

**CIVIL AVIATION REGULATIONS**

**SURINAME**

**PART 22 – SEARCH AND RESCUE**

**VERSION 1.0**

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## 22.1 APPLICABILITY

This CARS Part is applicable for the establishment, maintenance and operation of search and rescue services in Suriname. For the coordination of such services between Suriname and other States, annex 12 shall be applicable. The requirements of this Part shall be read in conjunction with ICAO DOC 9731 IAMSAR Vol I to 3.

### 22.1.2 PROVISION OF SEARCH AND RESCUE SERVICES

#### 22.1.2.1 Requirements for the provision of search and rescue services

A person shall not provide search and rescue services unless:

- (a) he is designated to do so or is approved by the CASAS issued under these Regulations; and
- (b) the services are provided in accordance with:
  - (i) the requirements specified by the CASAS in the applicable CARS Parts or any other publications of the CASAS; and
  - (ii) the procedures specified in the Manual of Air Navigation Service Operation (MANSOPs).

#### 22.1.2.2 Application to provide search and rescue services

A person or company wishing to provide search and rescue services shall make an application in a form specified by the CASAS and such application shall be accompanied by:

- a) the applicant's Manual of Air Navigation Service Operations (MANSOPs) provided under CARS Part 22.1.2.7 of these Regulations for approval;
- b) a written statement setting out the services and locations at which they shall be provided;
- c) the quality management system manual;
- d) the procedures to meet the requirements of the *Civil Aviation Regulations Suriname*;
- e) a written statement on financial capability to provide the service;
- f) the insurance policy in force in relation to the services provided; and.
- g) fees as specified by the Authority.

#### 22.1.2.3. Designation of search and rescue Service Provider and issuance of approval.

(1) The Authority shall, before issuing an approval, or designating an search and rescue Service Provider, be satisfied that:

- (a) the personnel of the applicant are adequate in number and have the necessary competency to provide the service;
- (b) the MANSOPs prepared and submitted with the application contains all the relevant information;
- (c) the facilities, services and equipment are established in accordance with these Regulations;
- (d) the operating procedures make satisfactory provision for the safety of aircraft;

- (e) an approved quality management system is in place;
  - (f) the applicant has approved procedures to meet the requirements of the *Civil Aviation Regulations* Suriname (CARS)
  - (g) the applicant has financial capability to provide the service; and
  - (h) the applicant has insurance policy in force in relation to the services provided.
- (2) Subject to the CARS, the CASAS may set any other conditions as may be deemed necessary.
- (3) The provision of air navigation services shall be subject to compliance with these Regulations and any other condition as may be specified or notified by the CASAS.
- (4) The CASAS may refuse to permit any person or company or grant approval to an applicant, and where the CASAS refuses, it shall notify the person, company or applicant in writing, of the reasons for the refusal, not later than fourteen days after making that decision.

#### 22.1.2.4 Format of approval.

Any approval shall be in written format and shall include the following information:

- (a) the ANSP's name and physical and mailing address of its principal place of business;
- (b) the type of services to be provided;
- (c) the location of services to be provided;
- (d) for air traffic service the service to be provided within a particular airspace or controlled aerodrome designated to the provider by the Authority;
- (e) conditions of approval; and
- (f) effective and expiry dates of the approval.

#### 22.1.2.5 Transfer of designation or approval.

A designation or approval to provide search and rescue services issued under these Regulations shall not be transferable.

#### 1.2.5.1 Suspension, variation and cancellation of approvals

- 1) The CASAS may, suspend provisionally, pending further investigation, any approval issued under these Regulations, if it considers that:
  - a) a relevant provision of these Regulations, or a condition in the certificate, has not been or is not being complied with;
  - b) false or materially incorrect information was given to the CASAS in the application for the approval; or

c) it is in the public interest to do so.

(2) The CASAS may, upon the completion of an investigation which has shown sufficient ground to the Authority's satisfaction suspend, vary or cancel any approval issued under these Regulations.

