

SEARCH AND RESCUE FRAMEWORK FOR THE

UNITED KINGDOM OF GREAT BRITAIN

AND

NORTHERN IRELAND

April 2008

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For additional copies of this document please contact EC Group, Europa Park, Magnet Road, Grays, Essex, RM20 4DN.

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FOREWORD

Search and Rescue is the activity of locating and recovering persons either in distress, potential distress or missing and delivering them to a place of safety.

The United Kingdom of Great Britain and Northern Ireland (UK) provides a comprehensive search and rescue service for those reported in trouble either on land, on water or in the air and for those reported missing. The fully integrated organisation of search and rescue co-ordinators and search and rescue units using a comprehensive communications infrastructure provides a well-developed search and rescue model. This UKSAR framework parallels and supports the UK's wider civil contingencies arrangements.

The purpose of this Framework Document is to describe, in Part 1, the background, scope and responsibilities of UK search and rescue and its strategic and operational management. Part 2 describes more fully those authorities and organisations who provide a significant role in the provision of search and rescue within the UK.

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PART 1

UK SEARCH AND RESCUE

STRATEGIC OVERVIEW

1. Introduction

- 1.1 The organisation for Search and Rescue (SAR) in the United Kingdom of Great Britain and Northern Ireland (UK) is an amalgam of separate Government Departments, the emergency services and other organisations. A number of charities and voluntary organisations dedicated to SAR also play a significant role.
- 1.2 These authorities and organisations are committed to a cohesive and co-operative partnership, the aim of which is the continued provision of an effective national SAR capability.
- 1.3 The purpose of this document, therefore, is to provide a management framework within which the responsible parties can work together to meet this aim and deliver their responsibilities as required by the Civil Contingencies Act 2004 where required. In doing so the UK SAR organisation provides a vital component of the UK's emergency response arrangements in accordance with the Civil Contingencies Act 2004.
- 1.4 Some SAR incidents require a fully integrated emergency response under the guidelines provided in the Cabinet Office publication *Emergency Response and Recovery* and the Scottish Executive publication *Emergency Preparedness and Preparing Scotland* together with any guidance relating to this document currently pertaining.
- 1.5 A more detailed description of the participants and resources for UK SAR is found in Part 2 of this document.

2. International Obligations

- 2.1 The UK organisation for civil maritime and civil aviation search and rescue is derived from the UK Government's adherence to the Convention on the Law of the Sea (UNCLOS), the Convention on Safety of Life at Sea (SOLAS) (1974), the Maritime Search and Rescue Convention (1979) and the Convention on International Civil Aviation (Chicago 1944) (Annex 12).
- 2.2 The UK responsibility for SAR measures for ships, aircraft and persons, whether civilian or military, covers the UK SAR Region (UKSRR). (See Annex A).

3. Scope of UK SAR

3.1 The key functions of UK SAR are to co-ordinate:

- a) maritime SAR in offshore, inshore and shoreline areas
- b) aeronautical SAR over land and sea
- c) inland SAR

3.2 These functions are undertaken through the ability of the various authorities and organisations to:

- a) receive details of persons, vessels and aircraft in distress
- b) communicate between SAR units and the co-ordinating authority
- c) communicate between SAR units
- d) communicate between co-ordinating authorities
- e) maintain declared SAR units as appropriate to:
 - i) provide assistance to persons, vessels and aircraft in distress
 - ii) deliver survivors to a place of safety or where further assistance can be rendered

4. Division of UK SAR Responsibility

4.1 Responsibility for civil aeronautical and maritime SAR policy rests with the Department for Transport, (DfT). As such, the DfT is responsible, through the UK SAR Strategic Committee, for assessing the adequacy of UK civil aeronautical and maritime SAR resources, response and co-ordination.

4.2 The responsibility for the co-ordination of land-based and inland waters SAR rests with the Police Service and is derived from their duty to protect life and property. (The Police Service has delegated this co-ordination responsibility to the DfT's Maritime and Coastguard Agency for the following inland waters – Lochs Ness, Oich and Lochy, Loughs Neagh and Erne, Upper River Clyde, Windermere, Coniston Water, Ullswater and Derwent Water, River Severn to Gloucester, Norfolk and Suffolk Broads and River Thames to Teddington).

5. Government Departments with Responsibility for National SAR

5.1 Department for Transport, (DfT)

5.1.1 The Agencies and Branches of the DfT have broad responsibilities in maritime and aeronautical safety.

5.1.2 The Maritime and Coastguard Agency (MCA) provides a response and co-ordination service for maritime SAR, counter pollution and salvage. The SAR role is undertaken by HM Coastguard, which is responsible for the initiation and co-ordination of civil maritime SAR. This includes the mobilisation, organisation and tasking of adequate resources to respond to persons either in distress at sea, or on those inland waters listed in paragraph 4.2, or to persons at risk of injury or death on the cliffs and shoreline of the UK. As part of its response, HM Coastguard provides Coastguard Rescue Teams for cliff and shoreline search and rescue purposes.

5.1.3 The Aviation Airspace Division (AAD) has overall responsibility for UK civil aviation SAR and assigns operation and Administration responsibility of all SAR arrangements for military and civil aviation to the MoD.

5.2 Ministry of Defence (MoD)

5.2.1 The MoD has responsibility for providing SAR facilities for military operations, exercises and training within the UK and, by agreement, exercises responsibility for the co-ordination of civil aeronautical SAR on behalf of the DfT. Where the coverage provided by military SAR assets meets the civil SAR coverage requirements, they will be made available for civil maritime and land-based SAR operations. The high readiness SAR assets are SAR helicopters, maritime surveillance fixed wing aircraft and mountain rescue teams. The MoD also establishes and maintains an Aeronautical Rescue Co-ordination Centre (ARCC) for the operation and co-ordination of civil and military aeronautical SAR assets.

5.3 Cabinet Office/Scottish Executive/National Assembly for Wales

5.3.1 These administrations have a role in ensuring the quality of preparedness for civil emergencies at the local government level and across central government.

6. Authorities and organisations with responsibility for, or significant involvement in, National SAR

6.1 Police Service

6.1.1 The Police Service, through its command infrastructure, co-ordinates land based SAR operations including the inland aspects of those incidents that originate at sea or in the air and provides co-ordination of all emergency services and other authorities where appropriate. The Police Service also maintains assets detailed later in this document, to deploy in Land SAR situations.

6.2 Fire and Rescue Service (FRS)

6.2.1 Fire and Rescue Services in the UK have a statutory responsibility to deal with fires and road traffic collisions. Each Fire Authority has the power to use the resources primarily provided for fire fighting to deal with non-fire incidents. These may include maritime, aeronautical and land based SAR operations. It is for each Fire Authority to set its own policy with regard to SAR operations and these will vary around the UK. Fifteen coastal Fire Services provide a standardised specialist offshore capability to assist the MCA with fires, chemical release and the release trapped persons.

6.3 Ambulance Service

6.3.1 The Ambulance Service in the UK has a statutory responsibility to respond to traumatic and medical emergencies. Land Ambulances may in some areas be complemented by Helicopter Emergency Medical Service (HEMS) assets which may assist in SAR tasks in circumstances compatible with the type and operating limitations of the aircraft.

6.4 Royal National Lifeboat Institution (RNLI)

6.4.1 The RNLI is a voluntary organisation incorporated by Royal Charter for the purpose of saving lives and promoting safety and providing relief from disaster, primarily at sea and secondly on the inland waters of the UK, Channel Islands, Isle of Man and Republic of Ireland. This is achieved by providing and maintaining a fleet of All Weather and Inshore Lifeboats, Inshore Rescue Hovercraft and Beach Lifeguard units located at strategic points as determined by the Institution's Trustee Committee. The RNLI reserves the right to direct its own assets, co-ordinated by the responsible authority.

6.5 **Voluntary Inland SAR Organisations**

6.5.1 Voluntary Inland SAR Teams are formed to provide SAR services on land. Operationally, each team is responsible to, and works under the authority of, a co-ordinating authority. This will normally be the Police but in some instances, could be HM Coastguard. Though each Team is independent, their common interests are represented by the following bodies:

- a) Mountain Rescue England and Wales (MR-EW)
- b) Mountain Rescue Committee of Scotland (MRC of S)
- c) British Cave Rescue Council (BCRC)
- d) Association of Lowland Search and Rescue (ALSAR)

6.5.2 Other volunteer SAR teams outwith those represented by those organisations detailed in paragraph 6.5.1 may also be used at the discretion of the co-ordinating authority

7. **UK SAR Committee Structure**

7.1 The organisation of UK SAR is defined by the UK SAR Strategic Committee as supported by the UK SAR Operators Group. The structure is shown at Annex C.

7.2 **UK SAR Strategic Committee**

7.2.1 Terms of Reference

The UK SAR Strategic Committee (UKSARSC) is an inter-agency national forum with responsibility for advising on the structure, scope and framework of the organisation of UK SAR. Its objectives are:

- a) To develop criteria for the coverage, responsiveness and availability of SAR resources, consulting the UK SAR Operators Group as required;
- b) To offer views to Ministers on improving SAR capability, effectiveness and co-operation;
- c) To promote effective and efficient co-operation between the various Government Departments, the emergency services and other organisations including voluntary agencies for the provision of an effective SAR service at national and, where appropriate, international levels;
- d) To establish the framework for UK SAR as described in this document;
- e) To provide Terms of Reference for the UK SAR Operators Group.

f) The Committee shall meet at least twice per year.

7.2.2 Membership of the Committee shall be confined to those with strategic and policy responsibilities within those organisations which contribute significantly to UK SAR. The Committee shall consist of members from the following organisations:

- a) DfT – Chair and Secretariat
- b) Ministry of Defence – Vice Chair
- c) Home Office
- d) Department for Communities and Local Government
- e) Maritime and Coastguard Agency (MCA)
- f) Association of Chief Police Officers England, Wales & NI (ACPO)
- g) Association of Chief Police Officers Scotland (ACPO(S))
- h) Chief Fire Officers Association (CFOA)
- i) Ambulance Service Association (ASA)
- j) Royal National Lifeboat Institution (RNLI)
- k) Cabinet Office

7.3 **UK SAR Operators Group**

7.3.1 Terms of Reference

Acting under the aegis of the UK SAR Strategic Committee, the objectives of the UK SAR Operators group are:

- a) To develop a programme of work to implement the tasks set by the UKSARSC;
- b) To consider reports and recommendations from associated SAR Working Groups;
- c) To consider the views of the UK Maritime and Aviation SAR, and Inland SAR Consultative Committees;
- d) To advise and make recommendations to the UKSARSC on a National SAR Framework to ensure efficient and effective co-operation between SAR agencies and those concerned with civil SAR;
- e) To determine the terms of reference and issue other guidance as appropriate to SAR Working Groups and Consultative Committees.
- f) The Group shall meet up to four times per year.

7.3.2 Membership of the Operators Group shall be confined to those organisations which have a substantial national focus and membership except where they can be and are content to be represented by another member organisation. The Operators group shall comprise, as standing members, representatives from:

- a) DfT - Maritime and Coastguard Agency (MCA) – Chair and Secretariat
- b) Ministry of Defence – Vice Chair
- c) Association of Chief Police Officers England, Wales & NI (ACPO)
- d) Association of Chief Police Officers Scotland (ACPO(S))
- e) Chief Fire Officers Association (CFOA)
- f) Ambulance Service Association (ASA)
- g) Royal National Lifeboat Institution (RNLI)
- h) Royal Life Saving Society UK (RLSS UK)
- i) Mountain Rescue England and Wales (MR-EW)
- j) Mountain Rescue Committee of Scotland (MRC of S)
- k) British Cave Rescue Council (BCRC)
- l) Association of Lowland Search and Rescue (ALSAR)

7.3.3 Other members may be co-opted from time to time as determined by the Group.

7.3.4 The terms of reference and existence of the Operators Group may be reviewed by the UKSARSC as required by them.

7.4 **Local Search and Rescue Committees (LSARC)**

7.4.1 To encourage liaison at a local level it is recommended that SAR committees, such as those coastal Local SAR Committees already established, are convened to monitor local arrangements for search and rescue. The jurisdiction of local committees should align as far as is possible with Police Force boundaries. Representatives from emergency services, appropriate statutory agencies and voluntary organisations should be invited to attend.

