

MOO Mission Co-ordination

Aim & Objectives

Aim: The aim of this unit is to allow MOO delegates to gain an understanding of Mission Co-ordination and their role of Mission Co-ordinator

Objectives: By the end of this unit delegates should/will be able to;

1. *Recognise the remit under which HMCG operates, the Coastguard functions and associated acts and the role of the Mission Co-ordinator*
2. *Identify the UK SRR*
3. *Distinguish the 5 IAMSAR operational stages*
4. *Identify the 6 stages of Mission Conduct*
5. *Apply SMEAC as an aid to briefing*
6. *Recognise the importance of recording information and the completion of the Mission Statement, Post Mission Review and other relevant forms*
7. *Recognise the rescue dilemma and appropriate unit selection, Termination criteria and when to alert duty personnel*

Coastguard Remit, Legislation and Functions

Safer Lives, Safer Ships, Cleaner Seas

We will now examine some of the legislation that drives the Coastguard and gives us our remit and responsibilities and functions

UK Coastguard challenge

- UK around ~20,000 miles of coastline
- Highly accessible / varied geography
- Inch per inch most dangerous part of UK
- Nowhere in UK is more than 72 miles (116km) from the coast
- Estimated 11.5 million people take part in coastal activities in the UK every year



Safer Lives, Safer Ships, Cleaner Seas



HMCG Responsibility Statement

“Her Majesty's Coastguard is responsible for the initiation and co-ordination of civil maritime search and rescue within the United Kingdom search and rescue region. This includes the mobilisation, organisation and tasking of adequate resources to respond to persons either in distress at sea, or to persons at risk of injury or death on the cliffs or shoreline of the United Kingdom.”

OmS link;

http://oms.mcga.gov.uk/oms_system_overview/hm_coastguard_responsibility_statement.htm

Safer Lives, Safer Ships, Cleaner Seas

The DFT has responsibility for establishment, operation and maintenance of an effective civil maritime and aeronautical SAR service

The Coastguard Act of 1925 outlines CG duties

And an act of parliament in 1992 stated.....



The National Coastal Structure

6 Divisions consisting of:

18 Areas

6 Coastal Operations Divisional Commanders (CODC)

18 Coastal Operations Area Commanders (COAC)

78 Senior Coastal Operations Officers (SCOO)

400 Coastal Rescue teams of which 200 are rope teams and 50 are mud teams

3,200 Coastguard Rescue Officers 18-65 who can be mobilised 24/7 365



Safer Lives, Safer Ships, Cleaner Seas

6 Divisions

400 Coastguard Rescue Teams of which 200 are Rope teams and 50 are Mud teams

CROs are formed into CRTs which are situated at strategic locations around the coast, and are equipped to deal with incidents and rescues appropriate to the risks associated with local coastal terrain

Each team is trained for Search capability and various teams are trained in specialist activities.....

3,200 Coastguard Rescue Officers men and women, 18-65, who can be mobilised in minutes 24/7 365.

Coastguard Rescue Officers form the mainstay of any CRT and they too must demonstrate commitment, competence, availability and good conduct. Their activities may include:

- Responding to call outs
- Carrying out all operational activities in accordance with official procedures
- Keeping up to date with health and safety notices and instructions
- Attending training and exercises
- Maintaining skill levels required to conduct rescues especially if a specialist team member
- Achieving and maintaining competence in all competencies pertaining to the CRT status by attending training and call outs

ASK

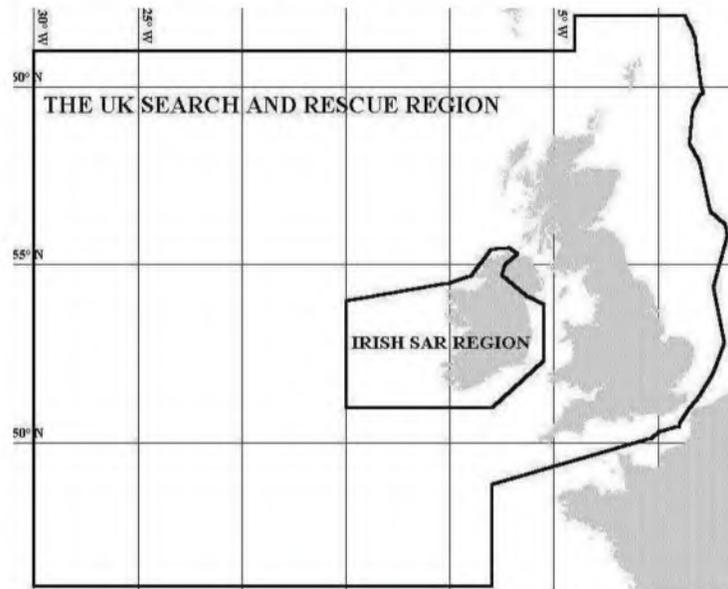
What are the Call signs for each Level?

Area 10 SCOO Alpha = Coastguard Sierra One Zero Alpha

Area 10 COAC = Coastguard Alpha Charlie One

Division 4 CODC = Coastguard Delta Charlie Four etc etc.....

UK SRR



OmS link;

http://oms.mcga.gov.uk/oms_system_overview/national_srr_boundaries/

Safer Lives, Safer Ships, Cleaner Seas

Littoral Area

- Relating or situated on the shore of the sea or a lake
- Includes the intertidal zone
- Can extend well beyond the intertidal zone

□ ASK

What do you understand as the Littoral Area?



