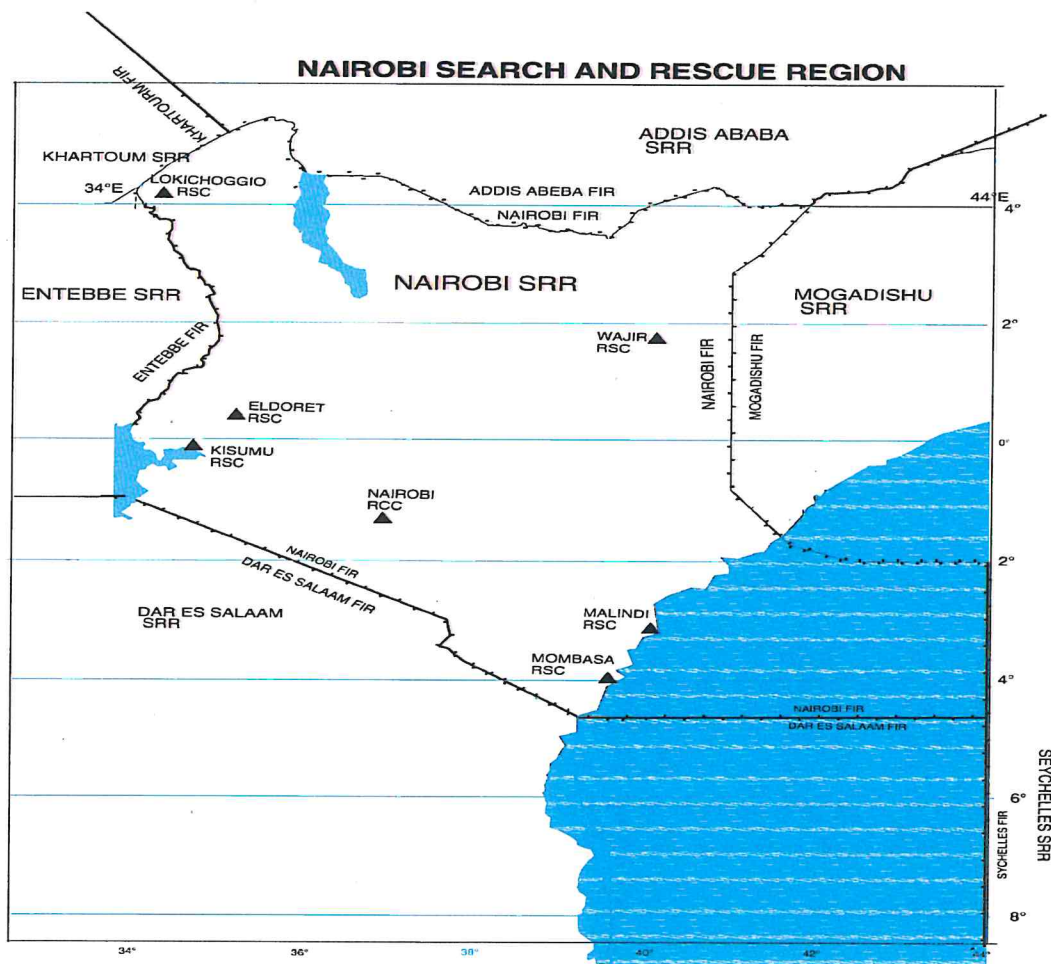




AERONAUTICAL SEARCH AND RESCUE STANDARD OPERATING PROCEDURE



REV:2

December 2023




AERONAUTICAL SEARCH AND RESCUE STANDARD OPERATING PROCEDURES

Record of Amendment

Amendment No.	Amendment Date	Date Entered	Entered By
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AERONAUTICAL SEARCH AND RESCUE STANDARD OPERATING PROCEDURES

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MANAGER AIR TRAFFIC SERVICES	DIRECTOR AIR NAVIGATION SERVICES	DIRECTOR GENERAL
SIGN: 		
DATE: 02/02/2024	14/2/2024	14/02/2024

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019	Malindi Control Tower	
020	Kisumu Control Tower	
021	Kenya Maritime Authority-KMA	
022	Kenya Ferry Services	
023	Kenya Airport Authority	
024	Kenya Meteorological Department	
025	Kenya Forest Services	
026	Kenya Revenue Authority	

AERONAUTICAL SEARCH AND RESCUE STANDARD OPERATING PROCEDURES

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Declaration

This Aeronautical Search and Rescue Standard Operating Procedures (ASAR-SOP) sets forth the procedures for coordinating and Conducting Aeronautical Search and Rescue Missions.

It has been prepared in accordance with Civil Aviation Act (Aeronautical Search and Rescue) Regulations, 2018, National Search and Rescue (NAMSAR) Plan, International Aeronautical and Marine Search and Rescue (IAMSAR) Manual (Doc 9731) and International Civil Aviation Organization (ICAO) Search and Rescue Annex 12.

AERONAUTICAL SEARCH AND RESCUE STANDARD OPERATING PROCEDURES

Foreword

This Aeronautical Search and Rescue – Standard Operating Procedures (ASAR-SOP) is prepared in coordination with SAR stakeholders, published and promulgated by Kenya Civil Aviation Authority (KCAA), in conformity with the Kenya Civil Aviation (Aeronautical Search and Rescue) Regulations 2018. It has been developed following the requirements for information to be included in the ASAR-SOP as contained in the Kenya Civil Aviation (Aeronautical Search and Rescue) Regulations, 2018 Part IV, Regulation 18.

The purpose of this SOP is to provide guidance to Rescue Coordination Centre (RCC), Rescue Sub Centers (RSC) and SAR service providers on procedures for SAR missions by providing a framework that shall direct and unify actions of all responding agencies to achieve effectiveness and efficiency in respect to saving lives and reducing damage to property and facilities.

The ASAR –SOP documents actions to be taken by SAR service providers in dealing with a SAR mission. It also details Communication procedure to be adopted for all ASAR missions.

The document is reviewed and updated once every two years or as the need arises. All stakeholders are invited to submit their views, comments, and suggestions for future review on this document to: kenyasar@kcaa.or.ke

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NAIROBI

AERONAUTICAL SEARCH AND RESCUE STANDARD OPERATING PROCEDURES

Abbreviations

AAID	-	Aircraft Accident Investigation Department
AFTN	-	Aeronautical Fixed Telecommunication Network
AIM	-	Aeronautical Information Management
ARCC	-	Aeronautical Rescue Coordination Centre
ASAR	-	Aeronautical Search and Rescue
A/SARMC	-	Assistant Search and Rescue Mission Coordinator
ATC	-	Air Traffic Control
AMREF	-	African Medical Research Foundation
BOF	-	Briefing Office
BMU	-	Beach Management Unit
CATCO	-	Chief Air Traffic Control Officer
DAC	-	Dangerous Air Cargo
DG	-	Director General
DOD	-	Department of Defense
DRB	-	Disaster Response Battalion
IAMSAR	-	International Aeronautical and Marine search and rescue
ICAO	-	International Civil Aviation Organization
ICRC	-	International Committee of Red Cross
ITMCC	-	Italian Mission Coordination Centre
JKIA	-	Jomo Kenyatta International airport
JRCC	-	Joint Rescue Coordination Centre
KAF	-	Kenya Air Force
KACA	-	Kenya Army Corps of Aviation
KCAA	-	Kenya Civil Aviation Authority
KCGS	-	Kenya Coast Guard Service
KDF	-	Kenya Defence Forces
KEMRI	-	Kenya Medical Research Institute
KFS	-	Kenya Ferry Services
KHZ	-	Kilo Hertz

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KMA	-	Kenya Maritime Authority
KMD	-	Kenya Meteorological Department
KPS	-	Kenya Police Service
KPAW	-	Kenya Police Air Wing
KWS	-	Kenya Wildlife Service
LKP	-	Last Known Position
MCC	-	Mission Coordination Centre
MET	-	Meteorological
MOTIH/UD	-	Ministry of Transport, Infrastructure and Urban Development
MHZ	-	Mega Hertz
MOH	-	Ministry of Health
MRCC	-	Maritime Rescue Coordination Centre
NAMSAR	-	National Search and Rescue
NDOC	-	National Disaster Operations Centre
NDMU	-	National Disaster Management Unit
NOTAM	-	Notice to Airmen
OSC	-	On Scene Commander
RCC	-	Rescue Coordination Centre
RMRCC	-	Regional Maritime Rescue Coordination Centre
RSC	-	Rescue Sub-Centre
SAR	-	Search and Rescue
SAR-EB	-	Search and Rescue Emergency Broadcast
SARMC	-	Search and Rescue Mission Coordinator
SARSAT	-	Search and Rescue Satellite Aided Tracking
SITREP	-	Situation Report
SOP	-	Standard Operating Procedures
SRU	-	Search and Rescue Unit

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Chapter 1

1.0 Scope

The procedures contained within this SOP cover Aeronautical Search and Rescue Missions within Nairobi Search and Rescue Region (SRR) and for such proximate areas of neighbouring states as guided in SAR agreement between states on Search and Rescue.