7.5 **Working Groups**

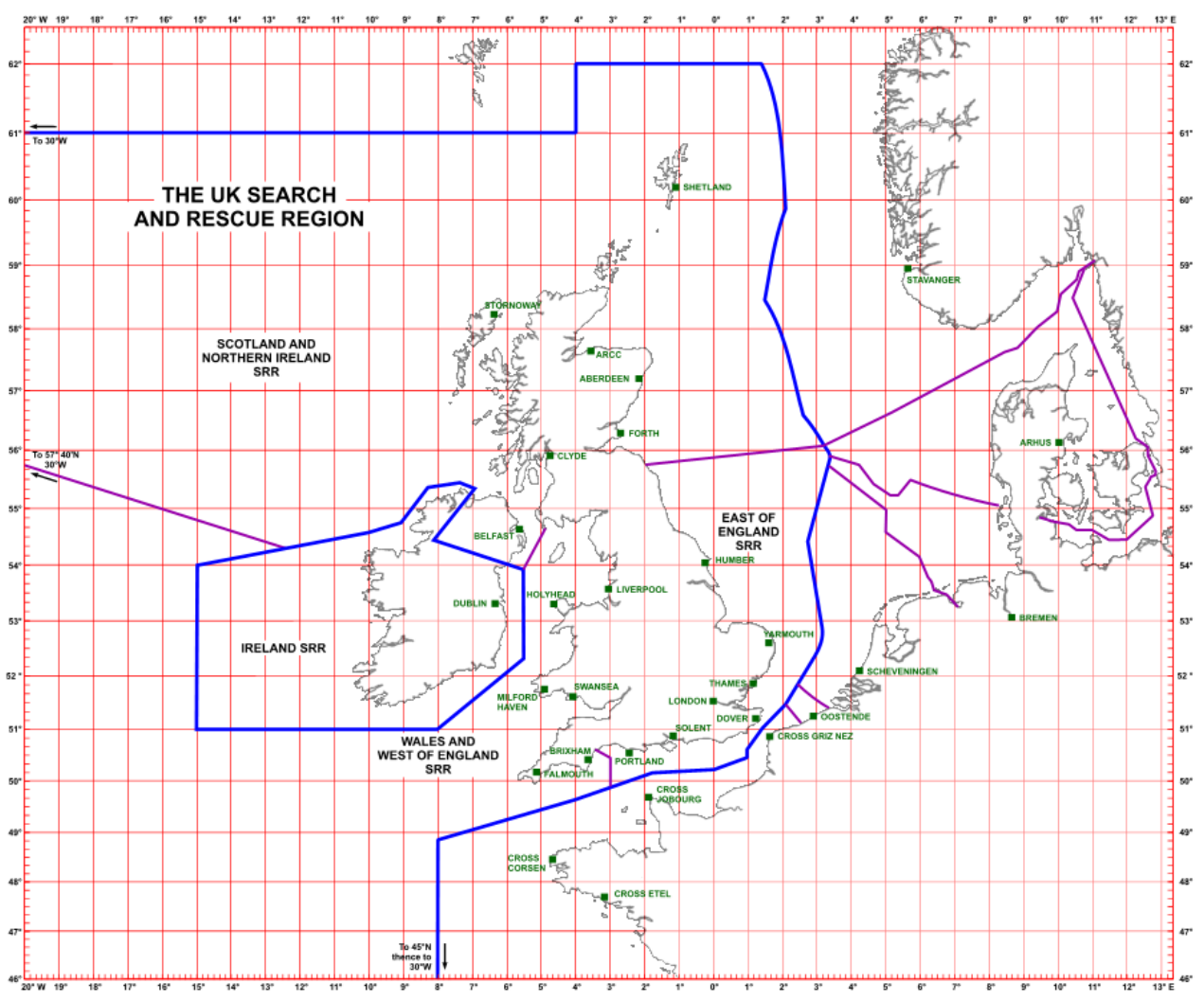
7.5.1 The UK SAR Operators Group has a number of standing Working Groups and can establish ad hoc Working Groups as required. These Working Groups, which report to the UK SAR Operators Group, perform the detailed work for the Operators Group.

8.1 **Future of UK SAR Helicopter (SAR-H) Provision**

- 8.1.1 The SAR-H project is a joint MoD/DfT programme that seeks to replace the SAR capability currently provided by the Royal Air Force (RAF) and the Royal Navy (RN), using Sea King Mk3, 3a and 5 helicopters, and the MCA through service contracts. The MoD and MCA together provide a 24 hour military and civil SAR service for the UK SAR Region from 12 bases around the UK. The new service is planned to commence early in the next decade. The project is subject to competition in accordance with EU procurement regulations. A proportion of Military aircrew will continue to form part of the strategy in accordance with a revised MoD UK SAR Policy which “seeks to develop a joint military deployable SAR capability and, in conjunction with the DfT, maintain a UK military/civilian SAR capability to ensure that the most effective and timely response is available to assist service personnel and civilians in hazardous situations”. SAR tasking, currently carried out by the Aeronautical Rescue Co-ordination Centre (ARCC) at Kinloss and the appropriate Maritime Rescue Co-ordination Centres (MRCCs) will continue to be managed by the MoD and MCA.

ANNEX A

The UK Search and Rescue Region



Key

- Maritime Rescue Coordination Centre
- ARCC Aeronautical Rescue Coordination Centre
- UK Maritime Search and Rescue Region Boundary
- Maritime Rescue Coordination Centre Regional Boundary

ANNEX B

CO-ORDINATES OF UK SEARCH AND RESCUE REGION

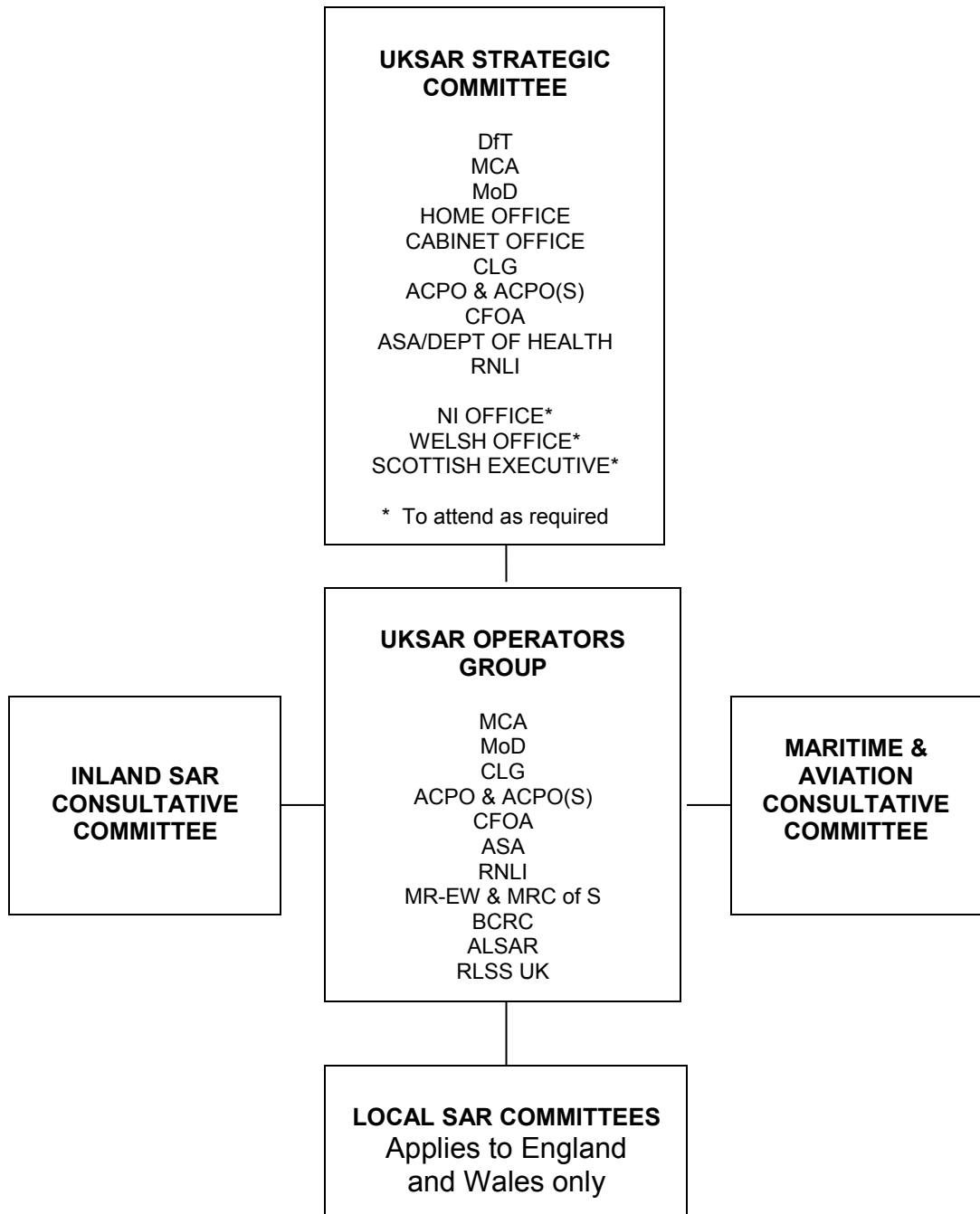
AERONAUTICAL SRR		MARITIME SRR		IRISH SRR	
61° 00' 00"N	030° 00' 00"W	62° 00' 00"N	001° 22' 23"E	54° 00' 00"N	015° 00' 00"W
61° 00' 00"N	004° 00' 00"W	62° 00' 00"N	004° 00' 00"W	54° 34' 00"N	010° 00' 00"W
63° 28' 33"N	000° 46' 22"W	61° 00' 00"N	004° 00' 00"W	54° 45' 00"N	009° 00' 00"W
63° 28' 23"N	000° 00' 00"	61° 00' 00"N	30° 00' 00"W	55° 20' 00"N	008° 15' 00"W
62° 00' 00"N	000° 00' 00"	45° 00' 00"N	30° 00' 00"W	55° 25' 00"N	007° 20' 00"W
62° 00' 00"N	001° 22' 22"E	45° 00' 00"N	08° 00' 00"W	55° 20' 00"N	006° 55' 00"W
61° 44' 10"N	001° 33' 29"E	48° 50' 00"N	08° 00' 00"W	54° 25' 00"N	008° 10' 00"W
61° 21' 22"N	001° 47' 18"E	49° 00' 30"N	06° 56' 00"W	53° 55' 00"N	005° 30' 00"W
59° 53' 46"N	002° 04' 30"E	49° 30' 00"N	04° 06' 30"W	52° 20' 00"N	005° 30' 00"W
59° 17' 22"N	001° 42' 36"E	49° 54' 24"N	02° 53' 42"W	51° 00' 00"N	008° 00' 00"W
58° 25' 46"N	001° 28' 54"E	49° 58' 54"N	02° 28' 54"W	51° 00' 00"N	015° 00' 00"W
57° 41' 16"N	001° 57' 48"E	50° 05' 54"N	01° 48' 18"W	54° 00' 00"N	015° 00' 00"W
56° 35' 40"N	002° 36' 42"E	50° 12' 24"N	01° 12' 24"W		
56° 05' 10"N	003° 14' 55"E	50° 18' 18"N	00° 36' 06"W		
55° 54' 58"N	003° 20' 55"E	50° 24' 30"N	00° 00' 00"		
55° 50' 00"N	003° 23' 55"E	50° 32' 48"N	00° 57' 48"E		
55.45' 52"N	003° 22' 08"E	50° 48' 54"N	01° 16' 30"E		
54° 37' 15"N	002° 53' 49"E	50° 57' 00"N	01° 21' 24"E		
54° 22' 45"N	002° 45' 43"E	51° 02' 18"N	01° 32' 54"E		
53° 18' 03"N	003° 03' 19"E	51° 06' 00"N	01° 43' 30"E		
52° 46' 57"N	003° 12' 13"E	51° 12' 00"N	01° 53' 18"E		
52° 37' 15"N	003° 10' 55"E	51° 14' 24"N	01° 57' 18"E		
52° 24' 57"N	003° 03' 25"E	51° 20' 12"N	02° 02' 18"E		
52° 17' 21"N	002° 55' 55"E	51° 30' 12"N	02° 07' 18"E		
52° 05' 57"N	002° 42' 49"E	51° 32' 00"N	02° 11' 12"E		
51° 58' 57"N	002° 37' 31"E	51° 48' 18"N	02° 28' 54"E		
51° 48' 15"N	002° 28' 49"E	51° 59' 00"N	02° 37' 36"E		
51° 30' 00"N	002° 00' 00"E	52° 01' 00"N	02° 39' 30"E		
51° 07' 00"N	002° 00' 00"E	52° 05' 18"N	02° 42' 12"E		
51° 00' 00"N	001° 28' 00"E	52° 06' 00"N	02° 42' 54"E		
50° 04' 00"N	001° 28' 00"E	52° 12' 24"N	02° 50' 24"E		
50° 00' 00"N	000° 15' 00"W	52° 17' 24"N	02° 56' 00"E		
50° 00' 00"N	002° 00' 00"W	52° 25' 00"N	03° 03' 30"E		
48° 50' 00"N	008° 00' 00"W	52° 37' 18"N	03° 11' 00"E		
45° 00' 00"N	008° 00' 00"W	52° 47' 00"N	03° 18' 18"E		
45° 00' 00"N	030° 00' 00"W	52° 53' 00"N	03° 10' 30"E		
61° 00' 00"N	030° 00' 00"W	53° 18' 06"N	03° 03' 24"E		
		53° 28' 12"N	03° 01' 00"E		
		53° 35' 06"N	02° 59' 18"E		
		53° 40' 06"N	02° 57' 24"E		
		53° 57' 48"N	02° 52' 00"E		