**22.1.2.6 Register of search and rescue services provider:**

(1) The CASAS shall keep and maintain a register showing:

- (a) name of the ANSP;
- (b) date of issue or renewal of the approval;
- (c) type of service offered by the ANSP;
- (d) expiry date of the approval;
- (e) date of variation, suspension or cancellation of the approval, if applicable
- (f) physical and postal address of the holder of the ANSP; and
- (g) any other particulars as may be determined by the

(2) Any changes in the particulars recorded shall be entered in the register by the CASAS.

(3) The register shall be a public document and any particular entered may be obtained upon payment of such a fee as may be specified by the CASAS.

**22.1.2.7 MANUAL OF AIR NAVIGATION SERVICES OPERATIONS**

**22.1.2.7.1 Manual of air navigation services operations (MANOPS)**

(1) The Manual of Air Navigation Services Operations (MANOPS) submitted under these Regulations shall be:

- (a) type written;
- (b) signed by the service provider ;
- (c) in format that is easy to revise and includes a list of effective pages: and
- (d) organized in a manner that facilitates evaluation and approval processes.

(2) An ANSP (SAR) shall keep at least one approved copy of the manual at the principal place of business.

**22.1.2.7.2. Contents of MANSOPS**

A Manual of Air Navigation Service Operations (MANSOPS) shall contain all information and instructions necessary to enable the personnel of an air navigation service provider to perform their duties and in particular shall include:

- (a) introduction;

- (b) management organisation;
- (c) services to be provided;
- (d) personnel requirements and their responsibilities;
- (e) training and performance assessment of staff and how that information is tracked;
- (f) Safety Management System and Quality Management System;
- (g) contingency plans developed for part or total system failure;
- (h) compliance with the Civil Aviation Regulations Suriname (CARS) as required;
- (i) facilities and equipment and how they are installed and maintained;
- (j) fault and defect reporting;
- (k) maintenance of documents and records;
- (l) facility operations and maintenance plan and procedures;
- (m) search and rescue responsibilities and coordination, operations, plan and procedures;
- (n) the proposed hours of service;
- (o) systems and procedures in the provision of air navigation services; and
- (p) any other information requested by the CASAS.

#### 22.1.2.7.3 Accuracy of MANSOPS

1) For the purposes of maintaining the accuracy of the information in the MANSOPs, the:

- (a) ANSP shall whenever necessary, amend the manual; or
- (b) CASAS may issue a written directive requiring the holder of a certificate to amend the manual.

(2) Notwithstanding the above (1), the ANSP shall submit the proposed amendment to the CASAS for approval, before the manual is amended.

#### 22.1.2.8. AIR NAVIGATION SERVICES

##### 22.1.2.8.1 Air Navigation Services Provider

The CASAS shall designate a service provider in accordance with these Regulations to provide:

- (a) air traffic services;

- (b) communication, navigation and surveillance systems;
- (c) meteorological services for air navigation;
- (d) aeronautical search and rescue coordination;
- (e) aeronautical information services, aeronautical maps and charts; or
- (f) for the construction of visual and instrument flight procedures.

#### 22.1.2.8.2 Air Navigation Services facilities and standard systems

A designated air navigation service provider shall:

- (a) provide in the designated portion of airspace and aerodromes, facilities for the provision of air navigation services; and
- (b) adopt and put into operation the appropriate standard systems, operational practices and rules as specified by the CASAS.

#### 22.1.2.8.3 Approval of Air Navigation Services facilities.

A person shall not install, maintain and operate air navigation service facilities in the designated airspaces and aerodrome without approval of the Authority.

#### 22.1.2.8.4 Safety inspections on Air Navigation Services

- (1) The CASAS shall carry out safety inspections of air navigation facilities, services, documents and records of the air navigation service provider which may be necessary to determine compliance with these Regulations.
- (2) The safety inspections shall be carried out in accordance with the requirements specified by the CASAS.
- (3) The CASAS may impose operating restrictions or sanctions on the operations of an ANSP in the event of nonconformance with the approval requirements or any unresolved safety concerns.

#### 22.1.2.8.5 Access to search and rescue facilities.

An inspector of the CASAS shall have unrestricted access to the facilities, installations, records and documents of the search and rescue services to determine compliance with these Regulations

#### 22.1.2.8.6 Production of documents

An ANSP (ATS,AIS,CNS,SAR,MET) shall produce any relevant documents under its possession if requested by an authorised person within seventy-two hours of such request.