Safer Lives, Safer Ships, Cleaner Seas



Safer Lives, Safer Ships, Cleaner Seas


Maritime &
Coastguard
Agency



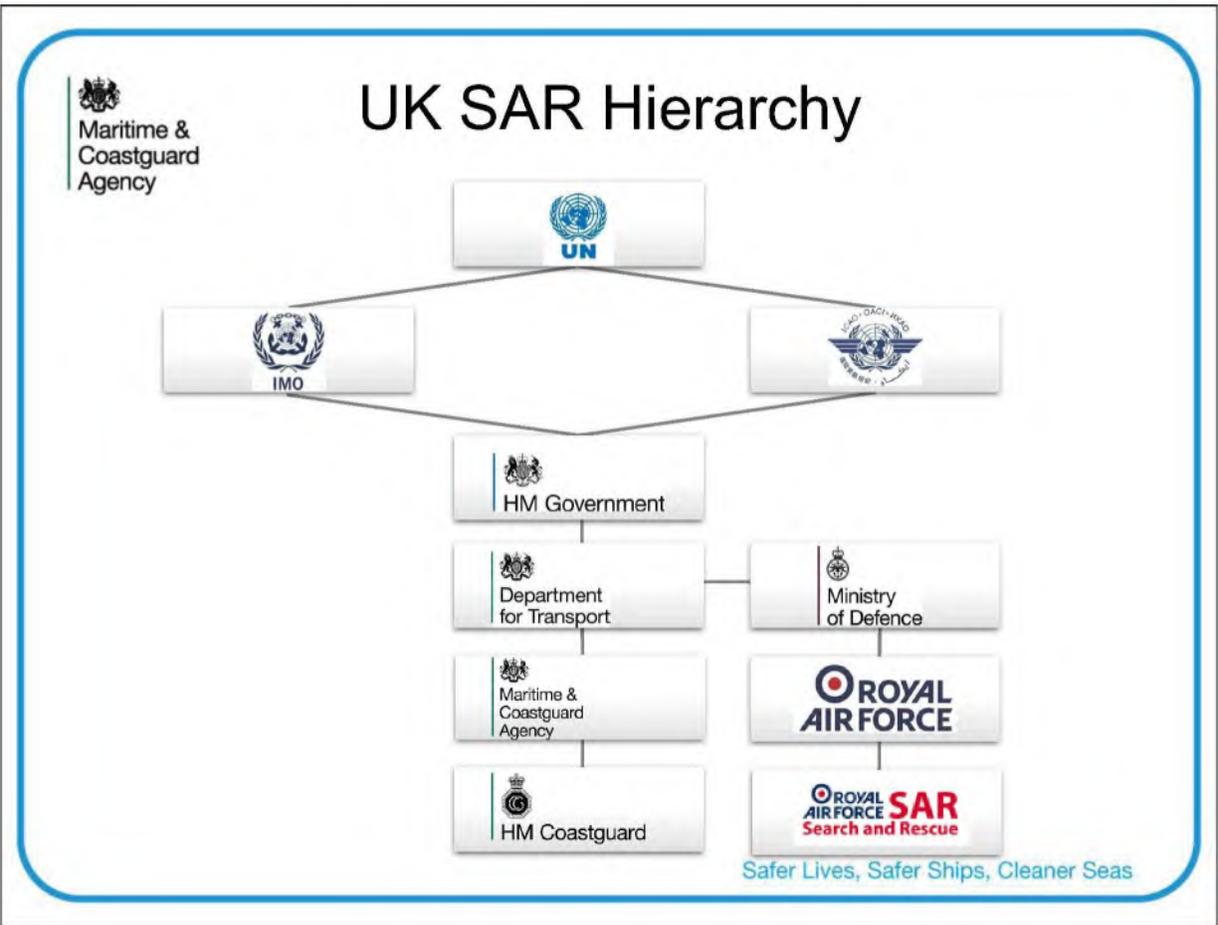
Safer Lives, Safer Ships, Cleaner Seas

HMCG Primacy

- HMCG has primacy for coastal incidents within the littoral area
- Other Emergency Services have primacy inland of the littoral area

Within the Littoral Area, or within the perceived Littoral Area, depending on the circumstances and terrain, as we have discussed, HMCG has Primacy.

Inland of this Littoral Area, depending on the circumstances, the Police, Fire or Ambulance Services will have Primacy. However under the Civil Contingencies Act 2004 we are category 1 responders and as such we could be tasked in land in extenuating circumstances such as a major incident.



Legislation formulated by the United Nations and passed onto the Member States and International bodies to implement. Legislation that directly affects MCA passed down from (IMO) for maritime legislation and the International Civil Aviation Organisation (ICAO) pass legislation pertaining to Civil Aviation, which affects how the MCC operates.

This legislation is passed to HM Government and then it becomes the responsibility of the various departments . MCA = DfT

Maritime legislation is then enforced through the MCA and thereby HM Coastguard. Take for example the current EBOLA crisis - "Ebola Watch" this directive has come from the

The RAF currently manage and control ARCC (Air Rescue Co-ordination Centre) but this will ultimately pass to HM Coastguard so that we become the authority for both Maritime and Air Rescue.

UK SAR Framework

- Can be found on OmS
- Provides detailed set-up on the UK SAR Framework

the UK SAR Framework Document is to describe the background, scope and responsibilities of UK SAR and its strategic and operational management with description of the authorities and organisations who provide a significant role in the provision of SAR within the UK.

SAR = locating and recovering persons either in distress, etc. and delivering them to a place of safety.

SAR Framework = fully integrates SAR co-ordinators and SRUs using a comprehensive communications infrastructure - forms the basis of the UK SAR Framework.

This supports the UK's wider civil contingencies arrangements.□

United Nations Convention on the Law of the Sea 1982

Every coastal State shall promote the establishment, operation and maintenance of an adequate and effective search and rescue service regarding safety on and over the sea and, where circumstances so require, by way of mutual regional arrangements cooperate with neighbouring States for this purpose. (Part VII, Art. 98(2))

External link:

http://www.un.org/depts/los/convention_agreements/texts/unclos/closindx.htm

Safer Lives, Safer Ships, Cleaner Seas

UNCLOS is the international agreement that resulted from the third United Nations Conference on the Law of the Sea, which took place between 1973 and 1982. The Law of the Sea Convention defines the rights and responsibilities of nations with respect to their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources.

Convention on the High Seas 1958

Every coastal State shall promote the establishment and maintenance of an adequate and effective search and rescue service regarding safety on and over the sea and where circumstances so require by way of mutual regional arrangements cooperate with neighbouring States for this purpose. (Art. 12(2))

Safer Lives, Safer Ships, Cleaner Seas

The Convention of the High Seas defines the high seas as all parts of the sea not included in the territorial sea and internal waters.

It deals specifically with the freedoms of the high seas;

the right of a State to have ships flying its flag;

the rights and obligations of the flag State;

piracy;

the right of visit;

and the laying of submarine cables and pipelines.