CO-ORDINATES OF UK SEARCH AND RESCUE REGION (Continued)

AERONAUTICAL SRR	MARITIME SRR	IRISH SRR
	54° 22' 48"N 02° 45' 48"E	
	54° 37' 18"N 02° 53' 54"E	
	55° 45' 54"N 03° 22' 13"E	
	55° 50' 06"N 03° 24' 00"E	
	55° 55' 09"N 03° 21' 00"E	
	56° 05' 12"N 03° 15' 00"E	
	56° 35' 42"N 02° 36' 48"E	
	57° 54' 18"N 01° 57' 54"E	
	55° 25' 48"N 01° 29' 00"E	
	59° 17' 24"N 01° 42' 42"E	
	59° 53' 48"N 02° 04' 36"E	
	61° 21' 24"N 01° 47' 24"E	
	61° 44' 12"N 01° 33' 36"E	
	61° 44' 12"N 01° 33' 14"E	
	62° 00' 00"N 01° 22' 23"E	

ANNEX C

UKSAR COMMITTEE STRUCTURE



PART 2

ORGANISATION OF UK SEARCH AND RESCUE

CHAPTER 1

The Maritime and Coastguard Agency

1.1 Responsibility

- 1.1.1 The Maritime and Coastguard Agency (MCA) is responsible for developing, promoting and enforcing high standards of marine safety; minimising loss of life amongst seafarers and coastal users; responding to maritime emergencies 24 hours a day; minimising the risk of pollution of the marine environment from ships, and where pollution occurs, minimising the impact on UK interests.
- 1.1.2 The MCA fulfils the duties placed on the Secretary of State by the Civil Contingencies Act 2004, “in so far as his functions include responding to maritime and coastal emergencies (excluding the investigation of accidents).”
- 1.1.3 The MCA’s response to emergencies is undertaken by Her Majesty’s Coastguard (HMCG) which is the authority responsible for the initiation and co-ordination of civil maritime search and rescue within the United Kingdom Search and Rescue Region (UKSRR). This includes the mobilisation, organisation and tasking of adequate resources to respond to persons either in distress at sea, or those inland waters listed in Part 1 paragraph 4.2, or to persons at risk of injury or death on the cliffs or shoreline of the United Kingdom.
- 1.1.4 As a SAR co-ordinator, HMCG is responsible for requesting and tasking its own SAR assets and those made available by other emergency services, authorities and organisations and co-ordinating the subsequent SAR operations unless the operations are formally handed over or delegated to another SAR co-ordinator. Close liaison is maintained with the Aeronautical Rescue Co-ordination Centre at RAF Kinloss, other emergency services and rescue organisations including adjacent foreign SAR organisations.

1.2 Organisation and Readiness

- 1.2.1 HMCG is organised into 9 SAR Areas where each Area contains a pair of Maritime Rescue Co-ordination Centres (MRCC). These MRCC pairs share common command, control and communications systems enabling either MRCC to assume control of the Area and to provide mutual support during emergency response operations. Each Area is divided into 3 or more Sectors and each Sector contains 2 or more Coastguard Rescue Teams (CRT). These teams of volunteers specialise in cliff and mud rescue, coastal searching techniques and surveillance.
- 1.2.2 The organisation is based upon a continuous communications watch on VHF, VHF/DSC, MF and MF/DSC radio and satellite communications. Radio coverage of UK coastal and offshore waters extends out to 150 nautical miles with satellite communications extending that coverage throughout the UKSRR and worldwide. This communications watch includes the monitoring of the international distress frequencies on VHF, VHF/DSC and MF/DSC. Distress alerts on Inmarsat are automatically routed to MRCC Falmouth. Maritime distress alerts received by COSPAS-SARSAT are forwarded to MRCC Falmouth by the UK COSPAS-SARSAT Mission Control Centre (UKMCC) at ARCC, RAF Kinloss. MRCCs monitor the same frequencies and alerting systems for Ship Security Alerts.
- 1.2.3 In addition to radio and satellite communications, MRCCs keep a constant emergency 999 telephone watch and have a VHF Direction Finding (DF) capability. Fax, e-mail and use of GD92 communications protocol complete this extensive and integrated communications system.
- 1.2.4 SAR Operations are supported by a computerised command and control system, which provides incident management and recording; resource selection and alerting; logging and databases; management information and statistical data. A computerised system provides the facility to predict the movement of drifting targets at sea and to produce search areas and optimum search coverage plans for search units.
- 1.2.5 MRCCs are also equipped with Automatic Identification System (AIS) which makes it possible to electronically monitor and track AIS fitted ships. At present, only SOLAS regulated ships of 300GT and above are required to carry AIS. AIS equipped vessels transmit regular digital messages on VHF detailing the type of vessel, identity, position, course and speed over the ground and other operational and safety data. The system provides a surface picture, albeit incomplete as non-SOLAS vessels are not obliged to carry AIS, out to the maximum range of VHF with ranges of 70 nautical miles not uncommon. AIS has uses for SAR response and co-ordination, accident prevention, environmental protection, enforcement and security.

1.3 Maritime Safety Information

- 1.3.1 Each MRCC broadcasts Maritime Safety Information (MSI) on VHF and, in some cases, MF radio in accordance with published schedules. MSI includes navigational warnings as issued by the UK Hydrographic Office, Gale Warnings, Shipping Forecasts, Local Inshore Forecasts, Strong Wind Warnings and Storm Tide Warnings as issued by the Meteorological Office; and Subfacts and Gunfacts as issued by the Ministry of Defence. HM Coastguard is also responsible for the UK NAVTEX service and its broadcasts, which contain the same information.

1.4 Provision of Medical Link Calls

- 1.4.1 HM Coastguard also provides the UK Radio Medical Advice Service whereby vessels making calls on either VHF or MF radio, or telephone call requiring medical advice or assistance are provided with a radio/telephone link to the appropriate medical authorities. If medical advice requires the casualty to be taken off the vessel then the MRCC providing the link will arrange for the casualty to be transported from the vessel to a hospital.

1.5 Channel Navigation Information Service

- 1.5.1 In addition to its search and rescue co-ordination responsibilities, MRCC Dover operates the Channel Navigation Information Service (CNIS). This vessel traffic monitoring service, which is operated in conjunction with the French, provides continuous radar surveillance of the Dover Strait to ensure vessels transiting the Straits do so in accordance with the International Regulations for Preventing Collisions at Sea, 1972. Vessels failing to comply with these regulations are identified either by other vessels or MCA's own surveillance aircraft and a plot of the contravention is available from the radar tracking system at MRCC Dover. A prosecution normally follows a contravention. As part of the CNIS, MRCC Dover makes regular safety broadcasts, which include weather conditions and other occurrences within the traffic separation scheme to assist vessels in their passage planning through this busy waterway. A mandatory reporting system is also in place whereby all vessels of 300GT and above are required to report, to MRCC Dover or MRCC Gris Nez (France), their intended passage through the Dover Strait traffic separation scheme. This reporting system also assists in identifying those ships which contravene the regulations.
- 1.5.2 Elsewhere in UK territorial waters, vessels may also make voluntary Position and Intended Movement reports to HMCG when transiting the Fair Isle Channel, the Pentland Firth, the Minches, Kyle of Lochalsh, and traffic separation schemes around the Isles of Scilly.

1.6 Global Maritime Distress and Safety System – Special Responsibilities

- 1.6.1 In addition to its normal search and rescue co-ordination role, MRCC Falmouth is also the UK's Global Maritime Distress and Safety System (GMDSS) Centre. MRCC Falmouth is linked directly to the Coast Earth Station at Burum, Netherlands whereby distress, urgency or safety messages received via the Inmarsat satellite systems are routed automatically to MRCC Falmouth for SAR action. Any distress alerts received from vessels outside the UKSRR, then MRCC Falmouth will pass details to the appropriate foreign RCC. Where this is not possible, then MRCC Falmouth will co-ordinate the necessary SAR action regardless of location worldwide.
- 1.6.2 All NAVTEX broadcasts originate from MRCC Falmouth for both the 518 kHz and 490 kHz services.
- 1.6.3 The National Maritime Emergency Position Indicating Radio Beacon (EPIRB) Registry is also located at MRCC Falmouth and provides the necessary identification of vessels following distress alerts from EPIRBs

1.7 Coastguard Rescue Service

- 1.7.1 The Coastguard Rescue Service is an organisation of Coastguard Rescue Teams (CRTs) situated at strategic locations around the coast which are equipped to deal with incidents appropriate to the risks associated with local coastal terrain and local shoreline activities and conditions. Each CRT has an initial response capability for investigation, surveillance and reporting (to MRCC) purposes and in some locations where no CRT exists but the operational requirement exists, small teams known as Initial Response Teams (IRT) have been established to provide this initial response.
- 1.7.2 All CRTs have a search capability and in addition, many have a cliff and/or mud rescue capability, whereas IRTs are usually equipped with portable radios for reporting purposes only.
- 1.7.3 Members of both CRTs and IRTs are volunteers. Reporting Members Ashore are non-uniformed volunteers who generally live in a prominent position overlooking the coast. They may report by telephone to their local MRCC at their own discretion if they observe a situation developing or witness an incident. Generally, it will be the MRCC that contacts them to verify any report of an incident that may be visible from the proximity of the Member's home. They may be capable of providing initial substantiating information relating to a report well in advance of the arrival of an IRT or CRT. Reporting Members Afloat are non-uniformed volunteers who are experienced boat users and wish to be associated with the work of HM Coastguard while at sea in their craft. As such, they are prepared to maintain radio contact with HM Coastguard whenever practicable, and provide HMCG with maritime intelligence.

1.8 Coastguard Contract SAR Helicopters

- 1.8.1 HMCG operates four SAR helicopter units providing suitably equipped helicopters and facilities at Sumburgh Airport (Shetland), Stornoway (Isle of Lewis), Portland and Lee-on-Solent. The helicopters provided have a full night/all weather capability for civil maritime and civil aviation SAR and medical evacuation from ships and offshore installations and a limited night overland capability.

These aircraft can also be made available for military rescue should the need arise. The Stornoway helicopter also has a secondary role in support of land rescue by day and a limited capability by night overland. Helicopters and crews at Sumburgh, Stornoway and Lee on Solent maintain a 15 minutes readiness state from 0730 to 2100 local time and 45 minutes readiness state outside these times, 24 hours a day throughout the year. At Portland, the aircraft and crew maintain a 15 minutes readiness state from 0900 to 2100 local time. Under an agreement between the MCA and the MoD, tasking of these assets is normally undertaken through ARCC, RAF Kinloss. Exceptionally, when helicopter assistance is necessary for immediate lifesaving, the MCA can task the helicopters direct and then notify the ARCC as soon as possible afterwards.

