multi-Crew Certified Aircraft Skill Test	61.16.4	L31, F900, B737, A340, C500/560
IR SE	Instrument Rating Single Engine Aircraft-Skill Test	61.17.5, 61.17.12	
IR ME	Instrument Rating Multi engine Aircraft-Skill Test	61.17.5, 61.17.12	
IR SE OPC	Instrument Rating Single Engine Aircraft-Operator Proficiency Check	61.17.11	
IR ME OPC	Instrument Rating Multi engine Aircraft - Operator Proficiency Check	61.17.11	
NIGHT	Night Rating	61.31.14	
FIE	Flight Instructor Examiner Skill Test	61.18.5, 61.195, 61.20.4	
TRE SE OPC (VFR)	Type Rating Examiner-Single-Engine Piston-Operator Proficiency Check	135.03.7	C210, C206, C182, C172, PA28-235, C208, SOLOY
TRE MEP OPC (VFR)	Type Rating Examiner-Multi-Engine Piston-Operator Proficiency Check	121.03.6, 135.03.7	C310, C401, C404, C402, PA32-300, PA31-350, BE58
TRE SET OPC	Type Rating Examiner-Single-Engine Turbine-Operator Proficiency Check	121.03.6, 135.03.7	C208, C206 SOLOY, C207 SOLOY, PC-12
TRE MET OPC	Type Rating Examiner-Multi-Engine Turbine-Operator Proficiency Check	121.03.6, 135.03.7	C406, BE 90, B190, PA31T, AC690

2. Table 2 consists of 21 numbered columns containing the information as detailed below:
- (a) Column 1 read downwards contains the requirements to be met, namely minimum qualifications, experience, ratings, special requirements, before an examiner can be allowed to carry out each of the respective types of flight tests listed in columns 2 to 21 read across.
 - (b) Columns 2 to 21 read downwards each contains the different types of the basic qualification, experience, ratings, special requirements required by an examiner before he or she could conduct the type of test indicated at the top of each of the columns.

For example for an examiner to be entitled to conduct a skill test for initial issue of PPL in terms of CAR61.03.5 the applicable flight test code is FE PPL (column 1) i.e. Flight Examiner for PLL Skill Test (column 2) the examiner must satisfy the following requirements:

- (i) hold a basic CPL licence
- (ii) have total flying experience of 1000 hours;
- (iii) have 250 hours instructional experience;
- (iv) must have Grade I or II instructor rating;
- (v) does not need any multi-engine experience or instruction or turbine experience or instruction,
- (v) needs a PIC Qualification on the type of aircraft flown;
- (vi) does not need to meet any special requirements;
- (vii) does not need any instrument flying experience or instrument instruction experience; and
- (viii) must be a person of integrity.

The same method should be used to determine the requirements to be met by an examiner before he or she can carry out an examination in respect of each of the flight tests listed in the columns 2 to 21 read across Table 2.

ANNEXURE B

MINISTRY OF WORKS TRANSPORT AND
COMMUNICATION

DIRECTORATE: CIVIL AVIATION

APPLICATION FOR APPOINTMENT AS A DESIGNATED EXAMINER
(TS 61.01.26(3))

SECTION A - PERSONAL DETAILS

Family Name	Given Names	Title	Date of Birth / /	
Residential Address		Postcode	State	
Postal Address (if Different)		Postcode	State	
Telephone No. Work	Home	Mobile	Fax	Licence Number
Place of Medical Examination	Date of Examination / /	Expiry Date of Medical / /		

SECTION B: QUALIFICATIONS AND EXPERIENCE

Basic License:.....		
Instructor Qualification:.....		
1	Grand Total Flying Experience	
2	Total Flying Experience – Single-Engine Aircraft – Piston	
3	Total Flying Experience – Single-Engine Aircraft – Turbine	
4	Total Flying Experience – Multi Engine Aircraft – Piston	
5	Total Flying Experience – Multi Engine Aircraft – Turbine	
6	Total Flying Experience – Instrument flying	
7	Total Flying Experience – Turbine Aircraft	
8	Total Instruction Time	
9	Total Instruction Time – Single-Engine Aircraft – Piston	
10	Total Instruction Time – Single-Engine Aircraft – Turbine	
11	Total Instruction Time – Multi-Engine Aircraft – Piston	
12	Total Instruction Time – Multi-Engine Aircraft – Turbine	
13	Total Instruction Time – Instrument flying	
14	Total Instruction Time – Turbine Aircraft	
15	Number of Flight Tests carried out to date	
16	Total Experience on Multi-Crew Aircraft	
17	Total Instruction Time – Instructor Rating Candidates	

Signed:
(Applicant)

Certified correct

Date.....

DESIGNATED EXAMINER' STAMP

MINISTRY OF WORKS, TRANSPORT AND COMMUNICATION

No. 175

2007

**PROPOSED CIVIL AVIATION TECHNICAL STANDARDS
NAM-CATS-OPS 136 "AIR TRANSPORT OPERATIONS: FREE BALLOONS"**

Pursuant to regulation 11.03.2 of the Namibian Civil Aviation Regulations, 2001 the chairperson of the Civil Aviation Regulations Committee hereby notifies that the Director: Civil Aviation intends, under section 22A of the Aviation Act 1962 (Act No. 74 of 1962), to issue the technical standards NAM-CATS-OPS 136 "Air Transport Operations: Free Balloons" set out in the Schedule.

The Committee hereby invites interested parties to comment on the proposed technical standards within 30 days commencing from the date of publication of this notice. The Committee will consider the comments and any representations received at the end of the stated period after which it will make recommendations to the Director who will in turn if satisfied, with the recommendations, issue the technical standards in terms of regulation 11.03.5.

Comments or representations should be lodged in writing and should reach the Ministry no later than 30 days from the publication of this notice and should be addressed to:

Mr L. Makanza
No. 4 Rudolph Street
Windhoek
Namibia

Tel: (061) 702252
Fax: (061) 702244
e-mail Larry.Makanza@Gmail.com

**NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO
AIR TRANSPORT OPERATIONS: FREE BALLOONS**

1. GENERAL

Section 22A of the Aviation Act, 1962 (as amended by section 5 of the Aviation Amendment Act, 1998) empowers the Director: Civil Aviation to issue technical standards for civil aviation on the matters which are prescribed by regulation.

The Director: Civil Aviation has pursuant to the empowerment provision mentioned above, (date) issued technical standards relating to Air Transport Operations: Free Balloons to be known as Document NAM-CATS-OPS-136.

2. PURPOSE

Document NAM-CATS-OPS 136 contains the standards, rules, requirements, methods, specifications, characteristics and procedures which are applicable in respect of air transport operations: free balloons.

Each reference to a technical standard in this document, is a reference to the corresponding regulation in the Namibian Civil Regulations, 2001, for example, technical standard 136.02.8 refers to regulation 8 of Subpart 2 of Part 136 of the regulations.

The abbreviation 'CAR' is used throughout this document when referring to any regulation.

The abbreviation 'TS' refers to any technical standard.

3 SCHEDULES AND NOTES

Guidelines and recommendations in support of any particular technical standard, are contained in schedules to, or notes inserted throughout the technical standards.

LIST OF TECHNICAL STANDARDS

136.01.5 INFORMATION ON EMERGENCY AND SURVIVAL EQUIPMENT CARRIED

1. Emergency and survival list

136.02.2 APPLICATION FOR AIR OPERATOR CERTIFICATE OR AMENDMENT THEREOF: FREE BALLOONS

1. Form of application

136.02.3 AIR OPERATOR CERTIFICATE

1. Form of certificate

136.02.5 RENEWAL OF CERTIFICATE

1. Form of application

136.02.16 SUBCHARTERING

1. Subchartering

136.03.4 STATISTICAL INFORMATION

1. Statistical information

136.03.7 QUALITY ASSURANCE

1. Minimum standards for a quality assurance system.
2. Compliance with the procedures for operations inspection, certification and continued surveillance

136.03.9 SAFETY MANAGEMENT SYSTEM

1. Guidelines for safety management systems

136.04.3 CREW MEMBER EMERGENCY DUTIES

1. Emergency evacuation demonstration

136.04.7 FLIGHT TIME AND DUTY SCHEME

1. Flight time and duty scheme

- 136.05.1 TRAINING OF CREW MEMBERS**
1. Training manual
 2. Training syllabus
- 136.05.3 CONVERSION TRAINING**
1. Operator's conversion training course syllabus.
 2. Crew resource management training
- 136.06.3 OPERATIONS MANUAL**
1. Structure of operations manual.
 2. Contents of operations manual
 3. General
- 136.06.6 OPERATIONAL FLIGHT PLAN**
1. Items in the operational flight plan
- 136.06.7 TECHNICAL LOG**
1. Information to be contained in the technical log
- 136.06.14 DOCUMENT STORAGE PERIODS**
- 136.07.3 STANDARD FIRST AID KIT**
1. Standard first aid kits
- 136.07.4 FIRE EXTINGUISHERS**
1. Definitions
 2. Hand fire extinguishers
- 136.07.5 SURVIVAL EQUIPMENT**
1. Survival equipment
 2. Interpretation
 3. Additional survival equipment
 4. Duplicates
 5. Location
- 136.07.6 COMMUNICATIONS EQUIPMENT**
1. General
 2. Radio equipment
 3. Audio selector panel
 4. Radio equipment for operations under VFR over routes navigated by reference to visual landmark
 5. Communication and navigation equipments for operations under IFR, or under VFR over routes not navigated by reference to visual landmarks.
- 136.08.1 ROUTES AND AREAS OF OPERATION**
1. Adequate operations site
 2. Airfield operating minima-take off, en-route and landing
- 136.08.3 OPERATIONAL CONTROL**
1. Information to be contained in the manual
- 136.08.5 MASS AND BALANCE**
1. Definitions
 2. Loading, mass, and balance

3. Mass values for crew
4. Mass values for passengers and baggage
5. Mass and balance documentation

136.08.9 FUEL POLICY

1. Contingency fuel

136.08.10 FUEL SUPPLY

1. Fuel planning and management
2. Monitoring fuel on board

136.08.4 CARRRY-ON BAGGAGE

1. Procedures for stowing carry-on baggage

136.09.6 MAINTENANCE MANAGEMENT MANUAL

1. General
2. Information to be contained in the manual

ANNEXURE A APPLICATION FOR AIR OPERATOR CERTIFICATE

ANNEXURE A APPLICATION FOR RENEWAL

ANNEXURE B AIR OPERATOR CERTIFICATE

ANNEXURE C SAFETY MANAGEMENT GUIDELINES

136.01.5 INFORMATION ON EMERGENCY AND SURVIVAL EQUIMENTS CARRIED**1. Emergency and survival list**

The operator must have a list containing the following minimum information regarding the emergency and survival equipment carried on board:

- (1) The number, colour and type of life rafts and pyrotechnics;
- (2) details of emergency medical supplies;
- (3) sufficient, adequate and suitable first - aid kits and their content;
- (4) life jackets;
- (5) water supplies; and
- (6) type and frequencies of emergency portable radio equipment.

