

Document	BAR 12 – Search and Rescue	
Version	01	



**Brunei Department of Civil Aviation
Negara Brunei Darussalam**

www.mtic.gov.bn/dca

BAR 12

Search and Rescue (SAR)

Document	BAR 12 – Search and Rescue	
Version	01	

Amendments

Amendment	Version	Date of Issue	Remarks
Incorporating latest ICAO Annex 12 Amendment (Amendment 18)	Version 1.0	29 January 2020	

Document	BAR 12 – Search and Rescue	
Version	01	

Table of Contents

PART A – PREFACE	4
A.1 Introduction	4
A.2 Authority for this Requirement	4
A.3 Applicability	4
A.4 Scope	4
PART B – ANS SAFETY OVERSIGHT REQUIREMENTS	5
B.1 Competent Authority for Safety Oversight	5
B.2 Safety Oversight Function	5
B.3 Safety Regulatory Audits	5
B.4 Corrective Action Plans (CAPs)	6
B.5 Qualified Entities	6
B.6 Safety Oversight Capabilities	7
B.7 Safety Oversight Records	7
PART C – ADMINISTRATIVE REQUIREMENTS	8
C.1 Job Description	8
C.2 Training programme and Training Records	8
PART D - REQUIREMENTS	9
CHAPTER 1. DEFINITIONS	9
CHAPTER 2. ORGANIZATION	11
CHAPTER 3 COOPERATION	14
CHAPTER 4. PREPARATORY MEASURES	17
CHAPTER 5. OPERATING PROCEDURES	20
APPENDIX. SEARCH AND RESCUE SIGNALS	24

Document	BAR 12 – Search and Rescue	
Version	01	

PART A – PREFACE

A.1 Introduction

- 1) Pursuant to Civil Aviation Order 2006 and the Civil Aviation Regulations 2006 and their subsequent amendments, the following requirements are hereby established for compliance by Search and Rescue (SAR) provider, the Director of Civil Aviation is empowered to issue Brunei Aviation Requirements (BARs). In accordance herewith, the following requirements are hereby established for compliance by SAR provider. These requirements shall be known as BAR 12 – Search and Rescue and any reference to this title shall mean referring to the requirements to be met for the provision of Search and Rescue.
- 2) Any SAR provider who contravenes any provision in these Requirements is guilty of an offence and liable on conviction under Part X of the CAO 2006 and Regulation 87 of the CAR 2006.

A.2 Authority for this Requirement

This BAR 12 – Search and Rescue is issued under the authority of the Director of Civil Aviation.

A.3 Applicability

This BAR 12 – Search and Rescue is applicable to any SAR provider in Brunei Darussalam.

A.4 Scope

BAR 12 – Search and Rescue contains the requirements for the provision Search and Rescue which are in compliance with ICAO Annex 2.

Document	BAR 12 – Search and Rescue	
Version	01	

PART B – ANS SAFETY OVERSIGHT REQUIREMENTS

B.1 Competent Authority for Safety Oversight

For the purpose of this requirement, ANS Standard Section, Regulatory Division, Brunei DCA shall be the competent authority for safety oversight of all Air Navigation Services (ANS) Providers in Brunei Darussalam. Seven fields of Air Navigation Services (ANS) are:

1. Air Traffic Management (ATM),
2. Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS),
3. Aeronautical Information Services (AIS),
4. Aeronautical Charts (Chart),
5. Communications, Navigation and Surveillance (CNS),
6. Aeronautical Meteorology (MET), and
7. Search and Rescue (SAR).

B.2 Safety Oversight Function

The ANS Standard Section, Regulatory Division, Brunei DCA shall exercise safety oversight as part of their supervision of requirements applicable to ANS providers in order to ensure the safe provision of this activity, and to verify that the applicable safety regulatory requirements and their implementing arrangements are met by ANS provider.