- 1.8.2 HM Coastguard currently provides Sikorsky S-61 helicopters at all locations. These helicopters are planned to be replaced by Sikorsky S92A and Augusta Westland 139 helicopters by 2008. Two Sikorsky S92A helicopters will be based at both Stornoway and Shetland and two Augusta Westland 139 aircraft will be based at Lee on Solent with one at Portland.

1.9 Emergency Towing Vessels

- 1.9.1 MCA charters four Emergency Towing Vessels (ETVs) to provide emergency towing cover in high risk shipping areas.
- 1.9.2 ETVs are based in the Strait of Dover, the Minches, the Fair Isle Area and the South Western Approaches respectively and operate under the control of the RCC Managers responsible for those areas. The ETV which patrols the Dover Strait is provided jointly by the UK and French Authorities who share Operational Control of the vessel.

1.10 Channel Islands

- 1.10.1 The Bailiwicks of Jersey and Guernsey are Crown Dependencies, owing allegiance to the Sovereign, but without incorporation into the UK. The islands are self-governing in internal matters, but the UK Government is responsible for defence and international affairs. The States (Government) of Guernsey, which is also responsible for the islands of Alderney and Sark, administers maritime affairs and its territorial waters. In the same way, the States of Jersey, to the south, is also responsible for its territorial waters and Les Ecrehou and Minquiers Reefs.
- 1.10.2 The British territorial waters surrounding the islands are wholly enclosed within the French SAR Region of MRCC Jobourg and the Premar Manche. The islands are represented on the UK SAR Maritime and Aviation Consultative Committee and the Anglo French Working Group for the Mancheplan. UK SAR liaison is generally through MRCC Falmouth and with France via MRCC Jobourg.
- 1.10.3 MRCCs Guernsey and Jersey are each managed by the respective Harbour Masters for their States departments. A 24 hour VHF and VHF/DSC watch is maintained with RDF facilities. In addition to RNLI Lifeboats, a purpose built marine ambulance launch and the Channel Islands Air Search "Islander" SAR aircraft are based in Guernsey and an emergency towing vessel with both SAR and counter pollution capability is based in Jersey. The islands also have locally based "private" vessels and aircraft/small helicopters which can be used to assist in SAR operations.
- 1.11.4 Maritime Incident Response Group (MIRG)

The MCA and FRS Maritime Incident Response Group (MIRG) consist of strategically located teams of Category 1 responders with declared assets to the MCA. Predominantly FRS personnel, these teams are deployed by MRCCs using SAR assets both airborne and seaborne to assist with incidents of fire, chemical release and industrial accidents (trapped persons).

CHAPTER 2

Ministry of Defence

2.1 Responsibility

2.1.1 The MoD provides declared SAR facilities to cover military operations, exercises and training within the UK SRR. Although these resources are established primarily for military purposes, it is MoD policy to render assistance whenever possible to other persons, aircraft or vessels in distress. Where the coverage provided by military SAR assets meets the civil SAR requirement, they will be made available for civil aeronautical, maritime and land-based SAR operations.

2.2 Organisation

2.2.1 MoD declared SAR resources consist mainly of RAF and RN SAR helicopters and maritime patrol aircraft (MPA), supplemented by other aircraft and surface vessels as necessary. On land, the MoD has specialist RAF Mountain Rescue Teams (MRTs). In the event of large-scale disasters, additional military resources can be made available in the form of Military Aid to the Civil Authorities (MACA).

2.3 Aeronautical Rescue Co-ordination Centre (ARCC)

2.3.1 MoD assets are controlled by the ARCC at RAF Kinloss. The ARCC operates 24 hours a day and co-ordinates the use of military SAR assets and, by agreement with the MCA, MCA SAR helicopters within the UK SRR in incidents involving civil or military aircraft in distress, irrespective of nationality. It also controls the military contribution to SAR operations requested by UK SAR authorities or neighbouring RCCs. For land based SAR, the ARCC will co-ordinate all military and civilian SAR helicopters while acting in support of the Police who have overall authority. The RAF SAR Force has the ability to deploy SAR Liaison Officers with appropriate communication to augment the ARCC at a local level. In civil maritime SAR, which may involve a response by surface vessels and aircraft, overall co-ordination of the incident will be the responsibility of the MCA through its network of MRCCs. The ARCC will work closely with the MRCC whenever airborne assets – military, civil or foreign are used in civil maritime SAR in the UKSRR.

2.3.2 ARCC operations are facilitated by a computerised command and control system, linked to all military SAR asset bases. The system provides for efficient tasking, management and recording of SAR operations. To fulfil its responsibilities the ARCC has extensive communications links with other SAR authorities and emergency services, including a considerable network of exclusive voice, fax and data circuits for communication with neighbouring RCCs, backed up by normal military operational links. Other SAR authorities should request military SAR helicopter, military MRT or MPA assistance for civil maritime or land SAR operations from the ARCC.

Exceptionally, if military SAR helicopter assistance is necessary for immediate lifesaving, provision has been made for the MCA to make direct contact with the nearest helicopter unit and request assistance. In this instance, the requesting authority is to inform the ARCC as soon as possible afterwards.

2.4 The United Kingdom Cospas-Sarsat Mission Control Centre (UKMCC)

2.4.1 Cospas-Sarsat is an international organisation that uses satellite technology to detect active radio distress beacons anywhere on Earth and to ensure that the distress alert data is passed quickly to the appropriate RCC. The ground segment of the system comprises 2 elements; the Local User Terminal (LUT) and the Mission Control Centre (MCC). The task of the MCC is to receive distress data from the LUT and foreign MCCs before passing this information to the appropriate RCC. The MCA is responsible for the maintenance and operation of the LUT while the MoD is responsible for the maintenance, manning and operation of the UKMCC. The UKMCC is an integral part of the ARCC at RAF Kinloss. At present, the Cospas-Sarsat system is capable of processing beacon alerts on 121.5 MHz, 243 MHz and 406 MHz although processing of 121.5 and 243MHz alerts will cease in 2009.

2.5 Distress and Diversion (D&D) Cells

2.5.1 Throughout their flights, most aircraft remain in two-way radio contact with the Air Traffic Control Centre (ATCC) appropriate to the area in which they are operating. The UK ATCCs provide distress and urgency alerting services in the London, Scottish and Shanwick Oceanic Flight/Upper Information Regions (F/UIRs). Usually, an aircraft with an emergency transmits its distress message in the first instance on the frequency (whether VHF, UHF or HF) in use at the time. It may also transmit on one or more of the dedicated VHF, UHF or HF distress frequencies. The transmission will be actioned by an ATCC which will, in turn, alert its D&D cell. D&D personnel will, again in turn, alert the ARCC which will then direct the SAR activity.

2.6 Fixed Wing Aircraft

- 2.6.1 The RAF maintains one Nimrod MPA at 2 hours readiness, 24 hours a day, at RAF Kinloss for SAR duties. The Nimrod can fly at high speed to a distance of approximately 800 nautical miles from base and then search for a period of 5 hours. Range can be extended at the expense of search time, or both may be extended by the use of in-flight refuelling. The Nimrod can be deployed to other bases to provide SAR cover when weather limits preclude operations at RAF Kinloss. The aircraft has a comprehensive suite of search sensors, with radar optimised for over-water searches. A limited number of aircraft may also be fitted with an Infra Red (IR) capability. The Nimrod has a variety of communications equipment including UHF, VHF, HF and IMM VHF(FM) radios, and the combination of a powerful radar, long endurance and excellent communications, make the aircraft the platform of choice for directing activities at the scene. The aircraft itself can drop liferafts and survival equipment to persons in distress but is more frequently employed in vectoring shipping and helicopters to the scene.
- 2.6.2 Other military fixed wing assets may be made available to assist in SAR missions; these can include transport, reconnaissance and airborne command-and-control aircraft. The decision to request such assistance will normally be made by the ARCC.

2.7 Helicopters

- 2.7.1 The RAF Sea King helicopters at Boulmer, Chivenor, Leconfield, Lossiemouth, Valley and Wattisham have a maximum endurance of 6 hours. This gives a radius of action of approximately 250 nautical miles from base. This can be extended by refuelling from forward bases, oil platforms or suitably equipped RN ships. At each location, one helicopter is available at 15 minutes readiness between 0800 and 2200 hours and 45 minutes readiness between 2200 and 0800. A second helicopter is on 60 minutes readiness between 0800 and evening civil twilight (ECT). All RAF SAR helicopters are equipped for full day/night all weather operations over land and sea (some limitations exist with regard to freezing conditions, but in general terms the helicopters are all weather capable) and have a full night vision goggle (NVG), search radar and thermal imaging capability. Crews are well practised in NVG operations which, in itself, is a major enhancement to search capability. In addition, all RAF SAR helicopter rear crew are medically trained, with the winchman holding a NHC approved paramedic qualification. Up to 17 persons can be carried, however this is dependent on weather conditions and the distance of the incident from the helicopter's operating base. All RAF SAR helicopters are equipped with VHF (Marine and Air Band), UHF, HF and Mountain Rescue radios. They are also capable of homing to all international distress frequencies.
- 2.7.2 The RN Sea Kings at Culdrose and Prestwick have an endurance of 4.5 hours, which gives a radius of action of approximately 200 nautical miles from base. This can be extended by refuelling from forward refuelling

sites, RN warships and suitably equipped RFA's. The Scilly Isles provide a valuable refuelling point extending the ROA out into the South Western Approaches to 250 nm from Culdrose. At each location one helicopter is available at 15 minutes readiness between 0800 and 2200 and then at 45 minutes readiness until 0800. A second aircraft and crew is available at 90 minutes readiness between 0800 and ECT or 1800 whichever is the later, but no later than 2200. All RN SAR helicopters are equipped for AWDN operations both over land and sea, (with limitations for operating in freezing conditions) and are equipped with NVG and a search radar. Additionally RN helicopters can be employed as a Command and Control platform in multiple aircraft/asset SAR operations. All RN rearcrew are medically trained, with the winchman trained up to paramedic standard. Seating is available for 10 passengers however maximum number of rescued personnel is dependent on aircraft maximum all up weight taking into consideration factors such as weather conditions, distance from suitable landing/refuelling site and nearest appropriate medical facilities. All RN SAR helicopters are fitted with a communications suite which includes VHF (IMM band), UHF and HF radios.

2.7.3 Other military helicopter assets can be used for SAR missions when available these can include light reconnaissance, troop transport and heavy lift helicopters. Requests for such assistance should be made through the ARCC.

2.8 RAF Mountain Rescue Teams (MRTs)

The RAF has 4 MRTs based at Kinloss, Leuchars, Leeming, and Valley. Each MRT is available at one hours notice and is operationally controlled by the ARCC at RAF Kinloss. The teams are fully equipped with their own vehicles and have a comprehensive communications suite which includes VHF, UHF and HF radios as well as a Satcom capability. The teams work closely with the military SAR helicopters and can provide a rapid response to both military and civilian incidents in all areas of the UK. RAF MRTs are trained in Aircraft Post Crash Management and all weather response to SAR incidents, particularly in remote and inhospitable terrain. RAF MRTs maintain a close liaison with the Police and civil mountain rescue organisations.

CHAPTER 3

Land Based Search and Rescue

3.1 General

3.1.1 Land based search and rescue can cover a wide variety of circumstances involving the emergency services, other statutory agencies and voluntary organisations.

3.2 Statutory Organisations Involved in Land Based Search and Rescue

3.2.1 Police

3.2.1.1 It is a legal requirement as defined within the relevant legislation for the Police Service to be involved in the saving of life and this includes investigating reports of missing persons. Whilst Police Forces do generally not maintain declared assets for search and rescue purposes the Police have primary responsibility for co-ordinating the role of other agencies including specialist support provided by voluntary organisations. A small number of Police Forces maintain volunteer Mountain Rescue Teams for deployment in SAR situations. Generally, the Police Service also maintains other resources such as Search Co-ordinators, Search Advisors, Search Managers, Searchers and Dog Handlers who can also be deployed for SAR purposes.

