

GOVERNMENT OF ZAMBIA

STATUTORY INSTRUMENT NO. 73 OF 2020

The Civil Aviation Authority Act, 2012
(Act No. 7 of 2012)

The Civil Aviation Authority
(Search and Rescue) Regulations, 2020

ARRANGEMENT OF REGULATIONS

Regulation

1. Title
2. Application
3. Interpretation
4. Establishment of National Aeronautical Search and
Rescue Organisation
5. Functions of Organisation
6. Appointment of Chief of Centre and staff
7. Expenses of organisation
8. Search and rescue region
9. Search and rescue communications
10. Search and rescue units
11. Search and rescue equipment
12. Cooperation with neighbouring State
13. Search and rescue agreement
14. Entry into Republic by states parties
15. Cooperation with other service providers
16. Dissemination of information
17. Preparatory information
18. Search and rescue plan of operation
19. Training and exercises
20. Wreckage
21. Information concerning emergencies
22. Procedures during emergency phases
23. Procedures where responsibility for operations extends to
two or more centres

24. Procedures for relevant agency
 25. Procedures for termination and suspension of search and rescue operations
 26. Procedures at scene of accident
 27. Procedures for pilot in command intercepting distress transmission
 28. Search and rescue signals
 29. Maintenance of records, appraisals and information sharing
 30. Requisition of aircraft or vessel
 31. Recovery of certain expenses
 32. Records
 33. Offence
- SCHEDULE

IN EXERCISE of the powers contained in section 78 of the Civil Aviation Authority Act, 2012, the following Regulations are made:

1. These Regulations may be cited as the Civil Aviation Authority (Search and Rescue) Regulations, 2020. Title
2. These Regulations apply to— Application
 - (a) aircraft requiring search and rescue services;
 - (b) persons or organisations responsible for the maintenance and operation of search and rescue services in the Republic and in areas over the land and territorial waters to which the Republic has jurisdiction as specified in the regional air navigation plan; and
 - (c) cross border search and rescue services where the Republic has reciprocal arrangements.
3. In these Regulations unless the context otherwise requires— Interpretation

“Aeronautical Search and Rescue Manual” means a manual developed and maintained by the Authority relating to search and rescue;

“alerting post” means a facility that serves as an intermediary between a person reporting an emergency and the centre or a sub centre;

“alert phase” means a phase where apprehension arises as to the safety of an aircraft and its occupants;

“Authority” has the meaning assigned to the word in the Act;

“Centre” means the rescue and search coordination centre;

“Chairperson” means the person appointed as Chairperson under the Act;

“Chief “ means a Chief Aeronautical Search and Rescue Officer;

“Company” has the meaning assigned to the word in the Civil Aviation Act, 2016; Act No.5 of 2016

“Cosmitscheskaja Systema Poiska Avarnitych Sudov-Search Rescue Satellite mission control Centre” means the Search and Rescue Satellite Aided Tracking Centre and “COSPAS - SARSAT Mission Control center” shall be construed accordingly;

“Director Air Navigation Services” means an officer of the Company responsible for air navigation services;

“Director General” means a person appointed as Director-General under the Act;

- “distress phase” means a phase where there is reasonable certainty that an aircraft and the aircraft’s occupants are threatened by grave and imminent danger and require immediate assistance;
- “ditching” means the forced landing of an aircraft on water;
- “emergency phase” means an uncertainty phase, alert phase or distress phase;
- “flight information region” means an airspace of defined dimensions within which flight information services and alerting services are provided;
- “notice to airmen” means a notice used to alert aircraft pilots of potential hazards along a flight route, or at a location, that could affect the safety of the flight and “NOTAM” shall be construed accordingly;
- “Organisation” means the National Aeronautical Search and Rescue Organisation constituted under regulation 4;
- “pilot-in-command” means the pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight;
- “relevant agency” means a local or foreign institution or organisation equipped to assist in a search and rescue operation;
- “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;
- “search” means an operation normally coordinated by the centre or sub centre, to locate persons in distress, using available personnel and facilities;
- “search and rescue aircraft” means an aircraft with specialised equipment suitable for the efficient conduct of search and rescue missions;
- “search and rescue facility” means a mobile resource, including a designated search and rescue unit, used to conduct a search and rescue operation;
- “search and rescue region” means an area of defined dimensions, associated with a centre, within which search and rescue services are provided, and “SRR” shall be construed accordingly;

“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;

“sub centre” means a unit subordinate to the centre established to complement the centre according to particular requirements of a responsible authority;

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

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

“vessel” means a water navigable craft of any type, whether self propelled or not.

