[DRAFT]
MARITIME SEARCH & RESCUE (SAR) PLAN
FOR
NAMIBIA
# RECORD OF AMENDMENTS

<table>
<thead>
<tr>
<th>Amendment</th>
<th>Date entered</th>
<th>Entered by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Doc ID</th>
<th>Revision No</th>
<th>Compiled by</th>
<th>Approved by</th>
<th>Effective date</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP/MWT/17</td>
<td>0.0</td>
<td>MWT-DMA</td>
<td>Minister of Works and Transport</td>
<td>August 2017</td>
<td>1</td>
</tr>
</tbody>
</table>
FOREWORD

Maritime Search and Rescue (SAR) comprises the search for and provision of aid to persons who are, or are believed to be, in imminent danger of loss of life at sea. The two operations – search and rescue – may take many forms, depending on whether they are both required or not, on the size and complexity of the operation and on the available staff and facilities. Maritime SAR does not include salvage or the saving of property except where the action is indivisible from that of safeguarding life.

Namibia has no dedicated SAR assets. Therefore, when a maritime SAR incident occurs other government, private and commercial assets are diverted from their primary functions in order to provide support. It is necessary that the available resources are organised and coordinated so that effective and expeditious search and/or rescue operations can be assured.

This national Maritime Search and Rescue Plan will be the standard reference document for use by all Namibian stakeholders working in the maritime domain and promulgates the agreed methods of coordination through which maritime SAR administration and operations are conducted within Namibia’s SAR Region.

This Plan is supplemented by various informative and instructional documents, procedures, understandings and agreements used within and between organisations concerned with maritime SAR. The Plan is consistent with the relevant international conventions to which Namibia is a Party. It has been developed with due regard to the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual and enables seamless coordination with aeronautical SAR agencies and assets.

In providing a maritime SAR response, nothing in the content of this Plan precludes properly qualified officers from using their initiative in providing a SAR response in circumstances where these procedures are judged to be inappropriate. In so doing, however, officers’ actions should conform as closely as possible to those instructions contained in the Plan most closely pertinent to the circumstances and they should keep all other parties involved informed.

When developing other plans or procedures at organizational level, care should be taken to ensure that procedures are written in accordance with this Plan. Should a procedure be identified that would benefit the maritime SAR community, it is recommended that the issue is raised with the National Maritime SAR Committee (NMSC) of which the Ministry of Works and Transport serves as the Secretariat.

This Plan will be promulgated on the Internet for the use of all maritime SAR practitioners. The Internet version on the web site of the Ministry of Works and Transport is the controlled document and is the latest version of this manual. It should always be referred to as it contains the most up to date information.

Alpheus !Naruseb, MP.
MINISTER OF WORKS AND TRANSPORT
POLICY

It is the policy of the Government of Namibia to provide a Maritime Search and Rescue (SAR) Plan for coordinating maritime SAR to meet national and international commitments.

As a responsible coastal State, Namibia shall utilize every available resources towards saving and preserving lives in her territories, territorial sea, and the high seas within her maritime SAR region. Therefore Namibia shall endeavour to provide maritime SAR services to any person, vessel, aircraft or installation at any place at all times, without regard to the nationality or status of such a person or the circumstances in which that person is found.

Namibia’s obligations as a Member State of the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO), especially the need for aeronautical SAR and maritime SAR to be coordinated and harmonized, are articulated in this Plan.


Namibia recognizes the importance of bilateral and multilateral cooperation to enable the orderly execution of maritime SAR missions. These agreements include the 2007 Multilateral Agreement between the Governments of Angola, Union of Comoros, Madagascar, Mozambique, Namibia and South African on Coordination of Maritime SAR Services following the 2000 Florence conference on the maritime SAR and the Global Maritime Distress and Safety System (GMDSS), and the 2000 Bilateral SAR Agreement between Namibia and South Africa.

The Government of Namibia will endeavour to develop and adopt a national legal framework that will transpose international SAR treaties for both maritime and aeronautical SAR into national law.

The Government of Namibia will endeavour to provide sustainable maritime SAR services through budgetary support and by building and developing capacity through training and exercises.

In order to ensure maximum cooperation between maritime SAR stakeholders in furthering the objectives of this Plan, binding cooperation agreements will be concluded between relevant Government institutions.

No person must provide maritime SAR services in Namibia except under the authority of the Minister of Works and Transport and in accordance with this Plan.
TABLE OF CONTENTS

RECORD OF AMENDMENTS .................................................................................................................. 1
FOREWORD........................................................................................................................................ 2
POLICY.............................................................................................................................................. 3
TABLE OF CONTENTS .......................................................................................................................... 4
ABBREVIATIONS AND ACRONYMS.................................................................................................. 8
GLOSSARY OF TERMS .......................................................................................................................... 10
PART 1 – SAR SYSTEM ORGANIZATION ......................................................................................... 16
  1.1 Global SAR system ....................................................................................................................... 16
  1.2 Overview of Namibia’s SAR system ............................................................................................ 16
  1.3 Namibian Maritime SAR Area ..................................................................................................... 17
  1.4 Organization and Management ................................................................................................... 17
  1.5 Role of MWT in maritime SAR ................................................................................................... 18
  1.6 National Maritime SAR Committee (NMSC) ............................................................................. 19
  1.7 Maritime SAR Operations Committee (SAROC) ..................................................................... 20
  1.8 Operational SAR Management ................................................................................................... 22
  1.9 Safety Management System (SMC) ............................................................................................ 24
PART 2 – SAR STAKEHOLDERS AND THEIR RESPONSIBILITIES .................................................. 25
  2.1 Overview ..................................................................................................................................... 25
  2.3 Responsibilities of SAR stakeholders .......................................................................................... 25
    Office of the Prime Minister (OPM) ............................................................................................... 25
    Ministry of Works and Transport .................................................................................................. 26
    Ministry of Defence ....................................................................................................................... 27
    Ministry of Safety and Security ..................................................................................................... 27
    Ministry of Home Affairs and Immigration (MHAI) ..................................................................... 28
    Ministry of International Relations and Cooperation (MIRCO) ..................................................... 28
    Ministry of Finance (MoF) ............................................................................................................. 28
    Ministry of Health and Social Services (MHSS) ......................................................................... 28

<table>
<thead>
<tr>
<th>Doc ID</th>
<th>Revision No</th>
<th>Compiled by</th>
<th>Approved by</th>
<th>Effective date</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP/MWT/17</td>
<td>0.0</td>
<td>MWT-DMA</td>
<td>Minister of Works and Transport</td>
<td>August 2017</td>
<td>4</td>
</tr>
</tbody>
</table>
Part 5 – Sar Communications

5.1 Overview ............................................................................. 44
5.2 Alerting Posts ..................................................................... 45
5.3 Sar Communications Frequencies .......................................... 47
5.4 Global Maritime Distress and Safety (GMDSS) ......................... 47
5.5 Cospas-sarsat System .......................................................... 48
5.6 Sar Radar Transponder (Sart) ................................................. 51
5.7 Other Types of Distress Alerting Devices .............................. 52
5.8 Ship Reporting System ......................................................... 53
5.9 Communications in Support of SAR Operations ...........................................54
5.10 Communication Facilities on Board Marine Craft ....................................54
PART 6 – AWARENESS, NOTIFICATION AND INITIAL ACTION .........................56
  6.1 Overview .....................................................................................................56
  6.2 SAR Stages ...............................................................................................56
  6.3 Phases of Emergency ................................................................................57
  6.4 Maritime Medical Evacuations .................................................................59
PART 7 – SAR OPERATIONAL PROCEDURES ..................................................60
  7.1 Maritime SAR Incidents .........................................................................60
  7.2 Maritime SAR Operation Sequence of Events .......................................61
  7.3 Medevac ...................................................................................................63
  7.4 Mass Rescue Operations (MRO) ..............................................................65
PART 8 – PUBLIC RELATIONS ........................................................................67
  8.1 Overview .....................................................................................................67
  8.2 Press Release .............................................................................................67
  8.3 Requesting Public Assistance .................................................................69
  8.4 Liaison with Relatives ..............................................................................69
  8.5. Casualties ...............................................................................................70
  8.6 Operations Involving two or More SAR Resources and Facilities ............70
PART 9 – CONCLUSION OF SAR OPERATIONS ............................................72
  9.1 Overview .....................................................................................................72
  9.2 Terminating a SAR Case ..........................................................................72
  9.3 Suspending Search Operations ...............................................................73
  9.4 Reopening of a Suspended or closed SAR Case ......................................74
  9.5 Debriefing .................................................................................................74
  9.6 Case Studies .............................................................................................75
PART 10 – REPORTING AND DELEGATION ....................................................77
  10.1 Reporting ................................................................................................77
  10.2 Documentation .........................................................................................77
  10.3 Urgency versus Detail ............................................................................77
  10.4 Priority of Signals/Messages .................................................................77

<table>
<thead>
<tr>
<th>Doc ID</th>
<th>Revision No</th>
<th>Compiled by</th>
<th>Approved by</th>
<th>Effective date</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP/MWT/17</td>
<td>0.0</td>
<td>MWT-DMA</td>
<td>Minister of Works and Transport</td>
<td>August 2017</td>
<td>6</td>
</tr>
</tbody>
</table>
10.5 Message Precedence ................................................................. 78
10.6 Reporting on Major Incidents ................................................. 78
10.7 Maritime SAR Incident Reports and Forms .......................... 78
10.8 Requisitioning of aircraft and vessels .................................. 79
10.10 Written Reports ................................................................. 79
APPENDIX A - NAMIBIA’S MARITIME SAR AREA ..................... 81
APPENDIX B – CONTACT LIST ...................................................... 82
APPENDIX C – REFERENCES/BIBLIOGRAPHY ............................. 83
ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACO</td>
<td>Aircraft Coordinator</td>
<td></td>
</tr>
<tr>
<td>AIS</td>
<td>Automatic Identification System</td>
<td></td>
</tr>
<tr>
<td>AMVER</td>
<td>Automated Mutual-Assistance Vessel Rescue</td>
<td></td>
</tr>
<tr>
<td>ATS</td>
<td>Air Traffic Services</td>
<td></td>
</tr>
<tr>
<td>CRAN</td>
<td>Communications Regulatory Authority of Namibia</td>
<td></td>
</tr>
<tr>
<td>DDRM</td>
<td>Directorate of Disaster Risk Management</td>
<td></td>
</tr>
<tr>
<td>DMA</td>
<td>Directorate of Maritime Affairs</td>
<td></td>
</tr>
<tr>
<td>DSC</td>
<td>Digital Selective Calling</td>
<td></td>
</tr>
<tr>
<td>ELT</td>
<td>Emergency Locator Transmitter</td>
<td></td>
</tr>
<tr>
<td>EMS</td>
<td>Emergency Medical Services</td>
<td></td>
</tr>
<tr>
<td>EPIRB</td>
<td>Emergency Position Indicating Radio Beacon</td>
<td></td>
</tr>
<tr>
<td>ETA</td>
<td>Estimated Time of Arrival</td>
<td></td>
</tr>
<tr>
<td>FM</td>
<td>Frequency Modulation</td>
<td></td>
</tr>
<tr>
<td>GATS</td>
<td>Government Air Transport Services</td>
<td></td>
</tr>
<tr>
<td>GEOSSAR</td>
<td>Geostationary Orbit Satellite</td>
<td></td>
</tr>
<tr>
<td>GHz</td>
<td>Gigahertz</td>
<td></td>
</tr>
<tr>
<td>GMDSS</td>
<td>Global Maritime Distress And Safety System</td>
<td></td>
</tr>
<tr>
<td>GNSS</td>
<td>Global Navigation Satellite System</td>
<td></td>
</tr>
<tr>
<td>GPS</td>
<td>Global Positioning System</td>
<td></td>
</tr>
<tr>
<td>HF</td>
<td>High Frequency</td>
<td></td>
</tr>
<tr>
<td>IAMSAR</td>
<td>International Aeronautical and Maritime Search and Rescue Manual</td>
<td></td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
<td></td>
</tr>
<tr>
<td>IMO</td>
<td>International Maritime Organization</td>
<td></td>
</tr>
<tr>
<td>Inmarsat</td>
<td>International Maritime Satellite Organization</td>
<td></td>
</tr>
<tr>
<td>KHz</td>
<td>Kilohertz</td>
<td></td>
</tr>
<tr>
<td>LEOSAR</td>
<td>Low Earth Orbit Satellite</td>
<td></td>
</tr>
<tr>
<td>LUT</td>
<td>Local User Terminal</td>
<td></td>
</tr>
<tr>
<td>MCC</td>
<td>Mission Control Centre</td>
<td></td>
</tr>
<tr>
<td>MCMT</td>
<td>Marine Crises Management Team</td>
<td></td>
</tr>
<tr>
<td>MEDEVAC</td>
<td>Medical Evacuation</td>
<td></td>
</tr>
<tr>
<td>MEOSAR</td>
<td>Medium Earth Orbit Satellite</td>
<td></td>
</tr>
<tr>
<td>MF</td>
<td>Medium Frequency</td>
<td></td>
</tr>
<tr>
<td>MFMR</td>
<td>Ministry of Fisheries and Marine Resources</td>
<td></td>
</tr>
<tr>
<td>MHAI</td>
<td>Ministry of Home Affairs and Immigration</td>
<td></td>
</tr>
<tr>
<td>MHSS</td>
<td>Ministry of Health and Social Services</td>
<td></td>
</tr>
<tr>
<td>MHz</td>
<td>Megahertz</td>
<td></td>
</tr>
<tr>
<td>MIRCO</td>
<td>Ministry of International Relations an Cooperation</td>
<td></td>
</tr>
<tr>
<td>MMSI</td>
<td>Maritime Mobile Service Identity</td>
<td></td>
</tr>
<tr>
<td>MOD</td>
<td>Ministry of Defense</td>
<td></td>
</tr>
<tr>
<td>MOHSS</td>
<td>Ministry of Health and Social Services</td>
<td></td>
</tr>
<tr>
<td>MOF</td>
<td>Ministry of Finance</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Doc ID</th>
<th>Revision No</th>
<th>Compiled by</th>
<th>Approved by</th>
<th>Effective date</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP/MWT/17</td>
<td>0.0</td>
<td>MWT-DMA</td>
<td>Minister of Works and Transport</td>
<td>August 2017</td>
<td>8</td>
</tr>
</tbody>
</table>
MRCC  Maritime Rescue Coordination Centre
MRO   Mass Rescue Operation
MRSC  Maritime Rescue Sub-Centre
MSI   Maritime Safety Information
MSLD  Maritime Locating Devices
MSS   Ministry of Safety and Security
MWT   Ministry of Works and Transport
NAMPOL Namibian Police Force
NAMPORT Namibian Ports Authority
NBDP  Narrow-band Direct Printing
NCAA  Namibian Civil Aviation Authority
NDF   Namibian Defense Force
NM    Nautical Mile
NMSC  National Maritime Search and Rescue Committee
OMA   Offices, Ministries and Agencies
OPM   Office of the Prime Minister
OSC   On-Scene Coordinator
PCC   Port Control Centre
PLB   Personal Locator Beacon
PRO   Public Relations Officer
RADAR Radio Detection And Ranging
RDMC  Regional Disaster Management Committee
SAR   Search and Rescue
SAROC Maritime Search and Rescue Operations Committee
SART  Search and Rescue Transponder
SC    Search and Rescue Coordinator
SES   Ship Earth Station
SITREP Situation Report
SMC   Search and Rescue Mission Coordinator
SOE   State Owned Enterprise
SOLAS International Convention for The Safety of Life At Sea
SOPs  Standard Operating Procedures
SPOC  Search and Rescue Point Of Contact
SRR   Search and Rescue Region
SRU   Search and Rescue Unit
SURPIC Surface Picture
TCA   Time of Closest Approach
TMAS  Telemedical Assistance Services
TRA   Temporary Restricted Area
UHF   Ultra High Frequency
ULR   Ultra Long Range
USCG  United States Coast Guard
VHF   Very High Frequency
VMS   Vessel Monitoring System
GLOSSARY OF TERMS
For clarity, and in the context of this document:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft coordinator (ACO)</td>
<td>A person who coordinates the involvement of multiple aircraft in SAR operations.</td>
</tr>
<tr>
<td>Alert phase</td>
<td>A situation wherein apprehension exists as to the safety of an aircraft or marine vessel, and of the persons on board.</td>
</tr>
<tr>
<td>Alerting post</td>
<td>Any facility intended to serve as an intermediary between a person reporting an emergency and a rescue coordination centre or rescue sub-centre.</td>
</tr>
<tr>
<td>ARGOS</td>
<td>A satellite-based location and data collection system.</td>
</tr>
<tr>
<td>Automatic identification system (AIS)</td>
<td>A system used by ships and vessel traffic services (VTS), principally for identifying and locating vessels.</td>
</tr>
<tr>
<td>Awareness range</td>
<td>Distance at which a search scanner can first detect something different from its surroundings but not yet recognize it.</td>
</tr>
<tr>
<td>Awareness stage</td>
<td>A period during which the SAR system becomes aware of an actual or potential incident.</td>
</tr>
<tr>
<td>Captain</td>
<td>Master of a ship or pilot-in-command of an aircraft, commanding officer of a warship or an operator of any other vessel.</td>
</tr>
<tr>
<td>Coast earth station (CES)</td>
<td>Maritime name for an Inmarsat shore-based station linking ship earth stations with terrestrial communications networks.</td>
</tr>
<tr>
<td>Conclusion stage</td>
<td>A period during a SAR incident when SAR facilities return to their regular location and prepare for another mission.</td>
</tr>
<tr>
<td>Coordinated universal time (UTC)</td>
<td>International term for time at the prime meridian.</td>
</tr>
<tr>
<td>Coordination</td>
<td>The bringing together of organizations and elements to ensure effective search and rescue response. One SAR authority must always have overall coordination responsibility and other organizations are to cooperate with this agency to produce the best response possible within available resources.</td>
</tr>
<tr>
<td>Cospas-Sarsat system</td>
<td>An international satellite system designed to provide distress alert and location data from 406MHz distress beacon signals.</td>
</tr>
<tr>
<td>Course</td>
<td>The intended horizontal direction of travel of a craft.</td>
</tr>
<tr>
<td>Craft</td>
<td>Any air or sea-surface vehicle, or submersible of any kind or size.</td>
</tr>
<tr>
<td>Digital selective calling (DSC)</td>
<td>A technique using digital codes which enables a radio station to establish contact with, and transfer information to, another station or group of stations.</td>
</tr>
<tr>
<td>Direction finding</td>
<td>Homing on signals to pinpoint a position.</td>
</tr>
</tbody>
</table>
**Distress alerting**
The reporting of a distress incident to a unit which can provide or coordinate assistance.

