



**CIVIL AVIATION REGULATIONS
AIR NAVIGATION SERVICES**

Part 12

SEARCH AND RESCUE

CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
Old MIA Road, Pasay City 1301
Metro Manila

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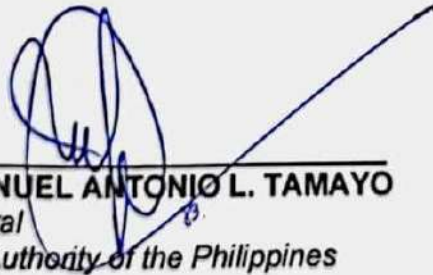
Republic of the Philippines
CIVIL AVIATION REGULATIONS
AIR NAVIGATION SERVICES
(CAR-ANS)

Part 12

SEARCH AND RESCUE

EFFECTIVITY

Part 12 of the Civil Aviation Regulations-Air Navigation Services is issued under the authority of Republic Act No. 9497 and shall take effect upon approval by the Board of Directors of the Civil Aviation Authority of the Philippines.



CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General
Civil Aviation Authority of the Philippines

OCTOBER 2023
Date

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FOREWORD

Pursuant to the provisions of Article 37 and Article 25 of the convention of International Civil Aviation, the Civil Aviation Authority of the Philippines (CAAP) formulated and issued this Civil Aviation Regulations-Air Navigation Services Part 12 (CAR-ANS Part 12), establishing rules and regulations relating to Search and Rescue.

This CAR-ANS Part 12 was also developed based on the Standards and Recommended Practices prescribed by the International Civil Aviation Organization (ICAO) as contained in Annex 12 – Search and Rescue.

CAR-ANS Part 12 provides the requirements for the establishment, organization, maintenance, provision, operation, and the coordination of Aeronautical SAR service in co-operation with agencies responsible for Maritime SAR and other relevant emergency organizations in order to attain the level of SAR service required by civil aviation.

The Philippine Aeronautical Rescue Coordination Center (PARCC) established by the Civil Aviation Authority of the Philippines forms part of the State's commitment to the global SAR system.

Article 38 of the Convention imposed an obligation to the CAAP to notify ICAO of any differences between its national regulations and practices and the International Standards contained in Annex 12 and any amendments thereto, especially when such differences are important for the safety of air navigation.

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I. PURPOSE

CAR-ANS Part 12 provides the rules and regulations for search and rescue service within the Philippine Search and Rescue Region (SRR).

II. AUTHORITY

The regulations contained herein are issued by authority of the Director General of the Civil Aviation Authority of the Philippines and shall be complied with by all concerned.

III. APPLICABILITY

This regulation shall apply to all facilities responsible for the provision of search and rescue in the Philippine SRR.

IV. REPEALING PROVISIONS

All previous Administrative Orders, Memorandum Circulars or part thereof as they pertain to search and rescue services which are inconsistent with the provisions of this Civil Aviation Regulation are hereby repealed, amended or modified accordingly.

V. SEPARABILITY PROVISIONS

The provisions in this Civil Aviation Regulations are hereby declared separable. If any portion thereof shall be held invalid or unconstitutional, such invalidity or unconstitutionality shall not affect other provisions which shall be in full force and effect.

VI. DISTRIBUTION

This Civil Aviation Regulation shall be distributed to all units concerned with the provision of search and rescue service in the Philippine SRR and other agencies involved in emergency response.

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RECORD OF AMENDMENTS AND CORRIGENDA

Amendments			
<i>Number</i>	<i>Date applicable</i>	<i>Subject(s)</i>	<i>Entered by</i>
1	11 June 2021	Incorporated Amendment 1 to CAR-ANS Part 12 amending provisions regarding Flight information coordinates; inclusion of Primary Search and Rescue Unit and Secondary Rescue Unit in the definitions; and changes in Secondary Rescue Units.	Captain Jim C. Sydiongco
Second Editon 2	September 2023	This 2 nd Edition to CAR-ANS Part 12 is developed to provide consistency with the safety standards prescribed in the Manual of Standards for Search and Rescue, 1 st Edition.	Captain Manuel Antonio L. Tamayo

Corrigenda			
<i>Number</i>	<i>Date applicable</i>	<i>Subject(s)</i>	<i>Entered by</i>