4. (1) There is established the National Aeronautical Search and Rescue Organisation which consists of the following part-time members appointed by the Minister:

Establishment
of National
Aeronautical
Search and
Rescue
Organisation

(a) a representative from the Disaster Management and Mitigation Unit;

(b) a representative each from the Ministry responsible for—

- (i) transport;
- (ii) health;
- (iii) defence;
- (iv) local government; and
- (v) national parks and wildlife;

(c) a representative each from the -

- (i) Zambia Airports Corporation Limited;
- (ii) Zambia Air Force;
- (iii) Zambia Army;
- (iv) Zambia National Service;
- (v) Zambia Police Service;
- (vi) department responsible for immigration; and
- (vii) Zambia Revenue Authority.

(2) The Organisation shall regulate its own procedure.

Functions of
Organisation

5. (1) The Organisation shall assist aircrafts that are in distress or missing and are in need of search and rescue for the purposes of rescuing occupants in a timely manner to save life.

(2) Despite the generality of sub regulation (1), the functions of the Organisation are to—

- (a) establish a search and rescue coordination centre and sub-centre in each search and rescue region for purposes of providing search and rescue services;
- (b) receive alerts from, and exchange information with, persons in distress;
- (c) determine the type and degree of search and rescue services to be provided within the search and rescue region and provide those services in accordance with these Regulations;
- (d) establish and maintain a system for reporting occurrences and the conduct of search and rescue operations to the Authority;
- (e) assist search and rescue units and other facilities in providing assistance to an aircraft or its occupants that appears to be in an emergency phase;
- (f) where separate aeronautical centres serve the same area, ensure cooperation and coordination between the relevant aeronautical emergency response services;
- (g) cooperate in the establishment of joint rescue coordination centres;
- (h) maintain an accurate and complete database of search and rescue sub centres, facilities and resources and make arrangements for the timely advice to the Authority of any change in their readiness or capability; and
- (i) coordinate its resources to search for, assist and, where appropriate, effect a rescue operation for survivors of aircraft crashes or forced landings and the crew and passengers of vessels in distress.

(3) The Organisation may—

- (a) coordinate the evacuation of a seriously injured or ill person requiring medical treatment;
- (b) endeavour to co operate with disaster management agencies established under any written law;
- (c) develop and recommend a national strategic search and rescue policy;

- (d) coordinate administrative and operational matters regarding search and rescue;
- (e) provide an interface between the national, regional and international organisations involved in search and rescue operations;
- (f) oversee the implementation of the search and rescue plan and procedures contained in the Aeronautical Search and Rescue Manual;
- (g) coordinate training on search and rescue services and exercises required by the search and rescue plan including follow up of actions recommended;
- (h) keep and maintain all data relating to every search and rescue action in an orderly and easily accessible manner for a period of at least seven years;
- (i) serve as a platform for the exchange of information; and
- (j) promote co operation among aeronautical rescue centres and communities in providing effective search and rescue services.

6. (1) The Company shall appoint, on terms and conditions that it may determine, the Chief who shall be responsible for the coordination of search and rescue activities in Zambia and management of the Centre and sub-centres.

Appointment
of Chief of
Centre and
staff

(2) The Company shall appoint other full time or part time professional and technical staff that may be necessary for the performance of the functions of the centre and sub-centres under these Regulations.

7. The expenses and costs of the Organisation shall be paid out of funds appropriated by Parliament for the performance of the Organisation's functions under these Regulations.

Expenses of
Organisation

8. A search and rescue region within which a search and rescue service is provided, shall be set up in accordance with the flight information services published in the Zambia Aeronautical Information Publication.

Search and
rescue region

9. (1) The Company shall have a rapid and reliable two way communications with—

Search and
rescue
communica-
tions

- (a) an associated air traffic service unit;
- (b) an associated search and rescue sub centre;
- (c) a search and rescue unit;
- (d) an appropriate direction finding and position fixing station;

(e) a designated meteorological office or meteorological watch office;

(f) an alerting posts; and

(g) a COSPAS SARSAT Mission Control Centre servicing the search and rescue region.

(2) The Company shall ensure that each search and rescue sub centre has 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.

Search and
rescue units

10. (1) The Company shall publish, in the Zambia Aeronautical Information Publication—

(a) public and private search and rescue services, their location and how suitably equipped they are for search and rescue operations;

(b) search and rescue units that are able to participate in search and rescue operations; and

(c) alerting posts.