It also contains two early and pioneering provisions on pollution by the discharge of oil and of radio-active wastes.

International Convention on Maritime Search and Rescue 1979

Chapter 2 – Organisation and Co-ordination

The Chapter makes clear the responsibilities of Governments. It requires Parties, either individually or in co-operation with other States, to establish basic elements of a search and rescue service . . .

External link:

[http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-on-Maritime-Search-and-Rescue-\(SAR\).aspx](http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-on-Maritime-Search-and-Rescue-(SAR).aspx)

Safer Lives, Safer Ships, Cleaner Seas

The 1979 Convention was aimed at developing an international SAR plan, SAR at sea will be co-ordinated by a SAR organisation and, when necessary, by co-operation between neighbouring SAR organisations. Although the obligation of ships to go to the assistance of vessels in distress was enshrined both in tradition and in international treaties (such SOLAS - The International Convention of Safety of Life at Sea), there was, until the adoption of the SAR Convention, no international system covering search and rescue operations. In some areas there was a well-established organisation able to provide assistance promptly and efficiently, in others there was nothing at all.

Civil Contingencies Act 2004

- Duty on MCA to respond to maritime and coastal emergencies
- Act as Category 1 responder alongside other responders

External link:

<http://www.legislation.gov.uk/ukpga/2004/36/contents>

Safer Lives, Safer Ships, Cleaner Seas

Civil Contingencies Act 2004 (c 36) is an ACT OF PARLIAMENT that establishes a coherent framework for emergency planning and response ranging from local to national level.

As a Category 1 Responder under the Civil Contingencies Act 2004, the MCA has a legal duty to plan for emergencies.

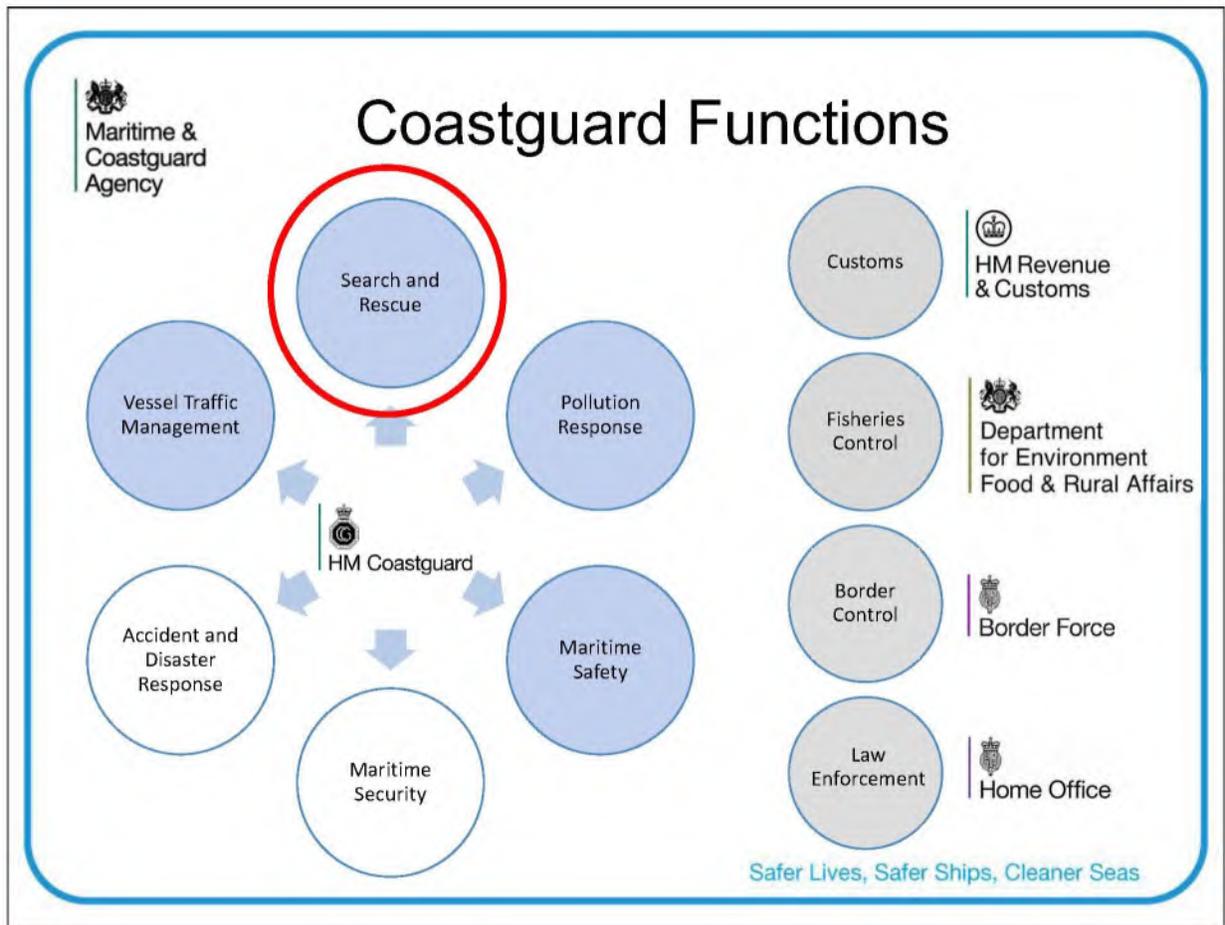
This duty is fulfilled in 3 ways, by implementing:

The National Contingency Plan for Marine Pollution.

Major Incident Plans

Business Continuity Plans

[kpga/2004/36/contents](http://www.legislation.gov.uk/ukpga/2004/36/contents)



Search & Rescue - HM Coastguard is responsible for the initiation and coordination of civil maritime search and rescue within the UK search and rescue region. This includes the mobilisation, organisation and tasking of adequate resources to respond to persons either in distress at sea, or to persons at risk of injury or death on the cliffs or shoreline of the UK.

Vessel Traffic Monitoring - We actively use Radar (at Dover) and software systems to monitor vessels within the UK Search & Rescue Region. This can provide information on suspect vessels and can also be used for Search & Rescue. Currently this is actively being utilised in the NMOC with the "Ebola Watch and compulsory reporting areas

Pollution Response - We act on reports of pollution, classify the report and inform our Counter Pollution & Salvage Department, report the incident to the authorities and assist them.

