

Statutory Instrument No. 121 of 2020

CIVIL AVIATION ACT
(Cap. 71:01)

CIVIL AVIATION (SEARCH AND RESCUE) REGULATIONS, 2020
(Published on 18th September, 2020)

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SCHEDULES

IN EXERCISE of the powers conferred on the Minister of Transport and Communications by section 89 of the Civil Aviation Act and on the recommendation of the Civil Aviation Authority, the following Regulations are hereby made —

Part I · Preliminary

Citation	1. These Regulations may be cited as the Civil Aviation (Search and Rescue) Regulations, 2020.
Interpretation	<p>2. In these Regulations, unless the context otherwise requires —</p> <p>“alert phase” means a situation where apprehension exists as to the safety of an aircraft and its occupants;</p> <p>“alerting post” means any facility intended to serve as an intermediary between a person reporting an emergency and a Rescue Coordination Centre or Rescue Sub-centre;</p> <p>“distress phase” means a situation where there is a reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger and require immediate assistance;</p> <p>“ditching” means a forced landing of an aircraft on water;</p> <p>“emergency phase” includes uncertainty phase, alert phase or distress phase;</p> <p>“operator” means a person, organisation or enterprise engaged in or offering to engage in an aircraft operation;</p> <p>“pilot-in-command” means a 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;</p> <p>“requisition” means an official order laying claim to the use of an aircraft for search and rescue purposes;</p> <p>“rescue” means an operation to retrieve persons in distress, provide for their initial medical or other needs, and deliver them to a place of safety;</p> <p>“Rescue Coordination Centre” means a unit responsible for promoting efficient organisation of search and rescue services, and for coordinating the conduct of search and rescue operations within a search and rescue region;</p>

“Rescue Sub-centre” means a unit subordinate to a Rescue Coordination Centre, established to complement the latter according to particular provisions of the responsible authorities;

“search” means 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” means an aircraft provided with specialised equipment suitable for the efficient conduct of search and rescue missions;

“search and rescue facility” means any mobile resource, including designated search and rescue units, used to conduct search and rescue operations;

“search and rescue region” means an area of defined dimensions, associated with a Rescue Coordination Centre, within which search and rescue services are provided;

“search and rescue service” means 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, vessel, other craft and installations;

“search and rescue unit” means a mobile resource composed of trained personnel provided with equipment suitable for the expeditious conduct of search and rescue operations;

“state aircraft” includes an —

(a) aircraft used or commanded by the Botswana Defence Force, the Botswana Police Service, Department of Wildlife and National Parks, Directorate of Intelligence and Security or customs service; and

(b) aircraft used in the military, security, customs or police service of a foreign state;

“state of registry” means the state in whose register an aircraft is entered; and

“uncertainty phase” means a situation where uncertainty exists as to the safety of an aircraft and its occupants.

3. These Regulations shall apply to —

Application

(a) an organisation responsible for the maintenance and operation of search and rescue services in Botswana and in areas over which Botswana has been given responsibility for the regional air navigation plan; and

(b) all aircraft requiring search and rescue services.

Part II — *Search and rescue organisation*

4. (1) The Authority shall arrange for the establishment and prompt provision of search and rescue services within Botswana to ensure that assistance is rendered to persons in distress, and such services shall be provided on a 24 hour basis.

Search and
rescue services

(2) The Authority may make arrangements to cooperate with other States.

(3) The Authority shall when establishing search and rescue services referred to in subregulation (1), —

(a) ensure availability of resources, communication facilities and skilled manpower to coordinate and provide the search and rescue functions; and

(b) establish a process to improve service provision, including the aspects of planning domestic and international cooperative arrangements and training.

(4) The Authority shall provide assistance to an 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.

(5) The Authority 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.