**Distress phase**
A situation wherein there is reasonable certainty that a vessel or other craft, including an aircraft or a person, is threatened by grave and imminent danger and requires immediate assistance.

**Ditching**
The forced landing of an aircraft on water.

**Drift**
The movement of a search object caused by environmental forces.

**Emergency locator transmitter (ELT)**
Aeronautical radio distress beacon for alerting and transmitting homing signals.

**Emergency Phase**
Emergency phases are based on the level of concern for the safety of persons or craft that may be in danger. The three levels of emergency are classified as Uncertainty, Alert, and Distress.

**Emergency position-indicator radio beacon (EPIRB)**
A device, usually carried aboard maritime craft, that transmits a signal that alerts search and rescue authorities and enables rescue units to locate the scene of the distress.

**Exclusive economic zone (EEZ)**
The sea outside the territorial sea of Namibia but within a distance of 200 nautical miles from the low water mark from which the territorial sea was measured.

**False alarm**
Distress alert initiated for other than an appropriate test, by communications equipment intended for alerting, when no distress situation actually exists.

**False alert**
Distress alert received from any source, including communications equipment intended for alerting, when no distress situation actually exists, and a notification of distress should not have resulted.

**Field search coordinator**
Term for SMC who coordinates land searches only.

**Fix**
A geographical position determined by visual reference to the surface, referencing to one or more radio navigation aids, celestial plotting, or other navigation device.

**General communications**
Operational and public correspondence traffic other than distress, urgency and safety messages, transmitted or received by radio.

**Global Maritime Distress and Safety System (GMDSS)**
A global communications service based upon automated systems, both satellite-based and terrestrial, to provide distress alerting and promulgation of maritime safety information for mariners.

**Global Navigation Satellite System (GNSS)**
Worldwide position and time determination system that includes one or more satellite constellations and receivers.

**Global positioning system (GPS)**
A specific satellite-based system used in conjunction with mobile equipment to determine the precise position of the mobile equipment.
Heading  
The horizontal direction in degrees magnetic in which a craft is pointed.

Hypothermia  
Abnormal lowering of internal body temperature (heat loss) from exposure to cold air, wind or water.

International Maritime Satellite Organization (Inmarsat)  
A system of geostationary satellites for worldwide mobile communications services, and which support the Global Maritime Distress and Safety System and other emergency communications systems.

Internal waters of Namibia  
Port waters and any areas of the sea that are on the landward side of the baseline from which the territorial sea of Namibia is measured.

Joint rescue coordination centre (JRCC)  
A rescue coordination centre responsible for both aeronautical and maritime search and rescue incidents.

Maritime rescue coordination centre (MRCC)  
The centre from which a maritime SAR incident is controlled and coordinated.

Maritime rescue sub-centre (MRSC)  
A unit subordinate to the MRCC established to complement the latter according to part particular provisions of the responsible authorities.

Mass rescue operation (MRO)  
An operation where immediate assistance is required for a large number of persons in distress.

MAYDAY  
The international radiotelephony distress signal, repeated three times.

MEDEVAC  
Evacuation of a person for medical reasons.

Minister  
Means the Minister responsible for maritime transport.

Mission control centre (MCC)  
Part of the Cospas-Sarsat system that accepts alert messages from the local user terminal(s) and other mission control centres to distribute to the appropriate rescue coordination centres or other search and rescue points of contact.

Namibian waters  
The territorial sea, exclusive economic zone, the waters on the landward side of the territorial seas, and the estuaries, rivers, lakes and other inland waters (whether or not artificially created or modified) of Namibia.

Narrow-band direct printing (NBDP)  
Automated telegraphy, as used by the NAVTEX system and telex-over-radio.

NAVAREA  "One of 16 areas into which the International Maritime Organization divides the world's oceans for dissemination of navigation and meteorological warnings.

NAVTEX  
Telegraphy system for transmission of maritime safety information, navigation and meteorological warnings and urgent information to ships.

On-scene  
The search area or the actual distress site.

On-scene coordinator (OSC)  
A person designated to coordinate search and rescue operations within a specified area.
On-scene endurance: The amount of time a facility may spend at the scene engaged in search and rescue activities.

Overdue: A situation where a craft has failed to arrive at its intended destination when expected and remains missing.

PAN-PAN: The international radiotelephony urgency signal. When repeated three times, indicates uncertainty or alert, followed by nature of urgency.

Personal locator beacon (PLB): Personal radio distress beacon for alerting and transmitting homing signals.

Place of safety: A location where rescue operations are considered to terminate; where the survivor’s safety of life is no longer threatened and where their basic human needs (such as food, shelter and medical needs) can be met; and, a place from which transportation arrangements can be made for the survivors’ next or final destination. A place of safety can be on land, or it may be on board a rescue unit or other suitable vessel or facility at sea that can serve as a place of safety until the survivors are disembarked at their next destination.

Planning stage: A period during a SAR incident when an effective plan of operations is developed.

Position: A geographical location normally expressed in degrees and minutes of latitude and longitude.

Positioning: Process of determining a position that can serve as a geographical reference for conducting a search.

Rescue: An operation to retrieve persons in distress, provide for their initial medical or other needs, and deliver them to a place of safety.

SafetyNET: Communications service provided via Inmarsat for promulgation of maritime safety information, including shore-to-ship relays of distress alerts and communications for search and rescue coordination.

Scenario: A consistent set of known facts and assumptions describing what may have happened to the survivors and/or craft.

Sea: Condition of the surface resulting from waves and swells.

Search: An operation, normally coordinated by a rescue coordination centre, using available personnel and facilities to locate persons in distress.

Search action plan: Message, normally developed by the SMC, for passing instructions to SAR facilities and agencies participating in a SAR mission.

Search and rescue authority: The authority within an Administration with overall responsibility for establishing and providing SAR services and ensuring that planning for those services is properly coordinated. The national maritime SAR authority in Namibia is the Ministry of Works and Transport. In Namibia, the SAR Authority takes on the roles of the SAR Coordinator as described in the IAMSAR Manual.
Search and rescue briefing officer
An officer appointed, usually by the SMC, to brief departing SAR facilities and debrief returning SAR facilities.

Search and rescue case
Any potential or actual distress about which a facility opens a documentary file, whether or not SAR resources are dispatched.

Search and rescue coordinating communications
Communications necessary for the coordination of facilities participating in a search and rescue operation.

Search and rescue facility
Any mobile resource, including designated search and rescue units, used to conduct search and rescue operations. The terms unit and asset may be interchangeable with facility.

Search and rescue incident
Any situation requiring notification and alerting of the SAR system and which may require SAR operations.

Search and rescue mission coordinator (SMC)
The suitably trained or qualified official temporarily assigned to coordinate a response to an actual or apparent distress situation.

Search and rescue plan
A general term used to describe documents which exist at all levels of the national and international search and rescue structure to describe goals, arrangements, and procedures which support the provision of search and rescue services.

Search and rescue point of contact (SPOC)
Rescue coordination centres and other established and recognized national points of contact that can accept responsibility to receive Cospas-Sarsat alert data to enable the rescue of persons in distress.

Search and rescue region (SRR)
An area of defined dimensions, associated with the national or regional rescue coordination centre (MRCC Walvis Bay or MRCC Cape Town), within which search and rescue services are provided.

Search and rescue service
The performance of distress monitoring, communication, coordination and search and rescue functions, including provision of medical advice, initial medical assistance, or medical evacuation, through the use of public and private resources, including cooperating aircraft, vessels and other craft and installations.

Search and rescue stage
Typical steps in the orderly progression of SAR missions. These are normally Awareness, Initial Action, Planning, Operations, and Mission Conclusion.

Search and rescue sub-region (SRS)
A specified area within a search and rescue region associated with a maritime rescue sub-centre.

Search and rescue unit (SRU)
A unit composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue operations.
Maritime SAR Plan for Namibia

Search area
The area determined by the search planner to be searched. This area may be sub-divided into search sub-areas for the purpose of assigning specific responsibilities to the available search facilities.

Search object
A ship, aircraft, or other craft missing or in distress or survivors or related search objects or evidence for which a search is being conducted.

Ship reporting system (SRS)
A reporting system which contributes to safety of life at sea, safety and efficiency of navigation and protection of the marine environment. This is established under SOLAS regulation V/11 or, for SAR purposes, under chapter 5 of the International Convention on Maritime Search and Rescue, 1979.

Situation report (SITREP)
Reports, from the OSC to the SMC or the SMC to interested agencies, to keep them informed of on-scene conditions and mission progress.

Surface picture (SURPIC)
A list or graphic display from a ship reporting system of information about vessels in the vicinity of a distress situation that may be called upon to render assistance.

Telemedical assistance service (TMAS)
A medical service permanently staffed by doctors qualified in conducting remote consultations and well versed in the particular nature of treatment on board ship.

Triage
The process of sorting survivors according to medical condition and assigning them priorities for emergency care, treatment, and evacuation.

Uncertainty phase
A situation wherein doubt exists as to the safety of an aircraft or a marine vessel, and of the persons on board.

Unreported
A situation where a craft has failed to report its location or status when expected and remains missing.

Vessel monitoring system
A tool for monitoring, control and surveillance of fishing activities. VMS provides fisheries authorities the position and movement of fishing vessels.

Vessel tracking
A generic term applied to all forms of vessel track data derived from multiple sources such as ship reporting system, AIS, LRIT, SAR Aircraft, VMS and VTS.

Vessel traffic services (VTS)
A marine traffic monitoring system established by harbor or port authorities to keep track of vessel movements and provide navigational safety in a limited geographical area.
PART 1 – SAR SYSTEM ORGANIZATION

1.1 Global SAR system

1.1.1 The International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) coordinate, on a global basis, member States’ efforts to provide search and rescue (SAR) services.

1.1.2 The goal of IMO and ICAO is to provide an effective worldwide system, so that wherever people may be in danger, in the air or at sea, SAR services, as referenced in the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, will be available if needed. The overall approach a State takes in establishing, providing and improving SAR services is affected by the fact that these efforts are an integral part of a global SAR system.

1.1.3 Search and Rescue (SAR) services are defined as the performance of distress monitoring, communication, coordination and search and rescue functions, including provision of medical advice, initial medical assistance, or medical evacuation, through the use of public and private resources, including cooperating vessels, aircraft and other craft and installations.

1.1.4 In providing assistance to persons in distress and to survivors of SAR incidents, IMO and ICAO member States are required do so regardless of the nationality or status of such a person or the circumstances in which that person is found.

1.1.5 Under this global approach, Namibia takes the responsibility for the coordination of maritime SAR services in Namibian waters with the support of the regional Maritime Rescue Coordination Centre (MRCC) in Cape Town, South Africa, in accordance with the 2007 Multilateral Agreement between the Governments of Angola, Union of Comoros, Madagascar, Mozambique, Namibia and South African on coordination of maritime SAR services.

1.1.6 Namibian maritime SAR services will be coordinated with aeronautical SAR services as advocated by both IMO and ICAO.

1.1.7 The Ministry of Works and Transport (MWT) has the overall responsibility for maritime SAR administration in Namibia, while the coordination of Maritime SAR services in Namibian will performed by the national Maritime Rescue Coordination Centre (MRCC) based in Walvis Bay.

1.2 Overview of Namibia’s SAR system

1.2.1 SAR systems can be established on a national or regional level, or both. National SAR systems can take the form of a single or multi-agencies approach, with a committee established to co-ordinate the efforts of all the multiple agencies to provide the State with the requisite SAR capability.
1.2.2 Namibia, being a signatory to the International Convention on the Safety Of Life At Sea (SOLAS) Convention, 1974, as amended, and the International Convention on Maritime Search and Rescue, 1979, has accepted the obligation to provide maritime SAR co-ordination and services in her territories, territorial seas, and the high seas within her search and rescue region.

1.2.3 The preferred approach for Namibia is a multi-agency/whole of Government approach mainly because Namibia does not have dedicated SAR resources. Consequently, Government Offices, Ministries and Agencies (OMAs), private and commercial undertakings, voluntary organizations, will as necessary, be diverted from their core functions by arrangement or agreement to fulfil Namibia’s maritime SAR obligations.

1.2.4 Namibia will establish a National Maritime SAR Committee (NMSC), comprising of organizations referred to above to provide Namibia with the best possible maritime SAR capability.

1.2.5 The NMSC will be an integral albeit subordinate component of the National SAR Coordinating Committee that brings together both maritime and aeronautical SAR services based on the requirements of IMO and ICAO.

1.3 Namibian Maritime SAR Area

1.3.1 The Namibian Maritime SAR Area falls within the Southern Africa Maritime Search and Rescue Region (SASRR) and comprises the territorial waters and exclusive economic zone of Namibia. See Appendix A.

1.3.2 The Namibian Maritime SAR area is contiguous with the South African SAR Area (Southern international border) and the Angolan SAR Area (Northern international border). Mutual co-operation and assistance will be provided and the existence of national SAR areas should not be a basis to restrict, delay or limit in any way, prompt and efficient action to relieve distress situations.

1.3.3 Although South Africa hosts the regional MRCC, which is responsible for the efficient organization and of maritime SAR services in the SASRR, Namibia has the primary responsibility for co-ordinating and providing SAR services within Namibian waters.

1.3.4 However, nothing precludes Namibia to transfer the coordination of a SAR incident to South Africa or vice versa. The same principle applies to Angola.

1.4 Organization and Management

1.4.1 There are two basic types of SAR management, namely administration and operations. In the Namibian context, maritime SAR administration is delegated to the Ministry of Works and Transport (MWT), with the NMSC setting the national maritime SAR policy direction and oversee the implementation of this Plan.
1.4.2 This Plan, together with the agreement to be concluded between the maritime SAR stakeholders, make membership of certain OMA to the NMSC and its subsidiary committees obligatory, while encouraging voluntary membership to the NMSC by other institutions with an interest in maritime SAR.

1.4.3 The following OMA and State Owned Enterprises (SOEs) will be mandatory members of the NMSC and its subsidiary committees:

- a) Office of the Prime Minister (Disaster Risk Management)
- b) Ministry of Works and Transport (MWT)
- c) Ministry of Defence (MOD)
- d) Ministry of Safety and Security (MSS)
- e) Ministry of Fisheries and Marine Resources (MFMR)
- f) Ministry of Health and Social Services (MHSS)
- g) Ministry of International Relations and Cooperation (MIRCO)
- h) Ministry of Home Affairs and Immigration (MHAI)
- i) Ministry of Finance (MOF)
- j) Regional Disaster Management Committees for Kunene, Erongo, Hardap and Karas regions
- k) Namibian Ports Authority (Namport)
- l) Namibia Civil Aviation Authority (NCAA)
- m) Communications Regulatory Authority of Namibia (CRAN)
- n) Telecom Namibia

1.5 Role of MWT in maritime SAR

1.5.1 MWT is the custodian and champion of maritime SAR services in Namibia. It has the overall responsibility for planning, establishing, organization staffing, equipping and managing the maritime SAR system in Namibia. In pursuance of its role, MWT, in consultation with the NMSC will execute the following functions:

- a) develop, co-ordinate, administer, review and evaluate plans, legislation, policies, procedures, standards and training requirements for maritime SAR co-operation and co-ordination;
- b) establish and support the Rescue Co-ordination Centres (MRCC) and Maritime Rescue Sub-centres (MRSC);
- c) support, assist and chair the National Maritime SAR Committee (MSC)
- d) promote SAR system effectiveness and commitment to SAR objectives;
- e) work nationally, regionally and internationally to establish recognized SAR regions, effective working relationships, use of common procedures and expedient exchanges of maritime SAR information;
- f) co-ordinate plans and procedures with other organizations that support, participate in or provide resources for maritime SAR operations;
- g) maintain maritime SAR policies, plans and other SAR directives;
- h) establish and maintain liaison with appropriate maritime SAR contacts, nationally, regionally, and internationally;
- i) develop and administer maritime SAR budget and funds;
j) maintain SAR data, a SAR library and SAR statistics and conduct review of SAR case studies;  
k) develop SAR agreements and improved international SAR capabilities and procedures;  
l) promote efficient and effective use of all SAR resources;  
m) improve SAR communications;  
n) encourage joint training and exercise leading to the development of improved SAR procedures and technology;  
o) initiate, review and evaluate SAR research and development efforts;  
p) participate in SAR seminars and workshops;  
q) promote safety programmes to decrease distress incidents;  
r) facilitate the development of contingency plans for SAR resources to respond to natural and man-made disasters;  
s) promote visits between SAR programme personnel and among RCC and RSC personnel and others with special expertise related to SAR or SAR support; and  
t) oversee the SAR training programme.

