

Democratic Socialist Republic of Sri Lanka



Civil Aviation Authority of Sri Lanka

Implementing Standards

(Issued under Sec. 120, Civil Aviation Act No. 14 of 2010)

Title: Compliance to Annex 12 – Search & Rescue

Reference No: IS-12-all

S.N: SLCAIS 029

Date: 22nd May 2020

Pursuant to Sec.120 of the Civil Aviation Act No.14 of 2010, Director General of Civil Aviation shall have the power to issue, whenever he considers it necessary or appropriate to do so, such Implementing Standards for the purpose of giving effect to any provision of the Civil Aviation Act, any regulations or Rules made thereunder including the Articles of the Convention on International Civil Aviation specified in the Schedule to the CA Act.

Accordingly, I, being the Director General of Civil Aviation do hereby issue the Implementing Standards on Compliance to Annex 12 – Search & Rescue as mentioned in the Attachment hereto IS-12-Att, elaborating the requirements to be satisfied for the effective implementation of the International Standards on Annex 12 – Search & Rescue.

This Implementing Standard shall be applicable to the Aeronautical Rescue Coordination Centre, Maritime Rescue Coordination Centre and all other organizations responsible for the provision of Search and Rescue Services in Sri Lanka.

This Implementing Standard shall come into force with immediate effect and remain in force unless revoked.

Attention is also drawn to sec. 103 of the Act, which states inter alia that failure to comply with Implementing Standard is an offence.

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Enclosure: Attachment No. IS-12-Att

Implementing Standards

SLCAIS-029: Compliance to Annex 12 - Search & Rescue

1. Notice to the Recipient

- 1.1. The requirements in this Implementing Standard are based on the Standards and Recommended Practices (SARPs) adopted by the International Civil Aviation Organization (ICAO) and incorporated in the 18th Amendment to Annex 12.
- 1.2. In pursuance of the obligation cast under Article 38 of the Convention which requires the Contracting States to notify the ICAO of any differences between the national regulations of the States and practices and the International Standards contained in the respective Annex and any amendments thereto, the CAASL will be taking steps to notify ICAO of such differences relating to either a Standard or a Recommended Practice, if any. The CAASL will also keep the ICAO currently informed of any differences which may subsequently occur, or of the withdrawal of any differences previously notified. Furthermore, the CAASL will take steps for the publication of differences between the national regulations and practices and the related ICAO Standards and Recommended Practices through the Aeronautical Information Service, which is published in accordance with the provisions in the Annex-15 to the Convention.
- 1.3. Taking into account of the ICAO council resolution dated 13 April 1948 which invited the attention of Contracting States of the desirability of using in the State's national regulations, as far as is practicable, the precise language of those ICAO Standards that are of a regulatory character, to the greatest extent possible the CAASL has attempted to retain the ICAO texts in the Annex in drafting this Implementing Standard.
- 1.4. The requirements contained in this document are applicable to the Aeronautical Rescue Coordination Centre, Maritime Rescue Coordination Centre and all other organizations responsible for the provision of Search and Rescue Services in Sri Lanka.
- 1.5. The Aeronautical Rescue Coordination Centre, Maritime Rescue Coordination Centre and Organizations responsible for the provision of Search and Rescue Services in Sri Lanka shall strictly comply with the requirements published in this document when providing services within Sri Lanka airspace.
- 1.6. This document supersedes the IS 029 dated on 15th August 2014 issued by the DGCA and IS 029 dated on 15th August 2014 shall be treated as null and void.
- 1.7. This document may be amended from time to time and the amendments will be issued in the form of new pages to replace the relevant pages of this document.
- 1.8. Status of ICAO Annex components in the Implementing Standard
Some of the components in an ICAO Annex are as follows and they have the status as indicated:

- 1.8.1. **Standard:** Any specification for physical characteristics, configuration, materiel, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in accordance with the Convention; in the event of impossibility of compliance, notification to the Council is compulsory under Article 38. The Standards are reflected in the Implementing Standards using the normal fonts and recipients are required to conform to such requirements invariably and the DGCA **will take appropriate enforcement action** when those requirements are not complied with.
- 1.8.2. **Recommended Practice:** Any specification for physical characteristics, configuration, materiel, performance, personnel or procedure, the uniform application of which is recognized as desirable in the interest of safety, regularity, efficiency or environmentally responsiveness of international air navigation, and to which Contracting States will endeavor to conform in accordance with the Convention. The Recommended Practices are reflected in the Implementing Standards in italic fonts and the Recipients are encouraged to implement them to the greatest extent possible. However, DGCA **will not take enforcement action** when a Recommended Practice is not satisfied by the recipient.
- 1.8.3. **Appendices:** Comprising material grouped separately for convenience but forming part of the Standards and Recommended Practices adopted by the Council. Enforcement action on such matters will be as in the case of Standards or Recommended Practices.
- 1.8.4. **Definitions:** A definition does not have independent status but is an essential part of each Standard and Recommended Practice in which the term is used, since a change in the meaning of the term would affect the specification.
- 1.8.5. **Tables and Figures:** add to or illustrate a Standard or Recommended Practice, and which are referred to therein, form part of the associated Standard or Recommended Practice and have the same status.

