GOVERNMENT GAZETTE

OF THE

REPUBLIC OF NAMIBIA

N$53.40 WINDHOEK - 18 August 2016 No. 6096

CONTENTS

Page

GOVERNMENT NOTICES

Government Notices

MINISTRY OF WORKS AND TRANSPORT

No. 181 2016

AMENDMENT OF NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS:
NAM-CATS-AH 139 "LICENSING AND OPERATION AERODROMES AND HELIPORTS"

In terms of section 22A of the Aviation Act, 1962 (Act No. 74 of 1962) read with the regulation 11.03.5 of the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001 and in consultation with the Civil Aviation Regulations Committee, I issue the amendments to the technical standards as set out in the Schedule. The technical standards come into operation on 1 August 2016.

A. SIMANA
DIRECTOR: CIVIL AVIATION Windhoek, 26 July 2016

SCHEDULE

**AMENDMENT OF NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS:
NAM-CATS-AH "LICENSING AND OPERATION AERODROMES AND HELIPORTS**

1. GENERAL

Regulation 1 L03.5 of the Namibian Civil Aviation Regulations, 2001 empowers the Director: Civil Aviation to issue or amend technical standards for civil aviation on the matters which are prescribed by regulation.

The Director: Civil Aviation pursuant to the empowerment provision mentioned above, has issued an amendment to the technical standards relating to aerodromes and heliports to be known as Document NAM-CATS-AH 139.

2. PURPOSE

Document NAM-CATS-AH 139 contains the standards, rules, requirements, methods, specifications, characteristics and procedures which are applicable in respect of matters contained in Part 139 of the Namibian Civil Aviation Regulations, 2001. The purpose of this amendment is to make provision for the incorporation of the current versions of the ICAO Annexes and to deal with other matters pertaining to aerodromes and heliports.

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 I 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 in inserted contained schedules to, and/or notes throughout the technical standards.

Definition

1. In these technical standards "the principal technical standards" means the Namibian Civil Aviation Technical Standards: NAM-CATS-AH 139 "Licensing and Operation of Aerodromes and Heliports" issued under Government Notice No. 58 of 28 March 2003.

Amendment of the introductory part to the principal technical standards

1. The introductory part to the principal technical *standards is amended in paragraph 4 by the substitution for the second subparagraph of the following subparagraph:

"The current edition of the international aviation standard known as Annex 14, Volume I (Aerodrome design and operations) the Convention on International Civil Aviation, is incorporated into the technical standards contained in this document.".

Insertion of TS 139.02.6 into the principal technical standards

2. The following technical standard is inserted after TS 139.02.4 of the principal technical standards:

"139.02.6 ESTABLISHMENT OF AERODROME EMERGENCY MANAGEMENT SYSTEM

1. Establishment of aerodrome emergency system

When establishing the aerodrome emergency system the applicant shall use the guidance material contained in the current version of the ICAO Human Factors Training Manual, Document 9683-AN950.".

Insertion of TS 139.02.8A into the principal technical standards

3. The following technical standard is inserted after TS 139.02.7 of the principal technical standards:

"139.02.8A SAFETY MANAGEMENT SYSTEM

1. Establishment of a safety management system

The applicant shall prepare the safety management system in accordance with the guidelines contained in the current version of the ICAO Safety Management Manua, Document 9859-AN/460, the current version of the ICAO Manual on Certification of Aerodromes, Document 9774-AN969 and in the current version of the ICAO Preparation of an Operations Manual, Document 9376-AN924.".

Insertion of TS 139.03.6 into the principal technical standards

4. The following technical standard is inserted after TS 139.02.4 of the principal technical standards:

"139.03.6 ESTABLISHMENT OF AERODROME EMERGENCY MANAGEMENT SYSTEM

1. Establishment of heliport emergency system

When establishing the aerodrome emergency system the applicant shall use the guidance material contained in the current version of the ICAO Human Factors Training Manual, Document 9683-AN950.".

Insertion of TS 139.03.8A into the principal technical standards

5. The following technical standard is inserted after TS 139.03.7 of the principal technical standards:

"139.03.8A SAFETY MANAGEMENT SYSTEM -

1. Establishment of a safety management system

The applicant shall prepare the safety management system in accordance with the guidelines contained in the current version of the ICAO Safety Management Manual, Document 9859-AN/460, the current version of the ICAO Manual on Certification of Aerodromes, Document 9774-AN969 and in the current version of the ICAO Preparation of an Operations Manual, Document 9376- A.

MINISTRY OF WORKS AND TRANSPORT

No. 182 2016

NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO AIR TRANSPORT OPERATIONS: NAM-CAT-OPS 136 "AIR TRANSPORT OPERATIONS - FREE BALLOONS"

In terms of section 22A of the Aviation Act, 1962 (Act No. 74 of 1962) read with the regulation 11.03.5 of the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001 and in consultation with the Civil Aviation Regulations Committee, I issue the technical standards set out in the Schedule. The technical standards come into operation on 1 August 2016.

A. SIMANA
DIRECTOR: CIVIL AVIATION Windhoek, 26 July 2016

SCHEDULE

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 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 EQUIMENT

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 EMGERGENCY 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 driving;

(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 top establish the minimum altitudes/flight levels for IFR flights

(b) Criteria for determination the usability of operations sites

Methods for the determination 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 fluid 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 forth 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 form 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 o 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 personal 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

Table 2 - Reports

Table 3 - Flight crew records

Table 4 - Cabin crew records

Table 5 - Records for other operation personnel

Table 6 - Other records

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 passengers available	Number of standard 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, CBrCIF 2), 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):

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

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

Table 2

(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

(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 1: 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: OPARATORS'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:
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:
4.3	Description of the type(s) of operation(s) applied for:		
4.4	Type(s) of free balloon(s) to be operated:		
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		

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	Ask operator's personnel. by all?
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 exampled.
Is SMS regularly internally audited/ checked?	Procedure demonstrated and exampled.
Is there a robust, mandatory, internal Occurrence reporting system? (In addition to MOR System.)	Procedure demonstrated and exampled
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	Check records reviewed?

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 exampled.
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 exampled.
Is risk/hazard management understood?	Ask operator's personnel
Is there a procedure for managing risks/ hazards?	Procedure demonstrated and exampled -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 exampled.
Is the competence and performance of Personnel responsible for implementing Safety measures checked?	Procedure demonstrated and exampled

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 eveidence when available.

Severity of Hazard

The severity pf 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 assess 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

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.

ANNEXURE D

MIINISTRY OF WORKS AND TRANSPORT

DIRECTORATE: CIVIL: AVIATION

THREE MONTHLY REPORT OF DESIGNATED EXAMINER
(TS 61.01.26(7) (d))

FROM: ..... Designation ref. No: .....

DATE OF TEST	NAME OF CANDIDATE	LICENSE NUMBER	TYPE OF TEST	HOURS FLOWN	PASS	FAIL

Report period Jan - Mar ☐ Apr - Jun ☐

July - Sep ☐ Oct - Dec ☐

Note: 1 copy to DCA retain 1 copy for Examiner record

Certified correct .....
Date .....

