

### REPUBLIC OF MAURITIUS DEPARTMENT OF CIVIL AVIATION

Sir Seewoosagur Ramgoolam International Airport, Plaine Magnien

# MAURITIUS CIVIL AVIATION REQUIREMENTS

**MCAR SAR** 

**Search and Rescue** 

ISSUE 1 LREV 1

08 November 2024

#### **FOREWORD**

The purpose of MCAR SAR "Search and Rescue", is to provide the standards pertaining to the provision of search and rescue services within the search and rescue region, complementing Regulations 23, 26, 43, Twelfth schedule Part II (5), Fourteenth schedule Part IV, 4 and Fourteenth schedule Part V, 4 of the Civil Aviation Regulations under the responsibility of the Republic of Mauritius and is issued under the authority conferred upon the Director of Civil Aviation under Regulation 135 of the Civil Aviation Regulations.

Pursuant to Article 25 (Aircraft in distress) of the Convention on International Civil Aviation, the Republic of Mauritius undertakes to provide such measures of assistance to aircraft in distress within its search and rescue region as it may find practicable, and to permit, subject to control by its own authorities, the owners of the aircraft or authorities of the State in which the aircraft is registered to provide such measures of assistance as may be necessitated by the circumstances.

Furthermore, when undertaking search for missing aircraft, the Republic of Mauritius will collaborate in coordinated measures which may be recommended from time to time pursuant to the above-mentioned Convention.

This MCAR SAR "Search and Rescue" Issue 1, Rev 0 replaces the requirements prescribed in Civil Air Navigation Requirements of Mauritius (CANRM), Section 2, Series C, Part I: Search and Rescue, Issue 2-Rev 0, dated 03 March 2015.

MCAR SAR-Issue 1 Rev 0 was based on the provisions of ICAO Annex 12 "Search and Rescue", 8<sup>th</sup> edition of July 2004, amendment 18 dated 22 of November 2007.

This MCAR SAR, Issue 1 Rev 1 is based on the provisions of ICAO Annex 12 "Search and Rescue", 8<sup>th</sup> edition, amendment 19 dated 28 of November 2024.

This MCAR SAR Issue 1 Rev 1 will be effective as from 28 of November 2024.

Director of Obell

**Director of Civil Aviation** 

#### **ISSUE AND REVISION SYSTEM**

THE REVISIONS TO THIS REQUIREMENT WILL BE INDICATED BY A VERTICAL BAR ON THE LEFT SIDE, IN FRONT OF THE LINE, SECTION OR FIGURE THAT HAS BEEN AFFECTED. AN ISSUE WILL BE THE REPLACEMENT OF THE COMPLETE DOCUMENT.

THESE REVISIONS MUST BE RECORDED ON THE RECORD OF REVISIONS TABLE OF THIS DOCUMENT, INDICATING THE RESPECTIVE NUMBER, DATE IT WAS ENTERED AND SIGNED BY THE PERSON ENTERING THE REVISION.

### **RECORD OF REVISIONS**

REV NO.	DATE	INSERTED BY	
Issue 1, rev. 0	12 June 2024	ANS Inspector	
Revision 1	08 November 2024	ANS Inspector	

#### **NOTE**

The content of this document is arranged as follows:

The main requirements appear first, followed by the related acceptable means of compliance (AMC), even though this MCAR does not have any, and guidance material (GM) paragraph(s).

All elements (i.e. Requirement, AMC and GM) are colour-coded and can be identified according to the illustration below:

Requirements

Acceptable means of compliance

**Guidance Material** 

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### **GENERAL REQUIREMENTS**

### SAR.001 Applicability

This MCAR SAR Requirement establishes the Standards to be met by a Search and Rescue services provider, whether they are service providers from the State of Mauritius or an independent Search and Rescue service provider from another State.

#### **SECTION A**

#### **TECHNICAL REQUIREMENTS**

#### **CHAPTER 1**

#### **Organization**

#### SAR.005 Search and Rescue Services

(1) Responsible for the provision of SAR services

The Ministry responsible for shipping matters shall be responsible individually or in cooperation with other agencies or States, to arrange for the establishment and prompt provision of search and rescue services within Mauritius territory to ensure that assistance is rendered to persons in distress. Such services shall be provided on a 24-hour basis.

(a) Territory where SAR services will be provided

Such services shall be provided within the entire Mauritian Territory including territorial waters. Such services shall also be provided over those portions of the high seas or areas of undetermined sovereignty for which responsibility of providing Air Traffic Services has been delegated to Mauritius.

(b) Basic elements of search and rescue

Search and rescue services shall include a legal framework, a competent and responsible organization, organized available resources, communication facilities and a workforce skilled in coordination and operational functions.

(c) Processes to improve service provision

Search and rescue service provider shall establish processes to improve service provision, including the aspects of planning, domestic and international cooperative arrangements, and training.

(2) Providing assistance to aircraft in distress

The search and rescue service provider shall provide assistance to aircraft in distress and to survivors of aircraft accidents, regardless of the nationality or status of such persons or the circumstances in which such persons are found.