B.3 Safety Regulatory Audits

- 1) The ANS Standard Section, Regulatory Division, Brunei DCA, or qualified entities as delegated by them, shall conduct safety regulatory audits.
- 2) The safety regulatory audits shall:
 - a) be conducted by ANS Inspectors qualified in accordance with the established requirements.
 - b) determine whether ANS provider comply with the established requirements; and
 - c) lead to the resolution of any deficiencies identified during the audit / inspection.
- 3) Within the ANS surveillance programme, the ANS Standard Section, Regulatory Division, Brunei DCA shall establish a programme of safety regulatory audits in order to:

Document	BAR 12 – Search and Rescue	
Version	01	

- a) cover all ANS providers;
 - b) ensure that sufficient audits are conducted over a period of 2 years for compliance by all ANS providers with the established regulatory requirements; and
 - c) ensure follow up of the implementation of corrective action plans (CAPs).
- 4) In addition to scheduled audits, the ANS Standard Section, Regulatory Division, Brunei DCA shall conduct random inspection for which no prior notification is given to the ANS provider, whenever the need arises.
 - 5) All audits and/or inspections shall be documented. Findings (non-compliance) shall be given to ANS provider in the event that sufficient evidence is not presented to ANS inspector.
 - 6) An audit / inspection report shall be prepared and given to ANS provider in accordance with established audits / inspection procedures.

B.4 Corrective Action Plans (CAPs)

- 1) The ANS Standard Section, Regulatory Division, Brunei DCA shall communicate the audit / inspection findings to the audited ANS provider and shall request CAPs to address the deficiencies.
- 2) Audited ANS provider shall provide CAPs detailing the proposed actions, action office and estimated implementation date.
- 3) The ANS Standard Section, Regulatory Division, Brunei DCA shall assess the CAPs to determine whether the audited ANS provider has sufficiently addressed the identified deficiencies.
- 4) A subsequent follow up audit shall be conducted within a time period determined by the ANS Standard Section, Regulatory Division, Brunei DCA.

B.5 Qualified Entities

- 1) When the ANS Standard Section, Regulatory Division, Brunei DCA decides to delegate to a qualified entity the conduct of safety regulatory audits, it shall

Document	BAR 12 – Search and Rescue	
Version	01	

ensure that the criteria used to select an entity amongst those qualified include the following:

- a) the qualified entity has prior experience in assessing ANS providers;
 - b) the qualified entity is not simultaneously involved in the provision of ANS in the same field; and
 - c) all personnel concerned with the conduct of safety regulatory audits are suitably trained and qualified in accordance with established minimum requirements and experience as determined by Director of Civil Aviation.
- 2) The ANS Standard Section, Regulatory Division, Brunei DCA shall maintain a record of the qualified entities commissioned to conduct on their behalf.

B.6 Safety Oversight Capabilities

Head of the ANS Standard Section, Regulatory Division, Brunei DCA shall ensure that all ANS inspectors are competent to perform the required function. In this regard the following shall be specified for all ANS inspectors (ATM, PANS-OPS, AIS, CHART, CNS, MET and SAR):

- (a) Function and responsibilities
- (b) Job description
- (c) Minimum qualifications and experience
- (d) Methodology to determine the no. of inspectors
- (e) Training programme (Initial, On-the job training (OJT), Recurrent and Specialised)
- (f) Periodic Training Plan
- (g) Proper Implementation of Training Plan
- (h) On-the job training (OJT) OJT Process
- (i) Maintenance of Training Records

B.7 Safety Oversight Records

The ANS Standard Section, Regulatory Division, Brunei DCA shall keep and maintain access to the appropriate records related to their safety oversight processes, including the reports of all safety regulatory audits and other safety-related records, for a period of 5 years.

Document	BAR 12 – Search and Rescue	
Version	01	

PART C – ADMINISTRATIVE REQUIREMENTS

C.1 Job Description

SAR provider shall develop job descriptions for SAR technical staff. Their positions, responsibilities, functions, accountabilities and authorities are to be clearly defined. Organisation chart indicating the specific responsibilities shall be developed.

C.2 Training programme and Training Records

The SAR provider shall establish and implement training programmes and procedures, to ensure the initial and continuing competence of operational personnel including continued competence (recurrent). Training programme shall include initial, recurrent or specialised training.