DESIGNATED EXAMINER' STAMP

_____

ANNEXURE E

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 priviledge and not a right. Consequently, this priviledge may be withdrawn by the Director: Civil Aviation at his or her discretion. This is not an employment contract, but a priviledge 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 seperate from the Directorate's pilot file for you. These records must be kept up to date.

....

DIRECTOR: CIVIL AVIATION **DATE**

MINISTRY OF WORKS AND TRANSPORT

No. 183 2016

AMENDMENT OF NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS:
NAM-CATS-OPS 135 "AIR TRANSPORT OPERATIONS- SMALL AEROPLANES"

In terms of section 22A of the Aviation Act, 1962 (Act No. 74 of 1962) read with the regulation 11.03.5 of the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001 and in consultation with the Civil Aviation Regulations Committee, I issue the amendments to the technical standards as set out in the Schedule. The technical standards come into operation on 1 August 2016.

A. SIMANA
DIRECTOR: CIVIL AVIATION Windhoek, 26 July 2016

SCHEDULE

AMENDMENT OF NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO AIR TRANSPORT OPERATIONS - SMALL AEROPLANES

1. GENERAL

Regulation 11.03.5 of the Namibian Civil Aviation Regulations, 2001 empowers the Director: Civil Aviation to issue or amend technical standards for civil aviation on the matters which are prescribed by regulation.

The Director: Civil Aviation pursuant to the empowerment provision mentioned above, has issued an amended to the technical standards relating to air transport contained in Document NAM-CATS-OPS 135.

2. PURPOSE

Document NAM-CATS-OPS 135 contains the standards, rules, requirements, methods, specifications, characteristics and procedures which are applicable in respect of matters contained in Part 135 of the Namibian Civil Aviation Regulations, 2001. The purpose of this amendment is to incorporate into and give effect to Chap 6, 6.3 of Annex 6 of the Convention dealing with flight recorders into Namibian Technical Standards on Civil Aviation and to make other changes occasioned by amendments to Annexes to the Convention.

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.

Definition

1. In these technical standards the principal technical standards" means the Namibian Civil Aviation Technical Standards: NAM-CATS-OPS 135 "Air Transport Operations - Small Aeroplanes" issued under Government Notice No. 3047 of 25 August 2003.

Insertion of TS 135.01.16A into the principal technical standards

2. The following technical standard is inserted after TS 135.01.15 of the principal technical standards:

"135.01.16A SAFETY MANAGEMENT SYSTEM

1. Establishment of a safety management system

The operator shall prepare the safety management system in accordance with the guidelines contained in the current version of the ICAO Safety Management Manual, Document 9859-AN/M60 and in the current version of the ICAO Preparation of an Operations Manual, Document 9376-AN924.

Amendment of TS 135.04.3 of the principal technical standards

3. TS 135 04.3 of the principal technical standards is amended by the insertion after item 2.2.13 of the following item:

"22.2.14 **Flight data recorder**

The operations manual shall include -

(a) up-to-date and sufficient documentation concerning flight data recorder parameter allocation, conversion equation, periodic calibration and other serviceability or maintenance information for the aeroplane type as prescribed in TS 135.05.12 and the documentation must be sufficient to ensure that accident investigation authorities have the necessary information to read out the data in engineering units.

(b) instructions for the preservation of flight recorder records in the event that the aeroplane is involved in an accident or incident and the operator must include procedures for the retention and safe custody of flight recorder records pending their disposition as prescribed under Annex 13 to the Convention."

Insertion o TS 135.08.2 into the principal technical standards

4. The following technical standard is inserted after TS 135.08.1 of the principal technical standards:

"135.08.2 ESTABLISHMENT OF STANDARD OPERATING PROCEDURES

1. Establishment of standard operating procedures

(1) The operator shall include, in the operations manual, standard operating procedures and instructions for each phase of the flight.

(2) When establishing standard operating procedures the operator shall use and include the guidelines contained in the current version of the US Federal Aviation Administration Advisory: Circular on Standard Operating Procedures For Flight

Deck Crewmembers, AC No: 120-71A which is hereby incorporated into these technical standards.".

Insertion of TS 135.0839A into the principal technical standards

5. The following technical standard is inserted after TS 135.0837 of the principal technical standards:

"135.08.39A ACCIDENT PREVENTION, SAFETY MANAGEMENT PROGRAMMES AND FLIGHT SAFETY DOCUMENTS SYSTEM

1. Establishment of accident prevention and safety management programmes

The operator shall prepare the accident prevention and safety management programme and the flight data analysis programme in accordance with the guidelines contained in the current version of the ICAO Safety Management Manual, Document 9859-AN/460 and in the current version of the ICAO Preparation of an Operations Manual, Document 9376-AN924.

2. Flight safety documents system

The operator shall prepare the flight safety documents system in accordance with the guidelines contained in contained in the current version of the ICAO Safety Management Manual, Document 9859-AN/460.".

MINISTRY OF WORKS AND TRANSPORT

No. 184 2016

AMENDMENT OF NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS: NAM-CATS-OPS 127 "AIR TRANSPORT OPERATIONS - HELICOPTER"

In terms of section 22A of the Aviation Act, 1962 (Act No. 74 of 1962) read with the regulation 11.03.5 of the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001 and in consultation with the Civil Aviation Regulations Committee, I issue the amendments to the technical standards set out in the Schedule. The technical standards come into operation on 1 August 2016.

A. SIMANA
DIRECTOR: CIVIL AVIATION Windhoek, 26 July 2016

SCHEDULE

AMENDMENT OF THE NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO AIR TRANSPORT OPERATIONS - HELICOPTERS

1. GENERAL

Regulation 11.03.5 of the Namibian. Civil Aviation Regulations, 2001 empowers the Director: Civil Aviation to issue or amend technical standards for civil aviation on the matters which are prescribed by regulation.

The Director: Civil Aviation pursuant to the empowerment provision mentioned above, has amended the technical standards relating to air transport contained in Document NAM-CATS-OPS 127.

2. PURPOSE

Document NAM-CATS-OPS 127 contains the standards, rules, requirements, methods, specifications, characteristics and procedures which are applicable in respect of matters contained in Part 127 of the Namibian Civil Aviation Regulations, 2001. The purpose of this amendment is to incorporate into and give effect to Chap 6, 6.3 of Annex 6 of the Convention dealing with flight recorders into Namibian Technical Standards on Civil Aviation and to make other changes occasioned by amendments to Annexes to the Convention.

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 61.0126 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.

Definition

1. In these technical standards "the principal technical standards" means the Namibian Civil Aviation Technical Standards: NAM-CATS-OPS 127 "Air Transport Operations - Helicopters" issued under Government Notice No. 3180 of 31 March 2004.