(3) Use of search and rescue units

The search and rescue service provider shall use search and rescue units and other available facilities to assist any aircraft or its occupants that are or appear to be in a state of emergency.

(4) Coordination between the aeronautical and maritime RCCs

The closest practicable coordination shall be ensured between the aeronautical and maritime rescue coordination centres.

(5) Consistency and cooperation

Consistency and cooperation between the aeronautical and maritime search and rescue services shall be facilitated.

(6) Joint rescue coordination centre

A joint rescue coordination centre shall be established to coordinate aeronautical and maritime search and rescue operations, if practicable.

#### SAR.010 Search and Rescue Regions

(1) Delineation of search and rescue regions

Search and rescue regions shall be delineated to provide search and rescue services. Such regions shall not overlap, and neighbouring regions shall be contiguous.

(a) Search and rescue regions shall, in so far as practicable, be coincident with corresponding flight information regions and, with respect to those areas over the high seas, maritime search and rescue regions.

#### **GM SAR.010 Search and Rescue Regions**

GM 1. Search and rescue regions are established to ensure the provision of adequate communication infrastructure, efficient distress alert routing and proper operational coordination to effectively support search and rescue services. Neighbouring States may cooperate to establish search and rescue services within a single SAR region.

GM 2. The delineation of search and rescue regions is determined on the basis of technical and operational considerations and is not related to the delineation of boundaries between States.

#### SAR.015 Rescue Coordination Centres and Rescue Sub-Centres

(1) Establishment of a Rescue Coordination Centre (RCC)

A rescue coordination centre shall be established in the search and rescue region.

(2) Staffing of the RCC and RSC

The rescue coordination centre and rescue subcentre, shall be staffed 24 hours a day by trained personnel proficient in the use of the language used for radiotelephony communications.

#### (3) English proficiency

RCC personnel involved in the conduct of radiotelephony communications shall be proficient in the use of the English language.

(4) Designation of public or private services as alerting posts

Where public telecommunications facilities would not permit persons observing an aircraft in emergency to notify the rescue coordination centre concerned directly and promptly, suitable units of public or private services shall be designated as alerting posts.

(5) Roles and responsibilities

The SAR service provider shall develop a description for each post and the roles and responsibilities of its staff.

(6) Updated contact details

Each rescue coordination centre and, as appropriate, rescue subcentre shall maintain up-to-date contact details in the OPS Control Directory.

(7) Subscribe and maintain access to the LADR

Each rescue coordination centre and, as appropriate, rescue subcentre shall subscribe and maintain access to the location of an aircraft in distress repository (LADR).

### GM SAR.015 Rescue Coordination Centres and Rescue Sub-Centres

- (1) A Contracting State may establish a rescue coordination centre with an associated search and rescue region that, in accordance with regional air navigation agreement, extends over an area greater than its sovereign airspace.
- (7) Guidance on the use of the OPS Control Directory and the LADR is contained in the Manual on Global Aeronautical Distress and Safety System (GADSS) (Doc 10165).

#### SAR.020 Search and Rescue Communications

(1) Rapid and reliable two-way communication (RCC)

The rescue coordination centre shall have means of rapid and reliable two-way communication with:

- (a) associated air traffic services units,
- (b) associated rescue subcentres,
- (c) where appropriate, coastal radio stations capable of alerting and communicating with surface vessels in the region,
- (d) the headquarters of search and rescue units in the region,

- (e) the maritime rescue coordination centre in the region and aeronautical, maritime or joint rescue coordination centres in adjacent regions,
- (f) a designated meteorological office or meteorological watch office,
- (g) search and rescue units,
- (h) alerting posts, and
- (i) the Cospas-Sarsat Mission Control Centre servicing the search and rescue region.
- (2) Rapid and reliable two-way communication (RSC)

The rescue subcentre shall have means of rapid and reliable two-way communication with:

- (a) adjacent rescue subcentres,
- (b) a meteorological office or meteorological watch office,
- (c) search and rescue units, and
- (d) alerting posts.

#### **GM SAR.020 Search and Rescue Communications**

(1) Maritime rescue coordination centres are identified in relevant documents of the International Maritime Organization.

#### SAR.025 Search and Rescue Units

(1) Designation of public or private services

As part of search and rescue units, elements of public or private services suitably located and equipped for search and rescue operations shall be designated.

(2) Public or private services that do not qualify as search and rescue units

Elements of public or private services that do not qualify as search and rescue units but are nevertheless able to participate in search and rescue operations, shall be designated as parts of the search and rescue plan of operation.

#### **GM SAR.025 Search and Rescue Units**

(1) The minimum units and facilities necessary for provision of search and rescue operations within a search and rescue region are determined by regional air navigation agreements and are specified in the appropriate Air Navigation Plan and Facilities and Services Implementation Document publications.

#### SAR.030 Search and Rescue Equipment

(1) Equipped search and rescue units

Search and rescue units shall be provided with equipment for locating promptly, and for providing adequate assistance at, the scene of an accident.

(2) Communications for search and rescue units

Each search and rescue unit shall have means of rapid and reliable two-way communication with other search and rescue facilities engaged in the same operation.