SAR provider shall maintain individual training records for each staff, which shall include a training plan detailing the courses completed by each staff. Training records shall be systematically maintained and kept up-to-date on a timely basis.

Document	BAR 12 – Search and Rescue	
Version	01	

PART D - REQUIREMENTS

CHAPTER 1. DEFINITIONS

When the following terms are used in these Requirements, 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 centre or rescue subcentre.

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

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

Joint rescue coordination centre (JRCC). A rescue coordination centre responsible for both aeronautical and maritime search and rescue operations.

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.

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

Document	BAR 12 – Search and Rescue	
Version	01	

Rescue coordination centre (RCC). 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.

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

Search. An operation normally coordinated by a rescue coordination centre or rescue subcentre 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 facility. Any mobile resource, including designated search and rescue units, used to conduct search and rescue operations.

Search and rescue service. The performance of distress monitoring, communication, coordination and search and rescue functions, 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 centre, within which search and rescue services are provided.

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.

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.

Document	BAR 12 – Search and Rescue	
Version	01	

CHAPTER 2. ORGANIZATION

2.1 Search and rescue services

2.1.1 SAR provider shall, individually or in cooperation with other States, arrange for the establishment and prompt provision of search and rescue services within its territories to ensure that assistance is rendered to persons in distress. Such services shall be provided on a 24-hour basis.

2.1.1.1 Those portions of the high seas or areas of undetermined sovereignty for which search and rescue services will be established shall be determined on the basis of regional air navigation agreements. SAR provider shall, individually or in cooperation with other States, arrange for the services to be established and provided in such areas in accordance with the provisions of this BAR.

Note. — The phrase “regional air navigation agreements” refers to the agreements approved by the Council of ICAO normally on the advice of Regional Air Navigation Meetings.

2.1.1.2 Basic elements of search and rescue services shall include a legal framework, a responsible authority, organized available resources, communication facilities and a workforce skilled in coordination and operational functions.

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

2.1.2 In providing assistance to aircraft in distress and to survivors of aircraft accidents, SAR provider shall do so regardless of the nationality or status of such persons or the circumstances in which such persons are found.

2.1.3 SAR provider having accepted responsibility to provide search and rescue services 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.

2.1.4 Where separate aeronautical and maritime rescue coordination centres serve the same area, SAR provider shall ensure the closest practicable coordination between the centres.

Document	BAR 12 – Search and Rescue	
Version	01	

2.1.5 SAR provider shall facilitate consistency and cooperation between their aeronautical and maritime search and rescue services.

2.1.6 SAR provider shall establish joint rescue coordination centres to coordinate aeronautical and maritime search and rescue operations, where practical.

2.2 Search and rescue regions [Not applicable]

2.3 Rescue coordination centres and rescue subcentres [Not applicable]

2.4 Search and rescue communications [Not applicable]

2.5 Search and rescue units

2.5.1 SAR provider shall designate, as search and rescue units, elements of public or private services suitably located and equipped for search and rescue operations.

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

2.5.2 SAR provider shall designate, as parts of the search and rescue plan of operation, elements of public or private services that do not qualify as search and rescue units but are nevertheless able to participate in search and rescue operations.

2.6 Search and rescue equipment

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

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

Document	BAR 12 – Search and Rescue	
Version	01	

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

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

Note 1. — Emergency locator transmitter (ELT) carriage requirements are given in ICAO Annex 6, Parts I, II and III.

Note 2.— Specifications for ELTs are given in ICAO Annex 10, Volume III.2.6.5 Each search and rescue aircraft, when used for search and rescue over maritime areas, shall be equipped to be able to communicate with vessels.

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

Note. — Many vessels can communicate with aircraft on 2182 kHz, 4125 kHz and 121.5 MHz. However, these frequencies, and in particular 121.5 MHz, may not be routinely monitored by vessels.

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.

Note. — The International Code of Signals is published in English, French and Spanish by the International Maritime Organization as documents I994E, I995F and I996S.

