

**“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

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**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

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

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

136.08.9 FUEL POLICY

1. Contingency fuel

136.08.10 FUEL SUPPLY

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

136.08.4 CARRY-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 EQUIPMENTS CARRIED

1. Emergency and survival list

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

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

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

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

1. Form of application

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

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

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

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

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

136.02.16 SUBCHARTERING**1. Subchartering**

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

136.03.4 STATISTICAL INFORMATION**1. Statistical information**

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

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

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

- (1) The quality assurance system referred to in CAR 136.03.7, must include -
 - (a) a clear definition of the level of quality the operator intends to achieve;
 - (b) a quality assurance programme that contains procedures designed to verify that all operations are being conducted in accordance with all the applicable requirements, standards and procedures;
 - (c) a procedure that sets out the level and frequency of the internal audits;
 - (d) a procedure to record the findings and communicate them to management;
 - (e) a list of responsible persons;
 - (f) procedures by which other quality indicators such as balloon malfunction reports, incidents, occurrences, complaints and defects are brought into the quality assurance system;

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

136.03.9 SAFETY MANAGEMENT SYSTEM

1. Guidelines for safety management systems

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

136.04.3 CREW MEMBER EMERGENCY DUTIES

1. Emergency evacuation demonstration

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

- (1) Actual operation of all types of exists;
- (2) Demonstration of the method used to operate a slide where fitted;

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

136.04.7 FLIGHT TIME AND DUTY SCHEME

1. Flight time and duty scheme

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

136.05.1 TRAINING OF CREW MEMBERS

1. Training manual

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

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

2. Training syllabus

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

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

136.05.3 CONVERSION TRAINING

1. Operator's conversion training course syllabus.

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

2. Crew resource management training

2.1 Procedures

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

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

2.2 Objective and contents

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

Notion of synergy Inquiry (explore, examine, scrutinize)

Conflict resolution
Decision making
Critique
Feedback

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

136.06.3 OPERATIONS MANUAL

1. Structure of operations manual.

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

Part 1: General

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

Part 2: Free balloon operating matters

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

Part 3: Route and operations site instructions and information

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

Part 4: Training

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

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

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

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

2.1.2 Organisation and responsibilities

(1) Organisational structure

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

(2) Nominated postholders

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

(3) Responsibilities and duties of operations management personnel

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

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

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

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

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

2.13 Operational control and supervision

(1) Supervision of the operation by the operator

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

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

(2) System of promulgation of additional operational instructions and information -

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

(3) Accident prevention and Safety Management System -

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

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

(3) Operational control

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

2.14 **Quality assurance system**

A description of the quality assurance system adopted.

2.15 **Crew composition**

(1) Crew composition

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

- (a) The type of free balloons being used;
- (b) the area and type of operation being undertaken;
- (c) the phase of the flight;
- (d) the minimum crew requirement and flight time and duty period planned;
- (e) experience (total and on type) recency and qualification of the crew members; and
- (f) the designation of the pilot-in-command and, if necessitated by the duration of the flight, the procedures for the relief of the pilot-in-command or other members of the crew.

(2) Designation of the pilot-in-command

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

(3) Crew incapacitation

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

2.16 **Qualification requirements**

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

- (2) Flight crew
 - (a) Pilot-in-command
 - (b) Co-pilot
 - (c) Pilot under supervision
 - (d) Operation on more than one type variant
- (3) Cabin crew
 - (a) Senior cabin crew member
 - (b) Cabin crew member
 - (i) Required cabin crew member
 - (ii) Additional cabin crew and cabin crew member during familiarization flights.
 - (c) Operation on more than one type or variant.
- (4) Training checking and supervision personnel
 - (a) For Flight crew
 - (b) For cabin crew
- (5) Other operations personnel

2.1.7 Crew health precautions

- (1) Crew health precautions

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

- (a) alcohol and other intoxicating liquor;
- (b) narcotics;
- (c) drugs;
- (d) sleeping tablets;
- (e) pharmaceutical preparations;
- (f) immunization;
- (g) scuba 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 to 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 fuel carried on board. Such instructions must take account of all circumstances likely to be encountered on the flight,

including the possibility of in-flight replanning and of failure of one or more of the free balloon's power plants. The system for maintaining fuel records must also be described.

