

বুধবার, জুন ১৯, ২০২৪

## [ বেসরকারি ব্যক্তি এবং কর্পোরেশন কর্তৃক অর্থের বিনিময়ে জারীকৃত বিজ্ঞাপন ও নোটিশসমূহ ]

**Civil Aviation Authority of Bangladesh** 

Gazette

Dhaka, ২ বৈশাখ, ১৪৩১ / 15 April, 2024

No: CAAB-30.31.0000,117.42.002.22—In exercise of the power conferred by Section 47, read with Section 14 of the Civil Aviation Act, 2017 (Act No. 18 of 2017), hereinafter referred as the "Act", the Chairman of the Civil Aviation Authority of Bangladesh is pleased to issue the following Air Navigation Order (ANO) "ANO 12" on Search and Rescue.

2. This ANO shall come into force on the date of its final publication in the Official Gazette.

Air Vice Marshal M Mafidur Rahman

BBP, BSP, BUP, ndu, afwc, psc Chairman

Civil Aviation Authority of Bangladesh.

( ১৯৮৬৫ ) মূ**ল্য :** টাকা ২৪.০০

## Preliminary

#### **1.1 Short Title and Commencement**

This Air Navigation Order (ANO) may be called the ANO 12 on Search and Rescue Service for Air Navigation, issued in accordance with the Annex 12 (up to Aamendment 18) to the Chicago Convention and referred herein as the "ANO 12" Issue-1. This ANO shall come into force on the date of its final publication in the official Gazette.

#### **1.2** Applicability

ANO-12 is applicable to the establishment, maintenance and operation of search and rescue services in the territories of Bangladesh and over high seas where provision of search and rescue services is the responsibility of Bangladesh in accordance with the Regional Air Navigation Agreements.

## 1.3 Definitions

## Alerting post

Any facility intended to serve as an intermediary between a person reporting an emergency and a rescue coordination center or rescue subcenter.

#### Alert phase

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

#### **Crew Member**

A person assigned by an operator to duty on an aircraft during flight time.

#### **Cospas-Sarsat System**

A satellite system designed to detect distress beacons transmitting on frequencies 121.5 MHz and 406 MHz

#### **Distress Phase**

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

## Ditching

The forced landing of an aircraft on water

## **Emergency Locator Transmitter (ELT)**

Aeronautical radio distress beacon for alerting and transmitting homing signals.

#### **Emergency Phase**

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

#### False Alert

Distress Alert received from any source, including communications equipment intended for alerting, when no distress situation actually exists, and a notification of distress should not have resulted.

## Global Maritime Distress and Safety System (GMDSS)

A global communication system, both satellite-based and terrestrial, to provide distress alerting and promulgation of maritime safety information for mariners

## **Global Positioning System (GPS)**

A specific satellite-based system used in conjunction with mobile equipment to determine the precise position of the mobile equipment.

#### Joint Rescue Coordination Centre (JRCC)

A rescue coordination center responsible for both aeronautical and maritime search and rescue operations.

## Local User Terminal (LUT)

An earth receiving station that receives beacon signals relayed by Cospas-Sarsat satellites processes them to determine the location of the beacons and forwards the signals.

#### **Mission Control Centre (MCC)**

Part of the Cospas-Sarsat system that accepts alert messages from the local user terminal(s) and other mission control centres to distribute to the appropriate rescue co-ordination centres or other search and rescue points of contact.

#### May Day

Spoken International distress signal, repeated three times.

#### Operator

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

## **On-Scene Coordinator (OSC)**

A person temporarily designated to coordinate Search and Rescue operation within a specified area.

#### Pan Pan

The International radio telephony urgency signal, when repeated three times, includes uncertainty or alert, followed by urgency.

## **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 center, established to complement the latter according to particular provisions of the responsible authorities.

## **Rescue action plan.**

A plan for rescue operations normally prepared Search mission coordinator (SMC) for implementation by the On-Scene Coordinator (OSC) and facilities on-Scene.

## **Rescue Unit**

A unit composed of trained personnel and provided with equipment suitable for the expeditious conduct of Search and Rescue.

## State

State means Bangladesh.

#### 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 Co-ordinator (SC)

One or more persons or agencies within an administration with overall responsibility for establishing and providing SAR services and ensuring that planning for those services is properly co-ordinated.

#### Search and Rescue (SAR) facility

Any mobile resource, including designated search and rescue units, used to conduct search and rescue operations.

#### Search and Rescue Organisation

The provider of search and rescue services within the Search and Rescue Region (SRR) Dhaka, Bangladesh.

#### 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.

## Search and Rescue Mission Coordinator (SMC)

An official temporarily assigned to coordinate response to an actual or apparent distress situation.

