Integrated Offshore Emergency Response
EPOL is the acronym for the Emergency Preparedness Offshore Liaison Group which was formed in 1995 in the aftermath of the Piper Alpha disaster in July 1988, the subsequent Public Enquiry and the introduction of the Prevention of Fire and Explosion, and Emergency Response Regulations 1995. The Group was established to look at all aspects of offshore oil and gas industry emergency response where there was a risk to life.

EPOL is an industry-led body originally chaired by Grampian Police, now Police Scotland as of 1st April 2013. HM Coastguard is a permanent member of the Group. EPOL has spawned a number of sub-groups which cover aspects of emergency response in greater detail – Human Resources, Mutual Aid, Media issues etc.

The Offshore Emergency Response Working Group (OERWG) was established under the umbrella of EPOL in 2009 following two major offshore helicopter incidents in the Central North Sea. The OERWG is a unique grouping that brings together the emergency services, regulators, and a cross section of the offshore oil and gas industry including public transport helicopter operators to review offshore Search and Rescue (SAR) procedures. The OERWG’s terms of reference are contained in Annex A of this document.

Procedures and guidance contained in this document have been determined by the OERWG membership. It is intended that the document will be dynamic and capable of regular refresh to reflect periodic changes to the structure of participating organisations. Procedural and guidance changes will only take place following consultation with the OERWG and wider industry. Although this document covers aviation issues in general terms, a sister EPOL OERWG document titled Multiple Aircraft SAR Operations – Standard Operating Procedures should always be consulted for the detailed technical aspects of aviation SAR response.

The document intends to explain the concept of Integrated Offshore Emergency Response to a wide range of agencies, authorities and to the broader offshore oil and gas industry including public transport helicopter and vessel owners or operators. In order to keep the document as brief and concise as possible, the explanation of roles and responsibilities of some of the agencies is limited to how they fit into the overall response to offshore oil and gas industry incidents.

Detailed guidance on the onshore aspect of offshore emergency response is available elsewhere on the EPOL website. This document focuses primarily on the offshore (i.e. at sea) aspect of oil and gas incidents.

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1 G-REDU 18 February 2009 18 persons rescued no fatalities & G-REDL 1 April 2009 16 fatalities no survivors.
2 For the purposes of this document, “public transport helicopter” or “public transport helicopters” is intended to cover helicopters engaged in the routine transportation of the offshore workforce to and from their place of work.
3 EPOL Website – [www.epolgroup.co.uk](http://www.epolgroup.co.uk)
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Integrated Offshore Emergency Response

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Integrated Offshore Emergency Response

Chapter 1 – Scope, Background & Requirement

1.1. Scope

1.1.1. Procedures and guidance contained within this document are intended to cover the Search and Rescue (SAR) emergency response to an offshore oil and gas industry incident throughout the UK Search & Rescue Region (UK SRR). It should be noted that the United Kingdom Continental Shelf (UKCS), as defined for oil and gas exploration, largely sits within the UK SRR. To the North and West of Shetland, however, there are areas where the two boundaries are at variance and bespoke emergency response procedures may be required.

1.1.2. In major offshore oil and gas industry incidents there will almost certainly be an element of overlap between the SAR emergency response and hydrocarbon containment or pollution control emergency response. This document, however, focuses solely on the SAR interface between the industry response and that provided by the emergency services. It should be noted that, although hydrocarbon containment or pollution control emergency response may run concurrent with SAR emergency response, SAR operations will always have primacy.

1.1.3. Although this document focuses on the at-sea emergency response, as survivors, evacuees or casualties are brought onshore, responsibilities move to the police and other emergency services working closely with the operating companies involved. The document will outline how these responsibilities interact within the concept of Integrated Offshore Emergency Response (IOER).

1.1.4. Although the IOER document attempts to provide a one size fits all solution, the geographic location of the incident may require or necessitate a tailored response although the principles behind IOER should remain.

1.2. Background

1.2.1. Offshore oil and gas incidents can be highly complex and the emergency response is likely to involve a wide range of authorities and assets. The industry is unique in the UK SRR in being able to call upon its own rescue vessels or SAR helicopters. In addition, they will have an onshore emergency response structure to support the Offshore Installation Manager (OIM). In certain circumstances, the onshore emergency response structure can also call upon public transport helicopters to support an evacuation via their contracted helicopter

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4 Discussed in detail in Chapter 9
provider. Industry onshore emergency response works closely with the police to receive and process evacuees when they are brought onshore. This is of major benefit to SAR coordinators who can then focus their effort on the at-sea response.

1.2.2. In a major offshore incident, it is inevitable that national SAR assets are likely to be deployed and nearby vessels not directly linked to the offshore installation in difficulty will respond under international obligations. In certain circumstances, offshore public transport helicopters may also form part of the overall emergency response.

1.2.3. A review of a wide range of significant offshore oil and gas industry incidents throughout the UK SRR from 2000 to 2010 identified the following areas that needed to be addressed –

- Confusion or ambiguity over roles and responsibilities.
- Incompatible terminology – SAR v offshore oil and gas industry.
- SAR assistance provided without clearly identifying the relevant IAMSAR\(^5\) Emergency Phase.
- Possible danger of exposing evacuees to greater risk than if they had remained on board the stricken offshore installation.
- Uncertainty over the use of public transport helicopters in offshore emergency situations\(^6\).
- Deconfliction issues when a large number of helicopters are involved.
- Communications issues – primarily aircraft on-scene communications.
- No agreed plan to manage multiple air assets.

1.3. Requirement

1.3.1. The IOER Plan will clearly define roles and responsibilities. Although it will focus primarily on the at-sea aspect of emergency response it must also recognise the role of onshore responders.

1.3.2. The IOER Plan must clearly establish where primacy lies during the various phases of an incident.

1.3.3. Terminology must be clear and unambiguous and understood by all participants. SAR terminology is based on the IAMSAR Manual and will be familiar to all vessels and aircraft responding to the incident, including assets responding from states adjacent to the UK SRR. This document uses IAMSAR terminology and procedures but attempts to put them into the context of an offshore oil and gas incident and to interface them with industry terminology.

\(^5\) IAMSAR – International Aeronautical and Maritime Search and Rescue. The acronym given to the manual jointly produced by the International Maritime Organisation (IMO) and International Civil Aviation Organisation (ICAO). IMO and ICAO are specialised agencies of the United Nations. Emergency phases are fully explained in Chapter 9.

\(^6\) Explained in Chapter 9
1.3.4. IAMSAR defines three Emergency Phases. Each and every SAR incident must be categorised into one of the three Emergency Phases. This will define the operating environment for those at risk and those responding.

1.3.5. A communication and coordination plan to safely manage the multiple aircraft response has to form part of the wider IOER Plan.
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Chapter 2 – PFEER. Industry Response and Capability.

2.1. PFEER

2.1.1. Responsibility for the regulation of health and safety for the offshore oil and gas industry lies with the Health and Safety Executive (HSE) Energy Division.

2.1.2. A key part of HSE legislation is The Offshore Installations (Prevention of Fire and Explosion, and Emergency Response) Regulations 1995 – commonly abbreviated to PFEER.

2.1.3. In broad terms, the PFEER Regulations require the duty holder to have in place the organisation and procedures to deal with an emergency and any subsequent evacuation, escape or rescue. This document summarises some of the key elements of PFEER with a view to explaining how PFEER interacts with the concept of Integrated Offshore Emergency Response and is not, in any way, intended to replace the full Statutory Instrument.

2.1.4. “Duty Holder” means

   a) in relation to a production installation, the operator
   b) in relation to a non production installation, the owner

“Owner” means

The person or company who controls the operation of a non production installation.

2.1.5. “Emergency” means an emergency of a kind which can require evacuation, escape or rescue.

2.1.6. “Evacuation” means the leaving of an installation and its vicinity, in an emergency, in a systematic manner and without directly entering the sea. The primary method of evacuation is normally taken to mean leaving by the method personnel arrived on the installation – on the UKCS this is normally by helicopter. The secondary method may require evacuation by lifeboat.

