

CIVIL AVIATION ACT
(Act No. 11 of 2011) (Cap. 71:01)

CIVIL AVIATION (SEARCH AND RESCUE) REGULATIONS, 2012
(Published on 23rd March, 2012)

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SCHEDULE

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 —

Citation **1. These Regulations may be cited as the Civil Aviation (Search and Rescue) Regulations, 2012.**

Interpretation **2. In these Regulations, unless the context otherwise requires —**
“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;
“alert phase” means a situation where apprehension exists as to the safety of an aircraft and its occupants.
“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;
“emergency phase” includes uncertainty phase, alert phase or distress phase;

- “requisition” means an official order laying claim to the use of an aircraft for search and rescue purposes;
- “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;
- “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;
- “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 specialized equipment suitable for the efficient conduct of search and rescue missions;
- “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, vessels and other craft and installations;
- “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 unit” means a mobile resource composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue operations;
- “state aircraft” includes —
- (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;
 - (b) aircraft used in the military, security, customs or police service of a foreign state;
- “uncertainty phase” means a situation wherein uncertainty exists as to the safety of an aircraft and its occupants; and
- “vessel” means a craft used for travelling on water and includes a boat or ship.
3. (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 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 Public Health Services; and
 - (f) a representative from —
 - (i) the ministry responsible for foreign affairs and international cooperation,
 - (ii) the private health sector,
 - (iii) the aviation industry, and
 - (iv) the telecommunications industry,
 appointed by the Minister.

National
Search and
Rescue
Coordination
Committee

(2) The Chief Executive Officer of the Authority shall be the Chairperson of the National Search and Rescue Coordination Committee and in the absence of the Chief Executive Officer, the Chief Executive Officer's delegate shall be the Chairperson.

(3) The object 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 5.

Functions of
National
Search and
Rescue
Coordination
Committee

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

(a) survivors of aircraft crashes or forced landings; and

(b) survivors of any state aircraft accident or incident where the aircraft is not engaged in an act of war.

(2) The functions set out in Sub-regulation (1) (a) exclude salvage operations.

(3) The National Search and Rescue Coordination Committee shall, in performing its functions, endeavour to cooperate with disaster management agencies established in terms of any law providing for the management of disasters.

Search and
rescue
regions

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

(2) The Authority shall publish the gazetted search and rescue regions referred to in Sub-regulation (1) in the relevant aeronautical publications.

(3) The search and rescue regions contemplated in Sub-regulation (1) shall be in accordance with —

(a) the Botswana Boundaries Act; or

(b) any relevant search and rescue agreements entered into with another State.

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(4) The National Search and Rescue Coordination Committee may perform search and rescue services outside Botswana in accordance with any agreement signed by the Minister with another State.

Manual

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

Registration
of emergency
locator
beacons

7. (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 8.

(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 8.

Rescue
Coordination
Centres and
Rescue
Sub-Centres

8. (1) Subject to Sub-regulation (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;

(c) organisations or institutions to act as registrars and custodians of registers of emergency locator beacons contemplated in regulation 7.

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

(3) Any appointment contemplated in Sub-regulations (1) and (2) shall be —

(a) done 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 Sub-regulation (1) (a) and (b) shall, with the agreement 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.

9. (1) A Head of a Rescue Coordination Centre or any person authorised by the Head 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 contemplated in regulation 8 (2) does not preclude that Rescue Coordination Centre from —

- (a) operating in another region; or
- (b) performing the tasks of another rescue co-ordination centre.

10. (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 —

- (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 notified or activated shall be promptly informed.

(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 practicable.

11. (1) Subject to Sub-regulation (2), the Authority may for purposes of any search and rescue operation —

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

(2) Where the Authority contemplates requisitioning a civilian aircraft or vessel or instructing a civilian holder of a Botswana aircraft flight crew licence or the master of a vessel, the Authority may do so only if —

Functions of
Rescue
Coordination
Centres and
Rescue
Sub-Centres

Procedures for
rescue
coordination
centres

Requisitioning
of aircraft and
vessels

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

(3) Any person who without lawful reason, fails to give effect to a requisition or to comply with an instruction contemplated in Sub-regulation (1) commits an offence and shall be liable, on conviction, to a fine not exceeding P50 000, or to imprisonment for a period not exceeding five years.