#### 22.1.2.9 Air Navigation Services contingency plan

- (1) An ANSP shall develop and maintain contingency plans for implementation in the event of disruption or potential disruption, of air navigation services in the airspace for which the ANSP is responsible.
- (2) the ANSP shall liaise with other air navigation service providers in adjacent or contiguous airspaces while developing contingency plans.
- (3) the contingency plan shall include :

- (i) the actions to be taken by the ANSP's personnel responsible for providing the service;
  - (ii) possible alternative arrangements for providing the service; and
  - (iii) the arrangements for resuming normal operations for the service.
- (4) The contingency plan shall be developed in accordance with the requirements specified by the CASAS.

#### 22.1.2.9.1 Alternative designated service provider.

The CASAS may, when considered necessary and in the public interest, designate an alternative service provider for a specified period to provide air navigation services.

#### 22.1.2.10 Units of measurement

The units of measurement used in air and ground operations shall be as specified by the CASAS.

## 22.2. ORGANIZATION

### 22.2.1 Search and rescue services

22.2.1.1 The Search and Rescue service provider is responsible for establishment and provision of search and rescue services in coordination with other organizations to ensure that assistance is rendered to persons in distress. Such services shall be provided on a 24-hour basis.

22.2.1.1.1 Such services shall be provided within the entire Suriname Territory including territorial waters. Such services shall also be provided over those portions of the high seas or areas of undetermined sovereignty for which responsibility of providing Air Traffic Services has been delegated to Suriname.

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

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

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

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

22.2.1.3 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.

22.2.1.4 Coordination between the aeronautical and maritime rescue coordination centers shall be ensured by NCCR, The Civil Aviation Department Suriname and the Maritime Authority Suriname.

22.2.1.5 There shall be maintenance of close cooperation between aeronautical and maritime search and rescue services in Suriname.

22.2.1.6 Joint rescue coordination centers shall be established to coordinate aeronautical and maritime search and rescue operations, where practical.

### 22.2.2 Search and rescue regions

22.2.2.1 Search and rescue regions shall be delineated on the basis of Regional Air Navigation Agreements to provide search and rescue services. Such regions shall not overlap and neighboring regions shall be contiguous.

Note 1.— Search and rescue regions are established to ensure the provision of adequate communication infrastructure, efficient distress alert routing and proper operational coordination to effectively support search and rescue services.

Note 2.— The delineation of search and rescue regions is determined on the basis of technical and operational considerations.

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

### 22.2.3 Rescue coordination centres and rescue subcentres

22.2.3.1 A rescue coordination centre shall be established in each search and rescue region.

Note.— A Contracting State may establish a rescue coordination centre with an associated search and rescue region that, in accordance with regional air navigation agreement, extends over an area greater than its sovereign airspace

22.2.3.2 Each rescue coordination centre and, as appropriate, rescue subcentre, shall be staffed 24 hours a day by trained personnel proficient in the use of the language used for radio-telephony communications.

22.2.3.3 RCC personnel involved in the conduct of radiotelephony communications shall be proficient in the use of the English language.

22.2.3.4 Where public telecommunications facilities does not permit persons observing an aircraft in emergency to notify the rescue coordination centre concerned directly and promptly, the person (s) shall notify the nearest police station.

### 22.2.4 Search and rescue communications

22.2.4.1 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, where provided;
- (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 centres in the region and aeronautical, maritime or joint rescue coordination centres 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.

Note.— Maritime rescue coordination centres are identified in relevant documents of the International Maritime Organization

22.2.4.2 Each rescue subcentre, where provided, 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.

### 22.2.5 Search and rescue units

22.2.5.1 As part of Search and rescue units, other agencies that are suitably located and equipped for search and rescue operations shall be designated for search and rescue functions.

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 publication

22.2.5.2 Organizations 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.

### 22.2.6 Search and rescue equipment

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

22.2.6.2 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.

22.2.6.3 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.

22.2.6.4 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.

22.2.6.5 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.

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.

22.2.6.6 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.

22.2.6.7 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.