Insertion of TS 127.01.17A into the principal technical standards

2. The following technical standard is inserted after TS 127.01.15 of the principal technical standards:

"127.01.17 SAFETY MANAGEMENT SYSTEM

1. Establishment of a safety management system

The operator shall prepare the safety management system in accordance with the guidelines contained m the current version of the ICAO Safety Management Manual, Document 9859-AN/460 and in the current version of the ICAO Preparation of an Operations Manual, Document 9376-AN924.".

Amendment of TS 127.04.3 of the principal technical standards

3. TS 127.04.3 of the principal technical standards is amended by the insertion after item 2.2.8 of the following item:

"22.9 **Flight data recorder**

The operations manual shall include -

(a) up-to-date and sufficient documentation concerning flight data recorder parameter allocation, conversion equation, periodic calibration and other serviceability or maintenance information for the helicopter type as prescribed in TS 127.05.13 and the documentation must be sufficient to ensure that accident investigation authorities have the necessary information to read out the data in engineering units.

(b) instructions for the preservation of flight recorder records in the event that the helicopter is involved in an accident or incident and the operator must include procedures for the retention and safe custody of flight recorder records pending their disposition as prescribed under Annex 13 to the Convention.".

Insertion of TS 127. 08.2 into the principal technical standards

4. The following technical standard is inserted after TS 127.07.7 of the principal technical standards:

"127.08.2 ESTABLISHMENT OF STANDARD OPERATING PROCEDURES

1. Establishment of standard operating procedures

(1) The operator shall include, in the operations manual, standard operating procedures and instructions for each phase of the flight.

(2) When establishing standard operating procedures the operator shall use and include the guidelines contained in the current version of the US Federal Aviation Administration Advisory: Circular on Standard Operating Procedures For Flight Deck Crewmembers, AC No: 120-71 A which is hereby incorporated into these technical standards.".

Insertion of TS 127.08.37A into the principal technical standards

5. The following technical standard is inserted after TS 127.08.35 of the principal technical standards:

"127.08.37A ACCIDENT PREVENTION, SAFETY MANAGEMENT PROGRAMMES AND FLIGHT SAFETY DOCUMENTS SYSTEM

1. Establishment of accident prevention and safety management programmes

The operator shall prepare the accident prevention and safety management programme and the flight data analysis programme in accordance with the guidelines contained in the current version of the ISAO Safety Management Manual, Document 9859-AN/460 and in the current version of the ICAO Preparation of an Operations Manual, Document 9376AN924.

2. Flight safety documents system

The operator shall prepare the flight safety documents system in accordance with the guidelines contained in contained in the current version of the ICAO Safety Management Manual, Document 9859-AN/460."

MINISTRY OF WORKS AND TRANSPORT

No. 185 2016

AMENDMENT OF NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS: NAM-CATS-OPS 121 "AIR TRANSPORT OPERATIONS - LARGE AEROPLANES"

In terms of section 22A of the Aviation Act, 1962 (Act No. 74 of 1962) read with the regulation 11.03.5 of the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001 and in consultation with the Civil Aviation Regulations Committee, I issue the

amendments to the technical standards as set out in the Schedule. The technical standards come into operation on 1 August 2016.

A. SIMANA
DIRECTOR: CIVIL AVIATION Windhoek, 26 July 2016

SCHEDULE

AMENDMENT OF THE NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO AIR TRANSPORT OPERATIONS - LARGE AEROPLANES

1. GENERAL

Regulation 11.03.5 of the Namibian Civil Aviation Regulations, 2001 empowers the Director: Civil Aviation to issue or amend technical standards for civil aviation on the matters which are prescribed by regulation.

The Director: Civil Aviation pursuant to the empowennent provision mentioned above, has amended the technical standards relating to air transport contained in Document NAM-CATS-OPS 121.

2. PURPOSE

Document NAM-CATS-FCL 121 contains the standards, rules, requirements, methods, speiifications, characteristics and procedures which are applicable in respect of matters contained in Part 121 of the Namibian Civil Aviation Regulations, 2001. The purpose of this amendment is to incorporate into and give effect to Chap 6, 6.3 of Annex 6 of the Convention dealing with flight recorders into Namibian Technical Standards on Civil Aviation and to make other changes occasioned by amendments to Annexes to the Convention.

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 “I’S” 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.

Definition

1. In these technical standards “the principal technical standards” means the Namibian Civil Aviation Technical Standards: NAM-CATS-OPS 121 “Air Transport Operations - Large Aeroplanes” issued under Government Notice No. 257 of 22 December 2003.

Insertion of TS 121.01.17A into the principal technical standards

2. The following technical standard is inserted after TS 121.01.15 of the principal technical standards:

"121.01.17A SAFETY MANAGEMENT SYSTEM

1. Establishment of a safety management system

The operator shall prepare the safety management system in accordance with the guidelines contained in the current version of the ICAO Safety Management Manual, Document 9859-AN/460 and in the current version of the ICAO Preparation of an Operations Manual, Document 9376-AN924.".

Amendment of TS 121.043 of the principal technical standards

3. TS 121 04.3 of the principal technical standards is amended by the insertion after item 2.2.13 of the following item:

"2.2.14 **Flight data recorder**

The operations manual shall include -

(a) up-to-date and sufficient documentation concerning flight data recorder parameter allocation, conversion equation, periodic calibration and other serviceability or maintenance information for the aeroplane type as prescribed in TS 121.05.12 and the documentation must be sufficient to ensure that accident investigation authorities have the necessary information to read out the data in engineering units.

(b) instructions for the preservation of flight recorder records in the event that the aeroplane is involved in an accident or incident and the operator must include procedures for the retention and safe custody of flight recorder records pending their disposition as prescribed under Annex 13 to the Convention.".

Insertion of TS 121. 08.2 into the principal technical standards

4. The following technical standard is inserted after TS 121.08.1 of the principal technical standards:

"121.08.2 ESTABLISHMENT OF STANDARD OPERATING PROCEDURES

1. Establishment of standard operating procedures

(1) The operator shall include, in the operations manual, standard operating procedures and instructions for each phase of the flight.

(2) When establishing standard operating procedures the operator shall use and include the guidelines contained in the current version of the US Federal Aviation Administration Advisory Circular on Standard Operating Procedures For Flight Deck Crewmembers, AC No: 120-71A which is hereby incorporated into these technical standards.".

Insertion of TS 121.08.41 into the principal technical standards

5. The following technical standard is inserted after TS 121.08.38 of the principal technical standards:

"121.08.41 ACCIDENT PREVENTION, SAFETY MANAGEMENT PROGRAMMES AND FLIGHT SAFETY DOCUMENTS SYSTEM

1. Establishment of accident prevention and safety management programmes

The operator shall prepare the accident prevention and safety management programme and the flight data analysis programme in accordance with the guidelines contained in the current version of ICAO Safety Management Manual, Document 9859-AN/460 and in the current version of the ICAO Preparation of an Operations Manual, Document 9376-AN924.