1.6 National Maritime SAR Committee (NMSC)

1.6.1 IMO and ICAO encourage member states to establish what is referred to as the SAR Co-ordinating Committee either on a national or regional level to improve and support the SAR system or programme.

1.6.3 A SAR Co-ordinating Committee must therefore be established pursuant to a National SAR plan that provides for a common maritime and aeronautical SAR approach to organizing and providing SAR services.

1.6.2 The National Maritime SAR Committee (NMSC) to be established in terms of this Plan will be subordinate to the National SAR Coordinating Committee and its objectives will be to:

a) provide a standing national forum to develop and recommend strategic maritime SAR policy for Namibia;  
b) provide a standing forum for co-ordination of administrative and operational maritime SAR matters for Namibia;  
c) provide an interface with other national and international organizations involved in emergency services;  
d) develop, maintain and oversee the Maritime SAR Plan for Namibia (this Plan);  
e) promote the effective use of all available facilities for maritime SAR;  
f) serve as a co-operative forum to exchange information and develop position and policies of interest to more than one party to this Plan;  
g) promote close co-operation and co-ordination between civilian and military authorities for the provision of effective SAR services;  
h) improve co-operation with the aeronautical SAR components as well as other disaster management agencies for the provision of effective SAR services; and
i) determine other ways to enhance the overall effectiveness and efficiency of SAR services within South Africa and to standardize SAR procedures and equipment where practicable.

1.6.3 Membership of the NMSC will be appointed from the agencies enumerated in paragraph 1.4.3.

1.6.4 The NMSC may at its discretion invite commercial, private and voluntary organizations to form part of its membership.

1.6.5 The NMSC is accountable to the National SAR Coordinating Committee or the Minister of Works and Transport, in the absence of the National SAR Coordinating Committee.

1.6.6 The NMSC may establish sub-ordinate committees and working groups as may be deemed necessary.

Meetings of the NMSC

1.6.7 The Head of Maritime SAR Administration will preside over NMSC meetings.

1.6.8 The first meeting of the NMSC after the commencement of this Plan must be held at the time and place determined by the Permanent Secretary for Works and Transport and all meetings thereafter must be held at the times and places that the NMSC determines.

1.6.9 The chairperson of the NMSC may at any time call a special meeting of the committee to be held at the time and place determined by the chairperson.

1.6.10 All members of the NMSC must be notified in writing of any meeting of the NMSC.

1.6.11 A majority of the total number of members forms a quorum at any meeting of the NMSC and a decision agreed on by a majority of the members present at a duly constituted meeting of the NMSC is a decision of the NMSC.

1.6.12 In the event of an equality of votes on any matter, the chairperson has a casting vote in addition to a deliberative vote.

1.6.13 The chairperson must designate a person to act as chairperson if he or she is unable to act as chairperson.

1.6.14 The NMSC will meet at least four times a year.

1.7 Maritime SAR Operations Committee (SAROC)
1.7.1 There will be established a Maritime SAR Operations Committee (SAROC) the main purpose of which will be to advise the NMSC on any matter that may have policy and financial Implications as well as to deal with day-to-day administrative matters that need to be sanctioned by the NMSC.

1.7.2 The objectives of the SAROC will be to:

a) assess emerging technologies and other environmental changes and advise the NMSC accordingly;

b) advise the NMSC on the appropriateness and necessity for developed SAR plans, legislation, policies, rules, treaties or agreements;

c) ensure a seamless administration of the maritime SAR Programme;

d) ensure that the limited search and rescue resources are used in the most economic, efficient and effective way;

e) ensure that SAR operations are conducted in accordance with laid down standards and recommended practices as reflected in this Plan and as considered the norm in terms of International Conventions;

f) take decisions on operational and administrative issues that may not have an impact on overall SAR policy, and do not require the approval of the NMSC; and

g) review past maritime SAR cases with a view to improving the SAR system.

1.7.3 The SAROC will be composed of the follows:

a) MRCC Chief;

b) Senior operational level officer responsible for maritime SAR matters within MWT;

c) Senior operational level officer responsible for SAR matters within MOD, Namibian Navy;

d) Senior operational level officer responsible for SAR matters within MSS, Water Wing;

e) Senior operational level officer responsible for SAR matters within MFMR;

f) Senior Port Control Officers responsible for SAR matters within Namport;

g) Senior operational level officers of recognized Voluntary SAR Organizations;

h) Senior operational level officers from emergency services in the Walvis Bay, Swakopmund, Luderitz, Henties Bay and Orangemund Local authorities.

1.7.4 The SAROC may at its discretion invite other persons to form part of its membership or attend its meetings.

1.7.5 The SAROC may establish sub-ordinate working groups as may be deemed necessary.

Meetings of SAROC
1.7.6 The MRCC Chief will preside over SAROC meetings.

1.7.7 The first meeting of SAROC after the commencement of this Plan must be held at the time and place determined by the Head of Maritime SAR Administration and all meetings thereafter must be held at the times and places that SAROC determines.

1.7.8 The Chairperson of SAROC may at any time call a special meeting of the SAROC to be held at the time and place determined by the chairperson.

1.7.9 All members of the SAROC must be notified in writing of any meeting of SAROC.

1.7.10 A majority of the total number of members forms a quorum at any meeting of the SAROC and a decision agreed on by a majority of the members present at a duly constituted meeting of the SAROC is a decision of the SAROC.

1.7.11 In the event of an equality of votes on any matter, the chairperson has a casting vote in addition to a deliberative vote.

1.7.12 The chairperson must designate a person to act as chairperson if he or she is unable to act as chairperson.

1.7.13 The NMSC will meet at least once every 3 months.

1.8 Operational SAR Management

1.8.1 Operations management includes routine and emergency activities supporting maritime SAR response activities. In the Namibian context, the MRCC and MRSCs are established and mandated to ensure the effective and efficient co-ordination of maritime SAR operations in Namibia.

1.8.2 In terms of the IAMSAR manual, the role that should be played by officials staffing MRCC and MRSCs may be administrative and operational. Administrative duties are concerned with maintaining the centres in a continuous state of preparedness and operational duties are concerned with the efficient conduct of SAR operations.

1.8.3 It must be emphasized that these centres, although designated SAR units, are performing their delegated functions on behalf of MWT and NMSC and are therefore part of the SAR facilities used to conduct SAR operations. They are therefore accountable to the MWT and the NMSC.

The Maritime Rescue Co-Ordination Centre (MRCC)

1.8.4 The MRCC will be under the control of the MRCC Chief and is primarily responsible for the operational coordination of maritime SAR services in the Namibian maritime
SAR area. The MRCC Chief is accountable to the Head of maritime SAR within the MWT.

1.8.5 A dedicated MRCC has been established and is located at the Walvis Bay Maritime Radio Centre in Walvis Bay.

Maritime RSCs Rescue Sub-Centres (MRSCs)

1.8.6 To ensure effective conduct of maritime SAR operations, Maritime Rescue Sub-centres (MRSC) with their own Rescue Sub-region (SRS) will be established. The rationale behind the establishment of MRSCs is to ensure direct and effective coordination of SAR services in the Namibian waters.

1.8.7 The area of responsibility falling under the control of the MRCC is therefore divided into three sub-regions, which will fall under the control of the Harbour Masters of Walvis Bay and Luderitz respectively (coastal sub-regions), and the Commanding Officer of the NAMPOL – Water Wing (inland sub-region). Within each sub-region the Port Control Centre (PCC) and, in the case of the inland sub-region, the national Commanding Centre of NAMPOL - Water Wing will act as a MRSC.

1.8.8 The MRSCs are accountable to the MRCC Chief. Should an operation falling within the scope of the MRSC escalate, or be such that it is beyond the capability of the MRSC, it will immediately be handed over to the MRCC.

Harbour MRCS

1.8.9 The PCCs alluded to in 1.8.7 will act as MRSCs covering sea areas adjacent to the coastline in their areas of control which are demarcated as follows:

a) Walvis Bay Port Control Centre MRSC – Kunene River Mouth to Meob Bay;
b) Luderitz Port Control Centre MRSC – Meob Bay to Orange River Mouth.

Inland Water MRSC

1.8.10 The Inland Water MRSC (National Commanding Centre of NAMPOL - Water ) will be responsible for the entire inland waters of Namibia, excluding sea ports.
Secondary MRSCs

1.8.11 Within the inland sub-region, the various Nampol - Water Wing Commanding centres and Police stations across the country will act as secondary MRSCs within their scope and capability.

1.8.12 Should an operation falling within the scope of the Secondary MRSC escalate, or be such that it is beyond the capability of the Secondary MRSC, it will immediately be handed over to the MRSC in Windhoek.

1.8.13 The Secondary MRSCs are accountable to the Commanding Officer of the NAMPOL – Water Wing or his/her delegate.

1.9 Safety Management System (SMC)

1.9.1 The NMSC will implement a safety management system (SMS) which as a minimum:

a) identifies safety hazards;

b) ensure the implementation of remedial action necessary to maintain agreed safety performance;

c) provide for continuous monitoring and regular assessment of the safety performance; and

d) is subject to regular review which has its objective the improvement in the overall performance of the SMS.

1.9.2 The SMS must clearly define the safety accountability of the key personnel in the maritime SAR system.
PART 2 – SAR STAKEHOLDERS AND THEIR RESPONSIBILITIES

2.1 Overview

2.1.1 A maritime SAR organisation is a consortium of all the agencies that perform distress monitoring, communications, and response functions. This include providing or arranging for medical advice, initial medical assistance or medical education, if necessary.

2.1.2 Maritime SAR facilities include designated SAR Unites (SRUs) and other resources that can be utilised to conduct or support SAR operations. SAR facilities consist of all public and private facilities, including co-operating vessels, aircraft, other craft and installations operating under the co-ordination of the MRCC. There may be other international resources that an MRCC could utilize while co-ordinating specific SAR missions.

2.1.3 Potential maritime SAR resources and facilities are sourced from public, private and voluntary organisations and placed under the jurisdiction of the MRCC to ensure expeditious and efficient conduct of SAR operations.

2.1.4 MWT will need to conclude agreements with the identified SAR resources and facilities to ensure their commitment to the sustenence of maritime SAR services in Namibia.

2.3 Responsibilities of SAR stakeholders

2.3.1 The promotion of continuous cooperation in the provision of maritime SAR services is essential. This will be underpinned by a national SAR agreement that must be concluded between all by all key maritime SAR stakeholders. This agreement will serve as a binding cooperation agreement in order to ensure maximum cooperation (including provision and resources and facilities) between such institutions in furthering the objectives of this maritime SAR plan and SAR in Namibia in general.

2.3.2 The responsibilities of the relevant maritime SAR stakeholders are outlined below:

Office of the Prime Minister (OPM)

Directorate of Disaster Risk Management
2.3.3 OPM through the Directorate of Disaster Risk Management (DDRM) will ensure that maritime emergencies and SAR services are recognised and integrated into the national emergency management system.

2.3.4 DDRM will assist in facilitating the classifying, by the National Risk Management Committee (NRMC), of certain maritime SAR incidents as national emergencies in terms of the Disaster Risk Management Act.

2.3.5 DDRM will also facilitate access to national contingency and national emergency fund and other resources to enable effective response to maritime SAR incidents, especially where MWT has no budget or other resources.

Ministry of Works and Transport

Government Air Transport Services (GATS)

2.3.6 GATS will support maritime SAR operations by providing aircraft, crew and equipment when required during maritime SAR or Medevac operations.

Directorate of Maritime Affairs (DMA)

2.3.7 MWT through the Directorate of Maritime Affairs (DMA), in collaboration with the NMSC, will perform the responsibility of national maritime SAR Co-ordinator (SC) and has the overall responsibility for establishing, staffing, equipping and overseeing the maritime SAR system in Namibia. This responsibility includes providing appropriate legal and funding support, establishing RCC’s and RSC’s, providing and arranging SAR facilities, co-ordinating SAR training and developing SAR policies.

2.3.8 In this regard, DMA will be responsible for the following:

   a) ensuring efficient and effective operation of Maritime SAR in Namibia;
   b) the establishment and proper functioning of the NMSC;
   c) chairing NMSC meetings;
   d) serving as secretariat for the NMSC;
   e) ensuring that the MRCCs are staffed and MRCC management are appointed;
   f) liaison with IMO, regional and continental institutions and with neighbouring states to promote and facilitate SAR services;
   g) ensuring appropriate training and exercises for SAR staff;
   h) exercising effective oversight and control over delegated maritime SAR functions such as coastal radio communication and maritime rescue coordination services;
   i) payment of an annual grant to voluntary organisations involved in the provision of SAR services in Namibia;
   j) budgeting for the maritime SAR programme;
k) ensuring effective maritime SAR support by among all Directorates, Divisions and other segments in the MWT; and
l) serve as chief liaison on maritime SAR.

Meteorological Services of Namibia (Met Services)

2.3.9 Met Services will support maritime SAR operations through timely provision of weather messages, marine environment forecasts and warnings for the coastal and high seas and provide weather information on demand to the MRCC and MRSCs.

Ministry of Defence

Namibian Defence Force (NDF)

2.3.10 NDF is regarded as a primary and critical maritime SAR resource in Namibia because of their well-trained personnel, communications network and airborne and seaborne resources. NDF will therefore be responsible for:

a) military SAR - the provision of maritime SAR for all NDF and visiting military ships, personnel and aircraft;
b) making Naval, Air Force and Army and communication channels available when necessary during a maritime SAR operation;
c) serving as maritime SAR alerting posts (command and control centres in Walvis By, Luderitz and other coastal areas);
d) providing vessels, search aircraft, crew and equipment when required during a maritime SAR or Medevac operation;
e) providing vessels, search aircraft, crew and equipment when required during a Medevac operation provided that there are no suitable civilian units to carry out such Medevac operation; and
f) recreational beach lifeguarding/beach rescue.

Ministry of Safety and Security

Namibian Police Force (Nampol)

2.3.11 Nampol will be responsible for:

a) serving as MRSC and provide SAR services for in inland waterways (rivers, dams, lakes etc);
b) ensuring that all Nampol stations act as SAR alerting posts;
c) making communication channels available when necessary during a maritime SAR operation;
d) providing crews, vessels, aircraft and equipment when available during a SAR operation;

e) protecting disaster scenes for the security of shipwreck or crashed aircraft wreckage. **The State is responsible for the protection of crashed aircraft or shipping wreckage until the investigation officials have completed their investigation and the owners are informed that they may remove the wreckage;**

f) taking custody of the deceased and/or personal effects of a casualty upon completion of investigations as applicable.

**Ministry of Home Affairs and Immigration (MHAI)**

2.3.12 MHAI will support maritime SAR services by expediting immigration clearance during SAR operation involving foreign crew or passengers.

**Ministry of International Relations and Cooperation (MIRCO)**

2.3.13 MIRCO will support maritime SAR services through diplomatic liaison with neighbouring and other States, especially when SAR operations are to be conducted across international borders. MIRCO will facilitate the entry of foreign personnel and equipment into the Namibian territory or Namibian personnel and equipment into the territory of another State for SAR purposes.

2.3.14 However, noting that normal diplomatic correspondence or communication may not be fast enough for communication between States in cases of maritime SAR emergencies, the MRCC or MWT may need to communicate directly with the relevant foreign authority.

**Ministry of Finance (MoF)**

2.3.15 MOF (Customs and Excise) will support maritime SAR services by expediting equipment clearance during SAR operation involving foreign crew or passengers.

**Ministry of Health and Social Services (MHSS)**

2.3.16 MOHSS will support maritime SAR services by providing emergency medical services (EMS) including life support and patient transport to health facilities.

2.3.17 MOHSS will also be expected to provide Telemedical Assistance Services (TMAS) 24 hours a day in line with IMO and ICAO requirements.
Ministry of Fisheries and Marine Resources (MFMR)

2.3.18 MFMR will support maritime SAR services by:

a) ensuring that their operations command centres act as alerting posts;

b) making their communication channels (including vessel reporting systems) available when required during a SAR or Medevac operation;

c) providing vessels, aircraft and vehicles and crews when necessary emergency services during SAR or Medevac operations.

Regional Disaster Management Committees (NDMC)

2.3.19 RDMCs will be responsible for:

a) ensuring that their command centres, if any, act as alerting posts;

b) making their communication channels available when required during SAR or Medevac operation;

c) providing emergency services, crews, vehicles and vessels when necessary during a SAR operation.

Namibian Ports Authority (NAMPORT)

2.3.20 Namport will be responsible for:

a) ensuring that Port Control Centres carry out the duties of MRSCs and alerting posts for their designated areas of responsibility;

b) ensuring that all manned lighthouses under its control act as alerting posts;

c) making communication channels available when required during a SAR or Medevac operation;

d) providing navigational warnings and information;

e) providing crews, vessels and equipment when required during maritime SAR or Medevac operations.