The operator shall ensure that all personnel are given an opportunity familiarise themselves with all equipment on a regular basis.

136.02.2 APPLICATION FOR AIR OPERATOR CERTIFICATE OR AMENDMENT THEREOF: FREE BALLOONS**1. Form of application**

The form referred to in CAR 136.02.2, in which application must be made for the issuing of an air operator certificate, or an amendment thereof, is contained in the appropriate portion of Annexure A.

136.02.3 AIR OPERATOR CERTIFICATE**1. Form of certificate**

The form referred to in CAR 136.02.3 (3), on which an air operator certificate is issued, is contained in Annexure B.

136.02.5 RENEWAL OF CERTIFICATE**1. Form of application**

The form in which an application for the renewal of an air operator certificate must be made, is contained in the appropriate portion of Annexure A.

136.02.16 SUBCHARTERING**1. Subchartering**

An operator may subcharter a free balloon or crew, or both a free balloon and crew in circumstances where the operator is faced with an immediate, urgent and unforeseen need for a replacement free balloon or crew.

136.03.4 STATISTICAL INFORMATION**1. Statistical information**

The statistical information referred to in CAR 136.03.4, that must be furnished to the Director, is the appropriate statistical information required by -

- (1) the International Civil Aviation Organisation, in the Manual on the ICAO Statistics Programme, Doc 9060; and
- (2) the Southern African Development Community Protocol on Transport, Communications and Meteorology of 24 August 1996, Chapter 9.

136.03.7 QUALITY ASSURANCE**1. Minimum standards for a quality assurance system.**

- (1) The quality assurance system referred to in CAR 136.03.7, must include -
 - (a) a clear definition of the level of quality the operator intends to achieve;
 - (b) a quality assurance programme that contains procedures designed to verify that all operations are being conducted in accordance with all the applicable requirements, standards and procedures;
 - (c) a procedure that sets out the level and frequency of the internal audits;
 - (d) a procedure to record the findings and communicate them to management;
 - (e) a list of responsible persons;

- (f) procedures by which other quality indicators such as balloon malfunction reports, incidents, occurrences, complaints and defects are brought into the quality assurance system;
 - (g) procedures for management analysis and overview;
 - (h) procedures for rectifying any deficiencies which may be found; and
 - (i) procedures for documenting the complete review process from the audits to the satisfactory management review so that this is available to the Director during a safety inspection and audit.
- (2) For maintenance purposes, the quality assurance system must, in addition, include at least the following functions:
- (a) Monitoring that the activities of maintenance responsibility are being performed in accordance with the approved procedures;
 - (b) monitoring that all contracted maintenance is carried out in accordance with the contract; and
 - (c) monitoring the continued compliance with the requirements prescribed in Subpart 9 of Part 136.
- (3) Measures must be taken to ensure that the system is understood, implemented and complied with at all levels.
- (4) The quality assurance system must be documented in the operations manual referred to in CAR 136.06.3.

136.03.9 SAFETY MANAGEMENT SYSTEM

1 Guidelines for safety management systems

- (1) An operator may design his or her safety management system based on the guidelines contained in Annexure C. The guidelines which are designed to meet the specific requirements of the ballooning community are based on a combination of a prepared checklist and a simple risk assessment matrix as shown on Annexure C.
- (2) The checklist consists of some 30 questions each of which can be answered either 'Yes' or 'No'. An answer, 'Yes' indicates a safe approach, whereas an answer of 'No' requires review and corrective action
- (3) The simple risk matrix is based on a subjective assessment, based on experience and evidence, of the likelihood of each identified hazard occurring coupled with the severity of the outcome. Multiplying likelihood by severity provides an initial risk assessment. Mitigating factors can then be applied to give a final risk assessment.

136.04.3 CREW MEMBER EMERGENCY DUTIES

1. Emergency evacuation demonstration

An emergency evacuation demonstration must be performed by the crew members in accordance with the following;

- (1) Actual operation of all types of exists;
- (2) Demonstration of the method used to operate a slide where fitted;
- (3) Actual fire fighting using equipments representative of that carried in the free balloon on an actual or simulated fire except that, with Halon extinguishers, an approved alternative method may be used;
- (4) The effects of smoke in an enclosed area and actual use of all relevant equipment in a simulated smoke-filled environment;
- (5) Actual handling of pyrotechnics, real or simulated, where fitted; and
- (6) Demonstration in the use of the life raft(s) and life jackets, where available.

136.04.7 FLIGHT TIME AND DUTY SCHEME

1. Flight time and duty scheme

The flight time and duty scheme shall comply with the current edition of the United Kingdom Civil Aviation Publication CAP 371.

136.05.1 TRAINING OF CREW MEMBERS

1. Training manual

The following information and instructions in relation to the training, experience, practice and periodical tests required under CAR 136.05.1 shall be included in the training manual referred to in regulation 136.05.1:

- (1) the manner in which the training, practice and periodical tests required under CAR 136.05.1 are to be carried out;
- (2) the minimum qualifications and experience which the operator requires of persons appointed by him or her to give or to supervise the said training, practice and periodical tests;
- (3) the type of the training, practice and periodical tests which each such person is appointed to give or supervise;
- (4) the type of free balloon in respect of which each such person is appointed to give or supervise the said training, practice and periodical tests;
- (5) the minimum qualifications and experience required for each member of the crew undergoing the said training, practice and periodical tests;
- (6) the current syllabus for, and specimen forms for recording, the said training, practice and periodical tests;
- (7) the manner in which instrument flight conditions and engine failure are to be simulated in the free balloon in flight;
- (8) the extent to which the said training and testing is permitted in the course of flights for the purpose of commercial air transport; and

- (9) the use to be made in the said training and testing of apparatus approved for the purpose by the Director.

2. Training syllabus

The training syllabus for crew members required in terms of CAR 136.05.1, is -

- (1) the syllabi prescribed in Parts 61, 63 and 64, for initial training;
- (2) the syllabi prescribed in TS 136.05.3 for conversion training ;
- (3) the syllabi prescribed in TS 136.05.4, for recurrent training and checking and refresher training and type and differences training; and
- (4) the syllabi prescribed in Part 92 for initial and refresher dangerous goods training.

136.05.3 CONVERSION TRAINING

1. Operator's conversion training course syllabus.

- (1) An operator's conversion course syllabus must include the following items:
 - (a) Ground training and checking including free balloon systems, normal, abnormal and emergency procedures;
 - (b) emergency and safety equipment training and checking which must be completed before free balloon training commences;
 - (c) crew resource management training;
 - (d) free balloon/simulator training and checking; and
 - (e) line flying under supervision and line check.
- (2) The conversion course must be conducted in the order set out in subparagraph (1) above.

2. Crew resource management training

2.1 Procedures

- (1) If the flight crew member has not previously completed an operator's conversion course, the operator ensure that a crew resource management (CRM) course with a full length syllabus is completed. The flight crew member should not be assessed either during or upon completion of this course.
- (2) If the crew member undergoes a subsequent conversion course with the same or another operator, he or she should complete the appropriate elements of the CRM course. The flight crew member should not be assessed either during or upon completion of this training.

- (3) Recurrent training:
 - (a) Where an operator utilises line orientated flying training (LOFT) in the recurrent training programme, the flight crew member should complete elements of CRM training. The flight crew member should not be assessed.
 - (b) Where an operator does not utilise LOFT, the flight crew member should complete elements of CRM training every year. The flight crew member should not be assessed.
 - (c) An operator should ensure that flight crew members complete the major elements of the full length CRM course over a four year recurrent training cycle. The flight crew member completing this refresher training should not be assessed.
 - (d) When a flight crew member undergoes an operator proficiency check, line check or command course, then CRM skills should be included in the overall assessment.
- (4) Operators should, as far as is practicable, provide combined training for flight crew and cabin crew.
- (5) There should be effective liaison between crew and cabin crew training departments. Provision should be made for flight instructors and cabin crew instructors to observe and comment on each others training.
- (6) The successful resolution of free balloon emergencies requires interaction between flight crew and cabin crew and emphasis should be placed on the importance of effective coordination and two-way communication between all crew members in various emergency situations. Initial and recurrent CRM training should include joint practice in free balloon evacuations so that all who are involved, are aware of the duties other crew members should perform. When such practice is not possible, combined crew and cabin crew training should include joint discussion of emergency scenarios.

2.2 Objective and contents

- (1) CRM is the effective utilisation of all available resources (e.g. crew members, free balloon systems and supporting facilities) to achieve safe and efficient operation.
- (1) The objective of CRM is to enhance the communication and management skills of the crew member concerned. The emphasis is placed on the non-technical aspects of crew performance.
- (2) CRM training should include the following elements:
 - (a) Statistics and examples of human factor related accidents;
 - (b) human perception, learning process;
 - (c) situational awareness;
 - (d) management of workload, tiredness or fatigue, and vigilance - management of stress;

- (e) operator's standard operating procedures;
- (f) personality type, delegation, leadership, effective communication skills;
- (g) the CRM loop:

Notion of synergy Inquiry (explore, examine, scrutinize)

Conflict resolution
Decision making
Critique
Feedback

- (h) effective communication and co-ordination within the crew, and between crew members and other operational personnel (air traffic service, maintenance personnel, etc.);
 - (i) error chain and taking actions to break the error chain; and
 - (j) implications of automation on CRM.
- (4) CRM training should also address the nature of the operator's operations as well as the associated crew operating procedures. This will include areas of operations which produce particular difficulties, adverse climatological conditions and any unusual hazards.
- (5) CRM training should include both:
- (a) Classroom training; and
 - (b) practical exercises including group discussions and accident reviews to analyse communication problems and instances or examples of a lack of information or crew management.
- (6) Ideally, the CRM training course should last a minimum of three days, but providing the whole syllabus is covered, then a 2 day course may be acceptable. A one day course for single-pilot operations may be acceptable.
- (7) As part of the operations manual, the CRM course (for conversion and recurrent training) is approved by the Director. An operator may use a course provided by another operator, if that course has already been approved.

136.06.3 OPERATIONS MANUAL

1. Structure of operations manual.

- (1) An operator must ensure that the main structure of the operation manual is as follows:

Part 1: General

This part must comprise all non type-related operational policies, instructions and procedures needed for a safe operation and must comply with all relevant CARs.