(3) Search and rescue aircraft communication equipment

Each search and rescue aircraft shall be equipped to be able to communicate on the aeronautical distress and on scene frequencies and on such other frequencies as may be prescribed.

(4) Search and rescue aircraft equipment for homing

Each search and rescue aircraft shall be equipped with a device for homing on distress frequencies.

(5) Communication between aircrafts and vessels

Each search and rescue aircraft, when used for search and rescue over maritime areas, shall be equipped to be able to communicate with vessels.

(6) Copy of the International Code of Signals

Each search and rescue aircraft, when used for search and rescue over maritime areas shall carry a copy of the International Code of Signals to enable it to overcome language difficulties that may be experienced in communicating with ships.

(7) Droppable survival equipment

Unless it is known that there is no need to provide supplies to survivors by air, at least one of the aircraft participating in a search and rescue operation shall carry droppable survival equipment.

(8) Survival equipment

States shall locate, at appropriate aerodromes, survival equipment suitably packed for dropping by aircraft.

(9) Measurement of actual surface drift

As of 26 November 2026, each search and rescue aircraft, when used for search and rescue over maritime areas, shall carry a droppable device for measuring actual surface drift.

### **GM SAR.030 Search and Rescue Equipment**

(4) Search and rescue aircraft equipment for homing

- GM 1 Emergency locator transmitter (ELT) carriage requirements are given in Annex 6, Parts I, II and III.
- GM 2 Specifications for ELTs are given in Annex 10, Volume III.
- (5) Communication between aircrafts and vessels
  - GM1. Until 25 November 2026, many vessels can communicate with aircraft on 2182 kHz, 4125 kHz and 121.5 MHz. However, these frequencies, and in particular 121.5 MHz, may not be routinely monitored by vessels.
  - GM 2. As of 26 November 2026, many vessels can communicate with aircraft on 2182 kHz, 4125 kHz, 121.5 MHz and 123.1 MHz. However, these frequencies, and in particular 121.5 MHz and 123.1 MHz, may not be routinely monitored by vessels. Rather, vessels monitor Channel 16 (156.8 MHz), the international maritime distress, safety and calling frequency.
- (6) Copy of the International Code of Signals

The International Code of Signals is published in English, French and Spanish by the International Maritime Organization as documents 994E, 995F and 996S.

#### **CHAPTER 2**

### Cooperation

#### SAR.035 Cooperation between States

(1) Coordination with neighboring States

Mauritius shall coordinate their search and rescue organizations with those of neighbouring States.

(2) Coordination of rescue operations

Whenever necessary, the RCC shall coordinate their search and rescue operations with those RCC of neighbouring States especially when these operations are proximate to adjacent search and rescue regions.

(a) Common search and rescue plans and procedures

In so far as practicable, common search and rescue plans and procedures to facilitate coordination of search and rescue operations with those of neighbouring States shall be developed.

(3) Immediate entry into the territory of search and rescue units

Subject to such conditions as may be prescribed by its own authorities, Mauritius shall permit immediate entry into its territory of search and rescue units of other States for the purpose of searching for the site of aircraft accidents and rescuing survivors of such accidents.

(4) Request to enter Mauritius

For the purpose of search and rescue, the authorities of the other State who wish their search and rescue units to enter the territory of Mauritius shall transmit a request, giving full details of the projected mission and the need for it, to the rescue coordination centre of Mauritius.

- (a) The authority of Mauritius shall:
  - (i) immediately acknowledge the receipt of such a request, and
  - (ii) as soon as possible, indicate the conditions, if any, under which the projected mission may be undertaken.
- (5) Agreements with neighbouring States

Mauritius shall enter into agreements with neighbouring States to strengthen search and rescue cooperation and coordination, setting forth the conditions for entry of each other's search and rescue units into their respective territories. These agreements shall also provide for expediting entry of such units with the least possible formalities.

- (6) Mauritius shall authorize its rescue coordination centres to:
  - (a) request from other rescue coordination centres such assistance, including aircraft, vessels, persons or equipment, as may be needed;
  - (b) grant any necessary permission for the entry of such aircraft, vessels, persons or equipment into its territory; and
  - (c) make the necessary arrangements with the appropriate customs, immigration or other authorities with a view to expediting such entry.
- (7) Assistance to other rescue coordination centres

Mauritius shall authorize its rescue coordination centres to provide, when requested, assistance to other rescue coordination centres, including assistance in the form of aircraft, vessels, persons or equipment.

(8) Joint training exercises

As of 26 November 2026, Mauritius shall make arrangements for joint training exercises involving their RCCs, RSCs and search and rescue units, those of other States and operators, in order to promote search and rescue efficiency.

(9) Periodic liaison visits

Mauritius shall make arrangements for periodic liaison visits by personnel of their rescue coordination centres and subcentres to the centres of neighbouring States.

#### SAR.040 Cooperation with other services

(1) Cooperation in search and rescue missions

All aircraft, vessels, local services and facilities which do not form part of the search and rescue organization shall cooperate fully with the latter in search and rescue and to extend any possible assistance to the survivors of aircraft accidents.