Communications Regulatory Authority of Namibia (CRAN)

2.3.21 CRAN will regulate the use of communication channels and radio frequencies and may assist with direction finding services. CRAN also issues and maintains a database of maritime call sign allocations to Namibian holders of maritime radio station licenses.

Namibian Civil Aviation Authority (NCAA)

2.3.22 NCAA will be responsible for:
a) establishing a system for coordinating Aeronautical SAR services which system must be coordinated with maritime SAR services as espoused by IMO and ICAO;

b) coordinating aeronautical SAR incidents at sea in conjunction with the MRCC;

c) providing the necessary liaison and support where a maritime incident requires aviation response;

d) co-ordinating the establishment of Temporary Restricted Areas (TRA) when so required for SAR purposes or protection of aviation accident sites from over flights of non-SAR related aviation assets;

e) clearances to enter, operate in or leave any of the areas mentioned in d) above

**Telecom Namibia**

2.3.23 Telecom Namibia will be responsible for:

a) providing coastal radio communication services to shipping for Namibia as delegated by MWT;

b) providing the national Maritime Rescue Coordination Centre (MRCC) as delegated by MWT and in terms of this Plan;

c) manning, equipping and operating the MRCC in terms of this Plan;

d) ensuring that maritime distress-related communications have a priority rating;

e) ensuring that coastal radio communication and SAR communication infrastructure and equipment are operated and maintained in line with IMO requirements and this Plan.

**Voluntary SAR Organizations**

2.3.24 Voluntary SAR organisation, including boating or yacht clubs, could play a critical role in the Namibian maritime SAR system. Voluntary organizations will thus be responsible for:

a) ensuring that their stations carry out the duties of alerting posts within their scope and capability;

b) making their communication channels available when required during SAR or Medevac operations;

c) providing crews, vessels and vehicles when necessary during a SAR or Medevac operation.

**Commercial and Private Organisations**
2.3.25 Commercial and private organisations are capable of providing assistance during maritime SAR incidents. Some of these organisations have facilities that are immediately suitable for use as SAR units; others have facilities that have been adapted by way of providing them with extra equipment or training.

2.3.26 Civilian units considered suitable for the provision of maritime SAR services are described as Search and Rescue Units (SRUs). The crews of these units are trained in SAR techniques.

2.3.27 Commercial towing and salvage companies may provide vessels to take over the towing or salvage of a vessel that is no longer in immediate danger. The owner or agent of the disabled vessel usually makes arrangements for these services. SAR units should not interfere with this form of private enterprise provided the commercial facilities are capable of completing the operation safely.

2.3.28 Other organisations that might volunteer to assist in a maritime SAR operation include general maritime operators, fishing companies, oil and gas companies, commercial airlines, yacht clubs and other community groups and organisations.

**Ships of convenience**

2.3.29 Several international conventions require that the master of a vessel, on receiving a message that persons are in distress at sea, proceeds to assist them when it can be done with due regard to the safety of the responding vessel and crew.

2.3.30 Vessels at sea, although not always available to participate in extended search operations, are potential SAR assets. Ship reporting and vessel tracking systems enable the MRCC to quickly know the approximate positions, courses, and speeds of vessels in the vicinity of a distress situation and other information about vessels which may be valuable, e.g. whether a doctor is aboard. Masters of vessels sailing the areas of concern are encouraged to send regular reports to the authorities operating a ship reporting system for SAR in the area.

**2.4 Charging for SAR services**

2.4.1 Each maritime SAR stakeholder will fund its own cost of participating in the implementation of this Plan unless otherwise arranged by the participants in advance, and will not allow a matter of reimbursement of cost to delay response to any person in danger or distress.

2.4.2 Maritime SAR services provided to persons in danger or distress will be without subsequent cost-recovery from the person(s) assisted. In certain circumstances cost recovery may be appropriate if the service extends beyond SAR. For example if NAMPORT, following a place of refuge request, incurs oil spill clean-up costs.
2.4.3 In accordance with customary international law, when one-nation requests help from another nation to assist persons in danger or distress, if such help is provided, it will be done voluntarily.
PART 3 – KEY MARITIME SAR PERSONNEL AND THEIR RESPONSIBILITIES

3.1 Head of Maritime SAR Administration

3.1.1 The Head of Maritime SAR Administration is the senior official within MWT with direct responsibility for maritime SAR services in Namibia. This official will have two basic key performance areas, namely; ensuring effective and efficient co-ordination of maritime SAR systems and processes, and improvement of SAR services through national and international co-operation.

3.1.2 The Head Maritime SAR Administration is responsible for discharging the functions and duties outlined in 2.3.8 above.

2.2 Chief of the Maritime Rescue Coordination Centre (MRCC)

3.2.1 As the Head of Maritime SAR Operations, the MRCC Chief will be responsible for:

a) maintaining the MRCC in a continuous state of preparedness coordinate all participating SAR assets and facilities;
b) preparing MRCC budgets;
c) ensuring that the MRCC conforms to the SAR procedures contained in this Plan;
d) ensuring that the MRCC and MRSC have in operational plans;
e) establishing close liaison with other authorities and organisations having SAR potential;
f) establishing liaison with SAR authorities of adjacent areas to ensure mutual cooperation and coordination in combined operations;
g) establishing communications and assigning SAR frequencies from those authorised to assets designated for SAR tasks;
h) establishing communications with adjoining MRCCs and appropriate organisations to ensure two-way alerting and dissemination of SAR information;
i) taking immediate action to provide assistance and advising the appropriate SAR authorities about distress situations and any action taken;
j) ensuring that the operating authority or agency of any craft, aviation asset in need of assistance has been advised of initial actions taken, and they are kept informed of all pertinent developments;
k) designating an SMC for a specific SAR incident;
l) ensuring that each incident is prosecuted until assistance is no longer necessary, rescue has been completed or chances of success are no longer a reasonable possibility;
m) ensuring that if the scope of the operation exceeds the MRCC’s capacity to plan and execute the operation, it shall seek advice and assistance from, or by mutual agreement, hand over coordination to the regional MRCC;
n) maintaining and preserving operational data and information records;
o) developing new and improved techniques and procedures;
p) ensure that, as applicable, the MRCC functions as an effective SAR Single Point of Contact (SPOC) in respect of Cospas Sarsat services; and
q) in conjunction with the NMSC, establishing a small boat safety reporting system for all commercial and recreational boats (under 25 gross tons) taking to water (sea or inland) from a Namibian port, marina, slipway, berthing, mooring or other launching facility in Namibia.

3.2.2 The MRCC Chief is responsible to the Head of Maritime SAR Administration and is a member of the NMSC.

MRCC and MRSC Operational plans

3.2.3 The MRCC and MRSC shall have operational plans that are coordinated with this Plan.

3.2.4 Amongst others, an operational plan must, as a minimum:

a) state precisely the area of responsibility allocated to the MRCC or MRSCs;
b) set out the procedure for conducting maritime SAR operations in the MRCC or MRSC area of responsibility the during different phases of emergency;
c) in respect of facilities available to the MRCC or MRSC:-
   (i) state precisely which agencies are responsible for activating assets;
   (ii) detail the methods of communicating with the various agencies;
   (iii) detail the methods of alerting mobile facilities;
   (iv) detail the methods of co-ordination with the various assets and facilities;
   (v) indicate by whom and to what extent, any of the assets and facilities can be requested to participate in a maritime SAR operation; and
   (vi) describe the facilities available to the MRCC or MRSC.

d) state the responsibilities of staff assigned to maritime SAR operations;
e) set out the method and procedure whereby information is obtained, stored and retrieved for use in a maritime SAR operation;
f) make provision for the training and exercising of SAR staff; and

g) set out a reporting procedure whereby appropriate authorities are informed of any hazard to navigation or wreck, consequent to an operation.

3.4 Search Mission Co-ordinations (SMC) or SAR Duty Controllers

3.4.1 The SMC or SAR Duty Controller takes charge of the operation until a rescue has been executed or until it has become apparent that future efforts would be of no avail or until
responsibility is accepted by another MRCC. The SMC plans the search and co-
ordinates the transit of SAR facilities to the scene.

3.4.2 During a maritime SAR operation, the SMC’s duties will normally include but not limited to the following:

a) classify the SAR incident into the appropriate emergency phase (Uncertainty, Alert/Urgency, or Distress).
b) ascertain the type of emergency equipment carried by the missing or distressed craft;
c) remain informed of prevailing environmental conditions;
d) if necessary, ascertain movements and location of vessels and alert shipping in likely search areas for rescue, lookout and/or radio watch on appropriate frequencies to facilitate communications with SAR facilities:
e) develop the search action plan, (and rescue action plan as appropriate), i.e., allocated search areas;
l) plot the area to be searched and decide on the method and facilities to be used;
f) designate the OSC, dispatch SAR facilities and designate on-scene communications frequencies;
g) inform the MRCC chief of the search action plan;
h) co-ordinate the operation with adjacent MRCCs when appropriate;
i) arrange briefing and debriefing of SAR personnel;
j) evaluate all reports from any source and modify the search action plan as necessary;
k) arrange for the fuelling of aircraft and, for prolonged search, make arrangements for the accommodation of SAR personnel;
l) arrange for delivery of supplies to sustain survivors;
m) maintain in chronological order an accurate and up-to-date record with a plot, where necessary, of all proceedings;
n) issue situational reports;
o) recommend to the MRCC chief the abandoning or suspending of the search operations;
p) release SAR facilities when assistance is no longer required;
q) notify accident investigation authorities;
r) if applicable, notify the State of registry of the vessel or aircraft in accordance with established arrangements;
s) prepare a final report on the results of the operation.

3.4.3 In addition to the above, the SMC should perform the following duties and functions:

a) gather information about distress situations; develop accurate and workable action plans, and dispatch and co-ordinate the resources that will carry out SAR missions;
b) monitor and maintain communications procedures, reports, files, and logs;
c) monitor operational communications, and distress, urgency and safety communications;
d) ensure that communications can be carried out rapidly with operating units, and that high precedence messages can be routed quickly;
e) monitor SAR facilities to ensure they can get underway and arrive at the distress location, without delay;
f) confirm the mix of resources at SAR facilities; ensure they are correct for the types of incidents experienced or anticipated;
g) monitor asset reliability and take corrective action as necessary;
h) review SAR assistance policies in response to changing condition;
i) research and exercise to ensure that SAR operations can safety and effectively be conducted in anticipated environment(s);
j) maintain close liaison with other organisation; know their capabilities to ensure that the most capable and timely resources, regardless of ownership, respond to SAR situations;
k) review historical incidents and apply lessons learned to identify and correct weaknesses;
l) monitor resource readiness standards to minimize resource unavailability;

3.5 On Scene Coordinator (OSC)

3.5.1 When a number of SAR assets are working together on the same SAR mission in the same location, there may be an advantage if one unit is assigned to coordinate the activities of all participating assets.

3.5.2 The SMC will designate this role to an On Scene Coordinator (OSC), who may be the person in charge of a ship or aircraft participating in the search or someone at another nearby facility in a position to handle OSC duties. The OSC should be the most capable person available, taking into consideration SAR training, communications capabilities of the asset, and the length of time that the asset the OSC is aboard can stay in the search area.

3.5.3 An OSC (sea) and/or OSC (shore) may be appointed by the SMC if required for a major incident. Frequent changes in the OSC should be avoided. Duties that the SMC may assign to the OSC, depending on needs and qualifications include:

a) assuming operational coordination of all SAR facilities on scene;
b) receiving the search action plan from the SMC;
c) modifying the search action plan based on prevailing environmental conditions and keeping the SMC advised of any changes to the plan (in consultation with the SMC when practicable);
d) providing relevant information to the other SAR assets;
e) implementing the SAR plan where required;
f) monitoring the performance of other assets participating in the search;
g) developing and implementing the rescue plan (when needed);

h) providing regular Sitreps to the SMC; and

i) In the case of maritime accidents liaising with the DMA Accident Investigator assigned.

3.6 Aircraft Coordinator

3.6.1 The appointment of an Aircraft Coordinator (ACO) is justified particularly in cases where there are a lot of aircraft participating in a SAR operation. The appointment of an ACO takes place in the same manner as that of an OSC and an ACO operates under the SMC.

3.6.2 An ACO is tasked with coordinating and harmonising aeronautical SAR activity on the scene as outlined by the SMC. As a rule, an ACO performs their duties from the RCC/RSC or other location suited well for aircraft coordination.

3.6.3 A person appointed as an ACO must have in-depth competence in the duties and has been trained accordingly. Air Traffic Controllers should be appointed to the role, if available. Where necessary, another person who has been appropriately trained or who is highly competent in aircraft radio communications may be appointed as an assistant to the ACO. In urgent cases where this is necessary to save human lives, another capable person may be temporarily appointed as an ACO.
 PART 4 – TRAINING AND EXERCISES

4.1 Overview

4.1.1 The importance of thorough training for all personnel employed on maritime SAR missions cannot be over-emphasised. Failure of a single link in the often complex chain of action required in SAR missions can compromise the success of the operation, resulting in loss of lives of SAR personnel, lives of those that might otherwise have been saved and/or loss of valuable resources.

4.1.2 The purpose of training is to meet SAR system objectives by developing SAR specialists. Since considerable experience and judgement are needed to handle SAR situations, necessary skills require significant time to master. Training can be expensive but contributes to operational effectiveness.

4.2 Training

4.2.1 Training is critical to SAR performance and safety. The SAR system should save those in distress when it can, but also use training to reduce risks to its own valuable personnel and resources. Training of personnel in making sound risk assessment will help to ensure that these trained professionals and valuable resources remain available for future operations.

4.2.2 Consistency in training and sharing of information relating to maritime SAR is promoted through NMSC and its sub-committees. Standardisation of the prosecution of maritime SAR operations is encouraged through these avenues.

4.2.3 Efforts to ensure professionalism extend to career development for individuals who are assigned to undertake SAR duties. The aim is to ensure SAR officers are competent. In additions, OMAs and other agencies should consider making assignments of sufficient length to develop expertise and take advantage of SAR experience in subsequent assignments of officers.

Who to Train

4.2.4 All personnel involved in maritime SAR operations need to undertake SAR-specific training.

4.2.5 An individual, a group or multiple groups may be trained. Each person should have had previous training to perform individual tasks. Where the individuals integrate into teams, team training is required so that the individuals can support the team effort. Where teams integrate, multiple team training is required to support the overall effort.
Requirements for Training

4.2.6 The Head of Maritime SAR Administration and the MRCC Chief are responsible for the establishment of formal training programs for maritime SAR personnel to reach and maintain competence appropriate to their roles.

4.2.7 Training of maritime SAR personnel should focus on both the practical and theoretical application of maritime SAR and may include the following:

a) study of SAR procedures, techniques and equipment through lectures, demonstrations, films, SAR manuals and journals;

b) assisting in or observing actual operations; and

c) exercises in which personnel are trained to coordinate individual procedures and techniques, or operate specialised equipment, in an actual or simulated environment.

4.2.8 MRCC and MRSC personnel will require formal specialist training. Training is most beneficial when it is accomplished before a specialist is assigned to duties requiring that training. It should match the duties to be performed and is generally provided at three levels:

a) entry level for those specialists just entering the organisation;

b) current level for those specialists who must remain at a certain level of proficiency to continue with their present position. This also includes any updating due to technical and equipment improvements; and

c) advanced level for those specialists who have proven performance in a current position and desire or need to advance.

4.2.9 Training can be accomplished in a range of locations, from on the job site to a formal training centre. Formal training can take place at a dedicated facility, or in a classroom adjacent to the work place. The location is determined by the cost effective use of available facilities and training staff or experts.

4.2.10 Generally, there are three forms of training, namely, training based on performance, training based on knowledge and awareness training.

4.2.11 Training based on performance helps SAR specialist and teams to perform their duties effectively and maintain the required level of competency and proficiency.

4.2.12 Training based on knowledge provides information necessary for the SAR experts and students to perform their duties and one method is to provide knowledge to enable them to review a SAR case.

4.2.13 Awareness training is significant for those persons infrequently involved in SAR such as high level executives, national transportation authorities etc.
4.2.14 On the job training enables learners to learn and contribute to the aims of the organisation simultaneously. The following techniques could be employed for on the job training:

a) checklists that details duties, skills, tasks and procedures required to be taught during training;
b) planning progression, which details the requirements for advancement and is a step-by-step approach, which requires tasks to be performed well at each level before proceeding to the next level;
c) assignment rotation broadens the knowledge of specialists and allows for multi-skilling and an understanding of the broader aspects of the organisation;
d) coaching is the responsibility of every SAR manager and may help to develop the strengths and potential of junior colleagues and assist them to overcome their weaknesses.
e) maintaining a training library assist students to increase their level of knowledge.

4.2.15 Other methods of training could include formal classrooms training, train-the-trainer, maintenance of a specific training facility, adding SAR to a curriculum of an existing training centre and conferences.

4.2.16 The SAR Mission Co-ordinators (SMC) course is a critical training programme to be undertaken by perspective candidates for SMC and OSC positions in Namibia as it is designed, tailor-made and customized for the Southern African Maritime SAR Region mindful of the shared SAR objectives and the need for aligning procedures in the region. The SMC course should be presented to new entrants in the SAR field and also serves as a refresher course for Duty Control Officers appointed at the MRCC and MRSCs.