3.2.1.2 The Police are also responsible for overseeing any criminal investigation. They facilitate enquiries carried out by the responsible accident investigation body, eg Health and Safety Executive, Air or Marine Accident Investigation Branch. It is also the responsibility of the Police on behalf of HM Coroner in England and Wales (Lord Advocate through his office of Procurator Fiscal in Scotland) to investigate any sudden or unexpected death.

3.2.1.3 Search and rescue incidents have the potential to develop into major incidents requiring the implementation of special arrangements by the Police or other emergency services supported by other statutory agencies and voluntary organisations. In such circumstances the Police co-ordinate the activities of those responding and will have responsibility for processing casualty information and identifying and arranging for the removal of the dead. A national structure has been agreed and adopted which ensures that all involved parties understand their role in the combined response. The management of the response is organised into 3 levels: Strategic (Gold), Tactical (Silver) and Implementation (Bronze). The requirement to implement one or more of these management levels will be dependent on the nature of the incident, but in practice the majority of incidents will be handled at implementation level by the local police

supervisor. More serious incidents in terms of the number of people involved or resources required will involve the use of Silver command. Only in exceptional circumstances will Gold Command be instigated.

3.2.1.4 In its planning, each agency will need to recognise the three management levels and how they inter-relate. This will allow the integration of management processes across agency boundaries. It should be noted that the management levels do not necessarily equate with a particular rank or seniority of the person discharging the function. This is particularly so when a major incident is in its initial development. However, by way of a general guide, Tactical Silver Command is typically overseen by the Superintending ranks and Strategic Gold Command by an ACPO Officer. Bronze command is usually overseen by the Inspecting ranks though it is not unusual to find lower ranking officers performing this function.

3.2.1.5 A list of the Police Forces in Great Britain are set out in Annex A to this chapter. Each Police Force is a separate independent authority with the Chief Constable having operational independence.

3.2.2 Fire and Rescue Service

3.2.2.1 The Fire and Rescue Service [FRS] in the UK is operated at a local level in line with a national statutory framework. The statutory responsibilities for Fire Authorities are detailed in the Fire and Rescue Services Act 2004, or equivalent legislation in Devolved Administrations. The contribution to search and rescue offered by FRS can be classified under one of three headings, core duties forming a statutory responsibility under the Act, emergencies prescribed by the Secretary of State, and elective powers adopted by individual authorities.

3.2.2.2 Core Duties

Under the Fire and Rescue Service Act 2004, and its equivalent in Devolved Administrations, Fire Authorities have a responsibility for making provisions for

1. Promoting fire safety
2. Extinguishing fires and protecting life and property in the event of fire
3. Rescuing people in the event of road traffic accidents
4. Decontaminating people who may become contaminated by CBRN material
5. Rescuing of people from collapsed building structures and none road transport wreckages, ie trains, trams and aircraft. This is commonly known as Urban Search and Rescue (USAR)

This necessitates securing the services of a Fire and Rescue Service [FRS]. Currently, there are 62 separate FRS within UKSRR – see Annex B to this chapter

3.2.2.3 Emergencies

The Fire and Rescue Services Act 2004 provides the Secretary of State in England with the power to extend further the statutory duties of Authorities in England to deal with specified emergencies. Similar arrangements exist in the Devolved administrations of Scotland, Wales and Northern Ireland. In Scotland, the Fire (Additional Function) (Scotland) Order 2005 has extended to duties of Fire Authorities in Scotland to make provision for the purpose of –

- a) Rescuing people trapped, or likely to become trapped, by water
and
- b) Protecting them from serious harm
In the event of serious flooding in its area.

In the case of major flooding in England and Wales, Defra is the lead department and is currently examining the existing flood response capability and what may be necessary to improve existing provision. Giving every FRS in England and Wales a statutory duty to make provision would therefore be premature at this stage, although Government has provided FRS with high volume pumps (HVPs) specifically to help deal with such incidents. The option of FRSs making statutory provision for major flooding by use of an Order is still available. In the meantime, FRSs will retain the power to make the provision they deem necessary according to their local circumstances and many have well developed inland water response capabilities.

3.2.2.4 Adoptive Powers

The Fire and Rescue Service's Act 2004 and its equivalent in Devolved Administrations empowers Fire Authorities to respond to a range of other eventualities as it sees fit where it considers that the event or situation is one that causes, or is likely to cause;

- a) One or more individuals to die, be injured or become ill;
- b) Harm to the environment (including the life and health of plants and animals).

These discretionary powers are used in a range of ways by individual FRS's and no single model can be assumed.

3.2.2.5 Local, Regional and National Response Arrangements

Fire and Rescue Services have the ability to mobilise personnel and equipment quickly throughout the UK mainland and maintain their own

communications, command and control systems. They are also able to communicate with other emergency responders, either through public or private networks such as “Airwave”, which is expected to become fully operational within the service by 2010. In addition to their local mobilising centres, a new National Co-ordinating Centre has been introduced to ensure that key national assets, such as USAR and Mass Decontamination teams, can be deployed and managed efficiently.

As Category 1 responders under the Civil Contingencies Act, FRS’s take part, through Local and Regional Resilience Forums, in multi-agency planning for, and response to, all types of civil emergency. These Forums also provide the key point of focus for engagement with Category 2 responders and voluntary agencies

3.2.3 Ambulance Service

3.2.3.1 The United Kingdom Ambulance Service is divided into separate authorities in England, Scotland, Northern Ireland, Wales and the Channel Islands as shown in Annex C to this chapter. Each Service is required to meet pre-determined response times.

3.2.3.2 Activation of Ambulance Service assets is by radio or data from command and communications centres specific to the Service involved which determines the most suitable and available asset to be deployed. Inter-Ambulance service communication on FM radio is nationally available by use of an Emergency Reserve Channel (ERC) enabling vehicles from other Services to communicate with a local control facility. However, Ambulance Trust nationally are converting from FM VHF analogue radio systems to adopt the Tetra Airwave system and over the next eighteen months all Trust will migrate to Airwaves.

3.2.3.3 Training for Paramedics and Ambulance Technicians is to a nationally agreed standard based upon a Manual compiled by the Institute of Health Care Development in collaboration with the relevant Ambulance Services and the Royal College of Nursing.

3.2.3.4 Paramedic staff are trained to use a wide range of skills, techniques and drug protocols in order to preserve life and maximise treatment options within the Golden Hour which is particularly important in time critical patients with multi system trauma.

3.2.3.5 The Ambulance Service does not routinely train in technical rescue onshore or offshore and is not equipped to do so. However, Ambulance Trusts are embarking on a programme of training specialist Paramedics to work alongside Fire Rescue Service in Urban Search and Rescue situations (USAR). This will see Paramedics working in collapsed structures and at heights ie tower crane rescue. Ambulance Trusts have embarked on a marine rescue programme sponsored by the MCA, called the Sea of Change. This will see Paramedics trained to deal with emergencies at sea. This programme has started and all Trusts with

coastal boundaries will have this capability. Notwithstanding the above, the core role of the Ambulance Service remains that of patient/casualty treatment and transport.

3.2.3.6 In addition to normal Ambulance Service assets, Helicopter Emergency Medical Service (HEMS) provision is being developed both rurally and in urban areas to complement ambulance based operations. HEMS aircraft are required to land on scene or in close proximity to any incident as they do not have a winching capability.

3.2.3.7 A Standard Operating Procedure for the deployment of Air Assets has been agreed between the Ambulance Service, The Royal Air Force, HM Coastguard, The Mountain Rescue Committee of Scotland and ACPOS in relation to the exchange of information concerning SAR deployments.

3.2.4 Ministry of Defence

3.2.4.1 See Chapter 2

3.3 Voluntary Organisations Involved in Land Based Search and Rescue

3.3.1 Voluntary teams are available at any time throughout the year. They are accessed through the Police who have overall responsibility for land based search and rescue. Teams have detailed knowledge of their primary areas of operation but are able to work elsewhere as required. It is emphasised that whilst teams are volunteers their standards are high and the service provided is professional and, as such, is an invaluable addition to the Police role in their response to search and rescue and major disasters.

3.3.2 The great majority of volunteer teams have their own robust communications systems that can be set up whenever and wherever required for a particular operation. Land based SAR teams affiliated to ALSAR, BCRC, MR-EW and MRC of S operate VHF radio communications systems which are fully compliant with the UK SAR Band Plan for inland SAR. In addition to the frequencies and channels shown in Appendix 1, some teams have an enhanced communications capability through their own PMR or satellite based communications. The list of registered call signs used by approved units is available on the UK SAR website.

3.3.3 Mountain Rescue Council for England and Wales (MR-EW)

3.3.3.1 The operational rescue teams, each of which is an independent unit, come together for liaison and co-operation purposes under the auspices of the MR-EW. The operational teams are grouped into 8 regional associations:

Lake District Search and Mountain Rescue Association

Cockermouth MRT	Kirkby Stephen SMRT
Coniston MRT	Langdale Ambleside MRT
Cumbria Ore Mines RU	Patterdale MRT
Duddon & Furness MRT	Penrith MRT
Kendal MRT	Wasdale MRT
Keswick MRT	

Mid-Pennine Search and Mountain Rescue Organisation

Bolton MRT	Cave Rescue Organisation
Bowland Pennine MRT	Holme Valley MRT
Calder Valley SRT	Rossendale & Pendle MRT

North East Search and Rescue Association

Cleveland SRT	Swaledale MRT
North of Tyne SRT	Teesdale & Weardale S&MRT
Northumberland NP SRT	Upper Wharfedale FRA
Scarborough & District SRT	

North Wales Mountain Rescue Association

Aberglaslyn MRT	North Wales CRO
HMCG MRT 83	Ogwen Valley MRO
Llanberis MRT	Outward Bound Wales SART
North East Wales SAR	South Snowdonia SART

Peak District Mountain Rescue Organisation

Buxton MRT	Glossop MRT
Derbyshire CRO	Kinder MRT
Derby MRT	Oldham MRT
Edale MRT	Woodhead MRT

South Wales Search and Rescue Association

Brecon MRT	Longtown MRT
Central Beacons MRT	West Brecon CRT
Gwent CRT	Western Beacons MSRT

South West England Rescue Association

Avon & Somerset CRT	Exmoor SRT
Cornwall Mine RO	Gloucestershire CRG
Cornwall SRT	Mendip Rescue Organisation
Dartmoor Rescue Group	Severn Area RA
Devon CRO	

Yorkshire Dales Rescue Panel

Cave Rescue Organisation

Isle of Man Search and Rescue Group

Isle of Man Civil Defence Team	Isle of Man Fire & Rescue Hill ST
Isle of Man Coastguard	Isle of Constabulary

NB In England and Wales the MoD (see Chapter 2) is a member of the MR-EW

3.3.4 Mountain Rescue Committee of Scotland (MRC of S)

3.3.4.1 Mountain rescue in Scotland is structured in the following manner. The civilian teams affiliated to the MRC of S are listed below. There is no regional structure as exists in England and Wales.

Aberdeen MRT	Arrochar MRT
Arran MRT	Assynt MRT
Borders SAR Unit	Lochaber MRT
Braemar MRA	Lomond MRT
Cairngorm MRT	Moffat MRT
Dundonnell MRT	Oban MRT
Galloway MRT	Ochils MRT
Glencoe MRT	Skye MRT
Glenelg MRT	Tayside MRT
Glenmore Lodge MRT	Torridon MRT
Killin MRT	Tweed Valley MRT
Kintail MRT	Scottish CRO

NB In Scotland, the Strathclyde, Tayside and Grampian Police Forces maintain MRTs. In addition the MoD has 2 RAF MRTs at Kinloss and Leuchars. These Police and RAF teams are members of the MRC of S.

3.3.5 Association of Lowland Search and Rescue (ALSAR)

3.3.5.1 The Association of Lowland Search and Rescue was established for the purpose of developing, co-ordinating and promoting the activities of lowland search and rescue teams. It covers areas not served by the MR-EW or MRC of S.