CHAPTER 1 – DEFINITIONS

When the following terms are used in this Implementing Standards 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 sub centre.

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

Aeronautical Rescue Coordination Centre (ARCC): RCC responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of aeronautical search and rescue within a Search and Rescue Region.

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.

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 sub-centre (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 sub-centre 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.

Abbreviations:

AASL	Airport & Aviation Services (SL) Ltd
ARCC	Aeronautical Rescue Coordination Centre
DGCA	Director General of Civil Aviation
ATS	Air Traffic Services
ELT	Electronic Locator Beacon
ICAO	International Civil Aviation Organization
JRCC	Joint Rescue Coordination Centre
MRCC	Maritime Rescue Coordination Centre
NOTAM	Notice to Airman
RCC	Rescue Coordination Centre
RSC	Rescue Sub Centre
SAR	Search & Rescue
SRR	Search & Rescue Region
UTC	Coordinated Universal Time
SL Navy	Sri Lanka Navy

2. CHAPTER 2 – ORGANIZATION

2.1 Search and Rescue services

2.1.1 Civil Aviation Authority of Sri Lanka shall make necessary arrangements for the establishment and prompt provision of Aeronautical Search and Rescue (SAR) services to ensure that assistance is rendered to aircraft in distress and to survivors of aircraft accidents. Such services shall be provided on a 24-hour basis.

2.1.1.1 Such services shall be provided within the Search & Rescue Region (SRR) of Sri Lanka defined under the Regional Air Navigation Agreement of Asia Pacific Region, including the territory of Sri Lanka.

2.1.1.2 SAR services shall include organized available resources, communication facilities and a workforce skilled in coordination and operational functions.

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

2.1.2 Organizations involved in SAR operations shall provide assistance to aircraft in distress and to survivors of aircraft accidents regardless of the nationality or status of such persons or the circumstances in which such persons are found.

2.1.3 Organizations involved with Search and Rescue operations 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 Aeronautical and Maritime Rescue Coordination Centre's serving the SRR of Sri Lanka, maintained by Airport & Aviation Services and Sri Lanka Navy shall ensure the closest practicable coordination between the centres.

2.1.5 Consistency and cooperation between Aeronautical and Maritime Search and Rescue services shall be maintained by Airport & Aviation Services and Sri Lanka Navy responsible for the provision of those services.

2.1.6 *A Joint Rescue Coordination Centre (JRCC) should be established to coordinate aeronautical and maritime Search and Rescue operations, where practical.*

2.2 Search and Rescue Regions

2.2.1 Search & Rescue Service shall be provided within the Search and Rescue Region of Sri Lanka.

2.2.1.1 Search and Rescue Region of Sri Lanka shall be coincident with the Flight Information Region of Sri Lanka.

2.3 Rescue Coordination Centers and Rescue sub Centers

- 2.3.1. A Rescue Coordinating Centre (RCC) and Rescue Sub Centers (RSC) if required, shall be established in the Search & Rescue Region of Sri Lanka.
- 2.3.2 The Rescue Coordination Centres and, as appropriate Rescue Sub Centres, shall be staffed 24 hours a day by trained personnel
- 2.3.3 ARCC personnel involved in the conduct of radiotelephony communications shall be at minimum possess ICAO English Language Proficiency Level 4.
- 2.3.4 In areas where public telecommunications facilities do not permit persons observing an aircraft in emergency to notify the rescue coordination centre concerned directly and promptly, the Police Stations in those areas shall act as alerting posts.

