



สำนักงานการบินพลเรือนแห่งประเทศไทย
The Civil Aviation Authority of Thailand

Guidance Material for National SAR Plan

CAAT-GM-ANS-NSP

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Approved by

A blue ink signature in Thai script, which appears to read 'สุทธิพงษ์ กองพูล' (Suttipong Kongpool).

Suttipong Kongpool

Director General of the Civil Aviation Authority of Thailand

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Abbreviations

CAAT	The Civil Aviation Authority of Thailand
COSPAS-SARSAT	Cosmicheskaya Sistema Poiska Avaryinyh Sudov-Search and Rescue Satellite-Aided Tracking
IAMSAR	International Aeronautical and Maritime Search and Rescue
ICAO	International Civil Aviation Organization
Inmarsat	International Mobile Satellite Organization
MHz	Megahertz
MRO	Mass Rescue Operation
NGO	Non-Governmental Organization
NSARC	National Search and Rescue Committee
NSP	National Search and Rescue Plan
RCC	Rescue Coordination Center
RSC	Rescue Sub-Center
SAR	Search and Rescue
SCC	SAR Coordinating Committee
SMC	SAR Mission Coordinator
SRR	Search and Rescue Region
SRU	Search and Rescue Unit
TMAS	Telemedical Assistance Services

0. Introduction

0.1 Background

Air Navigation Act B.E. 2497 as amended by the Air Navigation Act (No.14) specified the Office of the National Search and Rescue Committee (The Office of the NSARC) to have the duty and power to develop the National Search and Rescue Plan (National SAR Plan: NSP) and propose to the National Search and Rescue Committee (NSARC) for approval (Section 64/24 (1)). The National SAR Plan shall comply the “Rule of the CAAT on Manual of Standards of Search and Rescue Services standards”, which set out the requirement for the National SAR Plan details. The Guidance for National SAR Plan provides the available means to meet the relevant standards, to review and complement functions of Aeronautical Search and Rescue (hereinafter ‘SAR’) Service.

It should be clearly understood that this document has no legal status. It is intended to provide recommendations and guidance to illustrate a mean but not necessarily the only mean of complying with the Regulations, or to explain certain regulatory requirements by providing interpretative and explanatory material.

0.2 Purpose

The purpose of the Guidance Material for National SAR Plan are mentioned in the following:

- 0.2.1 to develop National SAR Plan in compliance with the relevant standards; and
- 0.2.2 to provide examples for the National SAR Plan development.

0.3 Applicability (is subjected to)

The Guidance Material for National SAR Plan provides recommendations and guidance for the Office of the NSARC staff who take charge in the National SAR Plan development.

Readers should forward advice of errors, inconsistencies or suggestions for improvement to this guidance material to the Manager of Air Navigation Services Standards Department of CAAT by email to ans@caat.or.th.

This document is published on the CAAT website and will be an uncontrolled document when printed out, or when opened as an electronic file from other sources than CAAT website.

0.4 Reference (Refer regulation)

- 0.4.1 Air Navigation Act B.E. 2497 as amended by the Air Navigation Act (No.14); and
- 0.4.2 Rule of the CAAT on Manual of Standards of Search and Rescue Services standards.

0.5 Definitions

Term	Definition
<i>Aircraft operator</i>	<p>“A person, organization or enterprise engaged in or offering to engage in an aircraft operation.” This means:</p> <ul style="list-style-type: none"> a) a person or company who, for compensation or hire, participates in the carriage by air transport of persons or property, or other aerial work services using aircraft; commonly an “airline” or other type of air transport or services company; and b) a person who owns or shares ownership of a general aviation aircraft that is used by them but not for commercial air transport purposes.
<i>Air traffic service</i>	<p>A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).</p>
<i>Air traffic services unit</i>	<p>A generic term meaning variously, air traffic control unit, flight information center or air traffic services reporting office.</p>
<i>Alerting post</i>	<p>Any facility intended to serve as an intermediary between a person reporting an emergency and a rescue co-ordination center or rescue sub-center.</p>
<i>Cospas-Sarsat System</i>	<p>A satellite system designed to detect and locate activated distress beacons transmitting in the frequency band of 406.0-406.1 MHz.</p>
<i>Craft</i>	<p>Any air or sea-surface vehicle, or submersible of any kind or size.</p>
<i>Distress alerting</i>	<p>The reporting of a distress incident to a unit, which can provide or co-ordinate assistance.</p>
<i>International Mobile Satellite Organization (Inmarsat)</i>	<p>A system of geostationary satellites for world –wide mobile communications services and which support the Global Maritime Distress and Safety System and other emergency communications systems.</p>
<i>Mass rescue operation (MRO)</i>	<p>Search and rescue services characterized by the need for immediate response to large numbers of persons in distress, such that the capabilities normally available to search and rescue authorities are inadequate.</p>
<i>Rescue</i>	<p>An operation to retrieve persons in distress, provide for their initial medical or other needs and deliver them to a place of safety.</p>
<i>Rescue coordination center (RCC)</i>	<p>A unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region.</p>
<i>Rescue sub-center (RSC)</i>	<p>A unit subordinate to a rescue coordination center established to complement the latter according to particular provisions of the responsible authorities.</p>
<i>Search</i>	<p>An operation, normally coordinated by a RCC or RSC, using available personnel and facilities to locate persons in distress.</p>

Term	Definition
<i>Search and rescue coordinator</i>	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.
<i>Search and rescue facility</i>	Any mobile resource, including designated search and rescue units, used to conduct search and rescue operations
<i>Search and rescue mission coordinator (SMC)</i>	The official temporarily assigned to coordinate response to an actual or apparent distress situation.
<i>Search and rescue plan</i>	A general term used to describe documents which exist at all levels of the national and international search and rescue structure to describe goals, arrangements and procedures which support the provision of search and rescue services.
<i>Search and rescue region (SRR)</i>	An area of defined dimensions, associated with a rescue coordination center, within which search and rescue services are provided.
<i>Search and rescue service</i>	The performance of distress monitoring, communication, co-ordination and search and rescue functions, including provision of medical advice, initial medical assistance, or medical evacuation, through the use of public and private resources including co-operating aircraft, vessels and other craft and installations.
<i>Search and rescue service provider</i>	The provider of search and rescue services within the Bangkok search and rescue region.
<i>Search and rescue sub-region</i>	A specified area within a search and rescue region associated with a rescue sub-center.
<i>Search and rescue unit (SRU)</i>	A unit composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue operations.
<i>Uncertainty phase</i>	A situation wherein doubt exists as to the safety of an aircraft or a marine vessel, and of the persons on board.
<i>Vessel</i>	A maritime craft.