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7 From 1st April 2013, the Offshore Safety Division of the HSE was incorporated into the HSE Energy Division.
9 PFEER definitions of Duty Holder and Owner as amended by SCR05. For the purposes of this document and ease of reading the term Duty Holder will be used throughout when referring to the onshore organisation responsible for providing support in life-saving emergency response to the OIM.
10 Terminology such as “downmanning” whether temporary, partial, controlled or precautionary is poorly defined and interpretation varies throughout industry. Its use is discouraged.
2.1.7. “Escape” is not defined in the PFEER Regulations but Article 16. Means of Escape states “The Duty Holder shall provide such means as will ensure, so far as is reasonably practicable, the safe escape of all persons from the installation in case arrangements for evacuation fail”.

2.1.8. In the accompanying Approved Code of Practice and guidance to PFEER, under guidance, “escape” means the process of leaving the installation in an emergency when the evacuation system has failed; it may involve entering the sea directly and is a “last resort” method of getting persons off the installation.

2.1.9. PFEER Article 17. Arrangements for Recovery and Rescue states

The Duty Holder shall ensure that effective arrangements are made, which includes such arrangements with suitable persons beyond the installation, for –

   a) recovery of persons following their evacuation or escape from the installation; and
   b) rescue of persons near the installation; and
   c) taking such persons to a place of safety,

and for the purposes of this regulation arrangements shall be regarded as being effective if they secure a good prospect of those persons being recovered, rescued and taken to a place of safety.

2.2. Industry Response and Capability

2.2.1. As outlined in Chapter 1, the offshore oil and gas industry is unique in the UKSRR in having an emergency response capability offshore with significant onshore support and backup.

2.2.2. Offshore capability is normally manifested by the provision of an Emergency Response and Rescue Vessel (ERRV) fitted with fast rescue or daughter craft. Under PFEER, the parent ERRV would be considered as a place of safety. An ERRV may cover one or more installations subject to HSE Energy Division approval.

2.2.3. A more complex solution is Jigsaw\textsuperscript{11} which meets the requirements of PFEER with a combination of vessels and SAR helicopters with a bespoke communications, command and control system.

2.2.4. The Duty Holder will provide back up and support to the OIM from the Duty Holder’s onshore premises or occasionally, in the case of smaller companies, through third party

\textsuperscript{11} Jigsaw is the name given by BP Exploration to the overall project using a combination of SAR helicopters, Regional Support Vessels, Autonomous Rescue & Recovery Craft, platform based radar coverage and an integrated command and control system.
facilities. The onshore Emergency Control Room\textsuperscript{12} will provide the following support to the OIM in the event of an emergency –

- Technical support and advice
- Logistics – vessels and helicopters
- Human Resources – interface with police for reception of evacuees
- Media response

\textsuperscript{12} There is no industry standard – it can be Emergency Control Room (ECR), Emergency Response Room (ERR), Emergency Response Centre (ERC) etc.
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Chapter 3 – National Search and Rescue Responsibility and Capability

3.1. HM Coastguard

3.1.1. HM Coastguard is the uniformed branch of the Maritime and Coastguard Agency (MCA), an executive agency of the Department for Transport (DfT). HM Coastguard is the responsible authority for the initiation and coordination of civil maritime search and rescue within the UKSRR.13

3.1.2. For the purposes of this document, incidents which happen at, on or near offshore installations which require a search and/or rescue response fall into the category of civil maritime incidents.

3.1.3. HM Coastguard carries out its coordination role through a network of Maritime Rescue Coordination Centres. MRCCs with specific offshore oil and gas industry responsibilities are located at Aberdeen, Humber, Liverpool and Shetland.

3.1.4. MRCCs are fitted with extensive radio and telecommunications equipment and are capable of providing a 24 hour immediate search and rescue response using declared and additional facilities.

3.1.5. In the context of this document, declared facilities are those which have been designated as being available for civil maritime search and rescue according to a specific standard or set of criteria e.g. RNLI lifeboats, military (Royal Air Force & Royal Navy) and HM Coastguard search and rescue helicopters.

3.1.6. Additional facilities are those which may be available from time to time but not to any specific standard e.g. vessels at sea responding under international obligations.14 In the context of this document, additional facilities will include offshore installations providing support (refuelling or reception of evacuees/survivors) and associated offshore support vessels such as ERRVs etc. Offshore oil and gas industry funded SAR helicopters such as Jigsaw and those based offshore on the Norwegian Continental Shelf are considered to be additional facilities. Public transport helicopters may form part of the overall emergency response and they are also classed as additional facilities.

14 Convention on the High Seas 1958 Article 12
3.2. UK Aeronautical Rescue Coordination Centre

3.2.1. The UK Aeronautical Rescue Coordination Centre, at Kinloss Barracks in Moray is a Royal Air Force unit responsible for military search and rescue and, under delegated authority from DfT, for civil aeronautical search and rescue throughout the UKSRR.

3.2.2. UK ARCC is also the sole tasking authority for all national SAR helicopters (RAF, RN and HM Coastguard). ARCC is also responsible for processing requests for assistance if the use of other SAR helicopters such as Jigsaw, Norwegian offshore or from neighbouring states is being considered.

3.2.3. UK ARCC is fitted with extensive radio and telecommunications equipment and is capable of providing a 24 hour immediate search and rescue response.

3.3. Police

3.3.1. On the UK mainland, the police are the authority responsible for land based search and rescue. The police role in offshore oil and gas industry incidents is explained in detail in the following chapter.

3.4. RNLI

3.4.1. The RNLI is a completely independent charitable organisation that provides a 24 hour lifeboat service around the coasts of the British Isles.

3.4.2. In the context of this document, the RNLI operate a fleet of fast All Weather Lifeboats which are declared facilities. RNLI assistance is normally requested through HM Coastguard MRCCs who will then coordinate the lifeboat in response to an incident although operational control of RNLI lifeboats remains at all times with the RNLI.

3.4.3. Use of RNLI lifeboats in offshore oil and gas incidents will depend primarily on incident location i.e. more likely in the East Irish Sea, Southern North Sea or in the event of a public transport helicopter servicing the oil and gas industry landing, ditching or crashing on the sea near to land.

3.5. Offshore Oil and Gas Industry Aviation Incidents

3.5.1. Following two significant helicopter incidents in the 1990s\textsuperscript{15}, the Civil Aviation Authority (CAA) and the Air Accident Investigation Branch (AAIB) recommended that, although the SAR response in both incidents had been satisfactory, there needed to be a

\textsuperscript{15} G-TIGH near to Cormorant Alpha 14.03.92 & G-TIGK in Brae Field 19.01.1995
clearer understanding of roles and responsibilities in the event of an aircraft landing, ditching or crashing into the sea.

3.5.2. A Memorandum of Understanding between the then Department of Transport and Ministry of Defence was signed on 3rd March 1997 in order to clarify roles and responsibilities.

3.5.3. If an aircraft declares a distress situation and continued flight is viable, the ARCC has clear responsibility as outlined in 3.2.1.

3.5.4. If the aircraft lands or ditches on the sea, the authority (ARCC or MRCC) receiving the initial notification will assume responsibility for coordinating the response and will receive full support from the other. At the earliest opportunity, discussion will then ensue in order to determine which authority is best placed to coordinate the overall response. Given that the SAR response will almost certainly include vessels as well as SAR helicopters, it is likely that the MRCC will take responsibility and be fully supported by the ARCC.

3.5.5. Aviation incidents that happen at or near offshore oil and gas installations are covered by the PFEER regulations and will be treated by the MRCC as an installation incident and will be coordinated by the MRCC as outlined in 3.1.2.

3.6. Overview of UK SAR

Diagram 1 – UK SAR Responsibilities – interaction between HM Coastguard & UK ARCC during a major offshore incident.

¡6 Usually taken by the HSE Energy Division to be approximately 1 nautical mile around an installation
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Chapter 4 – Police

4.1. Police

4.1.1. One of the main police functions is to protect life and property. The role of the police and their responsibilities in relation to offshore emergencies (oil and gas installations and associated activities) are set out below.