1.1 Aeronautical Search and Rescue Missions

1.1.1 Provision of resources for SAR missions

All agencies with a responsibility in this SOP shall endeavor to provide the resources required in the fulfillment of their roles. Furthermore, the National Disaster Operations Centre (NDOC) shall at the request of the Rescue Coordination Centre (RCC) coordinate provision of such additional resources as may be required.

1.1.2 ASAR areas of jurisdiction

The Aeronautical Search and Rescue (ASAR) unit will provide assistance to aircraft in distress and to survivors of aircraft accidents within the Nairobi Search and Rescue Region (SRR) and in coordination with ASAR units of neighboring states, within proximate areas.

Appendix 1: Map of Nairobi Search and Rescue Region (SRR)

1.1.3 Provision of SAR service

ASAR services will be provided to all aircraft operating within Nairobi SRR and for such other areas as may be contained in agreements entered into by Kenya.

1.1.4 SAR Communications

1.1.4.1 SAR Emergency Notification

Search Mission Coordinator (SMC) in Nairobi RCC will be responsible for notifying all SAR service providers of an active SAR mission. This will be a telephone call to the **SAR Point of Contact** notified to RCC, notifying the agency and requesting for specific action(s) and record of the same kept in RCC.

Ref Appendix 2 ASAR Notification

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1.1.4.2 Radio Communication

SMC in the RCC will provide coordination to the mission and service to distress aircraft and other aircraft from agencies involved in SAR using international SAR frequency 123.1 MHz. RCC will also monitor the emergency frequency 121.5MHz or other notified frequencies.

1.1.4.3 Internal communication

The team of SMCs shall operate in close co-ordination ensuring an efficient flow of information during the search and rescue phases. The team of SAR MCs shall ensure that all SAR field agencies are kept updated with developments of the SAR Mission. The field agencies will keep the SMC team updated of all new developments through the On-Scene Commander. Primary communication for responding agencies at the incident scene will be through the use of communication radios on specific frequencies as agreed with the on-scene Commander. In the event secondary communications are needed, equipment may include electronic communications and cell phones.

1.1.4.4 Media and public briefings

All communications to media, public and senior Government officials **shall** be handled by the **Director General, Kenya Civil Aviation Authority**. The SMC team will jointly prepare regular reports on SAR missions and forward to Director General, KCAA. All Persons involved in an Aeronautical Search and Rescue Mission **shall** refer all inquiries regarding **the Mission** to the Director General KCAA and exercise responsibility in handling information from the SAR operations.

1.1.5 Search Planning

Search Planning will follow the standard step based on source of distress information. Nothing in the SOP prevents the SMC from acting in a manner, other than that detailed for the purpose of expediting and safeguarding the search and rescue mission.

a) Distress COSPAS-SARSAT alerts:

- i. Analyze the information and extract key details
- ii. Check if the beacon is registered and emergency contact details.
- iii. Contact the emergency contacts for status check
- iv. If status is not resolved by emergency contact, locate the aircraft position using information provided and attempt to establish status.
- v. If status is resolved, act accordingly and respond to the source MCC.

If satellite tracking information is not available review available information and as necessary, develop a search plan using the five sequential steps:-

: -

- i. Estimating the datum**
Determining the position of emergency and including the effect of wind and currents;
- ii. Determining the size of the search area**
Allowing for errors in position estimates, Navigation errors of the search units and the drift variables;
- iii. Selecting appropriate search patterns**
Consider the size of area, type of terrain and capabilities of search units;
- iv. Determining the desired area of coverage**
Consider factors affecting the probability of detection, track spacing and number of sweeps; and
- v. Developing an optimum and attainable search plan**
Consider the number of search units available and other limiting factors and circumstances.

1.1.6 Closure of Search Mission

The SMC team will terminate the SAR mission upon being satisfied that all necessary actions have been taken. Notwithstanding the above statement, the closure of a SAR mission will only be after the scene has been handed over to Aircraft Accident Investigators or in the event of a prolonged non-yielding search, authority to terminate has been granted by Director General KCAA.

The SMC will:

- i. Recommend to the Search Coordinator the abandoning or suspending the search;
- ii. Release the SAR facilities when assistance is no longer required;
- iii. Notify the conclusion and/or termination of the search;

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- iv. Prepare a final report on the operation; and
- v. Submit the final report to SAR Coordinator (SC) within seven (7) days of conclusion of the SAR mission.

1.1.8 Request for Assistance from other Jurisdictions

All request for assistance in Aeronautical Search and Rescue from outside the SRR, will be addressed to Director General KCAA for consideration by the Kenya Government.

1.1.9 Coordination of SAR Missions in proximate areas

SAR missions in proximate areas of the Nairobi SRR boundaries will be coordinated in accordance with SAR agreements entered between the states.

Chapter 2

2.0 Aeronautical Rescue coordination center (ARCC)

ARCC is located in the Air Navigation Services (ANS) Complex, off Mombasa Road. The purpose of ARCC is to provide coordination and general direction on response to and management of Aeronautical Search and Rescue Missions within Kenya (Nairobi Search and Rescue Region).

The RCC is manned on a 24hour basis.

The RCC contacts: -

Primary: 0795814200

Cell : 0795811009

Cell : 0795814103

Email: sar@kcaa.or.ke or kenyasar@kcaa.or.ke

2.1 ARCC Team

A team of SMCs will be constituted when a SAR mission dictates. In exceptional circumstances and as necessary, officers from other SAR agencies, with SAR (OJT) validation may be requested to join the SMCs at RCC. The team will assist with the roles indicated below:

- i. Search Coordinator
- ii. Communications Officer
- iii. Plotting Officer
- iv. Intelligence Officer
- v. Briefing Officer
- vi. Recording officer
- vii. Assisting SAR SMCs

2.1.1 Search Coordinator

The Search Coordinator will be the duty SMC at Nairobi RCC and will provide guidance for the SAR mission.

The Search Coordinator will assess the circumstances of a particular case and take steps to promote the safety of life and prevent further loss of property.

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Search Coordinator will use the best judgment in initiating and coordinating operations to ensure use of the most suitable method of planning with least possible delays. On receipt of information regarding an aircraft in distress or on request from RSCs, MRCC or from any adjacent RCC or any other credible source, the mission coordinator will: -

- i. Notify Team members giving details as appropriate;
- ii. Appraise the situation;
- iii. Declare the appropriate emergency phase (if not already declared by ATC duty watch supervisor);
- iv. Notify SAR responding Unit to standby for assistance;
- v. Notify the - CAA management;
- vi. Determine if there is need for assistance by additional SAR SMCs, recall, constitute a team, assign duties and responsibilities to team members;
- vii. Coordinate with the On scene Command;
- viii. Manage and supervise all action plans, and ensure that all necessary actions are carried out by every team member;
- ix. Notify the AAID of the accident/incident aircraft;
- x. Send periodic briefs to the DG KCAA on the progress of the mission;
- xi. Ensure a proper handover of the accident scene to AAID team;
- xii. Ensure a final report is prepared.

Ref: Appendix 3 (Forms001/002/003)

2.1.2 Briefing Officer

- i. Prepares the briefs for the RCC team including the field team;
- ii. Prepares the draft media/public briefs after collating available information and updates;
- iii. Initiate NOTAM action if necessary;
- iv. Continue to obtain more amplifying information and analyse, evaluate, review and update the SAR Mission plan as required.

2.1.3 Intelligence Officer

- i. Monitor, investigate, collect and disseminate information to the appropriate team members;
- ii. Interrogate witnesses and obtain name, contact details, place/scene of accident, etc;

- iii. Obtain from the Meteorological office the weather and/or sea state information which may have influenced the intended voyage and for plotting of search areas;
- iv. If necessary, assess the search and rescue location and collect/review information from all practical sources;
- v. Obtain information on the crew and aircraft operating characteristics relating to the en-route weather and terrain;
- vi. Assess the ability of the crew to survive and the type of assistance required;
- vii. Evaluate and assess the situation, notify the SAR MC of any new information obtained;
- viii. Continue to gather data and information pertinent to the situation and pass to; SAR MC, Plotting, Recording and Briefing Officers.

