

YCAR PART VIII

Subpart 8

SEARCH AND RESCUE SERVICE REGULATIONS

UNCONTROLLED COPY WHEN DOWNLOADED

Check with [CAMA Website](#) to verify current version before using

FOREWORD

1. The Civil Aviation and Met. Authority (hereinafter “Authority”).
2. This Requirement shall come in force from June 2013
3. Future amendments of Subpart 8 will be harmonized with amendments to ICAO Annexes in a timely manner.
4. Definitions and abbreviations of terms used in Subparts 1 and 8 shall always be interpreted as per the applicable international standards.

LIST OF EFFECTIVE PAGES

Page	Issue	Rev.	Date		Page	Issue	Rev.	Date
I	01	00	June 2013		10	01	00	June 2013
Ii	01	00	June 2013		11	01	00	June 2013
Iii	01	00	June 2013		12	01	00	June 2013
Iv	01	00	June 2013		13	01	00	June 2013
V	01	00	June 2013		14	01	00	June 2013
Vi	01	00	June 2013		15	01	00	June 2013
1	01	00	June 2013		16	01	00	June 2013
2	01	00	June 2013		17	01	00	June 2013
3	01	00	June 2013		18	01	00	June 2013
4	01	00	June 2013					
5	01	00	June 2013					
6	01	00	June 2013					
7	01	00	June 2013					
8	01	00	June 2013					
9	01	00	June 2013					

AMENDMENTS HISTORY

Amendment	Source(s)	Subject(s)	Issue Date
Issue 01 Rev. 00	Based on consultation which commenced in 2013	New regulations in compliance with Annex 12	June 2013

Table of Contents

FOREWORD	2
LIST OF EFFECTIVE PAGES.....	3
RECORD OF AMENDMENTS.....	4
AMENDMENTS HISTORY	5
SUBPART 8 — GENERAL PROVISIONS	8
YCAR 8.1 Scope	8
YCAR 8.2 Applicability	8
YCAR 8.3 General Obligations Of Search And Rescue Providers.....	9
YCAR 8.4 Safety Management System.....	9
YCAR 8.5 Reporting System.....	9
YCAR 8.6 Resources And Facilities	10
YCAR 8.7 Document Library	10
YCAR 8.8 Competence And Training	11
YCAR 8.9 Communications.....	11
YCAR 8.10 Search And Rescue Units And Facilities.....	12
YCAR 8.12 Preparatory Information	14
YCAR 8.13 Plans Of Operation	15
YCAR 8.14 SAR Units	16
YCAR 8.15 Information Concerning Emergencies.....	16
YCAR 8.16 Procedures For RCC During Emergency Phases	16
YCAR 8.17 Initiation Of Search And Rescue Operations In Respect Of An Aircraft	17
Whose Position Is Unknown	17
YCAR 8.18 Termination And Suspension Of Operations.....	18
YCAR 8.19 Procedures At The Scene Of An Emergency.....	18
YCAR 8.20 Passing Of Information To Aircraft In Respect Of Which An Emergency	19
Phase Has Been Declared.....	19
YCAR 8.21 Procedures For Authorities In The Field.....	19
YCAR 8.22 Recordkeeping.....	19
YCAR 8.23 Procedures for a pilot-in-command intercepting a distress transmission.....	20
YCAR 8.24 Search And Rescue Signals	20
APPENDIX 1	21

APPENDIX 2 22

SUBPART 8 — GENERAL PROVISIONS

YCAR 8.1 Scope

- (a) This Requirement establishes general provisions governing the rights and obligations of civil aviation search and rescue service providers and other parties planning for or participating in civil aviation search and rescue operations.
- (b) Definitions, abbreviations and acronyms are contained in YCAR Part VIII, Subpart 1.