4.2. Jurisdiction

4.2.1. Legislation provides that the police have criminal jurisdiction for oil and gas installations within the UKCS. For all installations in the UK sector of the Northern and Central North Sea and West of Shetland, policing responsibilities lie with Police Scotland. For incidents occurring out with this area, companies should liaise with the appropriate Police Forces in England and Wales. These include:

- Norfolk Constabulary
- Lincolnshire Constabulary
- Humberside Police
- Lancashire Constabulary
- North Wales Police
- Merseyside Police

4.2.2. For offshore installations which are located within UK territorial waters, the Police Force with littoral responsibility has jurisdiction.

4.3. Response to a Major Offshore Incident

4.3.1. Unlike land based emergencies in which the police will coordinate the response of the other emergency services, offshore search and/or rescue operations will be led by HM Coastguard. HM Coastguard will also be responsible for notifying hospitals and ambulances when injured persons are to be brought ashore.

4.3.2. Actions the police would initially take in the event of an offshore emergency may include the following:

- Activate relevant contingency plans.
- Establish police command and control structures.
• Instigate an investigation if required.
• Send a Police Liaison Officer to the coordinating HM Coastguard MRCC.
• Send a Police Liaison Officer to companies involved to liaise with their emergency response teams.
• Liaise with other agencies as appropriate.
• Obtain details of persons onboard.
• Coordination of the shore based response to an offshore maritime emergency.
• Establish a casualty bureau and issue an emergency telephone number to the media for relatives’ enquiries.
• Attend at hospitals, reception centres, mortuaries, heliports or disembarkation points in order to document all persons taken ashore from the incident. Where appropriate, provide security and implement traffic management and cordon arrangements.
• Advise next of kin. Where fatalities are involved, this will be done by a personal visit from the police whenever possible. In the case of injured personnel, the scale of the incident and more importantly the extent of the injury will dictate if next of kin are advised in person by the police.
• Establish a media briefing centre at a suitable location.

4.4. Police Notification

4.4.1. It is difficult to be prescriptive regarding when the police should be notified. It is beneficial that the police are given early notification for the following reasons:

• The requirement placed on the police to protect life and property.
• Delay could have serious consequences to the overall response, the investigation and identification of victims.
• Media will quickly become aware of an offshore incident and early notification gives the police the opportunity to coordinate a joint, accurate and appropriate response.
• The incident may escalate and ultimately require a greater response.

4.4.2. The following sections detail examples of when the police will be involved, may be involved and when they should be notified for information only.

4.4.3. Incidents for which the police will be involved:

• Person overboard / missing person.
• Terrorist incident.
• Bomb threat.
• Other reported crime.
• Sudden and unexplained deaths.
• Unauthorised boarding of an installation by protestors.
4.4.4. Incidents for which the police may be involved:

- Fire.
- Explosion.
- Blow-out.
- Collision.
- Diving accident.
- Helicopter incident / accident.
- Serious injury.
- Gas leak.
- Structural failure.
- Vessel accident.
- Emergency medical evacuation.
- Installation abandonment.
- Evacuation to shore or receptor platform.

4.4.5. Incidents for which the police should be notified for information:

- Significant oil pollution.
- Pipeline incidents.
- Safety zone infringements.
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Chapter 5 – Aberdeen Air Traffic Services Unit

5.1. Aberdeen Air Traffic Services Unit

5.1.1. Aberdeen Air Traffic Services Unit (ATSU), based at Aberdeen Airport, provides air traffic services to helicopters working with the offshore oil and gas industry in the Northern, Central and Southern North Sea. They also provide services to helicopters operating in the West of Shetland area. Between the hours of 2200 and 0630 (local), services in the offshore sectors are limited to contingency or emergency cover only, on a callout basis. Agencies authorised to initiate a callout include D&D, ARCC and HM Coastguard. Aberdeen ATSU has radio telephony (R/T) and radar coverage in the majority of the North Sea from a combination of land and offshore based radars and R/T sites. In a significant part of the North Sea, however, there is no land-based radar coverage and surveillance of aircraft is provided by a system called Wide Area Multilateration (WAM).

5.1.2. Wide Area Multilateration utilises information from an aircraft’s transponder and then presents the aircraft’s position to the controller in a format much like secondary radar although the technology is very different.

5.1.3. Given the combination of land and offshore based helicopters, WAM and R/T sites, it is almost certain that Aberdeen ATSU will be among the first to know of any incident involving public transport helicopters en-route to or from an offshore installation. For incidents involving offshore installations, Aberdeen ATSU will normally be able to provide the SAR authorities (ARCC or HM Coastguard MRCC) with information on public transport helicopter activity in the area. In both cases, they should be able to provide details of the aircraft, souls on board and helicopter operating company.

5.1.4. Although Aberdeen ATSU will be able to assist the SAR authorities with vital information in the early stages of an offshore incident, they cannot fulfil the role of aircraft coordinator and they must not be asked to do so.

5.1.5. Working daily with the public transport helicopters that service the UK offshore oil and gas industry, Aberdeen ATSU has an unrivalled expertise and knowledge of offshore helicopter operations. Aberdeen ATSU forms an integral part of the overall SAR response to any major offshore oil and gas industry incident throughout the North Sea and areas to the West of Shetland. This includes the East Shetland Basin; although it sits within Norwegian airspace, responsibility for the provision of Air Traffic Services within this area is delegated to the UK. Aberdeen ATSU will also have a significant role to play in any major maritime incident (e.g. ferry incident, large passenger vessel incident, major search etc.) should that incident take place within those areas of the North Sea in which the offshore oil and gas industry, or helicopters servicing the industry, are likely to be involved.
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Chapter 6 – Deliberately Blank
7.1. Well Control & Pollution Response

7.1.1. It is outwith the scope of this document to cover well control and pollution response although it is recognised that in industry terminology such incidents will also require “Emergency Response”.

7.1.2. Detailed procedures covering how national agencies interact with the oil and gas industry in such incidents are laid out in the National Contingency Plan for Marine Pollution from Shipping and Offshore Installations (NCP).

7.1.3. Nevertheless, it is accepted that in certain types of offshore oil and gas industry incidents, Search and/or Rescue operations and counter pollution operations may have to run concurrently although it is recognised that SAR or lifesaving will always take priority.

7.2. Secretary of State’s Representative (SOSREP)

7.2.1. Full details of the role and responsibility of the Secretary of State’s Representative are outlined in the NCP and on the Department for Transport website –


7.3. Maritime Temporary Exclusion Zone

7.3.1. Under certain circumstances, SOSREP can authorise the establishment of a Temporary Exclusion Zone (TEZ). This specifies an area either bounded by geographical coordinates or in terms of a defined radius around a casualty. It is an offence to enter the TEZ without the express permission of the SOSREP or a delegated authority such as the On-Scene Coordinator if deemed appropriate by the SOSREP.

7.3.2. A TEZ can only be established where a ship, structure or other thing is either wrecked, damaged or in distress. A TEZ cannot be established in anticipation of an incident occurring.

8.1.1. The Health and Safety Executive booklet “Dealing with Offshore Emergencies” previously attempted to explain the roles and responsibilities of Government agencies or authorities in the response to offshore oil and gas industry incidents.

8.1.2. “Dealing with Offshore Emergencies” was last updated in 2003. HSE have stated that there is no intention to produce another update and have agreed that the booklet should no longer be seen as extant.

8.1.3. The Maritime and Coastguard Agency section of “Dealing with Offshore Emergencies” contains information and guidance that is no longer considered best practice.

8.1.4. This Integrated Offshore Emergency Response document fully replaces the HSE booklet in relation to HM Coastguard and national SAR procedures in relation to offshore oil and gas incidents.

8.2. IOER Principles

8.2.1. Nothing contained in IOER is intended to remove the Duty Holders’ responsibility to comply with the requirements of PFEER 1995.

8.2.2. If however, during an oil and gas industry incident, national assistance is requested by the OIM and a Distress or Alert situation is declared, national SAR assets or vessels responding under SOLAS will inevitably find themselves operating alongside assets provided by the duty holder fulfilling their obligations under PFEER.

8.2.3. It is clearly essential, in the overriding interests of the safety of all concerned, that an integrated emergency response with clear lines of responsibility is established at the outset.