National Search
and Rescue
Coordination
Committee

5. (1) There is hereby established a committee to be known as the National Search and Rescue Coordination Committee which shall consist of the following members —

- (a) the Commander or a representative of the Botswana Defence Force;
- (b) the Commissioner of Police or a representative of the Botswana Police Service;
- (c) the Chief Immigration Officer;
- (d) the Director of Wildlife and National Parks;
- (e) the Director of National Health Services;
- (f) the Director of Meteorological services;
- (g) the Director of Airport services or a representative from aerodrome operators;
- (h) the Commissioner General or a representative from Botswana Unified Revenue Service;
- (i) the Permanent Secretary or a representative from the ministry responsible for international affairs and cooperation;
- (j) the General Manager or a representative from Air Botswana; and
- (k) a representative from the —
 - (i) private health sector,
 - (ii) aviation industry, and
 - (iii) telecommunications industry.

(2) The Permanent Secretary to the Minister responsible for transport and communications shall be the Chairperson of the National Search and Rescue Coordination Committee and in his or her absence, the Permanent Secretary's delegate shall be the Chairperson.

(3) The objective of the National Search and Rescue Coordination Committee shall be to direct and ensure a coordinated and effective search and rescue service within the search and rescue regions established under regulation 7.

Functions of
National Search
and Rescue
Coordination
Committee

6. (1) The National Search and Rescue Coordination Committee shall, within its means and capabilities, coordinate its resources to search, assist and where appropriate, effect a rescue operation for a —

- (a) survivor of an aircraft crash or forced landing; and
- (b) survivor of any state aircraft accident or incident where the aircraft is not engaged in an act of war.

(2) The functions set out in subregulation (1) (a), exclude salvage operations.

(3) The National Search and Rescue Coordination Committee in performing its functions shall —

- (a) endeavour to cooperate with disaster management agencies established in terms of any law providing for the management of disasters;
- (b) develop and recommend the national strategic search and rescue policy;

- (c) coordinate administrative and operational matters regarding a search and rescue of an aircraft;
- (d) provide an interface between the national and other regional and international organisations involved in search and rescue operations;
- (e) oversee the implementation of the search and rescue plan for Botswana, and of procedures contained in the aeronautical search and rescue manual;
- (f) coordinate arrangements for search and rescue training and exercises required by the search and rescue plan, including follow-up of actions recommended following the conduct of search and rescue exercises;
- (g) promote effective use of all available facilities for search and rescue;
- (h) serve as a cooperative forum to exchange information and develop positions and policies of interest to parties involved in the plan;
- (i) promote close cooperation and coordination between civilian and military authorities and organisations for the provision of effective search and rescue services;
- (j) improve cooperation among aeronautical, land search and rescue communities for the provision of effective search and rescue services;
- (k) coordinate search and rescue exercises as necessary;
- (l) ensure the availability of appropriately packed, droppable life support equipment that is securely positioned and maintained at strategic locations throughout the search and rescue region, and readily available for rapid loading onto search and rescue units; and
- (m) determine other ways to enhance the overall effectiveness and efficiency of search and rescue services within Botswana, and to standardise search and rescue procedures and equipment where practicable, established in terms of any law providing for the management of disasters.

(4) The Committee shall meet at least three times a year to discuss matters related to its functions and to make any necessary recommendations to the Minister on matters affecting aeronautical search and rescue services.

(5) The chairperson of the committee may at any time and in coordination with the search and rescue service provider, call a special meeting of the committee when circumstances so require, at a time and place to be determined and shall notify the members of the committee in writing.

(6) A quorum for a meeting shall consist of one third of the committee members present.

7. (1) The Minister shall, by notice in the *Gazette*, publish the search and rescue regions within which search and rescue services shall be provided.

Search and
rescue regions

(2) The search and rescue regions published in accordance with subregulation (1), shall in so far as practicable, coincide with the Gaborone Flight Information Region and any relevant search and rescue agreements entered into with other states.

(3) The Authority shall publish the search and rescue regions referred to in subregulation (1), in the relevant aeronautical publications.