YCAR 8.2 Applicability

- (a) The CAMA is required, under article (7/h) of the Decree No.444/2000, to implement international agreements in the field of civil aviation search and rescue and by article (7/b) of the same Decree, to promulgate policy for civil aviation and propose laws and regulations.
- (b) Civil Aviation Regulations Part VIII, Subpart 8 is issued by the Civil Aviation and Met. Authority in pursuit of its obligations to ensure enforcement of accepted international regulations and standards within and by organisations providing civil aviation search and rescue services within the Sana'a SRR as designated by the Authority.
- (c) The objective of search and rescue services shall be to contribute towards the safety, regularity and efficiency of air navigation.
- (d) This objective shall be achieved by providing all related aviation organisations with the search and rescue information necessary for the performance of their respective functions.
- (e) The search and rescue service provider shall determine the type and degree of search and rescue services to be provided within the Sana'a SRR in accordance with:
1. Annex 12 – *Search and Rescue* to the Convention on International Civil Aviation;
 2. The International Aeronautical and Maritime Search and Rescue (IAMSAR) manual (ICAO Doc.9731-AN/9580); and
 3. ICAO Basic Air Navigation Plan – Middle East and Facilities and Services Implementation Document (Doc 9708).
- (f) The search and rescue service provider may arrange for services to be provided on its behalf. (g) The identity of the search and rescue service provider and the services to be provided shall be included in the Republic of Yemen AIP.
- (h) No person shall provide search and rescue services except under the authority of, and in accordance with the provisions of this Rule Subpart.
- (i) In providing assistance to aircraft in distress and to survivors of aircraft accidents, SAR service provider shall do so regardless of the nationality or status of such persons or the circumstances in which such persons are found.

YCAR 8.3 General Obligations Of Search And Rescue Providers

(a) The SAR service provider shall:

1. Use established processes to plan, develop, conduct and improve civil aviation search and rescue operations in accordance with the provisions contained in Annex 12 – *Search and Rescue* to the Convention on International Civil Aviation and relevant and appropriate guidance material contained in the IAMSAR manual;

2. Prepare an annual report that contains:

- i. an assessment of prevailing risks to both civil aviation operations and SAR operations in the Republic of Yemen;
- ii. an evaluation of the integrity and coverage of its services;
- iii. an identification of any shortcomings and deficiencies;
- iv. a formal notification to the Authority of proposed changes that effectively respond to its findings on such assessment, evaluation and identification.

YCAR 8.4 Safety Management System

(a) The SAR service provider shall implement a safety management system which is acceptable to the Authority and which, as a minimum:

1. Identifies safety hazards;
2. Ensures the implementation of remedial action necessary to maintain agreed safety performance;
3. Provides for continuous monitoring and regular assessment of the safety performance; and
4. Is subject to regular review which has as its objective the improvement in the overall performance of the safety management system.

(b) The safety management system shall clearly define to the satisfaction of the Authority the safety accountability of the senior personnel and staff of The SAR service provider.

YCAR 8.5 Reporting System

(a) The SAR service provider shall establish a reporting system covering documentation of occurrences that occur during the conduct of SAR operations.

(b) The SAR service provider shall notify any such occurrences to the Authority within three days containing explanation of the event and specifying any proposed mitigation measures.

Note - For the purposes of this Subpart, a SAR Occurrence is defined as „Any event associated with the policy, practices, procedures, training, coordination or conduct of SAR operations that could create a hazard to the safety of search and rescue operations or seriously compromise the provision of search and rescue services.“

YCAR 8.6 Resources And Facilities

(a) The SAR service provider shall ensure the availability of sufficient accommodation, equipment, and resources to coordinate not less than two civil aviation search and rescue operations at any one time.

(b) The SAR service provider shall establish a contingency plan that includes completed arrangements to secure access to alternative accommodation and resources in order to ensure the ongoing provision of civil aviation search and rescue services in the event of primary accommodation or equipment becoming unavailable for any reason.

(c) The designated SAR service provider shall ensure the provision of ~~an~~ RCC which must be staffed on a 24-hour basis by a complement of personnel who are trained, qualified, proficient and certified to levels of competence relevant to the functions and responsibilities appropriate to a civil aviation SAR service in the Republic of Yemen and acceptable to the Authority.

(d) The SAR service provider shall ensure that:

1. Provision is made for a 406 MHz ELT register that is updated whenever necessary;
2. Registered ELT information is immediately available to RCC staff and other authorized SAR parties.

YCAR 8.7 Document Library

(a) The SAR service provider shall establish and maintain a document library that is readily accessible by its operational and management staff that contains up to date editions of relevant documentation that is immediately accessible by its operational and management staff at all times.

(b) The library shall at all times have available for reference current editions of:

1. Annex 12;
2. IAMSAR Manual;
3. Handbook on Distress Alert Messages for Rescue Coordination Centres (RCCs);
4. Search and Rescue Points of Contact (SPOCs);
5. IMO Ship Security Competent Authorities (Cospas-Sarsat Document Reference G.007);
6. International Code of Signals (IMO Sales Numbers IA994E); and
7. Other technical documentation relevant to the effective delivery of SAR services in the Republic of Yemen.