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1. Organization of the National SAR Service

- 1.1 The name of agency charged with facilitating the SAR service in the national territory and in its jurisdictional waters, as well as in any other, permanently or temporarily, internationally-agreed area which, through its Implementation Agency known as the Rescue Coordination Center (RCC) and Rescue Sub-center (RSC), plans, coordinates and directs the actions to be carried out by the different participating agencies which implement or cooperate in the tasks.
- 1.2 The SAR's area of responsibility has been identified as the ... [\(name of the SAR Region \(SRR\) or Regions\)](#).
- 1.3 The national laws, decrees, regulations and provisions and international agreements which make up the legal basis for the agency being in charge of the SAR service administration at the national level and for it to have available its resources, policies and procedures.
- 1.4 The name of the agency nationally in charge of the SAR service administration to perform the basic functions of the National SAR System as efficiently as possible using the means and personnel committed in the National SAR Plan.
- 1.5 The basic functions of the National SAR System. All name of the agencies which have committed their participation in the National SAR Plan by means of a Letter of Agreement signed with the agency named to be responsible for the national SAR. For example, air traffic service unit, SAR Unit (SRU), police unit, public health agencies, fire departments, Non-Governmental Organizations (NGOs), etc.

2. Area of Responsibility

Area of responsibility of the SAR, within which SAR services are provided, including:

- a) the detail of the boundaries established for the SRR (or for each region);
- b) a chart indicated the SRR corresponding boundaries. The corresponding and illustrated in a chart, in case one or more SAR sub-regions have been established;
- c) responsible agency, in case more than one RCC has been established, mention each of them identifying the SRR under their jurisdiction;
- d) the RSC in charge, in case a sub-region has been established;
- e) available air facilities (see example in Figure 1: UK SAR Helicopter Bases);
- f) available ground facilities (see example in Figure 1: UK SAR Helicopter Bases);
- g) available maritime facilities (see example in Figure 1: UK SAR Helicopter Bases);
- h) the detail of the available air, ground and maritime facilities, their respective home bases and the estimated time by which the corresponding RCC will have them available.

UK SEARCH AND RESCUE HELICOPTER BASES

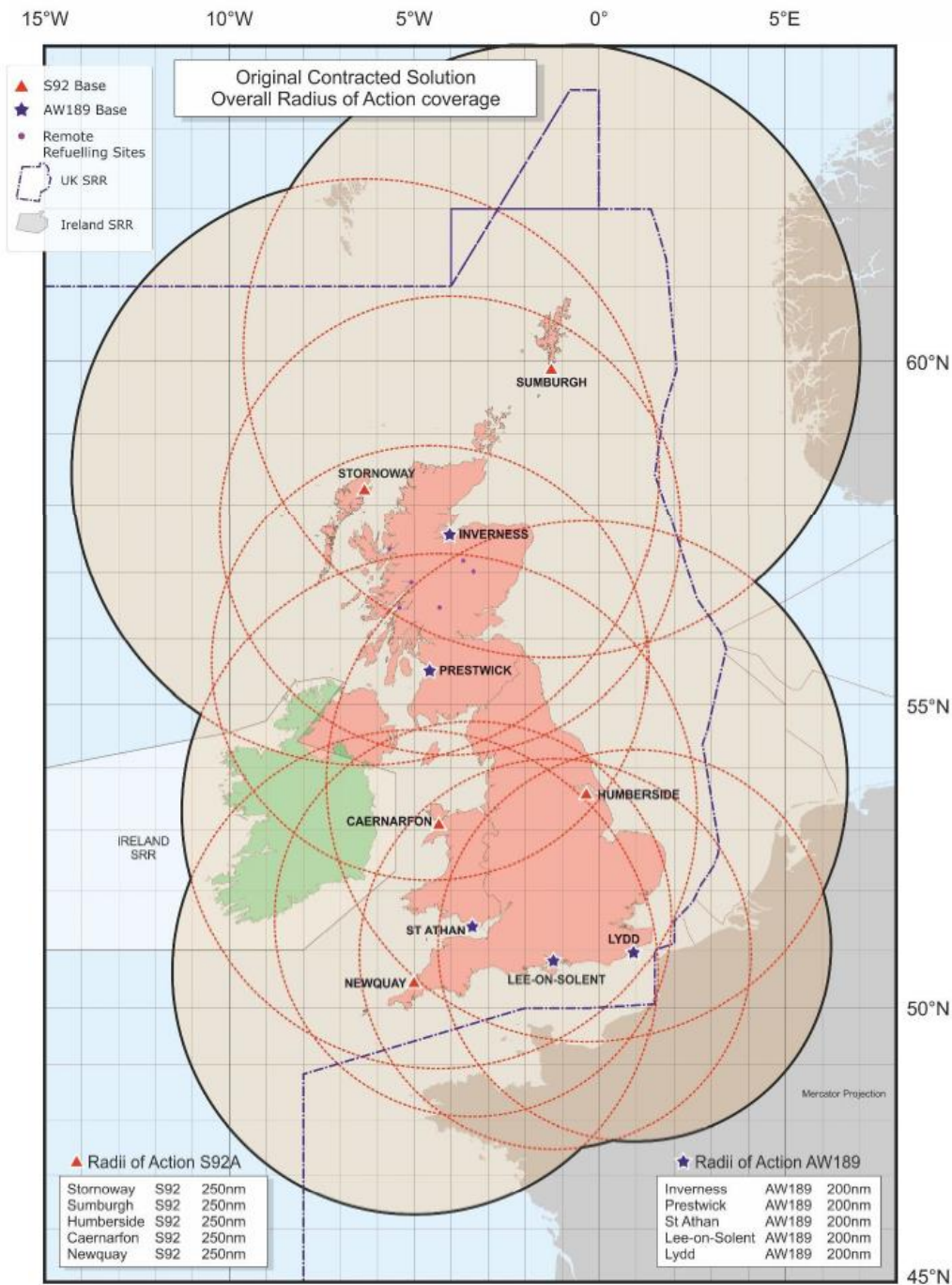


Figure 1: UK SAR Helicopter Bases

Source: (United Kingdom SAR (UKSAR), 2017, Annex B)