(2) Cooperation between the aeronautical and maritime authorities

Close coordination shall be maintained between the relevant aeronautical and maritime authorities to provide for the most effective and efficient search and rescue services.

(3) Cooperation with those responsible for investigating accidents

The search and rescue services shall cooperate with those responsible for investigating accidents and with those responsible for the care of those who suffered from the accident.

(4) Accident investigation

To facilitate accident investigation, rescue units shall, when practicable, be accompanied by persons qualified in the conduct of aircraft accident investigations.

#### (5) Cospas-Sarsat point of contact

As from 26 November 2026, a 24 hour search and rescue point of contact available for the receipt and acknowledgement of Cospas-Sarsat distress alert data shall be designated, this shall ensure a timely notification to the responsible RCC for the initiation of appropriate search and rescue response action.

#### SAR.045 Dissemination of information

#### (1) Publication and dissemination of information

All information necessary for the entry of search and rescue units of other States shall be published and disseminated through the AIP or, alternatively, include this information in search and rescue service arrangements.

(2) Information regarding the search and rescue plans of operation

When information benefits the provision of search and rescue services, information regarding the search and rescue plans of operation, shall be available through the rescue coordination centres or other agencies.

#### (3) Dissemination of information

Information shall be disseminated to the general public and emergency response authorities regarding actions to be taken when there is reason to believe that an aircraft's emergency situation may become cause for public concern or require a general emergency response.

#### **CHAPTER 3**

### **Preparatory measures**

#### SAR.050 Preparatory information

#### (1) Up to date information

The rescue coordination centre shall have readily available at all times up-to-date information concerning the following in respect of its search and rescue region:

- (a) search and rescue units, rescue subcentres and alerting posts,
- (b) air traffic services units,
- (c) means of communication that may be used in search and rescue operations,
- (d) addresses and telephone numbers of all operators, or their designated representatives, engaged in operations in the region, and
- (e) any other public and private resources including medical and transportation facilities that are likely to be useful in search and rescue.

#### (2) Other available information

The rescue coordination centre shall have readily available all other information of interest to search and rescue, including information regarding:

- (a) the locations, call signs, hours of watch, and frequencies of all radio stations likely to be employed in support of search and rescue operations;
- (b) the locations and hours of watch of services keeping radio watch, and the frequencies guarded;
- (c) locations where supplies of droppable emergency and survival equipment are stored;
- (d) objects which it is known might be mistaken for unlocated or unreported wreckage, particularly if viewed from the air;
- (e) as of 26 November 2026, the position, course and speed of aircraft that may be able to provide assistance to aircraft in distress; and
- (f) as of 26 November 2026, where the search and rescue region includes maritime areas, the position, course and speed of ships that may be able to provide assistance to aircraft in distress.
- (3) Access to information regarding the position, course and speed of ships

Until 25 November 2026, the rescue coordination centre whose search and rescue region includes maritime areas shall have ready access to information regarding the

position, course and speed of ships within such areas that may be able to provide assistance to aircraft in distress and information on how to contact them.

#### (4) Ship reporting systems

The Search and Rescue provider shall individually or in cooperation with other States, either establish a ship reporting systems in cooperation with maritime authorities or arrange communication links with Amver or regional ship reporting systems to facilitate search and rescue operations at sea.

#### **GM SAR.050 Preparatory information**

(3) Access to information regarding the position, course and speed of ships

This information may either be kept in the rescue coordination centres or be readily accessible.

(4) Ship reporting systems

Amver is a cooperative international ship reporting system with worldwide coverage that is available for interrogation by all rescue coordination centres. A number of Contracting States also operate regional ship reporting systems.

#### SAR.055 Plans of Operation

(1) Detailed plans of operation

The rescue coordination centre shall prepare detailed plans of operation for the conduct of search and rescue operations within its search and rescue region.

(2) Search and rescue plan

Search and rescue plans of operations shall be developed jointly with representatives of the operators and other public or private services that may assist in providing search and rescue services or benefit from them, taking into account that the number of survivors could be large.

(3) Arrangements for the servicing and refuelling

The plans of operation shall specify arrangements for the servicing and refuelling, to the extent possible, of aircraft, vessels and vehicles employed in search and rescue operations, including those made available by other States.

(4) Content of the search and rescue plans of operation

The search and rescue plans of operation shall contain details regarding actions to be taken by those persons engaged in search and rescue, including:

(a) the manner in which search and rescue operations are to be conducted in the search and rescue region,

- (b) the use of available communication systems and facilities,
- (c) the actions to be taken jointly with other rescue coordination centres,
- (d) the methods of alerting en-route aircraft and ships at sea,
- (e) the duties and prerogatives of persons assigned to search and rescue,
- (f) the possible redeployment of equipment that may be necessitated by meteorological or other conditions,
- (g) the methods for obtaining essential information relevant to search and rescue operations, such as weather reports and forecasts, appropriate NOTAM, etc.,
- (h) the methods for obtaining, from other rescue coordination centres, such assistance, including aircraft, vessels, persons or equipment, as may be needed,
- (i) as of 26 November 2026, the methods for obtaining approval to allow search and rescue units from an assisting State to enter into the territory of the State of the RCC,
- (j) the methods for assisting distressed aircraft being compelled to ditch to rendezvous with surface craft,
- (k) the methods for assisting search and rescue or other aircraft to proceed to aircraft in distress; and
- (I) cooperative actions to be taken in conjunction with air traffic services units and other authorities concerned to assist aircraft known or believed to be subject to unlawful interference.
- (5) Plans of operation shall be integrated with airport emergency plans

Search and rescue plans of operation shall be integrated with airport emergency plans to provide for rescue services in the vicinity of aerodromes including, for coastal aerodromes, areas of water.