(c) The SAR service provider shall produce, maintain and update master copies of all manuals required for the safe, effective and timely provision of civil aviation SAR services in the Republic of Yemen and provide copies, on request, to the Authority.

YCAR 8.8 Competence And Training

(a) The SAR provider shall ensure that initial and recurrent training of all RCC and, as appropriate, RSC operational and immediate supervisory staff is conducted to a syllabus that:

1. Includes the content of IAMSAR Manual;
2. Pays due regard to:
 - i. aviation law;
 - ii. rules of the air;
 - iii. air traffic control;
 - iv. aeronautical charts;
 - v. aeronautical information;
 - vi. aircraft accident and incident investigation;
 - vii. aircraft performance;
 - viii. airspace management;
 - ix. aeronautical communications including proficiency in the English language;
 - x. aeronautical meteorology;
 - xi. aircraft security; and
3. Is acceptable to the Authority.

(b) The SAR service provider shall ensure that RCC and, as appropriate, RSC staff are given regular proficiency training and exercises to maintain skills, knowledge and attitudes as appropriate to the provision of civil aviation SAR services to domestic and international civil aviation operations. The training and exercises shall be acceptable to the Authority.

YCAR 8.9 Communications

(a) The SAR service provider designated pursuant to these regulations to operate an RCC shall ensure that the RCC shall be capable of rapid and reliable two-way communication with:

1. Associated air traffic services;
2. Associated rescue sub-centres;
3. Appropriate direction-finding and position-fixing stations in the Sana'a SRR;
4. The appropriate operations centres of SRUs in the Sana'a SRR;
5. The MRCCs in the Sana'a SRR and all ARCCs, MRCCs and JRCCs in adjacent SRRs;

6. Designated meteorological offices or meteorological watch offices in the Sana'a SRR;
 7. All designated SRUs;
 8. All designated alerting posts;
 9. associated police force ;and
 10. The Cospas-Sarsat Mission Control Centre servicing the Sana'a SRR, as appropriate.
 11. Associated aviation and maritime security and surveillance centres in the Sana'a SRR.
- (b) The SAR service provider designated pursuant to these regulations to operate an RSC within the Sana'a SRR shall ensure that the RSC has means of rapid and reliable two-way communication with:
1. The RCC;
 2. Associated air traffic services;
 3. Associated police forces;
 4. Adjacent rescue sub-centres;
 5. Associated meteorological office or meteorological watch office;
 6. Appropriate designated SRUs; and
 7. Appropriate designated alerting posts; and
 8. Associated aviation and maritime security and surveillance centres in the Sana'a SRR.

YCAR 8.10 Search And Rescue Units And Facilities

(a) The RCC shall:

1. Designate and make formal arrangements for cooperative and appropriate use of public and private SAR Units that are suitably located, equipped and crewed for search and rescue operations throughout the Sana'a SRR;
2. Designate and make formal arrangements for cooperative and appropriate use of craft, vehicles and personnel that do not qualify as SAR Units but which may be able to effectively participate in SAR operations; and
3. Maintain an accurate and complete database of SAR Units and other SAR facilities and resources within the Sana'a SRR and make arrangements for the timely advice to the RCC of any change in their readiness or capability.
4. Where separate aeronautical and maritime rescue coordination centres serve the same area, Authorities shall ensure the closest practicable coordination between the centres, and should facilitate consistency and cooperation between their aeronautical and maritime search and rescue services.

(b) The SAR service provider shall provide relevant information on the availability of SAR Units within the Sana'a SRR to the Authority for publication in the AIP.

(c) The SAR service provider shall ensure the availability of appropriately packed, droppable life support equipment that is securely positioned and maintained at strategic locations throughout the Sana'a SRR and readily available for rapid loading onto SAR Units.

(d) ~~A~~ The SAR service provider shall ensure the availability of trained personnel and necessary personal safety equipment at strategic locations within the Sana'a SRR for the airborne and surface delivery of life support equipment to accident survivors by SAR Units.