2. Flight safety documents system

The operator shall prepare the flight safety documents system in accordance with the guidelines contained in the current version of the ICAO Safety Management Manual, Document 9859-AN/460.".

MINISTRY OF WORKS AND TRANSPORT

No. 186 2016

NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO AIR TRAFFIC SERVICES LICENCING: NAM-CATS-FCL 65 "PROFICIENCY IN LANGUAGES USED FOR RADIOTELEPHONY COMMUNICATIONS"

In terms of section 22A of the Aviation Act, 1962 (Act No. 74 of 1962) read with the regulation 11.03.5 of the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001 and in consultation with the Civil Aviation Regulations Committee, I issue the technical standards set out in the Schedule. The technical standards come into operation on 1 August 2016.

A. SIMANA
DIRECTOR: CIVIL AVIATION Windhoek, 26 July 2016

NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO AIR TRAFFIC SERVICES LICENCING: PROFICIENCY IN LANGUAGES USED FOR RADIOTELEPHONY COMMUNICATIONS

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, has issued technical standards relating to proficiency in languages used for radiotelephony communication to be known as Document NAM-CATS-FCL 65.

2. PURPOSE

Document NAM-CATS-FCL 65 contains the standards, rules, requirements, methods, specifications, characteristics and procedures which are applicable in respect of matters contained in Part 65 of the Namibian Civil Aviation Regulations, 2001. The purpose of this document is to incorporate into and give effect to Chap 1.2.9 of Annex I of the Convention dealing with personnel licensing into Namibian Technical Standards on Civil Aviation.

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.

65.01.8 LANGUAGE

1. Incorporation of Chap 1.2.9 of Annex I. of the Convention

(1) Chap 1.2.9 of Annex 1 to the Convention is incorporated into and becomes part of NAM-CATS-FCL 65.

2. Certificate of proficiency

(1) As from the date of commencement of these technical standards no person may be issued with an air traffic service licence referred to in Part 65 unless that person is in possession of certificate of proficiency in the English language issued by an approved training school pursuant to these technical standards.

(2) A person who wishes to obtain the certificate of proficiency referred to in paragraph (1) must demonstrate compliance with -

(a) the holistic descriptors described in section 2 of and

(b) at least operational level 4 of the ICAO language proficiency rating set out in, the Appendix to Chap 1.2.9 of Annex I to the Convention.

3. Approved language training schools

(I) If the Director is satisfied that any person or institution is capable of providing training in the English language to the level of proficiency which meets the ICAO requirements the Director may designate that person or institution as an approved school.

(2) An approved school referred to in paragraph (I) is authorized to offer approved training and to conduct approved tests in English language proficiency and to issue certificates of proficiency in the English language.

(3) An approved school shall design its English language proficiency training programme in accordance with the current version of the Manual on Implementation of ICAO Language Proficiency Requirements, ICAO Document 9835 AN/453.

4. Issue of English language proficiency certificate

(1) Any person who wishes to obtain a certificate of proficiency referred to in item 2(1) shall apply for such certificate to an approved school.

(2) On receipt of an application made in tennis of paragraph (1), an .approved school shall conduct an approved test and if satisfied that the applicant meets the requirements for the

issue of a certificate, issue such certificate to the applicant at operational level 4, 5 or 6 of the ICAO language proficiency ratings set out in the Appendix to Chap 1.2.9 of Annex 1 to the Convention.

(3) A person who is issued with a certificate of proficiency which is below operational level 6 of the ICAO language proficiency ratings shall be periodically evaluated in accordance with the requirements set out in paragraph 1.2.9.7 of the Appendix to Chap 1.2.9 of Annex 1 to the convention.

5. Endorsement of licence

(1) On production by any person of a certificate of proficiency issued in tennis of item 4(2), the Director shall endorse, in the air traffic service licence of the certificate holder, the appropriate level of proficiency indicated on the certificate.

(2) For purposes of paragraph (1), the Director may accept a certificate of proficiency issued by an approved competent authority of another state party to the Convention if the Director is satisfied that the standards in that state meets the requirements set out in Chap 1.2.9 of Annex 1 to the Convention.

6. Existing air traffic service licences

Notwithstanding item 2(1) any person who holds a Namibian air traffic service licence shall be deemed to have complied with the requirements of operational level 6 of the ICAO language proficiency requirements at set out in Chap 1.2.9 of Annex 1 to the Convention.

MINISTRY OF WORKS AND TRANSPORT

No. 187 2016

NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO FLIGHT CREW LICENCING: NAM-CATS-FCL 63 "PROFICIENCY IN LANGUAGES USED FOR RADIOTELEPHONY COMMUNICATIONS"

In terms of section 22A of the Aviation Act, 1962 (Act No. 74 of 1962) read with the regulation 11.03.5 of the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001 and in consultation with the Civil Aviation Regulations Committee, I issue the technical standards set out in the Schedule. The technical standards come into operation on 1 August 2016.

A. SIMANA
DIRECTOR: CIVIL AVIATION Windhoek, 26 July 2016

NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO FLIGHT CREW LICENCING: PROFICIENCY IN LANGUAGES USED FOR RADIOTELEPHONY COMMUNICATIONS

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, has issued technical standards relating to proficiency in languages used for radiotelephony communication 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 matters contained in Part 61 of the Namibian Civil Aviation Regulations, 2001: The purpose of this document is to incorporate into and give effect to Chap 1.2:9 of Annex 1 of the Convention dealing with personnel licensing into Namibian Technical Standards on Civil Aviation.

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.

61.01.15 LANGUAGE

1. Incorporation of Chap 1.2.9 of Annex 1 of the Convention

(1) Chap L2.9 of Annex I to the Convention is incorporated into and becomes part of NAM-CATS-FCL 61.

2. Certificate of proficiency

(1) As from the date of commencement of these technical standards no person may be issued with a pilot licence referred to in Part 61 unless that person is in possession of certificate of proficiency in the English language issued by an approved training school pursuant to these technical standards.

(2) A person who wishes to obtain the certificate of proficiency referred to in paragraph (1) must demonstrate compliance with -

(a) the holistic descriptors described in section 2 of, and

(b) at least operational level 4 of the ICAO language proficiency rating set out in, the Appendix to Chap 1.2.9 of Annex 1 to the Convention.

3. Approved language training schools

(1) If the Director is satisfied that any person or institution is capable of providing training in the English language to the level of proficiency which meets the ICAO requirements the Director may designate that person or institution as an approved school.

(2) An approved school referred to in paragraph (I) is authorized to offer approved training and to conduct approved tests in English language proficiency and to issue certificates of proficiency in the English language.

(3) An approved school shall design its English language proficiency training programme in accordance with the current version of the Manual on Implementation of ICAO Language Proficiency Requirements, ICAO Document 9835 AN/453.

4. Issue of English language proficiency certificate

(1) Any person who wishes to obtain a certificate of proficiency referred to in item 2(1) shall apply for such certificate to an approved school.