8. The National Search and Rescue Coordination Committee shall compile a manual, regarding search and rescue services and operation matters connected therewith, which it shall maintain and keep up to date.

Manual

9. (1) The owner of any aircraft required to carry emergency locator beacons shall register such emergency locator beacons with the organisations or institutions designated in terms of regulation 10.

Registration of
emergency
locator beacons

Rescue
Coordination
Centres and
Rescue
Sub-centres

(2) The owner of any aircraft registered in Botswana which carries an emergency locator beacon shall register such emergency locator beacon with the organisations or institutions designated in terms of regulation 10.

10. (1) Subject to subregulation (3), the Authority shall appoint —

- (a) organisations or institutions to act as Rescue Coordination Centres;
- (b) organisations or institutions to act as Rescue Sub-centres; or
- (c) organisations or institutions to act as registrars and custodians of registers of emergency locator beacons referred to in regulation 9.

(2) The Authority shall designate a Rescue Coordination Centre in each search and rescue region.

(3) An appointment referred to in subregulations (1) and (2), shall be —

- (a) made in accordance with an agreement reached with the applicable organisation or institution; and
- (b) published by notice, by the Authority, in the *Gazette* as well as in relevant aeronautical publications.

(4) The organisations or institutions appointed in terms of subregulation (1) (a) and (b) shall, with the approval of the National Search and Rescue Coordination Committee, appoint their respective Heads.

(5) A Head of a Rescue Coordination Centre or Rescue Sub-centre shall establish and preside over an operations committee to discuss, evaluate and effect operational procedures.

(6) An operations committee shall consist of persons representing organisations controlling the resources available to that Rescue Coordination Centre or Rescue Sub-centre.

(7) A Rescue Coordination Centre or Rescue Sub-centre shall be staffed 24 hours a day by trained personnel proficient in the use of English and language used for radiotelephony communications.

Functions of
Rescue
Coordination
Centres and
Rescue
Sub-centres

11. (1) A Head of a Rescue Coordination Centre or any person authorised by the Head of a Rescue Coordination Centre, shall be responsible for co-coordinating available resources for the purpose of searching, assisting and, where appropriate, effecting a rescue operation in that Rescue Coordination Centre's search and rescue region.

(2) A Head of a Rescue Sub-centre shall assist the Head of a Rescue Coordination Centre in carrying out assigned duties in a particular area or instance.

(3) The appointment of a Rescue Coordination Centre referred to in regulation 10 (2) does not preclude that Rescue Coordination Centre from —

- (a) operating in another region; or
- (b) performing the tasks of another Rescue Coordination Centre.

Procedures for
Rescue
Coordination
Centres

12. (1) A search and rescue operation that has commenced shall continue, where practicable, until all survivors are delivered to a place of safety or until all reasonable hope of rescuing survivors has passed.

(2) A Rescue Coordination Centre shall be responsible for determining when to discontinue search and rescue operations.

(3) Where a search and rescue operation has been successful, or where a Rescue Coordination Centre considers or is informed that an emergency no longer exists, the centre shall —

- (a) cancel the emergency phase;
- (b) terminate the search and rescue operation; and
- (c) promptly inform any authority, facility or service that has been notified or activated.

(4) Where a search and rescue operation becomes impracticable, and the Rescue Coordination Centre concludes that there might still be survivors, the Rescue Coordination 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.

(5) Where a Rescue Coordination Centre subsequently receives relevant information concerning a search and rescue operation that was terminated or temporarily suspended, the Rescue Coordination Centre shall evaluate the information, and the search and rescue operation shall be resumed when justified and it is practicable.

Part III – *Cooperation and coordination of search and rescue services*

13. (1) The Authority shall ensure that the search and rescue organisation is coordinated with those of neighbouring states.

Cooperation
between states

(2) The Authority shall coordinate search and rescue operations with those of neighbouring states especially when these operations are proximate to adjacent search and rescue regions.