3. Implementation Agencies

3.1 SAR Coordinating Committee

- a) listing of agencies which make it up;
- b) in case such committee not exist, the agency responsible for acting as national SAR authority and the organizations which by means of a Letter of Agreement have committed to participate in the National SAR Plan as implementation agencies.

Example:

The SCC is made up of members appointed by the following agencies:

- a) A representative and an alternate from the Office of the NSARC;
- b) A representative and an alternate from the Air Force;
- c) A representative and an alternate from the Navy;
- d) A representative and an alternate from the Army;
- e) A representative and an alternate from the National Police Service;
- f) A representative and an alternate from the National Civil Defense System;
- g) A representative and an alternate from the National Fire Department;
- h) A representative and an alternate from the National Red Cross;
- i) A representative and an alternate from the Airlines Association;
- j) A representative and an alternate from the National Aeroclub Federation;
- k) A representative and an alternate from the National Hospital System;
- l) A representative and an alternate from the Coastal Radio Stations Enterprise;
- m) A representative and an alternate from the National Parachuting Federation;
- n) A representative and an alternate from the National Mountain Climbers Federation;
- o) A representative and an alternate from the National Automobile Club.

3.2 National SAR Plan Implementation Agencies

All the agencies which will be responsible for integrating efforts and for coordinating SAR operations within the national sphere should be listed and, if any, those support organizations which, through a Letter of Agreement, have committed themselves to being at the disposal of one of the implementation agencies during a SAR operation.

3.3 Facilities, Personnel and Equipment Committed

A general description of all the means, personnel and equipment which, by means of a Letter of Agreement, each organization participating in the National Plan has committed to place at the disposal of the SAR (implementation as well as supporting organizations).

3.4 SAR Committee Structure

SAR committee structure should be established, concerning list of agencies regard to effectiveness of national SAR services. For example, see Figure 2: UK SAR Committee Structure.

UK SAR COMMITTEE STRUCTURE

ANNEX C

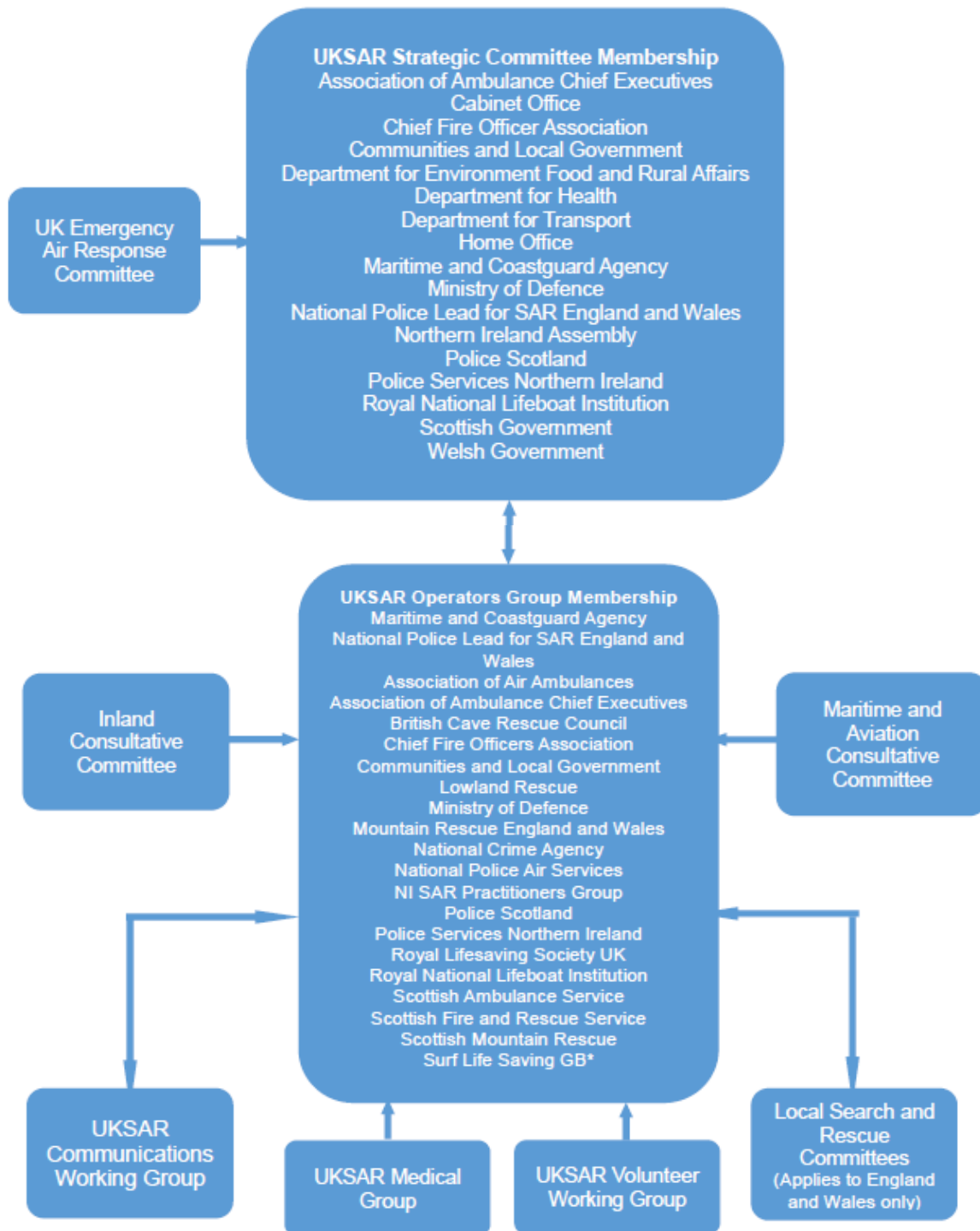


Figure 2: UK SAR Committee Structure

Source: (United Kingdom Search & Rescue (UKSAR), 2017, Annex C)