(2) On receipt of an application made in terms of paragraph (1), an approved school shall conduct an approved test and if satisfied that the applicant meets the requirements for the issue of a certificate, issue such certificate to the applicant at operational level 4, 5 or 6 of the ICAO language proficiency ratings set out in the Appendix to Chap 1.2.9 of Annex I to the Convention.

(3) A person who is issued with a certificate of proficiency which is below operational level 6 of the ICAO language proficiency ratings shall be periodically evaluated in accordance with the requirements set out in paragraph 1.2.9.7 of the Appendix to Chap 1.2.9 of Annex I to the Convention.

5. Endorsement of licence

(1) On production by any person of a certificate of proficiency issued in terms of item 4(2), the Director shall endorse, in the pilot licence of the certificate holder, the appropriate level of proficiency indicated on the certificate.

(2) For purposes of paragraph (1), the Director may accept a certificate of proficiency issued by an approved competent authority of another state party to the Convention if the Director is satisfied that the standards in that state meets the requirements set out in Chap 1.2.9 of Annex I to the Convention.

6. Existing pilot licences

Notwithstanding item 2(1) any person who holds a Namibian pilot licence shall be deemed to have complied with the requirements of operational level 4 of the ICAO language proficiency requirements at set out in Chap 1.2.9 of Annex 1 to the Convention. This is a transitional provision which is valid until 31 December 2008.

MINISTRY OF WORKS AND TRANSPORT

No. 188 2016

NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO AIR TRANSPORT OPERATIONS: NAM-CATS-FCL 61 "DESIGNATION OF EXAMINERS"

In terms of section 22A of the Aviation Act, 1962 (Act No. 74 of 1962) read with the regulation 11.03.5 of the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001 and in consultation with the Civil Aviation Regulations Committee, I issue the technical standards set out in the Schedule. The technical standards come into operation on 1 August 2016.

A. SIMANA
DIRECTOR: CIVIL AVIATION Windhoek, 26 July 2016

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

LIST OF TECHINCAL 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 letter of appointment
11. Crew member status of designated examiner
12. Special circumstances
13. Monitoring of system
14. Procedure for applications under Part 61
15 Conduct of test by examiner
16. Code of Ethics for Designated Examiners

ANNEXURES

ANNEXURE A: DESIGNATED EXAMINERS QUALIFICATION REQUIREMENTS

ANNEXURE B: APPLICATION FOR APPOINTMENT/RENEWAL AS DESIGNATED EXAMINER

ANNEXURE C: LETTER OF APPOINTMENT AS DESIGNATED EXAMINER

ANNEXURE D: THREE MONTHLY REPORT OF DESIGNATED EXAMINER ANNEXURE E: FLIGHT TEST FORMS

ANNEXURE F DESIGNATED EXAMINER TRAINING PROGRAMME

ANNEXURE G: DCA PRE-APPOINTMENT BRIEFING FOR DESIGNATED EXAMINERS

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) The candidate must be of character and standing acceptable to the aviation industry he serves.

(c) The candidate must have attended an approved Designated Examiner course specified in Annexure F which shall include a practical phase in a simulator with an approved scripted text.

(d) Undergo a briefing with a suitably qualified Aviation Inspector or Designated Examiner specially nominated by the Director for that purpose, to test his knowledge of the testing principles.

(e) Undergo a monitored test flight with a suitably qualified Aviation Inspectors or Designated Examiner specifically nominated by the Director for that purpose.

(g) The application, shall include a resume stating the following:

1) The candidates background, qualifications and experience including previous flight testing experience.

2) Declaration of details of any interest in a Flying School or Operator which could constitute a conflict of interest.

(3) The application shall be heard by a four-person panel composed as follows:

- The head of Flight Safety within the Directorate of Civil Aviation
- An Aviation Inspector of the Directorate of Civil Aviaton, or in his absence, a Designated Examiner specially appointed for the purpose by the Director;
- A Designated Examiner
- One member of good standing in the Namibian Aviation Industry

The function of the above-mentioned panel is to:

(a) review the candidate's credentials and to decide upon the professional suitability of the candidate, where "professional suitability- is defined as "a demonstrated willingness to work cooperatively with the Namibian DCA and to uphold the principles of aviation safety".

(b) to provide the applicant with a pm-appointment briefing. The structure and content of the pre-appointment briefing given to an Examiner who is being appointed for the first time is specified in urgent edition of the Transport Canada Approved Check Pilot Manual.

(4) 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. Curcumstances 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 D; 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) Designation number

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; current Joint Aviation Requirements (JAR) Flight Examiners Manual (FEM) of the European Union; and current Transport Canada (TC) Approved. Check Pilot (ACP) Manual.

(e) administer all flight tests using the designated examiner guidelines published by the Director as technical standards.

(f) sign and stamp all forms, clearly indicating his or her reference number and the date of the test; and

(g) 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.

(h) shall comply with Code of ethics for Designated Examiners.

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, which ever 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 the designated examiner certificate, the applicant shall within the previous 12 months-

(a) Undergo a monitored test flight with a suitably qualified Aviation Inspector or Designated Examiner specifically nominated by the Director for that purpose.

(b) Have conducted at least 3 tests specified in Annexure A.

(c) Have attended at least two Quarterly Review Meetings

(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 crew member 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.

(d) Initial PPL Flight Test.

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

(1) Each DE shall undergo a monitored flight check as described in 9(1)(a) above. The Aviation Inspector or specially appointed DE conducting the monitored test shall compile a Monitored Test Report.

(2) Where a DE fails to meet the required acceptable assessment his or her DE Status shall be deem to have lapsed until a satisfactory assessment is achieved.

(3) The head of Flight Safety within the Directorate of Civil Aviation shall hold a Quarterly Review Meeting with all Designated Examiners once every three months to assess and to report to the Director on the effectiveness of the "DE System" and trends in the quality of flight training and flight testing of Namibian pilots.

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 15.

(2) An application made under item (1) shall be accompanied by the application fee set out in Part 187:

(3) The fee payable for the appropriate skill test shall not be greater than that agreed from time to time by a recognized association of Designated Examiners.

15. Conduct of test by examiner

(1) The current edition of the Transport Canada Approved Check Pilot Manual is incorporated into the technical standards contained in this document.

(2) 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.

(3) Before carrying out the relevant test the examiner must ensure that the applicant has passed the relevant theoretical knowledge.

(4) 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.

(5) All flight tests shall be conducted in accordance with the current edition of Transport Canada Approved check Pilot Manual.

(6) In the interest of maintaining high standards of flight testing no Designated Examiner shall conduct two consecutive tests on one candidate except with the prior written approval of the Director.

(7) The test standards to be used during a skill or proficiency test shall be those specified in the current edition of the Transport Canada Approved Check Pilot Manual.

(8) The test tolerances to be used during all skill or proficiency tests shall be those specified in the current edition of the Transport Canada Approved Check Pilot Manual.

(9) The grading of all skill or proficiency tests shall comply with the 4-point grading scale specified in the current edition of the Transport Canada Approved Check Pilot Manual.