Part 2: Free balloon operating matters

This part must comprise all type-related instructions and procedures needed for a safe operation. It must take account of the different types of free balloons or variants used by the operator.

Part 3: Route and operations site instructions and information

This part comprise all instructions and information needed for the area of operation.

Part 4: Training

This part must comprise all training instructions for personnel required for a safe operation.

- (2) An operator must ensure that the contents of the operations manual are in accordance with paragraph 2 of this technical standard, and relevant to the area and type of operation.
- (3) An operator must ensure that the detailed structure of the operations manual is approved by the Director.

2. Contents of operations manual**2.1 PART 1:GENERAL****2.1.1 Administration and control of operations manual**

- (1) Introduction
 - (a) A statement that the manual complies with all applicable CARs and with the terms and condition of the applicable air operator certificate.
 - (b) A statement that the manual contains operational instructions that are to be complied with by the relevant personnel.
 - (c) A list and brief description of the various parts, their contents, applicability and use.
 - (d) Explanations and definitions of terms and words needed for the use of the manual.
- (2) System of amendment and revision
 - (a) Who is responsible for the issuance and insertion of amendments and revisions.
 - (b) A record of amendments and revisions with insertion dates and effective dates.
 - (c) A statement that handwritten amendments and revisions are not permitted except in situations requiring immediate amendment or revision in the interests of aviation safety.

- (d) A description of the system for the annotation of pages and their effective dates.
- (e) A list of effective pages
- (f) Annotation of changes (on text pages and as far as practicable, on charts and diagrams).
- (g) Temporary revisions.
- (h) A description of the distribution system for the manuals, amendments and revisions.

2.1.2 Organisation and responsibilities

- (1) Organisational structure

A description of the organisation structure including the general organogram and operations department organogram. The organogram must depict the relationship between the Operations Department and the other Departments of the organisation. In particular, the subordination and reporting lines of all Divisions, Department etc, which pertain to the safety of flight operations, must be shown.

- (2) Nominated postholders

The name of each nominated postholder responsible for flight operations, the maintenance system, flight crew training and ground operations. A description of their functions and responsibilities must be included.

- (3) Responsibilities and duties of operations management personnel

A description of the duties, responsibilities and authority of operations management personnel pertaining to the safety of flight operations and the compliance with the applicable CARs.

- (4) Authority, duties and responsibilities of the pilot-in-command.

A statement defining the authority, duties and responsibilities of the pilot-in-command.

- (5) Duties and responsibilities of crew members other than the pilot-in-command.

A statement defining the duties and responsibilities of crew members other than the pilot-in-command

2.13 Operational control and supervision

- (1) Supervision of the operation by the operator

A description of the system for supervision of the operation by the operator. This must show how the safety of flight operations and the qualification of personnel are supervised. In particular, the procedures related to the following items must be described:

- (a) Licence and qualification validity;
 - (b) competence of operations personnel; and
 - (c) control, analysis and storage of records, flight documents, additional information and data.
- (2) System of promulgation of additional operational instructions and information -

A description of any system for promulgating information which may be of an operational nature but is supplementary to that in the operations manual. The applicability of this information and the responsibilities for its promulgation must be included.

- (3) Accident prevention and Safety Management System -

A description of the main aspects of the Safety Management System including-

- (a) programmes to achieve and maintain risk-awareness by all persons involved in flight operations; and
 - (b) evaluation of aviation accidents and incidents and the promulgation of related information.
- (3) Operational control

A description of the procedures and responsibilities necessary to exercise operational control with respect to flight safety.

2.14 **Quality assurance system**

A description of the quality assurance system adopted.

2.15 **Crew composition**

- (1) Crew composition

An explanation of the method for determining crew compositions taking account of the following:

- (a) The type of free balloons being used;
- (b) the area and type of operation being undertaken;
- (c) the phase of the flight;
- (d) the minimum crew requirement and flight time and duty period planned;
- (e) experience (total and on type) recency and qualification of the crew members; and

- (f) the designation of the pilot-in-command and, if necessitated by the duration of the flight, the procedures for the relief of the pilot-in-command or other members of the crew.

(2) Designation of the pilot-in-command

The rules applicable to the designation of the pilot-in-command.

(3) Crew incapacitation

Instruction on the succession of command in the event of crew incapacitation.

2.16 Qualification requirements

- (1) A description of the required licence, rating(s), qualification/competency (e.g for routes and operations sites), experience training, checking and recency for operations personnel to conduct their duties. Consideration must be given to the free balloon type, kind of operation and composition of the crew.

(2) Flight crew

- (a) Pilot-in-command
- (b) Co-pilot
- (c) Pilot under supervision
- (d) Operation on more than one type variant

(3) Cabin crew

- (a) Senior cabin crew member
- (b) Cabin crew member
 - (i) Required cabin crew member
 - (ii) Additional cabin crew and cabin crew member during familiarization flights.
- (c) Operation on more than one type or variant.

(4) Training checking and supervision personnel

- (a) For Flight crew
- (b) For cabin crew

(5) Other operations personnel

2.1.7 Crew health precautions

- (1) Crew health precautions

The relevant regulations and guidance to crew members concerning health including -

- (a) alcohol and other intoxicating liquor;
- (b) narcotics;
- (c) drugs;
- (d) sleeping tablets;
- (e) pharmaceutical preparations;
- (f) immunization;
- (g) scuba diving;
- (h) blood donations;
- (i) meal precautions prior to and during flight;
- (j) sleep and rest; and
- (k) surgical operations.

Note See Document NAM-CATS-MR

2.1.8 Flight time limitations

- (1) Flight time and duty period limitations and rest requirements

A description of the flight time and duty period limitations and rest requirements prescribed in TS 136.04.7 as applicable to the operation.

- (2) Exceedances of flight time and duty period limitations and/or reductions of rest periods.

Conditions under which flight time and duty periods may be exceeded or rest periods may be reduced and the procedures used to report these modifications.

2.19 Operating procedures

- (1) Flight preparation instructions

As applicable to the operation:

- (a) Minimum flight altitudes

A description of the method of determination and application of minimum altitudes including-

- (i) a procedure to establish the minimum altitudes/flight levels for VFR flights, and

- (ii) a procedure to establish the minimum altitudes/flight levels for IFR flights
- (b) Criteria for determination of the usability of operations sites
Methods for the determination of operation sites operating minima
- (c) En route operating minima for VFR flights.
- (d) Presentation and application of operations site and en route operating minima.
- (e) Interpretation of meteorological information
Explanatory material on the decoding of MET forecasts and MET reports relevant to the area of operations, including the interpretation of conditional expressions.
- (f) Determination of the quantities of fuel carried
The methods by which the quantities of fuel to be carried, are determined and monitored in flight. This section must also include instructions on the measurement and distribution of the fuel carried on board. Such instructions must take account of all circumstances likely to be encountered on the flight, including the possibility of in-flight replanning and of failure of one or more of the free balloon's power plants. The system for maintaining fuel records must also be described.
- (h) Mass and centre of gravity
The general principles of mass and centre of gravity including:
 - (i) Definitions
 - (ii) methods, procedures and responsibilities for preparation and acceptance of mass and centre of gravity calculations;
 - (iii) the policy for using either standard or actual masses;
 - (iv) the method of determining the applicable passenger, baggage and cargo mass;
 - (v) the applicable passenger and baggage masses for various types of operations and free balloon types;
 - (vi) general instruction and information necessary for verification of the various types of mass and balance documentation in use;
 - (vii) last minute changes procedures ;
 - (viii) specific gravity of fuel; and
 - (ix) spacing policy/procedures.

(i) Flight plan, if any

Procedures and responsibilities for the preparation and submission of the flight plan. Factors to be considered include the means of submission for both individual and repetitive flight plans.

(j) Operational flight plan

Procedures and responsibilities for the preparation and acceptance of the operational flight plan. The use of the operational flight plan must be described including samples of the operational flight plan formats in use.

(k) Operator's flight folio

The responsibilities and the use of the operator's flight folio must be described, including samples of the format used.

A technical log may be used in place of a flight folio, if it contains the required information.

(l) List of documents, forms and additional information to be carried.

(2) Ground handling instructions

(a) Fueling procedures

(b) Free balloon, passengers and cargo handling procedures related to safety

A description of the handling procedures to be used when allocating spaces and embarking and disembarking passengers and when loading and unloading the free balloon. Further procedures, aimed at achieving safety whilst the free balloon is deflated, must also be given. Handling procedures must include -

(i) disembarkation of persons

(ii) sick passengers and person with reduced mobility

(iii) transportation of inadmissible passengers, deportees or persons in custody;

(iv) permissible size and weight of hand baggage;

(v) loading and securing of items in the free balloon;

(vi) special loads and classification of load compartments;

(vii) positioning of ground personnel;

(viii) operation of free balloon doors;

(ix) safety on the launching site, including fire prevention, blast and suction areas;

- (x) start-up, ramp departure and arrival procedures;
- (xi) servicing of free balloons;
- (xii) documents and forms for free balloon handling; and
- (xiii) multiple occupancy of free balloon spaces.

(c) Procedures for the refusal of embarkation and for disembarkation

Procedures to ensure that persons who appear to be intoxicated or who demonstrate by manner or physical indications that they are under the influence of drugs, except medical patients under proper care, are refused embarkation.

(3) Flight procedures

(a) VFR/IFR policy

A description of the policy for allowing flights to be made under VFR, or of requiring flights to be made IFR, or of changing from one to the other

(b) Navigation procedures

A description of all navigation procedures relevant to the type(s) and area(s) of operation.

Consideration must be given to-

- (i) standard navigation procedures including policy for carrying out independent cross-checks of keyboard entries where these affect the flight path to be followed by the free balloon;
- (ii) MNPS and POLAR navigation and navigation in other designated area;
- (iii) RNAV;
- (iv) in-flight replanning; and
- (v) procedures in the event of system degradation.

(c) Altimeter setting procedures

(d) Altitude alerting system procedure

(e) Ground proximity warning system procedures

(f) Policy and procedure for use of TCAS/ACAS

(g) Policy and procedures for in-flight fuel management

(h) Adverse and potentially hazardous atmosphere conditions

Procedures for operating in, or avoiding, potentially hazardous atmospheric conditions including -

- (i) thunderstorms;
- (ii) icing conditions;
- (iii) turbulence;
- (iv) windshear;
- (v) jetstream;
- (vi) volcanic ash clouds;
- (vii) heavy precipitation;
- (viii) sand storms;
- (ix) mountain waves; and
- (x) significant temperature inversions.

(i) Wake turbulence

Wake turbulence separation criteria, taking into account free balloon types, wind conditions and runway location.