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LIST OF EFFECTIVE PAGES

Part	Page	Amendment No.	Page Date
Part 12 Search and Rescue			
Foreword	12-iii	2 nd Edition	October 2023
Record of Amendments and Corrigenda	12-vii	2 nd Edition	October 2023
List of Effective Pages	12-ix	2 nd Edition	October 2023
Rules of Construction	12-xiii	2 nd Edition	October 2023
Amendment/Revision to CAR-ANS Part 12	12-xiii	2 nd Edition	October 2023
Table of Contents	12-xi	2 nd Edition	October 2023
Page	12.1-1	2 nd Edition	October 2023
	12.1-2	2 nd Edition	October 2023
	12.1-3	2 nd Edition	October 2023
	12.1-4	2 nd Edition	October 2023
	12.2-1	2 nd Edition	October 2023
	12.2-2	2 nd Edition	October 2023
	12.2-3	2 nd Edition	October 2023
	12.2-4	2 nd Edition	October 2023
	12.2-5	2 nd Edition	October 2023
	12.2-6	2 nd Edition	October 2023
	12.3-1	2 nd Edition	October 2023
	12.3-2	2 nd Edition	October 2023
	12.3-4	2 nd Edition	October 2023
	12.4-1	2 nd Edition	October 2023
	12.4-2	2 nd Edition	October 2023
	12.4-3	2 nd Edition	October 2023
	12.4-4	2 nd Edition	October 2023
	12.5-1	2 nd Edition	October 2023
	12.5-2	2 nd Edition	October 2023
	12.5-3	2 nd Edition	October 2023
	12.5-4	2 nd Edition	October 2023
	12.5-5	2 nd Edition	October 2023
	12.5-6	2 nd Edition	October 2023
	12.6-1	2 nd Edition	October 2023
	APP12.1-1	2 nd Edition	October 2023
	APP12.1-2	2 nd Edition	October 2023
	APP12.1-3	2 nd Edition	October 2023
	APP12.1-4	2 nd Edition	October 2023

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TABLE OF CONTENTS

	PAGE
FOREWORD	12-iii
RECORD OF AMENDMENTS AND CORRIGENDA	12-vii
LIST OF EFFECTIVE PAGES	12-ix
RULES OF CONSTRUCTION	12-xiii
AMENDMENT/REVISION TO CAR-ANS PART 12	12-xiii
12.1 DEFINITIONS	12.1-1
12.1.1 ACRONYMS AND ABBREVIATIONS	12.1-3
12.2 ORGANIZATION	12.2-1
12.2.1 Search and Rescue	12.2-1
12.2.2 Search and Rescue Regions	12.2-1
12.2.3 Rescue Coordination Centers and Rescue Sub-centers	12.2-1
12.2.4 Search and Rescue Communications	12.2-3
12.2.5 Search and Rescue Units	12.2-4
12.2.6 Search and Rescue Equipment	12.2-4
12.2.7 Assistance to Accident Inquiry	12.2-5
12.3 COOPERATION	12.3-1
12.3.1 Cooperation Between States	12.3-1
12.3.2 Cooperation Between Other Service	12.3-2
12.3.3 Dissemination of Information	12.3-2
12.4 PREPARATORY MEASURES	12.4-1
12.4.1 Preparatory Information	12.4-1
12.4.2 Plans of Operation	12.4-2
12.4.3 Search and Rescue Units	12.4-2
12.4.4 Training and Exercises	12.4-3
12.4.5 Wreckage	12.4-3
12.5 OPERATING PROCEDURES	12.5-1
12.5.1 Information Concerning Emergencies	12.5-1
12.5.2 Procedures for Rescue Coordination Centers During Emergency Phases	12.5-1
12.5.3 Procedure Where Responsibility for Operations Extends to Two or More Contracting States	12.5-3
12.5.4 Procedure for Agencies in the Field	12.5-3
12.5.5 Procedure for Rescue Coordination Centers- Termination and Suspension of Operations	12.5-3
12.5.6 Procedure at the Scene of an Accident	12.5-4
12.5.7 Procedure for a Pilot-In-Command Intercepting	

a Distress Transmission	12.5-5
12.5.8 Search and Rescue Signals.....	12.5-5
12.5.9 Maintenance of Records	12.5-5
12.6 SUPPLEMENTARY PROVISION	12.6-1

APPENDICES

APPENDIX 12.1

SEARCH AND RESCUE SIGNALS	APP12.1-1
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RULES OF CONSTRUCTION

Terminology

Through this regulation the following word usage applies:

- a) **Shall** indicate a mandatory requirement.
- b) **May** indicates that discretion can be used when performing an act described in a regulation.
- c) **Will** indicates an action incumbent upon the Authority.

AMENDMENT/REVISION TO CAR-ANS PART 12

Proposals for any amendment or revision to CAR-ANS Part 12 shall be submitted to the Technical Working Group (TWG) of the Air Traffic Management Safety Inspectorate Division (ATMSID). Whether it is an ICAO Annex 12 adopted amendment or any amendment or revision initiated by CAAP or by any other aviation stakeholders, the ATMSID TWG shall submit the deliberated proposal to the Regulations Review Committee (RRC) for furtherance.