4. SAR Functions and Responsibilities

4.1 SAR Functions and Responsibilities taken on by Each of the Organizations Participating in the National SAR Plan

The SAR functions and responsibilities of each organization in National SAR Plan should defined as below:

- a) a full and detailed description of each of the organizations, identifying the responsible organization. Those corresponding to the SCC should be made first;
- b) the organizations corresponding to the organization responsible for the SAR within the national sphere, in case the SCC has not been set up;
- c) the functions and responsibilities emerge from what has been agreed upon in the Letter of Agreement signed between the SAR's Directorate (SCC or Agency appointed by the State) and the reference organization/institution.

See example in Appendix F – Example of SAR Organizations - Distribution of Roles in the SAR system and Appendix G – Example of SAR Entities and Events Response.

4.2 In case of SCC has been establish, the objectives should be defined:

Example:

The SCC should have the following objectives:

- a) to provide a national forum to coordinate administrative issues and SAR operations;
- b) to serve as a contact with other national (regional) and international organizations engaged in providing emergency services;
- c) to promote the efficient use of existing SAR resources;
- d) to serve as a forum for cooperation to exchange information and to define positions and policies of common interest to the different parties to the Plan;
- e) to promote close collaboration and cooperation between civil and military authorities and other organizations so as to provide SAR services in an efficient way;
- f) to improve cooperation among aeronautical, maritime and ground SAR communities so as to provide SAR services in an efficient way;
- g) to determine other ways of improving the efficacy and general efficiency of National SAR services and, to the extent possible, to standardize SAR procedures and equipment;
- h) to set up SAR operational agreements with national or international agencies whose facilities and/or personnel are considered as necessary contributors to the National SAR Plan;
- i) to enact, coordinate with the corresponding agencies and supervise the measures needed to attract, and to provide training, qualifications and experience to the personnel of SRUs as well as to those belonging to agencies contributing to the National SAR Plan; and
- j) through the Office of NSARC, to enter into Mutual Assistance Arrangements and Agreements for SAR missions with neighboring States.

5. SAR Personnel Training Program

SAR personnel training program, rating standards and skill certification procedures.

5.1 SAR Training Program

General description of the program to attract and train SAR personnel skilled in each area, instructions for scheduling exercises (in the laboratory as well as using the facilities and personnel), including a description of the different SAR procedures, techniques and equipment to be used during such exercises.

This information should serve as a reference by those responsible for preparing and providing training to the SAR personnel assigned to the SRUs as well as to the personnel from the organizations involved in the National SAR Plan.

5.2 SAR Ratings – Certifications

Definition of the standards to rate the performance and certify the skills of the SAR staff from each SAR area or function as an official recognition that a person has satisfactorily demonstrated his/her skills as well as the mental and physical competence for SAR work. A listing of the agencies authorized to issue them should also be included.

6. Agreements with Support Organizations

6.1 The Complete Copies of Each of the Operational Agreements Entered

This chapter incorporates complete copies of:

- a) each of the operational agreements entered into by ... [\(name of the agency responsible for the national SAR\)](#) and the authorities of agencies or organizations participating with resources, services and/or personnel and which will not be under the direct control of the SAR administration, but whose participation during search, rescue, or a combination of both, operations, is considered indispensable; and
- b) a copy of each of the agreements entered into with the authorities participating with resources and services which will not be under the direct control of the SAR administration, but whose participation in the National SAR Plan is considered necessary.

See Appendix D for the Sample Operational Agreement for Inter-State Use of Specific SAR Facilities and Services, through which One State Provides Assistance to Another State.

6.2 International Agreements

The complete copies of each of the operational agreements entered into by ... [\(name of the organization responsible for the National SAR\)](#) with the authorities of the adjacent RCC of neighboring States. See Appendix E for the examples.

7. Mass Rescue Operations

A Mass Rescue Operation (MRO) is characterized by a need for immediate response to large numbers of persons in distress such that the capabilities normally available to SAR authorities are inadequate. It is therefore necessary to plan to enhance SAR capability in MROs. For the organization who take responsibility for National SAR Plan, see International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, Volume II, 6.15 as MRO reference.

8. Example Documents and Agreements of SAR Services

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Appendix C: SAR Committees and Working Groups

Appendix D: SAR Organizations - Distribution of Roles in the SAR system

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8.2 Appendix B - Sources for SAR assistance

1. State, provincial and local government departments

1.1 Many Government departments can give valuable aid to SAR operations. The National SAR Plan should specify the extent and manner in which each department is expected to aid the SAR system when called upon. Consideration should be given to calling upon public departments for assistance, rather than upon private concerns, as the latter may demand considerable payment for services. Examples of public departments and the facilities they may provide for SAR assistance are:

- a) Agricultural and forestry departments. Personnel and organization for land searches, fire fighters and first-aid personnel, communication networks, light aircraft and helicopters.
- b) Broadcasting stations. Communications networks and public information broadcasts.
- c) Civil aviation administrations. Air traffic services personnel, communications networks and departmental aircraft.
- d) Coastguard and lifeboat authorities. Where established, these authorities are typically the primary source of maritime SAR assistance. The services which these authorities may provide cover a wide range, but the following are among the more important:
 - i. trained personnel and specialized, all-weather SAR equipment;
 - ii. medical assistance and emergency medical evacuation;
 - iii. alerting posts, communications networks, direction-finding and radio facilities;
 - iv. survival equipment; and
 - v. testing, prototype and experimental equipment.
- e) Electric and public works departments. First-aid personnel, helicopters and communication lines;
- f) Fire departments. Fire departments are often focal points to which the general public turns for help or to report an accident. They may provide:
 - i. alerting post services; and
 - ii. rescue units, including vessels, ambulances, emergency medical technician teams and fire-fighting brigades.
- g) Health departments. Hospital and first-aid facilities, ambulances and medical stations in remote areas, telemedical assistance services (TMAS).
- h) Hydrographic and other marine survey departments. Marine navigation warnings and information, and vessels.
- i) Land survey departments. Aircraft, aerial photography and photo-interpretation personnel.
- j) Lighthouse and pilotage authorities. Vessels and crews.
- k) Marine and fisheries departments. Vessels and crews, and vessel reporting systems.
- l) Meteorological departments. Weather information and communications networks.
- m) Military services. Often the military services are the best source of all-weather facilities and trained personnel, rivalling even an established coastguard or lifeboat service in

SAR capabilities. With their communications networks, military operations centers make excellent sites for co-locating an RCC.

- n) Police departments, including municipal, State or provincial police forces. Police departments are focal points to which the general public often report abnormal observations. SAR-related services that police departments may provide are:
 - i. alerting posts;
 - ii. helicopters, small aircraft, rescue boats and land search parties;
 - iii. communications facilities;
 - iv. traffic control; and
 - v. fencing and guarding of accident sites.
- o) Service Railway departments. Communication networks.
- p) Telephone and telegraph departments. Communications networks and repair personnel.

2. Communications facilities

2.1 Communications are vital to an effective SAR system. The SAR system should have ways to receive distress alerts and to direct the efforts of responding SAR facilities. Immediate access to the lines of communication owned by Government departments and private concerns is most important. SAR managers should ensure that, whenever possible, each RCC has access to the following communications networks:

- a) air traffic services networks.
- b) amateur radio stations;
- c) State-owned and private broadcasting stations;
- d) cable, telephone and telegraphic corporations;
- e) coast radio stations;
- f) meteorological communications networks;
- g) military communications networks;
- h) railway communications systems;
- i) dedicated SAR communications networks;
- j) satellite communications systems, e.g. Inmarsat and Cospas–Sarsat; and
- k) transport communications systems.

3. Aircraft operating agencies

3.1 Arrangements should be made with aircraft operating agencies for their cooperation in SAR. They may be able to provide limited assistance by:

- a) requesting air crews to keep a visual or radio watch for aircraft or vessels lost in the vicinity of their route;
- b) diverting en-route aircraft to the extent practicable for SAR purposes;
- c) making suitable aircraft and crews available for SAR operations;
- d) providing RCCs with detailed information concerning one of their own aircraft in distress and the survival equipment carried by that aircraft; and

- e) encouraging aircraft operators and aerodromes to monitor the radio frequency 121.5 MHz.

4. Fishing vessels, yachts and small craft

4.1 Fishing vessels, yachts and other private small craft are sources from which volunteer assistance may be obtained. Those sources will have various levels of training in SAR operations. Police, customs and harbor authorities also usually have small craft suitable for SAR operations in coastal or protected waters.

5. Merchant vessels

5.1 Several international conventions require that the master of a vessel, on receiving a message that persons are in distress at sea, proceeds to assist them when it can be done without undue risk to the safety of the responding vessel and crew.

5.2 Vessels at sea, although not always available to participate in extended search operations, are potential SAR assets. Masters of vessels have a duty to assist others whenever it can be done without endangering the assisting vessel or crew. Ship reporting and vessel tracking systems enable the SMC to quickly know the approximate positions, courses, and speeds of vessels in the vicinity of a distress situation and other information about the vessels which may be valuable, e.g. whether a doctor is aboard. Masters of vessels sailing the areas of concern should be encouraged to send regular reports to the authority operating a ship reporting system for SAR in the area. Ships are a key SAR resource for RCCs, but requests for them to assist should be weighed against the considerable cost to shipping companies when they do divert to assist. Ship reporting systems enable RCCs to quickly identify the capable vessel which will be least harmed by a diversion, enabling other vessels in the vicinity to be unaffected. The basic functional requirements of a ship reporting system are:

- a) one or more communications stations that receive and relay vessels' reporting messages;
- b) a facility (personnel and equipment) for recording, plotting, updating and filing vessels' reports;
- c) a standard operating procedure available to participating ships; and
- d) immediate access to system information by any RCC which may need the data.

6. Auxiliaries

6.1 Auxiliaries, both maritime and aeronautical, are organizations which provide training and an operational framework for privately owned craft that volunteer to do SAR. Though not specifically designed for SAR, these craft frequently are useful over land and in coastal waters. These craft vary in size, type, design, power, endurance and durability. SAR planners should maintain updated information on how to contact these volunteer resources and be familiar with their capabilities and limitations.

7. Sports clubs and similar organizations

7.1 Aviation clubs, parachute jumping clubs, scouting troops, mountain climbing and hiking clubs may give valuable assistance, particularly with SAR over land. Aircraft operated by parachute clubs may be used for dropping supplies and aircraft operated by aviation clubs may be used for air searches that should be conducted at low speed and altitudes in areas well known to the pilots.

8. Commercial businesses

8.1 A number of commercial businesses may be able to contribute substantially to SAR, in view of their location, equipment and the nature of their business. They may include:

- a) Crop and insect spraying corporations. Aircraft and helicopters;
- b) Polar trading posts and tropical plantations. Alerting posts;
- c) Oil companies and others exploiting natural resources. Vessels and crews; aircraft and helicopters normally used for patrolling pipelines, transportation and surveying; and first-aid and communications facilities;
- d) Salvage companies. Undersea salvage equipment and personnel, vessels and crews, salvage expertise, equipment and ocean-going tugs;
- e) Shipping information agencies and classification societies. Sailing and arrival schedules, descriptive information and shipping particulars.

9. Other institutions

9.1 Institutions situated in isolated locations are particularly valuable to the SAR system. They are generally well equipped to serve as alerting posts, organize search parties and give medical aid. Examples include missionary and medical stations, monasteries, convents and other voluntary enclaves.