2.1.4 Communications Officer

- i. Request through ACC, other aircraft or agencies to attempt to establish the aircraft's position, informing them of all known frequencies;
- ii. Notify the Police to check along the route of flight for any reports regarding the flight;
- iii. Request the RM RCC to alert the vessels in the area if the flight is over or near water;
- iv. Review communication plan actions and ensure two way communications ready for transmission;
 - UHF 243.0 MHz,
 - VHF 123.1/121.5 MHz,
 - HF 8954/5680/2182 KHz,
 - Land lines
- v. When required, request Radar assistance for search from Radar stations;
- vi. If electronic search or intercept and escort is necessary, notify the SRU to dispatch aircraft capable of intercept and escort or electronic search;
- vii. Provide situation updates, if any, to search facilities en-route or on-scene;
- viii. Coordinate arrangements for deliveries of supplies to sustain the survivors;
- ix. Provide as much information as possible to the commander of the aircraft providing escort service;
- x. Relay messages as per the instruction of the team members to SRUs, participating agencies/authorities and/or personnel;
- xi. Periodically issue situational reports (SITREPs).

2.1.5 Plotting Officer

- i. In consultation with the RCC team members, begin to plot for the search area[s] or intercept point;
- ii. Obtain/select the appropriate maps and charts and ensure all the necessary plotting equipment are available;

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- iii. Obtain all necessary data and information from SMCs for use in identifying probable search area[s] and for intercept/escort requirements;
- iv. Ensure the use of correct scale for the maps and charts;
- v. Continue to plot for search area[s] or intercept point when new information is made available by the A/SAR MC;
- vi. Ensure details on maps and charts are to be clearly marked and named;
- vii. Determine the DATUM or last known position [LKP]. If a datum point cannot be determined, it may be necessary to use a datum line, that is, an intended track, or even a datum area;
- viii. Provide completed/printed plotting to the SAR MC.

2.1.6 Recording officer

- i. Continuously maintain an up-to-date entries and records of all actions taken during the activation period in the SAR logbook, forms and other necessary records;
 - In so far as practicable, recording should be done in chronological order.
- ii. Assist SAR MC in preparing a final report on the result of the SAR operation.
 - Examples of items to be recorded/compiled:
 - Actions taken by team members;
 - Sighting and hearing reports;
 - Messages;
 - Telephone calls, etc.

2.1.7 Assisting SMCs

Will perform following duties;

- i. Assist in carrying out tasks assigned by the SAR MC;
- ii. Assist all other officers in carrying out their duties as need may arise;
- iii. Assist the SAR MC in compiling the report on SAR Mission.

2.1.9 On-Scene-Commander

The on-scene- commander will be: -

- i. The senior most officer at the scene from the National police service, or
- ii. 1ST officer at the scene from any SAR service agency.

In That order

The on-scene- commander will: -

- (a) On arrival at the accident scene, establish an Operations Base;
- (b) Immediately liaise with the SAR MC for briefs, debriefs, directions on logistical support for agencies at the accident scene;
- (c) Coordinate the rescue activities through issuance of directions and obtaining briefs/debriefs to/from designated agency coordinators or liaison officers;

- (d) Maintain effective communication with all designated agencies' coordinators at the accident scene and RCC;
- (e) Relay requests for additional resources to RCC, where designated through the RCC on scene coordinator;
- (f) Maintain effective traffic and crowd control at the scene;
- (g) Advise the ARCC, when responding agencies' activities at the accident scene are complete, to effect hand over and closure of Mission;
- (h) The On-Scene Commander shall gather all information available at the scene or on scene updates and channel to the ARCC;
- (i) The On-Scene Commander shall ensure access control to the scene of accident.

2.2 Rescue Sub-centres

Rescue sub-centres are established at all KCAA manned airfields as secondary units for Coordination of Search and Rescue Missions or to assist the ARCC. The decision to activate a rescue sub-centre will be made by the ARCC after consideration of all circumstances.

When activated the sub-centre will carry out the ARCC duties to the extent requested.

2.3 Air Traffic Services Units

Air Traffic Services unit will usually notify its associated ARCC when an aircraft is actually or likely in a state of emergency. However, when the nature of the emergency is such that local rescue facilities can deal with it, such as when an incident occurs at or near an aerodrome, the RCC may not be informed. The notification from an ATS unit to an RCC will contain information, if available, in the order listed below:

- UNCERTAINTY, ALERT or DISTRESS as appropriate to the phase of emergency;
- Agency and person calling;
- Nature of the emergency;
- Significant information from the flight plan;
- Unit which made last contact, time, and frequency used;
- Last position report and how the position was determined;
- Colour and distinctive marks of the aircraft in difficulty;
- Any action taken by the reporting office;
- Number of persons on board (POB);
- Survival equipment carried; and
- Other information.

ARCC may also request an ATS unit to provide the above information in the case of an aeronautical incident at sea for coordination with RMRCC.

Chapter 3

3.1 Kenya Maritime Authority

The Kenya Maritime Authority (KMA) Coordinates all Maritime search and rescue effort in the region through the Regional Maritime Rescue Coordination Center (RMRCC). In the event of a missing Aircraft or ditching incident within maritime areas, search and Rescue mission will be undertaken by RMRCC in collaboration with ARCC.

The duty officer Regional Maritime Rescue Coordination Centre (RMRCC) will activate the internal alerting process as per the authority's procedures and as per agreement between ARCC and RMRCC.

Then,

- i. Obtain accurate and clear details on;
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required.
- ii. Immediately mobilize and deploy personnel and assets available from stakeholders and in consultation with ARCC.

In the event of Search

- Mobilize stakeholders most appropriate for the incident;
- Coordinate with the stakeholders to avail assets to be deployed in search and Rescue;
- Coordinate the agreed search process;
- Coordinate the deployment of resources in the search;
- Update search location taking into account the drift factor.

If the crash site is identified

Coordinate the conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc.

- Provide on-scene coordinator for the mission.

3.2 National Disaster Operations Centre (NDOC)

The National Disaster Operations Centre play the central Role in Mobilization and coordination of resources in response to Disasters in Kenya.

NDOC shall assume the overall responsibility on resource mobilization and allocations.

On receipt of an aircraft Distress, Disappearance or Accident from ARCC, the duty officer Operations or the NDOC point of contact for SAR will activate the internal alerting process as per the Centre's procedures.

Then,

- i. Obtain accurate and clear details on;
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required;
- ii. Immediately mobilize personnel and assets from responding agencies as per ARCC request.

In the event of Search

- Alert responding agencies to prepare personnel and assets most appropriate for the incident;
- Coordinate with the ARCC to determine deployable assets and personnel for the search exercise;
- Coordinate the deployment of resources in the search.

If the crash site is identified

- Coordinate the conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc. firefighting personnel and ambulances;
- Coordinate at national level with relevant government ministries and/or agencies and other organizations for resources;
- In coordination with ARCC, review the level/effectiveness of the response at each stage and agree on next step of activity.

3.3 National Disaster Management Unit

The National Disaster Management Unit (NDMU) plays a critical role in the management and mitigations of disasters in Kenya. On receipt of an aircraft Distress, Disappearance or Accident from ARCC, the duty officer Operations or the NDMU point of contact for SAR will activate the internal alerting process as per the Unit's procedures.

Then,

- i. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required;
- ii. Immediately Coordinate mobilization and deployment of personnel and assets available from the unit in consultation with ARCC.
 - Coordinate the evacuation of the casualties to the triage and/or hospitals as may be appropriate, under guidance of Medical Team;
 - Coordinate the conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc;
 - Coordinate firefighting personnel and ambulances;
 - In the absence of ARCC on site coordinator, provide on-scene coordination with ARCC.
- iii. At the request of ARCC, provide qualified SAR officer to assist in SAR Coordination.

3.4 Aircraft Operators

The aircraft operator holds material information regarding:

- i. The subject aircraft;
- ii. Crew and contacts;
- iii. Passengers on board;
- iv. Cargo on board;
- v. Flight itinerary; and
- vi. Other aircraft of interest to the mission.

The information is critical to search and rescue operations. The operator shall keep the ARCC fully informed about all material information regarding the flight in focus. The

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operator will work closely with the ARCC during the search and rescue mission. ARCC will keep the operator fully informed of the progress in the SAR operations.

