## GEN 3.6 SEARCH AND RESCUE

#### 1. **RESPONSIBLE SERVICES**

- 1.1 The Aviation Search and Rescue Service in Malaysia is provided by the Department of Civil Aviation, in collaboration with the Royal Malaysian Air Force, Royal Malaysian Navy, Royal Malaysian Police, Malaysian Maritime Enforcement Agency, Fire and Rescue Department and Marine Department.
- 1.2 All correspondence concerning Search and Rescue (SAR) shall be addressed to:-

Department of Civil Aviation Level 4, Podium Block B, No. 27, Persiaran Perdana, Precinct 4, 62618 Putrajaya, Malaysia. (Attn: Search and Rescue Co-ordinator)

Telephone :	603 - 88714000
Telefax :	603 - 88810530
Telex :	MA 30128
AFS Address:	WMKKYAYS

- 1.3 When SAR operations involving civil aircraft are needed, the Rescue Co-ordination Centre (RCC) / Rescue Sub Centre (RSC) will be activated within the Kuala Lumpur or Kota Kinabalu Search and Rescue Regions (SRR), the boundaries (GEN 3.6 7)of which coincide with the Kuala Lumpur and Kota Kinabalu FIRs. The addresses and other details of the RCCs / RSCs are provided in GEN 3.6 3.
- 1.4 The SAR services in the two SRRs are provided in accordance with the provisions contained in ICAO Annex 12 Search and Rescue.

## 2. AREA OF RESPONSIBILITY

- 2.1 The Department of Civil Aviation Malaysia is responsible for the overall planning and co-ordination of Aeronautical SAR (A-SAR) Operations involving civil aircraft within the Kuala Lumpur and Kota Kinabalu FIRs with the exception of accident/incident that happened in / or involving :
  - a) Urban/Populated and built areas which requires emergency and disaster responses where National Security Council Directive No. 20 prevails.
  - b) Within 5 NM radius of an airport/aerodrome where the Local Airport Emergency Procedures prevails.
  - c) Military aircraft whereby the respective military authority procedures prevails.
  - d) Border areas of Malaysia/Indonesia whereby the procedures stipulated in the Border SAR Manual of Malaysia/Indonesia prevails.
- 2.2 Each SAR Agency engaged in SAR operations shall be responsible for the expenses incurred by its own SRUs deployed during the SAR Mission.
- 2.3 Kuala Lumpur ARCC has been designated as SAR Point of Contact (SPOC) for the receipt of COSPAS-SARSAT data.

## 3. TYPES OF SERVICE

3.1 Details of related rescue units are given on GEN 3.6 - 3 - Search and Rescue Units. The aeronautical, maritime and public telecommunications services are also available to the search and rescue organisation.

- 3.2 The Department of Civil Aviation maintains air droppable survival equipment for maritime situations at the following locations:
  - a) Butterworth.
  - b) Kuala Lumpur.
  - c) Kuantan.
  - d) Kuching.
  - e) Labuan.
- 3.3 The survival equipment includes inflatable life rafts, emergency rations, medical supplies, signalling equipment, radio equipment and Emergency Locator Transmitters (ELT). Each of the above location has sufficient equipment for the rescue of survivors of wide body aircraft.
- 3.4 Prompt and accurate information regarding all aircraft movement is essential in order to ensure the expeditious and efficient function of the search and rescue organisation. Pilots and aircraft operators are therefore requested to ensure that the appropriate organisations are immediately made aware of any circumstances that may require search and rescue operations to be initiated.