(2) For purposes of facilitating accident investigations, search and rescue units shall, where practicable, be accompanied by persons qualified in the conduct of aircraft accident and incident investigations.

(3) The Company shall ensure that each search and rescue unit

(a) is cognisant of all parts of the plans of operation that are necessary for the effective conduct of its duties;

(b) keeps the centre informed of its preparedness;

(c) maintains the required number of search and rescue facilities; and

(d) maintains adequate supplies of rations, medical stores, signalling devices and other survival and rescue equipment.

Search and
rescue
equipment

11. (1) The Company shall ensure that—

(a) search and rescue units are provided with equipment for promptly locating and providing adequate assistance at the scene of an accident;

(b) search and rescue units have rapid and reliable two way communication with other search and rescue providers engaged in the same operation;

(c) a search and rescue aircraft is equipped to communicate on aeronautical distress and on scene frequencies and other frequencies that may be determined by the Authority; and

(d) a search and rescue aircraft is equipped with a device for homing on distress frequencies.

(2) Except where it is known that there is no need to provide supplies to survivors by air, at least one of the aircrafts participating in a search and rescue operation, shall carry droppable survival equipment.

(3) The Company shall ensure that appropriate survival equipment suitably packed for use by an aircraft is located at an aerodrome.

12. (1) The Company shall ensure that the search and rescue operations by the centre are coordinated with the search and rescue operations of neighbouring States.

Cooperation
with
neighbouring
State

(2) The Company 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.

(3) The centre may, with the approval of the Authority

(a) request from other search and rescue centres assistance, including aircraft, vessels, persons or equipment, where necessary;

(b) grant any permission that is necessary for the entry of an aircraft, vessel, person or equipment into the territory referred to in paragraph (a); and

(c) make necessary arrangements, with appropriate customs, immigration or other authorities, to expedite entry of an aircraft, vessel, person or equipment into the territory, under sub-regulation (3).

(4) The Company shall, when requested, provide assistance to other neighbouring search and rescue centres, and shall coordinate any assistance required by those centres.

(5) The Company shall make arrangements for

(a) joint training exercises involving its search and rescue units with those of other States and operators, in order to promote search and rescue efficiency; and

(b) periodic liaison visits by its staff and sub centres to search and rescue centres of neighbouring States.

Search and rescue agreement	13. (1) The Company shall, in collaboration with the Authority and relevant government authorities, enter into agreements with neighbouring States to strengthen search and rescue cooperation and coordination. (2) Subject to sub-regulation (1), the Company shall, in the agreements under sub-regulation (1), provide for the expeditious entry of search and rescue units into neighbouring States with the least possible formalities.
Entry into Republic by state parties	14. (1) The Director General shall, in coordination with relevant government authorities, and subject to conditions that may be prescribed by those authorities, permit search and rescue units of neighbouring States immediate entry into the Republic, for the purposes of conducting search and rescue operations. (2) A contracting State which seeks the entry of its search and rescue units into the Republic for search and rescue purposes, shall transmit a request to the Director General, giving full details of the proposed search and rescue mission. (3) Subject to sub regulation (2), the Director General shall (a) acknowledge the receipt of a request from a Contracting State for the purposes specified insub- regulation (2); and (b) in collaboration with relevant Government authorities indicate the conditions, if any, under which the proposed search and rescue mission may be undertaken.
Cooperation with other service providers	15. (1) A local service provider, who is not part of the Organisation, shall cooperate with the centre in providing emergency services and extend any possible assistance to survivors of an aircraft accident. (2) The centre shall ensure that a search and rescue service provider cooperates with agencies responsible for investigating accidents and those responsible for the care of survivors of an aircraft accident.
Dissemination of information	16. (1) The Company shall, in collaboration with the Authority (a) designate and publish in the Zambia Aeronautical Information Publication, a search and rescue point of contact for the receipt of COSPAS SARSAT distress data; (b) publish in the Zambia Aeronautical Information Publication, arrangements and information necessary for the entry into the Republic of search and rescue units of other states parties for the purpose of search and rescue; and

(c) make available, through the centre or other agencies, information on search and rescue plans of operation.

(2) The Director General shall, to the extent desirable and practicable, disseminate information to the general public and emergency response authorities on the actions to be taken where there is reason to believe that an aircraft's emergency situation gives rise to public concern or requires a general emergency response.