#### Search action plan

Message normally developed by the SMC, for passing instructions to SAR facilities and agencies participating in a SAR mission.

## Search and Rescue area

An area in which the coordination of Search and Rescue is integrated by a single rescue coordination centre.

## **SAR Aircraft**

An aircraft provided with specialized equipment suitable for the efficient conduct of SAR mission

#### 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.

## Organisation

## 2.1 Search and rescue services

- 2.1.1 The Chaiman CAAB shall ensure, by using CAAB's own resources, or with assistance of other Organizations of Bangladesh or in cooperation with other States for the establishment and prompt provision of search and rescue services within Dhaka SRR to ensure that assistance is rendered to persons in distress. Such service shall be provided on a 24-hour basis in accordance with the convention.
- 2.1.1.1 Provision of search and rescue services will be established for the portions of the high seas or areas of undetermined sovereignty shall be determined on the basis of regional air navigation agreements. The Chairman CAAB, having accepted the responsibility to provide search and rescue services in such areas shall thereafter, individually or in cooperation with other States, arrange for the services to be established and provided in accordance with the provisions of this rule.
- 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, the SAR organisation shall do so regardless of the nationality or status of such persons or the circumstances in which such persons are found.
- 2.1.3 Having accepted the responsibility of search and rescue services, CAAB 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, the SAR organisation shall ensure the closest practicable coordination between the centres.

- 2.1.5 The SAR organisation may facilitate consistency and cooperation between their aeronautical and maritime Search and Rescue services.
- 2.1.6 Joint rescue coordination centres may be established to coordinate aeronautical and maritime SAR operations, where practical.

## 2.2 Search and rescue regions

2.2.1 Search and rescue regions shall be delineated to provide search and rescue services.

Such region shall not overlap neighbouring regions shall be contiguous.

2.2.1.1 Search and rescue regions in so far as practicable, shall be coincident with corresponding flight information regions and, with respect to those areas over high seas as per regional agreement, maritime search and rescue regions.

## 2.3 Rescue coordination centres and rescue subcentres

- 2.3.1 The Search and Rescue Region will be named as Dhaka Search and Rescue Region (SRR) within which an RCC is to be established.
- 2.3.2 Kept intentionally blank.
- 2.3.3 Rescue coordination centre and, as appropriate, rescue subcentre of Bangladesh shall be staffed 24 hours a day by trained personnel proficient in the use of the language used for radiotelephony communications.
- 2.3.4 RCC Personnel involved in the conduct of radiotelephony communication shall be proficient in the use of English Language.
- 2.3.5 Kept intentionally blank.

## 2.4 Search and rescue communications

- 2.4.1 Each rescue coordination centre shall have means of rapid and reliable two-way communication with:
  - a) associated air traffic services units;
  - b) associated rescue subcentres;
  - c) appropriate direction-finding and position-fixing stations;
  - d) where appropriate, coastal radio stations capable of alerting and communicating with surface vessels in the region;

- e) the headquarters of search and rescue units in the region;
- f) all maritime rescue coordination centers in the region and aeronautical, maritime or joint rescue coordination centers in adjacent regions;
- g) a designated meteorological office or meteorological watch office;
- h) search and rescue units;
- i) alerting posts; and
- j) the Cospas- Sarsat Mission Control Centre servicing the search and rescue region.
- 2.4.2 Each rescue subcentre of Dhaka SRR shall have means of rapid and reliable two-way communication with:
  - a) adjacent rescue subcentres;
  - b) a meteorological office or meteorological watch office;
  - c) search and rescue units; and
  - d) alerting posts.

## 2.5 Search and rescue units

- 2.5.1 Units elements of public or private services suitably located and equipped for Search and Rescue operations shall be designated as Search and Rescue Units and Rescue Units.
- 2.5.2 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, shall be designated as a part of SAR plan of operation.

#### 2.6 Search and rescue equipment

- 2.6.1 Search and rescue units need to have equipment for locating promptly, and for providing adequate assistance at, the scene of an accident.
- 2.6.2 Kept Intentionally blank
- 2.6.3 Each search and rescue aircraft need to be equipped to be able to communicate on the aeronautical distress and on-scene frequencies and on such other frequencies as may be prescribed.