The operator will be responsible for notifying the next of Kin regarding an aircraft accident.

The operator shall not release any information relating to the SAR operations other than through the joint briefings with the KCAA management.

If the operator has the capacity, avail asset for the conduct of search and rescue. The assets will be put at the disposal of ARCC.

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Chapter 4

4.1 Kenya Defence Forces

The Kenya Defence Forces (KDF) have an original mandate in responding to disasters in Kenya. The Rescue Coordination Center will contact the appropriate department based on the circumstances of each case.

4.1.1 Kenya Air Force

On receipt of an aircraft distress, disappearance or accident from ARCC, the duty officer operations or the KAF point of contact for SAR will activate the internal alerting process as per the force procedures.

Then,

i. Obtain accurate and clear details on:

- Aircraft involved;
- Probable location or area of search;
- Number of persons on board;
- Nature of the problem;
- Type of assistance required;

ii. Immediately mobilize and deploy personnel and assets under the coordination of ARCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- If needed, provide airborne escort to aircraft in distress;
- In consultation with ARCC undertake the agreed search process;
- Communicate the search findings and recommendations to ARCC.

If the crash site is identified

- If first on scene, assume on-scene command until hand-over of the role as per established protocol;
- Assess and communicate the on scene conditions and rescue requirements;
- Secure the crash site;
- Set up tents in consultation with Medical Team Coordinator for Triage;
- Assist in removing the injured to the triage and/or ambulances using stretchers or as may be appropriate and under guidance of Medical Team;

- Assist in conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc;
 - Provide fire fighting vehicles and ambulances.
- iii. At the request of ARCC, provide qualified SAR officer to assist in SAR Coordination.

4.1.2 Kenya Army Corps of Aviation (KACA)

On receipt of an aircraft Distress, Disappearance or accident from ARCC, the duty officer Operations or the KACA point of contact for SAR will activate the internal alerting process as per the force procedures.

Then,

iv. Obtain accurate and clear details on:

- Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required;
- v. Immediately mobilize and deploy personnel and assets under the coordination of ARCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- If needed, provide airborne escort to aircraft in distress;
- In consultation with ARCC undertake the agreed search process;
- Communicate the search findings and recommendations to ARCC.

If the crash site is identified

- If first on scene, assume on-scene command until hand-over of the role as per established protocol;
- Assess and communicate the on scene condition and rescue requirements;
- Secure the crash site;
- Set up tents in consultation with Medical Team Coordinator for Triage;
- Assist in removing the injured to the triage and/or ambulances using stretchers or as may be appropriate and under guidance of Medical Team;

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- Assist in conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc;
 - Provide fire fighting vehicles and ambulances.
- vi. At the request of ARCC, provide qualified SAR officer to assist in SAR Coordination.

4.1.3 Kenya Navy

The Kenya Navy will play a lead role in all ASAR operations within the Maritime areas. On receipt of an aircraft Distress, Disappearance or accident from ARCC/RMRCC, the Duty Officer Operations or the Kenya Navy point of contact for SAR will activate the internal alerting process as per the naval procedures.

- i. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required.
- ii. Immediately mobilize and deploy personnel and assets under the coordination of RMRCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- In consultation with RMRCC undertake the agreed search process;
- Communicate the search findings and recommendations to ARCC/RMRCC.

If the crash site is identified

- If first on scene, assume on-scene command until hand-over of the role as per established protocol;
- Assess and communicate the on scene condition and rescue requirements;
- Secure the crash site;
- Assist in removing/rescuing the victims to the triage and/or marine ambulances under guidance of Medical Team;
- Conveyance of survival and rescue equipment;
- Assist in conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc;

- Provide fire-fighting marine vessels.
- iii. At the request of RMRCC, provide qualified SAR officer to assist in SAR Coordination.

4.1.4 Kenya Army

On receipt of an aircraft Distress, Disappearance or Accident from ARCC, the duty officer Operations or the Kenya Army point of contact for SAR will activate the internal alerting process as per the force procedures.

Then,

- i. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required.
- ii. Immediately mobilize and deploy personnel and assets under the coordination of ARCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- If needed, provide airborne escort to aircraft in distress;
- In consultation with ARCC undertake the agreed search process;
- Communicate the search findings and Recommendations to ARCC.

If the crash site is identified

- If first on scene, assume on-scene command until hand-over of the role as per established protocol;
- Assess and communicate the on scene condition and rescue requirements;
- Secure the crash site;
- Set up tents in consultation with Medical Team Coordinator for Triage;
- Assist in removing the injured to the triage and/or ambulances using stretchers or as may be appropriate and under guidance of Medical Team;
- Assist in conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc);
- Provide fire fighting vehicles and ambulances.
- iii. At the request of ARCC, provide qualified SAR officer to assist in SAR Coordination.

4.1.5 Kenya Defense Forces Disaster Response Battalion (DRB)

The Battalion is a specialized unit of the KDF with various resources (heavy equipment and skilled man power) that are ideal for SAR use in remote and/or difficult areas.

On receipt of information on an aircraft Distress or accident from ARCC, and if such resources are required, the duty officer Operations or the DRB point of contact for SAR will activate the internal alerting process as per the force procedures.

Then,

i. Obtain accurate and clear details on:

- Aircraft involved;
- Probable location;
- Type cargo carried by the aircraft;

If Dangerous Air Cargo (DAC) is carried by the distressed aircraft, additional information on:

- Quantity;
- Location on board aircraft;
- Brief, plain language description of DAC;
- More definitive information on any radioactive or biological material carried.
- Number of persons on board;
- Nature of the problem;
- Type of assistance required.

i. Immediately mobilize and deploy personnel and assets under the coordination of ARCC.

- If first on scene, assume on-scene command until hand-over of the role as per established protocol;
- Assess and communicate the on scene condition and additional rescue requirements;
- Secure the crash site;
- Set up tents in consultation with Medical Team Coordinator for Triage;
- Assist in removing the injured to the triage and/or ambulances using stretchers or as may be appropriate and under guidance of Medical Team;
- Assist in conveyance of specialists and equipment as the situation may require (Medical teams, scene contamination assessment officials (bomb, chemical, radioactive) etc;
- Provide fire fighting vehicles, relevant heavy equipment and ambulances.

- ii. At the request of ARCC, provide qualified SAR officer to assist in SAR Coordination.

4.2. National Police Services

The National Police Services (NPS) has the mandate to respond to all disasters/emergencies in Kenya. The National Police Service will provide on scene command for all Civil incidences as per the established protocol. The Rescue Coordination Center will contact the National Police Service whenever an incident occurs within Nairobi Search and Rescue Region.

4.2.1 National Police Service Operations (POLOPS)

On receipt of an aircraft Distress, Disappearance or Accident from ARCC or any other source, the duty officer Operations Centre will activate the internal alerting processes as per the service procedures.

Then,

- i. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required;
- ii. Immediately mobilize and deploy personnel and assets under the coordination of ARCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- In consultation with ARCC undertake the agreed search process;
- Coordinate the deployment of resources for search mission;
- Coordinate the deployment of ground search parties;
- Communicate the search findings and Recommendations to ARCC.

If the crash site is identified

- Assume the on scene command and control;
- Assess and communicate the on scene conditions and rescue requirements;
- Secure the crash site;
- Assist in rescue and evacuation of casualties to the triage and/or ambulances using stretchers or as may be appropriate and under guidance of Medical Team;

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- Assist in conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc;
- iii. At the request of ARCC, provide qualified SAR officer to assist in SAR Coordination;
- iv. NPS will assume on scene command and control in the rescue operations;
- v. The National Police Service has a primary role of securing the accident scene during and after the SAR mission;
- vi. Coordinate with ARCC and Aircraft Accident Investigation Department (AAID) on the preservation and handover of the scene to AAID.

4.2.2 National Police Air Wing

On receipt of an aircraft Distress, Disappearance or Accident from ARCC, the duty officer Operations or the NPS Air wing point of contact for SAR will activate the internal alerting process as per the service procedures.

Then,

- vii. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required.
- viii. Immediately mobilize and deploy personnel and assets under the coordination of ARCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- If needed, provide airborne escort to aircraft in distress;
- In consultation with ARCC undertake the agreed search process;
- Coordinate the deployment of resources for search mission;
- Communicate the search findings and recommendations to ARCC.