#### 4. SAR AGREEMENTS

- 4.1 SAR agreements have been concluded between the Department of Civil Aviation Malaysia and the SAR authorities of Brunei, Indonesia, Philippines, Singapore and Thailand (except India, Vietnam and Myanmar. Vietnam and Myanmar are covered by ASEAN Agreements for the facilitations of search for aircraft in distress and rescue of survivors from aircraft accidents). These agreements provide for mutual assistance in the conduct of the SAR operations within each other's Search and Rescue Regions and approval for entry of SAR aircraft, vessels and personnel of one state into the SRR of the other state, with prior permission, for the purpose of conducting SAR operations or rendering SAR assistance and for direct communications between the SAR authorities or agencies on all common SAR matters.
- 4.2 Request for entry of aircraft, equipment and personnel from other states to engage in search for aircraft in distress or to rescue survivors of aircraft accidents should be transmitted to the Rescue Co-ordination Centre. Instructions as to the conditions and control which will be exercised for the entry of such aircraft and /or personnel will be given by the Rescue Co-ordination Centre in accordance with the standing plan for the conduct of search and rescue in the area.

## 5. CONDITIONS OF AVAILABILITY

- 5.1 The SAR service and facilities in Malaysia are available without charge to neighbouring states on opportunity basis and upon request to the Kuala Lumpur or Kota Kinabalu Rescue Co-ordination Centre or Air Traffic Control Centre. GEN 3.6 3 indicates the facilities and the locations at which these can be made available. The facilities indicated at a location do not always denote that the facilities are based at that location but merely indicate that the facilities can be made available if the need arises.
- 5.2 The SAR service can be requested direct to the Watch Supervisors of the respective Air Traffic Control Centres (ATCC) as published in GEN 3.6 3

KUALA LUMPUR FIR			KOTA KINABALU FIR		
	RESCUE CO-ORDINA	١T		ES (RCC)	
Name	Kuala Lumpur RCC.		Name	Kota Kinabalu RCC.	
Postal Address	Department of Civil Aviation Sultan Abdul Aziz Shah Airport 47200 Subang Selangor Darul Ehsan Malaysia.		Postal Address	Department of Civil Aviation Kota Kinabalu International Airport 88618 Kota Kinabalu Sabah Malaysia.	
Telephone	603 - 78473573 (ATCC) 603 - 78465860 (RCC)		Telephone	6088 - 224404 (ATCC) 6088 - 224403 (RCC)	
Telefax .	603-78473572 (ATCC) 603-78466839 (RCC0		Telefax	6088 - 219170 ( ATCC ) 6088 - 219280 (RCC)	
AFS	WMFCZRZX (ATCC) WMKKYCYX (RCC)		AFS	WBKKZRZX (ATCC) WBKKYCYX (RCC)	
Telegraph	To be addressed to Air Traffic Control Centre, Sultan Abdul Aziz Shah Airport.		Telegraph	To be addressed to Air Traffic Control Centre, Kota Kinabalu International Airport.	
Search and Rescue Area	Kuala Lumpur FIR.		Search and Rescue Area	Kota Kinabalu FIR.	
Responsible Authority	Department of Civil Aviation Malaysia Sultan Abdul Aziz Shah Airport.		Responsible Authority	Department of Civil Aviation Kota Kinabalu International Airport.	
Remarks	Direct speech circuits between RCCs, RSCs and related ATS Units area avbl.		Remarks	Direct speech circuits between RCCs, RSCs and related ATS Units area avbl.	
	RESCUE SUB	C	ENTRES (RS	C)	
i. Name	Butterworth Rescue Sub-Centre.		i. Name	Labuan Rescue Sub-Centre.	
Postal Address	Royal Malaysian Air Force Butterworth Aerodrome 13050 Butterworth Malaysia.		Postal Address	Royal Malaysian Air Force Labuan Airport 87007 Labuan Sabah.	
Telephone Number	604 - 3232078		Telephone Number	Labuan 6087 - 412236	
Telefax No.	604 - 3232122		Telefax No.	6087 - 416560	
AFS	WMKBZGZX / WMKBYCYX	1	AFS	WBKLZGZX / WBKLYCYX	

ii. Name	Kuantan Rescue Sub-Centre.		ii. Name	Kuching Rescue Sub-Centre.	
Postal Address	Royal Malaysian Air Force Kuantan Aerodrome 26070 Kuantan Pahang Darul Makmur.	Address		Department of Civil Aviation Kuching International Airport 93728 Kuching Sarawak.	
Telephone	609 - 5381298		Telephone	6082 - 455572 (ATCC ) 6082 - 462497 (RSC)	
Telefax	609 - 5383472		Telefax	6082 - 571524/571526	
AFS	WMKDZGZX / WMKDYCYX		AFS	WBGGZGZX / WBGGYCYX	