(3) The Authority shall develop common search and rescue plans and procedures to facilitate coordination of search and rescue operations with those of neighbouring states.

(4) The Rescue Coordination Centre shall permit immediate entry into its territory of search and rescue, units of other states for the purpose of searching the site for aircraft accidents and rescuing survivors of such accidents.

(5) The Authority, through the Rescue Coordination Centre shall –

- (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 expedite such entry.

(6) The Rescue Coordination Centre shall, when requested, provide assistance to other Rescue Coordination Centres and coordinate any assistance required by those centres in the form of aircraft, vessels, persons or equipment.

(7) The designated aeronautical search and rescue agency shall make arrangements for –

- (a) joint training exercises involving its aeronautical search and rescue unit and those of other states and operators, in order to promote aeronautical search and rescue efficiency; and
- (b) periodic liaison visits, by personnel of its rescue coordination centres and sub-centres, to the centres of neighbouring states.

(8) The authorities of a contracting state who need their search and rescue unit to enter the territory of Botswana for search and rescue purposes shall transmit a request to the Rescue Coordination Centre, giving full details of the projected mission and the need for it.

14. (1) The Authority and relevant government agencies and authorities shall establish letters of agreement with all search and rescue agencies of contiguous states to strengthen search and rescue cooperation and coordination.

Search and
rescue letters
of agreement

(2) Subject to subregulation (1), the Authority shall set forth in the agreements, the conditions for entry of each other's search and rescue units into respective territories, and shall ensure that these agreements provide for expediting entry of such units with the least possible formalities.

Cooperation
with other
services

15. (1) All aircraft, vessels and local services and facilities which do not form part of the search and rescue organisation shall cooperate fully with the search and rescue organisation, and extend any possible assistance to the survivors of aircraft accidents.

(2) The Authority shall ensure that its search and rescue services cooperate with units responsible for investigating accidents and with those responsible for the care of survivors who suffered from the accident.

(3) To facilitate accident investigation, rescue units shall when practicable, be accompanied by persons qualified in the conduct of aircraft accident and incident investigations.

(4) The Authority shall designate a search and rescue point of contact for the receipt of Cospas-Sarsat distress data.

Dissemination
of information

16. (1) The Authority shall publish and disseminate all information necessary for the entry of search and rescue units of other states into the territory of Botswana.

(2) The information referred to in subregulation (1), may also be included in search and rescue service arrangements.

(3) The Authority shall make available, through the Rescue Coordination Centre or other agencies, information regarding search and rescue plans of operation.

(4) The Authority 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.

Part IV — *Preparatory measures*

Preparatory
information

17. The Authority in respect of its search and rescue region shall ensure that the Rescue Coordination Centre has readily available up-to-date information concerning the following —

(a) search and rescue units, Rescue Sub-centres and alerting posts;

(b) air traffic services units;

(c) means of communication that may be used in aeronautical 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 aeronautical search and rescue.

Search and
rescue plans of
operation

18. (1) The Authority shall ensure that the Rescue Coordination centre prepares a detailed plan of operation for the conduct of search and rescue operations in Botswana.

(2) The Authority shall ensure that the —

(a) search and rescue plans of operations are 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;

- (b) plans of operation 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; and
- (c) search and rescue plans of operation contain details regarding actions to be taken by those persons engaged in search and rescue, including —
 - (i) the manner in which search and rescue operations are to be conducted in the aeronautical search and rescue region,
 - (ii) the use of available communication systems and facilities,
 - (iii) the actions to be taken jointly with other Rescue Coordination Centres,
 - (iv) the methods of alerting en-route aircraft and ships at sea,
 - (v) the duties and prerogatives of persons assigned to search and rescue,
 - (vi) the possible redeployment of equipment that may be necessitated by meteorological or other conditions,
 - (vii) the methods for obtaining essential information relevant to search and rescue operations, such as weather reports, forecasts and appropriate NOTAM,
 - (viii) the methods for obtaining, from other rescue coordination centres, such assistance, including aircraft, vessels, persons or equipment, as may be needed,
 - (ix) the method for assisting distressed aircraft being compelled to ditch to rendezvous with surface craft,
 - (x) the method for assisting aeronautical search and rescue operation or other aircraft to proceed to an aircraft in distress, and
 - (xi) cooperative actions to be taken in conjunction with air traffic services units and other authorities concerned to assist an aircraft known or believed to be subject to unlawful interference; and
- (d) search and rescue plans of operation are integrated with airport emergency plans, to provide for rescue services in the vicinity of aerodromes.