22.2.6.8 Survival equipment suitable for dropping by aircraft shall be held by Maritime Search and Rescue unit.

## 22.3 COOPERATION

### 22.3.1 Cooperation between States

22.3.1.1 Suriname shall coordinate their search and rescue organizations with those of neighbouring States.

22.3.1.2 Whenever necessary, Rescue and Coordination Centre (RCC) shall coordinate their search and rescue operations with those of neighbouring States RCC especially when these operations are proximate to adjacent search and rescue regions.

22.3.1.2.1 Suriname 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.

22.3.1.3 Subject to such conditions as may be prescribed, the Civil Aviation department Suriname may permit 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.

22.3.1.4 For the purpose of search and rescue, the authorities of the other State who wish their search and rescue units to enter the territory of Suriname shall transmit a request, giving full details of the projected mission and the need for it, to the Civil Aviation Department Suriname.

22.3.1.4.1 The Civil Aviation Department Suriname shall:

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

22.3.1.5 Suriname 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 shall also provide for expediting entry of such units with the least possible formalities.

22.3.1.6 Suriname shall authorize its rescue coordination centres 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.

22.3.1.7 Suriname shall authorize its rescue coordination centres to provide, when requested, assistance to other rescue coordination centres, including assistance in the form of aircraft, vessels, persons or equipment.

22.3.1.8 Suriname 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.

22.3.1.9 Suriname shall make arrangements for periodic liaison visits by personnel of their rescue coordination centres and subcentres to the centres of neighbouring States.

### **22.3.2 Cooperation with other services**

22.3.2.1 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.

22.3.2.2 Close coordination shall be maintained between the aeronautical and maritime authorities to provide for the most effective and efficient search and rescue services.

22.3.2.3 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.

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

22.3.2.5 Suriname shall designate a search and rescue point of contact for the receipt of Cospas-Sarsat distress data.

### **22.3.3 Dissemination of information**

22.3.3.1 Information necessary for the entry of search and rescue units of other States shall be contained in Aeronautical Information Publication (AIP), or alternatively, in the search and rescue service arrangements, if any.

22.3.3.2 When such information could benefit the provision of search and rescue services, Suriname shall make available, through the rescue coordination centres or other agencies, information regarding their search and rescue plans of operation.

22.3.3.3 Suriname 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.

## **22.4 PREPARATORY MEASURES**

### **22.4.1 Preparatory information**

22.4.1.1 Each rescue coordination centre shall have readily available at all time's 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.

22.4.1.2 Each rescue coordination centre need to have readily available all other information of interest to search and rescue, including information regarding:

- (a) the locations, call signs, hours of watch, and frequencies of all radio stations likely to be employed in support of search and rescue operations;
- (b) the locations and hours of watch of services keeping radio watch, and the frequencies guarded;
- (c) locations where supplies of droppable emergency and survival equipment are stored; and
- (d) objects which it is known might be mistaken for unlocated or unreported wreckage, particularly if viewed from the air.

22.4.1.3 Each rescue coordination centre whose search and rescue region includes maritime areas shall have ready access to information regarding the position, course and speed of ships within such areas that may be able to provide assistance to aircraft in distress and information on how to contact them.

Note.— This information may either be kept in the rescue coordination centres or be readily accessible.

22.4.1.4 National Maritime Search and Rescue Unit need to, 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.

Note.— Amver is a cooperative international ship reporting system with worldwide coverage that is available for interrogation by all rescue coordination centres.

A number of Contracting States also operate regional ship reporting systems.

## 22.4.2 Plans of operation

22.4.2.1 Each rescue coordination centre shall prepare detailed plans of operation for the conduct of search and rescue operations within its search and rescue region.

22.4.2.2 Search and rescue plans of operations shall be developed jointly with representatives of the operators and other 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.

22.4.2.3 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.

22.4.2.4 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 taken in conjunction with air traffic services units and other authorities concerned to assist aircraft known or believed to be subject to unlawful interference.

22.4.2.5 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.

### 22.4.3 Search and rescue units

22.4.3.1 Each search and rescue unit shall:

- (a) be cognizant of all parts of the plans of operation prescribed in 22.4.2 that are necessary for the effective conduct of its duties; and
- (b) keep the rescue coordination centre informed of its preparedness.