(h) Mass and centre of gravity

The general principles of mass and centre of gravity including:

- (i) Definitions
- (ii) methods, procedures and responsibilities for preparation and acceptance of mass and centre of gravity calculations;
- (iii) the policy for using either standard or actual masses;
- (iv) the method of determining the applicable passenger, baggage and cargo mass;
- (v) the applicable passenger and baggage masses for various types of operations and free balloon types;
- (vi) general instruction and information necessary for verification of the various types of mass and balance documentation in use;
- (vii) last minute changes procedures ; (viii) specific gravity of fuel; and
- (ix) spacing policy/procedures.

(i) Flight plan, if any

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

(j) Operational flight plan

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

(k) Operator's flight folio

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

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

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

(2) Ground handling instructions

(a) Fueling procedures

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

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

- (i) disembarkation of persons
- (ii) sick passengers and person with reduced mobility
- (iii) transportation of inadmissible passengers, deportees or persons in custody;
- (iv) permissible size and weight of hand baggage;
- (v) loading and securing of items in the free balloon;
- (vi) special loads and classification of load compartments;
- (vii) positioning of ground personnel;
- (viii) operation of free balloon doors;
- (ix) safety on the launching site, including fire prevention, blast and suction areas;
- (x) start-up, ramp departure and arrival procedures;
- (xi) servicing of free balloons;
- (xii) documents and forms for free balloon handling; and
- (xiii) multiple occupancy of free balloon spaces.

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

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

(3) Flight procedures

(a) VFR/IFR policy

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

(b) Navigation procedures

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

Consideration must be given to-

- (i) standard navigation procedures including policy for carrying out independent cross-checks of keyboard entries where these affect the flight path to be followed by the free balloon;
 - (ii) MNPS and POLAR navigation and navigation in other designated area;
 - (iii) RNAV;
 - (iv) in-flight replanning; and
 - (v) procedures in the event of system degradation.
- (c) Altimeter setting procedures
 - (d) Altitude alerting system procedure
 - (e) Ground proximity warning system procedures
 - (f) Policy and procedure for use of TCAS/ACAS
 - (g) Policy and procedures for in-flight fuel management
 - (h) Adverse and potentially hazardous atmosphere conditions

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

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

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

(j) Crew members at their stations

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

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

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

(l) Admission to pilot's compartment

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

(m) Use of vacant crew spaces

The conditions and procedures for the use of vacant crew spaces

(n) Incapacitation of crew members

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

(o) Cabin safety requirements

Procedures covering:

(i) Cabin preparation for flight, in-flight requirements and preparation for landing including procedures for securing cabin and galleys;

(ii) procedures to ensure that passengers are positioned where, in the event that an emergency evacuation is required, they may best assist and not hinder evacuation from the free balloon;

(iii) procedures to be followed during passenger embarkation and disembarkation;

(iv) procedures in the event of fueling with passengers on board or embarking and disembarking; and

(v) smoking on board.

(p) Passenger briefing procedures

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

(q) Procedures for free balloons operated whenever required cosmic or solar radiation detection equipment is carried.

- (r) Procedures for the use of cosmic or solar radiation detection equipment and for recording its reading including actions to be taken into event that limit values specified in the operations manual are exceeded. In addition, the procedures, including ATS procedures, to be followed in the event that a decision to descend or re-route is taken.
 - (4) Use of the minimum equipment and configuration deviation list(s)
 - (5) Non revenue flights
- Procedures and limitations for -
- (a) training flights;
 - (b) test flights;
 - (c) delivery flights;
 - (d) ferry flights;
 - (e) demonstration flights; and
 - (f) positioning flights;
- including the kind of persons who may be carried on such flights.