Maritime Safety - We provide safety information broadcasts (Inshore Waters Forecast, Shipping Forecast, Gale Warnings, Navigational Warnings, Sub Facts and Gun Facts, Local Navigational Safety Warnings)

We provide information for the Leisure Mariners, Tides etc.

Maritime Security & Piracy - We receive Ship Security Alerts This function is currently being performed from Falmouth

Accident & Disaster Response - As a category 1 Responder, we have various departments and officers who are trained in this field, working closely with the Coastguard Rescue Service and other Emergency Services to control and manage both casualties and the scene of an incident.

The other 4 IMO functions are performed by the various Government Agencies as illustrated on the slide Viz...
The one function you will focus on as a MOO is SAR.

SAR Co-ordination

We will now look at some of the skills involved in Mission Co-ordination, some of you may already be aware of this and others not. We will go over the process either way.

SAR Operation Stages

Contained in IAMSAR
Manual Volume II
Mission Co-ordination

OmS link:

[http://oms.mcga.gov.uk/eg961e_secured-
meta-iamsarvol2.pdf](http://oms.mcga.gov.uk/eg961e_secured-meta-iamsarvol2.pdf)



Safer Lives, Safer Ships, Cleaner Seas

The IAMSAR manual is now online and accessible through OMS
Reference Tab -
SAR Response and Co-ordination
IAMSAR Vol 1, 2, 3

SAR Operation Stages

AWARENESS STAGE



Safer Lives, Safer Ships, Cleaner Seas

STAGE 1 - AWARENESS

The awareness stage is where we become aware that an incident is occurring or about to occur - this can develop in a number of ways let us examine some of them.....

AWARENESS – Group Work

Group 1

List how you may be made aware of an incident
in the ops room

Group 2

List the type of incidents you may come across in
the ops room

SAR Operation Stages

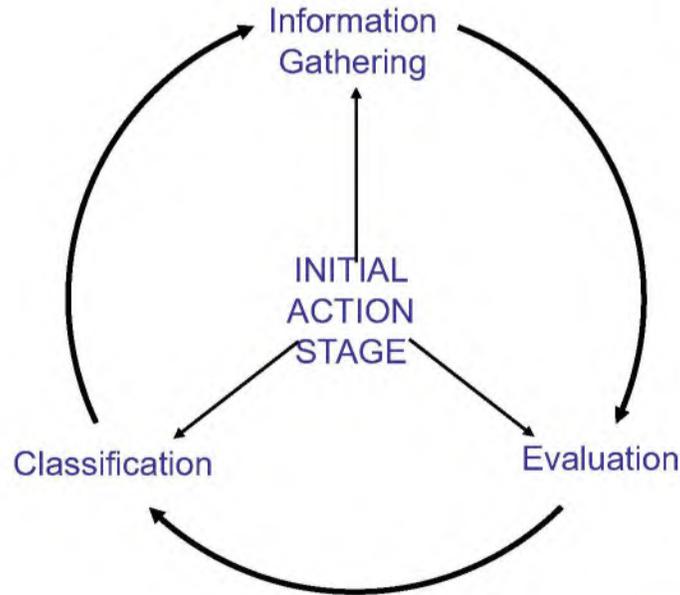


Safer Lives, Safer Ships, Cleaner Seas

Stage 2 is INITIAL ACTION

The initial action stage encompasses the preliminary action taken to alert SAR facilities and obtain more information. This stage may include evaluation and classification of the information, alerting of SAR facilities, communication checks, and, in urgent situations immediate performance of appropriate activities from other stages.

Initial Action Stage



Safer Lives, Safer Ships, Cleaner Seas

The key to a successful operation is accurate and timely information gathering. This should be a linked process of validation, analysis, and assessment.

In the initial action stage, the incident is created with the correct classification and as information is gathered, it is constantly evaluated to ensure that we are responding in an appropriate manner. This is an iterative process that continues throughout the execution of the incident. Where information is gathered and evaluated and decisions are made depending on the information gathered.

Initial Action Stage

1. Information Gathering

- MIPNANO / 6Ws
- ViSION MLPs
- OmS SOPs

Initial Action Stage

2. Evaluation

- Validity
- Urgency for action
- Extent of operation required

Initial Action Stage

3. Grade

- Information
- Monitoring
- Non-SAR
- Alert
- Distress
- Uncertainty

Safer Lives, Safer Ships, Cleaner Seas

Grade

This slide shows the different grades of incidents available in Vision 4.

All incidents initially start with the

Information Grade as in the initial stage, the Operator will be information Gathering. As the information is validated and the extent of the operation is determined, this grade can be changed to the most appropriate.

Monitoring is used for VTM and keeping a listening watch on a vessel

NON-SAR is used for incidents where there is no life in danger, such as an animal rescue – technically we don't do animal rescues but would to prevent the owner from getting themselves into difficulties.

Alert could be something like Medical Advice required / vessel broken down

Distress – Grave and imminent danger requires immediate assistance

Uncertainty – possibly the initial stage of an overdue vessel

Answers to these questions help us with the next question...(next slide)

Initial Action Stage

4. Classification

The Three Emergency Phases:



Safer Lives, Safer Ships, Cleaner Seas

Classification

Uncertainty

"A situation wherein doubt exists as to the safety of an aircraft or a marine vessel, and of the person on board" (IAMSAR Vol II)
This is the lowest of the three emergency phases - the key word is 'doubt'

Alert Phase

"A situation wherein apprehension exists as to the safety of an aircraft or marine vessel, and of the person on board" (IAMSAR Vol II)
This is the second of the three emergency phases - the key word is 'apprehension'

Distress

"A situation wherein there is reasonable certainty that a vessel or other craft, including an aircraft or a person, is threatened by grave and imminent danger and requires immediate assistance" (IAMSAR Vol II)
This is the highest of the three emergency phases - the key phrase is 'grave and imminent danger and requires immediate assistance'

Initial Action Stage

Uncertainty Phase

A situation wherein doubt exists as to the safety of an aircraft or a marine vessel, and of the person on board

Key word = Doubt

No designated Broadcast

Safer Lives, Safer Ships, Cleaner Seas

Colour is approx - Vision incident colour

Uncertainty Phase

This phase is normally associated with vessels or persons reported as late at the intended destination who have failed to make an expected position safety report.