The RRC shall be composed of the Director General, the Chiefs of Offices of the Flight Standards Inspectorate Service (FSIS), the Aerodrome and Air Navigation Safety Oversight Office (AANSOO), Air Traffic Services (ATS), Air Navigation Service (ANS), Aerodrome Development and Management Service (ADMS), the International Civil Aviation Coordinating Staff (ICACS), Enforcement and Legal Service (ELS), and representative from State Safety Programme Office (SSPO).

The Chairman of the RRC shall be the Director General or his authorized representative and the Vice Chairman for CAR -ANS Part 12 related matters shall be the Chief of AANSOO. The Secretariat of the RRC on matters concerning CAR-ANS Part 12 shall be the current Chief of the Regulatory Safety Standards Division (RSSD) of AANSOO.

The RRC shall follow the procedures prescribed in the Regulations Amendment/ Revision Procedure (RAP) in deciding on the amendment or revision to or any other proposals associated with it. Once the amendment or revision is reviewed and endorsed by the RRC for the approval of the Director General, it shall have to be published in the Official Gazette of the Philippines or in a newspaper of general circulation. A copy of this published amendment/revision to regulations must be filed to the University of the Philippines Law Center - Office of the National Administrative Register (UP-ONAR).

The Chairman of the RRC shall convene the committee during regular meetings or at the instance of the Chairman or Vice-Chairmen and follow the Internal Rules of Procedures prescribed in the RAP.

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12.1 DEFINITIONS

When the following terms are used in this CAR, they have the following meanings:

Alerting Post – Any facility intended to serve as an intermediary between a person reporting an emergency and a rescue coordination center or rescue sub-center.

Alert Phase - A situation wherein apprehension exists as to the safety of an aircraft and its occupants.

AMVER – Automated Mutual-assistance Vessel Rescue system; an international maritime mutual assistant program which provides vital aid and coordination of SAR efforts in offshore areas of the world; operated by the United States Coast Guard where merchant vessel data are compiled, printed and distributed to selected addresses having SAR responsibility.

Cospas-Sarsat System - A satellite system designed to detect and locate activated distress beacons transmitting in the frequency band of 406.0 - 406.1 MHz.

Distress Phase - A situation wherein there is a reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger and require immediate assistance.

Ditching - The forced landing of an aircraft on water.

Emergency Locator Transmitter (ELT) - A generic term (related to aircraft) describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be automatically activated by impact or be, manually activated.

Emergency Phase - A generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase.

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

Joint Rescue Coordination Center (JRCC) - A rescue coordination center responsible for both aeronautical and maritime search and rescue operations.

Local User Terminal (LUT) - An Earth receiving station that receives beacon signal relayed by Cospas-Sarsat satellites, processes them to determine the location of the beacon, and forwards the signal to relevant Mission Control Center (MCC).

Mission Control Center (MCC) - Part of the Cospas-Sarsat System that accepts alert messages from local user terminals and other mission control centers for distribution to appropriate rescue coordination centers or search and rescue points of contact (SPOC).

On-Scene Coordinator (OSC) - A person designated to coordinate search and rescue operations within a specified area.

Operator - A person, organization, or enterprise engaged in or offering to engage in an aircraft operation.

Pilot-in-Command - The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

Primary Search and Rescue Unit – recognized groups with the capability to conduct on-scene operation to retrieve persons in distress, provide initial medical or other needs and deliver them to a place of safety.

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

Rescue Coordination Center (RCC) - A unit responsible for promoting the efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region.

Rescue Sub-center (RSC) - A unit subordinate to a rescue coordination center, established to complement the latter according to particular provisions of the responsible authorities.

Search - An operation normally coordinated by a rescue coordination center or rescue sub-center using available personnel and facilities to locate persons in distress.

Search and Rescue Aircraft - An aircraft provided with specialized equipment suitable for the efficient conduct of search and rescue missions.

Search and Rescue Coordinator (SC) - One or more persons or agencies within an Administration with overall responsibility for establishing and providing SAR services and ensuring that planning for those services is properly coordinated.

Search and Rescue Facility - Any mobile resource, including designated search and rescue units, used to conduct search and rescue operations.

Search and Rescue Mission Coordinator (SMC) - The official temporarily assigned to coordinate response to an actual or apparent distress situation.

Search and Rescue Plan - A general term used to describe documents which exist at all levels of the national and international search and rescue structure to describe the goal, arrangements and procedures supporting the provision of search and rescue services.

Search and Rescue Point of Contact (SPOC) - A point of contact for SAR, designated by the national administration, that is responsible for receiving distress alert information and providing the information to appropriate SAR authorities.

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

Search and Rescue Region (SRR) - An area of defined dimensions, associated with a rescue coordination center, within which search and rescue services are provided.

Search and Rescue Sub-region (SRS) - A specified area within a search and rescue region associated with a rescue sub-center.

Search and Rescue Unit - A mobile resource composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue operations.

Secondary Rescue Unit – recognized off-scene groups with the ability to continuously assist in providing medical or other needs to retrieved persons in distress, and deliver them to a better place of safety.