19. (1) The Authority shall designate as search and rescue units, elements of public or private services suitably located and equipped for search and rescue operations, and without prejudice to the generality of the foregoing, the Authority may designate the following as search and rescue units, the —

Search and
rescue units

- (a) Botswana Defence Force;
- (b) Botswana Police Service;
- (c) Fire Service; and
- (d) department responsible for wildlife and national parks.

(2) The Authority shall designate, as part of a search and rescue plan of operation, units from public or private services that do not qualify as search and rescue units but are nevertheless able to participate in search and rescue operations.

(3) The Authority shall, when designating elements of public or private services as search and rescue units in accordance with subregulation (1), ascertain that the public or private services have the following —

- (a) a rapid and reliable two-way communication system;
- (b) an equipment enabling communication on aeronautical distress frequencies, on scene frequencies and on such other frequencies as may be prescribed;
- (c) a device for homing in on distress frequencies;
- (d) an Emergency Locator Transmitter (ELT); or
- (e) an equipment that can communicate with aircraft on the following frequencies 243 MHz and 121.5 MHz.

(4) A designated search and rescue agency shall ensure that each search and rescue unit —

- (a) is cognisant of all parts of the plans of operation described in regulation 18, that are necessary for the effective conduct of its duties;
- (b) keeps the Rescue Coordination Centre informed of its preparedness;
- (c) maintains readiness and the required number of aeronautical search and rescue facilities; and
- (d) maintains adequate supplies of rations, medical stores, signaling devices and other survival and rescue equipment.

Training and exercises

20. The Authority shall provide for regular training of their search and rescue personnel and arrange appropriate search and rescue exercises in order to achieve and maintain maximum efficiency in search and rescue services.

Wreckage

21. Where the presence of a wreckage resulting from an aircraft accident within Botswana might constitute a hazard or confuse subsequent search and rescue operations, the Minister shall ensure that the wreckage is removed, obliterated or chartered, following the completion of an accident investigation.

Part V — *Operating procedures*

Information concerning emergency

22. (1) Any person or any element of the search and rescue organisation having reason to believe that an aircraft is in an emergency, shall immediately give all available information to the Rescue Coordination Centre.

(2) The Rescue Coordination Centre shall, immediately upon receipt of information concerning aircraft in emergency, evaluate such information and assess the extent of the operation required.

(3) Where 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.

Procedure for Rescue Coordination Centre during emergency phase

23. The Rescue Coordination Centre shall upon receipt of information regarding an aircraft in distress handle such notification in accordance with the procedure as set out in Schedule 1.

Procedure where responsibility for operations extends to two or more contracting states

24. Where the conduct of an operation over the entire search and rescue region is the responsibility of more than one contracting state, each state involved shall take action in accordance with the relevant plan of operations when requested by the Rescue Coordination centre of the region.

Procedure for authorities in the field

25. The authorities directing the conduct of search and rescue operations in the field or any part 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 any developments.

Procedure for Rescue Coordination Centres — termination and suspension of operations

26. (1) A search and rescue operation shall continue where practicable until all survivors are delivered to a place of safety, or until all reasonable hope of rescuing survivors has passed.

(2) The responsible Rescue Coordination Centre shall be responsible for determining when to discontinue the search and rescue operations.