4.2.17 Namibia imports SAR training facilitators from outside the country to provide training for her maritime SAR personnel. Staff placement in other countries and exchanges of staff is also considered a significant way to transfer skills and maintain the required professionalism and competence amongst SAR personnel.

4.2.18 Formal training programmes should include, but not limited to:

a) **SAR Organisation**
   (i) knowledge of the maritime SAR Organisation and its relationship to maritime safety and security, air traffic, and communication services;
   (ii) knowledge of agreements made with SAR resources, facilities and neighbouring SAR services and/or countries;
   (iii) knowledge of the capabilities and limitations of available resources and facilities;
   (iv) knowledge of legal aspects e.g. in maritime incident, policies, towing and salvage.
b) SAR Procedures
   (i) how to obtain and evaluate information and reports;
   (ii) alerting of facilities and commencement of SAR operations;
   (iii) interpretation of different systems of position reporting;
   (iv) determination of a search area;
   (v) search techniques and patterns of air, maritime and land facilities;
   (vi) plotting of search information;
   (vii) communications procedures;
   (viii) rescue procedures;
   (ix) supply - dropping procedure;
   (x) ditching assistance, interception and escort procedures; and
   (xi) briefing and questioning of SAR personnel.

c) SAR Administration
   (i) routine administrative functions;
   (ii) data and information management;
   (iii) visits to SAR facilities and supply depots, participation in exercises, including packing and loading of survival stores; and
   (iv) instructions through films, relevant journals etc, on recent developments in SAR.

Public Safety Training Programme

4.2.19 A Public Safety Training Package should be developed through extensive consultation involving all maritime SAR stakeholders. This programme should include but not be limited to distress prevention, escape procedures, survival techniques, how to be located and actions to be taken to assist in one’s rescue.

4.3 Exercises

4.3.1 To reach a high degree of proficiency, periodic SAR exercises must be conducted by the MRCC. Joint SAR exercises must also be arranged and held with countries with which Namibia has concluded SAR Agreements and these exercises should be held at least once every 3 years.

4.3.2 Exercises test and improve operational plans and communications, provide learning experiences and improve liaison and co-ordination skills. There are three levels under which exercises must be conducted, namely Communication Exercise, Co-ordination Exercise and a Full-scale on Field Exercise.
4.3.3 A Communication Exercise requires the least planning and consists of periodic use of all means of communications between all potential users to ensure capability for actual emergencies. This exercise must be conducted at least once quarterly.

4.3.4 A Co-ordination Exercise involves simulated response to a crisis based on a series of scenarios. All levels of the maritime SAR service are involved but do not deploy. A co-ordination exercise must be conducted at least once per year as it requires a lot of planning and at least one to three days to execute.

4.3.5 A Full-scale or Field Exercise differs from the previous types in that actual SAR facilities are deployed. This increases the scope of maritime SAR system-testing and added realistic constraints due to times involved in launching, transit and activities of the SRU’s. This exercise must be held at least once every three years.

4.3.6 The responsibility of ensuring that these exercises are conducted lies with the Head of Maritime SAR Administration.

4.4 Improving professionalism

4.4.1 To enhance professionalism, maritime SAR managers should:
   a) ensure that SAR procedures as developed by the IMO and ICAO are followed, and that supplemental plans of operations and procedures suitable to local SAR exercises are allowed for;
   b) ensure that SAR personnel have the maturity and competence to carry out assigned duties and tasks;
   c) make arrangements to use all available resources for SAR, to the extent practicable;
   d) arrange to work with other States, especially as provided for in SAR agreements, and ensure that responsible personnel understands and follows such agreement;
   e) keep a complete and accurate log of operations;
   f) properly investigate and report any problems, and find ways to apply lessons to prevent future recurrences;
   g) ensure that once a specific step is taken e.g. acknowledgement of a distress call and offer to render assistance, every efforts is made to follow through on the offer, particularly since the survivors may forego other opportunities for help based on this understanding; and
   h) take every reported incident as a distress situation until proven otherwise.

4.5 Qualification and Certificates
4.5.1 The MRCC Chief should ensure that qualification and certification processes are in place in order to ensure that personnel have sufficient experience, maturity, and judgement to perform assigned tasks.

Qualifications

4.5.2 The purpose of a qualification is to indicate an individual’s ability to perform certain duties. During a qualification process, the individual must, by demonstration of abilities, show mental and physical competence to perform as part of a team.

4.5.3 Qualifications vary with each type of workplace e.g. vessels, aircraft or MRCC. A trainee may be assigned to an associate who observes and can attest to the trainee’s competence to perform each particular task. Thorough knowledge of the geographical area of operation should also be demonstrated.

Certification

4.5.4 The purpose of certification is to authorize an individual to serve in a stated capacity. Certificates may be issued to candidates who meet the requirements of service, age, medical fitness, training, qualification and, examinations and maturity.

4.5.5 Certification should be provided in writing prior to the person assuming duties. Certification is the official recognition by the organisation that it trusts the individual to use acquired abilities and skills. Certain task may require periodic re-certification and these tasks must be identified and listed in the MRCC’s operational plan.

4.5.6 The person in charge should be satisfied and believe that a qualified person has the maturity, leadership and integrity to perform as a team member before issuing a certificate, the final step leading to full assumption of duties.

4.5.7 Upon completion of training, prospective MRCC personnel should undergo qualification procedures before assuming duties. MRCC staff should be fully qualified in SAR incidents analysis, search planning and SAR operations management.

4.5.8 Training and qualifications improve organisational effectiveness, create a feeling of fairness, and reduce complaints against the organisation.
PART 5 – SAR COMMUNICATIONS

5.1 Overview

5.1.1 The success of any maritime SAR operation will be jeopardized if good communication is lacking. Communications support distress alerting, co-ordination and locating functions by allowing those in distress to alert the SAR system, and for the SAR system to respond and conduct its mission and for survivors to help SAR units respond and conduct a rescue.

5.1.2 The necessary communications for maritime SAR may include telephones, radio operating on international distress frequencies, long-range terrestrial and satellite systems and other equipment depending upon geography, the capabilities of mobile facilities within an area and other factors affecting the ability of persons to contact each other.

5.1.3 The quality, usefulness and overall timeliness of communications from their source to the final destination is of critical importance in maritime SAR. SAR communication equipment must at all times be accessible to all parties involved in a SAR operation. They must be reliable, i.e. be in good working condition at all times because time is of the essence in a SAR operation. Distress messages should always have precedence, that is, they must be processed before all other communications.

5.1.4 Communications must be able to take place reliably and quickly between units in distress and the SAR system, and between components of the SAR system, nationally, regionally and internationally. Maritime SAR operations in Namibia are likely to require communication between two or more of the following facilities:

   a) MRCCs, MRSCs, secondary MRSCs
   b) port authority;
   c) SAR vessels;
   d) SAR aircraft;
   e) air force bases/command posts;
   f) naval shore authorities;
   g) other vessels at sea;
   h) aircraft service units;
   i) coastal radio stations;
   j) police stations, vessels and vehicles;
   k) SAR land stations, land mobile stations and vessels;
   l) lighthouses;
   m) emergency medical services.
5.1.5 Because the above facilities come from different functional areas, interoperability becomes critical in their communications. Ships must be able to communicate with aircraft, and both must be able to communicate with the SAR system. All who may be involved with SAR should be provided with communication procedures, frequencies and equipment sufficiently compatible to carry out their duties.

5.1.6 Distress traffic includes all messages relating to immediate assistance required by persons, aircraft or marine craft in distress, including medical assistance. Any interference, which puts at risk the operation of safety services or degrades, obstructs or interrupts any radio communication, is harmful. SAR personnel should be the last people to cause harmful interference, and should co-operate with law enforcement agencies to report and stop incidents of interference.

5.2 Alerting Posts

5.2.1 "Alerting Post" is a broad term, which covers any facility, regardless of its primary purpose, involved in receiving information about an apparent distress situation and relaying it to a MRCC or MRSC. Alerting posts include, but are not limited to, coastal radio stations, Local User Terminals (LUT) and Mission Control Centres (MCC) of the Copas-Sarsat system, land earth stations of the Inmarsat System, Air Traffic Services (ATS), Port Control Centres (PCCs), police stations, naval command centres, Vessel Monitoring Services (VMS), emergency and fire services, vessels, aircraft or other persons or facilities which may receive and relay such alerts.

5.2.2 The ability of MRCC or MRSC to respond to an emergency depends largely on information forwarded via alerting posts. Communications between alerting posts and the MRCC, MRSC or local SAR facilities should be by fast and reliable means. Communication channels should be checked regularly to ensure that they are operational at all times.

5.2.3 The following institutions and facilities will serve as dedicated alerting posts and will be staffed 24 hours a day, namely, MRCC, MRSC, coastal radio station, PCCs, ATS, Namibian Navy Command Centres, and Namibian Police Stations, emergency and fire services, boating or yacht clubs.

5.2.4 The following procedures will be followed by the alerting post, on becoming aware of an emergency or potential emergency situation:

   a) gather as much information about the emergency situation as is possible;
   b) report to the nearest MRCC or MRSC;
   c) after making the initial report to the MRCC or MRSC, the alerting port must check the report for authenticity and accuracy;
   d) if there is reason to believe that the message or signal indicating the emergency is a hoax or false alert, declare the message as such; and
e) keep open the channel of communication between itself and the source of the emergency message until the MRCC or MRSC declares that it is no longer required.

5.2.5 A designated alerting post will gather the following information on a distressed for passing onto the MRCC or MRCS:

a) identification of the distressed craft (Name, type and call sign);
b) position of emergency (latitude/longitude or bearing/distance from known position or last reported position and next reporting position);
c) date or time of position;
d) nature of emergency (fire, collision, man overboard, disable, overdue, crash etc);
e) craft description (size, type, hull colour, cabin colour, deck colour, rigging etc);
f) persons on board;
g) date, time and point of departure, planned route, estimated time of arrival (ETA) and point of destination;
h) radio frequency in use;
i) emergency radio equipment and frequencies, including emergency position indicating beacons;
j) on-scene weather and sea conditions;
k) assistance required, if not obvious;
l) heading, speed and fuel on board;
m) details of initial reporter (name, telephone number, address etc);
n) date and time of initial report;
o) possible route deviations;
p) details of navigation equipment on board;
q) details of survival equipment on board;
r) other information sources (friends, relatives, associates, agents etc);
s) any other pertinent information.

5.2.6 A designated alerting post will gather the following information in relation to a lost person involved in a maritime emergency:

a) name of missing person;
b) location last seen;
c) date and time last seen;
d) known intentions or possible actions of missing person;
e) description of missing person;
f) clothing, footwear and equipment;
g) physical and mental condition;
h) knowledge of area;
i) weather conditions;
j) action being taken;
k) action desired, if not obvious;
5.2.7 A designated alerting post will gather information on existing weather conditions from the person who reported an occurrence by posing questions on the following:

a) whether it sky was clear or cloudy and recent changes;
b) whether severe weather conditions such as thunderstorms are occurring or have occurred, and at what times it started and stopped;
c) visibility and any factors affecting it such as fog, smoke, haze etc and time of recent changes;
d) description of the water or sea conditions;
e) wind direction and speed and recent changes.

5.3 SAR Communications Frequencies

5.3.1 The communications frequencies to be used by SAR resources, facilities and units are outlined in the IAMSAR Manual, Volume II as amended.

5.4 Global Maritime Distress and Safety (GMDSS)

5.4.1 Communications between merchant vessels in distress and maritime SAR organisations are achieved by a satellite and radio watch known as the Global Maritime Distress and Safety System (GMDSS). GMDSS enables a distress alert to be transmitted and received automatically over short and long distances. The system allows maritime SAR authorities as well as shipping in the vicinity of the distress to be rapidly alerted so that a coordinated SAR operation can be commenced with minimum delay.

5.4.2 Additionally, GMDSS provides for urgency and safety communications, and the dissemination of Maritime Safety Information (MSI). Certain fishing vessels and other marine craft may also carry GMDSS equipment. Advice may be sought from the MRCC staff who are familiar with the SOLAS GMDSS provisions and associated IMO requirements. GMDSS equipped vessels can be expected to perform the following wherever they operate:

a) transmit ship-to-shore distress alerts by two independent means;
b) receive shore-to-ship alerts (usually relayed by International MRCCs);
c) transmit and receive:
    (i) ship-to-shore alerts;
    (ii) SAR co-ordinating communications;
    (iii) on-scene communications;
(iv) locating signals;
(v) maritime safety information;
(vi) general radio communications to end from shore; and
(vii) bridge to bridge communications.

5.4.3 In Namibia, Telecom Namibia has been contracted to MSI including distress alerts on behalf of MWT. These are provided in terms of, and in according with, the International Convention on Maritime Search and the GMDSS requirements under the SOLAS Convention.

5.4.4 The kind of services provided by Telecom Namibia on behalf of MWT includes the following:

a) Watch keeping services - voice and Digital Selective Calling (DSC);
b) navigation warnings;
c) Navtex services;
d) ship reporting services;
e) Receive and relay distress communications; and
f) Automated Mutual Assistance Vessels Rescue (AMVER) System.

5.4.5 Regulation 5 of chapter IV of the 1988 Amendments for the SOLAS Convention requires every State to provide information to IMO about its shore-based SAR facilities to support ships carrying GMDSS communications equipment off its coast.

5.4.6 IMO collects and publishes this information in the GMDSS Master Plan. It is the responsibility of the Head of Maritime SAR Administration to ensure that the Master Plan has current information about its facilities, and that the MRCC’s communications facilities, ships and training institutions have a copy of the Master Plan.

5.4.7 The Master Plan shows for every State, in list format and on maps, which of the following services are operational and planned:

a) VHF, MF and HF Digital Selective Calling (DSC) installations;
b) Inmarsat, Safety Net, Navtex and HF narrow-band direct printing (NBDP) services; satellite EPIRB registration, MCC and LUT information; and
c) Which MRCC’s are using Ship Earth Stations (SES).

5.5 COSPAS-SARSAT System

5.5.1 COSPAS-SARSAT is a satellite system designed to provide distress alert and location data to assist SAR operations, using spacecraft and ground facilities to detect and locate the signals of distress beacons operating on 406 MHz. The responsible Cospas-Sarsat Mission Control Centre (MCC) forwards the position of the distress and other related information to the appropriate SAR authorities.
5.5.2 The primary purpose of this system is to detect, positively identify and provide the positions of 406 MHz EPIRBs, ELTs and PLBs anywhere in the world with the objective of supporting all organisations in the world with a responsibility for SAR operations, whether at sea, in the air or on land.

5.5.3 The Cospas-Sarsat system comprises:

a) Low orbiting satellites in near polar orbits;
b) Satellites in geostationary orbit;
c) Local User Terminals (LUTs), which are ground stations that receive and initially process the raw distress signal data relayed by a satellite;
d) Mission Control Centres (MCCs) which are responsible for the final processing and appropriate distribution of beacon detections; and
e) Frequency stable 406 MHz beacons, each with a unique identification code and capable of transmitting for 24 or 48 hours depending on their use.

5.5.4 The Cospas-Sarsat System provides distress alert and location data to RCCs for 406 MHz beacons activated anywhere in the world. In the Southern African Maritime SAR Region the Mission Control Centre and Local User Terminal (LUT) for the Region is situated in Milnerton, Cape Town, South Africa, and is managed and run by Telkom SA on behalf of the South African Government on a contractual basis.

5.5.5 The South African MCC serves the following countries:

a) Angola;
b) Botswana;
c) Burundi;
d) DRC Congo;
e) Lesotho;
f) Malawi;
g) Mozambique;
h) Namibia;
i) Rwanda;
j) Uganda;
k) Zambia;
l) Zimbabwe;
m) Swaziland; and
n) St Helena Island

Satellites

5.5.6 The satellite constellation is made up of SAR satellites in low earth orbit (LEOSAR) and geostationary orbit (GEOSAR).

5.5.7 Each LEOSAR satellite makes a complete orbit of the earth around the poles in about 100 – 105 minutes. The satellite views a “swath” of the earth of approximately 4000
km wide as it circles the globe, giving an instantaneous “field of view” about the size of a continent. When viewed from the earth, the satellite crosses the sky in about 15 minutes, depending on the maximum elevation angle of the particular pass.

5.5.8 Satellites are not equally spaced and hence do not pass over a particular place at regular intervals. In view of this, pass schedules are computed for each LUT every day. On average a satellite will pass over Southern Africa every 90 minutes or so which could delay beacon location.

5.5.9 The current GEOSAR constellation is composed of five satellites provided by the USA, (GOES 11 and GOES 12), and satellites provided by India (INSAT-3A) and Europe (MSG 1 and MSG 2.). These satellites provide continuous global coverage for 406 MHz beacons with the exception of the Polar Regions. To take full advantage of the real-time alerting capability the beacon must be designed to transmit, in its distress message, position data derived from a satellite navigation system such as the Global Positioning System (GPS).

5.5.10 Although the LEOSAR and GEOSAR systems have been successful over the past years, with over 30 000 lives saved, they have some limitations. For example the LEOSAR can delay beacon location by 1-2 hours while GEOSAR does not cover the polar areas.