17. (1) The centre shall make readily available the following up to date information, relating to its search and rescue region, search and rescue units, search and rescue sub centres and alerting posts and air traffic services units:

Preparatory
information

(a) means of communication that may be used in search and rescue operations;

(b) addresses and telephone numbers of all operators, or their designated representatives, engaged in operations in the region; and

(c) other public and private resources, including medical and transportation facilities that are likely to be useful in search and rescue operations.

(2) The centre shall provide search and rescue service providers with information relating to—

(a) locations, call signs, hours of watch, and frequencies of radio stations likely to be employed in support of search and rescue operations;

(b) 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 may be mistaken for unallocated or unreported wreckage, particularly if viewed from the air.

(3) The centre shall provide relevant information on the availability of search and rescue units within a search and rescue region for publication in the Zambia Aeronautical Information Publication.

18. (1) The centre shall prepare a detailed search and rescue plan of operation for the conduct of search and rescue operations within the search and rescue region.

Search and
rescue plan
of operation

(2) The search and rescue plans of operation under sub-regulation (1) shall be developed jointly with representatives of the operators and other public or private search and rescue service providers that may assist in, or benefit from providing search and rescue services.

(3) A search and rescue plan of operation shall---

(a) specify arrangements, to the extent possible, for the service and refuelling of an aircraft, vessel and vehicle employed in a search and rescue operation, including those made available by other Contracting States; and

(b) contain details regarding actions to be taken by a person engaged in a search and rescue operation, including the

(i) manner in which search and rescue operations are to be conducted in the search and rescue region;

(ii) use of available communication systems and facilities;

(iii) actions to be taken jointly with other search and rescue centres;

(iv) method of alerting en route aircraft;

(v) function and prerogative of a person assigned to search and rescue;

(vi) possible redeployment of equipment that may be necessitated by meteorological or other conditions;

(vii) method for obtaining essential information relevant to a search and rescue operation, such as weather reports and forecasts and appropriate notices to airmen;

(viii) methods for obtaining, from other search and rescue centres, assistance, persons or equipment that may be required for a search and rescue operation;

(ix) method for assisting distressed aircraft being compelled to ditch to rendezvous with surface craft;

(x) method for assisting search and rescue or another aircraft to proceed to an aircraft in distress; and

(xi) cooperative actions to be carried out in collaboration with air traffic services units and other relevant authorities, for the purpose of assisting aircraft known or believed to be subject to unlawful interference.

(5) The centre shall ensure that the search and rescue plans of operation are integrated with airport emergency plans and emergency response plans developed by air operators.

(6) The Company shall develop, and keep updated, a search and rescue manual containing the necessary procedures for a search and rescue operation and related matters in order to facilitate the implementation of the search and rescue plan.

19. The Company shall, to achieve and maintain maximum efficiency in search and rescue, provide for regular training of its search and rescue personnel.

Training and
exercises

20. The Authority shall ensure that a wreckage resulting from an aircraft accident within the Republic is removed, obliterated or charted following completion of an accident investigation.

Wreckage

21. (1) Where a person believes that an aircraft is in an emergency phase, that person shall immediately give a responsible air traffic control unit or the centre all available information.

Information
concerning
emergencies

(2) The centre shall, immediately on receipt of information under sub-regulation (1), evaluate that information and assess the extent of the operation required.

(3) The centre shall, where information concerning an aircraft in emergency phase is received from a source other than an air traffic service unit, determine the procedures applicable to the emergency phase situation.

22. (1) The centre shall comply with the following guidelines in the following order during an emergency phase:

Procedure
during
emergency
phase

(a) on the occurrence of an uncertainty phase, cooperate with an air traffic service unit and other appropriate agencies and service providers to ensure that incoming reports are speedily evaluated;

(b) on the occurrence of an alert phase, immediately alert the search and rescue units and initiate any necessary action; and

(c) on the occurrence of a distress phase, the centre shall immediately initiate action by a search and rescue unit in accordance with the appropriate plan of operation to-

(i) ascertain the position of the aircraft, estimate the degree of uncertainty of the position and, on the basis of the information and the circumstances, determine the extent of the area to be searched;

(ii) where possible, notify and keep the operator informed of the developments;

(iii) notify other search and rescue centres, likely to assist and be required in the operation;

- (iv) notify the associated air traffic services unit, when the information on the emergency has been received from another source;
- (v) request at an early stage aircraft, vessels and other services not specifically included in the appropriate plan of operation to—
 - (A) maintain a listening watch for transmissions from the aircraft in distress, survival radio equipment or emergency locator transmitter on a frequency of 121.5 mega herztz; and
 - (B) assist the aircraft in distress and inform the centre of any developments;
- (vi) from the information available, draw up a detailed plan of action for the conduct of the search and rescue operation required and communicate that plan for the guidance of the authorities immediately directing the search and rescue operation;
- (vii) amend the detailed plan of action, where necessary;
- (viii) notify the appropriate accident investigation authorities; and
- (ix) notify the Authority of the registration of the aircraft.