(10) Prior to a skill or proficiency test the Designated Examiner shall conduct a pre-flight briefing as specified in the current edition of the Transport Canada Approved Check Pilot Manual.

(11) Immediately after the termination of a flight whether successful or not, the Designated Examiner shall conduct a post-flight debriefing as specified in the current edition of the Transport Canada Approved Check Pilot Manual.

(12) Procedures to be followed when a candidate fails a Skill Test

(a) If a candidate fails a skill or proficiency test, the Designated Examiner shall notify the failed items and recommendations to the Chief Pilot and/ or Operations Manager of the candidate's employer or to the Chief Flight Instructor of the relevant Flight Training School.

(b) The Designated Examiner shall immediately notify the Director: Civil Aviation that the pilot has not met the required proficiency standard for the licence or rating. This notification shall consist of a copy of the failed test report as well as detailed written comments on the failed items.

(c) If a pilot has failed on Instrument dating and the Rating is still valid on the pilot's licence, the Designated Examiner shall draw a line through the instrument rating endorsements and inscribe the following "instruments Raft Suspended". He shall sign and date this inscription on the licence.

(d) The Designated Examiner shall ensure that the pilot receives a copy of the report which has been forwarded to the Director: Civil Aviation.

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 refersto 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.

TABLE I
INDEX

Designated Examiner Flight Test Codes

Code	Flight Test	NAMCARS
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-CPL Skill Test	61.16.4
TRE SEP CPL	Type Rating Examiner-Single-Engine Piston-CPL Skill Test	61.16.4
TRE MEP	Type Rating Examiner-Multi-Engine Piston Aircraft Skill Test	61.16A
TRE SET	Type Rating Examiner-Single-Engine-Turbine Skill Test	61.16.4
TRE MET	Type Rating Examiner-Multi-Engine Turbine Aircraft Skill Test	61.16.4
FE ATPL	Flight Examiner AWL Issue Skill Test	6 1,07.5
TRE MPA	Type Rating Examiner-Multi-Crew Certified Aircraft Skill Test	61.16.4
IR SE	Instrument Rating Single Engine Aircraft Skill Test	61.17.5, 61.17.1
IR ME	Instrument Rating Multi engine Aircraft Skill Test	61.17:5, 61.17.1
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
TRE MEP OPC	Type Rating Examiner-Multi-Engine Piston-	121.03.6,
(VFR)	Operator Proficiency Check	135.03
TRE SET OPC	Type Rating Examiner-Single-Engine Turbine-Operator Proficiency Check	121.03.6, 135.03.7
TRE MET OPC	Type Rating Examiner-Multi-Engine Turbine-Operator Proficiency Check	121.03:6, 135.03
TRE MPA OPC	Type Rating Examiner-Multi-Crew Certified Aircraft - OPC	121.03.6, 135.03.7

2. Table 2 consists of 21 numbered columns containing the information as detailed below:

(a) Column I 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 I to 20 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 examine an applicant for a FE PPL (Flight Examiner for PPL Skill Test) under column 2 read downwards the examiner must satisfy the following requirements:

(i) hold a basic CPL licence

(ii) have total flying experience of 100 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

(iii) must be a person of integrity:

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

TABLE 2

DIRECTORATE OF CIVIL AVIATION - DESIGNATED EXAMINER QUALIFICATION REQUIREMENTS

1	2	3	4	S	6	7	8	9	10	11	12	13
	FE PPL	**FE CPL**	**CPL VAL**	**TRE SEP PPL**	**TRE SEP CPL**	**TRE MEP**	**TRE SET**	**TRE MET**	**FE ATPL**	**THE MPA**	**IR SE**	**IR ME**
Basic Licence	CPL	ATPL	CPL/IR	CPL	CPL	CPL	CPL	CPL	ATPL	ATPL	ATPL	ATPL
Total Experience (hrs)	1000	2000	1000	1000	1000	2000	2000	2000	3000	3000	2000	2000
Instructional Experience	250	1500	500	250	500	1500	1000	1500	1500	n/a	1500	1500
Instructor Rating	Gr 1/11	Gr	Gr 1/11	Gr 1/11	Gr 1/11	Gr 1/11	Gr 1/11	Gr 1/11	Gr 1	TRI OR 1/11	Gr 1	Gr 1
Multi-engine Experience	n/a	n/a	n/a	n/a.	n/a	500	n/a	500	500		n/a	500
Multi-engine Instruction	n/a	n/a	n/a	n/a	n/a	250	n/a	250	250	n/a	n/a	n/a
Experience on Turbine Aircraft	n/a	n/a	n/a	n/a	n/a	n/a	500	500	n/a	n/a	n/a	n/a
Instruction on Turbine Aircraft	n/a	n/a	n/a	n/a	n/a	n/a	50	50				n/a
PIC Qualification on Type	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Special Requirements	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1500 Hrs on Multi-Crew certified Aircraft	n/a	n/a
Instrument Flying Experience							n/a		n/a	n/a	100	100
Experience on Instrument Instruction	n/a							n/a	n/a		50	50
Candidate must have integrity and be acceptable to DCA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

TABLE 2 (cont'd)
DESIGNATED EXAMINER FLIGHT TEST CODES

1 (cont)	14	15	16	17	18	19	20	21
	IR. SE OPC	**IR ME OPC**	**NIGHT**	**FIE**	**TRE SE OPC (VFR)**	**TRE MEP OPC (VFR)**	**TRE SET OPC**	**TRE MET OPC**
Basic Licence	CPL/R	CPL/R	CPL/R	CPUATPL	CPL/IR	CPL/R	CPL/IR	CPL/R
Total Experience	2000	2000	1000	5000	1000	2000	2000	2000
Instructional Experience	1000	1500	250	200	500	1500	1000	1500
Instructor Rating	Gr1 /11	Gr1 /11	Or 1/11	Gr 1	Gr1 /11	Gr 1/11	Gr 1/11	Gr 1/11
Multi-engine Experience	n/a	250	n/a	n/a	n/a	250	Ilia	500
Multi-engine Instruction	n/a	100	n/a	n/a	n/a	100	n/a	250
Experience on Turbine Aircraft	n/a	n/a	n/a	n/a	100 Hrs for SET OPC only	n/a	100	500
Instruction on Turbine Aircraft		n/a	nla	r la	50 Hrs for SET OPC only	50	50	
PIC Qualification on Type	Yes	Yes	n/a	n/a	Yes	Yes	Yes	Yes
Special Requirements	n/a	n/a	n/a	100 Hrs Instruction of Instructor Rating Candidates	n/a	n/a	n/a	n/a
Instrument Flying Experience	100	100	100	n/a	50	50	n/a	n/a
Experience on Instrument Instruction	50	50	n/a	n/a	n/a	n/a	pia	n/a
Candidate must have in egrity and be acceptable to DCA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Designated Examiner Flight Test Codes