#### SAR.060 Search and Rescue units

- (1) Each search and rescue unit shall:
  - (a) be cognizant of all parts of the plans of operation prescribed in SAR.055 that are necessary for the effective conduct of its duties, and
  - (b) keep the rescue coordination centre informed of its preparedness.
- (2) The SAR provider shall:
  - (a) maintain in readiness the required number of search and rescue facilities, and
  - (b) maintain adequate supplies of rations, medical stores, signalling devices and other survival and rescue equipment.

#### **SAR.065 Training and exercises**

- (1) Provision for regular training
  - (a) Until 25 November 2026, to achieve and maintain maximum efficiency in search and rescue, the SAR service provider shall provide for regular training of their search and rescue personnel and arrange appropriate table and field search and rescue exercises.
  - (b) As of 26 November 2026, to achieve and maintain maximum efficiency in search and rescue, the SAR service provider shall provide for regular training and exercises for their search and rescue personnel, which include both land and maritime environments as appropriate, containing both search and rescue elements, remote from an aerodrome.

#### (2) SAR Staff Training

(a) Training programme

The SAR service provider shall develop and implement a training programme for its staff. This programme as a minimum shall be in line with the IAMSAR Manual (Doc. 9731), Volume I, chapter 3 and its Volume II, chapter 1.8, and shall include initial, OJT, specialized, and recurrent training.

(b) Training plan

The SAR service provider shall develop and implement an annually training plan for its staff, addressing classroom classes, table and field search and rescue exercises

(c) Training records

The SAR service provider shall develop a system or methodology for maintaining training records in a standardized way for its ATS staff.

#### **GM SAR.065 Training and exercises**

(1) The need for regular training and exercises may be moderated commensurate with the frequency of real search and rescue responses which demonstrate satisfactory and effective search and rescue performance.

#### SAR.070 Wreckage

(1) Removal of wreckage

Until 25 November 2026, the search and rescue provider shall ensure that wreckage resulting from aircraft accidents within its territory or, in the case of accidents on the high seas or in areas of undetermined sovereignty, within the search and rescue regions for which it is responsible, is removed, obliterated or charted following completion of the accident investigation, if its presence might constitute a hazard or confuse subsequent search and rescue operations.

#### SAR.075 Accident sites and wreckage

- (1) As from 26 November 2026, the search and rescue provider shall ensure that search and rescue personnel that may be required to respond to an aircraft accident site are trained in the management of related occupational health risks.
- (2) As from 26 November 2026, the search and rescue provider shall ensure that wreckage resulting from aircraft accidents within its territory or, in the case of accidents on the high seas or in areas of undetermined sovereignty, within the search and rescue regions for which it is responsible, is removed, obliterated or charted following completion of the accident investigation, if its presence might constitute a hazard or confuse subsequent search and rescue operations.

### GM SAR.075 Accident sites and wreckage

Guidance related to effective occupational health practices at aircraft accident sites is contained in the Manual of Aircraft Accident and Incident Investigation, Part I – Organization and Planning (Doc 9756) and Circular 315 – Hazards at Aircraft Accident Sites.

#### **CHAPTER 4**

### **Operating procedures**

#### SAR.075 Information concerning emergencies

#### (1) Aircraft in an emergency

Any authority or any element of the search and rescue organization having reason to believe that an aircraft is in an emergency shall give immediately all available information to the rescue coordination centre concerned.

(2) Assessment of the operation required when aircraft in emergency

Rescue coordination centres shall, immediately upon receipt of information concerning aircraft in emergency, evaluate such information and assess the extent of the operation required.

(3) Information received concerning aircraft in emergency from other sources than ATS units

When information concerning aircraft in emergency is received from other sources than air traffic services units, the rescue coordination centre shall determine to which emergency phase the situation corresponds and shall apply the procedures applicable to that phase.

#### SAR.080 Procedures for rescue coordination centres during emergency phases

#### (1) Uncertainty phase

Upon the occurrence of an uncertainty phase, the rescue coordination centre shall cooperate to the utmost with air traffic services units and other appropriate agencies and services in order that incoming reports may be speedily evaluated.

#### (2) Alert phase

Upon the occurrence of an alert phase the rescue coordination centre shall immediately alert search and rescue units and initiate any necessary action.