If the crash site is identified

- Assume the on scene command and control;
- Assess and communicate the on scene condition and rescue requirements;
- Secure the crash site;
- Assist in rescue and evacuation of casualties to the triage and/or ambulances using stretchers or as may be appropriate and under guidance of Medical Team;

- Assist in conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc;
- ix. At the request of ARCC, provide qualified SAR officer to assist in SAR Coordination.

4.3 Kenya Wildlife Services

The Kenya Wildlife Services (KWS) play an important Role in Search and Rescue operations in Kenya especially in the National Game/Marine Parks and Reserves. The Rescue Coordination Center will contact the KWS operations or the appropriate department based on the circumstances of each case. Within the National parks and reserves, KWS will assume on scene command and control in the rescue operations until an officer from the NPS arrives.

4.3.1 Kenya Wildlife Services Air-wing

On receipt of an aircraft Distress, Disappearance or Accident from ARCC, the duty officer Operations or the KWS point of contact for SAR will activate the internal alerting process as per the service procedures.

Then,

- i. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required.
- ii. Immediately mobilize and deploy personnel and assets in coordination with ARCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- If needed, provide airborne escort to aircraft in distress;
- In consultation with ARCC undertake the agreed search process
- Coordinate the Park penetration by search teams;
- Coordinate the deployment of resources;
- Communicate the search findings and recommendations to ARCC.

If the crash site is identified

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- If first to arrive at the scene, or within the game parks and reserves, assume the on scene command and control;
- Assess and communicate the on scene condition and rescue requirements;
- Secure the crash site;
- Coordinate the Park access for rescue teams;
- Assist in removing the injured to the triage and/or ambulances using stretchers or as may be appropriate and under guidance of Medical Team;
- Assist in conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc);
- Provide firefighting personnel and ambulances.

4.3.2 Kenya Wildlife Services Mountain Unit

The Kenya Wildlife Service Mountain Unit is specialized in management of all emergency cases within the high altitude and mountainous areas. On receipt of an aircraft distress, disappearance, or accident from ARCC, the duty officer operations or the KWS mountain unit point of contact for SAR will activate the internal alerting process as per the service procedures.

- iii. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required;
- iv. Immediately mobilize and deploy personnel and assets in coordination with ARCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- In consultation with ARCC undertake the agreed search process;
- Coordinate park access by the search teams;
- Coordinate with other teams (airborne and ground assets) to enhance search;
- Communicate the search findings and recommendations to ARCC.

- If first to arrive at the scene, or within the game parks and reserves, assume the on scene command and control;
- Assess and communicate the on scene conditions and rescue requirements;
- Secure the crash site;
- Coordinate the Park access by the rescue teams;
- Assist in removing/rescuing the victims to the triage and/or ambulances under guidance of Medical Team;
- In absence of medics provide basic /survival first aid services to victims;
- Conveyance of survival and rescue equipment;
- Provide firefighting personnel.

4.4 Kenya Coast Guard Service (KCGS)

The Kenya Coast Guard Service (KCGS) has an original mandate in Maritime Search and Rescue.

On receipt of an aircraft distress, disappearance, or accident from ARCC, the duty officer or KCGS point of contact for SAR will activate the internal alerting process as per the service procedures.

Then,

- v. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required;
- vi. Immediately mobilize and deploy personnel and assets in coordination with MRCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- In consultation with MRCC undertake the agreed search process;
- Coordinate access by the search teams;
- Communicate the search findings and recommendations to ARCC.

If the crash site is identified

- If first to arrive at the scene, assume the on scene command and control;

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- Assess and communicate the on scene conditions and rescue requirements;
- Secure the crash site;
- Coordinate the access by the rescue teams;
- Assist in removing/rescuing the victims to the triage and/or ambulances under guidance of Medical Team;
- In absence of medics provide basic /survival first aid services to victims;
- Assist in the Conveyance of survival and rescue equipment;
- Provide firefighting services where applicable;
- In the absence of ARCC on scene coordinator, provide on-scene coordination with ARCC.

4.5 Kenya Ferry Services (KFS)

The Kenya Ferry Services(KFS) operate a fleet of Marine assets which are strategically located near Moi International and Diani Airports. Should an aircraft ditch within or near the Channel or within the Airports ditching areas, the KFS will offer a critical emergency service in rescue.

On receipt of an aircraft Distress or Accident, the duty officer Operations or the Kenya Ferry Services point of contact for SAR will activate the internal alerting process as per KFS procedures.

Then,

Obtain accurate and clear details on:

- Aircraft involved;
- Probable location;
- Number of persons on board;
- Nature of the problem;
- Type of assistance required;

Immediately mobilize and deploy personnel and assets available from the unit in consultation with ARCC/RMRCC.

- Coordinate the provision of a deck for rescue operations;
- Provide and coordinate the conveyance of Survival kit to the rescue site;
- Coordinate the evacuation of the casualties to the triage and/or hospitals as may be appropriate, under guidance of the Medical Teams;
- Coordinate the conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc);
- Coordinate the provision of on scene command platform.

4.6 Kenya Forest Services

The Kenya Forest Services is responsible for Conservation, management and utilization of the country's forest resources. The Kenya forest services is therefore an important link in the Aeronautical Search and Rescue within the Gazetted forested areas.

On receipt of information of an aircraft Distress, Disappearance or Accident the duty officer Operations or the Kenya Forest point of contact for SAR will activate the internal alerting process as per the service procedures.

Then,

- i. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required;
- ii. Immediately mobilize and deploy personnel and assets under the coordination of ARCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- If able, provide airborne escort to aircraft in distress;
- In consultation with ARCC undertake the agreed search process;
- Coordinate the Forest access and guidance to search teams;
- Coordinate the deployment of resources for search mission;
- Coordinate and lead ground search parties;
- Communicate the search findings and recommendations to ARCC.

If the crash site is identified

- If first to on site, Assume the on-scene command and control;
- Assess and communicate the on-scene conditions and rescue requirements;
- Secure the crash site;
- Coordinate the Forest penetration for rescue teams;
- Assist in removing the injured to the triage and/or ambulances using stretchers or as may be appropriate and under guidance of Medical Teams;
- Assist in conveyance of specialists and equipment as the situation may require (Medical teams, Government /security officials, scene contamination assessment officials (bomb, chemical, radioactive) etc;
- Provide firefighting assets and personnel.

4.7 Assistance from Air Operators

Air operators have unique capabilities and play important role in search and rescue operations. Whenever called upon they should volunteer assets, personnel and their expertise to assist in distress situations.

A number of air operators have organized into clubs that provide continuous tracking of members' aircraft and maintain a good liaison with contacts on airfields and airstrips. This information is critical to search for lost aircraft.

Air operators also hold unique capabilities and have specialized assets. Operators will therefore have important roles in search and rescue, and will be called upon by the ARCC as the circumstances dictate.

4.7.1 Tropic Air Ltd

Tropic Air Limited has the expertise, equipment and experience in Air Search and Rescue operations in and around Mt. Kenya and the Aberdare ranges. The Rescue Coordination Center will contact the Tropic Air LTD Operations Centre based on the circumstances of each case.

On receipt of an aircraft Distress, Disappearance or Accident from ARCC, the duty officer Operations or the Tropic Air LTD point of contact for SAR will activate the internal alerting process as per the company procedures.

Then,

- i. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required;
- ii. Immediately mobilize and deploy personnel and assets under the coordination of ARCC.

In the event of Search

- Avail an appropriate aircraft and crew with special abilities to undertake the mountain SAR operations;
- If needed, provide airborne escort to aircraft in distress;
- In consultation with ARCC undertake the agreed search process;
- Coordinate with ARCC, the deployment of resources;
- Provide relevant contacts for crew and their kin to assist in tracing;
- Communicate the search findings and recommendations to ARCC.

If the crash site is identified

- Coordinate with ARCC, the Provision of Aircraft and personnel for Rescue;
- Coordinate with ARCC the Rescue and evacuation of casualties;
- Coordinate with ARCC, Conveyance of survival and rescue equipment;
- Assist in provision of Airstrip conditions from data bank available.

4.7.2 AERO Club of East Africa

The AeroClub (EA) retains contacts and monitors the flight operations of all its members. This is a critical link for general aviation aircraft especially in the remote parts of East Africa. The Rescue Coordination Center will contact the Aviation Centre [Wilson Airport] based on the circumstances of each case.