(j) Crew members at their stations

The requirements for crew members to occupy their assigned stations or spaces during the different phases of flight or whenever deemed necessary in the interests of aviation safety.

(k) Use of safety belts for crew and passengers, if provided

The requirements for crew members and passengers to use safety belts and or harnesses during the different phases of flight or whenever deemed necessary in the interests of aviation safety.

(l) Admission to pilot's compartment

The conditions for the admission to the pilot's compartment of persons other than the flight crew

(m) Use of vacant crew spaces

The conditions and procedures for the use of vacant crew spaces

(n) Incapacitation of crew members

Procedures to be followed in the event of incapacitation of crew members in flight. Examples of the types of incapacitation and the means for recognising them, must be included.

(o) Cabin safety requirements

Procedures covering:

- (i) Cabin preparation for flight, in-flight requirements and preparation for landing including procedures for securing cabin and galleys;
- (ii) procedures to ensure that passengers are positioned where, in the event that an emergency evacuation is required, they may best assist and not hinder evacuation from the free balloon;
- (iii) procedures to be followed during passenger embarkation and disembarkation;
- (iv) procedures in the event of fueling with passengers on board or embarking and disembarking; and
- (v) smoking on board.

(p) Passenger briefing procedures

The content, means and timing of passenger briefing in accordance with CAR 136.08.11.

- (q) Procedures for free balloons operated whenever required cosmic or solar radiation detection equipment is carried.
- (r) Procedures for the use of cosmic or solar radiation detection equipment and for recording its reading including actions to be taken into event that limit values specified in the operations manual are exceeded. In addition, the procedures, including ATS procedures, to be followed in the event that a decision to descend or re-route is taken.

(4) Use of the minimum equipment and configuration deviation list(s)

(5) Non revenue flights

Procedures and limitations for -

- (a) training flights;
- (b) test flights;
- (c) delivery flights;
- (d) ferry flights;
- (e) demonstration flights; and
- (f) positioning flights;

including the kind of persons who may be carried on such flights.

2.1.10 Dangerous goods and weapons

- (1) Information, instructions and general guidance on the conveyance of dangerous goods including -
 - (a) operator's policy on the conveyance of dangerous goods;

- (b) guidance on the requirements for acceptance, labeling, handling, stowage and segregation of dangerous goods;
 - (c) procedures for responding to emergency situations involving dangerous goods;
 - (d) duties of all personnel involved as referred to in a Part 92; and
 - (e) instructions on the carriage of the operator's employees.
- (2) The conditions under which weapons, munitions of war and sporting weapons may be carried.

2.1.11 Security

- (1) Security instructions and guidance of a non-confidential nature which must include the authority and responsibilities of operations personnel. Policies and procedures for handling and reporting crime on board such as unlawful interference, sabotage, bomb threats, and hijacking must also be included.
- (2) A description of preventative security measures and training.

Note: Parts of the security instructions and guidance may be kept confidential.

2.1.12 Handling of aviation accidents and incidents

Procedures for the handling, notifying and reporting of aviation accidents and incidents. This section must include-

- (1) definitions of aviation accidents and incidents and the relevant responsibilities of all person involved;
- (2) the description of which operator departments, authorities or other institutions have to be notified by which means and in which sequence in case of an aviation accident;
- (3) special notification requirements in the event of an aviation accident or incident when dangerous goods are being carried;
- (4) a description of the requirements to report specific aviation accidents and incidents;
- (5) the forms used for reporting and the procedure for submitting them to the relevant authority must also be included; and
- (6) if the operator develops additional safety-related reporting procedures for its own internal use, a description of the applicability and related forms to be used.

2.1.13 Rules of the air

Rules of the air including-

- (1) visual and instrument flight rules;

- (2) territorial application of the rules of the air;
- (3) communication procedures including COM-failure procedures; reception of civil aircraft;
- (4) the circumstances in which a radio listening watch is to be maintained ;
- (5) signals;
- (6) time system used in operation;
- (7) ATC clearances adherence to flight plan and position reports;
- (8) Visual signals used to warn an unauthorized free balloon flying in or about to enter a restricted or prohibited area;
- (9) Procedures for pilots observing an aviation accident or receiving a distress transmission;
- (10) The ground/air visual codes for use by survivors, description and use of signal aids; and
- (11) distress and urgency signals.

PART 2: FREE BALLOON OPERATING MATTERS

Taking account of the differences between types, and variants of types, under the following headings:

2.2.1 General information and units of measurement

General information (e.g. free balloon dimensions), including a description of the units of measurement used for the operation of the free balloon type concerned and conversion tables.

2.2.2 Limitations

A description of the certified limitations and the applicable operational limitations including -

- (1) certification status;
- (2) passenger positioning configuration for each free balloon type including a pictorial presentation;
- (3) types of operation that are approved;
- (4) crew composition;
- (5) mass and centre of gravity;
- (6) speed limitations;
- (7) flight envelope(s);

- (8) wind limits;
- (9) performance limitations for applicable configurations;
- (10) airframe contamination; and
- (11) system limitations.

2.2.3 Normal procedures

The normal procedures and duties assigned to the crew, the appropriate checklists, the system for use of the checklists and a statement covering the necessary coordination procedures between flight crew and cabin crew. The following normal procedures and duties must be included:

- (1) Pre-flight;
- (2) pre-departure;
- (3) altimeter setting and checking;
- (4) take-off and climb;
- (5) cruise and descent;
- (6) approach, landing preparation and briefing;
- (7) VFR approach;
- (8) visual approach;
- (9) missed approach;
- (10) normal landing; AND
- (11) post landing.

2.2.4 Abnormal and emergency procedures

The abnormal and emergency procedures and duties assigned to the crew, the appropriate checklists, the system for use of the checklists and a statement covering the necessary coordination procedures between flight crew and cabin crew. The following abnormal and emergency procedures and duties must be included:

- (1) Crew incapacitation;
- (2) fire and smoke drills;
- (3) unpressurised and partially pressurised flight;
- (4) exceeding structural limits such as overweight landing;
- (5) lighting strikes;
- (6) distress communications and alerting ATC to emergencies;

- (7) engine failure;
- (8) system failures;
- (9) guidance for diversion in case of serious technical failure; AND
- (10) emergency landing/ditching.

2.2.5 Performance

- (1) Performance data must be provided in a form in which it can be used without difficulty.
- (2) Performance data

Performance material which provides the necessary data for compliance with the performance requirements prescribed in Part 1.

2.2.6 Flight planning

- (1) Data and instructions necessary for pre-flight and in-flight planning.
- (2) The method for calculating fuel needed for the various stages of flight in accordance with TS 136.08.9 and 10..

2.2.7 Mass and balance

Instructions and data for the calculation of the mass and balance including -

- (1) calculation system (e.g. index system);
- (2) information and instructions for completion of mass and balance documentation, including manual and computer generated types;
- (3) limiting masses and centre of gravity of the various versions; and
- (4) dry operating mass and corresponding centre of gravity or index.

2.2.8 Loading

Procedures and provisions for loading and securing the load in the free balloon.

2.2.9 Configuration deviation list

The Configuration Deviation List(s) (CDL), if provided by the manufacturer, taking account of the free balloon types and variants operated including procedures to be followed when an free balloon is being dispatched under the terms of its CDL.

2.2.10 Minimum equipment list

The Minimum Equipment List (MEL) taking into account the free balloon types and variants operated and the type(s)/area(s) of operation.

2.2.11 Survival and emergency equipment including oxygen

- (1) A list of the survival equipment to be carried for the routes to be flown and the procedures for checking the serviceability of this equipment prior to take-off. Instructions regarding the location, accessibility and use of survival and emergency equipment and its associated checklists(s) must also be included.
- (2) The procedure for determining the amount of oxygen required and the quantity that is available. The flight profile, number of occupants and possible cabin decompression must be considered. The information provided must be in a form in which it can be used without difficulty.

2.2.12 Emergency evacuation procedures

- (1) Instructions for preparation for emergency evacuation including crew coordination and emergency station assignment.
- (2) Emergency evacuation procedures

A description of the duties of all members of the crew for the rapid evacuation of a free balloon and the handling of the passengers in the event of a forced landing, ditching or other emergency.

2.2.13 Free balloon systems

A description of the free balloon systems, related controls and indications and operating instructions.

PART 3: ROUTE AND OPERATIONS SITE INSTRUCTIONS AND INFORMATION

Instructions and information relating to communications, navigation and operations sites including minimum flight levels and altitudes for each route to be flown and operating minima for each operations site planned to be used including-

- (1) minimum flight level/altitude;
- (2) operating minima for departure, destination and alternate operations sites;
- (3) communication facilities and navigation aids;
- (4) runway data and operations site facilities;
- (5) approach missed approach and departure procedures including noise abatement procedures;
- (6) COM-failure procedures
- (7) search and rescue facilities in the area over which the free balloon is to be flown
- (8) a description of the aeronautical charts that must be carried on board in relation to the type of flight and the route to be flown, including the method to check their validity;

- (9) Availability of aeronautical information and MET services;
- (10) en route COM/NAV procedures including holding; and
- (11) Operations site categorization for crew competency qualification.

PART 4: TRAINING

- (1) Training syllabi and checking programmes for all operations personnel assigned to operational duties in connection with the preparation and/or conduct of a flight.
- (2) Training syllabi and checking programmes must include:
 - (a) For flight crew -
All relevant items prescribed in Part 61 and Subpart 5 of Part 136;
 - (b) For cabin crew
All relevant items prescribed in Part 64 and Subpart 5 of Part 136;
 - (c) For operations personnel concerned, including crew members -
 - (i) All relevant items prescribed in Part 92; and
 - (ii) All relevant items regarding operator security.
 - (d) For operations personnel other than crew members (e.g. dispatcher, handling personnel, etc.)
All other relevant items pertaining to their duties
- (3) Procedures
 - (a) Procedures for training and checking;
 - (b) Procedures to be applied in the event that personnel do not achieve or maintain the required standards;
 - (c) Procedures to ensure that abnormal or emergency situations requiring the application of part or all of abnormal or emergency procedures and simulation of IMC by artificial means, are not stimulated during commercial flights.
- (4) Description of documentations to be stored and storage periods.

3. General

The operations manual must be drawn up in accordance with the current ICAO Doc 9376-AN/914, "Preparation of an Operations Manual".