Name	Location	Facilities			Remarks	
		Aircraft	Marinecraft	Other Units		
1	2		3		4	
			KUALA LUMI	PUR SRR		
Butterworth		MRG (1) ELR (1) HEL-H	RB RV	Para Rescue Team	<ul> <li>a. On deployment from :</li> <li>(1) Kuala Lumpur</li> <li>(2) Kuantan</li> <li>(3) Butterworth</li> <li>(4) Labuan</li> <li>(5) Kuching</li> </ul>	
Kota Bharu		MRG (1) ELR (1) HEL-H (2) (3)	RB		b. All Facilities at varying state or readiness and availability.	
Kuantan		MRG (1) ELR (1) HEL-H	RB RV	Para Rescue Team	-	
Subang		SRG MRG VLR ELR HEL-H HEL-M	RB RV	Para Rescue Team Jungle Rescue Team		
Johor Bahru		MRG (1) ELR (1) HEL-H (1) (2)	RB			
			KOTA KINAB	ALU SRR		
Kota Kinabalu		MRG (1) ELR (4) HEL-H (4)	RV RB		<ul> <li>a. On deployment from :</li> <li>(1) Kuala Lumpur</li> <li>(2) Kuantan</li> <li>(3) Butterworth</li> </ul>	
Kuching		MRG (1) ELR (4) HEL-H	RV RB	Para Rescue Team Jungle Rescue Team	<ul> <li>(4) Labuan</li> <li>(5) Kuching</li> <li>b. All Facilities at varying state of readiness and availability.</li> </ul>	
Labuan		MRG (1) ELR (1) HEL-H	RV RB	Para Rescue Team		
Miri		MRG (1) HEL-H (4)	RB		-	
Sandakan		MRG (1) HEL-H (4)	RB			
Sibu		MRG (1) HEL-H (5)	RB			
Tawau		MRG (1) HEL-H (4)	RB	Jungle RescueTeam		

	DISTRESS FREQUENCY GUARD					
FREQUENCY	HOURS OF WATCH	WATCH KEPT BY				
500 KHz	24 hours H + 15 to H + 18 and H + 45 to H + 48	Telecoms RadioStation at Kuala Muda, Penang Ships at sea				
2182 KHz	24 hours	Telecoms RadioStation at Kuala Muda, Penang Ships at sea				
121.5 MHz	24 hours Ad Operating hours	Kuala Lumpur ATCC Kota Kinabalu ATCC All ATC units during published operational hours				
243.0 MHz	Ad Operating hours Ad Operating hours Ad Operating hours	Butterworth ATC Kuantan ATC Labuan ATC				

## 6. PROCEDURES AND SIGNALS USED

#### 6.1 Procedures And Signals Used By Aircraft

- 6.1.1 Procedures for pilots-in-command observing an accident or intercepting a distress call and/or message are outlined in ICAO Annex 12, chapter 5.
- 6.1.2 Ditching reports, requested by aircraft about to ditch, are given in accordance with the provision in PROCEDURES FOR AIR NAVIGATION SERVICES, METEOROLOGY, ICAO DOC 7605 MET/526.

#### 6.2 Communications

Transmission and reception of distress messages are handled in accordance with ICAO Annex 10 Volume II, Chapter 5, para 5.3

Information concerning positions, call-signs, frequencies and hours of operation of aeronautical stations is published in AD 2.