2.1.10 Dangerous goods and weapons

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

2.1.11 Security

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

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

2.1.12 Handling of aviation accidents and incidents

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

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

2.1.13 Rules of the air

Rules of the air including-

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

PART 2: FREE BALLOON OPERATING MATTERS

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

2.2.1 General information and units of measurement

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

2.2.2 Limitations

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

- (1) certification status;
- (2) passenger positioning configuration for each free balloon type including a pictorial presentation;
- (3) types of operation that are approved;
- (4) crew composition;
- (5) mass and centre of gravity;
- (6) speed limitations;
- (7) flight envelope(s);
- (8) wind limits;
- (9) performance limitations for applicable configurations;
- (10) airframe contamination; and
- (11) system limitations.

2.2.3 Normal procedures

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

- (1) Pre-flight;
- (2) pre-departure;
- (3) altimeter setting and checking;
- (4) take-off and climb;
- (5) cruise and descent;
- (6) approach, landing preparation and briefing;

- (7) VFR approach;
- (8) visual approach;
- (9) missed approach;
- (10) normal landing; AND
- (11) post landing.

2.2.4 Abnormal and emergency procedures

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

- (1) Crew incapacitation;
- (2) fire and smoke drills;
- (3) unpressurised and partially pressurised flight;
- (4) exceeding structural limits such as overweight landing;
- (5) lighting strikes;
- (6) distress communications and alerting ATC to emergencies;
- (7) engine failure;
- (8) system failures;
- (9) guidance for diversion in case of serious technical failure; AND (10) emergency landing/ditching.

2.2.5 Performance

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

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

2.2.6 Flight planning

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

2.2.7 **Mass and balance**

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

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

2.2.8 **Loading**

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

2.2.9 **Configuration deviation list**

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

2.2.10 **Minimum equipment list**

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

2.2.11 **Survival and emergency equipment including oxygen**

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

2.2.12 **Emergency evacuation procedures**

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

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

2.2.13 **Free balloon systems**

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

PART 3: ROUTE AND OPERATIONS SITE INSTRUCTIONS AND INFORMATION

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

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

PART 4: TRAINING

- (1) Training syllabi and checking programmes for all operations personnel assigned to operational duties in connection with the preparation and/or conduct of a flight.
- (2) Training syllabi and checking programmes must include:
 - (a) For flight crew -
All relevant items prescribed in Part 61 and Subpart 5 of Part 136;
 - (b) For cabin crew
All relevant items prescribed in Part 64 and Subpart 5 of Part 136;
 - (c) For operations personnel concerned, including crew members -
 - (i) All relevant items prescribed in Part 92; and
 - (ii) All relevant items regarding operator security.

- (d) For operations personnel other than crew members (e.g. dispatcher, handling personnel, etc.)

All other relevant items pertaining to their duties

(3) Procedures

- (a) Procedures for training and checking;
- (b) Procedures to be applied in the event that personnel do not achieve or maintain the required standards;
- (c) Procedures to ensure that abnormal or emergency situations requiring the application of part or all of abnormal or emergency procedures and simulation of IMC by artificial means, are not stimulated during commercial flights.

- (4) Description of documentations to be stored and storage periods.

3. General

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

136.06.6 OPERATIONAL FLIGHT PLAN

1. Items in the operational flight plan

- (1) An operator must ensure that the operational flight plan used and the entries made during flight contain the following items:
 - (a) Free balloon registration;
 - (b) free balloon type and variant;
 - (c) date of flight;
 - (d) flight identification;
 - (e) names of crew members;
 - (f) duty assignment of crew members;
 - (g) place of departure;
 - (h) time of departure (actual off-block time, take-off time);
 - (i) place of arrival (planned and actual);
 - (j) time of arrival (actual landing and on-block time);
 - (k) type of operation;
 - (l) route and route segments with checkpoints/waypoints, distances, time and tracks;