Bucks SAR	Midshires SAR
Cheshire SAR	Norfolk Lowland SAR
Dorset SAR	SEBEV SAR
Essex SAR	Suffolk Lowland SAR
Hampshire SAR	Sussex SAR
Kent SAR	Wiltshire SAR
Lowland Search Dogs	

3.3.6 Northern Ireland Mountain, Cave and Cliff Rescue Co-ordinating Committee (NIMCCRCC)

3.3.6.1 Three teams provide search and rescue cover in Northern Ireland and come together for co-ordination and other purposes in the Northern Ireland Mountain Cave and Cliff Rescue Co-ordinating Committee. There is close co-operation between NIMCCRCC and the Irish Mountain Rescue Association (IMRA).

Irish CRO	North West MRT
Mourne MRT	Police Service of Northern Ireland SAR Unit

3.3.7 Search and Rescue Dog Association (SARDA)

3.3.7.1 The SARDA organisations are voluntary organisations dedicated to the training and use of dogs in searches. The members are commonly drawn from rescue teams. SARDA is affiliated to every region of the MR-EW and to the MRC of S. There is a SARDA in the Republic of Ireland.

SARDA (England)	SARDA (Southern Scotland)
SARDA (English Lakes)	SARDA (South Wales)
SARDA (Scotland)	SARDA (Wales)

3.3.8 British Cave Rescue Council (BCRC)

3.3.8.1 Search and rescue in caves and most disused mines in the British Isles is carried out by the 16 voluntary organisations that are members of the BCRC.

3.3.8.2 Each underground SAR organisation is responsible for its own geographical area of operation and for its own administration, fund raising,

command and control systems and its own equipment. The organisations are usually based in one of the main caving (ie limestone) areas and their operations almost exclusively take place in those areas. Collectively, however, they do also offer support to all Police Forces throughout the British Isles.

3.3.8.3 The purpose of the BCRC is to support and represent its member organisations and their work at national and international level and also to promote and assist liaison and co-operation between them.

3.3.8.4 Some BCRC member organisations also perform SAR functions above ground and are, for those functions, also represented by MR-EW. The BCRC and MR-EW are affiliated organisations with a close working relationship in many areas of mutual interest.

3.3.8.5 The organisations belonging to the BCRC are:

- Cave Rescue Organisation (Based in North Yorkshire)
- Cornwall Mine Rescue Organisation
- Cumbrian Ore Mines Rescue Unit
- Derbyshire Cave Rescue Organisation
- Devon Cave Rescue Organisation
- Gloucestershire Cave Rescue Group
- Gwent Cave Rescue Team
- Irish Cave Rescue Organisation
- Mendip Rescue Organisation
- Midlands Cave Rescue Organisation
- North Wales Cave Rescue Organisation
- Scottish Cave Rescue Organisation
- South East Cave Rescue Organisation
- Swaledale Mountain Rescue Team
- Upper Wharfedale Fell Rescue Association
- West Brecon Cave Rescue Team

3.3.9 Royal Life Saving Society UK

3.3.9.1 Voluntary Open Water Lifeguard Units patrol designated stretches of coastal beaches, rivers, lakes and leisure parks. These units have detailed knowledge of their primary areas of operation and are qualified to provide safety cover/rescue by paddle/powered craft and by foot patrol. They normally provide safety cover by inshore powered rescue craft, paddle craft and by foot patrol. They normally provide safety cover by agreement of the Local Authority or facility operator at weekends and public holidays from 1st May until 30th September and by request for special events throughout the year. The majority have VHF communications systems and networks set up whenever patrols are taking place. A number of coastal units, where appropriate have declared facility status, work in liaison with HMCG and the RNLI Beach Rescue Service. These Lifeguard Units can be accessed through the Royal Life Saving Society UK.

Police Forces

SCOTLAND

I	Northern Constabulary	V	Fife Constabulary
II	Grampian Police	VI	Strathclyde Police
III	Tayside Police	VII	Lothians and Borders Police
IV	Central Scotland Police	VIII	Dumfries & Galloway Constabulary

ENGLAND AND WALES

(Forces are identified by their NRC number)

1	Avon and Somerset Constabulary	23	Lincolnshire Police
2	Bedfordshire Police	24	Merseyside Police
3	Cambridgeshire Constabulary	25	Metropolitan Police
4	Cheshire Constabulary	26	Norfolk Constabulary
5	City of London Police	27	Northamptonshire Police
6	Cleveland Police	28	Northumbria Police
7	Cumbria Constabulary	29	North Wales Police
8	Derbyshire Constabulary	30	North Yorkshire Police
9	Devon and Cornwall Constabulary	31	Nottinghamshire Police
10	Dorset Police	32	South Wales Police
11	Durham Constabulary	33	South Yorkshire Police
12	Dyfed-Powys Police	34	Staffordshire Police
13	Essex Police	35	Suffolk Constabulary
14	Gloucestershire Constabulary	36	Surrey Police
15	Greater Manchester Police	37	Sussex Police
16	Gwent Police	38	Thames Valley Police
17	Hampshire Constabulary	39	Warwickshire Constabulary
18	Hertfordshire Constabulary	40	West Mercia Constabulary
19	Humberside Police	41	West Midlands Police
20	Kent Constabulary	42	West Yorkshire Police
21	Lancashire Constabulary	43	Wiltshire Constabulary
22	Leicestershire Constabulary	44	Police Service of Northern Ireland

ISLE OF MAN

A	Isle of Man Constabulary
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Fire Services

1	Central Scotland Fire and Rescue Service	32	Isle of Man Fire and Rescue Service
2	Dumfries & Galloway Fire and Rescue Service	33	Kent Fire and Rescue Service
3	Fife Fire and Rescue Service	34	Lancashire Fire and Rescue Service
4	Grampian Fire and Rescue Service	35	Leicestershire Fire and Rescue Service
5	Highland & Islands Fire and Rescue Service	36	Lincolnshire Fire and Rescue Service
6	Lothian & Borders Fire and Rescue Service	37	London Fire and Rescue Service
7	Strathclyde Fire and Rescue Service	38	Merseyside Fire and Rescue Service
8	Tayside Fire and Rescue Service	39	Mid and West Wales Fire and Rescue Service
9	Northern Ireland Fire and Rescue Service		
10	Avon Fire and Rescue Service	40	Norfolk Fire Service
11	Bedfordshire & Luton Fire and Rescue Service	41	North Wales Fire Service
12	Buckinghamshire Fire & Rescue Service	42	North Yorkshire Fire and Rescue Service
13	Cambridge Fire and Rescue Service	43	Northamptonshire Fire and Rescue Service
14	Cheshire Fire and Rescue Service	44	Northumberland Fire and Rescue Service
15	Cleveland Fire and Rescue Service	45	Nottinghamshire Fire and Rescue Service
16	Cornwall County Fire Brigade	46	Oxfordshire Fire Service
17	Cumbria County Fire and Rescue Service	47	Royal Berkshire Fire and Rescue Service
18	Derbyshire Fire and Rescue Service	48	Shropshire Fire and Rescue Service
19	Devon Fire and Rescue Service	49	Somerset Fire and Rescue Service
20	Dorset Fire and Rescue Service	50	South Wales Fire Service
21	County Durham and Darlington Fire and Rescue Brigade	51	South Yorkshire Fire and Rescue Service
		52	Staffordshire Fire and Rescue Service
22	East Sussex Fire and Rescue Service	53	Suffolk County Fire Service
23	Essex County Fire and Rescue Service	54	Surrey Fire and Rescue Service
24	Gloucestershire Fire and Rescue Service	55	Tyne and Wear Metropolitan Fire and Rescue Service
25	Greater Manchester County		
26	Hampshire Fire and Rescue Service	56	Warwickshire Fire and Rescue Service
27	Hereford and Worcester	57	West Midlands Fire Service
28	Hertfordshire Fire and Rescue Service	58	West Sussex Fire and Rescue Service
29	Humberside Fire and Rescue Service	59	West Yorkshire Fire Service
30	Isle of Wight Fire and Rescue Service	60	Wiltshire Fire and Rescue Service
31	Isles of Scilly Fire and Rescue Service	61	Guernsey Fire and Rescue Service
		62	Jersey Fire Service

Ambulance Trusts		
New Ambulance Trust	Existing Ambulance Trusts	Area Covered
North East Ambulance Service NHS Trust	<ul style="list-style-type: none"> • North East • Part of Tees, East & North Yorkshire 	As per the Government Office Region (GoR) for the North East
North West Ambulance Service NHS Trust	<ul style="list-style-type: none"> • Cumbria • Lancashire • Mersey Region • Greater Manchester 	As per the GoR for the North West [Plus Glossop (High Peak Council)]
Yorkshire Ambulance Service NHS Trust	<ul style="list-style-type: none"> • Part of Tees, East & North Yorkshire • West Yorkshire • South Yorkshire 	As per the GoR for Yorkshire and the Humber [With the exception of North and North East Lincolnshire (see East Midlands)]
East Midlands Ambulance Service NHS Trust	<ul style="list-style-type: none"> • East Midlands • Lincolnshire • Half of Two Shires 	As per the GoR for the East Midlands [With the exception of Glossop (see North West), and the addition of North and North East Lincolnshire]
West Midlands Ambulance Service NHS Trust	<ul style="list-style-type: none"> • West Midlands • Hereford & Worcester 	As per the GoR for the West Midlands
Staffordshire Ambulance Service NHS Trust	<ul style="list-style-type: none"> • Coventry & Warwickshire • Staffordshire 	Staffordshire to remain separate, working in partnership with the West Midlands during that period, with eventual merger
East of England Ambulance Service NHS Trust	<ul style="list-style-type: none"> • East Anglian • Essex • Bedfordshire & Hertfordshire 	As per the GoR for the East of England
London Ambulance Service NHS Trust	<ul style="list-style-type: none"> • London (unchanged) 	As per the GoR for London
South East Coast Ambulance Service NHS Trust	<ul style="list-style-type: none"> • Kent • Surrey • Sussex 	Kent, Surrey and Sussex: [Plus the area covered by Rushmoor District Council and part of Hart District Council]
South Central Ambulance Service NHS Trust	<ul style="list-style-type: none"> • Hampshire • Royal Berkshire • Oxfordshire • Half of Two Shires 	Hampshire, Berkshire, Oxfordshire and Buckinghamshire: [With the exception of Rushmoor District Council, part of Hart District Council and the electoral ward of Shrivenham]
Great Western Ambulance Service NHS Trust	<ul style="list-style-type: none"> • Great Western 	Bristol, North Somerset, Bath & North East Somerset, Gloucestershire, Wiltshire: [Plus the electoral ward of Shrivenham (Vale of the White Horse Council)]
South West Ambulance Service NHS Trust	<ul style="list-style-type: none"> • Dorset • West Country 	Devon, Cornwall, Isles of Scilly, Dorset, Somerset
Isle of Wight Healthcare Primary Care Trust	<ul style="list-style-type: none"> • Isle of Wight 	Isle of Wight

CHAPTER 4

Royal National Lifeboat Institution

4.1 General

4.1.1 The Royal National Lifeboat Institution (RNLI) is a voluntary organisation incorporated by Royal Charter for the purpose of saving lives and promoting safety on water in the United Kingdom, Northern Ireland, the Channel Islands, the Isle of Man and the Republic of Ireland.

4.2 Organisation

4.2.1 The RNLI is organised in six divisions for the operation and administration of lifeboats, with each division under the authority of an Inspector of Lifeboats. There are 232 lifeboat stations of which 127 operate lifeboats over 10 metres in length (all weather lifeboats) including 74 at which an Inshore Lifeboat (under 10 metres in length) is also available. In addition there are 105 stations at which there are Inshore Lifeboats only, 4 of which also operate an Inshore Rescue Hovercraft. A fleet of relief lifeboats is maintained so that boats may be replaced at short notice in the event of damage or when withdrawn for refit without diminishing the cover available. The location of lifeboat stations is given in the Annex to this chapter.

4.2.2 The RNLI is also the largest provider of lifeguard services in the UK particularly in the south and south west of the UK and it is the intention of the RNLI to progressively expand these services to other parts of the UK.