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2.6.4	Each search and rescue aircraft need to be equipped with a device for homing on distress frequencies.
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	Kept intentionally blank
2.6.8	Kept intentionally blank

## Cooperation

#### **3.1** Cooperation between States

- 3.1.1 CAAB shall coordinate their search and rescue efforts with those of neighboring States, when necessary.
- 3.1.2 SAR organisation of Bangladesh shall coordinate their SAR operations with those of neighboring States specially when these operations are proximate to adjacent SRRs.
- 3.1.2.1 Kept intentionally blank.
- 3.1.3 Subject to the SAR agreements that had been concluded between Civil Aviation Authority of Bangladesh and the SAR authorities or agencies of neighboring States, the Bangladesh shall permit immediate entry into its territory of SAR units of other States for the purpose of searching for the site of aircraft accidents and rescuing survivors of such accidents or provided the approval of entry is obtained from the higher authority.
- 3.1.4 For the purpose of search and rescue, the authorities of the other State who wish their search and rescue aircraft to enter the territory of Bangladesh shall transmit a request, giving full details of the projected mission and the need for it, to the Chairman Civil Aviation Authority of Bangladesh as per procedure in AIP Bangladesh.
- 3.1.4.1 The ACC/RCC Dhaka 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 CAAB may with the prior approval of the Government, enter into agreement with a contracting State of the Chicago convention for the purpose of securing safety of Civil Aviation and SAR services, and for strengthening and expediting SAR service.
- 3.1.6 CAAB with the approval of the Government shall authorize its rescue coordination centers to:
  - a) request from other rescue coordination centres, 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 its territory; and
- c) make the necessary arrangements with the appropriate customs, immigration or other authorities with a view to expediting such entry.
- 3.1.7 Dhaka RCC shall provide, when requested, assistance to other RCCs, including assistance in the form of aircraft, vessels, persons or equipment subject to approval of the higher authority.
- 3.1.8 For strengthening and improving SAR services, the chairman CAAB shall endeavor to arrange joint training exercises involving SAR units of Bangladesh and SAR units of neighboring States.
- 3.1.9 Kept intentionally blank.

## **3.2** Cooperation 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, formed by the chairman need to cooperate fully with the RCC in SAR and to extend any possible assistance to the survivors of aircraft accident.
- 3.2.2 To provide for the most effective and efficient search and rescue service, CAAB may maintain closest practicable coordination between the relevant aeronautical and maritime authorities.
- 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 Intentionally kept blank.
- 3.2.5 A Search and Rescue point of contact shall be designated by CAAB for the receipt of COSPAS-SARSAT distress data.

## **3.3** Dissemination of information

- 3.3.1 CAAB shall publish and disseminate all Information necessary for the entry of search and rescue units of other States shall be contained in AIP Bangladesh, or alternatively, any arrangements in the search and rescue service, if any.
- 3.3.2 Intentionally kept blank.
- 3.3.3 Intentionally kept blank.

#### **Preparatory Measures**

#### 4.1 **Preparatory information**

- 4.1.1 Dhaka RCC shall have readily available at all times up-to-date information concerning the following in respect of its search and rescue region:
  - a) search and rescue units, rescue subcentres and alerting posts;
  - b) air traffic services units;
  - c) means of communication that may be used in search and rescue operations;
  - d) addresses and telephone numbers of all operators, or their designated

representatives, engaged in operations in the region; and

- e) any other public and private resources including medical and transportation facilities that are likely to be useful in search and rescue.
- 4.1.2 Intentionally Kept Blank.
- 4.1.3 Intentionally Kept Blank.
- 4.1.4 The Chairman may, by using CAAB's own resources, or in cooperation of with other organizations of Bangladesh or of other States establish ship-reporting system(s) or arrange communication links with **Amver** or regional ship reporting systems to facilitate SAR services at sea.

## 4.2 Plans of operation

- 4.2.1 Rescue Coordination Centre shall prepare detailed plans of operation for the conduct of search and rescue operations within its search and rescue region.
- 4.2.2 Search and rescue plans of operation need to 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 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 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;
  - 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 (AEP) to provide for rescue services in the vicinity of aerodromes including 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 plans of operation/search and rescue plan prescribed in 4.2 for having knowledge of all parts of the plans of operation 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 organization 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, CAAB shall provide regular training of their search and rescue personnel and arrange appropriate search and rescue exercises.

#### 4.5 Wreckage

SAR service 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 Sovereignty, within the Dhaka SRR for which it is responsible, is removed, obliterated or charted following completion of the accident investigation, if its presence might constitute a hazard or confuse subsequent SAR operations.

## **Operating Procedures**

## 5.1 Information concerning emergencies

- 5.1.1 Any authority or any element of the SAR organization having reason to believe that an aircraft is in an emergency shall give immediately all available information to the RCC.
- 5.1.2 Rescue coordination centre 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, Dhaka rescue coordination centre shall determine to which emergency phase the situation corresponds and shall apply the procedures applicable to that phase.