8.3 Appendix C - Sample National SAR Committee Interagency Agreement

1. Purpose

1.1 This Agreement provides for a national-level Committee to coordinate civil search and rescue (SAR) matters of interagency interest within [State name].

2. Background

2.1 The National Search and Rescue Committee (NSARC) is established as a standing interagency group to oversee the National Search and Rescue Plan (NSP) and to act as a coordinating forum for national SAR matters.

[Note: If the National Search and Rescue Plan (NSP) is created first, then the paragraph could read as: The [State] National Search and Rescue Plan (NSP) established a standing interagency group to oversee the NSP and to act as a coordinating forum for national SAR matters. This group is named the National Search and Rescue Committee (NSARC).]

3. Sponsorship

3.1 The [name of national agency] is the sponsor of NSARC. The [name of national agency] shall:

3.2 Designate an executive-level person to chair the Committee, who shall report to the Secretary of [Department or Ministry name] via the [name of national agency]; and

3.3 Appoint a Committee Secretary to ensure that the Committee operates according to policies and procedures contained in current directives.

4. Membership, observers and advisors

4.1 The Member Agencies of the Committee are as follows:

-
-
-

[e.g.: Ministry/Department of Defense, Ministry/Department of Transportation; Ministry/Department of Commerce, National Police, Emergency Management Agency, Medical, etc.]

4.2 Each of these Member Agencies shall designate one representative by name or position to serve as its primary Committee Member, and another to serve as its Alternate Committee Member.

4.3 Each Committee Member may call upon officials in that agency to serve as Advisors and to participate in meetings of the Committee, or of subsidiary groups of the Committee.

4.4 Others may be invited with the approval of the Chair or the Committee to participate as government or non-government Observers on an ad hoc basis.

5. National Search and Rescue Plan participation

5.1 Member Agencies of NSARC are, by virtue of their membership, also Participants to the National Search and Rescue Plan of [State name].

6. Objectives

6.1 The objectives of the Committee are to:

6.1.1 Recommend implementation strategies and actions that ensure that the [State] meets domestic needs and international commitments to provide effective civil SAR services;

- 6.1.2 Hold sole responsibility for the provisions of the NSP;
- 6.1.3 Serve as the primary coordinating forum within the national government for the conduct and support of civil SAR operations covered by the NSP, and for matters relating to national civil SAR policies and positions;
- 6.1.4 Administer the National Search and Rescue Supplement to the International Aeronautical and Maritime Search and Rescue Manual for interagency guidance on implementing the NSP;
- 6.1.5 Seek to ensure compatibility between the NSP and the National [Disaster] Response Plan (NRP) so that the NSP can be implemented independently or concurrently with the NRP during an incident of national significance;
- 6.1.6 Promote application of research and development, improved standards and procedures, new technologies, regulations, and education to improve the effectiveness and efficiency of distress alerting and other civil SAR services, and to reduce the associated risks;
- 6.1.7 Help coordinate the civil SAR efforts of the NSARC Member Agencies with other national and international government, private, and volunteer organizations;
- 6.1.8 Promote the effective use of all available resources to support civil SAR;
- 6.1.9 Foster appropriate use of SAR agreements and other arrangements and plans to improve cooperation and mutual support among the various national and international civil SAR communities;
- 6.1.10 Promote close cooperation among civilian and military authorities and organizations for provision of effective civil SAR services;
- 6.1.11 Promote analysis and initiatives to help citizens avoid or cope with distress situations; and
- 6.1.12 Consider, as appropriate, contingency plans for use of SAR resources in emergencies other than civil SAR.

7. Procedures

- 7.1 The following procedures shall be followed in conducting the business of the Committee:
 - 7.1.1 The Committee shall schedule regular meetings on at least a [quarterly] basis.
 - 7.1.2 The Chair or any Member Agency via its respective Committee Member may call a special meeting when deemed necessary.
 - 7.1.3 Meetings will be properly documented by the Secretary. Decisions will normally be made by consensus. Where consensus cannot be reached, decisions will be submitted to the Committee for majority vote at a regular or executive meeting of the Committee, or by an informal poll of the Committee Members by the Secretary with the results properly documented.
 - 7.1.4 The Chair is authorized to represent directly the views, actions, recommendations and decisions of the Committee, or otherwise act on behalf of the Committee, by correspondence or other means, except that where such correspondence is directed to the [Secretary of Homeland Security] [Transportation], it shall be via the [name of national agency].
 - 7.1.5 The normal procedure for addition of a national Agency as an NSARC Member Agency and NSP Participant shall be as follows:
 - a) Based on a unanimous vote of the Committee, the Chair will extend a written invitation to the prospective Member Agency, and the Agency will respond to the Chair in writing of the Agency's acceptance; and

- b) The Chair will then notify each Member Agency, via the Member Agency's Executive Secretary or an individual designated to receive such notification, of the acceptance. If no Member Agency objects within [60] days, the invited Agency will from that time become an NSARC Member Agency and an NSP Participant. Such notifications, designations, and objections should be in writing.

7.1.6 Alternatively, an additional national Agency may become a Member Agency and NSP Participant by mutual written agreement of all current Member Agencies and the prospective Member Agency.

7.1.7 Termination of an Agency's Committee Membership shall automatically terminate its status as an NSP Participant; such termination shall be accomplished by the Agency's written notification to the other Member Agencies at least six months in advance.

7.1.8 Policy issues or plans that require the attention or approval of the Signatories, e.g. adoption of the NSP, will be submitted by the Chair with recommendations for action. In such cases the views of all of the Committee Members shall be included.

7.1.9 Nothing in this Agreement shall be viewed to obligate the Member Agencies to comply with decisions of the Committee.

8. Entry into force, amendment, renewal and termination

8.1 This Agreement shall enter into force on the date of the first Committee meeting following the completion of the signatures by the Secretaries (or equivalent level authority) of all of the Member Agencies.