8.2.4. For all offshore oil and gas related incidents which meet the statement outlined in 8.2.2, HM Coastguard will coordinate the overall SAR response and will, in virtually every case, be supported by the ARCC.

8.2.5. The OIM clearly retains overall responsibility for dealing with events on the installation.

8.2.6. The duty holder, through their ECR, will continue to support the OIM in all areas. If logistic support, particularly public transport helicopters, is being considered it is critical that
close dialogue takes place with the HM Coastguard MRCC\textsuperscript{17} before these aircraft are despatched.

8.2.7. In all offshore oil and gas incidents which require a SAR response, the police also have a critical role to play. Early notification of the incident to the appropriate force by the MRCC and by the duty holder is essential.

8.2.8. In the event of a major land based incident, the police normally provide overall coordination of the emergency services and other responding agencies. In offshore oil and gas incidents, however, HM Coastguard are responsible for the at sea coordination while the police will concentrate upon the coordination of the onshore response.

8.2.9. Upon completion of the SAR response, i.e. when everyone has been accounted for or when there is no longer any reasonable expectation of finding further survivors, a formal handover of primacy should be agreed between MRCC and police ensuring a clear transition from the SAR phase to the recovery phase of the operation.

8.2.10. Wherever possible, the deployment of trained liaison officers to the key centres responding to the incident significantly enhances communication and inter-agency response.

8.2.11. It is a fundamental concept of Integrated Offshore Emergency Response that no single agency or authority will be capable of dealing with all aspects of IOER.

\textsuperscript{17} MRCC will consult UK ARCC and the Aircraft Coordinator (ACO) during this process. Role of the ACO is discussed in detail in Chapter 9.
8.3. Major Incident

8.3.1. The term Major Incident is commonly used by emergency services personnel to describe events or situations which would constitute an emergency as defined in the Civil Contingencies Act 2004.

8.3.2. Examples for major incidents used by the land based emergency services include -

- Initial treatment, rescue and transport of a large number of casualties.
- Involvement either directly or indirectly of large numbers of people.
- Handling of a large number of enquiries likely to be generated both from the public and news media.
- Need for the large scale combined resources of two or more of the emergency services.
- Mobilisation and organisation of the emergency services and supporting organisations, e.g. the local authority, to cater for the threat of death, serious injury or homelessness to a large number of people.
- Any occurrence which presents a serious threat to the health of the community, disruption to the service, or causes (or is likely to cause) such numbers or types of casualties as to require special arrangements to be implemented by hospitals, ambulance services or health authorities.

8.3.3. The Maritime and Coastguard Agency defines a major incident as “one which requires the implementation of special arrangements”. Incidents involving any combination of the above criteria may require the declaration of a major incident. In the context of this document, this may include -

- Rescue of a large numbers of persons from an offshore installation
- Rescue of a large number of persons from a vessel in distress near to offshore installations e.g. passenger vessel or ferry
- Helicopter incidents involving casualties or fatalities

8.3.4. The declaration of a Major Incident may fall upon the MCA (HM Coastguard) or one or more of the other emergency services, and/or other Category 1 responders as defined by the Civil Contingencies Act 2004.
Integrated Offshore Emergency Response

Chapter 9 – IOER – Detailed SAR Procedures and Guidance

9.1. Notification / Alerting

9.1.1. The need to notify HM Coastguard of an incident as early as possible cannot be overemphasised. It is essential, in order to enable the timely despatch of SAR resources, that HM Coastguard be alerted at the outset of any actual or potential incident which may represent a risk to life or limb or threat of pollution. Delays in notifying HM Coastguard may crucially affect the final outcome of an incident, and time lost at the outset cannot be recovered.

9.1.2. If investigations offshore subsequently reveal the situation to be not as critical as initially assessed, any positive response initially undertaken can be quickly and easily curtailed.

9.1.3. HM Coastguard strongly recommend that the relevant MRCC be notified immediately of any of the following -

- Whenever personnel on an installation go to muster stations.
- All civil maritime/aeronautical incidents on or near the installation e.g. man overboard, aircraft ditching, drifting vessels etc.
- Any other incident which may pose a threat to life, the environment or property.

9.1.4. When contacting HM Coastguard, include all relevant and useful information such as installation location, OIM’s intentions, perceived threat to the installation, weather on scene, numbers of persons at risk, on-scene resources, status of helicopter facilities etc.

9.2. IAMSAR Terminology

9.2.1. The rationale behind using IAMSAR terminology was laid out in sections 1.3.3 and 1.3.4.

9.2.2. There are three key Roles in IAMSAR - Search and Rescue Mission Coordinator (SMC), On-Scene Coordinator (OSC) and Aircraft Coordinator (ACO).

9.2.3. IAMSAR requires each and every SAR incident to be categorised into one of three Emergency Phases. In ascending order these are the Uncertainty Phase, Alert Phase and Distress Phase.
9.3. Search and Rescue Mission Coordinator

9.3.1. Search and Rescue Mission Co-ordinator (SMC) – the official responsible for coordination of the response to an actual or apparent emergency situation.

9.3.2. Under IAMSAR, each and every incident response will come under the control of a nominated Search and Rescue Mission Coordinator (SMC). For offshore oil and gas industry incidents, this will be a designated senior uniformed officer at the coordinating MRCC.

9.3.3. For protracted incidents, the role may be handed over from one SMC to another. Such handover will be formally recorded.

9.3.4. The SMC has overall responsibility for appointing or confirming the roles of OSC and/or ACO.

9.4. On-Scene Coordinator

9.4.1. On-Scene Coordinator (OSC) – a person designated (i.e. by the SMC) to coordinate search and rescue operations within a specified area

9.4.2. The role of the OSC is to carry out the SMC’s action plan on-scene. The OSC normally coordinates on-scene resources, communicates the SMC’s instructions and acts as a communications link between all participants. The OSC will also provide the SMC with regular situation reports (Sitreps) on the incident offshore.

9.4.3. The role of OSC is normally assumed by the OIM of the installation with the problem. This is a long standing arrangement designed to reflect and recognise the OIM’s status under the PFEER Regulations. Where it is not possible or practical for the OIM to assume the role of OSC, alternatives have to be found in adjacent installations or nearby vessels.

9.4.4. Some duty holder procedures call upon the installation ERRV to assume the role of OSC should the situation on the installation become untenable. It should be noted that no transfer of OSC should take place without involving the SMC. In any case, and in such circumstances, the ERRV will be fully occupied in its primary rescue and recovery role. A more appropriate asset to fulfil the essentially communications based role of OSC may be another vessel or installation in a more stand-off role. In remote locations, however, with no supporting infrastructure or adjacent installations, the ERRV may be the only option as OSC.

9.4.5 The role of OSC may be assumed initially. This must subsequently be verified by the SMC at the earliest opportunity and the SMC can appoint a more suitable asset if considered appropriate.

9.4.6. It is essential that the SMC communicate the appointment of an OSC and the identity of the OSC to all other participants in the response at the earliest opportunity. Any change to the role should be similarly broadcast to all participants.
9.5. Aircraft Co-ordinator

9.5.1. Aircraft Coordinator (ACO) – a person or team who coordinates the involvement of multiple aircraft SAR operations in support of the SMC working with the OSC.

9.5.2. If two or more aircraft are likely to respond to the incident, an Aircraft Coordinator will be appointed.

9.5.3. The primary function of the ACO is to ensure the safe management of aircraft responding to the incident. It should be noted that few aircraft have the capability to act as air traffic controllers.

9.5.4. Although the overall responsibility for appointing the ACO lies with the SMC, this responsibility may be delegated, following discussion, to the ARCC.

9.5.5. It is the responsibility of the SMC to communicate the appointment of an ACO and the identity of the ACO to all other participants in the response at the earliest opportunity. Any change to the role should be similarly broadcast to all units.

9.5.6. Further information on the broader aspects of air response and detailed technical air response procedures are contained in Chapter 10 and a sister document Multi Aircraft SAR Operations - Standard Operating Procedures.

9.6. IAMSAR Emergency Phases

9.6.1. Evaluating, identifying and declaring the relevant emergency phase defines the operational environment for those responding to the incident. This is important for all responding assets, particularly when evaluating the level of risk they may have to expose their own personnel to against the perceived danger to those whom they seek to help. This is particularly critical when considering the possible use of public transport helicopters.