## 5.2 **Procedures for Dhaka rescue coordination centre**

#### during emergency phases

#### 5.2.1 Uncertainty phase

Upon the occurrence of an uncertainty phase, the rescue coordination centre Dhaka 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 Dhaka rescue coordination centre shall immediately alert search and rescue units of Bangladesh and initiate any necessary action.

#### 5.2.3 Distress phase

Upon the occurrence of a distress phase, the Dhaka rescue coordination centre shall:

a) immediately initiate action by search and rescue units of Bangladesh in accordance with the appropriate plan of operation/search and rescue plan;

- 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;
- notify other rescue coordination centres of neighbouring States and as applicable rescue subcentres if necessary, the help of which seems likely to be required, or which may be concerned in the operation;
- e) notify the associated air traffic services 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/search and rescue plan and able to assist to:
- 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
- inform the associated rescue subcentre and rescue coordination centre Rescue of neighbouring States, if necessary, 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 search and rescue action in respect of an aircraft whose position is unknown

In the event that an emergency phase is declared in respect of an aircraft whose position is unknown and may be in one of two or more search and rescue regions, the following shall apply:

a) When a rescue coordination centre 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 neighbouring rescue Coordination Centres 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 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 rescue coordination centre with overall coordination responsibility shall inform all rescue coordination centres that may become involved in the operation of all the circumstances of the emergency and subsequent developments. Likewise, all rescue coordination centres becoming aware of any information pertaining to the emergency shall inform the rescue coordination centre that has overall responsibility.

Whenever applicable, the rescue coordination centre responsible for search and rescue action shall forward to the air traffic services unit serving the flight information region in which the aircraft is operating, information of the search and rescue action initiated, in order that such information can be passed to the aircraft.

# 5.3 Procedures where responsibility for operations extend to two or more neighbouring States

When the conduct of operations over 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 authority immediately directs to conduct of operations or any part thereof shall:

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

## 5.5 Procedures for rescue coordination centres—termination and suspension of operations

- 5.5.1 Search and rescue operations shall continue until all survivors are delivered to a place of safety or until all reasonable hope of rescuing survivors has passed.
- 5.5.2 The responsible rescue coordination centre 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 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 become 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 When multiple facilities are engaged in search and rescue operations onscene, the rescue coordination centre or rescue subcentre 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:
  - 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;

- 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 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 SAR aircraft, its 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 appropriate RCC 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 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 this manual 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:

- a) acknowledge the distress transmission;
- b) record the position of the aircraft 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

- 5.8.1 The air-to-surface and surface-to-air visual signals in 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 Appendix.

#### 5.9 Maintenance of records

- 5.9.1 Dhaka rescue coordination centre shall keep a record of the operational efficiency of the search and rescue organisation in its region.
- 5.9.2 Rescue coordination centre shall prepare appraisals of actual search and rescue operations in its 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.

## 1. Signals with surface craft

- 1.1 The following maneuvers performed in sequence by an aircraft mean that the aircraft wishes to direct a surface craft towards an aircraft or a surface craft in distress:
  - a) circling the surface craft at least once;
  - b) crossing the projected course of the surface craft close ahead at low altitude and:
    - 1) rocking the wings; or
    - 2) opening and closing the throttle; or
    - 3) changing the propeller pitch.
  - c) heading in the direction in which the surface craft is to be directed.

Repetition of such maneuvers has the same meaning.

- 1.2 The following maneuvers by an aircraft means that the assistance of the surface craft to which the signal is directed is no longer required:
  - crossing the wake of the surface craft close astern at a low altitude and:
    - 1) rocking the wings; or
    - 2) opening and closing the throttle; or
    - 3) changing the propeller pitch.
  - for acknowledging receipt of signals:
    - 1) the hoisting of the "code pennant" (vertical red and white stripes) close up (meaning understood);
    - 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.

### 2. Ground-Air visual signal codes

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

No	Message	Code symbol
1	Require assistance	V
2	Require medical assistance	Х
3	No or Negative	Ν
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	L L
3	We have found only some personnel	++
4	We are not able to continue. Returning to base	X X
5	Have divided into two groups. Each proceeding in direction indicated	
6	Information received that aircraft is in this direction	$\rightarrow \rightarrow$
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.

#### 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.

মোঃ তাজিম-উর-রহমান, উপপরিচালক (উপসচিব), বাংলাদেশ সরকারী মুদ্রণালয়, তেজগাঁও, ঢাকা কর্তৃক মুদ্রিত। মোঃ নজরুল ইসলাম, উপপরিচালক (উপসচিব), বাংলাদেশ ফরম ও প্রকাশনা অফিস, তেজগাঁও, ঢাকা কর্তৃক প্রকাশিত। website: <u>www.bgpress.gov.bd</u>