On receipt of an aircraft Distress, Disappearance or Accident, the duty Operations officer or the point of contact for SAR will activate the internal alerting process as per the Club's procedures and immediately alert ARCC if the information did not originate from there. Then, ARCC will request as much information as may be available at the Club's Aviation Centre. The information will include the following:

- Full Aircraft details;
- Full itinerary of the flight;
- Last point of contact with aviation Centre or last point observed on flight tracking;
- Name (s) of crew and contacts;
- Number of persons on board;
- Nature of the problem if reported to the Aviation centre;
- Type of assistance required, if known.

Then,

- i. Immediately mobilize and deploy personnel and assets under the coordination of ARCC.

In the event of Search

- Avail an appropriate asset to undertake the search operations;
- If able, provide airborne escort to aircraft in distress;
- Coordinate with ARCC, the deployment of resources;
- Communicate the search findings and recommendations to ARCC.

If the crash site is identified

- Provide rescue aircraft, if able;
- Provide to ARCC updated information on nearby Airstrip conditions and weather if available.

4.8 Kenya Meteorological Department (KMD)

Part of the key functions of the KMD is provision of meteorological and climatological services to civil aviation, military aviation and shipping in the western Indian Ocean including the issuing of cyclone warnings for the safety of merchant and other ships.

On receipt of information of an aircraft Distress, Disappearance or Accident the duty officer or KMD point of contact for SAR will activate the internal alerting process as per the Organizations procedures.

Then,

Immediately mobilize Met personnel to provide and keep updated ARCC with weather reports and forecast appropriate to the Search and Rescue Mission or as per specific request from ARCC.

4.9 Kenya Airports Authority

The Kenya Airports Authority provides facilitative infrastructure for aviation services between Kenya and the outside world. Its main functions are: Administer, control and manage aerodromes, provide and maintain facilities necessary for efficient operations of aircraft, provide rescue and firefighting equipment.

While the mandate of KAA regarding rescue covers aerodromes and their vicinity, the authority may extend assistance of specialized firefighting equipment at the request of ARCC.

At the request of ARCC, the Authority will also facilitate access for aircraft, Ambulances, personnel etc. directly involved with Search and Rescue missions.

4.10 Ministry of Health [MOH]

The MOH play a primary role in provision of health services. During an Aeronautical disaster MOH play multiple roles in rescue, specialized assessment of the scene, evacuation and treatment of victims.

On receipt of information of an aircraft Distress or Accident from ARCC, the duty officer Operations or the MOH point of contact for SAR will activate the internal alerting process as per the Ministry's procedures.

Then,

- i. Obtain accurate and clear details on:
 - Aircraft involved;
 - Location;
 - Number of persons on board;

- Nature of the problem;
 - Last point of departure;
 - Type of assistance required;
- ii. Immediately mobilize and deploy personnel and assets available from the unit in consultation with ARCC.
- Coordinate the evacuation of the casualties to the triage and/or hospitals as may be appropriate, under guidance of Medical Team;
 - Coordinate the conveyance of specialists and equipment as the situation may require (Medical teams, scene contamination assessment officials (chemical, radioactive) etc;
 - Coordinate the deployment of ambulances;
 - Coordinate the deployment of First Aiders to the scene of disaster;
 - Coordinate Dead body management and transport;
 - Coordinate Psycho social support services to the victims and their kin;
 - Coordination of Medical services from government departments; KEMRI, Port Health, Government Chemist, Radiation Board and Disease surveillance;
 - Mobilize resources relevant to the emergency relief required;
 - Coordinate the Deployment of MOH Rapid response teams if required;
 - Coordinate the distribution of accident victims to various hospitals;
 - Sensitize and inform the public on emergency situations, as necessary.

4.11 International committee of the Red Cross (ICRC) – Kenya

The ICRC play a critical role in Rescue operations in Kenya. They have specialized personnel and equipment to stabilize accident victims and convey them to health facilities for comprehensive care.

On receipt of an aircraft Distress or Accident from ARCC, the duty officer Operations or the ICRC point of contact for SAR will activate the internal alerting process as per the Unit's procedures.

Then,

- i. Obtain accurate and clear details on:
- Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required;

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- ii. Immediately mobilize and deploy personnel and assets available from the unit in consultation with ARCC.
 - Coordinate the evacuation of the casualties to the triage and/or hospitals as may be appropriate, under guidance of Medical Teams;
 - Coordinate the deployment of firefighting personnel and ambulances;
 - Coordinate Aqua Rescue [Divers] for emergencies in water bodies;
 - Coordinate the deployment of First Aiders to the scene of disaster;
 - Coordinate Dead body management and transport;
 - Coordinate Psycho social support services to the victims and their kin;
 - Coordinate tracing of missing persons.

4.12 AMREF (East Africa) Flying Doctors

The AMREF play a central role in Rescue operations in Kenya. They have specialized personnel and equipment to stabilize accident victims and convey them to health facilities for comprehensive care.

On receipt of an aircraft Distress or Accident from ARCC, the duty officer Operations or the AMREF point of contact for SAR will activate the internal alerting process as per the Unit's procedures.

Then,

- i. Obtain accurate and clear details on:
 - Aircraft involved;
 - Probable location or area of search;
 - Number of persons on board;
 - Nature of the problem;
 - Type of assistance required;
- ii. Immediately mobilize and deploy personnel and assets available from the unit in consultation with ARCC.
 - Coordinate the evacuation of the casualties to the triage and/or hospitals as may be appropriate, under guidance of Medical Teams;
 - Coordinate the deployment of aircraft and vehicle ambulances;
 - Coordinate the deployment of First Aiders to the scene of disaster;
 - Coordinate Psycho social support services to the victims and their kin.

4.13 Organized groups around large water bodies in Kenya

Organized groups around water bodies are among the most important first responders in rescue operations.

The groups include private boat owners', divers clubs, beach management units (BMUs), fishing groups, water sports and leisure clubs etc. Due to their expertise in diving and knowledge of the particular water body, the organized groups are very helpful as first responders.

On receipt of information or observation of an aircraft accident the groups or individuals will endeavor to offer maximum assistance to the victims.

Individuals who notice an incident or accident should notify the ARCC or any government agency directly or through their management.

Then,

- Mobilize personnel and assets available to respond to the incident;
- Provide guidance to other experts due to mastery in local terrain;
- Communicate the search findings and recommendations to ARCC;
- Evacuate the casualties, provide basic first aid and convey them to hospitals as may be appropriate;
- Assist in the conveyance of specialists and equipment as the situation may require;
- Appoint one official to coordinate the exercise with Rescue coordination centre;
- Coordinate the deployment of First Aiders to the scene of disaster.

4.14 Department of Immigration Services

The department oversees cross border movement and play an important Role in Aeronautical Search and Rescue operations in Kenya whenever Air disaster occurs involving international flights or in the event of cross border SAR operations.

On receipt of facilitation request from ARCC, the duty officer Operations or the Immigration department point of contact for SAR will attend to the requests as per the departments procedures and MOU entered between the Government of the Republic of Kenya and the involved State, on Search and Rescue.

The facilitation request may include but not limited to: -

- i. Processing of foreign victims;
- ii. Facilitation of foreign specialists;
- iii. Facilitation of local SAR experts in cross border missions.

4.15 Customs Services Department

The department oversees enforcement of laws relating to entry and exit of goods and play an important Role in Aeronautical Search and Rescue operations in Kenya whenever Air disaster occurs involving international flights or in the event of cross border SAR operations.

On receipt of facilitation request from ARCC, the duty officer Operations or the Customs services department point of contact for SAR will attend to the requests as per the departments procedures and MOU entered between the Government of the Republic of Kenya and the involved State, on Search and Rescue.

The facilitation request may include but not limited to:

- i. Processing of goods recovered at crash site;
- ii. Processing of foreign assets intended for assistance in an ongoing Search and Rescue mission;
- iii. Processing of assets intended for assistance to an ongoing search and rescue mission outside Kenya.

4.16 Ministry of Foreign Affairs

The ministry oversees foreign coordination, negotiation and liaison with foreign governments. Where circumstances require, the Ministry will play a key role in the search and rescue operations.

The roles may include but not limited to:

- i. Coordination with foreign governments to facilitate entry into their territory for cross border search and rescue;
- ii. Coordination with foreign governments in regard to request for assistance in search and rescue;
- iii. Coordination on any search and rescue issue that touches on other government(s).

4.17 Aircraft Accidents Investigations Division

The Air Accident Investigation Division (AAID) is responsible for the investigation of air accidents and serious incidents in Kenya involving both local and foreign aircraft. The division will be notified at the onset of an Aeronautical SAR Mission. After locating the wreckage, the AAID will be informed of the same and should endeavor to report to the scene at the earliest.