9.6.2. An Uncertainty Phase is said to exist when there is knowledge of a situation that may need to be monitored, or to have more information gathered, but that does not require despatching of resources.

9.6.3. The Alert Phase exists when an aircraft, ship or other craft, or persons on board are having some difficulty and may need assistance, but are not in immediate danger. Search and Rescue Units (SRUs) may be despatched or other SAR facilities diverted to provide assistance if it is believed that conditions might worsen or that SAR facilities might not be available or able to provide assistance if conditions did worsen at a later time. The proword associated with the Alert Phase is PAN or PAN-PAN.

9.6.4. The Distress Phase exists when there is reasonable certainty that an aircraft, ship or other craft, or persons on board is in danger and requires immediate assistance. The proword associated with the Distress Phase is MAYDAY.
9.6.5. IAMSAR Emergency Phases can be upgraded or downgraded by the master, aircraft captain or OIM, in consultation with the SMC, as the incident progresses.

9.6.6. It is the responsibility of the SMC to ensure that all participating units are kept apprised of the relevant Emergency Phase at all times.

9.7. IAMSAR in the Context of Offshore Oil and Gas Industry Incidents

9.7.1. In the context of the IOER document, an offshore installation in difficulty, whether fixed or mobile, will be treated as an “other craft” when determining the relevant IAMSAR Emergency Phase.

9.7.2. When declaring an emergency situation, the master of a vessel or captain of an aircraft will normally prefix their initial (and subsequent calls) with MAYDAY or PAN-PAN depending on the gravity of the incident.

9.7.3. HM Coastguard recognise that, particularly for fixed offshore installations, OIMs may not be entirely conversant with IAMSAR and the MRCC will seek to quantify and establish the relevant IAMSAR Emergency Phase through initial or subsequent dialogue with the OIM.

9.7.4. Assuming the installation has gone to muster, an exchange of information in 9.1.4. will take place. The MRCC will ask if assistance is required. If the answer is “No” then the SMC will identify the relevant Emergency Phase as the Uncertainty Phase. The MRCC will continue to monitor the situation through regular updates from the OIM until such time as the OIM reports that the onboard situation has been resolved or the OIM reassesses the need for assistance and upgrading of the Emergency Phase.

9.7.5. If the OIM requests assistance in response to the question posed above, the MRCC will seek to establish whether the Distress Phase or Alert Phase applies.

9.7.6. Catastrophic situations are clearly Distress Phase from the outset. Other situations may be less clear and may be subject to a variety of additional factors – response times, day or night, current and forecast weather, numbers of persons at risk, options for evacuation etc.

9.7.7. Many offshore installations are located more than one hundred miles offshore. At night, in severe weather, helicopter assistance may be at least several hours away. Factor in a large number of persons to be evacuated and it can be seen that a broad interpretation may have to be taken when defining “immediate assistance”. An installation at risk from a drifting vessel which has a closest point of approach in 3 hours is in Distress now if it will take two hours for helicopters to arrive on scene before they even begin to undertake an evacuation.

9.7.8. Positive SAR action will normally be undertaken upon a clear declaration of the Distress or Alert Phase. In only the most exceptional cases, however, the SMC may elect to task SAR units as a precautionary measure if he/she considers that the situation could deteriorate despite the OIM’s assessment of the situation. Ideally agreement should be
reached between the OIM and SMC but if this is not possible, the SMC must then clearly identify the Emergency Phase and announce that to all parties.

9.7.9. The OIM is the individual with the statutory responsibility for responding to an emergency onboard an offshore installation. The role of the onshore ECR is to support the OIM. The MRCC must receive the declaration of Distress or Alert from the OIM or his designated deputy on board the installation.

![Diagram 4 – IAMSAR Emergency Phases as applied to an offshore oil and gas industry incident](image)


9.8.1. Military and civilian aircraft, along with vessels responding to an incident, will be familiar with IAMSAR.

9.8.2. United Kingdom civilian registered SAR helicopters are governed by CAA Regulations (CAP 999 Helicopter Search and Rescue [SAR] in the UK. National Approval Guidance).

9.8.3. Modern civilian SAR helicopters are configured internally for SAR use and seating for evacuees is limited. In a distress situation, evacuees can be carried on the floor of the aircraft, unrestrained and overall numbers carried will be based on risk, all up weight, distance to nearest receptor installation etc. In the absence of a clear risk to life, the number of evacuees that the aircraft can carry may be limited by the number of available seats – subject to the aircraft captain’s discretion.
9.8.4. A clear declaration of the Distress or Alert Phase facilitates the establishment of restricted airspace around the scene of an incident in order to provide safe management of the airspace and to exclude aircraft which are not part of the overall response.

9.8.5. In certain circumstances, public transport helicopters may form part of the SAR response. This is discussed more fully in the following section.

9.8.6. In a clearly identified Distress situation, nearby offshore installations (Receptors) may be requested to take evacuees temporarily over and above lifeboat capacity or available beds. The rationale for this is to keep the number of helicopter movements as low as possible in order to minimise overall risk. In such circumstances when an installation becomes temporarily overmanned, the MRCC will liaise closely with the operator of the evacuated installation to ensure that evacuees are moved onwards as soon as possible.

9.9. Use of Public Transport Helicopters in SAR Operations

9.9.1. Public transport helicopter operations are regulated by the CAA. Provided that flying operations conducted by helicopter operators during SAR operations stay within the bounds of Public Transport, there should be no restriction. This means that conditions on scene and surrounding an incident should not fall outside the bounds of normal Public Transport operations and that passengers on board the aircraft must be transported and equipped for safety purposes as they would be for Public Transport flights. If conditions are beyond normal operating criteria for public transport helicopters, such as fire, fumes or other similar events, then the general CAA view is that the additional risks would not be appropriate for public transport helicopters.

9.9.2. Effectively, it is reasonable for SAR authorities to request public transport helicopter assistance for multiple aircraft SAR operations (such as a platform evacuation) provided that conditions are within their normal capabilities. The SAR authorities cannot ask public transport helicopters to fly in dangerous conditions, transport numbers of people in excess of their normal passenger limits or to transport seriously injured or ill passengers.

9.9.3. All requests for public transport helicopter assistance must be routed through the relevant helicopter company onshore flight operations cell. Requests should not be made direct to aircraft captains who may be operating a helicopter in the vicinity of the incident. The flight operations cell is the appropriate level of decision making for the possible use of public transport helicopters operating as outlined in 9.9.1.

9.9.4. For regulatory purposes, SAR helicopters are different because they are trained, equipped, prepared and approved for operations in which the risks are greater than for public transport operations. SAR aircraft also have medical capabilities and can provide for the safety of injured passengers who public transport helicopters must not carry unless the passengers are able to travel unassisted and egress the aircraft on their own during an emergency.
9.10. Myths and Misconceptions

9.10.1. “MAYDAY is when you abandon”. In a catastrophic situation, MAYDAY may well mean abandonment. However, an installation or vessel can declare a MAYDAY or Distress situation and any of the following can take place

- Nobody is taken off. The situation that brought about the MAYDAY is addressed or resolved by those on board.

- A partial emergency evacuation takes place. Numbers are reduced. The situation is either resolved by those remaining on board or the overall threat has been reduced by minimising the number of persons at risk.

- Complete evacuation.

9.10.2. “If you request assistance it’s a Distress”. If assistance is requested it is either the Distress Phase or the Alert Phase. The Alert Phase may place restrictions on the response but it must always be considered.

9.10.3. “If it’s a Distress it’s everyone off”. In a catastrophic situation that may well be the case. However, the decision on how many persons are to be taken off ultimately lies with the OIM or the Master of a vessel and all three options outlined in 9.10.1 are available to him. The SMC can advise the OIM or Master of a vessel of factors that may influence that decision but the final decision rests with the OIM or Master.
Chapter 10 – IOER – Major Incident – Aviation Procedures & Guidance

10.1. Overview

10.1.1. Offshore oil and gas industry incidents are complex for a variety of reasons but what makes them unique is the likely combination of national SAR, offshore SAR and public transport helicopters operating in close proximity.