22.4.3.2 Each search and rescue unit shall:

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

### 22.4.4 Training and exercises

To achieve and maintain maximum efficiency in search and rescue, regular training of the search and rescue personnel shall be provided.

Appropriate search and rescue exercises shall also be arranged for such personnel.

### 22.4.5 Wreckage

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

## 22.5 OPERATING PROCEDURES

### 22.5.1 Information concerning emergencies

22.5.1.1 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.

22.5.1.2 Rescue coordination centres shall, immediately upon receipt of information concerning aircraft in emergency, evaluate such information and assess the extent of the operation required.

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

### 22.5.2 Procedures for rescue coordination centres during emergency phases

#### 22.5.2.1 Uncertainty phase

Upon the occurrence of an uncertainty phase, the rescue coordination centre 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.

#### 22.5.2.2 Alert phase

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

#### 22.5.2.3 Distress phase

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

- a) immediately initiate action by search and rescue units in accordance with the appropriate plan of operation
- b) ascertain the position of the aircraft, estimate the degree of uncertainty of this position, and, on the basis of this information and the circumstances, determine the extent of the area to be searched;
- c) notify the operator, where possible, and keep the operator informed of developments;
- d) notify other rescue coordination centres, 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 and able to assist to:

1) maintain a listening watch for transmissions from the aircraft in distress, survival radio equipment or an Emergency Locator Transmitter (ELT);

Note.— The frequencies contained in the specifications for ELTs given in CARS Part 17 ,Annex 10, Volume III, are 121.5 MHz and 406 MHz.

- 2) assist the aircraft in distress as far as practicable; and
- 3) inform the rescue coordination centre 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.

#### 22.5.2.4 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 22.5.2 and confer with neighbouring rescue coordination centres with the objective of designating one rescue coordination centre 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 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.

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

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.

### 22.5.3 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.

### 22.5.4 Procedures for organizations 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 rescue coordination centre of such instructions; and
- b) keep the rescue coordination centre informed of developments.

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

22.5.5.1 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.

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

Note.— Contracting States may require input from other appropriate State authorities in the decision-making process leading to termination of SAR operations

22.5.5.3 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 agency, facility or service that has been activated or notified shall be promptly informed.

22.5.5.4 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 agency, facility or service which has been activated or notified. Relevant information subsequently received shall be evaluated and search and rescue operations resumed when justified and practicable.

### 22.5.6 Procedures at the scene of an accident

22.5.6.1 When multiple **organizations** / facilities are engaged in search and rescue operations on-scene, 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.

22.5.6.2 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
- (d) act as instructed by the rescue coordination centre or the air traffic services unit.

22.5.6.2.1 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.

22.5.6.3 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.

22.5.6.4 When a ground signal has been displayed, the aircraft shall indicate whether the signal has been understood or not by the means described in 22.5.6.3 or, if this is not practicable, by making the appropriate visual signal.

22.5.6.5 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 Doc 9731.

### **22.5.7 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.

### 22.5.8 Search and rescue signals

22.5.8.1 The air-to-surface and surface-to-air visual signals in the I.S 22.5.8 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.

22.5.8.2 Upon observing any of the signals in the I.S 22.5.8, aircraft shall take such action as may be required by the interpretation of the signal given in the I.S 22.5.8.

### 22.5.9 Maintenance of records

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

22.5.9.2 Each rescue coordination centre shall prepare appraisals of actual search and rescue operations in its region.

These appraisals shall comprise any pertinent remarks on the procedures used and on the emergency and survival equipment, and any suggestions for improvement of those procedures and equipment.

Those appraisals, which are likely to be of interest to other States, shall be submitted to ICAO for information and dissemination, as appropriate.

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**CIVIL AVIATION REGULATIONS  
SURINAME**

**PART 22 – IMPLEMENTING STANDARDS**

**VERSION 1.0**

**DATE JULY 2022**

For ease of reference, the number assigned to each implementing standard corresponds to its associated regulation. For example, IS 22.5.8: would reflect a standard required in subsection 22.5.8.

## IS 22.5.8

## SEARCH AND RESCUE SIGNALS

(Note. See CARS Part 22.5.8)

### 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

<i>No.</i>	<i>Message</i>	<i>Code symbol</i>
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.

*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.

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