YCAR 8.11 Collaboration And Cooperation With Other Services

(a) The SAR service provider shall, under the direction of the Authority, seek to establish formal, documented agreements of cooperation with SAR service providers of all contiguous States with a view to:

1. Strengthening SAR cooperation and coordination;
2. Specifying the conditions for entry of each others' SRUs into their respective territories; and
3. Expediting entry of such SRUs.

(b) The SAR service provider shall include in agreements of cooperation with SAR service providers of contiguous States information concerning its SAR services and capabilities including details of SAR Units able to assist in the conduct of SAR operations in contiguous SRRs, and shall
 — immediately acknowledge the receipt of such a request, and
 — as soon as possible, indicate the conditions, if any, under which the projected mission may be undertaken.

(c) The SAR service provider shall publish and disseminate all information necessary for the entry of SRUs of other States into its territory or, alternatively, include this information in formal SAR agreements.

(d) The SAR service provider shall coordinate SAR operations that are proximate to contiguous SRRs with SAR providers of those States.

(e) The SAR service provider shall encourage, to the fullest extent possible, operators of all aircraft, vessels and appropriate local services and facilities which do not form part of the SAR organization to cooperate fully, as their capacities allow, in the planning and conduct of SAR operations.

(f) The SAR service provider shall establish formal, documented agreements of cooperation, that are acceptable to the Authority, with State air traffic service providers that clearly define respective responsibilities in providing emergency response services to civil aircraft including the exchange of flight plan and operational data, communication services, temporary attribution of staff and other specialised services as may be deemed necessary from time to time.

(g) The SAR service provider shall cooperate, as far as practicable, with all properly accredited authorities and entities investigating incidents and accidents.

(h) The SAR service provider shall designate a SAR Point of Contact for receipt of crash alert and location messages and associated data from authorities and users of the Cospas-Sarsat system.

(i) The SAR service provider shall recommend and prepare documentation for declaration of a Restricted Area by the responsible ATS authority whenever deemed necessary for safe and efficient SAR operations.

(j) The SAR service provider shall seek to arrange joint training exercises involving their SRUs and those of other States.

(k) The SAR service provider shall seek to arrange:

- 1.Periodic liaison visits for RCC and RSC staff to cooperating entities within the Republic of Yemen and ATS and SAR service providers in contiguous States;
- 2.Attendance at local, regional and international meetings of SAR authorities.

(l) The SAR service provider shall seek to encourage the closest possible cooperation and coordination with relevant aeronautical, maritime and military emergency response authorities.

(M) The SAR service provider should authorize its rescue coordination centres to provide, when requested, assistance to other rescue coordination centres, including assistance in the form of aircraft, vessels, persons or equipment.

YCAR 8.12 Preparatory Information

(a) The SAR service provider shall ensure that the RCC always has immediate access to comprehensive, accurate and up-to-date data concerning the following assets and facilities in the Sana'a SRR:

- 1.RSCs;
- 2.SRUs;
- 3.Locations where supplies of droppable emergency and survival equipment are stored;
- 4.Alerting posts;
- 5.ATS Units;
- 6.Means of communication that can be used in SAR operations;
- 7.Addresses (electronic and postal) and telephone numbers of duly authorised operators' representatives; and
- 8.Any other public and private resources including medical and transportation facilities that are likely to be useful in SAR operations.

YCAR 8.13 Plans Of Operation

(a) The SAR service provider shall prepare detailed plans of operation for the safe and effective conduct of SAR operations within the Sana'a SRR.

(b) The plans of operation shall specify, as a minimum:

1. Structure of functional responsibilities including authority, delegation and lines of reporting;
2. Essential information methods;
3. Arrangements for the servicing and re-fuelling of aircraft, vessels and vehicles employed in SAR operations;
4. Arrangements for expeditious access to weather information and other operational information including NOTAM; and
5. Effective and rapid rescue.

(c) SAR plans of operation shall include details of actions to be taken with respect to:

1. Available communication systems and facilities;
2. Alerting en-route aircraft and ships at sea;
3. Duties and prerogatives of all participating personnel;
4. Possible redeployment of personnel and equipment that may be necessitated by meteorological;
5. Particular assistance appropriate to distressed aircraft confronted with the need to ditch, including rendezvous with surface craft;
6. In-flight diversion to and intercept and escort of aircraft in distress; and
7. Cooperative action to be taken in conjunction with ATS, security and other appropriate authorities to assist aircraft known or believed to be subject to unlawful interference or a bomb threat.