10.1.2. Detailed procedures for helicopters are contained in a sister document “Multi Aircraft SAR Operations – Standard Operating Procedures”. This section attempts to give an overview and guidance to the offshore oil and gas industry, MRCC and ARCC personnel and for those responding to the incident on-scene.

10.1.3. Oil and gas industry exploration and production is focussed on five main areas on the UKCS – Northern North Sea (NNS), Central North Sea (CNS), Southern North Sea (SNS), West of Shetland (WoS) and the East Irish Sea (EIS).

10.1.4. With the exception of the East Irish Sea, all the above areas are covered by one Air Traffic Services Unit based at Aberdeen Airport.

10.1.5. Procedures in this section are directed primarily at incidents in the NNS, CNS, SNS and WoS. However, procedures in the East Irish Sea should, as far as is possible, be consistent with the broad approach.

10.2. Aviation Procedures and Guidance

10.2.1. At the outset of an offshore incident, Aberdeen ATSU will have the best overview of the local air picture – particularly so if the incident involves a helicopter emergency.

10.2.2. All communications are likely to be routed through the ATSU Watch Manager until back up personnel can be drafted in. MRCC and ARCC must be careful not to overload the ATSU WM by duplicating requests for information. A coordinated or agreed approach is needed.

10.2.3. If two or more aircraft are likely to respond, one of the aircraft will be appointed ACO. This will normally be undertaken by the ARCC in consultation with the SMC.

10.2.4. If two or more aircraft are likely to respond, restricted airspace under the Emergency Restriction of Flying (ERF) Regulations should be established around the incident. Any request for the establishment of a Restricted Area (Temporary) [RA(T)] will normally be undertaken by the ARCC on behalf of the SMC. The request will be made to the Safety and
Airspace Regulation Group of the CAA who will review the application, establish restricted airspace if appropriate and promulgate details. Dimensions of the restricted area will normally be cylindrical based on a centre point with a radius in nautical miles and height expressed in thousands of feet. When nearby installations form part of the SAR response as refuelling or receptor platforms, the restricted area should include these installations and allow for a safe margin. Although the ARCC will normally take responsibility for requesting the RA(T), the ARCC must consult both the SMC and Aberdeen ATSU in order that correct dimensions can be agreed at the outset.\(^{18}\)

10.2.5. The primary reason for establishing the RA(T) must always be to allow for the safe management of aircraft responding to the incident. This will facilitate the collapse of the restricted airspace when SAR operations are complete and will not impact on subsequent air operations – counter pollution or recovery.

10.2.6. The SMC will be responsible for determining which installations are capable of acting as refuelling or receptor facilities.

10.2.7. Management of aircraft within the RA(T) will be delegated by the Emergency Authority (MRCC or ARCC) to the ACO. Air to air and air to surface communications will be undertaken on the international on-scene frequency of 123.100 MHz following an announcement by the SMC or ACO. It is the responsibility of the SMC to ensure that the affected installation, refuelling and receptor installations are monitoring 123.100 MHz.

10.2.8. Offshore installations should ensure that they have the ability to transmit & receive on 123.100 MHz. Further details and explanation are given in Annex B.

10.2.9. If 123.100 MHz becomes congested or unworkable, the fall back frequency will normally be the traffic frequency for the local area.

10.2.10. Aircraft en-route to the incident will be managed by Aberdeen ATSU in accordance with normal procedures. Aberdeen ATSU will hand over management of the aircraft to the ACO before the aircraft enters the RA(T). The procedure will work in reverse as aircraft leave the RA(T) – e.g. with injured personnel or evacuees being taken ashore.

10.2.11. Aircraft will only be able to enter the RA(T) with the approval of the ACO. The ACO will always have the final say in how many aircraft can be safely managed within the RA(T) at any given time.

10.2.12. The ARCC and SMC must avoid overloading the ACO. In order to facilitate the movement of a large number of evacuees, the SMC should provide the ACO with details of receptor & refuelling installations and overall complement to be moved. The SMC should not attempt to micro-manage the evacuation by allocating specific numbers for each installation. In a distress situation, the emphasis should be on reducing the overall complement of the stricken installation by the quickest means.

\(^{18}\) See Annex D for proforma – Request for Emergency Restriction of Flying Regulations
10.2.13. As mentioned earlier in this document, the duty holder ERC, acting in support of the OIM, may source and despatch public transport helicopters to assist in bringing evacuees back to the shore. It is of the utmost importance, however, that there is close interaction between the MRCC and the duty holder regarding the deployment of these aircraft. It may be necessary to delay despatching them until SAR operations are coming to a close.

10.2.14. If the OIM elects to leave a skeleton crew on board the installation, there must be dialogue with the SMC and others. Options for recovering the final number should be considered and incorporated into the action plan. The number left on board should normally be less than the capacity of one helicopter lift.
Chapter 11 – Helicopter Ditching or Crash into the Sea – Procedures & Guidance

11.1. Background

11.1.1. Chapter 3 Section 3.5. has already touched on the subject but focused on coordination responsibilities.

11.1.2. The sequence of helicopter incidents in the Central and Northern Sea commencing February 2009 and running through to August 2013 has been one of the driving factors behind the development of IOER.

11.1.3. The safe management of aircraft responding to a major offshore incident including helicopter incidents has been dealt with earlier in this document.

11.1.4. This chapter intends to clarify issues arising from offshore helicopter incidents.

11.2. Helicopter Incident at or near an Installation

11.2.1. If a helicopter suffers an incident at or near an offshore installation it will be treated as an offshore incident and HM Coastguard’s primary point of contact will be via the OIM and the duty holder ECR.

11.2.2. Although the duty holder is considered to have primacy over the helicopter owner, best practice suggests that a pre-agreed bridging document laying out areas of responsibility and mutual support should be developed by the duty holder and helicopter operator.

11.2.3. When geographically possible, HM Coastguard will request a Maritime Incident Communications Officer (MICO) from the duty holder attend at the coordinating MRCC.

11.2.4. When geographically possible, HM Coastguard will also request a MICO from the helicopter owner attend at the coordinating MRCC.

11.2.5. Whenever possible, a Police Liaison Officer (PLO) will attend at the coordinating MRCC.

11.2.6. Depending on the geographic location of the incident, it may not be possible to deploy MICO’s or PLOs to the coordinating MRCC. Other options may be possible i.e. the deployment of MICOs to another MRCC (e.g. Aberdeen).
11.3. Helicopter Incidents While En-route to or Returning from an Offshore Installation

11.3.1. Four out of five of the incidents referred to in 11.1.2 came into this category. Although all four were carrying offshore oil and gas industry workers they did not come under PFEER jurisdiction and are therefore classified as aviation incidents.

11.3.2. For en-route helicopter incidents, HM Coastguard will rapidly establish the identity of the aircraft through Aberdeen ATSU. HM Coastguard’s primary point of contact will be through the helicopter owner’s local base or ECR.

11.3.3. HM Coastguard will rely on the helicopter owner to identify which offshore installation duty holder or operator will take the lead in representing the passengers.

11.3.4. Although the helicopter owner is considered to have primacy over the identified duty holder or offshore operator, best practice suggests that a pre-agreed bridging document laying out areas of responsibility and mutual support should be developed by the helicopter owner and duty holder.

11.3.5. Where geographically possible, HM Coastguard will request a MICO from the helicopter owner attend at the coordinating MRCC.

11.3.6. Where geographically possible, HM Coastguard will also request a MICO from the duty holder’s ECR attend at the coordinating MRCC.

11.3.7. Whenever possible, a Police Liaison Officer (PLO) will attend at the coordinating MRCC.

11.3.8. Depending on the geographic location of the incident, it may not be possible to deploy MICO’s or PLOs to the coordinating MRCC. Other options may be possible i.e. the deployment of MICOs to another MRCC (e.g. Aberdeen).