- (m) planned cruising speed and flying times between check-points/ waypoints. Estimate and actual times overhead;
 - (n) safe altitudes and minimum levels;
 - (o) planned altitudes and flight levels;
 - (p) fuel calculations (records of in-flight fuel checks);
 - (q) fuel on board when starting engines;
 - (r) alternate(s) for destination and, where applicable, take-off and en route, including information required in subparagraphs (l), (m), (n) and (o) above;
 - (s) where required, initial flight plan clearance and subsequent re- clearance;
 - (t) in-flight re-planning calculations; and
 - (u) relevant meteorological information.
- (2) Items which are readily available in other documentation or from an acceptable source, or which are irrelevant to the type of operation, may be omitted from the operational flight plan.
- (3) The operator must ensure that the operational flight plan and its use is described in the operations manual.
- (4) The operator must ensure that all entries in the operational flight plan are made concurrently and that they are permanent in nature.

136.06.7 TECHNICAL LOG

1. Information to be contained in the technical log

- (1) A flight plan, if required, filed prior to departure must contain the following items:
- (a) identification and transponder data;
 - (b) flight rules and type of flight;
 - (c) number and type(s) of free balloon(s) and wake turbulence category;
 - (d) radio communication, navigation and approach-aid equipment;
 - (e) site of departure and time;
 - (f) flight information region boundaries and estimated times;
 - (g) cruising speed and flight level;
 - (h) route to be followed;
 - (i) destination operations site and estimated times of arrival;
 - (j) alternate landing site(s);

- (k) alerting action required;
 - (l) fuel endurance;
 - (m) total number of persons on board;
 - (n) emergency and survival equipment and colour of free balloon;
 - (o) other pertinent information; and
 - (p) name, postal address, telephone and telefax number of the operator or pilot-in-command of the free balloon which must be completed in field 18 of the standard flight plan form.
- (2) The operator must ensure that all entries are made concurrently and that they are permanent in nature.

136.06.14 DOCUMENT STORAGE PERIODS

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

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

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

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, CBrClF₂), or equivalent as the extinguishing agent, must be conveniently located on the pilot's compartment for use by the flight crew.
- (3) At least one hand fire extinguisher must be located in, or readily accessible for use in, each galley not located on the main passenger deck.
- (4) At least one readily accessible hand fire extinguisher must be available for use in each Class A or Class B cargo or baggage compartment and in each Class E cargo compartment that is accessible to flight crew members in flight.
- (5) At least the following number of hand fire extinguishers must be conveniently located in the passenger compartment(s):

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 falling (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

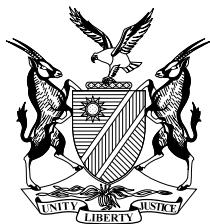
- 3.1 Maintenance contractor selection procedure;

- 3.2 Detailed list of maintenance contractors;
- 3.3 Relevant technical procedures identified in the maintenance contract(s)

PART 4: OPERATORS'S MAINTENANCE PROCEDURES

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

ANNEXURE A



REPUBLIC OF NAMIBIA DIRECTORATE: CIVIL AVIATION

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

Notes:

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

Mark the appropriate block

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

1. PARTICULARS REGARDING THE APPLICANT/HOLDER

1.1	Full name :		
1.2	Trade name, if any :		
1.3	Principal place of business:	1.4	Postal address:
			Postal code:
1.5	Telephone number :	1.6	Telefax number :
1.7	Cellular phone number :	1.8	E-mail address :
1.9	SITA code (if any) :	1.10	Telex number :

1.11 Legal status of applicant/holder (individual/close corporation/operator's /trust/other - specify) :				
1.12 Registration number in the case of a close corporation/operator's /trust :				
1.13 Full particulars in respect of the individual/each responsible director/shareholder/member/ office bearer:				
Name	Position	Identity number	Nationality	Country of permanent residence
1.14 The applicant/holder declares hereby that the particulars provided in this application are true in every respect.				
Signature		Date		