This phase does not require the despatch of resources except, if necessary, as part of a communications search to gather information / intelligence

Initial Action Stage

Alert Phase

A situation wherein apprehension exists as to the safety of an aircraft or marine vessel, and of the person on board

Key word = Apprehension

Broadcast = Pan Pan

Safer Lives, Safer Ships, Cleaner Seas

Alert phase incidents in Vision are Yellow

The Alert phase may be entered into immediately or follow on from the Uncertainty phase.

A Pan Broadcast would be initiated to try to obtain information if this were an overdue vessel and a search plan would be formulated.

Initial Action Stage

Distress Phase

A situation wherein there is reasonable certainty that a vessel or other craft, including an aircraft or a person, is threatened by grave and imminent danger and requires immediate assistance

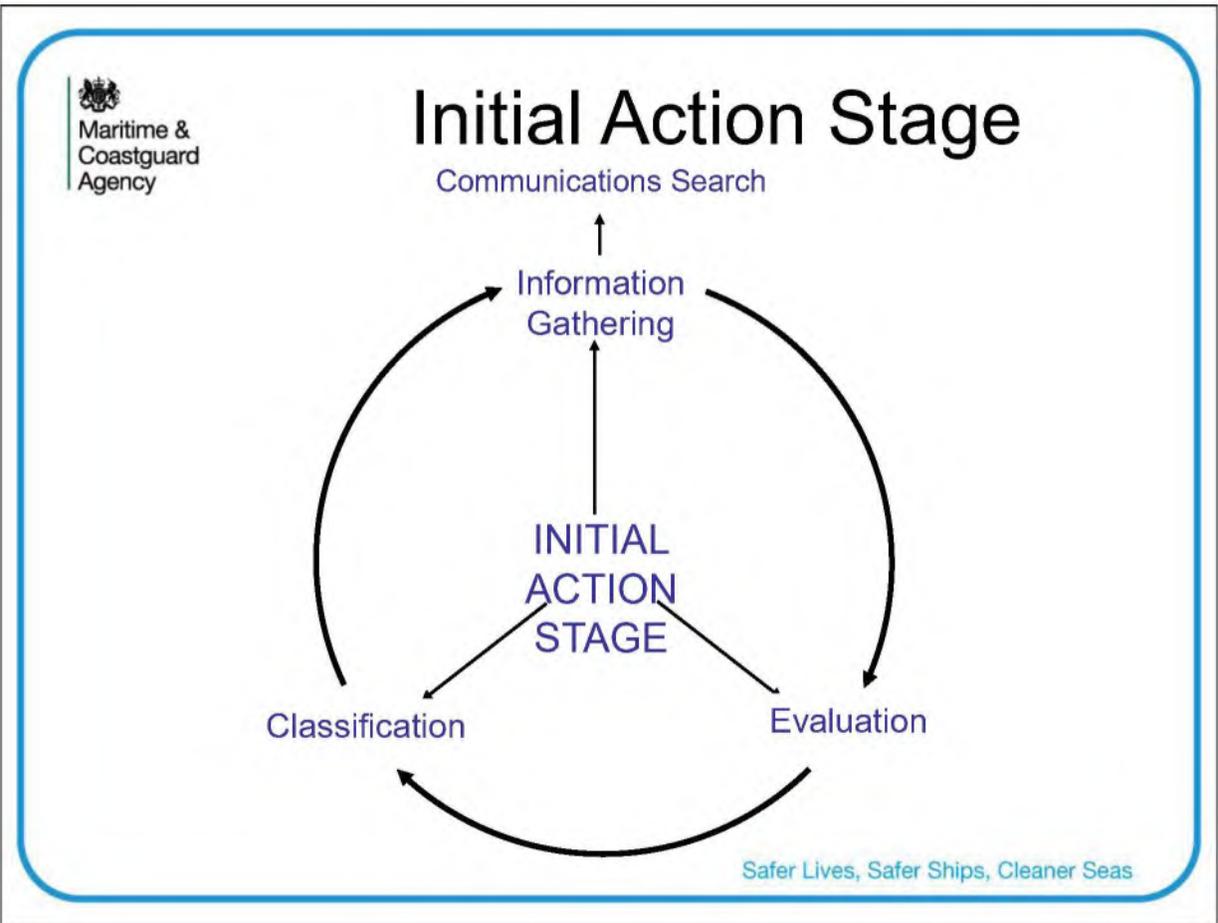
Key word = Grave and imminent danger, requires immediate assistance

Broadcast = Mayday Relay

Safer Lives, Safer Ships, Cleaner Seas

Distress incidents in Vision are Red

The Distress phase may be entered into immediately, or follow on from the Alert phase.
All Broadcasts will Be Mayday Relays - the initial search plan will be initiated and search units dispatched.



As we have already discussed, the information gathering process is iterative and continuous.

□ DISCUSS

Let us assume we have a vessel overdue:

The FIF has informed us that the Vessel is the Athena, a 40 ft yacht with an experienced skipper on-board who is 2 hours overdue on a week-long passage.

What Phase are we in? Uncertainty

Why did you reach that conclusion?

Now what do we do? Communications search to gather more information and continue the process as information comes in.

Initial Action Stage

Communications Search

1. Preliminary
2. Extended

What would happen with a Preliminary Communications Search?

What Phase would we be in?

A Preliminary Communications search is normally conducted during the Uncertainty Phase

What actions could be taken?