Transcending from LEOSAR and GEOSAR to MEOSAR

5.5.11 The above systems are, therefore being replaced by a more responsive and modern Cospas-Sarsar Medium Altitude Earth Orbiting Search and rescue (MEOSAR) satellite system, which combines both LEOSAR and GEOSAR functions and will be using SAR repeaters carried on board the Global Navigation Satellite System (GNSS) constellations consisting of 72 or more Mid Earth Orbiting satellites with connectivity to any beacon anywhere in the world at all times through advanced location processing using time and frequency measurements of beacon signals to triangulate beacon location.

5.5.12 As a result of the foregoing, MEOSAR will be the next generation satellite aided global SAR system providing near instantaneous beacon detection and location, globally at all times.

Beacon detection

5.5.13 With the exception of the GEOSAR, the position of a distress beacon is calculated by using Doppler shift, which is caused by the relative movement between a satellite and a beacon. As a satellite approaches a beacon there is an apparent rise in the beacon frequency and as the satellite moves away the frequency appears to fall. When a satellite is at its closest point to a beacon the received frequency is the same as the transmitted frequency (the point of inflection) and provides the “Time of Closest Approach” (TCA).
5.5.14 This method of calculation produces two possible positions for each beacon (labelled A and B), either side of the satellite’s ground track; one is the true position and the other is its mirror image. The ambiguity is due to the equipment only being able to determine the distance between a satellite and a beacon and not the direction. Position ambiguity is subsequently resolved by using:

a) Data obtained by the same LUT from the next satellite pass which “sees” the beacon; or
b) Data from another satellite pass observed by a different LUT.

**Beacon types**

5.5.15 There are three types of Cospas-Sarsat distress beacons:

a) Emergency Locator Transmitters (ELT) used by aviators;
b) Emergency Position Indicating Radio Beacons (EPIRB) used by mariners; and
c) Personal Locator Beacons (PLB) used on land.

5.5.16 Aviators and mariners often carry PLBs as personal back up devices to ELTs and EPIRBs.

5.5.17 Because 406 MHz beacons transmit an extremely stable frequency, positions calculated by the LUT usually fall within a radius of 5km from the actual beacon position.

5.5.18 406 MHz beacons use digital technology that allows an identifier to be sent when the beacon is activated. This identifier correlates to a registration database held at the MCC and allows additional information to be gained about the target. 406 MHz beacons should be coded with a country code and registered in the country that maintains the database for that country code. It is therefore important that all Namibian 406 MHz beacons are registered with the MRCC.

5.5.19 If a Namibian beacon is detected overseas, the overseas SAR authority may contact MRCC Namibia or the regional MRCC in Cape Town for appropriate details. If, however, a foreign-registered 406 MHz beacon is detected in the Namibian maritime SAR area, the regional MRCC (being the regional LUT for Cospas Sarsat) contacts the appropriate overseas registration authority to obtain further relevant SAR data and share it with the Namibian MRCC as applicable.

### 5.6 SAR RADAR Transponder (SART)

**Overview**
5.6.1 Satellites can detect and provide the positions of the latest distress beacons to an accuracy of a few miles/kilometres. Though this is extremely good, in poor visibility it may not be sufficient to permit a searching craft to quickly locate survivors.

5.6.2 To overcome this problem, a SAR transponder (SART) has been developed which will respond to the normal 3cm X-band (9 GHz) RADAR fitted to merchant ships. It will NOT respond to 10cm S-band (3 GHz) RADAR. It is a short-range homing device, which enables ships and other suitably equipped craft to home on the source of the signal. This facility is in accordance with IMO Resolution A. 530(13) – Use of RADAR transponders for SAR purposes.

5.6.3 A SART can be either a stand-alone item of equipment or built into an EPIRB.

5.6.4 When within RADAR range, the SART will respond to 3cm RADAR pulses by painting a line of blips extending outwards from the SART’s position along its line of bearing on the RADAR screen. When within about one (1) mile of the SART, the blips may change to wide arcs or even complete circles thus giving an indication of the close proximity of the SART, but masking its bearing.

5.6.5 Since the RADAR detection range depends primarily upon the height of the RADAR scanner and the height of the beacon, it is probably not realistic to expect a detection range of much more than 30 miles for an aircraft flying at 3000 ft equipped with 3cm (9 GHz) RADAR and about 10 miles for a ship’s RADAR and a few miles for a motor launch. However, bearing in mind that it is a short-range homing device, this should be adequate for final location.

5.6.6 Tests have shown that the operation of a SART inside the canopy of a life raft will significantly decrease its detection range, so every effort should be made to operate it from outside the canopy and as high as possible. Battery life in the “standby” mode is 96 hours and about eight (8) hours during RADAR interrogation.

5.7 Other Types of Distress Alerting Devices

5.7.1 Advances in technology have seen the development of other distress locating devices.

**Automatic Identification System- Search And Rescue Transmitter (AIS-SRT)**

5.7.2 The Automatic Identification System (AIS) – Search and Rescue Transmitter (SART) derives position and time synchronization from a built in Global Navigation Satellite System (GNSS) receiver and transmits its position with an update rate of one (1) minute. Every minute the position is sent as a series of eight (8) equal position reports, this is to maintain a high probability that at least one of the position reports is sent on the highest point of a wave.
5.7.3 Shipboard GMDSS installations include one or more SAR locating devices. These devices may be either an AIS-SART (from 1 January 2010), or a RADAR-SART (Search and Rescue Transponder). The AIS-SART is used to locate a survival craft or distressed vessel by sending updated position reports using a standard AIS class A position report. The position and time synchronization of the AIS-SART is derived from a built in GNSS receiver.

**Maritime Survivor Locating Systems. VHF DSC Maritime Survivor Locating Devices (MSLD).**

5.7.4 The VHF DSC MSLD, such as the Mobilarm Crewsafe series of beacons, transmit a MAYDAY using a synthesised voice on VHF Channel 16 and a distress alert on DSC (VHF Channel 70) immediately a man overboard incident occurs (or when the unit is manually activated). The transmission is repeated once the MSLD obtains a GPS position (within 1 minute) and is updated every 5 minutes for the first 30 minutes, and then every 10 minutes for the life of the battery (24 hrs). The MSLD includes the MMSI for identification; some MSLD may also transmit on AIS and a 121.5 MHz homing signal.

5.8 Ship Reporting System


5.8.2 The ship reporting system will enable the MRCC to quickly assess the approximate positions, courses and speeds of vessels in the vicinity of a distress situation in order to:

a) reduce the interval between loss of contact with a vessel and initiation of SAR operations in cases where no distress signal has been received;

b) permit rapid identification of vessels which may be called upon to provide assistance;

c) permit delineation of a search area of a limited size in case the position of a person, a vessel or other craft in distress is unknown or uncertain; and

d) facilitate the provision of urgent medical assistance or advice.

5.8.3 The ship reporting system must satisfy the following requirements:

a) provision of information, including sailing plans and position reports, which would make it possible to determine the current and future positions of participating vessels;

b) maintenance of a shipping plot;

c) receipt of reports at appropriate intervals from participating vessels;
5.8.4 Participation in the ship reporting system may be voluntary and vessels will be requested to submit regular reports including a report that they are entering or leaving the Namibian maritime SAR area, sailing plans, and arrival and departure reports when entering or leaving Namibian ports.

5.8.5 In addition to said reporting system, the MRCC may make use of AMVER, which is a worldwide voluntary ship reporting system operated by the US Coast Guard (USCG).

5.9 Communications in Support of SAR Operations

Overview

5.9.1 The SMC is responsible for designating specific frequencies for on-scene use during SAR operations, and for establishing reliable communications with adjacent operations centres. When appointed, the Coordinator Surface Search (CSS) or the On Scene Coordinator (OSC) is responsible for establishing reliable communications between all participating search units and the MRCC.

5.9.2 The SMC is responsible for informing all SAR participants of the specific frequencies selected for an operation. The SMC should designate a primary and secondary frequency in the appropriate frequency bands (HF, VHF and UHF) for use as on-scene channels.

5.10 Communication Facilities on Board Marine Craft

Ship Stations

5.10.1 There are three distinct categories of vessels to be catered for by the maritime SAR system; these are:

a) Deep sea vessels (SOLAS);

b) Fishing vessels; and

c) Pleasure craft.

5.10.2 Most deep-sea vessels will carry communications equipment compatible with the GMDSS. Other vessels, most of which use satellite communications, may extend this
coverage. A continuous bridge listening watch is kept on VHF Ch16, as far as is practicable.

**Fishing Vessels**

5.10.3 Some fishing vessels will carry GMDSS equipment; however the majority of fishing vessels carry a variety of radio equipment and do not maintain regular watches. Frequencies allocated to fishing vessels are normally not compatible with large ships.

5.10.4 The Ministry of Fisheries and Marine Resources (MFMR) uses the Vessel Monitoring Systems (VMS) which utilises Inmarsat-C polling to track fishing vessels operating in Namibian waters for regulatory reasons. MFMR may be able to assist the MRCC in contacting or locating fishing vessels.

**Pleasure Craft**

2.9.17 Regulations concerning the carriage of radio and other SAR equipment by pleasure craft vary depending upon the type and size of craft and its area of operations.

2.9.18 However, there is a general acceptance by the boating community of the need to carry a VHF radio with continuous digital selective calling (DSC).
PART 6 – AWARENESS, NOTIFICATION AND INITIAL ACTION

6.1 Overview

6.1.1 When the maritime SAR system first becomes aware of an actual or potential emergency, the information collected and the initial action taken are often critical to successful SAR operations. It must always be assumed that in each incident there are survivors who will need assistance and whose chances of survival are reduced by the passage of time.

6.1.2 The success of a SAR operation depends on the speed with which the operation is planned and carried out. Information must be gathered and evaluated to determine the nature of the distress, the appropriate emergency phase, and what action should be taken. Prompt receipt of all available information by the MRCC is necessary for thorough evaluation, immediate decision on the best course of action and timely activation of SAR assets to make it possible to:

a) locate, support and rescue persons in distress in the shortest possible time; and
b) use any contribution survivors may still be able to make towards their own rescue while they are still capable of doing so.

6.1.3 Experience has shown that the chances of survival of an injured person decrease by as much as 80% during the first 24 hours, and those for uninjured persons diminish rapidly after first three days. Following an accident, even uninjured person who are apparently able-bodied and capable of rational thought are often unable to accomplish simple tasks and are known to have hindered, delayed or even prevented their own rescue.

6.2 SAR Stages

6.2.1 Response to a maritime SAR incident usually proceeds through a sequence of five stages. These stages are groups of activities typically performed by the SAR system in responding to a SAR incident from the time the system becomes aware of the incident until its response to the incident is concluded.

6.2.2 Response to a particular SAR incident may not require the performance of every stage. For some incidents, the activities of one stage may overlap the activities of another stage such that the portions of two or more stages are being performed simultaneously. The five SAR stages are:
a) **Awareness.** Knowledge by any person or agency in the SAR system that an emergency situation exists or may exist.

b) **Initial Action.** Preliminary action taken to alert SAR assets and obtain more information. This stage may include evaluation and classification of the information, alerting of SAR assets, communication checks and, in urgent situations, immediate performance of appropriate activities from other stages.

c) **Planning.** The development of operational plans including plans for search, rescue and final delivery of survivors to medical facilities or other places of safety as appropriate.

d) **Operations.** Dispatching SAR assets to the scene, conducting searches, rescuing survivors, assisting distressed craft, providing necessary emergency care of survivors and delivering casualties to medical facilities.

e) **Conclusion.** Return of SRUs to a location where they are debriefed, refuelled, replenished and prepared for another mission, return of SAR assets to their normal activities and completion of all required documentations.

6.2.3 All maritime SAR incidents will be regarded as Namibian MRCC operations and will be conducted by the MRCC or its MRSC’s. If, in the opinion of the Chief of the MRCC, the operation is not a Namibian operation, he/she will advise the SMC responsible for the operation in writing to discontinue the operation.

6.2.4 A maritime SAR incident is considered imminent or actual when any of the following conditions exist:

a) a surface vessel or craft has requested assistance;

b) a surface vessel or craft has transmitted a distress signal;

c) it is apparent that a surface vessel or craft is in distress;

d) a surface vessel or craft is reported to be sinking or to have sunk;

e) the crew is reported to have abandoned ship or is about to do so;

f) reports indicate that the operating efficiency of the craft is so impaired that the craft may sink or the crew may be forced to abandon;

g) the surface vessel or craft is overdue or unreported;

h) persons are in the water and require assistance;

i) a distress beacon has been activated;

j) a MEDEVAC is required on medical advice.

6.3 **Phases of Emergency**

6.3.1 Three phases of emergency have been established for classifying incidents and determining the actions to be taken for each particular incident.

6.3.2 They are as follows, in order of progression:
6.3.3 Upon initial notification, an incident is classified in any one of the three phases but, depending on how the situation develops, it may have to be reclassified.

**Uncertainty phase**

6.3.4 An Uncertainty Phase is said to exist when there is knowledge of a situation that may need to be monitored, or to have more information gathered, but does not require dispatching of resources.

6.3.5 When there is doubt about the safety of an aircraft, ship, or other craft or persons on board, or it is overdue, the situation should be investigated and information gathered. A communication search may begin during this phase. An Uncertainty Phase is declared when there is doubt regarding the safety of an aircraft, ship, or other craft, or persons on board.

**Alert Phase**

6.3.6 An Alert Phase exists when an aircraft, ship or other craft, or persons are having some difficulty and may need assistance, but are not in immediate danger. Apprehension is usually associated with the Alert Phase, but there is no known threat requiring immediate action. SRUs may be dispatched or other SAR assets diverted to provide assistance if it is believed that conditions might worsen or that SAR assets might not be available or able to provide assistance if conditions did worsen at a later time.

6.3.7 For overdue craft, the Alert Phase is considered when there is a continued lack of information concerning the progress or position of a craft. SAR resources should begin or continue communications searches, and the dispatch of SRUs to investigate high-probability location or overfly the craft's intended route should be considered. Vessels and aircraft passing through areas where the concerned craft might be located should be asked to maintain a sharp lookout, report all sightings and render assistance if needed.

**Distress Phases**

6.3.8 A Distress Phase exists when there is reasonable certainty that an aircraft, ship on other craft or persons on board is in danger and requires immediate attention. For overdue craft, a distress exists when communications searches and other forms of investigations have not succeeded in locating the craft or revising its ETA so that it is no longer considered overdue.
6.3.9 If there is sufficient concern that for the safety of a craft and the persons aboard to justify search operations, the incident should be classified as in the Distress Phase.

6.3.10 Conditions under which these phases of emergency could be declared, contents of all the appropriate notifications, procedures to be followed and actions that must be followed are set forth in the IAMSAR Manual Volume II as amended.

6.4 Maritime Medical Evacuations

6.4.1 Medical evacuation (Medevac) of a seriously ill or injured person on board a vessel at sea, in the Namibian SAR area, will only be carried out by the Namibian MRCC when the person's condition requires that he obtain medical treatment sooner than when his vessel could be able to get him to a suitable medical facility.

6.4.2 Procedures regarding medical evacuations are articulated to in Part 7, 7.3, of this Plan.
PART 7 – SAR OPERATIONAL PROCEDURES

7.1 Maritime SAR Incidents

Uncertainty Phase

7.1.1 An uncertainty phase exists when an alerting post declares to the MRCC that:

a) there is doubt regarding the safety of a vessel and/or the persons on board; or
b) it is overdue and has failed to make its E.T.A.; or

c) it has failed to make an expected position or safety report.

Alert Phase

7.1.2 An alert phase is declared:

a) when there is apprehension regarding the safety of a vessel or the persons on board; and

b) when following the uncertainty phase, attempts to establish contact with the vessel have failed and enquiries addressed to other appropriate sources have been unsuccessful; or

\[ \text{c) when information has been received indicating that the operational efficiency of a} \]

\[ \text{vessel is impaired but not to the extent that a distress situation is likely.} \]

Distress Phase

7.1.3 A distress phase is declared when:

a) positive information is received that a vessel or the persons on board are in grave and imminent danger and in need of immediate assistance; or

b) following the alert phase, further unsuccessful attempts to establish contact with the vessel and more widespread unsuccessful enquiries point to a probability that the vessel is in distress; or

\[ \text{c) information is received which indicates that the operating efficiency of the vessel has been impaired to the extent that a distress situation is likely.} \]

7.1.4 The master or person in command of a vessel can declare any one of the three above-mentioned emergency phases. However, it is normal practice that, when possible, the
master or person in command of the vessel will declare the distress emergency only when his vessel and/or her crew are in grave and imminent danger.

7.2 Maritime SAR Operation Sequence of Events

Uncertainty Phase (INCERFA)

7.2.1 An alerting post initiates the uncertainty phase by informing the nearest MRSC of the uncertainty. Upon the declaration of an uncertainty phase by the MRSC it should -

a) verify, if necessary, the information received;
b) if no information is available on the intentions of the master or person in command of the vessel, attempt should be made to obtain information on the route, ports and/or times of departure and/or expected time of arrival (ETA) of the vessel;
c) start a plot of the situation based on the information obtained;
d) conduct a communication search in order to:
   (i) attempt to communicate with the vessel by radio;
   (ii) determine the vessel's most probable whereabouts by -
      • making enquiries at all locations where it might have stopped or called (including the point or port of departure);
      • contacting other appropriate sources, including vessels at sea which may have sighted the vessel and other persons who may have knowledge of the captain's intentions;
   e) inform the MRCC of the situation and confirm that the MRSC has taken charge of the operation.