(d) The SAR service provider shall ensure that plans of operation are integrated with aerodrome emergency procedures to provide for optimal, coordinated response to aircraft emergencies that may arise in the vicinity of airports, including, for coastal aerodromes, areas of water.

(e) Search and rescue plans of operations should be developed jointly with representatives of the operators and other public or private services that may assist in providing search and rescue services or benefit from them, taking into account that the number of survivors could be large.

YCAR 8.14 SAR Units

- (a) The SAR service provider shall ensure that arrangements are made for:
- 1.the constant readiness of the required number of SAR units and facilities;
 - 2.adequate supplies of rations, medical provisions, signaling devices and other appropriate survival and rescue equipment.
- (b) The SAR provider shall ensure that each SRU:
- 1.Is cognizant of all parts of the plans of operations that are necessary for the effective conduct of its tasks;
 - 2.Keeps the RCC informed of its preparedness.

YCAR 8.15 Information Concerning Emergencies

- (a) Any authority or element of the SAR organization, having reason to believe that a civil aircraft is experiencing an emergency, shall immediately give all available, relevant information to the ARCC.
- (b) The SAR service provider, upon receipt of advice that a civil aircraft is experiencing a state of emergency, shall immediately evaluate such information and assess the extent of the measures to be taken.
- (c) The SAR service provider shall ensure that upon receiving advice of a civil aircraft experiencing an emergency from a source other than an ATS Unit, the RCC will determine to which emergency phase the situation corresponds and apply the procedures applicable to that phase.

YCAR 8.16 Procedures For RCC During Emergency Phases

- (a) Upon the declaration of an uncertainty phase, the RCC shall:
- 1.Cooperate closely with appropriate ATS Units;
 - 2.Acquire relevant data;
 - 3.Research the situation with respect to the subject aircraft, affected personnel and the environment, and
 - 4.Evaluate the circumstance with the purpose of making preparatory arrangements for management of any developing emergency.
- (b) Upon the declaration of an alert phase, the RCC shall:
- 1.Immediately alert appropriate personnel, suitable SRUs and SAR facilities;
 - 2.Continue to acquire relevant data;
 - 3.Continue to research the situation with respect to the subject aircraft, affected Personnel and the environment; and

4. Develop an action plan in the context of the appropriate plan of operation.

(c) Upon the declaration of a distress phase, the RCC shall:

1. Immediately activate the action plan including use of SRUs and SAR facilities, as appropriate;

2. Determine the last known position of the aircraft, assess its subsequent trajectory, and, in consideration of all intelligence, determine the area to be searched, or monitor the aircraft's flight movement and take appropriate action;

3. Notify the operator when possible and keep the operator informed of developments;

4. Notify other RCCs whose help might be required or which may be affected by the operation;

5. Notify the associated ATS Unit when emergency information is received from another source;

6. At an early stage, request aircraft, vessels, vehicles and other appropriate facilities not specifically included in the plan of operation and able to assist to:

i. Maintain a listening watch for transmissions from the aircraft in distress, survival equipment or ELT;

ii. Assist the aircraft in distress however practicable;

iii. Inform the RCC of any developments; and

7. From the information available, draw up a detailed action plan for the conduct of the search and/or rescue operation required and communicate such plan for the guidance of the authorities immediately directing the conduct of the operation;

8. Amend the action plan as necessary in the light of evolving circumstances;

9. Notify the appropriate accident investigation authorities; and

10. Notify the State of registry of the aircraft.

YCAR 8.17 Initiation Of Search And Rescue Operations In Respect Of An Aircraft Whose Position Is Unknown

(a) In the event that an emergency phase is declared in respect of an aircraft whose position is unknown and it is uncertain whether the aircraft is located in the Sana'a SRR or another SRR, the following shall apply:

1. When the Sana'a RCC is notified of a civil aircraft emergency and is unaware of other RCCs taking responsive action, the Sana'a RCC shall take responsibility for initiating suitable procedures and shall confer with contiguous RCCs to agree upon a single RCC that will assume responsibility forthwith;

2. Unless otherwise decided by common agreement of the RCCs concerned, the RCC to coordinate SAR action shall be the centre responsible for:

- i. the SRR in which the aircraft last reported its position; or
- ii. the SRR to which the aircraft was proceeding when its last reported position was on the border separating two SRRs; or
- iii. the SRR 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 SRR in which the distress site is located as identified by the Cospas-Sarsat system;

3. After declaration of the distress phase, the RCC with overall coordination responsibility shall inform all RCCs that may become involved in the operation of all the circumstances of the emergency and subsequent developments. Likewise, all RCCs becoming aware of any information pertaining to the emergency shall inform the RCC that has overall responsibility.