4.2.3 Core to the RNLI is the delivery of prevention messages that have been traditionally delivered by its Sea Safety and Beach Safety units.

4.3 Concept of Operations

4.3.1 The RNLI saves lives at sea throughout the United Kingdom and the Republic of Ireland by providing:

1. A strategically located fleet of all-weather lifeboats which are available at all times and tactically placed inshore craft which are subject to weather limitations.
2. A Beach Lifeguard service on a seasonal basis where appropriate.

3. Safety education and accident prevention to a defined standard of performance, commensurate with the resources available, using trained and competent people who, wherever possible, are volunteers.

4.4 Strategic Performance Standards

4.4.1 The RNLI aims to:

1. Achieve an average launch time of 10 minutes from notification to the RNLI
2. Reach all notified casualties where a risk of life exists, in all weathers, out to a maximum of 100 nautical miles.
3. Reach at least 90% of all casualties within 10 nautical miles of Lifeboat stations within 30 minutes of launch in all weathers
4. Reach any beach casualty up to 300m from shore within the flags on RNLI lifeguard patrolled beaches, within 3½ minutes

4.5 Co-ordination of RNLI SAR Services in the Channel Islands

- 4.5.1 SAR operations involving lifeboats in the Channel Islands are co-ordinated by the MRCCs of the Harbour authorities of either Guernsey or Jersey depending on location of the incident.

4.6 Authority to Launch

- 4.6.1 Each lifeboat station is controlled by a Lifeboat Operations Manager (LOM). The LOM authorises the launching of a lifeboat. The LOM is supported by one or more Deputy Launching Authorities who can act in the absence of the LOM. Whilst the SAR co-ordinators are responsible for requesting the launch of a lifeboat, the final decision to launch in the weather and sea or water conditions prevailing, rests with the Launching Authority and the Coxswain or Helmsman.

4.7 RNLI Central Cooperation's and Information Room (COIR)

The COIR at RNLI Headquarters, Poole, Dorset, is staffed continuously and enables a responsible officer to be fully and quickly informed of lifeboat operations. The COIR also ensures that there is adequate liaison between RNLI staff and Lifeboat Station officials and provides advice and guidance where necessary. It also provides a central point of contact for other SAR authorities wishing to contact the RNLI.

4.8 Communication with Lifeboats

- 4.8.1 All lifeboats and hovercraft are fitted with VHF (FM) radio operating in the 156-174 MHz band. All-weather lifeboats are also fitted with MF radiotelephone equipment and the Severn, Trent and Tamar class lifeboats have an HF capability. Where a special requirement exists a few are also fitted with transceivers on 121.5 MHz (International Aeronautical Distress) and 123.1 MHz. Special arrangements are being developed to facilitate communications with lifeboats operating on inland waters.
- 4.8.2 All-weather lifeboats are also fitted with MF and VHF Digital Selective Calling (DSC).

4.9 Aids to Navigation

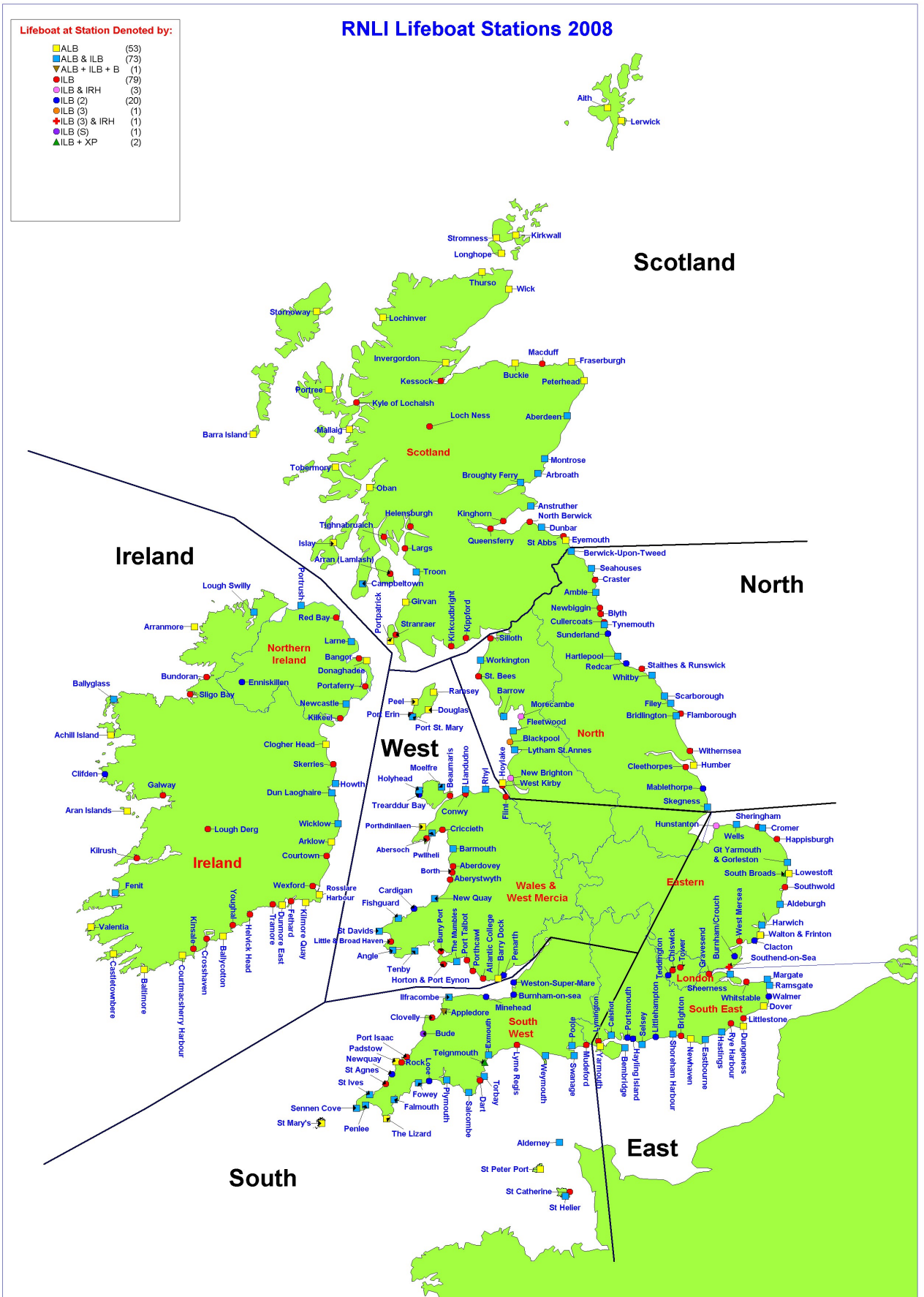
- 4.9.1 All lifeboats carry Global Positioning System (GPS) receivers. All-weather lifeboats are fitted with GPS, integrated to an electronic chart system operating ARCs (Admiralty Raster Chart System). All B Class, Hovercraft and some D-class (IBI type) are fitted with electronic vector chart systems.
- 4.9.2 All lifeboats over 10 metres in length are also fitted with VHF/DF Equipment which operates on the marine band and also on 121.5 MHz.

4.10 Duration of Lifeboats

- 4.10.1 All-weather lifeboats have a duration of 10 hours at full speed. Proceeding at economic or slow speed can considerably extend this duration when on scene and searching.
- 4.10.2 Inshore lifeboats have a duration of 3 hours at full speed. Proceeding at economic or slow speed can considerably extend this duration when on scene and searching.

4.11 RNLI Beach Lifeguards

- 4.11.1 The RNLI provides a Beach Lifeguard service under contract to certain Local Authorities and private beach owners. This service is currently limited to beaches in the South and South West of the UK but it is likely to expand significantly during the next few years.
- 4.11.2 The service is provided under a Memorandum of Understanding with the Maritime and Coastguard Agency.
- 4.11.3 RNLI Lifeguards operate from 1 May to 31 September (full season) with levels of cover increasing during the main and peak periods of the season. Cover may be provided outside of this period by prior arrangement with the Local Authority, in these cases HMCG will be notified in advance.



CHAPTER 5

Supporting Services

5.1 Introduction

5.1.1 During the course of SAR co-ordination, response and information gathering, UK SAR makes use of a number of other organisations and authorities who are able to help either because of their proximity to the SAR incident, or the information they may be able to provide which could lead to a successful outcome of a SAR operation.

5.2 Masters of Vessels at Sea

5.2.1 Masters of vessels at sea, on receiving a distress message either direct from the vessel in trouble or as relayed by another vessel or SAR authority, are bound by the SOLAS Convention to render assistance. Guidance to Masters is given in the International Aeronautical and Maritime SAR Manual (IAMSAR) Volume 3, the Annual Summary of Admiralty Notices to Mariners and the International Radio Regulations.

5.3 Lighthouse and Pilotage Authorities

5.3.1 Trinity House, the Northern Lighthouse Board and the Commissioners of Irish Lights liaise closely with MCA. These authorities are constantly aware of the whereabouts and availability of their lighthouse tenders which are capable of responding to SAR incidents and communicating on all maritime distress frequencies. Their service launches are of particular value in recovering persons from the water or from pleasure craft. An operational Control Centre located at Trinity House Depot at Harwich, Essex, is continuously manned and co-ordinates the operational functions of the Trinity House Lighthouse Service. Northern Lighthouse Board and Commissioners of Irish Lights have similar arrangements at their Edinburgh and Dublin bases.

5.3.2 Competent Harbour Authorities have fast pilot launches available and are all fitted with VHF communications and are of particular value in responding to SAR incidents either within or just outside harbour limits.

5.4 Lloyds of London

- 5.4.1 Lloyds Intelligence Service can provide positive confirmation of a ship's name (and previous name), call sign, MMSI, last known position, voyage details, ship details and type, and possible cargo. Such reference can be particularly important when doubtful or incomplete information makes identification difficult or where there are several ships with the same name. MCA reciprocates by providing information to Lloyds regarding casualties and data from its Channel Navigation Information Service (see chapter 1).
- 5.4.2 Lloyds Intelligence can make international enquiries if vessels are reported overdue and may ask MCA to make broadcasts and other enquiries on their behalf.

5.5 Local Authorities and Beach Lifeguard

- 5.5.1 While responsibility for safety on beaches and cliffs, except where privately owned, has traditionally rested with the local authorities, UK SAR will respond immediately when SAR measures are required.
- 5.5.2 In various parts of the UK, Beach Lifeguard Units (BLUs) are provided to minimise the risk of injury or drowning on and around UK beaches. The BLUs may be volunteers operating under contract to Local Authorities or paid services that in some cases are privately run.
- 5.5.3 The lifeguards are trained by the Royal Life Saving Society (RLSS UK), the Surf Life Saving Association (SLSA GB) or the Royal National Lifeboat Institution (RNLI).
- 5.5.4 BLUs work closely with HM Coastguard and where they have received appropriate training in SAR communications and achieved the required standard, they have been granted declared facility status. The RNLI has a MOU with the MCA on the provision of lifeguard services.

5.6 Offshore Oil and Gas Operators

- 5.6.1 Companies operating offshore have considerable resources of ships, helicopters and equipment available for normal day-to-day operations and to deal with emergencies.
- 5.6.2 General guidance on the handling of offshore emergencies is given in the Health and Safety Executive's Offshore Emergencies Handbook. Offshore operator's emergency plans are drawn up in conjunction with MCA. HM Coastguard are advised of any offshore incident likely to cause a threat to life irrespective of whether any positive action is subsequently required. The resources at the disposal of offshore operators are generally available to assist in other SAR emergencies.

5.7 Liaison with Foreign SAR Authorities

5.7.1 UK SAR maintains a close liaison with neighbouring countries for SAR co-operation purposes. In most cases, Memoranda of Understanding or Agreements have been agreed between the UK and these neighbouring countries which provide the SAR co-operation details. Designated UK MRCCs have permanent liaison arrangements with foreign RCCs as shown in Annex A to this chapter. The ARCC has liaison arrangements with foreign ARCCs.

5.8 National Coastwatch Institution (NCI)

5.8.1 The National Coastwatch Institution (NCI) is a voluntary organisation which currently operates 36 Coastal Surveillance Stations around the English and Welsh Coasts. The Stations are open primarily during daylight hours, but can be opened at any time to assist in a SAR emergency.