State of Registry - The State on whose register the aircraft is entered.

Uncertainty phase - A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.

Vessel - A marine craft.

12.1.1 ACRONYMS AND ABBREVIATIONS

AAIIB	Aircraft Accident Investigation and Inquiry Board
AANSOO	Aerodrome and Air Navigation Safety Oversight Office
ADMS	Aerodrome Development and Management Service
AIP	Aeronautical Information Publication
AMVER	Automated Mutual-Assistance Vessel Rescue System
ANS	Air Navigation Service
ATMSID	Air Traffic Management Safety Inspectorate Division
ATS	Air Traffic Service
CAAP	Civil Aviation Authority of the Philippines
CAR	Civil Aviation Regulations
CAR-ANS	Civil Aviation Regulations - Air Navigation Services
COSPAS	Cosmicheskaya Sistyema Poiska Avariynyh Sudov
DILG	Department of Interior and Local Government
DSWD	Department of Social Welfare and Development
ELS	Enforcement and Legal Service
ELT	Emergency Locator Transmitter
FIR	Flight Information Region
FSIS	Flight Standards Inspectorate Service
ICACS	International Civil Aviation Coordinating Staff
ICAO	International Civil Aviation Organization
INMARSAT	International Mobile Satellite Organization
JRCC	Joint Rescue Coordination Center
LGU	Local Government Unit
LUT	Local User Terminal
MCC	Mission Control Center
NDRRMC	National Disaster Risk Reduction and Management Council
NOTAM	Notice to Airmen
OSC	On-Scene Coordinator

PAF	Philippine Air Force
PAGASA	Philippine Atmospheric Geophysical and Astronomical Services Administration
PARCC	Philippine Aeronautical Rescue Coordination Center
PCG	Philippine Coast Guard
PNP	Philippine National Police
PRC	Philippine Red Cross
RCC	Rescue Coordination Center
RRC	Regulations Review Committee
RSC	Rescue Sub-Center
RSSD	Regulatory Safety Standards Division
SAR	Search and Rescue
SARSAT	Search and Rescue Satellite-Aided Tracking
SC	Search and Rescue Coordinator
SMC	Search and Rescue Mission Coordinator
SPOC	Search and Rescue Point of Contact
SRG	Search and Rescue Group
SRR	Search and Rescue Region
SRS	Search and Rescue Sub-region
SRUs	Search and Rescue Units
SSPO	State Safety Programme Office
UP-ONAR	University of the Philippines Law Center - Office of the National Administrative Register
UTC	Coordinated Universal Time

12.2 ORGANIZATION

12.2.1 Search and Rescue Services

12.2.1.1 The Civil Aviation Authority of the Philippines is responsible for the establishment, organization, and prompt provision of search and rescue service in coordination with other agencies to ensure that assistance is rendered to persons in distress. Such services shall be provided on a 24- hour basis.

12.2.1.1.1 Search and Rescue service shall be provided within the Philippine SRR including over those portions of the high seas or areas of undetermined sovereignty for which responsibility of providing Air Traffic Services has been delegated to the Philippines.

12.2.1.1.2 Search and rescue service shall include organized available resources, communication facilities, and a workforce skilled in coordination and operational functions.

12.2.1.1.3 The search and rescue service shall establish programs to ensure the continued improvement of the service, including the aspects of SAR planning, mutually effective domestic and international SAR cooperation agreements and, continuous personnel training.

12.2.1.2 Assistance to aircraft in distress and to survivors of aircraft accidents shall be provided regardless of the nationality or status of such persons or the circumstances in which such persons are found.

12.2.1.3 Search and rescue service 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.

12.2.1.4 Rapid and close coordination between the aeronautical and maritime rescue coordination centers shall be maintained to ensure prompt SAR response to emergency calls.

12.2.1.5 Joint rescue coordination center (JRCC) may be established to coordinate aeronautical and maritime search and rescue operations in a unified facility, where practical.

12.2.2 Search and Rescue Regions

12.2.2.1 The Manila Flight Information Region (FIR) shall be designated as the Philippine Search and Rescue Region (SRR). The Philippine SRR shall not overlap and be contiguous with the SRR's of adjacent States.

12.2.2.2 The Philippine Search and Rescue Region (SRR) shall have the geographical coordinates which coincide with the Manila Flight Information Region (FIR) as published in the Aeronautical Information Publication (AIP) under ENR 2.1-1.