Search and
rescue
measures
regarding
aircraft

12. (1) Subject to these Regulations, any search and rescue operations shall be undertaken in accordance with the Search and Rescue manual.

(2) The Authority shall, where an aircraft has failed to reach its destination or is reported missing, immediately institute search and rescue operations if the flight plan was filed prior to departure and the flight in question was —

- (a) between aerodromes where air traffic services are provided, unless otherwise indicated —
 - (i) on the flight plan,
 - (ii) through aeronautical publication, or
 - (iii) through notices;
- (b) conducted in airspace within which air traffic control services are provided; or
- (c) a flight to an aerodrome where air traffic services are not provided, if search and rescue operations are specifically requested by the pilot-in-command.

(3) A Search and rescue operation shall be instituted in respect of all flights where —

- (a) a flight plan was filed and not closed;
- (b) in respect of a flight for which no flight plan has been filed, information is received, from any source, that the aircraft is overdue or missing; or
- (c) for any aircraft which is believed to be in need of assistance or is in distress.

(4) Where a search and rescue operation is conducted, the relevant Rescue Coordination Centre shall inform the Authority of the progress made and the termination of the search and rescue operation.

(5) Any person who causes the initiation of a search and rescue operation by failure to or omission to close a flight plan commits an offence and shall be liable, on conviction, to a fine not exceeding P50 000, or to imprisonment for a period not exceeding 10 years, or to both.

Search and
rescue
communications

13. (1) A Rescue Coordination Centre shall have means of rapid and reliable two-way communication with —

- (a) air traffic services units;
- (b) Rescue Sub-centres;
- (c) 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; and
- (g) alerting posts.

(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.

14. (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 —

- (a) the Botswana Defence Force;
- (b) the Police Service;
- (c) the Fire Brigade; and
- (d) the Department responsible for wildlife.

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

(3) The Authority shall, when designating elements of public or private services as search and rescue units in accordance with Sub-regulation (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.

15. (1) Where multiple facilities are engaged in search and rescue operations 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.

(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) its 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,
 - (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.

Search and
rescue units

Procedures
at scene of
accident

(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 aircraft 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 Sub-regulation (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 Sub-regulation (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 its disposal; and
- (b) if radio communication can not be established, the aircraft shall make the appropriate visual signal.

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

Procedures for
pilot-in-
command

16. 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, giving all available information; and
- (e) at the pilot's discretion, while awaiting instructions, proceed to the position given in the transmission.

Filing of
disaster
management
and aerodrome
emergency
plans

17. (1) All aerodrome managers are required to file their emergency plans and any amendments thereto with the nearest Rescue Coordination Centre.

(2) All Heads of disaster management agencies established in terms of any law providing for the management of disasters are required to file their emergency plans in respect of aircraft incidents, and any amendments thereto, with the nearest Rescue Coordination Centre.

Reporting of
aircraft or
vessel in
distress

18. (1) A person who knows or has reason to believe that an aircraft or vessel is in distress shall report the occurrence at a police station nearest to that person 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 contemplated in Sub-regulation (1) —

- (a) by notice in the Gazette; and
- (b) by any means of the printed and electronic media so as to ensure wide publicity.

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

Training of
search and
rescue
personnel

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

Search
and rescue
signals

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

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

21. Any person who contravenes any provision of these Regulations for which no penalty is prescribed commits an offence and is liable, on conviction, to a fine not exceeding P50 000, or to imprisonment for a period not exceeding 10 years, or to both.

Offences and
Penalties

SCHEDULE

(Reg. 20 (1))

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 —
 - (i) rocking the wings; or
 - (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 (ii) and (iii) may be less effective than the visual signal in (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 —

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

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

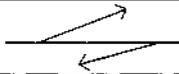
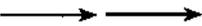
- (a) for acknowledging receipt of signals —
 - (i) the hoisting of the “code pennant” (vertical red and white stripes) close up (meaning understood),
 - (ii) the flashing of a succession of “T’s” by signal lamp in the Morse code, or
 - (iii) the changing of heading to follow the aircraft; and
- (b) 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 “N’s” 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	LL
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.
 - 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 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 –
 - (i) by rocking the aircraft's wings,
 - (b) during the hours of darkness –
 - (i) 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.

MADE this 11th day of January, 2012.

NONOFO E. MOLEFHI,
*Minister for Transport and
Communications.*