Code	Fight Test	NAMCARS	Aircrapty 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 Singe Engine Pistion PPL Skill Test	61.16.4	C210 C206; C182, C172, PA28-235,
TRE SEP CPL	Type Rating Examiner Singe 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, PC12
TRE MET	Type Rating Examiner Multi Engine Turbine Aircraft Skill Test	61.16.4	C406, BE90, 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 P900 F9 0, B737, A340, C500/560
IR SE	Instrument Rating Single Engine Aircraft Skill Test	61.175, 61, 7.12	
IR ME	Instrument RatingMulti Engine Aircraft Skill Test	61.17.5, 61.17.12	
IR SE OPC	Instrument Rating Singe 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	61.314	
FIE	Flight Instructor Examiner Skill Test	61.18.5, 61.19.5, 61.20.4	
TRE SE OPC (VFR)	Type Rating Examiner Single Engine Piston Operator Proficiency Check	61.16.11, 135.03.7	C210, C206, C182, C172, PA28-235, C208, SOLOY
TRE MEP OPC (VFR)	Type Rating Examiner Multi Engine Piston Operator Proficiency Check	61.16.11, 121.03.6, 135.03.7	C310, C401, C404, C402, PA32-300, PA31-350, BE 58
TRE SET OPC	Type Rating Examiner Single Engine Turbine Operator Proficiency Check	121.03.6, 135.03.7	C208, C206, SOLOY, C207, PC12
TRE MET OPC	Type Rating Examiner Multi Engine Turbine Operator Proficiency Check	121.03.6, 135.03.7	C208, C206, SOLOY, C207, PC12
TRE MPA OPC	Type Rating Examiner Multi-Crew Certified Aircraft OPC	121.03.6, 135.03.7	L31, F900, B737, A340, C5001560

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)

Approved: Director: Civil Aviation .....

Date: .....

ANNEXURE C

LETTER OF APPOINTMENT AS DESIGNATED EXAMINER

REPUBLIC OF NAMIBIA

MINISTRY OF WORKS AND TRANSPORT

DIRECTORATE OF CIVIL AVIATION

Enquiries: Date: .....
.....
.....
.....

LETTER OF APPOINTMENT AS DESIGNATED EXAMINER

The Director would like to congratulate you on receipt of this letter of Appointment as Designated Examiner (DE). In addition, the Designated Examiner position is one the aviation industry values, most particularly because of the inherent recognition of your integrity, and as an important part of the system of aviation safety. Your appointment as a DE is recognition of the important role you will be expected to play in providing part of the flying training industry safety net The Flight test codes for which you can conduct tests are listed hereunder:

.....
.....
.....

The Director takes this opportunity to stress your independence as a DE (even where your appointment is linked to an employer), and relies on your integrity to withstand the sometimes subtle pressures from employers and/or students. This understanding is reinforced by the signed code of ethics document returned with your letter of appointment.

This appointment is valid from ..... to ....., unless earlier suspended or revoked by the Director: Civil Aviation

Once again, congratulations.

Yours sincerely

DIRECTOR: CIVIL AVIATION

MINISTRY OF WORKS AND TRANSPORT

No. 189 2016

NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO FLIGHT CREW LICENCING: NAM-CATS-FCL 61 "PROFICIENCY IN LANGUAGES USED FOR RADIO RADIOTELEPHONY COMMUNICATIONS"

In terms of section 22A of the Aviation Act, 1962 (Act No. 74 of 1962) read with the regulation 11. .03.5 of the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001 and in consultation with the Civil Aviation Regulations Committee, I issue the technical standards set out in the Schedule. The technical standards come into operation on 1 August 2016.

A. SIMANA
DIRECTOR: CIVIL AVIATION Windhoek, 26 July 2016

NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO FLIGHT CREW LICENCING: PROFICIENCY IN LANGUAGES USED FOR RADIOTELEPHONY COMMUNICATIONS

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, has issued technical standards relating to proficiency in languages used for radiotelephony communication to be known as Document NAM-CATS-FCL 63.

2. PURPOSE

Document NAM-CATS-FCL 63 contains the standards, rules, requirements, methods, specifications, characteristics and procedures which are applicable in respect of matters contained in Part 61 of the Namibian Civil Aviation Regulations, 2001. The purpose of this document is to .incorporate into and give effect to Chap 1.2.9 of Annex 1 of the Convention dealing with personnel licensing into Namibian Technical Standards on. Civil Aviation.

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.

63.01.11 LANGUAGE

1. Incorporation of Chap 1.2.9 of Annex 1 of the Convention

(1) Chap 1.2.9 of Annex 1 to the Convention is incorporated into and becomes part of NAM-CATS-FCL 63.

2. Certificate of proficiency

(1) As from the date of commencement of these technical standards no person may be issued with a flight engineer licence referred to in Part 63 unless that person is in possession of certificate of proficiency in the English language issued by an approved training school pursuant to these technical standards.

(2) A person who wishes to obtain the certificate of proficiency referred to in paragraph (1) must demonstrate compliance with -

(a) the holistic descriptors described in section 2 of; and

(b) at least operational level 4 of the ICAO language proficiency rating set out in, the Appendix to Chap 1.2.9 of Annex 1 to the Convention.

3. Approved language training schools

(1) lf the Director is satisfied that any person or institution is capable of providing training in the English language to the level of proficiency which meets the ICAO requirements the Director may designate that person or institution as an approved school.

(2) An approved school referred to in paragraph (1) is authorized to offer approved training and to conduct approved tests in English language proficiency and to issue certificates of proficiency in the English language.

(3) An approved school shall design its English language proficiency training programme in accordance with the current version of the Manual on Implementation of ICAO Language Proficiency Requirements, ICAO Document 9835 AN/453.

4. Issue of English language proficiency certificate

(1) Any person who wishes to obtain a certificate of proficiency referred to in item 2(I) shall apply for such certificate to an approved school.

(2) On receipt of an application made in terms of paragraph (1), an approved school shall conduct an approved test and if satisfied that the applicant meets the requirements for the issue of a certificate, issue such certificate to the applicant at operational level 4, 5 or 6 of the ICAO language proficiency ratings set out in the Appendix to Chap 1.2.9 of Annex 1 to the Convention.

(3) A person who is issued with a certificate of proficiency which is below operational level 6 of the ICAO language proficiency ratings shall be periodically evaluated in accordance with the requirements set out in paragraph 1.2.9.7 of the Appendix to Chap 1.2.9 of Annex 1 to the Convention.

5. Endorsement of licence

(1) On production by any person of a certificate of proficiency issued in tennis of item 4(2), the Director shall endorse, in the flight engineer licence of the certificate holder, the appropriate level of proficiency indicated on the certificate.

(2) For purposes of paragraph (1), the Director may accept a certificate of proficiency issued by an approved competent authority of another state party to the Convention if the Director is satisfied that the standards in that state meets the requirements set out in Chap 1.2.9 of Annex 1 to the Convention.