2.4 Search and Rescue Communications

- 2.4.1 The Rescue Coordination Centers shall have means of rapid and reliable two-way communication with;
- a) associated Air Traffic Services units;
 - b) associated Rescue Sub centers;
 - c) 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) MRCC and the Aeronautical, Maritime or Joint Rescue Coordination Centers in adjacent regions;
 - f) designated meteorological office or meteorological watch office;
 - g) Search and Rescue units;
 - h) alerting posts; and
 - i) Cospas-Sarsat Mission Control Centre servicing the Search and Rescue region.
- 2.4.2 A RSC where provided shall have means of rapid and reliable two-way communication with:
- a) adjacent Rescue Sub Centres;
 - b) meteorological office or meteorological watch office;
 - c) SAR units; and
 - d) Alerting posts.

2.5 Search and Rescue Units

- 2.5.1 The following Organizations shall provide Search & Rescue Units to assist aircraft in distress and to survivors of aircraft accidents promptly. Those units shall be suitably located and equipped for Search and Rescue operations.

- 1) Sri Lanka Army
- 2) Sri Lanka Navy
- 3) Sri Lanka Air Force

- 4) Sri Lanka Coast Guard
- 5) Sri Lanka Police

2.5.2 Private/Public Agencies that do not qualify as Search and Rescue units but are nevertheless able to participate in Search and Rescue operations shall be designated as parts of the Search and Rescue plan of operation.

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 communication with other Search and Rescue facilities engaged in the same operation.

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 by the ARCC.

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 Annex 6, Parts I, II and III.

Note 2. — Specifications for ELTs are given in 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.

2.6.6 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.

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 shall carry droppable survival equipment.

2.6.8 *Sri Lanka Air Force should locate, survival equipment suitably packed for dropping by aircraft, at appropriate aerodromes.*

2.7 SAR Manual

2.7.1 Aeronautical and Maritime Search and Rescue Coordination Centres shall develop and maintain SAR Operations Manuals. SAR Operations Manuals shall serve to demonstrate how Rescue Coordination Centres will comply with the requirements set out in this Implementing Standards. The contents of the SAR Operations Manuals shall include but not limited to the following:

- a) Organization structure of the SAR system (including a description of the role, responsibilities and job functions of the SAR personnel who are responsible for ensuring the compliance of the organization requirements).
- b) Area of Responsibility
- c) SAR Functions and responsibilities
- d) SAR personnel Training
- e) Agreements with supporting organizations
- f) International agreements

2.7.2 Rescue Coordination Centres shall:

- a) Keep the SAR Operations Manual in a readily accessible form;
- b) Ensure that SAR personnel have easy access to the operations manual; and
- c) Amend the Operations Manual whenever necessary to keep its content up to date.

2.7.3 Aeronautical Rescue Coordination Centre shall submit a copy of the most current Operations Manual to the Director General of Civil Aviation.

2.8 SAR personnel

2.8.1 Air Traffic Service Provider shall establish procedures to ensure that all his operational staff at Aeronautical Rescue Coordination Centre, are adequately competent for the provision of Aeronautical SAR services.

2.8.2 Air Traffic Service Provider shall ensure that training policy and programmes including initial, recurrent and specialized training for the operations personnel of ARCC are established.

2.8.3 Job descriptions shall be developed for the operations personnel of Rescue Coordination Centres.

2.9 Guidance Materials

2.9.1 Air Traffic Service Provider shall ensure that relevant ICAO documents and other technical and regulatory publications are readily available to all operations personnel at the ARCC.

2.10 Records

Air Traffic Service Provider shall maintain documents and records operations and Training of operations personnel. These documents shall include, but not limited to:

- a) Records of malfunction or fault of critical safety facilities and equipment;
- b) Records of SAR exercises and operations;
- c) Records of training programme and plan for each SAR technical staff;
- d) Records and copies of certificates of all related trainings for each staff:

3. CHAPTER 3 – CO-OPERATION

3.1 Co-operation between States

3.1.1 Search and Rescue organizations of Sri Lanka shall coordinate with those of neighboring States

3.1.2 *RCCs should, whenever necessary, coordinate its SAR operations with those of neighboring States especially when these operations are proximate to adjacent Search and Rescue regions.*

3.1.2.1 *RCCs should, in so far as practicable, develop common Search and Rescue plans and procedures to facilitate coordination of Search and Rescue operations with those of neighboring States.*

3.1.3 Subject to such conditions as may be prescribed by DGCA, ARCC shall permit immediate entry of Search and Rescue units of other States into the territory of Sri Lanka for the purpose of searching for the site of aircraft accidents and rescuing survivors of such accidents.

3.1.4 The authorities of Sri Lanka 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 RCC of the State concerned or to such other authority as has been designated by that State.

3.1.4.1 When a request is received from the authorities of another Contracting State who wish their Search & Rescue Units to enter the territory of Sri Lanka, the authorities of Sri Lanka Shall,

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

3.1.5 Civil Aviation authority 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 their respective territories. These agreements should also provide for expediting entry of such units with the least possible formalities.