(3) A Rescue Coordination Centre shall consider as essential, input from other organisations participating in the search and rescue operation, in the decision making process leading to the termination of the search and rescue operation.

(4) Where a search and rescue operation has been successful, or where a Rescue Coordination Centre considers or is informed that an emergency no longer exists —

- (a) the emergency phase shall be cancelled;
- (b) the search and rescue operation shall be terminated; and
- (c) any authority, facility or service that has been activated or notified shall be promptly informed.

(5) Where a search and rescue operation becomes impracticable, and the Rescue Coordination Centre concludes that there might still be survivors, the Rescue Coordination Centre shall suspend on-scene activities pending further developments, and shall promptly inform any authority, facility or service which has been activated or notified.

(6) Where a Rescue Coordination Centre receives relevant information, the Rescue Coordination Centre shall evaluate the information, and shall resume search and rescue operations when justified and it is practicable to do so.

27. (1) Where multiple facilities are engaged in a search and rescue operation on-scene, the Rescue Coordination Centre or Rescue Sub-centre 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.

Procedure at
scene of
accident

(2) Where a pilot-in-command observes that, either another aircraft or a surface craft is in distress, the pilot-in-command 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) where appropriate, report to the Rescue Coordination Centre or air traffic services unit as much of the following information as possible —
 - (i) type of craft in distress, its identification and condition,
 - (ii) the aircraft's position, expressed in geographical or grid coordinates or in distance and true bearing from a distinctive landmark or from a radio navigation aid,
 - (iii) time of observation expressed in hours and minutes Coordinated Universal Time (UTC),
 - (iv) number of persons observed,
 - (v) whether persons have been seen to abandon the craft in distress,
 - (vi) on-scene weather conditions,
 - (vii) apparent physical condition of survivors, and
 - (viii) 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.

(3) Where an aircraft is first to reach the scene of an accident, and that aircraft is not a search and rescue aircraft, the pilot-in-command of the aircraft shall take charge of on-scene activities of all other aircrafts subsequently arriving, until the first search and rescue aircraft reaches the scene of the accident.

(4) Where an aircraft is unable to establish communication with the appropriate Rescue Coordination Centre or air traffic services unit, the pilot-in-command, referred to in subregulation (3), shall, by mutual agreement, hand over charge of the on-scene activities to the pilot-in-command of an aircraft capable of establishing and maintaining such communications until the arrival of the first search and rescue aircraft.

(5) Where it is necessary for an aircraft to convey information to survivors or surface rescue units, and two-way communication is not available, the pilot-in-command shall, if practicable, drop communication equipment that would enable direct contact to be established, or convey the information by dropping a hard copy message.

(6) Where a ground signal has been displayed, the pilot-in-command of an aircraft shall indicate whether the signal has been understood or not by the means described in subregulation (4) or, if this is not practicable, by making the appropriate visual signal.

(7) Where it is necessary for an aircraft to direct a surface craft to the place where an aircraft or surface craft is in distress, the pilot-in-command of an aircraft shall —

- (a) do so by transmitting precise instructions by any means at his or her disposal; and
- (b) if radio communication cannot be established, the pilot-in-command shall make the appropriate visual signal.

(8) A person who unlawfully interferes with search and rescue operations commits an offence and is liable to a fine not exceeding P15 000, or to imprisonment for a period not exceeding 18 months, or to both.

Procedure for pilot-in-command

28. Where the pilot-in-command of an aircraft, intercepts a distress transmission, the pilot-in-command 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 and give all available information; and
- (e) at the pilot's discretion, while awaiting instructions, proceed to the position given in the transmission.

Search and rescue signals

29. (1) The air-to-surface and surface-to-air visual signals set out in Schedule 1 shall, when used, have the meaning indicated therein.

(2) The signals shall only be used for the purpose indicated, and no other signals which are likely to be confused with those signals, shall be used.