The ARCC provide the AAID with all material facts as may be requested and available.

Chapter 5

5.0 Emergency Exercises / Drills

5.1 Objectives of SAR Exercises / Drills

SAR Drills and exercises are used to rehearse anticipated emergency scenarios. They are designed to enhance training, reduce confusion, and verify the adequacy of emergency response activities and equipment.

Such exercises are categorized by the following types:

- (a) Full scale SAR exercise/Drill;
- (b) Partial SAR Exercise;
- (c) Table top exercises;
- (d) SAR communication test.

All exercises outlined above shall have pre-determined objectives, against which the performance of the participants will be clearly measured.

The ARCC shall conduct SAR Exercises/Drills in a manner described below for the purposes of testing/evaluating:

- a) Response, communication, co-ordination, and control of all responding agencies in the event of a SAR Mission;
- b) Effectiveness of the SAR Plan and SAR-SOPs;
- c) Adequacy of available SAR assets in responding to a SAR Mission.

5.2 Full scale SAR exercise/Drill

A test of all personnel, facilities and procedures associated with the SAR-SOP, and which shall be conducted at least once every three (3) years.

- i. All major agencies expected to respond to an actual SAR Mission shall participate in Full-scale exercises.
- ii. A post-mortem evaluation, involving full debriefing, analysis and critique of the response shall be conducted within seven (7) days from the date of the exercise.
- iii. Representatives of all responding agencies will meet and evaluate/critique the performance of each responding agency based on the written submissions/observations by observers
- iv. Lessons learned from the exercise shall be compiled and documented, to enable revisions/updating of procedures to correct mistakes and shortcomings identified during the exercise or post-mortem meeting.

5.3 Partial SAR Exercise

- i. Partial SAR exercises shall involve an actual response. The exercises may be required to test or evaluate new systems, train personnel on techniques or procedures or at the request of a responding agency. They are economical because of their limited scope and are effective and efficient due to the ability to repeat the exercises on a fairly frequent basis.
- ii. Partial exercises shall be conducted at least once each year that a full scale is not held.
- iii. Partial exercises shall involve only one or two responding agencies. However, they may be scaled up to additionally involve co-ordination procedures between several different units, if required.

5.4 Table top exercises / Drills

- i. These exercises involve a review of each agency's role on a round table meeting.
- ii. Table Top exercise shall be conducted at least once each six (6) months, except during six-month period when a full scale exercise is held.
- iii. Table Top Exercise shall be designed to test the integration and capability of emergency response resources, without the expense and disruption to services associated with the full-scale exercise.
- iv. Such exercises shall be run frequently in order to reconfirm procedures, policy, emergency contact information, radio frequencies, changes in key personnel etc.
- v. Typically, an accident scenario plus an accident location shall be selected and each agency representatives asked to describe what actions their agency will implement if the scenario was real.
- vi. Therefore, the exercise shall be inter-active with intellectual discussions between all participants, and shall test understanding (intellectual perception) not just the specific agency procedures, but also all aspects associated with inter-agency response, communication, co-ordination and control processes in an emergency situation.
- vii. Lessons learnt shall be documented and distributed to all agencies associated with the response for further training and information to their staff.
- viii. Where the feedback or discussions reveal inherent loopholes in the agency's emergency procedures, a report shall be generated to fast track update or revision or amendment of such sections of the SAR-SOP.

5.5 SAR communication test

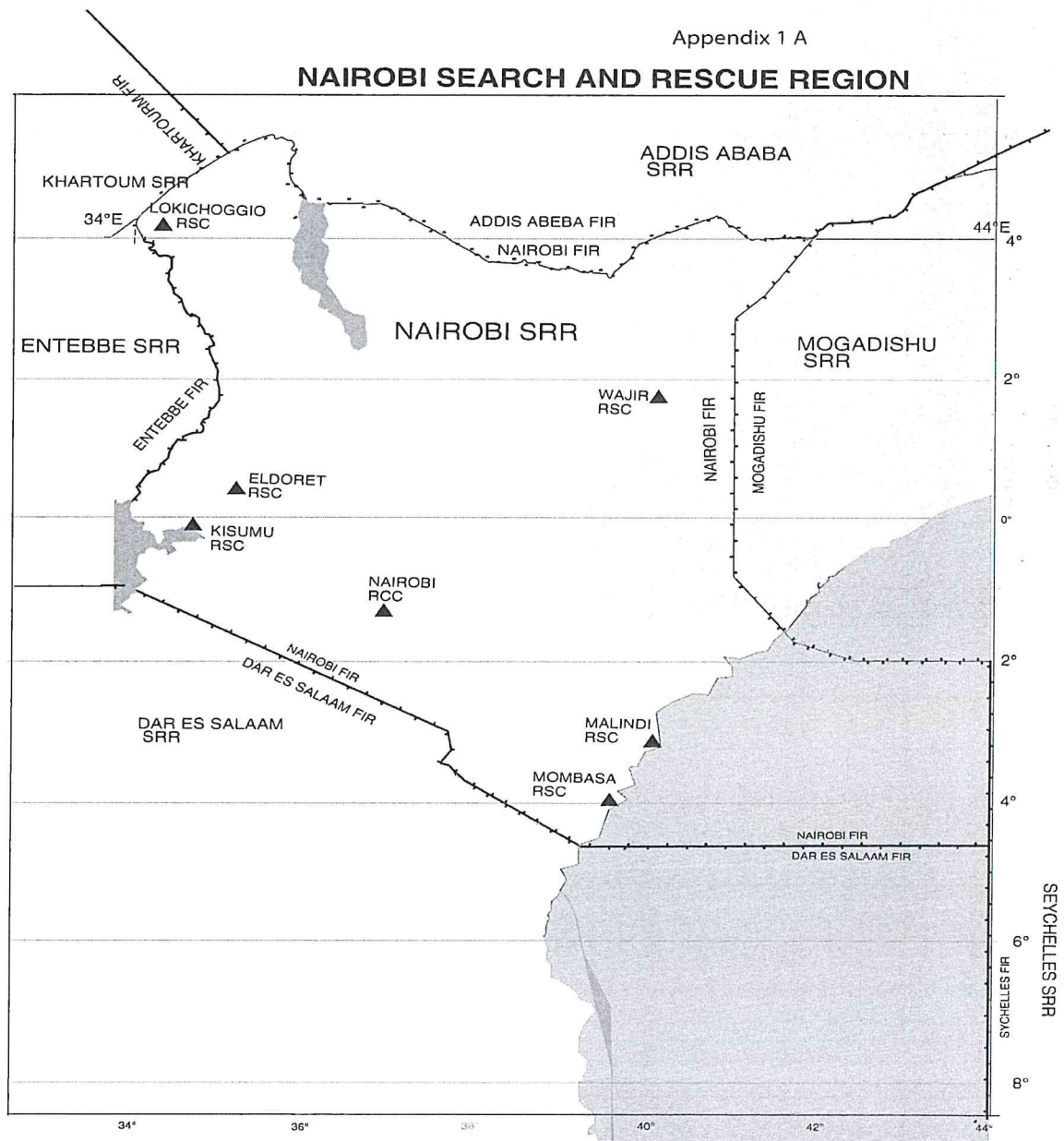
- i. This exercise involves a review of the communication system.
- ii. It shall be conducted on a daily basis for cluster one, Quarterly basis for all responding agencies through notified points of contact. Appendix 6: SAR Contacts
- iii. Lessons learned shall be documented and distributed to all agencies.

5.6 Completion of exercise

The ARCC will:

- i. Assess the exercise outcomes against established objectives;
- ii. Identify any improvements required to the documented procedures;
- iii. Summarize the critiques of agency performance; and
- iv. Prepare a summary report for presentation to the stakeholders.