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

2.6.8 Where applicable, SAR provider shall locate, at appropriate aerodromes, survival equipment suitably packed for dropping by aircraft.

Document	BAR 12 – Search and Rescue	
Version	01	

CHAPTER 3 COOPERATION

3.1 Cooperation between States

3.1.1 SAR provider shall coordinate its search and rescue operations with those of neighbouring States.

3.1.2 SAR provider shall whenever necessary, coordinate its search and rescue operations with those of neighbouring States especially when these operations are proximate to adjacent search and rescue regions.

3.1.2.1 SAR provider shall in so far as practicable, develop common search and rescue plans and procedures to facilitate coordination of search and rescue operations with those of neighbouring States.

3.1.3 Subject to such conditions as may be prescribed by Brunei Darussalam's relevant authorities, SAR provider shall permit immediate entry into its territory of search and rescue units of other States for the purpose of searching for the site of aircraft accidents and rescuing survivors of such accidents.

3.1.4 The authorities of a Contracting States who wish their search and rescue units to enter the territory of another Contracting State for search and rescue purposes, shall transmit a request, giving full details of the projected mission and the need for it, to the rescue coordination centre the State concerned or to such other authority as has been designated by that State.

3.1.4.1 The authorities of Contracting States shall:

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

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

3.1.6 [Not applicable]

Document	BAR 12 – Search and Rescue	
Version	01	

3.1.7 [Not applicable]

3.1.8 SAR provider shall make arrangements for joint training exercises involving their search and rescue units, those of other States and operators, in order to promote search and rescue efficiency.

3.1.9 [Not applicable]

3.2 Cooperation with other services

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

3.2.2 SAR provider shall ensure the closest practicable coordination between the relevant aeronautical and maritime authorities to provide for the most effective and efficient search and rescue services.

3.2.3 SAR provider shall ensure that their search and rescue services cooperate with those responsible for investigating accidents and with those responsible for the care of those who suffered from the accident.

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

3.2.5 SAR provider shall designate a search and rescue point of contact for the receipt of COSPAS-SARSAT distress data.

3.3 Dissemination of information

3.3.1 SAR provider shall publish and disseminate all information necessary for the entry of search and rescue units of other States into its territory or, alternatively, include this information in search and rescue service arrangements.

Document	BAR 12 – Search and Rescue	
Version	01	

3.3.2 When such information could benefit the provision of search and rescue services, SAR provider shall make available, through the rescue coordination centre or other agencies, information regarding their search and rescue plans of operation.

3.3.3 SAR provider shall, to the extent desirable and 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.

BRUNEL DCA

Document	BAR 12 – Search and Rescue	
Version	01	

CHAPTER 4. PREPARATORY MEASURES

4.1 Preparatory information

4.1.1 [Not applicable]

4.1.2 [Not applicable]

4.1.3 [Not applicable]

4.1.4 [Reserved]

Remarks: Recommended Practice 4.1.4 is reserved for future consideration.

4.2 Plans of operation

4.2.1 [Not applicable]

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

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, including those made available by other States.

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 centres;
- d) the methods of alerting en-route aircraft and ships at sea;
- e) the duties and prerogatives of persons assigned to search and rescue;
- f) the possible redeployment of equipment that may be necessitated by meteorological or other conditions;

Document	BAR 12 – Search and Rescue	
Version	01	

- g) the methods for obtaining essential information relevant to search and rescue operations, such as weather reports and forecasts, appropriate NOTAM, etc.;
- h) the methods for obtaining, from other rescue coordination centres, such assistance, including aircraft, vessels, persons or equipment, as may be needed;
- i) 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 to be taken in conjunction with air traffic services units and other authorities concerned to assist aircraft known or believed to be subject to unlawful interference.

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, for coastal aerodromes, areas of water.

4.3 Search and rescue units

4.3.1 Each search and rescue unit shall:

- a) be cognizant of all parts of the plans of operation prescribed in 4.2 that are necessary for the effective conduct of its duties; and
- b) keep the rescue coordination centre informed of its preparedness.