(3) Where the pilot-in-command of an aircraft observes any of the signals set out in Schedule 2, the pilot-in-command of the aircraft shall take such action as may be required by the interpretation of the signal given.

Requisitioning of aircraft and vessels

30. (1) The Minister may for purposes of any search and rescue operation —

- (a) requisition any civil aircraft or vessel;
- (b) request the assistance of any military aircraft or vessel; or
- (c) request any holder of a Botswana aircraft flight crew licence to assist in the operation.

(2) Where the Minister contemplates requisitioning a civilian aircraft or vessel, or requesting a civilian holder of a Botswana aircraft flight crew licence, the Minister may only do so where —

- (a) human life is in immediate and grave danger; and
- (b) there are no other means available to conduct the operation.

- 31.** (1) A Rescue Coordination Centre shall have means of rapid and reliable two-way communication with —
- (a) associated air traffic services units;
 - (b) associated Rescue Sub-centres;
 - (c) appropriate direction-finding and position-fixing stations;
 - (d) the headquarters of search and rescue units in the region;
 - (e) a designated meteorological office or meteorological watch office;
 - (f) search and rescue units;
 - (g) alerting posts; and
 - (h) the Cospas-Sarsat Mission Control Centre servicing the search and rescue region.
- (2) A Rescue Sub-centre shall have means of rapid and reliable two-way communication with —
- (a) adjacent Rescue Sub-centres;
 - (b) a meteorological office or meteorological watch office;
 - (c) search and rescue units; and
 - (d) alerting posts.
- 32.** (1) The Authority shall ensure that —
- (a) search and rescue units are provided with equipment for locating promptly and for providing adequate assistance at the scene of an accident;
 - (b) aeronautical search and rescue units have means of rapid and reliable two-way communication with other aeronautical search and rescue facilities engaged in the same operation;
 - (c) search and rescue aircrafts are equipped to be able to communicate on the aeronautical distress and on-scene frequencies, and on such other frequencies as may be determined by the Authority;
 - (d) search and rescue aircrafts are equipped with a device for homing on distress frequencies; and
 - (e) at least one of the aircraft participating in a search and rescue operation shall carry droppable survival equipment, unless it is known that there is no need to provide supplies to survivors by air.
- (2) The Authority shall ensure that appropriate survival equipment suitably packed for dropping by aircrafts are located at aerodromes.
- 33.** (1) A person who knows or has reason to believe that an aircraft or vessel is in distress, shall report the occurrence at a nearby police station or at such other office or facility or to a dedicated emergency number as the National Search and Rescue Coordination Committee may determine.
- (2) The Authority shall publish the addresses and telephone numbers of the offices or facilities referred to in subregulation (1), by —
- (a) notice in the *Gazette*; and
 - (b) any means of the printed and electronic media so as to ensure wide publicity.

Search and
rescue
communications

Search and
rescue
equipment

Reporting of
aircraft or
vessel in
distress

Part VI — General provisions

- 34.** (1) The Authority shall keep all data relating to every search and rescue action undertaken by a Rescue Coordination Centre in an orderly and easily accessible manner for a period of at least 12 calendar months.

