

SEARCH AND RESCUE

1. RESPONSIBLE SERVICES

The Search and Rescue Service (SAR) in Spain is organized in accordance with the rules and methods recommended in Annex 12 of ICAO, resulting from a collaboration between the Ministerio de Defensa (Ejército del Aire y del Espacio) and the Ministerio de Transporte, Movilidad y Agenda Urbana.

The Special Air Operations and Personnel Recovery Directorate (JSAO&PR) under the Air Combat Command (MACOM) is responsible for the Search and Rescue Service and, thus, of that Service managing and inspection, as well as of the coordination of its activities.

Postal address:

Jefatura SAO&PR

Cuartel General del Mando Aéreo de Combate

Base Aérea de Torrejón

28850 MADRID (SPAIN)

Telephones:

SAR Directorate Head:

TEL: [+34-917 035 004](tel:+34917035004) (on working days from 0730 to 1500 LT).

Mobile phone: [+34-619 148 654](tel:+34619148654) (available H24).

SAR Section:

TEL: [+34-917 035 168](tel:+34917035168) (on working days from 0730 to 1500 LT).

Mobile phone: [+34-689 470 104](tel:+34689470104) (available H24).

E-mail: jesar@ea.mde.es

This service is based in the following ICAO documents:

	Annex 2	Rules of the Air (Appendix A)
	Annex 11	Air Traffic Services (Chapter 5°)
	Annex 12	Search and Rescue
	Annex 13	Aircraft Accident and Incident Investigation
	DOC 7030	Regional Supplementary Procedures
	DOC 9432	Radiotelephony Manual
	DOC 9731-AN/958	IAMSAR Manual

2. AREA OF RESPONSIBILITY

The Spanish SAR area of responsibility is divided into three Search and Rescue Regions (SRR). An Aeronautical Rescue Coordination Centre (ARCC) is in charge of all the SAR operations inside its associated SRR.

2.1. SRR MADRID

The SRR Madrid limits coincide with those of FIR MADRID.

Unit responsible for SAR operations inside Madrid SRR:

Madrid Aeronautical Rescue Coordination Center (ARCC MADRID).

Postal address:

Centro Coordinador de Salvamento
Centro de Control de Tránsito Aéreo de Madrid
Carretera de la Base s/n. Torrejón de Ardoz
28850 Madrid (SPAIN)

Telephones:

ARCC Madrid Commander:

TEL: [+34-916 785 274](tel:+34-916-785-274) (on working days from 0730 to 1500 LT).
Mobile phone: [+34-686 972 284](tel:+34-686-972-284) (available H24).

ARCC Madrid SAR Mission Coordinator (SMC).

Mobile phone: [+34-619 134 128](tel:+34-619-134-128) (available H24).

ARCC Madrid Coordinator On-duty:

TEL: [+34-916 771 718](tel:+34-916-771-718) (available H24).
Mobile phone: [+34-667 183 009](tel:+34-667-183-009) (available H24).
FAX: [+34-916 772 021](tel:+34-916-772-021) (available H24).

E-mail: rccmadrid@ea.mde.es

AFTN: LECMYCYX.

2.2. SRR BALEARES

The SRR Balears limits coincide with those of FIR BARCELONA, plus the territory of the Principality of Andorra (see FIR BORDEAUX).

Unit responsible for SAR operations inside Balears SRR:

Palma Aeronautical Rescue Coordination Centre (ARCC PALMA).

Postal address:

Centro Coordinador de Salvamento
Centro de Control de Tránsito Aéreo de Palma
Aeropuerto de Palma de Mallorca
Palma de Mallorca
07071 ISLAS BALEARES (SPAIN)

Telephones:

ARCC Palma Commander:

TEL: [+34-971 497 500](tel:+34-971-497-500) (on working days from 0730 to 1500 LT).

ARCC Palma Operations Manager:

Mobile phone: [+34-619 654 700](tel:+34-619-654-700) (available H24).

ARCC Palma SAR Mission Coordinator (SMC):

Mobile phone: [+34-690 092 443](tel:+34-690-092-443) (available H24).

ARCC Palma Coordinator On-duty:

TEL: [+34-971 491 152](tel:+34-971-491-152) (available H24).
TEL: [+34-971 497 627](tel:+34-971-497-627) (available H24).
FAX: [+34-971 491 158](tel:+34-971-491-158) (available H24).