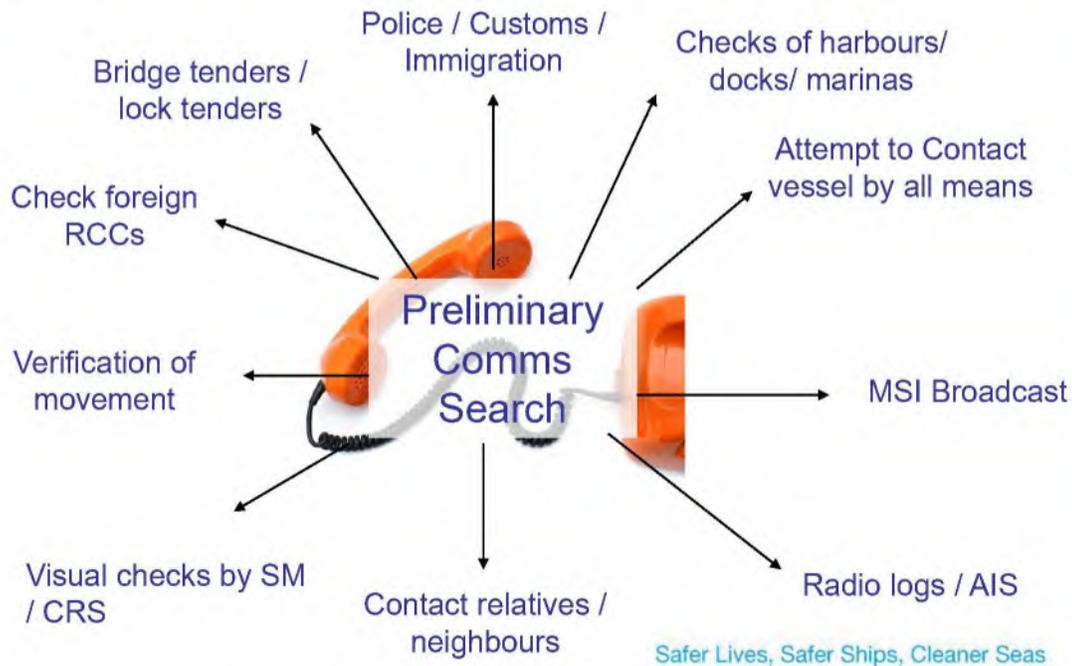
What would happen with an Extended Communications Search?

What Phase would we be in?

Extended communications searches are associated with the Alert Phase.

What actions could be taken?

Initial Action Stage



What information can we gather in the preliminary Communications Search?

- Contact (or asking the first informant to contact) crew relatives and neighbours to check if they have had any recent telephone calls
- Request visual checks by Sector Managers, Coastguard Rescue Service
- If the subject of the search is a commercial vessel, verify departure, intended itinerary and non-arrival at destination through its owners, Lloyds Intelligence, MAREP reporting stations, CALDOVREP and port authorities etc.
- Make enquiries through foreign RCCs
- Bridge and lock personnel
- Harbour or dock personnel and facilities (e.g. harbour tug/workboat)
- Marinas, yacht clubs, and other waterside facilities
- Police / river police
- Offshore installations
- Customs, Immigration (if applicable)
- Tug companies in large ports and rivers

If there is no positive information received, such as they are safe, we must consider re-classifying the incident and upgrading to the Alert Phase

Initial Action Stage



If incident is upgraded - now extended comms search

If we have upgraded to the Alert Phase, the cycle is now repeated and the extended communications search will commence. What could we then do to escalate the communications search that we have not already discussed?

Consider contacting local radio stations
Cycle repeated again

SAR Operation Stages



Safer Lives, Safer Ships, Cleaner Seas

Stage 3 - Planning

What type of plans might we need to make? What decisions have we made so far? What are the implications? What decisions do/could we need to make? - what effects will they have?

The Mission Plan is developed using the headings of:

- Facts, Factors (What has happened or what has affected what has happened). Facts are known information, considerations, or other issues relevant to the situation. A Factor is a modifying influence to the situation (such as the weather conditions)
- Deductions (So what might have happened): What are the implications of this fact, i.e. that which might result or occur? Deductions may be ordered into a sequence of what is more likely to occur
- Outputs (And so what are we going to do?): This will create Actions, Constraints, Questions or a Risks

Structuring and ordering the Output will produce a course of action which then leads to the development of the Mission Plan.

Planning Stage

Encompasses comprehensive planning of the SAR response

- Search Plans
- Resource Plan
- Comms Plan
- Rescue Plan
- Media Plan
- Contingency Plan
- Welfare Plan (SAR units, ops room staff..)

Safer Lives, Safer Ships, Cleaner Seas

Mission Plans may require phases and Courses of Action. Courses of Action may be expressed characterised by a predominant type of activity such as Search Plans, Resource Plans etc..

Plans should include contingency plans to mitigate risks. Unintended effects, positive or negative, are inevitable and should be catered for. Some activities will have unforeseeable effects and these cannot necessarily be planned for in advance, but the possibility that such effects may arise requires agility on the part the plan to be flexible as needs arise.

SAR Operation Stages



Safer Lives, Safer Ships, Cleaner Seas

Having decided on a plan, the Mission Coordinator should write a clear concise statement of the task. This will be used as a tool to prevent mission creep and to keep the team focussed on the mission. This takes the form of a Mission Statement. The Mission Statement contains the task, and its purpose but also allows freedom of action, and has scope for initiative. The Mission statement will articulate: Who, What, Where, When and 'In Order to....', not the How.

Operations Stage

Encompasses all activities that involve searching for the distressed persons or craft, providing assistance, and removing them to a safe place



Safer Lives, Safer Ships, Cleaner Seas

As stressed before, this is a constant cycle. As information is gathered or circumstances change, the whole process of information gathering, evaluating, re-classification and execution continues until the point where the casualty has been assisted or removed to a place of safety.

Once aware of SAR Incident, ops room constantly returns to phase 2,

Awareness >> Initial action (info gathering > info evaluation > re-classification)

New info? >> update Planning > update operations

SAR Operations Stages

AWARENESS STAGE
INITIAL ACTION STAGE
PLANNING STAGE
OPERATIONS STAGE
CONCLUSION STAGE



Safer Lives, Safer Ships, Cleaner Seas

□ ASK

What do you think the Conclusion stage is?

□ ANSWER

Return of SAR units – debriefed, refuelled, replenished and prepared for other missions, return of other SAR facilities to their normal activities, and the completion of all Documentation – such as, SAR SITREP, POLREP, DEFREP etc. along with more Formal reports – such as Post Mission Review, as necessary

Mission Conduct

A review of past incidents has shown that in the past there has been an inconsistent approach to information gathering and analysis

Mission Conduct fulfils the requirement for a comprehensive and consistent approach for dealing with incidents.

We will now cover each aspect -

Mission Planning, Mission Instructions, Mission recording, Post Mission Reports, Post Mission Review and Post Mission Investigations - all of these elements make up Mission Conduct.