Appendix 1: Nairobi Search and Rescue Region



Appendix 2: ASAR NOTIFICATION

ASAR NOTIFICATION

Form 001



SAR No: _____ Date: _____

A/C Type: _____ Call Sign: _____ Registration: _____

No. of Persons on Board: _____

Probable Location or Search Area:

Nature of the Problem:

Type of Assistance Required:

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Appendix 3: ASAR RCC Transfer - Form 002



DATE AND TIME: _____

FROM: (Originating RCC): _____ TO: (Receiving RCC): _____

A. IDENTITY OF CASUALTY (Name/call sign, flag, State): _____

B. POSITION (Latitude/longitude): _____

C. NUMBER OF PERSONS IN DISTRESS: _____

D. ASSISTANCE REQUIRED: _____

E. CO-ORDINATING RCC: _____

F. DESCRIPTION OF CASUALTY

(Physical description, owner/charterer, cargo carried, passage from/to, life-saving equipment carried): _____

G. WEATHER ON SCENE (Wind, sea/swell state, air/sea temperature, visibility, cloud cover/ceiling, barometric pressure): _____

H. INITIAL ACTIONS TAKEN (By casualty and RCC): _____

I. AREAS ALREADY SEARCHED: _____

J. CURRENT/PRESENT SEARCH SUB-AREAS: _____

K. ALERTED UNITS: _____

L. ENDURANCE OF EXISTING SAR UNITS ON SCENE: _____

M. AVAILABILITY OF SAR UNITS ON SCENE (Hours/Days): _____

N. COMMUNICATION PLAN: _____

O. CONFIRMATION (All participating SAR Units have been advised of the transfer of responsibility): _____

RCC SUPERVISOR

NAME: _____ SIGN: _____

Appendix 4: ASAR SITREP - FORM 003



TRANSMISSION (Distress/urgency) _____

DATE AND TIME _____

SAR SITREP No. _____

FROM: (Originating RCC): _____ TO: _____

A. IDENTITY OF CASUALTY (Name/call sign, flag State): _____

B. POSITION (Latitude/longitude): _____

C. SITUATION (Type of message, e.g., distress/urgency; date/time; nature of distress/urgency, e.g., fire, collision, medico):

D. NUMBER OF PERSONS: _____

E. ASSISTANCE REQUIRED: _____

F. COORDINATING RCC: _____

G. DESCRIPTION OF CASUALTY

(Physical description, owner/charterer, cargo carried, passage from/to, life-saving equipment carried):

H. WEATHER ON SCENE (Wind, sea/swell state, air/sea temperature, visibility, cloud cover/ceiling, barometric pressure):

J. INITIAL ACTIONS TAKEN (By casualty and RCC):

K. SEARCH AREA (As planned by RCC):

L. CO-ORDINATING INSTRUCTIONS (OSC designated, units participating, Communications):

M. FUTURE PLANS: _____

N. ADDITIONAL INFORMATION (Include time SAR operation terminated):

Notes:

1. Each SITREP concerning the same casualty should be numbered sequentially.
2. If help is required from the addressee, the first SITREP should be issued in short form if remaining information is not readily available
3. When time permits, the full form may be used for the first SITREP, or to amplify it.
4. Further SITREPs should be issued as soon as other relevant information has been obtained. Information already passed should not be repeated.
5. During prolonged operations, "no change" SITREPs, when appropriate, should be issued at intervals of about 3 hours to reassure recipients that nothing has been missed.
6. When the incident is concluded, a final SITREP is being issued as confirmation.

APPENDIX 5 : SAR CLUSTERS

For the purposes of distribution of Search and Rescue Alerts, the responders are grouped into various clusters:

CLUSTER 1- Notified for Incidents with a high probability of developing into distress;

- i) National Police Service (National Police Service Operations and Air-wing),
- ii) Kenya Defense Forces
- iii) Kenya Maritime Authority (KMA),
- iv) Kenya Civil Aviation Authority (KCAA) Management,
- v) Kenya Wildlife Service (KWS)- in the National Parks/Reserves and Conservancies,
- vi) Air Operators (Affected Air Operator),
- vii) Aircraft Accident Investigations Department (AAID).

CLUSTER 2 – Incidents that are confirmed as distress;

- i) Kenya Wildlife Service (KWS),
- ii) Kenya Meteorological Department (KMD),
- iii) Ministry of Health (Responding Units),
- iv) National Disaster Operations Centre (NDOC),
- v) National Disaster Management Unit (NDMU),
- vi) Kenya Red Cross,
- vii) Kenya Coast Guards Service (KCGS),
- viii) Tropic Air- Incidents in Mt. Kenya and surrounding areas,
- ix) Kenya Defense Forces- Disaster Response Battalion (DRB),
- x) National Youth Service –Incidents requiring ground searches,
- xi) Kenya Forest Service- Incidents in the national forest areas,
- xii) Kenya Ports Authority- (Ferry Department),
- xiii) Kenya Airports Authority (KAA),
- xiv) Other Air Operators/Agencies situated in strategic locations,
- xv) County Government Administrations.

CLUSTER 3 – When significant details are available and contacted on need basis;

- i) State Department of Immigration and Registration of Persons,
- ii) Customs Services Department,
- iii) Ministry of Foreign Affairs (MFA),
- iv) AMREF,
- v) Beach management Units (BMU),
- vi) Resort Hotels (Around Parks and Beaches).

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Appendix 6: Contacts

NO	AGENCY	CONTACT PERSON	TELEPHONE	E-MAIL
1.	KENYA CIVIL AVIATION AUTHORITY	NAIROBI AERONAUTICAL RESCUE COORDINATION CENTRE [ARCC]- ANS COMPLEX MLOLONGO	+25479581009, +254795814103, +254795814200.	sar@kcaa.or.ke kenyasar@kcaa.or.ke
		KCAA HEADQUARTERS AVIATION HOUSE NAIROBI [JKIA]	PABX- +254709725000 +254728606586/570 +254734000491/2 FAX- +254206822300	info@kcaa.or.ke
		AIR NAVIGATION SERVICES [JKIA]	+254206827102 Direct Line +254206827100 Ext. 6000	jomo@kcaa.or.ke
		KCAA JKIA PABX	+254206827100/700720 030/731777756 /715737134 TOLL FREE LINES- ACCIDENTS/INCIDENTS +2540800720030/08 002215432	
		NAIROBI AREA CONTROL CENTRE	+254206827101, +254725834906 and +254206827100 Ext. 6040	
		JKIA CONTROL TOWER	+254705934715 Direct Line +254206827100 Ext. 6063	
		WILSON AIRPORT CONTROL TOWER	BOF-+254723533631 HKNWZPZX TWR- +254723633904/726206 512/713436995 +254206004692	aiswilson@kcaa.or.ke wilson@kcaa.or.ke
		MOI AIRPORT MOMBASA CONTROL TOWER [RSC]	+2544135220000 +254413522272 Ext. 240/222 +254717648298	
		MALINDI AIRPORT CONTROL TOWER [RSC]	+254705283987	

AERONAUTICAL SEARCH AND RESCUE STANDARD OPERATING PROCEDURES

		ELDORET AIRPORT CONTROL TOWER [RSC]	+254705134757	eld@kcaa.or.ke
		KISUMU CONTROL TOWER [RSC]	+254719652025 +254719652026 Ext.2102	
		WAJIR COTROL TOWER [RSC]	+254110464795	
		LOKICHOGIO CONTROL TOWER [RSC]	+254705283986 Direct Line	loki@kcaa.or.ke
		UKUNDA CONTROL TOWER [RSC]	+254793599522	
2.	KENYA MARITIME AUTHORITY	OPERATIONS CENTRE	+254721368313 +254737719414 FAX- +25420-8007776 +254412131100-1-4	www.rmrc@kma.go.ke rmrc@kma.go.ke
3.	MINISTRY OF TRANSPORT INFRASTRU CTURE AND URBAN DEVELOPME NT	MOTIH/UD HQs.	+254202729200	
		AIRCRAFT ACCIDENT INVESTIGATION DEPARTMENT [AAID]	+254202729200 Ext. 40026 Direct Line +254204966026 +254722778773/770111 333 AFTN- HKNCYLYX	directoraa@transport.go.ke
4.	NATIONAL DISASTER OPERATION S CENTRE [NDOC]	NDOC OPERATIONS CENTRE	+254202151053/202212 386 +2542022211445 +254776390897/711860 588	P.O.BOX 37300- 00100 Nairobi nationaldisasterops@ yahoo.co.uk info@ndockenya.org. ke
5.	NATIONAL DISASTER MANAGEME NT UNIT	NDMU OPERATIONS CENTRE	+254202199151/202188 171 +254202188108FAX 999, 911,112, SMS-211	www.disastermanag ement.go.ke ndmu@gmail.com

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REFERENCES

- i. Kenya Civil Aviation (Aeronautical Search and Rescue) regulations 2018
- ii. National Search and Rescue (NAMSAR) Plan
- iii. International Aeronautical and Marine Search and Rescue (IAMSAR) Manual (Doc 9731)
- iv. International Civil Aviation Organization (ICAO) Search and Rescue Annex 12