YCAR 8.18 Termination And Suspension Of Operations

- (a) SAR operations shall continue, when practicable, until all survivors are delivered to a place of safety or until all reasonable hope of rescuing survivors has passed.
- (b) The RCC shall normally be responsible for determining when to discontinue SAR operations
- (c) When a SAR operation has been successful or when the RCC considers that an emergency no longer exists, the emergency phase shall be cancelled, the SAR operation shall be terminated, and any authority, facility or service that has been activated or notified shall be promptly informed.
- (d) If, for any reason, a SAR operation becomes impracticable and the RCC concludes that there is still some prospect of survivors being found, the RCC shall temporarily suspend on-scene activities pending further developments and shall promptly inform any authority, facility or service which has been activated or notified. Relevant information that is subsequently received shall be evaluated and SAR operations resumed when deemed by the RCC to be justified and practicable.

YCAR 8.19 Procedures At The Scene Of An Emergency

- (a) When multiple facilities are engaged in SAR operations on-scene and the RCC designates an OSC or ACO to coordinate tactical activity on-scene to improve the safety and efficiency of operations, the OSC or ACO shall perform the assigned tasks in full account of the nature of the search target, the type, number and capacity of SAR Units and the environment and keep the RCC fully informed of actions taken and proposed.
- (b) When a pilot-in-command observes that either another aircraft or a surface craft is in distress, the pilot shall, if possible and unless considered unreasonable or unnecessary:
 - 1.Keep the craft in distress in sight until compelled to leave the scene or advised by the ATS Unit, on advice from the RCC, that it is no longer necessary;
 - 2.Determine the position of the craft in distress;
 - 3.As appropriate, report to the ATS Unit as much of the following information as possible:

- i. type of craft in distress, its identification and condition;
 - ii. position of the craft expressed in geographical coordinates or as a true bearing and distance from a distinctive landmark or ground radio navigation aid;
 - iii. time of observation expressed in hours and minutes in Coordinated Universal Time (UTC);
 - iv. number of persons observed;
 - v. whether the persons have been seen to abandon the craft in distress;
 - vi. apparent physical condition of the survivors;
 - vii. on-scene weather conditions;
 - viii. apparent best ground access route to the distress site; and
4. Act as instructed by the ATS Unit on advice from the RCC.

(c) If the first aircraft to reach the scene of an accident is not a search and rescue aircraft, it shall take charge of on-scene activities of all other aircraft subsequently arriving until the first search and rescue aircraft reaches the scene of the accident. If, in the meantime, such aircraft is unable to establish communication with the appropriate rescue coordination centre or air traffic services unit, it shall, by mutual agreement, hand over to an aircraft capable of establishing and maintaining such communications until the arrival of the first search and rescue aircraft.

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

YCAR 8.20 Passing Of Information To Aircraft In Respect Of Which An Emergency Phase Has Been Declared

(a) Where the RCC has responsibility for an SAR action within the Sana'a SRR, it shall forward to the Sana'a ACC information about the SAR action sufficient to enable communication of useful and relevant information to the subject aircraft and other aircraft operating in the Flight Information Region as deemed appropriate.

YCAR 8.21 Procedures For Authorities In The Field

(a) When cooperating authorities vested with functions and responsibilities under the national SAR plan engage in the field in SAR-related activity being coordinated by the RCC, they shall keep the RCC informed of instructions given to the units under their direction and relevant developments.

YCAR 8.22 Recordkeeping

(a) The SAR provider shall retain all data relating to every SAR action undertaken by the RCC in an orderly and easily accessed manner for a period of at least twelve calendar months.

YCAR 8.23 Procedures for a pilot-in-command intercepting a distress transmission

Whenever a distress transmission is intercepted by a pilot-in command of an aircraft, the pilot shall, if feasible:

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

YCAR 8.24 Search And Rescue Signals

(a) Upon observing any of the visual signals given in ICAO documents, aircraft shall take action as follows:

1. When a ground signal has been displayed, a searching aircraft shall indicate whether the signal has been understood by any of:

- i. two-way radio communication on equipment that is to hand,
- ii. communications equipment dropped from an aircraft; or
- iii. if these means are impracticable:

- A. during the hours of daylight, by rocking the aircraft's wings;
- B. during the hours of darkness, by flashing the aircraft's lights on and off; or
- C. if not so equipped, by switching its navigation lights on and off.