3.1.6 Rescue coordination Centres shall:

- a) request from other RCCs such assistance, including aircraft, vessels, persons or equipment, as may be needed;
- b) grant any necessary permission for the entry of such aircraft, vessels, persons or equipment into the territory of Sri Lanka subject to the conditions prescribed by the Director General of Civil Aviation; and
- c) make the necessary arrangements with the appropriate customs, immigration or other authorities with a view to expediting such entry.

3.1.7 RCCs shall make necessary arrangements to provide, when requested, assistance to other rescue coordination centres, including assistance in the form of aircraft, vessels, persons or equipment.

3.1.8 *RCCs should 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 *Airport & Aviation Services (SL) Ltd. and Sri Lanka Navy should make arrangements for periodic liaison visits by personnel of their RCC's to the Centres of neighboring States whenever possible.*

3.2 Co-operation with other services

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

3.2.2 Closest practicable coordination between the aeronautical and maritime authorities shall be maintained to provide for the most effective and efficient Search and Rescue services.

3.2.3 Search and Rescue Services shall cooperate with those responsible for investigating accidents and with those responsible for the care of those who suffered from the accident-

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

3.2.5 Aeronautical Rescue Coordination Centre is designated as the Search and Rescue point of contact for the receipt of COSPAS - SARSAT distress data.

3.3 Dissemination of information

3.3.1 Information necessary for the entry of SAR units of other States into the territory of Sri Lanka shall be published in the Aeronautical Information Publication (AIP) of Sri Lanka and in the Search and Rescue service arrangements.

3.3.2 *When such information could benefit the provision of SAR services, the SAR organisation responsible should make available, through the RCCs or other agencies, information regarding their SAR plans of operation.*

3.3.3 The information regarding actions to be taken when there are reasons to believe that an aircraft emergency situation may become cause for public concern or require a general emergency response shall be disseminated to the general public and emergency response authorities, to the extent desirable and practicable.

CHAPTER 4 – PREPARATORY MEASURES

4.1 Preparatory information

4.1.1 Each RCC shall have readily available at all times up-to-date information concerning the following in respect of the Sri Lanka Search and Rescue region:

- a) SAR units, and alerting posts;
- b) Air Traffic Services units;
- c) means of communication that may be used in SAR 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.

4.1.2 *Each RCC should 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) Objects which it is known might be mistaken for unlocated or unreported wreckage, particularly if viewed from the air.*

4.1.3 *Each RCC should have ready access to information regarding the position, course and speed of ships within the maritime areas that may be able to provide assistance to aircraft in distress and information on how to contact them.*

4.1.4 *The MRCC should, individually or in cooperation with other States, either establish ship reporting systems in cooperation with maritime authorities or arrange communication links with Amver or regional ship reporting systems to facilitate search and rescue operations at sea.*

4.2 Plans of operation

4.2.1 Each RCC shall prepare detailed plans of operation for the conduct of Search and Rescue operations within Sri Lanka Search and Rescue Region.

- 4.2.2 *SAR plans of operations should be developed jointly with representatives of the operators and other public and private agencies 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 refueling, 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 SAR plans of operation shall contain details regarding actions to be taken by those persons engaged in search and rescue, including:
- a) the manner in which search and rescue operations are to be conducted in the Search and Rescue region;
 - b) the use of available communication systems and facilities;
 - c) the actions to be taken jointly with other rescue coordination centres;
 - d) the methods of alerting en-route aircraft and ships at sea;
 - e) the duties and prerogatives of persons assigned to search and rescue;
 - f) the possible redeployment of equipment that may be necessitated by meteorological or other conditions;
 - g) the methods for obtaining essential information relevant to search and rescue operations, such as weather reports and forecasts, appropriate NOTAM, etc.;
 - h) the methods for obtaining, from other rescue coordination centres, such assistance, including aircraft, vessels, persons or equipment, as may be needed;
 - i) 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 SAR 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 Each Search & Rescue Unit shall:

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

4.4 Training and exercises

To achieve and maintain maximum efficiency in Search and Rescue, Organizations involved in Search & Rescue functions shall provide regular training of their Search and Rescue personnel and arrange appropriate Search and Rescue exercises, at least once a year.

4.5 Wreckage

Wreckage resulting from aircraft accidents within the territory of Sri Lanka or, in the case of accidents on the high seas, within the Search and Rescue region for which Sri Lanka is responsible, 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.