2. APPLICATION FOR THE ISSUING OF AN AIR OPERATOR CERTIFICATE

2.1	Description of the type(s) of operation(s) applied for:
2.2	Type(s) of free balloon(s) to be operated:
2.3	Nationality and registration mark(s) of the free balloon(s) to be operated:
2.4	Proposed area(s) of operation:
2.5	Attached documents: Mark the appropriate block Operations manual Proof of financial capability Maintenance management manual Free balloon maintenance programme Free balloon technical log Maintenance arrangements between applicant and approved aircraft maintenance organisation Valid Air Services Licence

3. APPLICATION FOR THE AMENDMENT OF AN AIR OPERATOR CERTIFICATE

3.1	Certificate number:	3.2	Expiry date:
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

Policy/culture

Is the need for a Safety Management System (SMS) accepted as essential by all?

Is safety accepted as the highest priority

Is there a safety policy statement, made by an accountable manager, in operating manuals?

Are safety responsibilities detailed?

Are all personnel aware of their responsibilities?

Are safety procedures documented?

It is clearly stated that safety issues must be resolved immediately in priority order?

Is there a procedure for resolving safety issues?

Is SMS regularly internally audited/checked?

Is there a robust, mandatory, internal Occurrence reporting system?
(In addition to MOR System.)

Are personnel encouraged to contribute to safety ideas?

Is safety literature widely available to all?

Is there a safety training programme for new personnel?

Are training responsibilities clear?

Are staff safety training needs regularly

VALIDATION QUESTIONS

Policy/culture

Ask operator's personnel.

Ask operator's personnel. by all?

Statement seen at audit.

Responsibility breakdown seen at audit

Ask operator's personnel.

Records seen at audit.

Checked.

Procedure demonstrated and exemplified.

Procedure demonstrated and exemplified.

Procedure demonstrated and exemplified

Evidence of action

Evidence seen at audit

Checked.

Checked

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 exemplified.
Is there a procedure for ensuring amendments are incorporated?	Procedure demonstrated and example
Is there a procedure for ensuring amendments are read by personnel?	Ask operator's personnel
Are operations and procedures regularly reviewed in relation to risk/hazard?	Review seen at audit.
Is the introduction of change accepted as a risk/hazard?	Ask operator's personnel
Are risk/hazards considered before changes are implemented?	Ask operator's personnel
Is there a process for reviewing the impact of environmental/work-place change on safety?	Procedure demonstrated and exemplified.
Is risk/hazard management understood?	Ask operator's personnel
Is there a procedure for managing risks/hazards?	Procedure demonstrated and exemplified -risk assessment process.
Are the limits for safe operation defined?	Seen at audit.
Are the limits for safe operation accepted by all?	Ask operator's personnel.
Are the limits for safe operation adhered to by all?	Ask operator's personnel.
Is the safety reporting system used?	Check records
Are safety reports recorded?	Check records
Is there a procedure to ensure action is taken as a result of safety reports?	Procedure demonstrated and exemplified.
Is the competence and performance of Personnel responsible for implementing Safety measures checked?	Procedure demonstrated and exemplified

2. SMS Risk Assessment Matrix

This simple procedure should suit the needs of most operators. If you require advice on risk assessment please contact the Directorate: Civil Aviation Windhoek Namibia

Tel: (061) 702 252

Fax: (061) 702 244

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

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

Types of Hazard

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

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

3. Assessment

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

Severity of Hazard

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

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

Likelihood of Occurrence

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

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

Matrix production

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

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.

DESIGNATED EXAMINER'S 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 privilege and not a right. Consequently, this privilege may be withdrawn by the Director: Civil Aviation at his or her discretion. This is not an employment contract, but a privilege to act on behalf of the Director: Civil Aviation and therefore withdrawal of designation by the Director: Civil Aviation does not affect your capacity to earn an income as a professional pilot.
5. It is an ICAO imperative that a training file must be kept for all Directorate inspectors. Although you are not an employee of the Directorate, you act in the interest of the Director: Civil Aviation when performing duties as a designated examiner and therefore it is a requirement to maintain a training file of your qualifications and proficiencies separate from the Directorate's pilot file for you. These records must be kept up to date.

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