6. Existing flight engineer licences

Notwithstanding item 2(1) any person who holds a Namibian flight engineer licence shall be deemed to have complied with the requirements of operational level 6 of the ICAO language proficiency requirements at set out in Chap 1.2.9 of Annex 1 to the Convention. This transitional provision is valid until 31 December 2008.

MINISTRY OF WORKS AND TRANSPORT

No. 190 2016

AMENDMENT OF CIVIL AVIATION TECHNICAL STANDARDS: NAM-CATS-AR 21 "CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS AND AIRCRAFT AIRWORTHINESS"

In terms of section 22A of the Aviation Act, 1962 (Act No. 74 of 1962) read with the regulation 11.03.5 of the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001 and in consultation with the Civil Aviation Regulations Committee, I issue the amendments to the technical standards as set out in the Schedule. The technical standards come into operation on 1 August 2016.

A. SIMANA
DIRECTOR: CIVIL AVIATION Windhoek, 26 July 2016

SCHEDULE

AMENDMENT OF THE NAMIBIAN CIVIL AVIATION TECHNICAL STANDARDS RELATING TO CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS AND AIRCRAFT AIRWORTHINESS

1. GENERAL

Regulation 11.03.5 of the Namibian Civil Aviation Regulations, 2001 empowers the Director: Civil Aviation to issue or amend technical standards for civil aviation on the matters which are prescribed by regulation.

The Director: Civil Aviation pursuant to the empowerment provision mentioned above, amended the technical standards relating to aerodromes and heliports are contained in Document NAM-CATS-AR 21.

2. PURPOSE

Document NAM-CATS-AR 21 contains the standards, rules, requirements, methods, specifications, characteristics and procedures which are applicable in respect of matters contained in Part 21 of

the Namibian Civil Aviation Regulations, 2001. The purpose of this amendment is to define certain abbreviations and expressions used in the current technical standards and to make provision for the use of alternative certification standards for products and parts and aircraft airworthiness is cases where foreign standards are used

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.

Definition

1. In these technical standards "the principal technical standards" means the Namibian Civil Aviation Technical Standards: NAM-CATS-AR 21 "Certification Procedures for Products and Parts and Aircraft Airworthiness" issued under Government Notice No. 3025 of 22 July 2003.

Amendment of the introductory part to the principal technical standards

2. The introductory part to the principal technical standards is amended by the insertion of the following paragraph after paragraph 3:

"4. REFERENCES TO REGULATIONS AND STANDARDS OF OTHER STATES

In these technical standards -

"BCAR" means the British Civil Airworthiness Requirements;

"CS" means the Certification Specifications issued under the EU Basic Regulation (EC) 216/2008 as amended from time to time;

TASK' means the European Aviation Safety Agency of the European Union;

"FAA" means the Federal Aviation Administration of the USA;

"FAA AC" means Federal Aviation Administration Advisory Circular; and

"FAR" means the Federal Aviation Regulations of the USA.

Amendment of TS 21.02.3 of the principal technical standards

3. TS 21.02.3 of the principal technical standards is amended -

(a) in item 1 by the substitution in subitem (1) for the words "Joint Airworthiness Requirements" of the word "CS";

(b) in item 2 by the substitution in subitem (1) for the words "Joint Airworthiness Requirements" of the words "CS-VLA";

(c) in item 3 by the substitution for the subitems (1) and (2) of the following subitems:

"(1) Compliance for type certification must be shown with the FAA airworthiness requirements as stated in FAR Part 23 or FAR Part 25 or the EASA airworthiness requirements as stated in CS 23 or CS 25 (as amended on the date of the application for certification), as the case may be.

(2) Aeroplanes imported from a foreign country and assembled there must meet at least FAR Part 23 or FAR Part 25 or CS 23 or 25, or equivalent, and have been certified by an appropriate authority and released for export as suck".

(d) in item 4 by the substitution for the subiterns (1) and (2) of the following subitems:

"(1) Compliance for type certification must be shown with the FAA airworthiness requirements as stated in FAR Part 27 or FAR Part 29 or the EASA airworthiness requirements as stated in CS 27 or CS 29 (as amended on the date of the application for certification), as the case may be.

(2) Rotorcraft imported from a foreign country and assembled there must meet at least FAR Part 27 or FAR Part 29 or CS 27 or CS 29, or equivalent, and have been certified by an appropriate authority and released for export as such.".

(e) in item 6 -

(i) by insertion after paragraph (b) of subitem (1) of the word "or"; and

(ii) by insertion after paragraph (b) of subitem (1) of the following paragraph:

"EASA- AMC-29,";

(f) in item 9 by the substitution for the subitems (1) and (2) of the following subitems:

"(1) Compliance for type certification must be shown with the FAA airworthiness requirements as stated in FAR Part 33 or the EASA airworthiness requirements as stated in CS-E (Engines) (as amended on the date of the application for certification), as the case may be.

(2) Engines imported from a foreign country and assembled in Namibia must meet at least FAR Part 33 or CS-E (Engines), or equivalent, and have been certified by an appropriate authority and released as such Engines manufactured to requirements other than the FAR or CS may be accepted by the Director, if considered practical as regards language, standards, etc."

(g) in item 10 by the substitution for the subitems (1) and (2) of the following subitems:

"(1) Compliance for type certification must be shown with the FAA airworthiness requirements as stated in FAR Part 35 or the EASA airworthiness requirements as stated in CS-P (Propellers) (as amended on the date of the application for certification), as the case may be.

(2) Propellers imported from a foreign country and assembled in Namibia must meet at least FAR Part 33 or CS-P (Propellers), or equivalent, and have been certified by an appropriate authority and released as such Propellers manufactured to requirements other than the FAR or CS may be accepted by the Director, if considered practical as regards language, standards, etc."

(h) in item. 11 by the substitution for the subitems (1) and (2) of the following subitems:

"(1) Compliance for type certification must be shown with the FAA airworthiness requirements as stated in FAR Part 21 or the EASA airworthiness requirements as stated in the EU Basic Regulation (EC) 216/2008 -Part 21 (as amended on the date of the application for certification), as the case may be.

(2) Avionics imported from a foreign country must meet at least FAR Part 21 or EASA Part 21, or equivalent, and have been certified by an appropriate authority and released as such."

(i) in item 12 by the substitution for the subitems (2) and (3) of the following subitems:

"(2) Compliance for type certification must be shown with the FAA airworthiness requirements as stated in FAR Part 21 or the EASA airworthiness requirements as stated in the EASA Basic Regulation 1592/2002 -Part 21 (as amended on the date of the application for certification), as the case may be.

(3) Equipment imported from a foreign country and assembled in Namibia must meet at least FAR Part Zlor EASA Part 21, or equivalent, and have been certified by an appropriate authority and released as such."

(j) in item 14 by the substitution in paragraph (b) of subitem (2) for the word "JAR" of the word "EASA".

(k) in item 16 by the substitution for the word "JAR" of the word "CS" wherever it occurs.".