8.2 Based on a unanimous vote of the Committee, any proposed amendment(s) to this Agreement or to the NSP should be adopted by one of the following means:

8.2.1 The Chair will notify each Member Agency, via the Member Agency's Executive Secretary or an individual designated to receive such notification, of the proposed amendment(s). If no Member Agency objects within [60] days, the amendment(s) will be considered adopted. Such notifications, designations, and objections should be in writing.

8.2.2 The amendment(s) shall be adopted by mutual written agreement of all Member Agencies.

8.3 This Agreement, as amended, shall be automatically renewed on 1 January [year] and every five years thereafter unless superseded by a new arrangement or terminated.

[Agency names and signatories]

8.4 Appendix D - Sample Operational Agreement for Inter-State Use of Specific SAR Facilities and Services, through which One State Provides Assistance to Another State

Note 1: Depending on the administrative procedures of each State, an agreement of this type, or such as the one proposed by the IAMSAR Manual, Volume I, Appendix I, could be entered into at the level of the agency in charge of civil aviation, or at a higher level.

Note 2: The provisions of this type of agreement can be adapted so that they can include, or deal with separately, the assistance to be provided by maritime or overland rescue units. Should more than one RCC from each State be involved, this should be specified in the necessary form.

OPERATIONAL AGREEMENT

Concerning Assistance in air search operations between the search and rescue services of (State A) and (State B) within their respective SAR Regions (SRR).

1. INTRODUCTION

1.1 Pursuant to the standards and recommended practices of the International Civil Aviation Organization (ICAO) concerning the provision of assistance between SAR services of neighboring States, the SAR Service of State A binds itself to provide assistance to the SAR Service of State B, in the form specified in 2. Scope of the Assistance, immediately upon Rescue Coordination Centre (RCC) A's receiving a request for such assistance from Rescue Coordination Centre (RCC) B.

2. SCOPE OF THE ASSISTANCE

2.1 When so requested by RCC B, RCC A will place at the disposal of RCC B, circumstances permitting, one or more aircraft, as may be needed, for search and rescue operations in SRR B, involving aircraft of any nationality.

3. TERMS OF THE AGREEMENT

3.1 Upon submitting a request for help, RCC B will supply RCC A with all the information pertaining to the scope of the necessary assistance.

3.2 Upon receiving the request from RCC B, RCC A will immediately assign one or more search and rescue aircraft, as necessary, to RCC B.

3.3 During the flight, the aircraft thus assigned shall get in touch with RCC B as soon as possible reporting its status as a search and rescue aircraft, and shall request instructions.

3.4 At the end of the search and rescue mission assigned by RCC B, the aircraft shall land at the base of operations that has been determined within the SRR B, so as to supply post-flight information or, if necessary, to get ready to undertake other missions.

4. SPECIAL PROVISIONS

4.1 Overflight and landing

4.1.1 The SAR Service of State B shall make the necessary arrangements to facilitate the entry of SAR aircraft from State A, and to notify the authorities involved that said entry is going to take place.

4.2 Technical stops, lodging and transportation of crew members

4.2.1 The SAR Agency of State B shall cover the costs of the following services:

- a) use of the assigned aerodromes and of their facilities;
- b) fuel supply, aircraft servicing and handling operations;
- c) lodging and transportation of crew members.

4.3 Dropped supplies and survival equipment

4.3.1 The head of RCC B and the aircraft pilot shall organize the recovery of the dropped supplies and survival equipment in conditions to be used again.

4.4 Report on the operations

4.4.1 RCC B shall send RCC A two copies of the report of each search and rescue operation in which aircraft of State A have participated.

4.4.2 RCC A shall send RCC B two copies of the report prepared by the crew that participated in the operation, together with the technical comments which might be necessary.

8.5 Appendix E - Sample Agreement Between Two States to Facilitate Entry of SAR Resources

Note 1: Depending on the administrative procedures of each State, an agreement of this type, or such as the one proposed by the IAMSAR Manual, Volume I, Appendix I, could be entered into at the level of the agency in charge of civil aviation, or at a higher level. This agreement between State A and State B, concerning air search and rescue operations, is being implemented through an exchange of Notes.

Note 2: This type of agreement can be adapted so that it can include, or deal with separately, the search and rescue operations carried out by maritime or overland rescue units.

Your Excellency:

1. I'm honored to refer to the discussions held regarding the need to ensure adequate cooperation between our two Governments in search and rescue operations along our common border.

2. As a result of the conclusions arrived at during these discussions, my Government would like to propose:

- 1) That, in the future, public aircraft from State A or from State B used in search and rescue air operations, be allowed to enter, or to leave, the territory of either country without having to go through the immigration and customs formalities usually required by our respective Governments, on condition that the Rescue Coordination Centre in charge of the search and rescue operation assume, either directly or through some other person it may delegate to, the responsibility of giving notice, either by telephone or by telegram:
 - a) To the immigration service at the point of entry closest to the area over which the search and rescue operations are about to be started, advising it of the actions to be carried out and giving details pertaining the objective of the flight, the identification markings of each aircraft, and the number of people making up the crew of each of them;
 - b) To the customs post closest to the area over which the search and rescue operations are about to be started, advising it of the actions to be carried out and giving details pertaining to the territory over which the search will take place, the possible duration of the stay of the aircraft, the identification markings of each of them, and the number of people who make up the crew of each aircraft.
- 2) That, should a public aircraft of one of the two countries land in the territory of the other in the course of search and rescue operations, the fact will be communicated, verbally or by phone, to the closest customs administrator, so that he/she may render all the assistance possible with respect to any special importation which may be needed for the search and rescue operation. This report may be made by the Rescue Coordination Centre organizing the operation or by the pilots involved, whatever best contributes to the success of the operation in question.
- 3) That any product transported from one country to the other by the aircraft in question in the course of a search and rescue operation will stay in this latter country until the operation is concluded; such products or merchandise receiving the same customs treatment normally given to imported products in that country.

3. The expression "public aircraft" as used in the present Note, identifies the aircraft from the Governments of State A and of State B, as well as any other aircraft registered in States A and B which might be placed under the operational control of a Rescue Coordination Centre in either country, for purposes of a search and rescue operation.