Lack of the above signals would indicate that the ground signal is not understood.

(b) When it is necessary for an aircraft to direct a surface craft to the place where an aircraft or surface craft is in distress, the aircraft shall do so by transmitting precise instructions by any means at its disposal. If no radio communication can be established, the aircraft shall:

- 1. Circle the surface craft at least once;
- 2. Cross the projected course of the surface craft close ahead at low altitude, and i. rock the wings; or ii. open and close the throttle; or iii. change the propeller pitch; and
- 3. Head in the direction in which the surface craft is to be directed.

Repetition of this procedure has the same meaning.

APPENDIX 1

Note: "SAR Unit" means "a mobile resource composed of trained personnel and provided with equipment suitable for the conduct of search and rescue operations." Providers of SAR Units are commonly different entities to providers of SAR coordination services. Recognizing that provisions relating to airborne carriage of equipment by SAR Units may not be of immediate relevance to a provider responsible for SAR coordination, (to which the greater number of this Subset of SAR regulations apply), and that they are, nonetheless, critically important for safe, timely and effective SAR operations, this sub-set of regulations is presented as a separate appendix to YCAR Part VIII, Subpart 8.

A.1. SAR Unit Equipment

- (a) Airborne SAR Units shall carry equipment for promptly locating the site of an accident, including direction finding equipment with a homing capability on 406MHz and aviation distress frequencies, and for providing adequate and timely assistance to survivors.
- (b) Airborne SAR Units shall be equipped to be able to communicate on the aeronautical and maritime distress and on-scene radio frequencies.
- (c) Airborne SAR Units designated for SAR operations over maritime areas shall be equipped to be able to communicate with vessels and to receive signals from Automatic Identification Systems carried by ships and lifeboats in accordance with the Global Maritime and Distress Safety System administered by the International Maritime Organization.
- (d) Airborne SAR Units designated for SAR operations over maritime areas shall carry a copy of the "International Code of Signals" (IMO Sales Numbers IA994 E) to assist in communication with ships.
- (e) Airborne SAR Unit shall be equipped to be able to communicate with other SAR Units and facilities engaged in SAR operations.
- (f) Airborne SAR Units shall carry Volume III, "Mobile Facilities", of the International Aeronautical and Maritime Search and Rescue manual.
- (g) Helicopter SAR Units designated for night time rescue operations shall be equipped with night vision enhancement devices.
- (h) Helicopter SAR Units shall be equipped with a rescue winch.
- (i) Helicopter SAR Units designated for night time rescue operations shall be equipped with four axis automated flight control systems to enable the conduct of winching procedures.

APPENDIX 2

SEARCH AND RESCUE SIGNALS

1. Signals with surface craft

1.1 The following manoeuvres performed in sequence by an aircraft mean that the aircraft wishes to direct a surface craft towards an aircraft or a surface craft in distress

- a) circling the surface craft at least once;
- b) crossing the projected course of the surface craft close ahead at low altitude and:
 - 1) rocking the wings; or
 - 2) opening and closing the throttle; or
 - 3) changing the propeller pitch.
- c) heading in the direction in which the surface craft is to be directed.

Repetition of such manoeuvres has the same meaning

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

- crossing the wake of the surface craft close astern at a low altitude and:
- 1) rocking the wings; or
 - 2) opening and closing the throttle; or
 - 3) changing the propeller pitch.

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>LL</u>
3	We have found only some personnel	++
4	We are not able to continue. Returning to base	XX
5	Have divided into two groups. Each proceeding in direction indicated	↔
6	Information received that aircraft is in this direction	→ →
7	Nothing found. Will continue to search	NN

2.3 Symbols shall be at least 2.5 metres (8 feet) long and shall be made as conspicuous as possible.

3. Air-to-ground signals

3.1 The following signals by aircraft mean that the ground signals have been understood:

a) during the hours of daylight:

— by rocking the aircraft's wings;

b) during the hours of darkness:

— flashing on and off twice the aircraft's landing lights

or, if not so equipped, by switching on and off twice

its navigation lights.

3.2 Lack of the above signal indicates that the ground signal is not understood.