E-mail: rccpalma@ea.mde.es

AFTN: LECPYCYX.

2.3. SRR CANARIAS

The SRR Canarias limits coincide with those of FIR CANARIAS.

Due to temporary technical reasons, the SAR service is not guaranteed to the East side of the line defined by:

- 282500N 0130000W, 270000N 0135000W
- 262000N 0145000W, 245000N 0152000W
- 235000N 0162000W, 223000N 0170000W
- 210000N 0173000W, 203000N 0172000W

Unit responsible for SAR operations inside SRR Canarias:

Canarias Aeronautical Rescue Coordination Centre (ARCC CANARIAS).

Postal address:

Centro Coordinador de Salvamento Aeronáutico
Dirección Región Canarias ENAIRE
Carretera Ojos de Garza s/n. Telde
35219 LAS PALMAS DE GRAN CANARIA (SPAIN)

Telephones:

ARCC Canarias Commander:

TEL: [+34-928 328 290](tel:+34928328290) (on working days from 0730 to 1500 LT).

Mobile phone: [+34-636 207 226](tel:+34636207226) (available H24).

ARCC Canarias SAR Mission Coordinator (SMC).

Mobile phone: [+34-616 603 277](tel:+34616603277) (available H24).

ARCC Canarias Coordinator On-duty:

TEL: [+34-928 577 080](tel:+34928577080) (available H24).

Mobile phone: [+34-609 479 952](tel:+34609479952) (available H24).

FAX: [+34-928 577 081](tel:+34928577081) (available H24).

E-mail: rcc.canarias@ea.mde.es

AFTN: GCCCYCYX.

3. TYPES OF SERVICE

For the conduct of SAR operations, the Aeronautical Search and Rescue Service uses SAR specialised Ejército del Aire y del Espacio. These are usually located at their main operating bases, with permanent availability for the service, as detailed in the following chart:

DEDICATED SAR ASSETS			
MAIN OPERATING BASE	LOCATION	ROTARY WING	FIXED WING
GCLP (Base Aérea de Gando)	27°55.92'N 015°23.20'W	Airbus H-215 (1) "Super Puma"	CASA/Nurtanio CN-235

DEDICATED SAR ASSETS			
MAIN OPERATING BASE	LOCATION	ROTARY WING	FIXED WING
LEVS (Base Aérea de Cuatro Vientos)	40°22.23'N 003°47.12'W	NH Industries NH-90 "Lobo"	–
LEGT (Base Aérea de Getafe)	40°17.65'N 003°43.42'W	–	CASA/Nurtanio CN-235
LESJ (Base Aérea de Son San Juan)	39°33.10'N 002°44.33'E	Aerospatiale AS-332B1 "Super Puma"	CASA/Nurtanio CN-235

Depending upon the requirements of the SAR Service, these assets may be deployed at bases other than their main ones.

All the SAR specialised aircraft are equipped to communicate on the distress frequencies, both aeronautical: 121.500 MHz and 243.000 MHz and maritime: 2182 kHz and 156.800 MHz FM–CH 16, as well as on the dedicated frequencies reserved for on-scene SAR communications. They are also equipped with radio direction finders for homing on emergency beacons and frequencies. The rotary wing aircraft are equipped with a rescue winch, and fixed wing aircraft are equipped with radar and FLIR.

Other fixed and rotary wing assets belonging to the Ejército del Aire y del Espacio might also be available for SAR collaboration, on request, as detailed in the following chart:

ADDITIONAL SAR ASSETS			
MAIN OPERATING BASE	LOCATION	ROTARY WING	FIXED WING
LEGA (Base Aérea de Armilla)	37°08.00'N 003°38.15'W	Sikorsky S-76C	–
LETO (Base Aérea de Torrejón)	40°29.80'N 003°26.75'W	–	Canadair CL-415

Besides Ejército del Aire y del Espacio, the SAR Service can request the collaboration of air, maritime or ground emergency response assets belonging to other state, regional or local organisations when deemed necessary.