7.2.2 When the communication search indicates that the ship or craft is in no distress, the MRSC will close the incident and immediately inform the reporting source and any facility that has been alerted. When there continues to be apprehension regarding the safety of a vessel or the persons on board, the uncertainty phase will be advanced to the alert phase.

Alert Phase (ALERFA)

7.2.3 The alert phase can be initiated by an MRSC or the MRCC. Upon the declaration of an alert phase by an MRSC or MRCC it should immediately appoint an SMC and alert staff and SAR facilities.

7.2.4 In the case of an MRSC, the SMC should evaluate the situation and decide on one of the following courses of action:
a) If the operation falls within the capabilities of the MRSC, activate the MRSC SAR plan. Inform the MRCC of the situation.

b) If the operation is of such a nature that it is beyond the capability of the MRSC, immediately hand over the operation to the MRCC and inform them of the hand-over.

7.2.5 In the case of an MRCC, the SMC should evaluate the situation and decide on one of the following courses of action:

a) If the operation falls within the capabilities of the MRCC, initiate the MRCC SAR plan.

b) If the operation falls within the capabilities of an MRSC, hand the operation over to the MRSC and inform them of the hand-over. The MRCC should monitor the progress of the operation and be prepared to take charge should it escalate beyond the capabilities of the MRSC.

Distress Phase (DETRESFA)

7.2.6 This distress phase can be initiated by:

a) the MRSC or the MRCC based on the information derived from the alert phase; or

b) the master or person in command of the vessel making a distress signal declaring that his vessel or persons on board the vessel are in grave or imminent danger.

7.2.7 Where the master or person in command of the vessel declares the distress phase, the MRSC or MRCC will move directly into the distress phase by appointing the SMC and initiating the SAR plan.

7.2.8 The SAR Operational plan should be such that it can be initiated without having to go through the alert phase to reach the distress phase. However, many of the steps required in the alert phase will be required when going directly into the distress phase.

7.2.9 The SAR Operational plan should amongst others detail that the following duties be carried out in the distress phase:

a) Initiate action in accordance with the detailed MRCC/MRSC Operational Plan or instructions for the conduct of SAR operations in its area;

b) Where appropriate, estimate the degree of uncertainty of the vessel’s position and determine the extent of the area to be searched;

c) Notify the owner or the agent, if possible, and keep him informed of developments.

d) Notify adjacent MRCCs or MRSCs which may render assistance or which may be concerned with the operation;

e) Request assistance which might be available from ships, craft or services not included in the SAR service;
f) Prepare a general plan for the conduct of operations from the information available;
g) Make the appropriate amendments as the operation develops;
h) When applicable, inform the vessel in distress, if possible, of the SAR action taken;
i) Co-ordinate all the SAR efforts in the operation;
j) Appoint on-scene coordinators (OSC) in the SAR operation;
k) Obtain, research, keep and update weather reports for the area in which the SAR operation is taking place;
l) Notify the local NAMPOL Liaison Officer. At all times the local NAMPOL Liaison Officer must be kept informed of the progress of the SAR operation. The MRCC Chief or MRSC Chiefs must ensure that their SAR plan has the contact numbers (telephone and fax) available for use by the duty SMC. The NAMPOL Liaison Officer can be kept informed of a SAR operation by copy of the SITREPs. **It is the duty and responsibility of NAMPOL to take charge of deceased persons and/or wreckage and they have to be informed where there is a possibility of bodies and/or wreckage coming ashore. Where a SAR operation is terminated with persons missing at sea in Namibian waters, the NAMPOL Liaison Officer must be informed in writing of such fact.**
m) Notify accident investigation authorities as appropriate;
n) Notify the resources mentioned in (e) in consultation with the OSC when their assistance is no longer required;
o) In the case of a MRSC, keep the MRCC informed of the progress of the operation;
p) Keep the MRCC Chief and the Head of Maritime SAR Administration informed of the progress of the operation.

### 7.3 Medevac

**Medical evacuation (Medevac) of a seriously ill or injured person on board a vessel at sea in the Namibian SAR area will only be carried out the person’s condition requires that he obtain medical treatment sooner than when his vessel could be able to get him to a suitable medical facility.**

**Procedure**

a) Coordination of a Medevac is to be carried out by the MRSC that is nearest to the vessel;
b) Information received by a coastal radio station, the ship’s agent, the MRCC or any other source is to be immediately relayed to the nearest MRSC;
c) This MRSC will establish in whose area of control the ship is and immediately transfer the information to the MRSC under whose area of control the ship falls;
d) The controlling MRSC will evaluate the situation by:
   i) referring the medical information to a Doctor to establish the sense of urgency;
(ii) obtaining more medical information if required;
(iii) establishing the vessel’s ETA at the nearest port;
(iv) determining the most suitable means to effect evacuation considering the time element involved and environmental conditions;
(v) Civilian helicopter operators are to be approached first and only if there is no civilian helicopter available, will NDF be approached.

e) If the doctor consulted in (d) above confirms the urgency of the case then the controlling MRSC will:

(i) instruct the resource to proceed with the Medevac;
(ii) consult with the master of the vessel confirming that the Medevac is underway and he/she is to prepare his ship accordingly;
(iii) inform the master that he/she is to ensure that the patient has his/her passport, seaman's papers, medical records and any medication he/she has been using with him/her;
(iv) inform the master or person in command of the vessel that the vessel's owners, bare-boat charterers (if any), or the seaman's employers are liable for any and all costs incurred, and obtain from such person:
   • a confirmed acceptance of such liability (whenever possible);
   • his/her name;
   • the correct spelling of the vessel's name;
   • the vessel's port of registry and nationality;
   • the name and address of the vessel's owners; and
   • the vessel's SA agent or the vessel's Protection and Indemnity (P & I) club.

f) The controlling MRSC will, if there is a local agent for the ship, remind the agent to inform customs and immigration of the situation, or do so itself;
g) The controlling MRSC will co-ordinate the operation until completed;
h) The controlling MRSC will co-ordinate with the MRCC as required;
i) The controlling MRSC will transmit an incident report on completion of the Medevac to the MRCC.

List of Doctors

7.3.2 The MRCC Chief is to ensure that the operational plans of the MRCC and the MRSC have updated contact details of doctors recognised/nominated for maritime SAR purposes for easy reference in the event of a Medevac situation. In some cases especially in the event of a seriously injured person, it would be prudent to have a medically trained person available on board the resource carrying out the Medevac.
7.4 Mass Rescue Operations (MRO)

7.4.1 A mass rescue operation (MRO) is one where immediate assistance is required for a large number of persons in distress. It is likely that normally available resources will be inadequate to deal with the response if the numbers involved are large. If a mass rescue situation develops at sea, another dimension is added.

7.4.2 It is reasonable to expect that all casualties recovered in a marine MRO will require some form of medical or personal attention once they are landed ashore due to the significance and drama of the event.

7.4.3 Although rare occurrences, the potential is always present in areas where large numbers of persons travel by sea or air. Namibian ports are frequently visited by large passenger ship carrying 2000 persons or more while offshore drilling platforms exploring for oil and gas offshore Namibian also accommodate a large number of persons. Therefore emergencies involving either of these maritime activities could trigger a MRO.

7.4.4 The risk of disaster on busy routes can come from bad weather and sea conditions, collision, engine or structural failure and in recent years from terrorism.

7.4.5 The response to a MRO incident in the Namibian maritime SAR area of responsibility would involve all available SAR resources along with vessels of opportunity at sea. It could also involve SAR resources from neighbouring and other countries.

7.4.6 In a major marine emergency situation, perhaps involving a large passenger vessel with up to 2,000 persons or more on board, in bad weather conditions, it is likely that the system will be over-burdened. This is particularly so with a prolonged incident response taking place over a number of days. Resource exhaustion, staff shortages in all areas, the interface between sea and land, communications system, hospital bed availability etc will be factors for detailed attention in major emergency plans.

7.4.7 There will be very high volumes of communications at many levels in a mass rescue operation. Radio communications between the national and regional MRCCs and SAR units, on-scene with the various assets air and sea, phone communications, MRSC, Namibian Ports Authority, OMA, Hospitals, Ambulance, Fire Services, NAMPOL, Air Traffic Control, families of passengers and crew, press, etc. Communications systems may thus become overloaded.

7.4.8 Unless some catastrophic failure has occurred on a passenger vessel, or any other surface vessel, it is generally best practice for passengers to remain on board until rescued. Abandoning passengers to life rafts in bad weather/sea conditions can be a very difficult and risky procedure. Winching survivors, some of whom may be injured or elderly and infirm or young children, from a rolling/ pitching vessel can be equally risky and, a very slow process.
7.4.9 A Large aircraft ditching at sea, although very rare, will usually necessitate immediate abandonment to liferafts and a mass rescue effort.

7.4.10 The use of other vessels at sea can be an essential element of a major emergency response operation. They can be used as a base for SAR helicopter operations to reduce transit times when long distances are involved. They can accommodate large numbers of survivors depending of the type of vessel and can provide a lee to reduce the effects of wind and sea on the casualty. Large passenger vessels may be well suited for this purpose.

7.4.11 Response to a major emergency involving a MRO will be multi-agency and perhaps international. Although the SMC remains in charge of the SAR co-ordination response, it is likely that in major emergencies, a Marine Crisis Management Team (MCMT) will be established to advise/liaise/administer/manage the emergency at a very senior level comprising of the relevant members of the National Maritime SAR Committee (NMSC) or the National Risk Management Committee (NRMC).

7.4.12 Assistance in the form of a MWT SAR Liaison Officer or Fire Service Officers could be placed on board the casualty in certain situations. Fire Service personnel can provide fire fighting to assist the distressed vessel crew and can provide triage for injured persons prior to evacuation by lifeboat or helicopter.

7.4.13 Various aspects of major emergency response and MROs require careful planning and regular exercise. The realistic exercise element is essential but very difficult to provide. SAR authorities will not normally encounter MROs since they are rare occurrences. Check lists designed for use in mass rescue operations can assist the maritime SAR authorities with tasking records, weather/sea conditions, event times, vessel details, survivor number accounting and other issues should be used and amended following assessment during exercise scenarios. Shortcomings identified in mass rescue exercises should be remedied without delay.
PART 8 – PUBLIC RELATIONS

8.1 Overview

8.1.1 SAR operations for missing aircraft and vessels generate considerable publicity. By virtue of its nature and role, the MRCC is a resource of news and this is especially true during SAR incidents. The public should be informed during maritime SAR operations, within the limits of confidentiality, of SAR actions. The potential benefits of early release of information include:

a) additional information from the public, leading to more effective use of maritime SAR resources;

b) fewer time-consuming requests from the news media; and

c) reduction in inaccurate public speculation about the SAR mission;

8.1.2 MRCC should be governed by public relations procedures, to be developed by the MRCC Chief in consultation with the Head of Maritime SAR Administration, when dealing with the media. It is important that a relationship between the media and an MRCC is established such that:

a) the media’s legitimate interest in an incident of concern and the public’s “right to know” is respected;

b) information reaching the public is factual and as complete as possible;

c) the operational functioning of the MRCC is not prejudiced; and

d) benefit is derived from publicity of an incident and from media broadcasts for information made at the request of SAR staff.

8.1.3 All press or media releases shall be made in the name of the Namibian maritime SAR system. All the organisations that participated in a maritime SAR operations should be recognised and their contributions acknowledged by whoever is appointed as Public Relations Officer (PRO).

8.2 Press Release

8.2.1 The early release of information will frequently aid in preventing time-consuming request from news media concerning the operation. In case where extensive searches are being conducted release of information to the public may bring important leads to the SMC.

8.2.2 News releases should be written following the time-proved format of who, what, where, when, why and how. In drafting a release all six of these items should be covered in
the first paragraph. Subsequent paragraph can provide additional detailed information concerning one or more of these questions. By drafting releases in this fashion the news media will be able to cut portions of the release in order to meet their space requirements without damaging the overall story. The release of names can be a sensitive issue and policies and procedures should be established in accordance with privacy guidelines.

8.2.3 A good news release will be well written, factual and newsworthy. It should not contain personal opinion, judgements, elaboration, colouring or any classified material. Asking the following questions may test news-worthiness:

a) is the story still timely?
b) are the people involved known?
c) is the story unusual?
d) is locality within the range of the news media’s interest?
e) does the story have general interest?
f) has the story a personal or human-interest appeal to many people?

8.2.4 A maritime SAR officer shall not disclose to the media:

a) the name of any crew or other missing persons;
b) any personal judgements pertaining to any person involved in the incident;
c) any comments on the judgement, experience or training of persons involved in the incident;
d) degrading opinion on the conduct of the SAR operation or personalities involved;
e) personal opinions and theories;
f) names of those associated with the search;
g) names of persons who have given information relating to the incident.

8.2.5 SAR officers should not comment on behalf of other SAR authorities or organisations.

8.2.6 Media releases may include the following information:

a) type of vessel, other factual details of vessels
b) reason for the SAR operation, e.g. vessels/aircraft overdue, report of impending crash landing; weather situation; beacon activation;
c) owner of the aircraft/vessels (subject to consent);
d) number of missing persons;
e) area being searched;
f) number and types of assets engaged in the search;
g) arrangements for the search;
h) details of other authorities participating in the search; and
i) reinforce the positive aspects relating to safety and survival.
8.2.7 As the operation progresses, releases should be made periodically to keep the public updated on the progress being made. A final release should be made when the case is concluded. This release should summarise the activities conducted during the operation, giving full particulars on the efforts expended to locate and rescue the distressed persons. The final release should be a complete summary of the incident and details:

a) the number of aircraft missions, total hours flown and use of vessels;

b) auxiliary land or marine search, if applicable;

c) the reasons for termination; and

d) any other information relevant to the incident that should be made public.

8.3 Requesting Public Assistance

8.3.1 The MRCC Chief/SMC may enlist the news media to obtain information from the general public. In sparsely populated areas, information from the general public may be sought through the media, requesting members of the public to contact the MRCC. The MRCC telephone number should be included as part of the release.

8.4 Liaison with Relatives

8.4.1 Information that may significantly effects conduct of search may be obtained from relatives and friends of missing persons. Information relating to the personal history and possible course of action taken by the missing persons should be collected by officers trained in investigation methods and competent to describe the current and proposed search plan in a reassuring manner.

Notification of Next Of Kin

8.4.2 The SMC should be aware of the concerns of the relatives of the missing persons. During a search, it is recommended that one staff member should maintain regular contact with the relatives to provide information and outline plans. If appropriate, relatives should be encouraged to visit the MRCC to enable them to see the search effort.

8.4.3 Next of kin/relatives should be advised at an early stage of any SAR operation, to ensure where possible that the timing of associated media releases does not cause them undue concern.
8.4.4 In any event, before a search is suspended or terminated, SAR management should ensure that the next of kin are consulted as far as possible. They should be fully briefed on the complete search effort, conditions in the search area, and the reasons for proposing the termination of the search. Relatives are more able to accept the SMC’s decision to suspend or conclude search operations if they are privy to the processes.

8.4.5 Whenever foreign nationals are the subjects of a maritime SAR action, the Ministry of International Relations and Coordination (MIRCO) should be informed.

8.5 Casualties

8.5.1 NAMPOL will be responsible for releasing the names of civilian casualties. The names of military casualties of a SAR incident are only to be released by NDF or MIRCO as appropriate.

8.5.2 The names and addresses of survivors shall not be released until positive check and identification has been accomplished. Generally, survivor’s information should not be released prior to the release of casualty information, although circumstances may dictate a departure from this procedure.

8.5.3 Survivors shall be encouraged to contact their own families as soon as possible and all reasonable assistance towards accomplishing this should be provided. Controlling the dissemination of information by survivors is difficult and requires tactful briefing. Whenever possible the PRO or MLO should brief survivors on what information may be released.

8.6 Operations Involving two or More SAR Resources and Facilities

8.6.1 To avoid confusion in public information and exposure of one SAR facility at the expense of other SAR resources or facilities participating in a specific maritime SAR operation, it is essential that the overall co-ordinating authority responsible for SAR operations issue any news releases.

8.6.2 The overall co-ordinating authority for maritime SAR in Namibia is the Ministry of Works and Transport (MWT), working through the NMSC and the MRCC in terms of this Plan. This fact should be recognised in any dealings with the media.

8.6.3 The following guidelines will apply for releasing information on operations involving two or more vessels, aircraft or other facilities during maritime SAR Operations:
a) all media releases or statements shall be made in the name of Minister of Works and Transport;

b) the MRCC will appoint a Public Relations Officer (PRO) for a specific SAR action and inform all SAR resources and facilities participating in the SAR action of such an appointment. The PRO could be the MRCC Chief or the SMC responsible for the co-ordination of that SAR action or mission;

c) media releases by the MRCC shall be subject to the scrutiny and approval of the Head of Maritime SAR Administration prior to their release;

d) media releases by MRSCs shall be subject to scrutiny and approval by the MRCC Chief prior to their release;

e) the PRO shall consult with NDF, in the case where the latter is a participant in a SAR action, before any information relating to NDF activities or assets is released to the public/media;

f) the PRO or MLO shall ensure that the contributions of any participating SAR resource or facility is recognised and acknowledged during his/her liaison with the media;

g) depending on the magnitude (casualties, public or international interest) the Head of Maritime SAR Administration may act as the PRO.