Maintenance of
records

	<p>(2) A Rescue Coordination Centre shall prepare an appraisal of actual search and rescue operations in its region.</p> <p>(3) An appraisal under subregulation (1), shall comprise any pertinent remark on the procedure used, and on the emergency and survival equipment, and any suggestion for the improvement of the procedure and equipment.</p> <p>(4) The appraisal which is likely to be of interest to other states shall be submitted to the International Civil Aviation Organisation (ICAO) for information and dissemination as appropriate.</p>
Recovery of certain expenses	<p>35. (1) Where a search and rescue operation is undertaken in connection with any occurrence caused by the unlawful act or omission of any person, the Minister may recover from that person, the whole or any portion of the expenses incurred in connection with that operation.</p> <p>(2) The Minister may, after having recovered the expenses in subregulation (1), compensate any person who has incurred any loss or damage as a result of the operation.</p> <p>(3) Subject to subregulations (1) and (2), the Minister shall determine the expenses, and notify in writing, the person who by an unlawful act or omission caused an occurrence which led to a search and rescue operation referred to in subregulation (1), of the expenses to be recovered.</p>
Failure to comply with direction or instructions	<p>36. (1) A person who fails to comply with any direction or instruction given to him or her under these Regulations shall be deemed to have contravened these Regulations.</p> <p>(2) A person who becomes aware of a violation of any provision of these Regulations shall without delay report the violation to the Authority.</p> <p>(3) The Authority shall, upon being notified of a violation, determine the nature and type of investigation or enforcement action that need to be taken.</p>
Offences and penalties	<p>37. A person who contravenes any provision of these Regulations for which no penalty is prescribed commits an offence and is liable to a fine not exceeding P50 000, or to imprisonment for a period not exceeding 10 years, or to both.</p>
Revocation of S.I. No. 19 of 2012	<p>38. The Civil Aviation (Search and Rescue) Regulations, 2012 are hereby revoked.</p>

SCHEDULES

SCHEDULE 1

Procedure for handling distress notification (Regulation 23)

The following actions shall be followed by the Rescue Coordination Centre upon receipt of information regarding an aircraft in distress –

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.

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.

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 is 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 –
 - (i) maintain a listening watch for transmissions from the aircraft in distress, survival radio equipment or an E.L.T (the frequencies contained for E.L.Ts are 121.5 MHz and 406 MHz),
 - (ii) assist the aircraft in distress as far as practicable, and
 - (iii) 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 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.

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) where 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 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 —
 - (i) the region in which the aircraft last reported its position,
 - (ii) the region to which the aircraft was proceeding when its last reported position was on the line separating two search and rescue regions,
 - (iii) 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
 - (iv) the region in which the distress site is located as identified by the Cospas-Sarsat system; and
 - (c) after declaration of the distress phase, —
 - (i) 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, and
 - (ii) all Rescue Coordination Centres which become aware of any information pertaining to the emergency, shall inform the Rescue Coordination Centre that has overall responsibility.
5. Passing of information to an 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 a manner that such information can be passed to the aircraft.

SCHEDULE 2

Search and rescue signals (Regulation 29)

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, —
 - (i) rocking the wings,
 - (ii) opening and closing the throttle, or
 - (iii) changing the propeller pitch, and
- (c) heading in the direction in which the surface craft is to be directed.

1.2 Due to high noise level on board surface craft, the sound signals in subparagraphs (ii) and (iii) may be less effective than the visual signal in subparagraph (i), and are regarded as alternative means of attracting attention.

1.3 Repetition of such manoeuvres has the same meaning.

1.4 The following manoeuvres by an aircraft means that the assistance of the surface craft to which the signal is directed is no longer required —

- (i) crossing the wake of the surface craft close astern at a low altitude,
- (ii) rocking the wings,
- (iii) opening and closing the throttle, or
- (iv) changing the propeller pitch.

1.5 The following replies may be made by a surface craft to the signal in paragraph 1 —

- (a) for acknowledging receipt of signals —
 - (i) the hoisting of the “code pennant” (vertical red and white stripes) close up (meaning understood),
 - (ii) the flashing of a succession of “Ts” by signal lamp in the morse code, or
 - (iii) the changing of heading to follow the aircraft; and
- (b) for indicating inability to comply —
 - (i) the hoisting of the international flag “N” (a blue and white checkered square), or
 - (ii) the flashing of a succession of “Ns” in the Morse code.

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>L L</u>
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	
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.

2.4 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.

2.5 Attention to the signals at paragraphs 2.1 and 2.2 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, and
- (b) during the hours of darkness by 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 signal indicated at paragraph 3.1 indicates that the ground signal is not understood.

MADE this 31st day of August, 2020.

THULAGANO MERAPE SEGOKGO,
Minister for Transport and Communications.