5.8.2 NCI watch keepers are all trained to maintain a visual watch and their primary task is to “Spot, Plot and Report” any incident that affects the safety of persons at sea, on the beach, or on cliffs. Their initial contact will probably be with HM Coastguard, but they also will liaise with other emergency services.

5.8.3 All stations scan VHF Marine Band Channel frequencies; some where appropriate will transmit under supervision of HM Coastguard. Where needed some stations have Radar to assist in maintaining their watch keeping responsibilities.

5.8.4 One of the most important contributions NCI stations make to SAR is the local knowledge which all watch keepers on station possess.

5.8.5 All watch keepers are trained to a high standard and stations will be expected to achieve Declared Facility Status (DFS) within 18 months of opening.

5.8.6 By maintaining a visual watch NCI stations complement the electronic identification of possible SAR incidents.

5.9 Sky Watch Civil Air Patrol

5.9.1 Sky Watch Civil Air Patrol (SWCAP) is a voluntary organisation consisting of private pilots with their own light aircraft who have made themselves available to the emergency services for day time aerial observation and monitoring. They do not have crews standing by “at readiness” nor is there an immediate call-out facility but if weather conditions are favourable, they will get airborne as quickly as possible on request and usually within 1 hour. Call out is normally via Police or Coastguard.

5.9.2 Whilst routinely airborne SWCAP units will report any sightings of persons in potential trouble or distress or other unusual or suspect occurrences via

Air Traffic Control to the appropriate emergency services via the 999 system. For incidents at sea or on the coast, then direct radio contact with the Coastguard is used. The SWCAP unit will, if possible, remain in the area at the request of the emergency service until relieved by a dedicated SAR unit.

ANNEX A

UK MRCC LIAISON RESPONSIBILITY

MRCC Aberdeen	Coastguard Reykjavik (Iceland) MRCC Thorshavn (Faroe Is) RCC Stavanger (Norway) RCC Bodo (Norway)
MRCC Yarmouth	RCC Aarhus (Denmark) RCC Bremen (Germany) RCC Den Helder (Netherlands)
MRCC Dover	RCC Oostende (Belgium) MRCC Gris Nez (France)
MRCC Falmouth	MRCC Jobourg (France) MRCC Corsen (France) MRCC Etel (France) MRCC Jersey MRCC Guernsey RCC Boston, (USA) RCC Norfolk, (USA) RCC Miami, (USA) RCC Halifax, (Canada) International RCCs worldwide
MRSC Liverpool	Isle of Man Coastguard, Douglas
MRCC Swansea	MRCC Dublin, (Eire)
MRCC Clyde	MRCC Gronnedal, (Greenland)

SEARCH AND RESCUE FREQUENCIES

Frequency	Channel	Mode + Simplex = (S) Duplex (D)	Freq Band	Purpose and Remarks
Calling and Distress Frequencies				
457 kHz	-	A1D/G1D – (S)	LF	Avalanche Rescue Beacons
2182 kHz	-	J3E-(S)	MF	International maritime distress, calling and safety. SSB
2187.5 kHz	-	F1B-(S)	MF	International maritime medium frequency digital selective calling
2272 kHz	-	A1D/G1D-(S)	MF	Avalanche Rescue Beacons
4340 kHz	-	A1A-(S)	HF	NATO combined submarine distress. CW
8364 kHz	-	A1A/J3E-(S)	HF	Survival craft. CW/SSB
121.5 MHz	-	A3E/A2D-(S)	VHF	International aeronautical emergency frequency. Cospas-Sarsat beacon distress frequency which will become a beacon homing-only frequency on 1 February 2009. AM
156.125 MHz	62a	F3E-(S)	VHF	Land SAR FM
156.525 MHz	70	G2B-(S)	VHF	International maritime VHF digital selective calling
156.8 MHz	16	F3E-(S)	VHF	International maritime distress, calling and safety. FM
243 MHz	-	A3E/A2D-(S)	VHF	NATO combined Distress/Emergency. Submarine Distress Marker Buoy homing. Cospas-Sarsat beacon distress frequency that will become a beacon homing-only frequency on 1 February 2009. AM
406.0 – 406.1 MHz	-	A1D/G1D-(S)	UHF	Cospas-Sarsat - Emergency Position-Indicating Radio Beacons (EPIRB) – maritime Emergency Locator Transmitters (ELT) – aviation Personal Locator Beacons (PLB) – multi-environment
SAR Control and Scene of Search				
3023 kHz	-	J3E/A1A – (S)	HF	RCC to ships and/or aircraft at scene of search. SSB/CW
5680 kHz	-	J3E/A1A – (S)	HF	RCC to ships and/or aircraft at scene of search. SSB/CW
8364 kHz	-	J3E/A1A – (S)	HF	International for intercommunication between survival craft, aircraft and ships. SSB/CW
86.3125 MHz	105	F3E-(S)	VHF	Land SAR. Used in Scotland as a feeder link for cross-band rebroadcasting. Note: In England and Wales, this channel is due for withdrawal at the end of 2008. FM
86.3250 MHz	106	F3E-(S)	VHF	Secondary land Search and Rescue (Low Band, shared) FM
123.1 MHz	-	A3E/A2D – (S)	VHF	NATO/International combined scene of search and rescue. AM
132.65 MHz	-	A3E-(S)	VHF	Counter pollution on scene operations. AM
147.350 MHz	96	F3E (S) or (D)	VHF	Land SAR simplex or paired another suitable channel. FM
147.475 MHz	92	F3E (S) or (D)	VHF	Land SAR simplex or paired another suitable channel. FM
152.850 MHz	93	F3E (S) or (D)	VHF	Land SAR simplex or paired another suitable channel. FM
155.350 MHz	91	F3E (S) or (D)	VHF	Land SAR simplex or paired another suitable channel. FM
156.0 MHz	0 (Zero)	F3E – (S)	VHF	Coastal and inshore search and rescue. FM
156.175 MHz	63a	F3E – (S)	VHF	Land SAR Team Working Channel. FM
156.225 MHz	64a	F3E – (S)	VHF	Land SAR Team Working Channel. FM
156.300 MHz	6	F3E – (S)	VHF	Intership frequency for use at scene of search. Also for RCC to ships at scene of search. FM
156.375 MHz	67	F3E – (S)	VHF	May be used for SAR co-ordination, if authorised, by participating land, sea and air stations. FM

SEARCH AND RESCUE FREQUENCIES (Contd)

Frequency	Channel	Mode + Simplex = (S) Duplex (D)	Freq Band	Purpose and Remarks
156.500 MHz	10	F3E – (S)	VHF	May be used for SAR co-ordination, if authorised, by participating land, sea and air stations. FM
156.675 MHz	73	F3E – (S)	VHF	May be used for SAR co-ordination, if authorised, by participating land, sea and air stations. FM
157.200 MHz	24a	F3E – (S)	VHF	Land SAR Ground to Air channel (abbreviated to G2A). FM
157.275 MHz	85a	F3E – (S)	VHF	Land SAR Team Working Channel. FM
158.650 MHz	53a	F3E – (S)	VHF	Land SAR Channel. FM
160.725 MHz	62b	F3E – (S)	VHF	Land SAR Team Working Channel. FM
160.775 MHz	63b	F3E – (S)	VHF	Land SAR Team Working Channel. FM
160.825 MHz	64b	F3E – (S)	VHF	Land SAR Team Working Channel. FM
161.800 MHz	24b	F3E – (S)	VHF	Land SAR Team Working Channel. FM
161.875 MHz	85b	F3E – (S)	VHF	Land SAR Team Working Channel. FM
168.350 MHz	98	F3D – (D)	VHF	Scotland – Land SAR GPS Data Channel – paired with Channel 99
174.0375 MHz	99	F3D – (D)	VHF	Scotland – Land SAR GPS Data Channel – paired with Channel 98
244.6 MHz	-	A2D/A3E – (S)	VHF	UK scene of SAR control. AM
252.8 MHz	-	A3E – (S)	VHF	Military aviation scene of search. AM
282.8 MHz	-	A3E – (S)	VHF	Combined scene of search and rescue. AM

Additional info:

1. Frequencies above 200 MHz are referred to as UHF in HM Forces; elsewhere 300 MHz is the VHF/UHF threshold.
2. The Home Office and Scottish Executive allocate frequencies in the 147 and 155 MHz bands for Police-sponsored Land SAR.
3. Channels 24, 62, 63, 64 and 85 were semi-duplex channels, but are now allocated to UK Land SAR and have become simplex channels with an “a” or “b” suffix, each “a” suffix denoting the lower frequency channel of the former semi-duplex pairing. The channel designations are only relevant within the UK. The channels are managed by the UK SAR Communications Working Group and the licensing authority is the MCA.

GLOSSARY OF ABBREVIATIONS

ACPO	Association of Chief Police Officers England, Wales and Northern Ireland
ACPO(S)	Association of Chief Police Officers Scotland
ALSAR	Association of Lowland Search and Rescue
ARCC	Aeronautical Rescue Co-ordination Centre
ARCS	Admiralty Raster Chart Service
ASA	Ambulance Service Association
ATCC	Air Traffic Control Centre
ALBs	All-weather Lifeboats
BCRC	British Cave Rescue Council
BLUs	Beach Lifeguard Units
CFOA	Chief Fire Officers Association
CAD	Civil Aviation Division
CNIS	Channel Navigation Information service
COIR	Central Operations and Information Room
COSPAS/SARSAT	Satellite Distress Alerting System
CRT	Coastguard Rescue Team or Cave Rescue Team
D&D	Distress and Diversion
DF	Direct Finding
DSC	Digital Selective Calling
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
ECT	Evening Civil Twilight
ETV	Emergency Towing Vessel
F/UIRs	Flight/Upper Information Regions
EPIRB	Emergency Position Indicating Radio Beacon
ERC	Emergency Reserve Channel
FM	Frequency Modulation
GMDSS	Global Maritime Distress and Safety System
GPS	Global Positioning System
GT	Gross Tonnes
HEMS	Helicopter Emergency Medical Service
HF	High Frequency
HMCG	Her Majesty's Coastguard
IMRA	Irish Mountain Rescue Association
IAMSAR	International Aeronautical and Maritime Search and Rescue Manual
IR	Infra Red
IRT	Initial Response Team
KHz	kilo-Hertz
LSARC	Local Search and Rescue Committees

GLOSSARY OF ABBREVIATIONS (continued)

LUT	Local user Terminal
MACA	Military Aid to the Civil Authorities
MCA	Maritime and Coastguard Agency
MCC	Mission Control Centre
MF	Medium Frequency
MFDESC	Medium Frequency Digital Selective Calling
MHz	Mega-Hertz
MIRG	Maritime Incident Response Group
MMSI	Mobile Maritime Ship Identification
MoD	Ministry of Defence
MPA	Maritime Patrol Aircraft
MR-EW	Mountain Rescue England and Wales
MRC of S	Mountain Rescue Committee of Scotland
MRCC	Maritime Rescue Co-ordination Centre
MRT	Mountain Rescue Team
MSI	Maritime Safety Information
NAVTEX	Navigational Safety Text
NIMCCRCC	Northern Ireland Mountain Cave and Cliff rescue Co-ordinating Committee
NVG	Night Vision Goggles
OCC	Operations Control Centre
RAF	Royal Air Force
RCC	Rescue Co-ordination Centre
RLSS UK	Royal Life Saving Society UK
RN	Royal Navy
RNLI	Royal National Lifeboat Institution
SAR	Search and Rescue
SARDA	Search and Rescue Dog Association
SHS	Station Honorary Secretary (Royal National Lifeboat Institution)
SLSS	Surf Lifesaving Society
SOLAS	Convention on Safety of Life at Sea (1974)
SRR	Search and Rescue Region
UHF	Ultra-High Frequency
UK	United Kingdom
UKSAROG	United Kingdom Search and Rescue Operators Group
UKSARSC	United Kingdom Search and Rescue Strategic Committee
USA	United States of America
USAF	United States Air Force
USAR	Urban Search and Rescue
VHF	Very High Frequency
VHFDESC	Very High Frequency Digital Selective Calling

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