Rescue aircraft belonging to permanent Search and Rescue Units will use the following call-signs:

- a) Fixed Wing 'Rescue (plus number)'
- b) Rotary Wing 'Rescue Helicopter (plus number)'

Rescue vessels / boats will use the following call- sign:

'Rescue Boat (plus number)'

## 6.3 Search And Rescue Signals

The search and rescue signals to be used are those prescribed in ICAO Annex 12, Chapter 5, para 5.10. These are shown on GEN 3.6 - 6.

No	Message	Code symbol	No	Message	Code symbol
1	Require assistance	V	4	Yes or affirmative	Y
2	Require medical assistance	X	5	Proceeding in this direction	•
3	No or Negative	N			

# SEARCH AND RESCUE SIGNALS

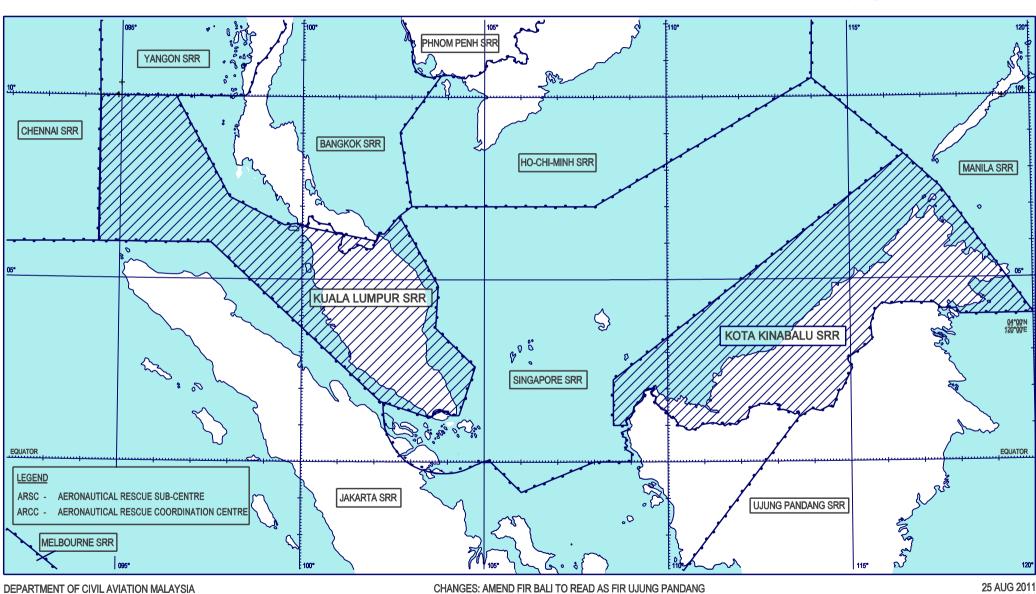
# Ground / Air Visual Signal Code For Use By Survivors

## Ground / Air Visual Signal Code For Use By Rescue Units

No	Message	Code symbol	No	Message	Code symbol
1	Operation completed	LLL	5	Have divided in two groups. Each proceeding in direction indicated	<b>X</b>
2	We have found all personnel	LL	6	Information received that aircraft is in this direction.	
3	We have found only some personnel		7	Nothing found. Will continue to search	NN
4	We are not able to continue. Returning to base.	XX			

Instructions for use:

- 1. Use strips of fabric, parachute material, pieces of wood, stones, or other available material.
- 2. Make signals not less than 8 ft (2.5 m).
- 3. Lay out symbols exactly as depicted to avoid confusion.
- 4. Provide maximum colour contrast between signals and background.
- 5. Endeavour to attract attention by other means such as radio, flares, smoke or reflected light.



# KUALA LUMPUR, KOTA KINABALU AND ADJACENT SEARCH AND RESCUE REGIONS

AND FIR MADRAS TO READ AS FIR CHENNAI

AIP AMDT 3/2001