Mission Conduct

- PART 1: MISSION PLANNING
 - Information Gathering
 - Validation
 - Analysis
 - Assessment

OmS link:

http://oms.mcga.gov.uk/mission_conduct.pdf

Safer Lives, Safer Ships, Cleaner Seas

Mission Conduct

- PART 1: MISSION PLANNING

- Information Gathering

- Validation

- Grade Information:

- 1. totally reliable
 - 2. may be reliable but requires clarification
 - 3. unreliable

Safer Lives, Safer Ships, Cleaner Seas

As discussed, part of the validation process involves the grading of information as we receive it -

Grade Information:

1. totally reliable
2. may be reliable but requires clarification
3. unreliable

process of validation should be continuous throughout a mission to ensure that information is given the appropriate weight as it is updated, or reviewed in the light of the receipt of new information.

No information should be discounted - that which may have seemed unreliable in the first instance may become creditable later on.

Information may be evaluated using two criteria, Reliability and Credibility.

Reliability reflects the experience, and knowledge of the provider, so a report by a qualified mariner may in context be more reliable than that of a non-mariner.

Credibility assesses accuracy of the information in the light of the initial report, and other sources of information.

Mission Conduct

- PART 1: MISSION PLANNING
 - Information Gathering
 - Analysis
 - Develop information into a sequence

Analysis takes the information and develops it into a sequence normally time lined, but it should deliver a coherent story. Analysis has to be linked with Validation and Assessment continually and constantly re-visited to ensure that information is being updated and refreshes as further information is gathered

Mission Conduct

- PART 1: MISSION PLANNING
 - Information Gathering
 - Assessment
 - Place information in order of priority (weight)

The Assessment is where the information is placed in an order of priority (weight) and becomes 'facts' and 'factors'

Mission Conduct

- PART 1: MISSION PLANNING

- Develop the Plan

- What? - Facts and Factors
Information / Consideration /
Modifying Influence
 - So What? - Deductions
Implications / Might Result
 - And So? - Output
Action / Constraint / Risk /Question

Mission Conduct

- PART 1: MISSION PLANNING

Develop the Plan

Action

- task that needs completing

Constraints

- Imposed on all parties (constraint)
- Self - imposed (restraints)
- Shortfall in resources (limitations)
- Provision of opportunities (freedoms)

Safer Lives, Safer Ships, Cleaner Seas

Constraints

Constraints can be broken down further – these will have an impact on how the incident is executed or how resources may be able to react.

- Imposed on all parties (constraint) - Inclement conditions may affect how all the units operate in a given scenario.

- Self - imposed (restraints) - We may need to draw up a search plan that completed before the onset of darkness, after that we would do a different search.

- Shortfall in resources (limitations) - There may be a shortfall in personnel in a team, or not enough people have responded whereby they may have to be backed up by flank teams.

- Provision of opportunities (freedoms) - The CRT must be able to be given the opportunities to react to situations and deal with an unfolding situation and inform the Ops room once the action has been decided upon, this could be as simple as how the OIC will deploy search team, or where to put a man over a cliff.

Mission Conduct

- PART 1: MISSION PLANNING

Develop the Plan

Questions

Cannot be answered within team, requiring further investigations

Risks

Identified for analysis and management

Safer Lives, Safer Ships, Cleaner Seas

Questions

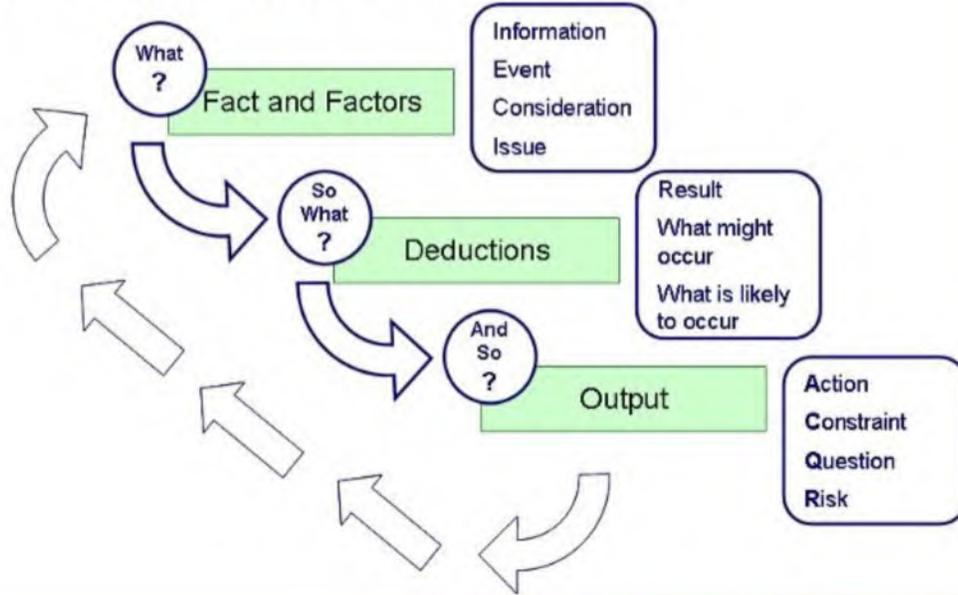
If anything requires further clarification or if we find that there are questions that have arisen that we do not have the answers to and that may require further investigation. It may also be that a question has been answered previously but that has raised another question which now requires further investigation.

Risks

What risks may be involved needs careful analysis and the mission coordinator needs a full awareness. These may be risks to the resources or the casualty themselves. The risks need to be highlighted, and if possible mitigated.

Mission Conduct

- PART 1: MISSION PLANNING



Mission Planning is a reiterative process and must be revisited each time new information is received. Outputs can be fed back into Facts and Factors to ensure that the information is constantly being re-validated. As the incident is unfolding and new information comes to light, or questions are answered, the process evolves until there is a successful outcome to the incident and all the units have returned safely back to base.