(2) Where an emergency phase is declared in respect of an aircraft whose position is unknown and is likely to be in one of two or more search and rescue regions, the following shall apply:

- (a) when the centre is notified of the existence of an emergency phase and is unaware of other search and rescue centres taking appropriate action, it shall—
 - (i) assume responsibility for initiating suitable action in accordance with these Regulations; and
 - (ii) confer with neighbouring search and rescue centres with the objective of designating one search and rescue centre to assume immediate responsibility; and
- (b) unless otherwise decided by common agreement of the search and rescue centres concerned, the centre to coordinate the search and rescue operation shall be the centre responsible for—

- (i) the area in which the aircraft last reported its position;
- (ii) the area to which the aircraft was proceeding when its last reported position was on the line separating two search and rescue regions;
- (iii) the area to which the aircraft was destined where it was not equipped with suitable two way radio communication or not under obligation to maintain radio communication; or
- (iv) the area in which the distress site is located as identified by the COSPAS SARSAT system

(3) The centre with overall coordination responsibility shall, after declaration of a distress phase, inform all search and rescue centres likely to be involved in the operation, of all the circumstances of the emergency and subsequent developments.

(4) A centre that becomes aware of any information pertaining to an emergency phase shall inform the centre that has overall responsibility of the search and rescue operation.

(5) A centre responsible for search and rescue action shall, where applicable, forward to the air traffic services unit serving the flight information area in which the aircraft is operating, information of the search and rescue operations initiated to be passed on to the aircraft.

23. Where the conduct of operations over the entire search and rescue region is the responsibility of more than one Contracting State, each State shall take action in accordance with the relevant plan of operations when so requested by the centre of the region.

Procedures where responsibility for operations extends to two or more centres

24. A relevant agency that directs the conduct of a search and rescue operations or any part of that operation shall

Procedures for relevant agency

- (a) give instructions to the units under the authority's direction and inform the centre of those instructions; and
- (b) keep the centre informed of any developments.

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

Procedures for termination and suspension of search and rescue operations

(2) A centre shall be responsible for determining when to discontinue a search and rescue operation.

Procedures
at scene of
accident

(3) Where a search and rescue operation is successful or where a centre considers, or is informed, that an emergency no longer exists, the emergency phase shall be cancelled, the search and rescue operations shall be terminated and any relevant agency, search and rescue facility or search and rescue service that is activated or notified, shall be promptly informed.

(4) If a search and rescue operation becomes impracticable and a centre concludes that there might still be survivors, the centre shall suspend on scene activities pending further developments and shall promptly inform any relevant agency, search and rescue facility or search and rescue service which is activated or notified.

(5) Any relevant information subsequently received for purposes of sub regulation (4) shall be evaluated and search and rescue operations resumed when justified and practicable.

26. (1) Where multiple search and rescue facilities are engaged in a search and rescue operation, the centre or rescue sub centre shall designate one or more units to coordinate all operations to help ensure the safety and effectiveness of air and surface operations, taking into account the search and rescue facility capabilities and operational requirements.

(2) Where a pilot in command observes that another aircraft is in distress, the pilot shall, if possible and unless considered unreasonable or unnecessary

(a) keep the aircraft in distress in sight until compelled to leave the scene or advised by the centre that it is no longer necessary;

(b) determine the position of the aircraft in distress;

(c) report to the centre or air traffic services unit the following information where possible:

(i) the type of aircraft in distress, its identification and condition;

(ii) the position of the aircraft in distress, expressed in geographical or grid coordinates or in distance and true bearing from a distinctive landmark or from a radio navigation aid;

(iii) the time of observation expressed in hours and minutes;

(iv) number of persons observed;

(v) whether persons have been seen to abandon the aircraft in distress;

(vi) 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 centre or the air traffic services unit.

(3) If the first aircraft to arrive at the scene of an accident is not a search and rescue aircraft the pilot-in-command's aircraft shall take charge of the on scene activities until the first search and rescue aircraft arrives at the scene of the accident and if that aircraft is unable to establish communication with the centre or air traffic services unit, it shall, by mutual agreement hand over to an aircraft capable of establishing and maintaining that communication until the arrival of the first search and rescue aircraft.