#### (3) Distress phase

Upon the occurrence of a distress phase, the rescue coordi- nation centre shall:

- (a) immediately initiate action by search and rescue units in accordance with the appropriate plan of operation,
- (b) ascertain the position of the aircraft, estimate the degree of uncertainty of this position, and, on the basis of this information and the circumstances, determine the extent of the area to be searched,

- (c) notify the operator, where possible, and keep the operator informed of developments,
- (d) notify other rescue coordination centres, the help of which seems likely to be required, or which may be concerned in the operation,
- (e) notify the associated air traffic services unit, when the information on the emergency has been received from another source.
- (f) request at an early stage such aircraft, vessels, coastal stations and other services not specifically included in the appropriate plan of operation and able to assist to:
  - (i) maintain a listening watch for transmissions from the aircraft in distress, survival radio equipment or an ELT,
  - (ii) assist the aircraft in distress as far as practicable, and
  - (iii) inform the rescue coordination centre of any developments,
- (g) of action for the conduct of the search and/or rescue operation required and communicate such plan for the guidance of the authorities immediately directing the conduct of such an operation,
- (h) amend as necessary, in the light of evolving circum- stances, the detailed plan of action.
- (i) notify the appropriate accident investigation authorities, and
- (i) notify the State of Registry of the aircraft.

The order in which these actions are described shall be followed unless circumstances dictate otherwise.

(4) Initiation of search and rescue action in respect of an aircraft whose position is unknown

In the event that an emergency phase is declared in respect of an aircraft whose position is unknown and may be in one of two or more search and rescue regions, the following shall apply:

- (a) When a rescue coordination centre is notified of the existence of an emergency phase and is unaware of other centres taking appropriate action, it shall assume responsibility for initiating suitable action in accordance with SAR.080 and confer with neighbouring rescue coordination centres with the objective of designating one rescue coordination centre to assume responsibility forthwith.
- (b) Unless otherwise decided by common agreement of the rescue coordination centres concerned, the rescue coordination centre to coordinate search and rescue action shall be the centre responsible for:
  - (i) the region in which the aircraft last reported its position, or
  - (ii) the region to which the aircraft was proceeding when its last reported position was on the line separating two search and rescue regions, or

- (iii) the region to which the aircraft was destined when it was not equipped with suitable two-way radio communication or not under obligation to maintain radio communication, or
- (iv) the region in which the distress site is located as identified by the Cospas-Sarsat system.
- (c) After declaration of the distress phase, the rescue coordination centre with overall coordination responsibility shall inform all rescue coordination centres that may become involved in the operation of all the circumstances of the emergency and subsequent developments. Likewise, all rescue coordination centres becoming aware of any information pertaining to the emergency shall inform the rescue coordination centre that has overall responsibility.
- (5) Passing of information to aircraft in respect of which an emergency phase has been declared

Whenever applicable, the rescue coordination centre responsible for search and rescue action shall forward to the air traffic services unit serving the flight information region in which the aircraft is operating, information of the search and rescue action initiated, in order that such information can be passed to the aircraft.

#### GM SAR.080 Procedures for rescue coordination centres during emergency phases

- (f)(1) Until 25 November 2026, the frequencies contained in the specifications for ELTs given in Annex 10, Volume III, are 121.5 MHz and 406 MHz.
- (f)(1) As of 26 November 2026, the frequencies contained in the specifications for ELTs given in Annex 10, Volume III, are 121.5 MHz and 406.0 to 406.1 MHz. The Cospas-Sarsat 406 MHz channel assignment plan is contained in Cospas-Sarsat Document C/S T.012.

### SAR.085 Procedures where responsibility for operations extends to two or more Contracting States

Where the conduct of operations over the entire search and rescue region is the responsibility of more than one Contracting State, each involved State shall take action in accordance with the relevant plan of operations when so requested by the rescue coordination centre of the region.

#### SAR.090 Procedures for authorities in the field

The authorities immediately directing the conduct of operations or any part thereof shall:

(1) Instructions to units

Give instructions to the units under their direction and inform the rescue coordination centre of such instructions, and

#### (2) Keeping RCC informed

Keep the rescue coordination centre informed of developments.

### SAR.095 Procedures for rescue coordination centres-termination and suspension of operations

(1) Continuation of search and rescue operations

Search and rescue operations shall continue, when practicable, until all survivors are delivered to a place of safety or until all reasonable hope of rescuing survivors has passed.

(2) Discontinue of search and rescue operations

The responsible rescue coordination centre shall normally be responsible for determining when to discontinue search and rescue operations.

(3) Cancelling emergency phase

When a search and rescue operation has been successful or when a rescue coordination centre considers, or is informed, that an emergency no longer exists, the emergency phase shall be cancelled, the search and rescue operation shall be terminated and any authority, facility or service that has been activated or notified shall be promptly informed.

(4) Temporarily suspension of SAR activities

If a search and rescue operation becomes impracticable and the rescue coordination centre concludes that there might still be survivors, the centre shall temporarily suspend on-scene activities pending further developments and shall promptly inform any authority, facility or service which has been activated or notified. Relevant information subsequently received shall be evaluated and search and rescue operations resumed when justified and practicable.