136.06.6 OPERATIONAL FLIGHT PLAN**1. Items in the operational flight plan**

- (1) An operator must ensure that the operational flight plan used and the entries made during flight contain the following items:
 - (a) Free balloon registration;
 - (b) free balloon type and variant;
 - (c) date of flight;
 - (d) flight identification;
 - (e) names of crew members;
 - (f) duty assignment of crew members;
 - (g) place of departure;
 - (h) time of departure (actual off-block time, take-off time);
 - (i) place of arrival (planned and actual);
 - (j) time of arrival (actual landing and on-block time);
 - (k) type of operation;
 - (l) route and route segments with checkpoints/waypoints, distances, time and tracks;
 - (m) planned cruising speed and flying times between check-points/waypoints. Estimate and actual times overhead;
 - (n) safe altitudes and minimum levels;
 - (o) planned altitudes and flight levels;
 - (p) fuel calculations (records of in-flight fuel checks);
 - (q) fuel on board when starting engines;
 - (r) alternate(s) for destination and, where applicable, take-off and en route, including information required in subparagraphs (l), (m), (n) and (o) above;
 - (s) where required, initial flight plan clearance and subsequent re-clearance;
 - (t) in-flight re-planning calculations; and
 - (u) relevant meteorological information.

- (2) Items which are readily available in other documentation or from an acceptable source, or which are irrelevant to the type of operation, may be omitted from the operational flight plan.
- (3) The operator must ensure that the operational flight plan and its use is described in the operations manual.
- (4) The operator must ensure that all entries in the operational flight plan are made concurrently and that they are permanent in nature.

136.06.7 TECHNICAL LOG

1. Information to be contained in the technical log

- (1) A flight plan, if required, filed prior to departure must contain the following items:
 - (a) identification and transponder data;
 - (b) flight rules and type of flight;
 - (c) number and type(s) of free balloon(s) and wake turbulence category;
 - (d) radio communication, navigation and approach-aid equipment;
 - (e) site of departure and time;
 - (f) flight information region boundaries and estimated times;
 - (g) cruising speed and flight level;
 - (h) route to be followed;
 - (i) destination operations site and estimated times of arrival;
 - (j) alternate landing site(s);
 - (k) alerting action required;
 - (l) fuel endurance;
 - (m) total number of persons on board;
 - (n) emergency and survival equipment and colour of free balloon;
 - (o) other pertinent information; and
 - (p) name, postal address, telephone and telefax number of the operator or pilot-in-command of the free balloon which must be completed in field 18 of the standard flight plan form.
- (2) The operator must ensure that all entries are made concurrently and that they are permanent in nature.

136.06.14 DOCUMENT STORAGE PERIODS

An operator shall ensure that the following information/documentation is stored in an acceptable form accessible to the Director, for the periods shown in the table below.

Note: Additional information relating to maintenance records is prescribed in Subpart 9.

Table 1 - Information used for the preparation and execution of a flight

Information used for the preparation and execution of the flight as described in CAR 136.06.1	
Operational flight plan	3 months
Free balloon Technical Log	24 months after the date of the last entry
Route specific NOTAM/AIS briefing documentation edited by the operator	3 months
Mass and balance documentation	3 months
Notification of special loads including dangerous goods	3 months

Table 2 - Reports

Reports	
Journey Log	3 months
Flight report(s) for recording details of any occurrence, as prescribed in CAR 136.03.12, or any event which the commander deems necessary to report/record	3 months
Reports on exceedances of duty and/or reducing rest periods	3 months

Table 3 - Flight crew records

Flight Crew Records	
Flight, duty and rest time	15 months
	As long as the flight crew member is exercising the privileges of the licence for the operator
Licence	3 years
Conversion training and checking	3 years
Command course (including checking)	3 years
Recurrent training and checking	3 years
Recent experience	3 years
Route and operations site competence	3 years
Training and qualification for specific operations when required by Part 136. Dangerous goods training as appropriate	3 years

Table 4 - Cabin crew records

Cabin Crew Records	
Flight, Duty and Rest time	15 months
Initial training, conversion and differences training (including checking)	As long as the cabin crew member is employed by the operate
Recurrent training and refresher (including checking)	Until 12 months after the cabin crew member has left the employ of the operator
Dangerous Goods training as appropriate	3 months

Table 5 - Records for other operation personnel

Records for other operations personnel	
Training/qualification records of other personnel for whom an approved training programme is required by Part 136	Last 2 training records

Table 6 - Other records

Other Records	
Records on cosmic and solar radiation dosage	Until 12 months after the crew member has left the employ of the operator
Quality system records	5 years

136.07.3 STANDARD FIRST AID KIT**1. Standard first aid kits**

- (1) The following must be included in the first aid kit:
- (a) bandage (unspecified);
 - (b) burns dressings (unspecified);
 - (c) wound dressings, large and small;
 - (d) adhesive tape, safety pins and scissors;
 - (e) small adhesive dressings;
 - (f) antiseptic wound cleaner;
 - (g) adhesive wound closures;
 - (h) adhesive tape;
 - (j) disposable resuscitation aid;
 - (k) simple analgesic e.g. paracetamol
 - (l) anti-emetic e.g. cinnarizine;
 - (m) nasal decongestant;
 - (n) first aid handbook;

- (o) splints, suitable for upper and lower limbs;
- (p) gastrointestinal antacid;
- (q) anti-diarrhoeal medication e.g. loperamide;
- (r) round/air visual signal code for use by survivors;
- (s) disposable gloves; and
- (t) a list of contents. This should include information on the effects and side effects of drugs carried.

Note 1. An eye irrigator whilst not required to be carried in the first aid kit should, where possible, be available for use on the ground.

- (2) Unless the standard first aid kit is clearly visible, its location must be indicated by a placard or sign, and appropriate symbols may be used to supplement the placard or sign.
- (3) The operator or pilot-in-command must ensure that the standard first aid kit is readily accessible for use.
- (4) A free balloon must be equipped with the following number of standard first aid kits:

Number of passenger spaces available	Number of standard of first aid kits required
0 to 99	1
100 to 199	2
200 to 299	3
300 and more	4

136.07.4 FIRE EXTINGUISHERS

1. Definitions

Any word or expressions to which a meaning has been assigned in the Aviation Act, 1962, and the Namibian Civil Aviation Regulations, 2001, bears, when used in this technical standard, the same meaning unless the context indicates otherwise, and -

- (1) "Class A cargo or baggage compartment" means a cargo or baggage compartment in which -
 - (a) the presence of a fire would be easily discovered by a crew member while at his or her station; and
 - (b) each part of the compartment is easily accessible in flight.
- (2) "Class B cargo or baggage compartment" means a cargo or baggage compartment in which -

- (a) there is sufficient access in flight to enable a crew member to effectively reach any part of the compartment with the contents of a hand fire extinguisher;
 - (b) when the access provisions are being used, no hazardous quantity of smoke flames or extinguishing agent will enter any compartment occupied by the crew or passengers; and
 - (c) there is a separate approved smoke or fire detector system to give warning at the pilot or flight engineer station;
- (3) “Class E cargo compartment” means a cargo compartment used only for the carriage of cargo and in which -
- (a) there is a separate approved smoke or fire detector system to give warning at the pilot or flight engineer station;
 - (b) there are means of shutting off the ventilating airflow to or within the compartment, and the controls for these means are accessible to the flight crew in the flight crew compartment;
 - (c) there are means of excluding hazardous quantities of smoke, flames or noxious gases, from the flight crew compartment, and
 - (d) the required crew emergency exits are accessible under any cargo loading conditions.

2. Hand fire extinguishers

The operator or pilot-in-command may not operate a free balloon unless hand fire extinguishers are provided for use in flight crew, passenger and, as applicable, cargo compartments and galleys in accordance with the following:

- (1) The type and quantity of extinguishing agent must be suitable for the kinds of fires likely to occur in the compartment where the extinguisher is intended to be used and for personnel compartments, must minimize the hazard of toxic gas concentration.
- (2) At least one hand fire extinguisher, containing Halon 1211 (bromochloro difluoromethane, CBrClF₂), or equivalent as the extinguishing agent, must be conveniently located on the pilot’s compartment for use by the flight crew.
- (3) At least one hand fire extinguisher must be located in, or readily accessible for use in, each galley not located on the main passenger deck.
- (4) At least one readily accessible hand fire extinguisher must be available for use in each Class A or Class B cargo or baggage compartment and in each Class E cargo compartment that is accessible to flight crew members in flight.
- (5) At least the following number of hand fire extinguishers must be conveniently located in the passenger compartment(s):

Maximum approved passenger spacing configuration	Number required
7 to 30	1
31 to 60	2
61 to 200	3
201 to 300	4
301 to 400	5
401 to 500	6
501 to 600	7
601 or more	8

When two or more extinguishers are required, they must be evenly distributed in the passenger compartment.

- (6) At least one of the required fire extinguishers located in the passenger compartment of a free balloon with a maximum approved passenger positioning configuration of at least 31, and not more than 60, and at least two of the fire extinguishers located in the passenger compartment of a free balloon with a maximum approved passenger positioning configuration of 61 or more must contain Halon 1211, or equivalent as the extinguishing agent.
- (7) The number and location of hand fire extinguishers must be such as to provide adequate availability for use, account being taken of the number and size of the passenger compartments, the need to minimise the hazard toxic gas concentrations and the location of toilets, galleys, etc. These considerations may result in the number being greater than the minimum prescribed.
- (8) There must be at least one fire extinguisher suitable for both flammable fluid and electrical equipment fires installed on the pilot's compartment. Additional extinguishers may be required for the protection of other compartments accessible to the flight crew in flight. Dry chemical fire extinguishers should not be used on the pilot's compartment, or in any compartment not separated by a partition from the pilot's compartment, because of the adverse effect on vision during discharge and, if non-conductive, interference with electrical contacts by the chemical residues.
- (9) Where only one hand fire extinguisher is required in the passenger compartments it must be located near the cabin crew member's station where provided.
- (10) Where two or more hand fire extinguishers are required in the passenger compartments and their location is not otherwise dictated by consideration of subparagraph (7) above, an extinguisher must be located near each end of the cabin either the remainder distributed through the cabin as evenly as it practicable.
- (11) Unless an extinguisher is clearly visible, its location must be indicated by a placard or sign, and appropriate symbols may be used to supplement such a placard or sign.

136.07.5 SURVIVAL EQUIPMENT**1. Survival equipment**

The operator or pilot-in-command may not operate a free balloon across areas in which search and rescue would be especially difficult, unless it is equipped with the following:

- (1) Signalling equipment to make the pyrotechnical distress signals approved by the Director;
- (2) at least one ELT; and
- (3) additional survival equipment for the route to be flown taking account of the number of persons on board prescribed in paragraph 3: Provided that the additional equipment need not be carried when the free balloon remains within a distance from an area where search and rescue is not especially difficult.