4.3.2 SAR provider shall:

- a) maintain in readiness the required number of search and rescue facilities; and
- b) maintain adequate supplies of rations, medical stores, signalling devices and other survival and rescue equipment.

4.4 Training and exercises

To achieve and maintain maximum efficiency in search and rescue, shall provide for regular training of their search and rescue personnel and arrange appropriate search and rescue exercises.

4.5 Wreckage

SAR provider shall ensure that wreckage resulting from aircraft accidents within its territory or, in the case of accidents on the high seas or in areas of undetermined

Document	BAR 12 – Search and Rescue	
Version	01	

sovereignty, is removed, obliterated or charted following completion of the accident investigation, if its presence might constitute a hazard or confuse subsequent search and rescue operations.

BRUNEL DCA

Document	BAR 12 – Search and Rescue	
Version	01	

CHAPTER 5. OPERATING PROCEDURES

5.1 Information concerning emergencies

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 centre concerned.

5.1.2 [Not applicable]

5.1.3 [Not applicable]

5.2 Procedures for rescue coordination centres during emergency phases [Not applicable]

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 centre of the region.

5.4 Procedures for authorities in the field

The authorities 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 centre of such instructions; and
- b) keep the rescue coordination centre informed of developments.

5.5 Procedures for termination and suspension of operations

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

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

Document	BAR 12 – Search and Rescue	
Version	01	

Note – Brunei Darussalam may require input from other appropriate State authorities in the decision-making process leading to termination of SAR operations.

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

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

5.6 Procedures at the scene of an accident

5.6.1 [Not applicable]

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 centre that it is no longer necessary;
- b) determine the position of the craft in distress;
- c) as appropriate, report to the rescue coordination centre or air traffic services unit as much of the following information as possible:
 - type of craft in distress, its identification and condition;
 - its position, expressed in geographical or grid coordinates or in distance and true bearing from a distinctive landmark or from a radio navigation aid;
 - time of observation expressed in hours and minutes Coordinated Universal Time (UTC);
 - number of persons observed;
 - whether persons have been seen to abandon the craft in distress;
 - on-scene weather conditions;
 - apparent physical condition of survivors;
 - apparent best ground access route to the distress site; and

Document	BAR 12 – Search and Rescue	
Version	01	

- act as instructed by the rescue coordination centre or the air traffic services unit.

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 centre or air traffic services unit, it shall, by mutual agreement, hand over to an aircraft capable of establishing and maintaining such communications until the arrival of the first search and rescue aircraft.

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.

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 5.6.3 or, if this is not practicable, by making the appropriate visual signal.

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 Doc 9731.

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 on the transmission;
- d) inform the appropriate rescue coordination centre or air traffic services unit of the distress transmission, giving all available information; and
- e) at the pilot's discretion, while awaiting instructions, proceed to the position given in the transmission.

5.8 Search and rescue signals

29 January 2020	Uncontrolled when printed	Page 22 of 26
-----------------	---------------------------	---------------

Document	BAR 12 – Search and Rescue	
Version	01	

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

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 signal given in that Appendix.

5.9 Maintenance of records

5.9.1 [Not applicable]

5.9.2 [Not applicable]

Document	BAR 12 – Search and Rescue	
Version	01	

APPENDIX. SEARCH AND RESCUE SIGNALS

(Note. – See Chapter 5, 5.8 of this BAR)

1. Signals with surface craft

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

- 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 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 manoeuvres has the same meaning.

1.2. The following manoeuvres 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).


Document	BAR 12 – Search and Rescue	
Version	01	

2. Ground-air visual signal code

2.1. Ground-air visual signal code for use by survivors

No.	Message	Code Symbol
1	Require assistance	∨
2	Require medical assistance	×
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

<i>No.</i>	<i>Message</i>	<i>Code symbol</i>
1	Operation completed	LLL
2	We have found all personnel	<u>LL</u>
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 metres (8 feet) long and shall be made as conspicuous as possible.

Document	BAR 12 – Search and Rescue	
Version	01	

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

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.