4. SEARCH AND RESCUE AGREEMENTS

Spain has signed SAR collaboration agreements detailed below with its neighbouring States. Those agreements establish the procedures for requesting and providing assistance in SAR operations, including crossing of the respective borders when necessary:

- Senegal
Agreement between Spain and the Republic of Senegal regarding the rescue of aircraft in the Canarias and Dakar areas, signed on 26 June 1968.
- France and Italy
Spanish-French-Italian Technical Agreement relating to the arrangements for search and rescue in the Western Mediterranean and adjoining land areas (SAR MED/OCC Agreement), signed on 27 October 1972.
- Portugal
Technical Agreement on cooperation and mutual support between the search and rescue services of the Kingdom of Spain and the Republic of Portugal, signed on 15 December 1993.
- United Kingdom
Memorandum of Understanding between the Kingdom of Spain and the United Kingdom of Great Britain and Northern Ireland on search and rescue services in the North Atlantic, signed on 28 November 1995.
- Cape Verde

Technical agreement for cooperation and mutual support between the aeronautical search and rescue services of the Kingdom of Spain and the Republic of Cape Verde, signed on 18 February 2000.

- Morocco
Technical Agreement for cooperation and mutual support between the operational search and rescue units of the Moroccan Royal Air Force and the Spanish Ejército del Aire y del Espacio signed on 5 April 2000.
- Algeria
Memorandum of Understanding between the Algerian and Spanish aeronautical search and rescue services (SAR), signed on 14 November 2007.
- Mauritania
Technical Agreement for cooperation and mutual support between the operational search and rescue units of the Kingdom of Spain and the Islamic Republic of Mauritania, signed on 9 March 2015.

5. CONDITIONS OF AVAILABILITY

The Ejército del Aire y del Espacio provides the SAR specialised air assets required for the conduct of SAR operations by keeping aircraft on H24 SAR ground alerts. The number, deployment and reaction time of the SAR ground alert aircraft depends on Ejército del Aire y del Espacio operational requirements.

Contact the appropriate ARCC for information on the current availability, deployment and reaction times of the SAR assets.

6. PROCEDURES AND SIGNALS USED

6.1. SIGNALS BETWEEN AIRCRAFT AND VESSELS

6.1.1. For aircraft use.

The following manoeuvres performed in sequence by an aircraft mean that the aircraft wishes to direct a vessel towards an aircraft or vessel in distress:

- Circling the vessel at least once;
- Crossing ahead of the ship at low altitude and (simultaneously):
 - a. Rocking its wings; or
 - b. Opening or closing its throttle; or
 - c. Changing propeller pitch; and
- Heading in the direction to be indicated to the vessel.

Remark: Repetition these manoeuvres has the same meaning.

The following manoeuvre performed by an aircraft means that the assistance of the vessel to which the signal is directed is no longer required:

- Crossing close astern of the vessel at low altitude and simultaneously:
 - a. Rocking its wings; or
 - b. Opening or closing its throttle; or
 - c. Changing propeller pitch.

6.1.2. For vessel use.



The following replies may be made by the vessel to the signals in the previous section.

- To acknowledge receipt of signal:


- a. Hoisting the “code pennant” (vertical red and white stripes) to the top; or
- b. Flashing a succession of “T” letters with a signal lamp in Morse code.
- c. Changing heading to follow the aircraft.
- To indicate inability to comply:
 - a. Hoisting the international flag “N” (chequered blue and white).
 - b. Flashing a succession of “N” letters with a signal lamp in Morse code.

6.2. GROUND-TO-AIR VISUAL SIGNALS

6.2.1. Code for use by rescue units.

CODE	MESSAGE
L L L	Operation completed.
<u>L L</u>	We have found all personnel.
+ +	We have found only some personnel.
X X	We are not able to continue. Returning to base.
	Have divided into two groups Each proceeding in direction indicated.
	Information received that aircraft is in this direction.
N N	Nothing found. We continue the search.

6.2.2. Codes for use by survivors.

CODE	MESSAGE
V	Require assistance.
X	Require medical assistance.
N	No or negative.
Y	Yes or affirmative.
	Proceeding in this direction.

6.3. AIR-TO-GROUND VISUAL SIGNALS

The following signals by aircraft mean that the ground signals have been understood and acknowledge receipt:

- a. Rocking aircraft wings during the hours of daylight.
- b. Flashing landing lights twice or, if not so equipped, by switching the navigation lights on and off twice during the hours of darkness.

Absence of the above signals means that the ground signal has not been understood.

SPANISH SEARCH AND RESCUE REGIONS (SRR)