8.6.4 The PRO’s duties will include the following:

a) receive briefings from the SMC, MRCC personnel, SITREPs, SAR log and interviews with rescued personnel if available;

b) make proper and full use of existing news media such as press, radio, television and services to disseminate information;

c) establish liaison with media sources early in the mission in order to prevent the SMC from being flooded with requests for information as the mission progresses;

d) be well informed of SAR procedures and techniques being used and in which stage the SAR system is functioning at any particular time; and

e) process and review the news-worthiness of all photographs taken of mission activities where the PRO is not the SMC.
PART 9 – CONCLUSION OF SAR OPERATIONS

9.1 Overview

9.1.1 A maritime SAR operations enter the conclusion stage if one or more of the following happens:

a) information is received that the ship, aircraft, other craft, or persons who are the subject of the SAR incident are no longer in distress;
b) the ship, aircraft, other craft, or persons for whom SAR facilities are searching have been located and survivors rescued; and
c) during the Distress Phase, the proper authority determines that the search has no significant chance of succeeding.

9.2 Terminating a SAR Case

9.2.1 The authority to terminate or suspend a maritime SAR case rests with different levels within the maritime SAR system depending on the circumstances. In particular, the MRCC Chief has the authority to suspend a case when the subjects of a search have not been found, and may delegate to the SMC the authority to close cases in all other circumstances, i.e when the SMC determines that the craft or people are no longer in distress.

9.2.2 In areas where the MRCC or MRSC is not able to co-ordinate the operations, the OSC may need to take responsibility for deciding to suspend or close the search.

9.2.3 Most maritime SAR operations typically conclude when those in distress are no longer in distress or are rescued. The basic steps to closing this type of case are to immediately notify all authorities, centres, services or facilities that have been activated and complete a record of the case.
9.2.4 The authority to close a SAR case when subjects of a search have not been found resides with the Head of Maritime SAR Administration in consultation with the MRCC Chief.

9.2.5 In all other circumstances, where it has been determined with certainty that the craft and people are no longer in distress, the MRCC Chief, Duty Controllers or OSC may close the case without consulting the Head of Maritime SAR Administration.

9.5.6 In cases, where there is uncertainty on whether to close or suspend a SAR case, the Head of Maritime SAR Administration must be consulted.

9.3 Suspending Search Operations

9.3.1 Some cases may require extended searching. At some point, the proper authority must make the complex decision to suspend active search operations pending the receipt of additional information. In making this decision, each SAR incident must be considered on its own merits, and care should be taken not to end the search prematurely. The decision to suspend a search involves humanitarian considerations, but there is a limit to the time and effort that can be devoted to each SAR case.

9.3.2 Prior to suspending search operations, a thorough case review must be undertaken. The decision to suspend operations should be based on an evaluation of the probability that there were survivors from the initial incident, the probability of survival after the incident, the probability that any survivors were within the computed search area, and the effectiveness of the search effort as measured by the cumulative probability of success. The reasons for search suspension should be clearly recorded.

9.3.3 The case review should also examine:
   a) search decisions for proper assumptions and reasonable planning scenarios;
   b) certainty of initial position and any drift factors used in determining search area;
   c) significant clues and leads re-evaluated;
   d) the search plan, in order to ensure that all assigned areas were searched, the probability of detection is as high as desired, and compensation was made for search degradation caused by weather, navigational, mechanical or other difficulties; and
   e) the determination about the survivability of survivors, considering time elapsed since the incident; environmental conditions; age, experience and physical condition of survivors; available survival equipment and studies or information relating to survival in similar situations.

9.3.4 A search should normally be terminated only when there is no longer any reasonable hope of rescuing survivors from the SAR incident. Considerations for suspending a search include:

<table>
<thead>
<tr>
<th>Doc ID</th>
<th>Revision No</th>
<th>Compiled by</th>
<th>Approved by</th>
<th>Effective date</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP/MWT/17</td>
<td>0.0</td>
<td>MWT-DMA</td>
<td>Minister of Works and Transport</td>
<td>August 2017</td>
<td>73</td>
</tr>
</tbody>
</table>
a) all assigned areas have been thoroughly searched;
b) all reasonable probable locations have been investigated;
c) all reasonable means of obtaining information about the whereabouts of the
d) ship, aircraft, other craft or persons who are the subjects of the search have been exhausted; and
e) all assumptions and calculations used in search planning have been reviewed.

9.3.5 When a search has proven unsuccessful and the SMC in consultation with the MRCC Chief and, as appropriate, Head of Maritime SAR Administration, has suspended search operations, others concerned, for example the operating agency of the missing craft, may continue the search and the MRCC may continue to co-ordinate the search if requested to do so.

9.3.6 The MRCC should maintain a suspended case file, which should periodically be reviewed so that the operations can be re-activated without delay if additional information develops which justifies engaging in renewed search efforts.

9.4 Reopening of a Suspended or closed SAR Case

9.4.1 If significant new information or clues develops, reopening of a suspended or closed case should be considered. Reopening without good reason may lead to unwarranted use of resources, risk of injury to searchers, possible inability to respond other distress situations and creating false hope among relatives.

9.4.2 The Minister of Works and Transport may direct that a closed maritime SAR case be re-opened after careful consideration of representations made by any member of the public, group or an institution with an interest in the case.

9.5 Debriefing

9.5.1 Following an incident the conduct of a debriefing of agencies and groups involved should be considered. The purpose of incident debriefs are to establish opportunities for improvement in the operation of the national maritime SAR system.

9.5.2 Incidents worthy of debrief may include those where:

a) lives have been lost;
b) large and complex searches have been conducted;
c) multi-agency involvement occurred; or
d) where coordination, communication or response challenges were experienced during the incident.
9.5.3 The above list is not exhaustive and the conduct of a post incident, multi-agency debrief is at the discretion of the Head of Maritime SAR Administration in overall coordination of the incident with mutual agreement of other SAR authorities and agencies involved.

9.5.4 Post incident debriefs should be used to:

a) establish opportunities for improvement in the operation of the national maritime SAR system; and
b) ensure that policies and procedures are current and relevant.

9.5.5 The Head of Maritime SAR Administration in consultation with the MRCC Chief is to:

a) decide the need for a debrief in consultation with other SAR participants;
b) organise and host the debrief unless otherwise agreed by the participants;
c) establish a venue that maximises opportunity for participation in, and learning from, the debrief;
d) capture and share the opportunities for improvement arising;
e) initiate changes to the national SAR plans, as appropriate, arising from the debriefs; and
f) include lessons learned from debriefs in the reports to the NMSC.

9.5.6 Participation at debriefs may be restricted to particular agencies depending on the issues that are likely to arise and would be a decision for the Head of Maritime SAR Administration in consultation with the MRCC Chief.

9.5.7 Maritime SAR stakeholders that participate in the debriefing will meet their own attendance costs, unless otherwise agreed by the participants.

9.5.8 The debriefing should include the opportunity for all significant parties involved in the incident to contribute and learn from it.

9.6 Case Studies

9.6.1 The IAMSAR Manual provides guidance on case studies as follows.

9.6.2 Sometimes a SAR case has a surprise ending, as when the survivors are found by someone not involved in the search effort in a location outside the search area, or they are found, alive and well, in the search area after the search effort has been suspended. There are also occasions when there seems to have been an unusual number of problems in spite of the best efforts of the SAR personnel. Finally, there may be important and valuable lessons to learn from a SAR incident and the subsequent response of the SAR system that would be revealed only by a careful after-the-fact review.

9.6.3 A SAR case study is an appropriate method for addressing those aspects of an incident that are of particular interest. Individual aspects of interest could include problems with

<table>
<thead>
<tr>
<th>Doc ID</th>
<th>Revision No</th>
<th>Compiled by</th>
<th>Approved by</th>
<th>Effective date</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP/MWT/17</td>
<td>0.0</td>
<td>MWT-DMA</td>
<td>Minister of Works and Transport</td>
<td>August 2017</td>
<td>75</td>
</tr>
</tbody>
</table>
communications, assumptions made, scenario development, search planning, or international co-ordination. SAR case studies or incident reviews also provide opportunities to analyse survivor experiences and lifesaving equipment performance. Survival in hostile environments is affected by many variables, including the physical condition of the survivors, survivor actions, reinforcement given by rescue crews prior to rescue, and the effectiveness of safety or survival equipment. Knowing more about these factors can help the SAR system become more effective.

9.6.4 When used to review and evaluate all aspects of a response to an incident, SAR case studies are one of the most valuable and effective tools for improving SAR system performance. Therefore, SAR case studies or reviews should be performed periodically even when no problems are apparent. There is almost always room for improvement, especially in large, complex cases. The most important outcome, however, is that early detection and correction of apparently small problems or potential problems will prevent them from growing into serious deficiencies later.

9.6.5 To get a balanced view, more than one person should conduct SAR case studies.

9.6.6 The case study team should include recognised experts in those aspects of the case being reviewed. To achieve maximum effectiveness, case studies should not assign blame, but rather, should make constructive suggestions for change where analysis shows that such change will improve future performance.
PART 10 – REPORTING AND DELEGATION

10.1 Reporting

10.1.1 The first responsibility of the relevant duty personnel is to identify incidents and take appropriate and prompt action, then to document and report what has been done, giving reasons or intention when appropriate.

10.2 Documentation

10.2.1 Documentation is the selection and recording of information and the events handled by the relevant duty personnel from initial incident awareness to the conclusion of the operation. It provides the basis for reports made during maritime SAR operations and of subsequent reports and returns. It includes all data recorded; messages and signals received or transmitted by radio and telecommunications links, search planning forms, operation logs, charts and maps, and other recorded data.

10.3 Urgency versus Detail

10.3.1 A detailed report which arrives too late is useless. No report should be made without considering its timeliness and how urgently the recipients need to be informed. If there is risk that the addressee(s) who need to know may be informed too late the SMC should abbreviate the text or omit some of the formatted headings in the first message, giving amplifying information in later messages.

10.3.2 It may be difficult to decide when to make a Situation Report (SITREP) in an uncertain or fast situation, but it is usually best to pass significant details as they become available rather than wait until the picture is thought to be complete. The complete picture will seldom be clear until the incident is over, when it will be too late for supporting authorities to act. Messages “for the record" seldom need urgent transmission, and can usually be sent to arrive before daily close of business, or in time for office opening hours.

10.4 Priority of Signals/Messages

10.4.1 It is difficult to judge the priority of messages alerting Headquarters about major incidents (particularly if Ministers need to be told), that are of general interest to, or affect the Ministry or could have political, international, commercial or other repercussions.
10.4.2 For major incidents that could be of general interest to or affect MWT, the MRCC Chief should ensure that the Head of Maritime SAR Administration and the Accounting Officer of MWT are informed before the media broadcasts the story.

10.4.3 For incidents that could have political or international repercussions, the Head of Maritime SAR Administration should inform the Minister through the Accounting Officer as soon as possible.

10.5 Message Precedence

10.5.1 Precedence indicates the speed with which a message should be handled at all stages. The urgency of informing the addressee governs the precedence and the whole route must be considered. Because modern on-line transmission methods are very fast it is often assumed that precedence no longer matters.

10.6 Reporting on Major Incidents.

10.6.1 In the event of a serious incident the Heads of Maritime SAR Administration need to be contacted. Although what constitutes a serious incident cannot be specified exactly, the following factors should determine the recipients "Need to Know":

   a) has there been a loss of life?
   b) are a significant number of lives at risk?
   c) has there been loss or failure of operational SAR units?
   d) has there been/may there be national media interest?
   e) has there been/may there be International involvement and/or consequences? and
   f) has there been/may there be Ministerial/Cabinet/Parliamentary questions?

10.6.2 If the MRSC is coordinating an incident, it is the responsibility of the MRSC co-ordinator to telephonically inform the MRCC. This telephone call is to be confirmed with a SITREP.

10.6.3 In the case of the MRCC coordinating the incident, then the MRCC Chief or his delegate is to telephonically inform the Head of Maritime SAR Administration, depending on the type of incident and confirm the telephone call with a SITREP.

10.7 Maritime SAR Incident Reports and Forms

10.7.1 These reports and forms are to be developed and completed as per guidelines contained in the operational plans of the MRCC and the IAMSAR Manual, Volume II.
10.8 Requisitioning of aircraft and vessels

Authority to requisition vessels and aircraft

10.9.1 The Minister of Works and Transport may for purposes of this Plan requisition any aircraft or vessel, if human life is in immediate and grave danger and there are no other means to conduct a rescue operation.

10.9.2 The following persons are delegated with the authority to requisition and deploy aircraft and vessels for purposes of any maritime SAR operations on behalf of the Minister of Works and Transport:

a) the Permanent Secretary (MWT);
b) Head of Maritime SAR Administration;
c) MRCC Chief.

Requisitioning of NDF Aircraft/Helicopters and Civilian Aircraft

10.9.3 All requests for military or civilian fixed-wing aircraft and helicopters for SAR and Medevac operations shall be made to the nearest Air Force Command Centre or aircraft operator.

10.9.4 Where there is immediate danger to life and the casualty is within 30 miles of the aircraft base, requests for helicopter assistance may be made directly to the Air Force Base or civilian operator and inform the Air Force Command Centre or operators as soon as possible thereafter. As a matter of procedure the matter should be conveyed to the nearest ATC centre.

10.10 Written Reports

10.6.1 In order to obtain full benefits from any lesson learnt during a maritime SAR operation and also to rectify any shortcomings exposed, it is essential that written reports on the operation are prepared. These reports are to be forwarded to the Head of Maritime SAR Administration by the MRCC Chief. The Head of Maritime SAR Administration will inform any other organisations concerned.
10.6.2 To be effective, these reports must be prepared in good time and while memories are still vivid. Preferably they should be in the form of a narrative and include:

a) dates and times;
b) geographical positions;
c) action taken;
d) parties involved;
e) exemplary acts;
f) final outcome.

10.6.3 Comments on problems or shortcomings encountered, liaison with others and suggestions for improvement may be included or appended.

10.6.4 Reports should not be delayed if non-essential details are outstanding. The latter can be forwarded at a later date.

10.6.5 The Head of Maritime SAR Administration or other organisation that provided aid should thereafter evaluate these reports. They should check that the relevant procedure laid down in this Plan was complied with, that the shortcomings within his sphere of influence were or will be rectified and that all persons connected with maritime SAR are made aware of any lessons learnt.

10.6.6 Where it appears that current maritime SAR procedures can be improved, a memorandum is to be submitted to the NMSC Secretariat/Head of Maritime SAR Administration setting out the recommendations. Annual returns reflecting broad details of all maritime SAR operations carried out during the previous financial year are to be forwarded to the NMSC Secretariat not later than 30 April of each year. These returns are to incorporate the reports of all facilities and other organisations that were involved in maritime SAR operations during this period.

10.6.7 Reports, when submitted to the NMSC Secretariat, should include additional memorandums recommending improvements to the current maritime SAR procedures.

10.6.8 The original of all reports and memorandums should be addressed to:

The Permanent Secretary
Ministry of Works and Transport
Private Bag 13341, Ausspannplatz
Windhoek
Attention: Head of Maritime SAR Administration/NMSC Secretariat

10.6.9 These reports and memorandums should be incorporated by the Secretariat in an annual report detailing all SAR operations carried out during the previous financial year ending 31 March.

10.6.10 This annual report should be submitted to the NMSC before the 30 April of the applicable year.

<table>
<thead>
<tr>
<th>Doc ID</th>
<th>Revision No</th>
<th>Compiled by</th>
<th>Approved by</th>
<th>Effective date</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP/MWT/17</td>
<td>0.0</td>
<td>MWT-DMA</td>
<td>Minister of Works and Transport</td>
<td>August 2017</td>
<td>80</td>
</tr>
</tbody>
</table>
APPENDIX A- NAMIBIA’S MARITIME SAR AREA
APPENDIX B – CONTACT LIST

GOVERNMENT MINISTRIES, OFFICES AND AGENCIES CONTACT DETAILS

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>CONTACT PERSON AND DESIGNATION</th>
<th>PHYSICAL ADDRESS</th>
<th>OFFICE TEL. No.</th>
<th>MOBILE No.</th>
<th>FAX No.</th>
<th>EMAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VOLUNTARY, COMMERCIAL AND PRIVATE ORGANIZATIONS CONTACT DETAILS

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>CONTACT PERSON AND DESIGNATION</th>
<th>PHYSICAL ADDRESS</th>
<th>OFFICE TEL. No.</th>
<th>MOBILE No.</th>
<th>FAX No.</th>
<th>EMAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REGIONAL AND INTERNATIONAL ORGANIZATIONS CONTACT DETAILS

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>CONTACT PERSON AND DESIGNATION</th>
<th>PHYSICAL ADDRESS</th>
<th>OFFICE TEL. No.</th>
<th>MOBILE No.</th>
<th>FAX No.</th>
<th>EMAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C – REFERENCES/BIBLIOGRAPHY


Canadia Coast Guard (2000) National search and rescue manual


International Convention on Maritime Search and Rescue (1979)


Merchant Shipping Act, Namibia (1951)

Multilateral agreement between the governments of Angola, Comoros, Madagascar, Mozambique, Namibia and South Africa on the coordination of maritime SAR services (2007)


Wreck and Salvage Act, Namibia (2004)