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 ARCC.
- 5.1.2 ARCC shall, immediately upon receipt of information concerning aircraft in emergency, evaluate such information and assess the extent of the operation required.
- 5.1.3 When information concerning aircraft in emergency is received from other sources than air traffic services units, the ARCC shall determine to which emergency phase the situation corresponds and shall apply the procedures applicable to that phase.

5.2 Procedures for Rescue Coordination Centres during emergency phases

5.2.1 Uncertainty phase

Upon the occurrence of an uncertainty phase, the ARCC shall cooperate to the utmost with Air Traffic Services units and other appropriate agencies and services in order that incoming reports may be speedily evaluated.

5.2.2 Alert phase

Upon the occurrence of an alert phase the ARCC shall immediately alert SAR units and initiate any necessary action.

5.2.3 Distress phase

Upon the occurrence of a distress phase, the ARCC shall:

- a) immediately initiate action by SAR 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 RCCs, the help of which seems likely to be required, or which may be concerned in the operation;
- e) notify the associated ATS unit, when the information on the emergency has been received from another source;
- f) request at an early stage such aircraft, vessels, coastal stations and other services not specifically included in the appropriate plan of operation and able to assist to:

- 1) maintain a listening watch for transmissions from the aircraft in distress, survival radio equipment or an ELT;
 - 2) assist the aircraft in distress as far as practicable; and
 - 3) inform the RCC 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 an 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.

5.2.4 Initiation of SAR 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 the ARCC is notified of the existence of an emergency phase and is unaware of other centres taking appropriate action, it shall assume responsibility for initiating suitable action in accordance with 5.2 and confer with neighboring RCCs with the objective of designating one RCC to assume responsibility forthwith.
- b) Unless otherwise decided by common agreement of the Rescue Coordination Centres concerned, the Rescue Coordination Centre to coordinate Search and Rescue action shall be the centre responsible for:
 - 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 search and rescue regions; 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 RCC responsible for SAR action shall inform all RCCs that may become involved in the operation of all the circumstances of the emergency and subsequent developments. Likewise, all RCCs becoming aware of any information pertaining to the emergency shall inform the RCC that has overall responsibility

5.2.5 Passing of information to aircraft in respect of which an emergency phase has been declared:

Whenever applicable, the ARCC 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.

5.3 Sri Lanka is solely responsible for the conduct of operations over the entire SRR of Sri Lanka.

5.4 Procedures for authorities in the field

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

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

5.5 Procedures for Rescue Coordination Centre –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 ARCC with the inputs of other participating agencies involved in the SAR operations in the decision making process shall normally be responsible for determining when to discontinue Search and Rescue operations.

5.5.3 When a Search and Rescue operation has been successful or when the ARCC considers, or is informed, that an emergency no longer exists, the emergency phase shall be cancelled, the SAR 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 SAR operation becomes impracticable and the ARCC 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 SAR operations resumed when justified and practicable.

5.6 Procedures at the scene of an accident

5.6.1 When multiple facilities are engaged in SAR operations on-scene, the ARCC 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.

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: of

- 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 the craft in distress;
- c) as appropriate, report to the ARCC or ATS 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
- d) act as instructed by the ARCC or the ATS unit.

5.6.2.1 If the first aircraft to reach the scene of an accident is not a SAR aircraft, it shall take charge of on-scene activities of all other aircraft subsequently arriving until the first SAR aircraft reaches the scene of the accident. If, in the meantime, such aircraft is unable to establish communication with the ARCC or ATS unit, it shall, by mutual agreement, hand over to an aircraft capable of establishing and maintaining such communications until the arrival of the first SAR 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.

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: acknowledge the distress transmission:

- a) record the position of the craft in distress if given;
- b) take a bearing on the transmission;

- c) inform the ARCC or appropriate ATS unit of the distress transmission, giving all available information; and
- d) at the pilot's discretion, while awaiting instructions, proceed to the position given in the transmission.

5.8 Search and Rescue signals

- 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 the Appendix.

5.9 Maintenance of records

- 5.9.1 Each RCC shall keep a record of the operational efficiency of their Search and Rescue organization in the Region.
- 5.9.2 *Each RCC should prepare appraisals of actual Search and Rescue operations in the region. These appraisals should 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.*

APPENDIX. SEARCH AND RESCUE SIGNALS

(Note. — See Chapter 5, 5.8)

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).

2. Ground-air visual signal code

2.1 Ground-air visual signal code for use by survivors

No.	Message	Code symbol
1	Require assistance	V
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	<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 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 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.

_____END_____