12.2.3 Rescue Coordination Center and Rescue Sub-centers

- 12.2.3.1 The Civil Aviation Authority of the Philippines shall establish the Philippine Aeronautical Rescue Coordination Center (PARCC) which shall have supervision and control of aeronautical search and rescue service established and provided in the Philippine SRR; and shall determine from time to time additional areas within the jurisdiction of the Republic of the Philippines, where search and rescue services will be provided.
- 12.2.3.2 PARCC shall be located close to associated facilities providing Air Traffic Services to keep additional communication facilities to a minimum, achieved rapid and efficient emergency alert notification and, effective coordination of SAR operations.
- 12.2.3.3 PARCC shall be staffed 24 hours a day by trained personnel proficient in the use of the language used for radiotelephony communications.
- 12.2.3.4 PARCC personnel involved in the conduct of radiotelephony communications shall be proficient in the use of the English language.
- 12.2.3.5 Where public telecommunications facilities do not permit persons observing an aircraft on emergency to notify the rescue coordination center concerned directly and promptly, such persons shall notify the nearest police station.
- 12.2.3.6 Rescue sub-centers (RSCs) may be established when necessary for the efficient execution of SAR operations. RSC's shall be in close cooperation and coordination with the PARCC facility located at the main CAAP offices.
- 12.2.3.7 CAAP-PARCC shall be in coordination with the following recognized rescue units who will provide the necessary SAR assets and act appropriately as:
- a) Primary Search and Rescue Units (SRUs):
 - 1) 505th SRG, Philippine Air Force
 - 2) PCG Air Group, Philippine Coast Guard
 - 3) Naval Air Group, Philippine Fleet-Philippine Navy
 - 4) PNP Air Group, Philippine National Police
 - b) Secondary Rescue Units:
 - 1) Department of Interior and Local Government, DILG and Local Government Units (LGUs)
 - 2) Philippine Red Cross, PRC
 - 3) Department of Social Welfare and Development, DSWD
 - 4) National Disaster Risk Reduction and Management Council, NDRRMC
 - c) Non-Government Organizations:

- 1) Airlines and aviation organizations
 - 2) Shipping and maritime agencies
 - 3) Radio stations and amateur radio groups and organizations
 - 4) Private hospitals
- d) Other emergency relief organizations with SAR capable resources as may be called upon by PARCC.
- 1) In sparsely populated areas where communication systems are not developed, alerting posts shall be designated to relay by the most reliable and expeditious means, information concerning aircraft in distress.
 - 2) PARCC shall endeavor to arrange for local authorities, vessels, and aircraft to cooperate fully in SAR operations, and take appropriate actions for the well-being of survivors of aircraft accidents.
 - 3) The location, organization, and function of PARCC and its associated rescue sub-centers shall be published in the AIP for information and proper dissemination.

12.2.3.8 Each rescue coordination center 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, should be submitted to ICAO for information and dissemination, as appropriate.

12.2.4 Search and Rescue Communications

12.2.4.1 PARCC shall have means of rapid and reliable two-way communication with:

- a) associated air traffic services units;
- b) associated rescue sub-centers, where provided;
- 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) maritime RCCs, aeronautical RCCs, and joint rescue coordination centers in adjacent regions;
- f) Philippine Atmospheric Geophysical and Astronomical Services Administration, PAGASA;
- g) search and rescue units, SRUs;
- h) alerting posts; and
- i) the Cospas-Sarsat Mission Control Center (MCC) and Local User Terminals (LUTs) servicing the region.

- 12.2.4.2 Each rescue sub-center, where provided, shall have means of rapid and reliable two-way communication with:
- a) the main RCC base facility;
 - b) adjacent rescue sub-centers;
 - c) a meteorological office or meteorological watch office;
 - d) search and rescue units; and
 - e) alerting posts.

12.2.5 Search and Rescue Units

- 12.2.5.1 Agencies that are suitably located and equipped for search and rescue operations shall be designated for search and rescue functions.
- 12.2.5.2 Other agencies that do not qualify as search and rescue units but are nevertheless able to participate in search and rescue operations shall form part of the search and rescue plan of operation.

12.2.6 Search and Rescue Equipment

- 12.2.6.1 Search and rescue units shall be provided with equipment for locating promptly the distress position, and for providing adequate assistance to survivors of an aircraft accident.
- 12.2.6.2 Each search and rescue unit shall have means of rapid and reliable two-way communication with other search and rescue units and facilities engaged in the same operation.
- 12.2.6.3 Each search and rescue aircraft shall be equipped to communicate on the distress and on-scene frequencies, and on such other frequencies as may be arranged with responding SAR units.
- 12.2.6.4 Each search and rescue aircraft shall be equipped with a device for homing on the distress frequencies.
- Note 1. — Emergency locator transmitter (ELT) carriage requirements are given in PCAR Part 8.*
- Note 2.— Specifications for ELT are given in CAR-ANS Part 8.*
- 12.2.6.5 Each search and rescue aircraft, when used for search and rescue over maritime areas, shall be equipped with communication systems to enable it to communicate with maritime vessels.
- 12.2.6.6 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. Search and rescue signals are given in the Appendix.
- 12.2.6.7 Communication facilities shall be available to enable an expeditious exchange of messages between SRUs deployed for SAR and with their respective headquarters.