2. Interpretation

For the purposes of this technical standard the expression “area in which search and rescue would be especially difficult” means -

- (1) an area so designated by the State responsible for managing search and rescue; or
- (2) an area which is largely uninhabited and where -
 - (a) the State responsible for managing search and rescue has not published any information to confirm that search and rescue would not be especially difficult; and
 - (b) the State referred to in (a) does not, as a matter of policy, designate areas as being especially difficult for search and rescue.

3. Additional survival equipment

- (1) The following additional survival equipment must be carried when required:
 - (a) 500 ml of water for each four, or fraction of four, persons on board;
 - (b) one knife;
 - (c) first aid equipment;
 - (d) one set of air/ground codes.
- (2) In addition, when polar conditions are expected, the following should be carried:
 - (a) means for melting snow;
 - (b) one snow shovel and one ice saw;

- (c) sleeping bags for use by one third of all persons on board and space blankets for the remainder or space blankets for all passengers on board; and
- (d) one Arctic/polar suit for each crew member carried.

4. Duplicates

If any item of equipment contained in the above list is already carried on board the free balloon in accordance with another requirement, there is not need for this to be duplicated.

5. Location

Unless the survival equipment is clearly visible, its location must be indicated by a placard or sign, and appropriate symbols may be used to supplement the placard or sign.

136.07.6 COMMUNICATIONS EQUIPMENT

1. General

- (1) The operator or pilot-in-command must ensure that a flight does commence unless the communication and navigation equipment required under Subpart 7 of Part 136, is -
 - (a) approved and installed in accordance with the requirements applicable to them including the minimum performance standard and the operational and airworthiness requirements;
 - (b) installed in such manner that the failure of any single unit required for either communication or navigation purpose, or both, will not result in the inability to communicate or navigate safely on the route being flown;
 - (c) in an operable condition for the kind of operation being conducted except as provided in the, MEL; and
 - (d) so arranged that if equipment is to be used by one crew member at his or her station during flight, it must be readily operable from his or her station. When a single item of equipment is required to be operated by more than one crew member, it must be installed so that the equipment is readily operable from any station at which the equipment is required to be operated.
- (2) Communication and navigation equipment minimum performance standards are those prescribed in the applicable NAM-TSO, unless different performance standards are prescribed. Communication and navigation equipment complying with design and performance specifications other than NAM-TSO on the date of commencement of the CARs, may remain in service, or be installed, unless additional requirements are prescribed in Subpart 7 of Part 136.

2. Radio equipment

- (1) The operator or pilot-in-command may not operate a free balloon unless it is equipped with radio equipment for the kind of operating being conducted.
- (2) Where two independent (separate and complete) radio systems are required, each system must have an independent antenna installation except that, where rigidly supported non-wire antennae or other antenna installations or equivalent reliability are used only one antenna is required.

3. Audio selector panel

The operator or pilot-in-command may not operate a free balloon under IFR unless it is equipped with an audio selector panel accessible to each required crew member.

4. Radio equipment for operations under VFR over routes navigated by reference to visual landmarks

The operator or pilot-in-command may not operate a free balloon under VFR over routes that can be navigated by reference to visual landmarks, unless it is equipped with the radio equipment (communication and SSR transponder equipment) necessary under normal operating conditions to fulfill the following:

- (1) communicate with appropriate ground stations;
- (2) communicate with appropriate air traffic service facilities from any point in controlled airspace within which flights are intended;
- (3) receive meteorological information; and
- (4) reply to SSR interrogations as required for the route being flown.

5. Communication and navigation equipment for operation under IFR, or under VFR over routes not navigated by reference to visual landmarks

- (1) The operator or pilot-in-command may not operate a free balloon under IFR, or under VFR over routes that cannot be navigated by reference to visual landmarks unless the free balloon is equipped with communication and navigation equipment in accordance with the requirements of air traffic services in the area(s) of operation but not less than -
 - (a) two independent radio communication systems necessary under normal operating conditions to communicate with an appropriate ground station from any point on the route including diversions;
 - (b) one VOR receiving system, one ADF system, one DME and one Marker Beacon receiving system ;
 - (c) one ILS OR MLS where ILS or MLS is required for approach navigation purposes;
 - (d) an area navigation system when area navigation is required for the route being flown;
 - (e) an additional VOR receiving system on any route, or part thereof, where navigation is based only on VOR signals;

- (f) an additional ADF system on any route, or part thereof, where navigation is based only on NDB signal; and
 - (g) SSR transponder equipment as required for the route being flown.
- (2) The operator or pilot-in-command may operate a free balloon that is not equipped with the navigation equipment specified in subparagraph (1)(e) or (f), provided that it is equipped with alternative equipment authorised, for the route being flown, by the Director. The reliability and the accuracy of alternative equipment must allow safe navigation for the intended route.

136.08.1 ROUTES AND AREAS OF OPERATION

1. Adequate operations site

- (1) When defining operations site for the type of free balloon(s) and operation(s) concerned, an operator must take into account the following:
- (a) An adequate operations site is an operations site which the operator considers to be satisfactory, taking account of the applicable performance requirements. In addition, it should be anticipated that, at the expected time of use, the operations site will be available and equipped with necessary ancillary services, such as ATS, sufficient lighting, communications, weather reporting, navigation aids and emergency services.

2. Airfield operating minima-take off, en-route and landing

- (1) An operator may only fly a free balloon for commercial air transport purposes by day and the flight shall be carried out under Visual flight Rules (VFR).
- (2) The operator must specify in the operations manual referred to in TS 136.06.3 the conditions for take-off in terms of visibility and surface wind speed and the conditions for VFR flights.
- (3) Where there are no external fire extinguishers at the operations site, the operator shall provide the staff with an effective fire and rescue facility which can respond to a free balloon accident or incident pending the arrival of external emergency services.
- (4) For the purpose of item (1) "day" means the time from 30 minutes before sunrise up to 30 minutes after sunset.

136.08.3 OPERATIONAL CONTROL

1. Approval of method of supervision

The Director shall give due consideration to:

- (1) Qualification for employment;
- (2) Training/examination/licences;
- (3) Licence and qualification validity;
- (4) Competence of operations;
- (5) Personnel;
- (6) Supervisory staff;

- (7) Control, analysis and storage of records;
- (8) Flight documents and data;
- (9) Documents used for the preparation and execution of the flight;
- (10) Reports;
- (11) Analysis and retention of documents and records;
- (12) Quality control of EDP;
- (13) Documents storage periods - flight crew records;
- (14) Documents storage periods - cabin crew records;
- (15) Flight time and duty period records (flight crew and cabin crew);
- (16) Documents storage periods - records for other operations personnel; and
- (17) Accident prevention and Safety Management System:
 - (a) Accident prevention;
 - (b) Human factors;
 - (c) Accident prevention organisation;
 - (d) Safety Management System; and
 - (e) Main aspects of the Safety Management System.

136.08.5 MASS AND BALANCE

1. Definitions

Any word or expression to which a meaning has been assigned in the Aviation Act, 1962, and the Namibian Civil Aviation Regulations, 2001, bears, when used in this technical standard, the same meaning unless the context indicates otherwise, and -

“maximum structural landing mass” means the maximum permissible total free balloon mass upon landing under normal circumstances;

“maximum structural take off mass” means the maximum permissible total free balloon mass at the start of the take-off run; and

“maximum zero fuel mass” means the maximum permissible mass of an free balloon with no usable fuel. The mass of the fuel contained in particular tanks must be included in the zero fuel mass when it is explicitly mentioned in the free balloon flight manual limitations;

“traffic load” means the total mass of passengers, baggage and cargo, including any non-revenue load.

2. Loading, mass and balance

The operator must specify, in the operations manual, the principles and methods involved in the loading and in the mass and balance system which comply with the provisions of CAR 136.08.7. This system must cover all types of intended operations.

3. Mass values for crew

- (1) The operator or pilot-in-command must use the following mass values to determine the dry operating mass:
 - (a) Actual masses including any crew baggage; or

- (b) standard masses, including hand baggage, of 20 kg for flight crew members and 10 kg for cabin crew members.
- (2) The operator or pilot-in-command must correct the dry operating mass to account for any additional baggage. The position of this additional baggage must be accounted for when establishing the centre of gravity of the free balloon.

4. Mass values for passengers and baggage

- (1) The operator or pilot-in-command must compute the mass of passengers and checked baggage using either the actual weighed mass of each person and the actual weighed mass of baggage or the standard mass values specified in Tables 1 to 3 below except where the number of passenger spaces available is less than 6, when the passenger mass may be established by a verbal statement by or on behalf of each passenger or by estimation. The procedure specifying when to select actual or standard masses must be included in the operations manual.
- (2) If determining the actual mass by weighing, the operator or pilot-in-command must ensure that passengers' personal belongings and hand baggage are included. Such weighing must be conducted immediately prior to boarding and at an adjacent location.
- (3) If determining the mass of passengers using standard mass values, the standard mass values in Tables 1 and 2 below must be used. The standard masses include hand baggage and the mass of any infant carried by an adult on one passenger space. Infants occupying separate passenger spaces are to be considered as children for the purpose of this paragraph.
- (4) Mass values for passengers - 20 spaces or more
- (a) Where the total number of passenger spaces available in a free balloon is 20 or more, the standard masses of male and female in Table 1 are applicable. As an alternative, in cases where the total number of passenger spaces available is 30 or more, the 'All Adult' mass values in Table 1 are applicable.
- (b) For the purpose of Table 1, holiday charter means a charter flight solely intended as an element of a holiday travel package.

Table 1

Passenger spaces	20 and more		30 and more
	Male	Female	All adult
All flights except holiday charters	88 kg	70 kg	84 kg
Holiday charters	83 kg	69 kg	76 kg
Children	35 kg	35 kg	35 kg

- (5) Mass values for passengers - 19 spaces or less

Table 2

Passenger spaces	1 - 9	10 - 19
Male	96 kg	92 kg
Female	78 kg	74 kg
Children	35 kg	35 kg

- (a) Where the total number of passenger spaces available in a free balloon is 19 or less, the standard masses in Table 2 are applicable.
- (b) On flights where no hand baggage is carried in the cabin or where hand baggage is accounted for separately, 6 kg may be deducted from the above male and female masses. Articles such as an overcoat, an umbrella, a small handbag or purse, reading material or a small camera are not considered as hand baggage for the purpose of this paragraph.
- (6) Mass values for baggage

Where the total number of passenger spaces available in the free balloon is 20 or more, the standard mass values given in Table 3 are applicable for each piece of checked baggage. For free balloons with 19 passenger spaces or less, the actual mass of the checked baggage, determined by weighing, must be used.