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

(5) Where a ground signal has been displayed, the aircraft shall indicate whether the signal has been understood or not by the means described or, if this is not practicable, by making the appropriate visual signal.

(6) Where it is necessary for an aircraft to direct a surface craft to the place where an aircraft is in distress, the aircraft shall do so by transmitting precise instructions by any means at its disposal and if no radio communication can be established, the aircraft shall make the appropriate visual signal.

27. (1) Where a distress transmission is intercepted by a pilot in command, the pilot shall, if feasible—

- (a) acknowledge the distress transmission;
- (b) record the position of the aircraft in distress if given;
- (c) take a bearing on the transmission;
- (d) inform the centre or air traffic services unit of the distress transmission, giving all available information; and
- (e) while awaiting instructions, proceed to the position given in the transmission.

Procedures
for pilot-in-
command
intercepting
distress
transmission

28. (1) The air to surface and surface to air visual signals described in the Schedule shall, when used, have the meaning indicated and be used only for the purpose indicated and no other signals likely to be confused with them shall be used.

Search and
rescue
signals

	(2) A pilot in command on observing any of the signals, shall take action that may be required by the interpretation of the signal given.
Maintenance of records, appraisals and information sharing	29. (1) The Company shall keep a record of the operations of the Organisation. (2) The Centre shall prepare appraisals of actual search and rescue operations in the region.
Requisition of aircraft or vessel	30. (1) Subject to sub-regulation (2), the Authority may for purposes of any aeronautical search and rescue operation, request the assistance of a (a) civil aircraft or vessel; (b) military aircraft or vessel; or (c) holder of a Zambian aircraft flight crew licence or the owner of a vessel to assist in the operation. (2) The Authority shall only request for the assistance under sub-regulation (1), where— (a) human life is in immediate and grave danger; or (b) there are no other means available to conduct the operation.
Recovery of certain expenses	31. (1) The Director General may, where any search and rescue operation is undertaken in connection with an occurrence caused by the unlawful act or omission of any person, recover from that person the whole or any portion of the expenses incurred in connection with that operation. (2) The Authority may, after having recovered the expenses under sub regulation (1), compensate any person who has incurred loss or damage as a result of the operation. (3) Subject to sub regulations (1) and (2) and any other relevant written law, the Authority shall determine the expenses to be recovered depending on the nature of the unlawful act or omission.
Records	32. The Company shall retain all data relating to each search and rescue operation undertaken by the Company in an orderly and easily accessed manner for a period of at least seven years.
Offence	33. (1) A person who contravenes the provisions of these Regulations commits an offence and is liable on conviction, to fine not exceeding two hundred thousand penalty units or to imprisonment for a term not exceeding two years, or to both. (2) A person who becomes aware of a violation of any regulation shall without delay report it to the Authority.

(3) The Authority shall, on being notified of a violation, determine the nature and type of investigation and enforcement action to be taken in accordance with the Act.

SCHEDULE

(Regulation 28)

SEARCH AND RESCUE SIGNALS

1. Signals with surface craft

(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, but not lower than 500 ft above ground level -
 - (i) rocking the wings; or
 - (ii) opening and closing the throttle; or
 - (iii) changing the propeller pitch due to high noise level on board surface craft, the sound signals in (i) and (ii) may be less effective than the visual signal in (i) and are regarded as alternative means of attracting attention; and
- (c) heading in the direction in which the surface craft is to be directed.

(2) Repetition of such manoeuvres has the same meaning.

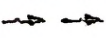
(3) The following manoeuvres by an aircraft means that the assistance of the surface craft to which the signal is directed is no longer required:

- (a) crossing the wake of the surface craft close astern at a low altitude and rocking the wings;
- (b) opening and closing the throttle;
- (c) changing the propeller pitch; or
- (d) the changing of heading to follow the aircraft.

2. 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	↑

3. Ground air visual signal code for use by rescue units.

No.	Message	Code Symbol
1.	Operation complete	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

4. 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.

5. Air to ground signals

(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—
 - (i) flashing on and off twice the aircraft's landing lights;
 - or
 - (ii) if not so equipped, by switching on and off twice its navigation lights.

(2) Lack of the above signal indicates that the ground signal is not understood.

M. L. KAFWAYA,
Minister of Communications and Transport

LUSAKA
25th July, 2020
[MCT.103/4/5]