### GM SAR.095 Procedures for rescue coordination centres-termination and suspension of operations

(2) Contracting States may require input from other appropriate State authorities in the decision-making process leading to termination of SAR operations.

### SAR.100 Procedures at the scene of an accident

(1) Multiple facilities engaged in search and rescue operations

When multiple facilities are engaged in search and rescue operations on-scene, the rescue coordination centre or rescue subcentre shall designate one or more units on-scene to coordinate all actions to help ensure the safety and effectiveness of air and

surface operations, taking into account facility capabilities and operational requirements.

(2) Actions by pilot-in-command

When a pilot-in-command observes that either another aircraft or a surface craft is in distress, the pilot shall, if possible and unless considered unreasonable or unnecessary:

- (a) keep the craft in distress in sight until compelled to leave the scene or advised by the rescue coordination centre that it is no longer necessary,
- (b) determine the position of the craft in distress,
- (c) as appropriate, report to the rescue coordination centre or air traffic services unit as much of the following information as possible:
  - (i) type of craft in distress, its identification and condition,
  - (ii) its position, expressed in geographical or grid coor- dinates or in distance and true bearing from a distinctive landmark or from a radio navigation aid,
  - (iii) time of observation expressed in hours and minutes Coordinated Universal Time (UTC),
  - (iv) number of persons observed,
  - (v) whether persons have been seen to abandon the craft in distress.
  - (vi) as of 26 November 2026, whether any distress signals, including distress beacon transmissions, have been received or observed;
  - (vii) on-scene weather conditions,
  - (viii) until 25 November 2026, apparent physical condition of survivors,
  - (ix) as of 26 November 2026, apparent best ground access route to the distress scene,
  - (x) as of 26 November 2026, position and description of any other craft in the area that may assist; and
- (d) act as instructed by the rescue coordination centre or the air traffic services unit.
- (3) Actions of first aircraft to reach the scene of an accident and is not a search and rescue aircraft
  - (a) Until 25 November 2026, if the first aircraft to reach the scene of an accident is not a search and rescue aircraft, it shall take charge of on-scene activities of all other aircraft subsequently arriving until the first search and rescue aircraft reaches the scene of the accident. If, in the meantime, such aircraft is unable to establish communication with the appropriate rescue coordination centre or air traffic services unit, it shall, by mutual agreement, hand over to an aircraft capable of

- establishing and maintaining such communications until the arrival of the first search and rescue aircraft.
- (b) As of 26 November 2026, if the first aircraft to reach the distress scene is not a search and rescue aircraft, it shall take charge of on-scene activities of all other aircraft subsequently arriving until the first search and rescue aircraft reaches the distress scene. If, in the meantime, such aircraft is unable to establish communication with the appropriate rescue coordination centre or air traffic services unit, it shall, by mutual agreement, hand over to an aircraft capable of establishing and maintaining such communications until the arrival of the first search and rescue aircraft.
- (4) When two-way communication is not available with survivors or surface rescue units

When it is necessary for an aircraft to convey information to survivors or surface rescue units, and two-way communication is not available, it shall, if practicable, drop communication equipment that would enable direct contact to be established, or convey the information by dropping a hard copy message.

(5) Understanding of ground signals

When a ground signal has been displayed, the aircraft shall indicate whether the signal has been understood or not by the means described in SAR.100 (4) or, if this is not practicable, by making the appropriate visual signal.

- (6) Directing a surface craft to the place where an aircraft or surface craft is in distress
  - When it is necessary for an aircraft to direct a surface craft to the place where an aircraft or surface craft is in distress, the aircraft shall do so by transmitting precise instructions by any means at its disposal. If no radio communication can be established, the aircraft shall make the appropriate visual signal.
- (7) As of 26 November 2026, when carrying a device for measuring actual surface drift in accordance with SAR.30 (9), a search and rescue aircraft shall drop the device as soon as it reaches the scene of an accident.

#### GM SAR.100 Procedures at the scene of an accident

- GM 1 Until 25 November 2026, air-to-surface and surface-to-air visual signals are published in Volume III of Doc 9731.
- GM 2 As of 26 November 2026, air-to-surface and surface-to-air visual signals are published in the Appendix and in the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, Volume III Mobile Facilities (Doc 9731).
- GM 3 The deployment of such devices will assist with search area planning accuracy and, therefore, minimize search times.

#### SAR.105 Procedures for a pilot in command intercepting a distress transmission

- (1) Until 25 November 2026, whenever a distress transmission is intercepted by a pilot-in-command of an aircraft, the pilot shall, if feasible:
  - (a) acknowledge the distress transmission,
  - (b) record the position of the craft in distress if given,
  - (c) take a bearing on the transmission,
  - (d) inform the appropriate rescue coordination centre or air traffic services unit of the distress transmission, giving all available information, and
  - (e) at the pilot's discretion, while awaiting instructions, pro- ceed to the position given in the transmission.
- (2) As of 26 November 2026, whenever a distress transmission is intercepted by a pilot-in-command of an aircraft, the pilot shall, if feasible:
  - (a) acknowledge the distress transmission.
  - (b) record the position of the craft in distress if given,
  - (c) take a bearing on the transmission,
  - (d) inform the appropriate rescue coordination centre or air traffic services unit of the distress transmission, giving all available information,
  - (e) at the pilot's discretion, while awaiting instructions, proceed to the distress position, and
  - (f) attempt to establish communications with the person(s) in distress.
- (3) Whenever a pilot monitors 121.5 MHz, and intercepts a transmission from a distress beacon, the pilot shall also:
  - (a) record, and report as soon as possible, the position where the transmission was first received;
  - (b) not alter any settings for squelch on the aircraft's radio; and
  - (c) if feasible, continue to monitor the frequency until such time as the signal ceases, and inform the appropriate rescue coordination centre or air traffic services unit of such.