12.2.6.8 The units conducting search and rescue mission shall be responsible for preparing the survival supplies to be airdropped and color-coded in accordance with the following:

- a) medical and first aid supplies - RED;
- b) food and water – BLUE;
- c) protective clothing and blankets - YELLOW;
- d) other supplies - BLACK;
- e) mixed supplies in the same container or package – MIXEDCOLORS.

Note:- Other provision pertaining to droppable survival equipment can be found on Manual of Standards for Search and Rescue (MOS-SAR) Chapter 4, 4.4.3.

12.2.7 Assistance to Accident Inquiry

To assist accident inquiry, rescue units shall be accompanied by a representative of the Aircraft Accident Investigation and Inquiry Board (AAIIB) qualified to examine aircraft wreckage and take photographic evidence.

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12.3 COOPERATION

12.3.1 Cooperation between States

12.3.1.1 Whenever necessary, the PARCC shall coordinate their search and rescue operations with those of adjacent States especially when these operations are proximate to adjoining SRRs.

12.3.1.1.1 The adjacent States of the Philippines and their respective SRRs are:

	State	SRR
1.	China	Hong Kong, SAR
2.	Indonesia	Ujung Pandang
3.	Japan	Naha
4.	Malaysia	Kota Kinabalu
5.	Singapore	Singapore
6.	Taiwan	Taipei
7.	USA	Oakland
8.	Vietnam	Ho Chi Minh

12.3.1.1.2 PARCC, shall develop common search and rescue plans and procedures to facilitate coordination of search and rescue operations with those of neighboring States.

12.3.1.1.3 Subject to conditions as may be prescribed by the Director General for Civil Aviation of the Philippines, entry 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, shall be permitted.

12.3.1.1.4 For the purpose of search and rescue, the authorities of other States who wish their search and rescue units to enter the territory of the Philippines shall transmit a request, giving full details of the projected mission and the need for it, to The Director General, Civil Aviation Authority of the Philippines, Old MIA Road, Pasay City, Metro Manila 1300, Philippines.

12.3.1.1.5 The Director General of CAAP shall:

- a) acknowledge the receipt of such a request, and
- b) as soon as possible, indicate the conditions, if any, under which the projected mission may be undertaken.

12.3.1.1.6 CAAP, shall enter into agreements with neighboring States to strengthen search and rescue cooperation and coordination, setting forth the conditions for entry of each other's search and rescue units into its respective territories.

12.3.1.1.7 These agreements shall also provide for expediting entry of such units with the least possible formalities.

12.3.1.1.8 By the authority granted by CAAP, PARCC:

- a) may request from other rescue coordination centers such assistance, including aircraft, vessels, persons or equipment, as may be needed;
- b) may grant any necessary permission for the entry of such aircraft, vessels, persons or equipment into Philippine territory; and
- c) may make the necessary arrangements with the Bureau of Customs, the Department of Foreign Affairs, the Philippine Air Force, concerned Embassies, if required, and other authorities with a view to expediting such entry.

12.3.1.1.9 By the authority granted by CAAP, PARCC shall provide, when requested, assistance to other rescue coordination centers, including assistance in the form of aircraft, vessels, persons or equipment.

12.3.2 Cooperation with Other Services

12.3.2.1 CAAP PARCC, shall arrange for all aircraft, vessels and local emergency services and facilities which do not form part of the primary and secondary rescue groups to cooperate fully in search and rescue and to extend any possible assistance to survivors of aircraft accidents.

12.3.2.2 CAAP shall ensure the closest practicable coordination between PARCC, the 505th SRG, PAF, the Naval Air Group-Philippine Navy, and the PCG Aviation Group to provide for the most effective and efficient search and rescue services.

12.3.2.3 CAAP shall ensure that search and rescue services cooperate with organizations in charge for investigating aviation accidents and with those responsible for the care of survivors of an aviation accident.

12.3.2.4 To facilitate accident investigation, rescue units should, when practicable, be accompanied by persons from the Aircraft Accident Investigation and Inquiry Board of the CAAP who are qualified in the conduct of aircraft accident investigations.

12.3.2.5 The SAR Point-of-Contact (SPOC) in the Philippine SRR to receive Cospas-Sarsat distress alerts shall be the Philippine Aeronautical RCC of CAAP.

12.3.3 Dissemination of information

12.3.3.1 Information necessary for the entry of search and rescue units of other States into Philippine SRR shall be contained in the AIP of the CAAP.

12.3.3.2 CAAP shall, to the extent practicable, disseminate information 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.

12.4 PREPARATORY MEASURES

12.4.1 Preparatory Information

12.4.1.1 The PARCC 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 sub-centers 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.