Table 3 : 20 or more spaces

Type of flight	Baggage standard mass
Domestic	11 kg
International	15 kg

- (7) If the operator or pilot-in-command wishes to use standard mass values other than those contained in Tables 1 to 3 above, he or she must advise the Director of his or her reasons and obtain such approval in advance. After verification and approval by the Director of the results of the weighing survey, the revised standard mass values are only applicable to that operator. The revised standard mass values can only be used in circumstances consistent with those under which the survey was conducted. Where revised standard masses exceed those in Tables 1 to 3, then such higher values must be used.
- (8) On any flight identified as carrying a significant number of passengers whose masses, including hand baggage, are expected to exceed the standard passenger mass, the operator or pilot-in-command must determine the actual mass of such passengers by weighing or by adding an adequate mass increment.
- (9) If standard mass values for checked baggage are used and a significant number of passengers check-in baggage that is expected to exceed the standard baggage mass, the operator or pilot-in-command must determine the actual mass of such baggage by weighing or by adding an adequate mass increment.

- (10) The operator must ensure that a pilot-in-command is advised when a non-standard method has been used for determining the mass of the mass and balance documentation.

5. Mass and balance documentation

5.1 General

- (1) The operator must establish mass and balance documentation prior to each flight specifying the load and its distribution.

The mass and balance documentation must enable the pilot-in-command to determine by inspection that the load and its distribution is such that the mass and balance limits of the free balloon are not exceeded.

The person supervising the loading of the free balloon must confirm by signature that the load and its distribution are in accordance with the mass and balance documentation.

Acceptance of the loading of the free balloon by the pilot-in-command, must be indicated by countersignature or equivalent.

- (2) The mass and balance documentation must contain the following information:
- (a) The free balloon registration and type;
 - (b) the flight identification number and date;
 - (c) the identity of the pilot-in-command;
 - (d) the identity of the person who prepared the document;
 - (e) the dry operating mass and the corresponding centre of gravity of the free balloon;
 - (f) the mass of the fuel at take-off and the mass of trip fuel;
 - (g) the mass of consumables other than fuel;
 - (h) the components of the load including passengers, baggage, cargo and ballast;
 - (i) the take-off mass, landing mass and zero fuel mass;
 - (j) the load distribution;
 - (k) the applicable free balloon centre of gravity positions; and
 - (l) the limiting mass and centre of gravity values.

5.2 Last minute change

- (1) The operator must specify procedures for last minute changes to the load.

- (2) If any last minute change occurs after the completion of the mass and balance documentation, this must be brought to the attention of the pilot-in-command and the last minute change must be entered on the mass and balance documentation.

The maximum allowed change in the number of passengers or hold load acceptable as a last minute change, must be specified in the operations manual.

If this number is exceeded, new mass and balance documentation must be prepared.

5.3 Computerised systems

- (1) Where mass and balance documentation is generated by a computerised mass and balance system, the operator must verify the integrity of the output data.
- (2) The operator must establish a system to check that amendments of the input data are incorporated properly in the system and that the system is operating correctly on a continuous basis by verifying the output data at intervals not exceeding six months.

5.4 Onboard mass and balance systems

The operator must obtain the approval of the Director if the operator wishes to use an onboard mass and balance computer system as a primary source of despatch.

5.5 Datalink

When mass and balance documentation is sent to free balloons via datalink, a copy of the final mass and balance documentation as accepted by the pilot-in-command, must be available on the ground.

136.08.9 FUEL POLICY

1. Contingency fuel

- (1) At the planning stage, not all factors which could have an influence on the fuel consumption to the destination operations site can be foreseen. Therefore, contingency fuel is carried to compensate for items such as -
 - (a) deviations of an individual free balloon from the expected fuel consumption data;
 - (b) deviations from forecast meteorological conditions; and
 - (c) deviations from planned routings and/or cruising levels/altitudes.

136.08.10 FUEL SUPPLY

1. Fuel planning and management

- (1) The total quantity of fuel carried on board the balloon must be sufficient for the intended flight and must include a safe margin for emergency

contingencies. The manner in which the amount are calculated and records and the minimum fuel remaining on landing must be stated in the technical log referred to in TS 136.06.7.

- (2) Fuel planning tables must be provided for all balloons. The tables must take account of the size of the balloon and the duration of the intended flight and should refer to the conditions for which the figures apply.

2. Monitoring fuel on board

- (1) The operator must ensure that there are means for ascertaining, before departure, that the amount of fuel on board meets the pilot-in-command's requirements. In flight there must be instructions for ensuring that if, at the point of intended landing, the amount of fuel calculated to remain unused is likely to become less than any minimum quantity specified, this fact becomes apparent at an early stage. Procedures for changing tanks and for isolating and evacuating the fuel system on landing must be stated.
- (2) Before signing the Technical Log Sector Record Page, the pilot-in-command must be satisfied that the correct quality and quantity of fuel is on board and that it has been loaded in accordance with instructions.

136.08.14 CARRY-ON BAGGAGE

1. Procedures for stowing of carry-on baggage

Procedures established by an operator to ensure that carry-on baggage is adequately and securely stowed, must take account of the following:

- (1) Each item carried in a cabin must be stowed only in a location that is capable of restraining it;
- (2) mass limitations placarded on or adjacent to stowages must not be exceeded;
- (3) underspace stowages must not be used unless the space is equipped with a restraint bar and the baggage is of such size that it may adequately be restrained by this equipment;
- (4) items must not be stowed in areas such as bulkheads that are incapable of restraining articles against movement forwards, sideways or upwards and unless the bulkheads carry a placard specifying the greatest mass that may be placed there;
- (5) baggage and cargo placed in lockers must not be of such size that they prevent latched doors from being closed securely;
- (6) baggage and cargo must not be placed where it can impede access to emergency equipment; and
- (7) checks must be made before take-off and before landing, to ensure that baggage is stowed where it cannot impede evacuation from the aircraft or cause injury by failing (or other movement) as may be appropriate to the phase of flight.

136.09.6 MAINTENANCE MANAGEMENT MANUAL**1. General**

The operator's maintenance management manual must contain details of the organisation structure, including:

- (1) The competent person responsible for the maintenance system;
- (2) The personnel responsible for planning, performing, supervising and inspecting all maintenance to ensure -
 - (a) that such maintenance is carried out on time to an approved standard so that the maintenance responsibility referred to in CAR 136.09.3 is satisfied; and
 - (b) the functioning of the quality assurance system referred to in CAR 136.03.7; and
- (3) The procedures to be followed to satisfy such maintenance responsibility and quality assurance functions.

2. Information to be contained in the manual**PART 0: GENERAL ORGANISATION**

0.1 Corporate commitment by the Operator;

0.2 General information

- Brief description of organisation
- Relationship with other organisations
- Fleet composition - Type of operation
- Line station locations

0.3 Notification procedure to the Director regarding changes to the Operator's maintenance arrangements/locations/personnel/activities/approval

0.4 Maintenance Management Manual amendment procedures

PART I: MANAGEMENT

- Maintenance Management personnel:
 - Accountable Manager
 - Quality Manager
 - Maintenance co-ordination
 - Duties and responsibilities
 - Organisation chart(s)
 - Manpower resources and
 - Training policy,

PART 2: QUALITY SYSTEM PROCEDURE

2.1 Maintenance quality policy, plan and audit procedures;

2.2 Monitoring of maintenance management activities

- 2.3 Monitoring the effectiveness of the maintenance programme
- 2.4 Monitoring that all maintenance is carried out by an organisation approved in terms of Part 145.
 - Free balloon maintenance
 - Engines
 - Components
- 2.5 Monitoring that all contracted maintenance is carried out in accordance with the contract, including sub-contractors used by the maintenance contractor;
- 2.6 Quality audit personnel.

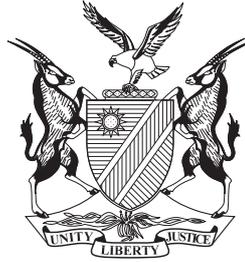
PART L2: ADDITIONAL LINE MAINTENANCE PROCEDURES

PART 3: CONTRACTED MAINTENANCE

- 3.1 Maintenance contractor selection procedure;
- 3.2 Detailed list of maintenance contractors;
- 3.3 Relevant technical procedures identified in the maintenance contract(s)

PART 4: OPERATORS'S MAINTENANCE PROCEDURES

- 4.1 Free balloon technical log utilization and MEL application;
- 4.2 Free balloon maintenance programme - Development and amendment;
- 4.3 Time and maintenance records, Responsibilities, Retention, Access;
- 4.4 Accomplishment and control of Airworthiness Directives;
- 4.5 Analysis of the effectiveness of the maintenance programmes
- 4.6 Non-mandatory modification embodiment policy;
- 4.7 Major modification standards;
- 4.8 Defect reports:
 - Analysis
 - Liaison with Manufacturers and Regulatory Authorities
 - Deferred defect policy;
- 4.9 Engineering activity
- 4.10 Reliability programmes
 - Airframe
 - Propulsion
 - Components;
- 4.11 Pre-flight Inspection
 - Preparation of the free balloon for flight
 - Sub-contracted ground handling functions
 - Security of cargo and baggage loading
 - Control of refuelling, quantity or quality
 - Control of snow, ice, dust, and sand contamination to an approved Standard;
- 4.12 Aircraft weighing
- 4.13 Flight test procedures
- 4.14 Sample of documents, Tags and Forms used;

ANNEXURE A

**REPUBLIC OF NAMIBIA
DIRECTORATE: CIVIL AVIATION**

**APPLICATION FOR THE ISSUING OF AN AIR OPERATOR CERTIFICATE
APPLICATION FOR THE AMENDMENT OF AN AIR OPERATOR
CERTIFICATE
APPLICATION FOR THE RENEWAL OF AN AIR OPERATOR
CERTIFICATE**

Notes:

- (i) *An application for the issuing of an air operator certificate, or an amendment thereof, must comply with the provisions of CAR 136.02.2.*
- (ii) *An application for the renewal of an air operator certificate, must comply with the provisions of CAR 136.02.5.*
- (iii) *Section 1 must be completed in all cases.*
- (iv) *All other sections must be completed if applicable to the specific application.*
- (v) *The original application must be submitted to the Director: Civil Aviation.*
- (vi) *Where the required information cannot be furnished in the space provided, the information must be submitted as a separate memorandum and attached hereto.*
- (vii) *Please delete if not applicable.*

Mark the appropriate block

Application for the issuing of an air operator certificate
Application for the amendment of an air operator certificate
Application for the renewal of an air operator certificate