4. If Your Excellency's Government is prepared to accept the above proposals, my Government would like the present Note, together with Your Excellency's affirmative answer, constitute an agreement between both our Governments which would come into force as of the date of Your Excellency's answer and would remain in force until expiry of a period of days as of the date in which either of the parties to the agreement notifies the other of its intention to terminate it.

I remain, Sir, your obedient servant.

(signed).....

8.6 Appendix F - Example of SAR Organizations - Distribution of Roles in the SAR System

Key: Maritime SAR 🚢 Aeronautical SAR ✈ Land SAR 🚒

	SAR Coordinator	Tasking Authority	SAR provider	SAR Asset Provision	Advisory / info services	Regulator	Investigation body
SAR Participants							
National Level							
IRCG (RCCs)	🚢	🚢	🚢🚒	🚢🚒			
IRCG (CGUs)			🚢🚒	🚢🚒			
IAA (ANSP)	✈				🚢		
AGS	🚒	🚒	🚒	🚒		🚒	
National Ambulance Service				🚢 ✈			
Marine Ambulance Response Team MART			🚢 ✈				
Army			🚒	🚒			
Naval Service			🚢	🚢			
Air Corps			🚢 ✈	🚢 ✈			
Irish Lights				🚢			
Medico Cork					🚢🚒		
Water Safety Ireland					🚢		
Local Authority Level							
Dublin Fire Brigade			🚒🚢	🚒🚢			
Other Fire Services			🚒🚢	🚒🚢			
Local authorities (lifeguards etc.)				🚒			
Harbor authorities				🚒🚢			
Volunteer Organizations							
RNLI			🚢	🚢			
Civil Defense			🚢🚒	🚢🚒			
CRBI			🚢	🚢			
Irish Cave Rescue Organization (ICRO)			🚢 ✈	🚢 ✈			
Mountain Rescue Ireland (MRI)			🚢 ✈	🚢 ✈			
Private							
IRCG helicopters (under contract)			🚢 ✈	🚢 ✈			
Vessels of opportunity				🚢			
International							
MCA			🚢 ✈	🚢 ✈		🚢	🚢
Other							
Investigation Bodies							
MCIB							🚢
AAIU							✈
Regulatory Authorities							
MSO						🚢	
IAA (SRD)						✈	
RSA						🚒	

Note: The abbreviations in this table are specific abbreviations of the unit.

8.7 Appendix G - Examples of SAR Entities and Events Response

EVENT → ENTITY ↓	Civil Aircraft SAR	Military Aircraft SAR	Aircraft SAR	Terrestrial SAR	Aerodrome Emergency Procedures
Department of Emergency Management	SUPPORT AGENCY/ ADMINISTRATIVE HEAD Government and external liaison/coordination as required, Communications.	SUPPORT AGENCY/ ADMINISTRATIVE HEAD Government and external liaison/coordination as required; Communications.	SUPPORT AGENCY/ ADMINISTRATIVE HEAD Government and external liaison/coordination as required; Communications.	SUPPORT AGENCY/ ADMINISTRATIVE HEAD Government and external liaison/coordination as required; Communications.	SUPPORT AGENCY/ ADMINISTRATIVE HEAD Government and external liaison/coordination as required; Communications.
Protection Corps /Department of Emergency Management	SUPPORT AGENCY 1st line provider: Ground search, Rescue, medical and life support; Communications.	SUPPORT AGENCY 2nd line provider: Ground search, Rescue, medical and life support; Communications.	SUPPORT AGENCY 1st line provider: Ground search, Rescue, medical and life support; Communications.	LEAD AGENCY Overall coordination; 1st line provider: Ground search, Rescue, medical and life support	SUPPORT AGENCY 1st line provider: Ground search, Rescue, medical and life support; Communications.
Police	SUPPORT AGENCY Crowd control, guard of site; 2nd line provider: Ground search, Rescue, medical and life support; Communications.	SUPPORT AGENCY 2nd line provider: Crowd control, guard of site; 2nd line provider: Ground search, Rescue, medical and life support; Communications.	SUPPORT AGENCY Crowd control, guard of site; 2nd line provider: Ground search, Rescue, medical and life support; Communications.	SUPPORT AGENCY Crowd control, guard of site; 2nd line provider: Ground search, Rescue, medical and life support; Communications.	SUPPORT AGENCY Crowd control, guard of site; 2nd line provider: Ground search, Rescue, medical and life support; Communications.
Aviation Office	SUPPORT AGENCY 2nd line provider: search aircraft and airborne equipment; Communications.	SUPPORT AGENCY 2nd line provider: search aircraft and airborne equipment; Communications.	LEAD AGENCY Overall coordination; 1st line provider: search aircraft and airborne equipment	SUPPORT AGENCY 2nd line provider: search aircraft and airborne equipment as required; Communications.	SUPPORT AGENCY As required
International Airport	SUPPORT AGENCY Supplementary airport resources as required	SUPPORT AGENCY Supplementary airport resources as required	SUPPORT AGENCY Supplementary airport resources as required	SUPPORT AGENCY Supplementary airport resources as required	LEAD AGENCY Overall coordination
Civil Aviation Regulatory Office	LEAD AGENCY Overall coordination	SUPPORT AGENCY SAR coordination expertise/RCC; Communications.	SUPPORT AGENCY SAR coordination expertise/RCC; Communications.	SUPPORT AGENCY SAR coordination expertise/RCC as required; Communications.	SUPPORT AGENCY As required
Arm Forces	SUPPORT AGENCY 1st line provider search aircraft and airborne equipment; Communications.	LEAD AGENCY Overall coordination; 1st line provider search aircraft and airborne equipment; Ground search, Rescue, medical and life support	SUPPORT AGENCY Ground search, Rescue, medical and life support; Communications.	SUPPORT AGENCY 1st line provider search aircraft and airborne equipment as required; 2nd line provider: Ground search, Rescue, medical and life support; Communications.	SUPPORT AGENCY As required