12.4.1.2 PARCC needs to 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; and
- d) known objects which might be mistaken for unmarked or unreported wreckage sites, particularly when viewed from an altitude.

12.4.1.3 PARCC shall have ready access to information regarding the position, course and speed of ships that may be able to provide assistance to aircraft in distress and information on how to contact these vessels.

12.4.1.4 Philippine Maritime RCC and maritime organizations need to individually or in cooperation with adjacent RCCs establish a ship reporting systems or arrange links with AMVER or regional ship reporting systems to facilitate search and rescue operations.

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

12.4.2 Plans of Operation

- 12.4.2.1 Each rescue coordination center shall prepare detailed plans of operation for the conduct of search and rescue operations within its search and rescue region.
- 12.4.2.2 Search and rescue plans of operations shall be developed jointly with the operators and agencies that may assist in providing search and rescue service.
- 12.4.2.3 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.
- 12.4.2.4 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 centers;
 - 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 centers, such assistance, including aircraft, vessels, persons or equipment, as may be needed;
 - i) the methods for assisting distressed aircraft being compelled to ditch to rendezvous with surface craft;
 - j) the methods for assisting search and rescue or other aircraft to proceed to aircraft in distress; and
 - k) cooperative actions taken in conjunction with air traffic services units and other authorities concerned to assist aircraft known or believed to be subject to unlawful interference.
- 12.4.2.5 Search and rescue plans of operation shall be integrated with airport emergency plans to provide for rescue services in the vicinity of aerodromes including coastal aerodromes and, water areas within the jurisdiction of aerodromes.

12.4.3 Search and Rescue Units

- 12.4.3.1 Each search and rescue unit shall:

- a) be cognizant of all parts of the plans of operation prescribed in 4.2 necessary for the effective conduct of its assigned mission; and
- b) keep the rescue coordination center informed of its preparedness status.

12.4.3.2

Each search and rescue unit 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.

12.4.4

Trainings and Exercises

To achieve and maintain maximum efficiency in search and rescue, regular training of the search and rescue personnel shall be provided. Appropriate search and rescue exercises shall also be arranged for such personnel.

12.4.5

Wreckage

Wreckage resulting from aircraft accidents within the entire Philippine Territory including its territorial waters or, in the case of accidents on the high seas or in areas of undetermined sovereignty, falling within the search and rescue region shall be removed, obliterated or charted following completion of the accident investigation, if its presence might constitute a hazard or confuse subsequent search and rescue operations.

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12.5 OPERATING PROCEDURES

12.5.1 Information concerning Emergencies

12.5.1.1 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 center concerned.

12.5.1.2 Immediately upon receipt of information concerning aircraft in emergency, the PARCC shall evaluate such information and assess the extent of the operation required.

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

12.5.2 Procedures for Rescue Coordination Center during Emergency Phases

12.5.2.1 Uncertainty phase

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

12.5.2.2 Alert phase

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

12.5.2.3 Distress phase

Upon the occurrence of a distress phase, the rescue coordination center 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 centers, the assistance of which seems likely to be required, or to which the SAR operator may be centered;

- e) notify associated air traffic service units, 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 emergency response plan of operation and are able to:
 - 1) maintain a listening watch for transmissions from the aircraft in distress, survival radio equipment or an Emergency Locator Transmitter (ELT);
Note.— The frequencies for ELTs are 121.5 MHz and 406 MHz, taking into consideration factors due to the phasing out of the frequency 121.5 MHz.
 - 2) assist the aircraft in distress as far as practicable; and
 - 3) inform the rescue coordination center of any developments;
- g) from the information available, draw up a detailed plan 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 operation;
- h) amend as necessary, in the light of evolving circumstances, the detailed plan of action;
- i) notify the appropriate accident investigation authorities; and
- j) notify the State of Registry of the aircraft.

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

12.5.2.4

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 center is notified of the existence of an emergency phase and is unaware of other centers taking appropriate action, it shall assume responsibility for initiating suitable action in accordance with 12.5.2 and confer with neighboring rescue coordination centers with the objective of designating one rescue coordination center to assume responsibility forthwith.
- b) Unless otherwise decided by common agreement of the rescue coordination centers concerned, the rescue coordination center to coordinate search and rescue action shall be the center responsible for the region in which the aircraft last reported its position; or the region to which the aircraft was proceeding when its last reported position was on the line separating two SRRs; or 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 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 center with overall coordination responsibility shall inform all rescue coordination centers that may become involved in the operation of all the circumstances of the emergency and subsequent developments. Likewise all rescue coordination centers becoming aware of any information pertaining to the emergency shall inform the rescue coordination center that has overall responsibility.

12.5.2.5 Passing of information to aircraft in respect of which an emergency phase has been declared.

Whenever applicable, the rescue coordination center 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.

12.5.3 **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 center of the region.