1. PARTICULARS REGARDING THE APPLICANT/HOLDER

1.1 Full name :	
1.2 Trade name, if any :	
1.3 Principal place of business:	1.4 Postal address: Postal code:

1.5 Telephone number :	1.6 Telefax number :
1.7 Cellular phone number :	1.8 E-mail address :
1.9 SITA code (if any) :	1.10 Telex number :
1.11 Legal status of applicant/holder (individual/close corporation/operator's /trust/other specify) :	

1.12 Registration number in the case of a close corporation/operator's /trust :

1.13 Full particulars in respect of the individual/each responsible director/shareholder/member/office bearer:				
Name	Position	Identity number	Nationality	Country of permanent residence

1.14 The applicant/holder declares hereby that the particulars provided in this application are true in every respect.	
Signature	Date

2. APPLICATION FOR THE ISSUING OF AN AIR OPERATOR CERTIFICATE

2.1 Description of the type(s) of operation(s) applied for:

2.2 Type(s) of free balloon(s) to be operated:
--

2.3 Nationality and registration mark(s) of the free balloon(s) to be operated:

2.4 Proposed area(s) of operation:

2.5 Attached documents: Mark the appropriate block Operations manual Proof of financial capability Maintenance management manual Free balloon maintenance programme Free balloon technical log Maintenance arrangements between applicant and approved aircraft maintenance organisation Valid Air Services Licence

3. APPLICATION FOR THE AMENDMENT OF AN AIR OPERATOR CERTIFICATE

3.1 Certificate number:	3.2 Expiry date:
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3.3 Particulars of amendment(s) applied for:
--

3.4 Attached documents: Mark the appropriate block Amendment to approved operations manual Proof of financial capability in respect of amendment Amended maintenance management manual Amendment to approved free balloon maintenance programme Amendment to approved free balloon technical log Maintenance arrangements between holder and approved aircraft maintenance organisation in respect of amendment
--

4. APPLICATION FOR THE RENEWAL OF AN AIR OPERATOR CERTIFICATE

4.1 Certificate number:	4.2 Expiry date:
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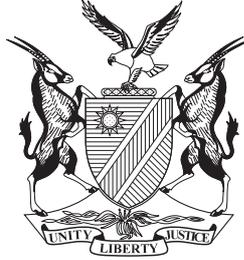
4.3 Description of the type(s) of operation(s) applied for:

4.4 Type(s) of free balloon(s) to be operated:
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4.5 Nationality and registration mark(s) of the free balloon(s) to be operated:

4.6 Proposed area(s) of operation:

4.7 Attached documents: Mark the appropriate block Operations manual Proof of financial capability Maintenance management manual Free balloon maintenance programme Free balloon technical log Maintenance arrangements between holder and approved aircraft maintenance organisation Valid Air Services Licence
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ANNEXURE B

**REPUBLIC OF NAMIBIA
DIRECTORATE: CIVIL AVIATION**

AIR OPERATOR CERTIFICATE

1. Certificate number:	
2. Name of holder:	
3. Principal place of business of holder:	4. Postal address of holder: Postal code:
5. Type(s) of operation(s) authorised:	6. Type(s) of free balloon(s) authorised for operation:
7. Nationality and registration mark(s) of free balloon(s) authorised for operation:	
8. Area(s) of operation:	
9. Conditions :	
10. Date issued:	11. Expiry date:
12. Date renewed:	13. Expiry date:
14. I hereby certify that the holder of this certificate has been duly certificated in accordance with Part 136 of the Namibian Civil Aviation Regulations, 2001.	
15. Any attachment to this certificate which supplements its contents, forms an integral part hereof.	
Date	Director: Civil Aviation

**ANNEXURE C
SAFETY MANAGEMENT CHECKLIST**

1. Safety Management Checklist

The idea of the checklist system is to allow operators individually to assess whether their organisation has a positive safety management culture. Affirmative answers indicate a positive situation. Negative responses always suggest that corrective action is needed. During audits the Directorate: Civil Aviation inspectors will discuss SMS with operators. Their discussions will be based around the checklist and validation questions below. The "Validation Questions" also provide a suggested method of how the effectiveness of a Safety Management culture can be internally assessed.

CHECKLIST	VALIDATION QUESTIONS
Policy/culture	Policy/culture
Is the need for a Safety Management System (SMS) accepted as essential by all?	Ask operator's personnel.
Is safety accepted as the highest priority by all?	Ask operator's personnel.
Is there a safety policy statement, made by an accountable manager, in operating manuals?	Statement seen at audit.
Are safety responsibilities detailed?	Responsibility breakdown seen at audit
Are all personnel aware of their responsibilities?	Ask operator's personnel.
Are safety procedures documented?	Records seen at audit.
It is clearly stated that safety issues must be resolved immediately in priority order?	Checked.
Is there a procedure for resolving safety issues?	Procedure demonstrated and exemplified.
Is SMS regularly internally audited/checked?	Procedure demonstrated and exemplified.
Is there a robust, mandatory, internal Occurrence reporting system? (In addition to MOR System.)	Procedure demonstrated and exemplified
Are personnel encouraged to contribute to safety ideas?	Evidence of action
Is safety literature widely available to all?	Evidence seen at audit
Is there a safety training programme for new personnel?	Checked.

Are training responsibilities clear?	Checked
Are staff safety training needs regularly reviewed?	Check records
STAFF STANDARDS	SAFETY STANDARDS
Are safety standards clearly defined?	Read definitions.
Are safety standards reflected in operating procedures?	Check examples
Is there a procedure for amending operating procedures to reflect changing safety procedures?	Procedure demonstrated and exemplified.
Is there a procedure for ensuring amendments are incorporated?	Procedure demonstrated and example
Is there a procedure for ensuring amendments are read by personnel?	Ask operator's personnel
Are operations and procedures regularly review in relation to risk/hazard?	Review seen at audit.
Is the introduction of change accepted ask a risk/hazard?.	Ask operator's personnel
Are risk/hazards considered before changes are implemented?	Ask operator's personnel
Is there a process for reviewing the impact of environmental/work-place change on safety?	Procedure demonstrated and exemplified.
Is risk/hazard management understood?	Ask operator's personnel
Is there a procedure for managing risks/hazards?	Procedure demonstrated and exemplified -risk assessment process.
Are the limits for safe operation defined?	Seen at audit.
Are the limits for safe operation accepted by all?	Ask operator's personnel.
Are the limits for safe operation adhered to by all?	Ask operator's personnel.
Is the safety reporting system used?	Check records
Are safety reports recorded?	Check records
Is there a procedure to ensure action is taken as a result of safety reports?	Procedure demonstrated and exemplified.

Is the competence and performance of Personnel responsible for implementing Safety measures checked? Procedure demonstrated and exemplified

2. SMS Risk Assessment Matrix

This simple procedure should suit the needs of most operators. If you require advice on risk assessment please contact the Directorate: Civil Aviation Windhoek Namibia
Tel: (061) 702 252
Fax: (061) 702 244

The assessment process must be undertaken by someone who is aware of the risks associated with the activity being assessed and who will use sound judgment in the preparation of the assessment. The assessor should also be aware that, in the event of a subsequent accident or incident, their risk assessment process may be challenged.

Risk = The Severity of the Hazard 'x' The likelihood of Occurrence

Types of Hazard

The following list provides examples of operator hazards identified by the Directorate: Civil Aviation. It is not exhaustive merely an example of the types of hazard that should be considered.

Wire strike; Unexpected/Forecast Change in Weather, Fire in the Air; Hard landing; Landing Resulting in Third Party Casualties or Damage; Landing on Unsuitable Terrain; Passenger Incapacitation in the Air; Fuel Exhaustion; Passenger Incapacitation on the Ground; Ditching; Lighting Strike; Pilot Incapacitation; Structural Failure; Control Failure; Fire on the Ground; Contaminated Fuel; Loose Articles in Basket; Loss of Control

3. Assessment

Assessment of likelihood and severity of hazard is subjective and is based on personal experience of the activity under assessment or statistical evidence when available.

Severity of Hazard

The severity of a hazard should be assessed under the following headings, depending on the possible outcome should the hazard become a reality, and allocated a score:

Trivial	Minor Injury	Serious Injury	Single Fatality	Multiple Fatality
1	2	3	4	4

Likelihood of Occurrence

The likelihood of the hazard occurring should be assessed against the following headings and again allocate a score

Highly	Unlikely	Quite Possible	Likely	High Likely
1	2	3	4	5

Matrix production

Once Severity and Likelihood levels have been decided they should be entered in the matrix

Hazard	Severity	Likelihood	Rating	Mitigation	M/Factor	Final Rating
Wire Strike	3	3	9	Highlight all wires on charts	Likelihood reduced to 2	6
Fire in the Air	4	2	8	Good engineering practices	Likelihood reduced to 1	3
Landing in Unsuitable Terrain	3	4	12	Good weather-Check & good flight planning	Likelihood reduced to 2	6

The content of the above table is for example only and does not imply or infer a risk level.

Risk Rating

The Risk Rating is the figure obtained when the Severity assessment is multiplied by the Likelihood assessment.

A resultant figure of less than 6 indicates a low risk; a figure between 6 and 15 a medium risk; and a figure greater than 15 a high risk.

High risk ratings should generally be deemed unacceptable and mitigation sought to reduce the rating to an acceptable level- medium or better.

Mitigation

Mitigation action should be taken whenever possible to reduce risk ratings even when the risk is low.

Risk Assessment Audit Trail

Organisations should record and retain the details of their risk assessment process.

REPUBLIC OF NAMIBIA**MINISTRY OF WORKS TRANSPORT AND COMMUNICATION
DIRECTORATE: CIVIL AVIATION****DESIGNATED EXAMINER (DE)**

NAME..... LIC NO.

DESIGNATION NO.

1. Pursuant to the provisions of regulations 61.01.25 and 61.01.26(1), of the Namibian Civil Aviation Regulations, 2001. You are hereby designated as an examiner to conduct the following skill or proficiency tests:-

2. The foregoing privileges shall be exercised in respect of Namibian licensed flight crew.

3. This authorisation shall remain valid up to and including

4. This designation is a privilege and not a right. Consequently, this privilege may be withdrawn by the Director: Civil Aviation at his or her discretion. This is not an employment contract, but a privilege to act on behalf of the Director: Civil Aviation and therefore withdrawal of designation by the Director: Civil Aviation does not affect your capacity to earn an income as a professional pilot.

5. It is an ICAO imperative that a training file must be kept for all Directorate inspectors. Although you are not an employee of the Directorate, you act in the interest of the Director: Civil Aviation when performing duties as a designated examiner and therefore it is a requirement to maintain a training file of your qualifications and proficiencies separate from the Directorate's pilot file for you. These records must be kept up to date.

.....
DIRECTOR: CIVIL AVIATION.....
DATE