11.4. Recovery of Aircraft

11.4.1. The recovery of an abandoned aircraft is outwith the scope of the IOER document and enters the world of salvage.

11.4.2. It is important to note, however, that recovery of the aircraft in as intact a condition as possible will aid the accident investigators in identifying the factors that may have contributed to the aircraft’s demise. In the aviation world, examination and analysis of the aircraft or debris may lead to remedial action being undertaken on similar aircraft across the world before they too become a casualty.
12.1. Availability of Remotely Operated Vehicles

12.1.1. Specialised offshore vessels have the ability to deploy Remotely Operated Vehicles (ROVs) for a variety of subsea tasks in support of the offshore oil and gas industry. ROVs can range in complexity from a basic observation type fitted with cameras which relay pictures back to the mother ship up to complex work ROVs fitted with manipulators capable of carrying out subsea work in addition to the cameras. The North Sea has the greatest concentration of ROV fitted vessels in European waters.

12.2. Use of ROVs during a Distress Situation

12.2.1. ROVs can be used in certain circumstances to assist during a Distress situation when a search is being conducted for persons in the water. The use of ROVs escalate a two dimensional surface search into a three dimensional search. Their use is most effective when the datum for the search is established with a high degree of accuracy and surface units are quickly on scene. ROVs have been used successfully in incidents of man overboard from an installation and following a fatal helicopter crash. Although these incidents clearly did not have a happy outcome, locating the missing persons on the seabed enabled a clear cessation of SAR activity and transition to the recovery phase.

12.2.2. Owners of vessels fitted with ROVs have stated that they see the use of a ROV during a Distress situation as an extension of the mother ship’s response under international conventions.

12.2.3. It must be made clear, however, that such usage is linked only to the Distress situation and for the sole purpose of locating or accounting for any missing persons. The SMC may require a statement or agreement with the vessel to this effect.

12.2.4. In Integrated Offshore Emergency Response, close liaison with partner agencies or authorities will be established at the outset. Although the use of a ROV to assist in the location of missing persons can be seen as part of the SAR effort, the investigating agencies such as Police, AAIB, MAIB and /or HSE Energy Division must be kept fully apprised of the operation. Recovery, in the widest sense, will be led by one of these agencies or a combination of them and may involve a commercial contract.

12.2.5. Some specialist offshore support vessels operate divers in support of subsurface offshore oil and gas operations. The MRCC is not authorised to request their assistance or to accept any offer of assistance.
Integrated Offshore Emergency Response

Chapter 13 – Offshore Medical Evacuations (Medevacs) - Procedures & Guidance

13.1. Terminology & Definitions

13.1.1. IAMSAR defines Medevac as “Evacuation of a person for medical reasons”.

13.1.2. An expanded definition could be “Evacuation of a sick or injured person from a hostile environment to a place of safety where the appropriate level of medical attention can be provided”.

13.1.3. In the interests of standardisation, the use of other terminology such as Medrescue and Casevac is discouraged.

13.1.4. Medevacs can be carried out by helicopter or by surface craft such as RNLI lifeboats. For the purposes of this document, however, the use of medevac almost exclusively relates to evacuation by helicopter and, almost exclusively, SAR helicopter.

13.2. Authorisation

13.2.1. When UK SAR is involved, all requests for medevacs from vessels or offshore installations in the UK SRR have to be authorised by a doctor familiar with medevac procedures. The following paragraphs detail approved medical sources.

13.2.2. The Maritime and Coastguard Agency have contracted Aberdeen Royal Infirmary and Queen Alexandra Hospital, Portsmouth to provide a Radio Medical Advice (RMA) service to ships and seafarers. Vessels requiring medical advice will be put in contact with doctors trained in providing remote medical advice and assessment. If appropriate, the doctor will recommend that the patient or casualty be evacuated (i.e medevac).

13.2.3. The offshore oil and gas industry contracts medical support to specialised companies known generically as “Topside doctors” or “Topside medical support”. On the UKCS, HM Coastguard recognise four companies operating in this capacity –

- International SOS / Abermed
- Capita Health Solutions
- MCL Medics
- RS Occupational Health Ltd

13.2.4. It is accepted that foreign flag vessels may elect to seek medical advice through the SAR services provided by the relevant flag state. Medical advice provided via this route is also accepted as “equivalent medical source”.

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13.3. Procedures for Requesting Medevac Assistance.

13.3.1. A suitably trained and qualified medic is normally employed on offshore installations. In most cases, the medic will consult the contracted topside doctor before any request for helicopter assistance is passed to the Coastguard. If the doctor recommends evacuation the medic or installation personnel will be informed and the request will be passed by the medic or installation personnel to the relevant Coastguard MRCC.

13.3.2. When making the request, the medic or installation personnel will be expected to provide the MRCC with basic medical information about the patient’s or casualty’s condition, name of topside doctor, case number (where applicable) and how to contact him or her. Standard information on weather conditions on scene, confirmation of position, helideck availability, refuelling capability and air frequency should also be provided.

13.3.3. The topside doctor must initiate contact with the relevant Coastguard MRCC to confirm the need for evacuation, initial assessment of the patient’s or casualty’s condition, the timescale within which the evacuation should be carried out and the type of medical facilities likely to be required. This must be done as a matter of priority – the helicopter will not be tasked without doctor’s recommendation in all but very exceptional circumstances.

13.3.4. The topside doctor should contact the Coastguard as follows –

<table>
<thead>
<tr>
<th>Installation /vessel location</th>
<th>Coastguard MRCC to contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>West of Shetland</td>
<td>MRCC Aberdeen</td>
</tr>
<tr>
<td>Northern North Sea</td>
<td>MRCC Aberdeen</td>
</tr>
<tr>
<td>Central North Sea</td>
<td>MRCC Aberdeen</td>
</tr>
<tr>
<td>Southern North Sea</td>
<td>MRCC Humber</td>
</tr>
<tr>
<td>East Irish Sea / Morecambe Bay</td>
<td>MRCC Liverpool</td>
</tr>
</tbody>
</table>

Subsequent coordination of the medevac may be handed to another MRCC e.g. MRCC Shetland for medevacs in the Northern North Sea or West of Shetland.

13.3.5. The doctor must provide a timescale within which the evacuation should be carried out. One of the following options should be used –

- Evacuation as soon as possible
- Evacuation within 6 hours
- Evacuation within 12 hours
- Evacuation within 24 hours

19 See Annex C for proforma
13.3.6. Doctors must avoid further refining these options which are designed to provide a plain English benchmark upon which to base a decision for tasking a SAR helicopter, including the option to make the transfer in daylight or more favourable forecast weather conditions.

13.3.7. HM Coastguard is aware of the use of triage scales across the offshore oil and gas industry (e.g. Priority 1, 2 and 3) but do not use them. The use of timescale for evacuation is mandatory when requesting helicopter assistance. It is already in use by HM Coastguard, UK ARCC, UK SAR helicopters and the RMA contracted hospitals and a plain English system greatly facilitates procedures when dealing with Rescue Coordination Centres or SAR helicopters in adjacent countries.

13.3.8. If the doctor’s decision is “may need to come off if the condition of the patient deteriorates”, the doctor should discuss this with the appropriate MRCC. The SMC will, in conjunction with the ARCC and SAR helicopter captain, consider the forecast weather and remaining daylight. Under these circumstances, the SMC, ARCC and SAR helicopter captain may discuss whether a pre-emptive evacuation might be a better and safer solution for all concerned. The MRCC will then communicate this operational decision to the doctor and the offshore installation.

13.3.9. In certain exceptional circumstances, such as traumatic injury, it is highly likely that the installation medic will be fully occupied in dealing with the casualty and, therefore, unable to speak to the doctor. Under such circumstances, the installation should provide the MRCC with as much information regarding the injury as possible. The SMC may then request helicopter assistance from the ARCC before medical authorisation has been obtained. Consultation with the doctor should be undertaken subsequently and at the earliest opportunity in order to confirm the tasking and to provide relevant medical advice.

13.3.10. In the case of a collapsed person where the medic is similarly occupied and unable to speak to the doctor, a slightly different procedure applies. The cause of the collapse may be attributable to a variety of reasons – not all of which require immediate tasking of a SAR helicopter. In such cases, the SMC may elect to put the installation in contact with doctors at a RMA hospital in order that advice and helicopter authorisation can be promptly obtained if necessary. If the installation medic is dealing with the casualty, the installation OIM or a trained first aider should be prepared to speak to the doctor on behalf of the medic.