12.5.4 **Procedures for Agencies in the Field**

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

- a) give instructions to the units under their direction and inform the rescue coordination center of such instructions; and
- b) keep the rescue coordination center informed of developments.

12.5.5 **Procedures for Rescue Coordination Centers— Termination and Suspension of Operations**

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

12.5.5.2 The responsible rescue coordination center shall be responsible for determining when to discontinue search and rescue operations.

12.5.5.3 When a search and rescue operation has been successful or when a rescue coordination center 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 agency, facility or service that has been activated or notified shall be promptly informed.

12.5.5.4 If a search and rescue operation becomes impracticable and the rescue coordination center concludes that there might still be survivors, the center shall temporarily suspend on-scene activities pending further developments and shall promptly inform any agency, 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.

12.5.6 Procedures at the Scene of an Accident

12.5.6.1 When multiple agencies/facilities are engaged in search and rescue operations on-scene, the rescue coordination center or rescue sub-center 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.

Note.— Air-to-surface and surface-to-air visual signals are published in Volume III of ICAO Document 9731.

12.5.6.2 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 center that it is no longer necessary;
- b) determine the position of the craft in distress;
- c) as appropriate, report to the rescue coordination center 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 coordinates or in distance and true;
 - iii. bearing from a distinctive landmark or from a radio navigation aid;
 - iv. time of observation expressed in hours and minutes Coordinated Universal Time (UTC);
 - v. number of persons observed;
 - vi. whether persons have been seen to abandon the craft in distress;
 - vii. on-scene weather conditions;
 - viii. apparent physical condition of survivors;
 - ix. apparent best ground access route to the distress site; and
- d) act as instructed by the rescue coordination center or the air traffic services unit.

- 12.5.6.2.1 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 center 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.
- 12.5.6.3 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.
- 12.5.6.4 When a ground signal has been displayed, the aircraft shall indicate whether the signal has been understood or not by the means described in 12.5.6.3 or, if this is not practicable, by making the appropriate visual signal.
- 12.5.6.5 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.
- Note.— Air-to-surface and surface-to-air visual signals are published in Volume III of ICAO Document 9731.*
- 12.5.7 Procedures for a Pilot-in-Command Intercepting a Distress Transmission**
- 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 of the signal transmission;
 - d) inform the appropriate rescue coordination center or air traffic services unit of the distress transmission, giving all available information; and
 - e) at the pilot's discretion, while awaiting instructions, proceed to the position given in the transmission.
- 12.5.8 Search and Rescue Signals**
- 12.5.8.1 The air-to-surface and surface-to-air visual signals enumerated in the Appendix shall, when used, have the meaning indicated therein. They shall be used only for the purpose indicated; no other signals shall be used that will likely introduce confusion.

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

12.5.9 Maintenance of Records

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

12.6 SUPPLEMENTARY PROVISION

12.6.1

The expenses incurred by aircraft conducting search and rescue missions may be subsidized by the State. Detailed methods of subsidy shall be formulated by the department concerned in conjunction with the financial department through consultation.

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APPENDIX 12.1

SEARCH AND RESCUE SIGNALS

1. Signals with Surface Craft

1.1 The following maneuvers 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:

- a) circling the surface craft at least once;
- b) 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.

Note.— Due to high noise level on board a 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.
- c) heading in the direction in which the surface craft is to be directed. Repetition of such maneuvers has the same meaning.

1.2 The following maneuvers by an aircraft means that the assistance of the surface craft to which the signal is directed is no longer required:

- 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.

Note.— The following replies may be made by surface craft to the signal in 1.1:
- 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.
- 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.

Note.— See Note following 1.1 b), 3).

2. Ground-Air Visual Signal Code

2.1 Ground-air visual signal code for use by survivors

No.	Message Code symbol	Code Symbol
1	Require assistance	✓
2	Require medical assistance	X
3	No or Negative	N
4	Yes or Affirmative	Y
5	Proceeding in this direction	↑

2.2 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	XX
5	Have divided into two groups. Each proceeding in direction indicated	↔
6	Information received that aircraft is in this direction	→→
7	Nothing found. Will continue to search	NN

2.3 Symbols shall be at least 2.5 meters (8 feet) long and shall be made as conspicuous as possible.

Note: 1 - Symbols may be formed by any means such as: strips of fabric, parachute materials, pieces of wood, stones or such like material; marking the surface by tramping, or staining with oil.

Note: 2 - Attention to the above signals may be attracted by other means such as radio, flares, smoke and reflected light.

3. Air-to-ground signals

3.1 The following signals by aircraft mean that the ground signals have been understood:

- a) during the hours of daylight:
 - by rocking the aircraft's wings;
- b) during the hours of darkness:
 - flashing on and off twice the aircraft's landing lights or, if not so equipped, by switching on and off twice its navigation lights.

3.2 Lack of the above signal indicates that the ground signal is not understood.

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