### GM SAR.105 Procedures for a pilot in command intercepting a distress transmission

Retaining the existing settings for squelch from the time the transmission is first received until the signal ceases provides rescue coordination centres with the most accurate potential location of the distress beacon.

#### SAR.110 Search and rescue signals

(1) Air-to-surface and surface-to-air visual signals

The air-to-surface and surface-to-air visual signals in the Appendix of this MCAR shall, when used, have the meaning indicated therein. They shall be used only for the purpose indicated and no other signals likely to be confused with them shall be used.

(2) Interpretation of the signals

Upon observing any of the signals in the Appendix, aircraft shall take such action as may be required by the interpretation of the signal given in that Appendix.

#### SAR.115 Maintenance of records

(1) Record of the operational efficiency

Each rescue coordination centre shall keep a record of the operational efficiency of the search and rescue organization in its region.

(2) Appraisals of actual search and rescue operations

Each rescue coordination centre shall prepare appraisals of actual search and rescue operations in its region. These appraisals shall comprise any pertinent remarks on the procedures used and, on the emergency, and survival equipment, and any suggestions for improvement of those procedures and equipment. Those appraisals which are likely to be of interest to other States shall be submitted to ICAO for information and dissemination as appropriate.

#### **APPENDIX**

### Search and rescue signals

(See chapter 4 of this MCAR)

#### (1) Signals with surface craft

- (a) The following manoeuvres performed in sequence by an aircraft mean that the aircraft wishes to direct a surface craft towards an aircraft or a surface craft in distress:
  - (i) circling the surface craft at least once;
  - (ii) crossing the projected course of the surface craft close ahead at low altitude and:
    - (1) rocking the wings, or
    - (2) opening and closing the throttle, or
    - (3) changing the propeller pitch.
- GM 1. Due to high noise level on board surface craft, the sound signals in (2) and (3) may be less effective than the visual signal in (1) and are regarded as alternative means of attracting attention.
  - (iii) heading in the direction in which the surface craft is to be directed.

Repetition of such manoeuvres has the same meaning.

- (b) The following manoeuvres by an aircraft means that the assistance of the surface craft to which the signal is directed is no longer required:
  - (i) crossing the wake of the surface craft close astern at a low altitude and:
    - (1) rocking the wings, or
    - (2) opening and closing the throttle, or
    - (3) changing the propeller pitch.
- GM 2. The following replies may be made by surface craft to the signal in (1)(a):
  - (ii) for acknowledging receipt of signals:
    - (1) the hoisting of the "code pennant" (vertical red and white stripes) close up (meaning understood);
    - (2) the flashing of a succession of "T's" by signal lamp in the Morse code;
    - (3) the changing of heading to follow the aircraft.
  - (iii) for indicating inability to comply:
    - (1) the hoisting of the international flag "N" (a blue and white checkered square);
    - (2) the flashing of a succession of "N's" in the Morse code.

GM 3. See GM 1.

### (2) Ground-air visual signal code

(a) Ground-air visual signal code for use by survivors

No.	Message	Code symbol
1	Require assistance	$\vee$
2	Require medical assistance	X
3	No or Negative	Z
4	Yes or Affirmative	Y
5	Proceeding in this direction	1

(b) Ground-air visual signal code for use by rescue units

No.	Message	Code symbol
1	Operation completed	LLL
2	We have found all personnel	LL
3	We have found only some personnel	++
4	We are not able to continue. Returning to base	××
5	Have divided into two groups. Each proceeding in direction indicated	#
6	Information received that aircraft is in this direction	<b>→ →</b>
7	Nothing found. Will continue to search	NN

- (c) Symbols shall be at least 2.5 metres (8 feet) long and shall be made as conspicuous as possible.
- GM 4. Symbols may be formed by any means such as: strips of fabric, parachute material, pieces of wood, stones or such like material; marking the surface by tramping or staining with oil.
- GM 5. Attention to the above signals may be attracted by other means such as radio, flares, smoke and reflected light.

#### (3) Air-to-ground signals

- (a) The following signals by aircraft mean that the ground signals have been understood:
  - (i) during the hours of daylight:
    - (1) by rocking the aircraft's wings,
  - (ii) during the hours of darkness:
    - (1) flashing on and off twice the aircraft's landing lights or, if not so equipped, by switching on and off twice its navigation lights.
- (b) Lack of the above signal indicates that the ground signal is not understood.