13.4. SAR procedures

13.4.1. Upon receiving the request for medical evacuation and the doctor’s authorisation, the MRCC will forward the details to UK ARCC who maintains a national overview of all SAR capable helicopters. The ARCC is responsible for tasking all national UK SAR helicopters and for requesting assistance from neighbouring states or from offshore SAR helicopter operators.
13.4.2. Occasionally, selection of the most appropriate asset is straightforward. More often, the decision is complex being based on a variety of factors – speed of response, current and forecast weather conditions, destination hospital, concurrent incidents and conflicting priorities etc. The quality and quantity of information provided by the installation and the doctor greatly assists the decision making process. It should be noted that in some of the most urgent cases, particularly those originating in the Northern North Sea, the most appropriate hospital based on speed of response and medical capability, may be in Norway.

13.4.3. The destination hospital will be determined initially at this time and the MRCC and ARCC will agree between themselves who will make arrangements for reception, helipad lighting, ambulance etc.

13.4.4. Once the helicopter crew have recovered the patient or casualty they will make a clinical assessment of the patient or casualty condition. This might confirm the destination hospital. It may, however, require upgrading or downgrading the plan – either of which may require a change in destination.

13.4.5. During the flight back to the hospital, the crew of the SAR helicopter can obtain further specialist medical advice or provide the receiving hospital with updated details of the casualty’s condition via a radio link call or satellite phone. Wherever possible, this should be conducted via the coordinating MRCC.

13.5. Routine or Emergency Medevacs

13.5.1. Depending on the medical condition of the casualty, offshore medical evacuations are classed as Routine or Emergency. Section 13.5 mirrors information provided in Oil & Gas UK’s Guidelines for the Management of Aviation Operations.

13.5.2. Routine Medevacs. If the casualty is physically mobile (e.g. capable of unassisted emergency escape or evacuation, has a non-urgent medical condition and/or does not need a paramedic escort) these evacuation flights can be undertaken using a helicopter operating for the public transport of passengers and conducted to the full set of rules offering the highest mitigation of risk (e.g. scheduled crew change).

13.5.3. It should be noted that public transport helicopters are not certified, role equipped or crewed to undertake SAR duties such as evacuating a stretchered or immobilised casualty and/or undertaking medical supervision and clinical procedures (e.g. monitoring and defibrillator use during flight).

13.5.4. Emergency Medevacs. In the event that a casualty requires transportation in a stretcher, requires professional medical surveillance for the duration of the flight (e.g. by a paramedic) or if incapacitated by an injury that inhibits full mobility (e.g. if a limb is immobilised), the casualty should be removed from an offshore installation or vessel only by a SAR helicopter operating under pre-existing CAA AOC and legal alleviations or by a SAR helicopter operating under Military Aviation Authority (MAA) regulations.
13.6. Medical Evacuation of a Psychologically Distressed Person

13.6.1. It is not possible to give definitive advice on the medical evacuation of psychologically distressed persons given the wide range of factors that may apply.

13.6.2. If the person requiring evacuation is onboard a vessel, the best option may be for the ship to return to port with the individual being closely monitored at all times.

13.6.3. If the person requiring evacuation is onboard an offshore installation, the only option is to return him to shore by helicopter. There may be risks involved and the evacuation will only be undertaken after detailed discussion between all interested parties. This will normally include the doctor recommending the evacuation, the MRCC, the ARCC, the SAR helicopter Captain and, in certain circumstances, the Police. It should be noted that as long as the individual is being closely monitored on board the installation, there is likely to be no requirement for an immediate response and that time will normally be available to explore all options.

13.7. Myths and Misconceptions

13.7.1. Not all medevacs are “Immediate life-saving” or “life or death only”. A medevac can be requested by a doctor for a variety of reasons – quality of life threatening injury, the need for further medical investigation, condition of patient may deteriorate etc. Some of these conditions may come under the category of “evacuation within 12 hours” or “evacuation within 24 hours”. These remain a doctor recommended medevac and the procedures outlined in section 13.5 should be followed.

13.7.2. “Can’t we use a crew change helicopter?” – see Section 13.5.

13.7.3. In the case of injured or ill persons on a vessel operating close to an offshore installation “Get him up on the basket” is rarely an option for a variety of reasons –

- The “basket” has largely been consigned to history.
- Replacements such as the “Frog” are available but are not widely in use throughout the UKCS.
- Personnel being transferred will need to be suitably dressed and equipped with survival equipment. The ability to don a survival suit applies equally to personnel transfers.
- Personnel in Frogs or similar sit restrained inside the unit. Unhampered ability to egress the unit in the event of it ending up in the water is essential.
- Use of all personnel carriers require the lifting equipment (crane) to be certified for man riding or personnel transfer. This is the exception rather than the norm across the UKCS.

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20 For the purposes of this document, the term “psychologically distressed person” is taken to mean a person whose current psychological state may pose a threat to their own health and wellbeing or to the health and wellbeing of others. It can also include persons with conditions related to substance abuse.
• When the facility does exist, personnel transfers by carrier can only be undertaken under relatively benign weather conditions and under the mutual agreement of the vessel master and OIM.
Emergency Preparedness Offshore Liaison Group

Offshore Emergency Response Working Group

Terms of Reference

To explain roles & responsibilities in Offshore Emergency Response

To review, analyse and improve Offshore Emergency Response

To promote the concept of Integrated Offshore Emergency Response

To act as the focal point for the development of Offshore Emergency Response Procedures

To provide a forum for reviewing significant offshore incidents & promulgating lessons learned
Annex B

Use of the 123.100 MHz Aeronautical Frequency by Offshore Installations during a Declared Emergency Situation

1. Building on lessons learned from the two North Sea helicopter incidents early in 2009, the Maritime and Coastguard Agency (MCA), working closely with the Aeronautical Rescue Co-ordination Centre (ARCC) and Aberdeen Air Traffic Services Unit (ATSU), has developed a plan designed to provide safer management of aircraft and airspace in the vicinity of a major offshore incident.

2. A key element of the plan is the communications structure. It is clearly essential in any incident that those participating in the response are able to communicate with those requiring assistance. It is equally important that all have the ability to communicate on a common frequency.

3. After extensive discussion between the Search & Rescue (SAR) authorities, Aberdeen ATSU, Civil Aviation Authority (CAA), Ofcom, the Oil and Gas Industry and the three main civilian offshore helicopter operators, it is intended that the internationally recognised Air - on scene frequency of 123.100 MHz will be used as the common aeronautical frequency for any future offshore incidents.

4. CAA has approved the use of 123.100 MHz by offshore installations in declared emergency situations and has stated that it can be included within an installation’s existing aeronautical licence at no additional cost. However, each installation will have to apply individually to the CAA for this approval.

5. Although it is intended that 123.100 MHz will be the primary Air - on scene frequency during an offshore incident, circumstances may necessitate the simultaneous use of the area traffic frequency.

6. The MCA, as the authority responsible for coordinating the national SAR response to a major offshore incident, strongly recommend that offshore operators review their existing aeronautical fit in order to ensure that their installations are capable of operating on this frequency in addition to their existing traffic and log frequencies.

7. Advice and further explanation on the overall aeronautical SAR communications plan can be obtained from the undersigned.

Pete Thomson
Offshore Energy Liaison Officer
MRCC Aberdeen
Telephone – 01224 597911
E-mail – pete.thomson@mcca.gov.uk
20 April 2010
### Medical Evacuation: Information required for HM Coastguard

<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor Name:</td>
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<tr>
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<td>Contact Number:</td>
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<tr>
<td>Installation / Vessel Name:</td>
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<tr>
<td>Patient information (if known):</td>
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<tr>
<td>Within 6 hours</td>
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<td>Within 12 hours</td>
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<tr>
<td>Within 24 hours</td>
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<tr>
<td>Medical facility required:</td>
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<td>(e.g. Basic A&amp;E, Burns Unit, Head Injury, Spinal Injury, Trauma Unit, etc)</td>
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<td>Other relevant information:</td>
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Request for Emergency Restriction of Flying Regulations

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