Mission Conduct

- PART 1: MISSION PLANNING

Recording the Plan

Capture FFDO elements in SMC comments

12:41:00	SHET1	SMC Comment F - Report of 3 persons stuck in mud, all lying down not moving significantly, 300 m from hard sand, rising tide D - Recover and evacuate, urgent situation due to rising tide, medical assistance will be required O - Task mud rescue team, ensure enough personnel, task helo if necessary, consider ILB / hovercraft, request ambulance Extract/evacuate persons and ensure medical attention. Primary method mud rescue team, and ambulance unit. ILB/hovercraft and helo if required or mud rescue team unsuccessful.
----------	-------	---

Safer Lives, Safer Ships, Cleaner Seas

There can be two types of Mission Plan, depending on the type or urgency of the situation. The Mission Coordinator can create a Quick Mission Plan, or an Extended Mission Plan, both plans need to be recorded in Vision as an SMC Comment.

The Quick Mission Plan consists of Facts, Factors, Deductions and Outputs and a summary of the plan. The amount of information captured under using a Quick Mission Plan will be less than that of an Extended Mission Plan. A Quick Mission Plan will be used for example where an immediate lifesaving response is required e.g. swimmer reported as drowning. An Extended Mission Plan will be more complex and there may be a number of courses of action identified following the analysis and ordering of the output actions.

Also, as the incident progresses, the SMC may need to enter F, D, O updates. To do this, the previous F, D, O comments should be copied across and then added to, in order to reflect the progression of the mission

Mission Conduct

TABLE TOP EXERCISE – CONDUCT

- Split into two groups
- Using the whiteboards, carry out your mission planning (Facts/Factors, Deductions, Output)



Table Top Exercise #1

A call on VHF CH16 is received at the CGOC from RFA Argus, currently in Lyme Bay, reporting sighting flares to the North. HMS Severn also reports a sighting.

Safer Lives, Safer Ships, Cleaner Seas

Table Top Exercise #2

999 Call from Mr Mateus Kaminski, in Aberystwyth, reporting that his friend, Agnieszka Pawlo, has entered the water on the North beach. She is very drunk and thinks she is being funny but Mateus thinks the sea is dangerous - Mateus wants to go in after her but he can't swim. She is ignoring his shouts to come back to shore.

Mission Conduct

- PART 2: STATEMENT

Main reference and coordinating instructions for all mission participants

Used to brief duty officers

It is mandatory for a Mission Statement to be completed, even if this is retrospective. If a Mission Statement can't be written, then further analysis of the information may be required.

The Mission Statement is used for the main reference and coordinating instructions. It is also the core element for briefing the Commanders and other duty Officers as necessary. It also ensures that there is a process which is followed and shows the forward thinking of the Mission Coordinator

Mission Conduct

- PART 2: STATEMENT

Mission Statement Elements:

S ITUATION
M ISSION
E XECUTION
A NY QUESTIONS
C ONFIRMATION

Safer Lives, Safer Ships, Cleaner Seas

Situation: What has happened or is happening

Mission: What the mission is

Execution: How the mission will be executed

Resource: - What resources will do what

Any Questions: - Ensure instructions are understood

Confirmation: - Ensure that each person is aware of what they need to do



SMEAC

Situation, Mission, Execution, Any Questions, Confirmation

SITUATION: (*What is happening / has happened*)

Man overboard from the yacht DooDah. Last seen in position 51 12.4 N 004 32.5 W.

Weather SW'yly 5/6, ebb tide, last light at 1935UTC. No other vessels in immediate vicinity.

Safer Lives, Safer Ships, Cleaner Seas

In this example, we can see at a glance exactly what the situation is. The Yacht DooDah has had a Man Overboard in the position given. Other pertinent information such as the weather, last light and no other vessels can help are all important - think of it as a basic summary so anyone reading the Mission Statement can see at a glance what the situation is and what is unfolding.



SMEAC

Situation, Mission, Execution, Any Questions, Confirmation

MISSION: (*Who, What, Where, When, In order to...*)

'A' Watch will execute a DISTRESS phase action
at 51 12.4 N 004 32.5 W now in order to rescue
a person in the water.

Safer Lives, Safer Ships, Cleaner Seas

The Mission element outlines who needs to do what in order to carry out our mission. In our example, it clearly illustrates which watch is dealing with the incident, the SAR phase of the incident and what we will attempt to do, namely rescue the person in the water.

SMEAC

Situation, Mission, Execution, Any Questions, Confirmation

EXECUTION: (*How Mission will be conducted*)

Using a SAR helicopter and a lifeboat to execute a search to locate the person. Continue with broadcast action to obtain further assistance.

The Execution element is a BRIEF summary of how we will carry out the mission. This is not expected to be a comprehensive set of instructions for the resources, which is covered in the Resource Element, but a summary of what we are going to do. In our example, we are outlining the fact that a helo will be used and broadcast action will continue



SMEAC

Situation, Mission, Execution, Any Questions, Confirmation

RESOURCES: (*Who will do what*)

Coastguard 'A': Develop a Rapid Response search plan using a SAR Helicopter and a lifeboat

Coastguard 'B': Broadcast Mayday Relay

SAR helicopter: Execute a Rapid Response search to locate PIW.

Lifeboat: Execute a Rapid Response search to locate PIW

Safer Lives, Safer Ships, Cleaner Seas

This is where we allocate specific tasks to the resources involved in the execution of the incident. Initially this may be as simple as allocating a Coastguard to conduct broadcast action. As the mission unfolds and more resources are either needed or tasked, then the Mission Statement would be changed to reflect this. Remember this is a work in progress until the mission is complete and the incident has been concluded.

In our example, we have listed and added resources with their tasks as the incident has unfolded, it includes the drawing up of a search plan, the broadcasting of the mayday relay and the search instructions given to the helo and lifeboat.



SMEAC

Situation, Mission, Execution, Any Questions, Confirmation

ANY QUESTIONS?

CONFIRMATION

Coastguard 'B' : How often do you want me to repeat the Mayday Relay if we get no response?

Safer Lives, Safer Ships, Cleaner Seas

The confirmation and questions element is where the Mission Coordinator ensures that everyone is clear with their allocated tasks and there are no questions that need clarification. It is also the opportunity for the team to seek clarification if needed. If it appears that there are questions that need input from the resources, these can be put into the questions field so they are addressed. In our example, Coastguard B is seeking clarification on the frequency of the Relay.

SMEAC

Situation, Mission, Execution, Any Questions, Confirmation

Forward Look:

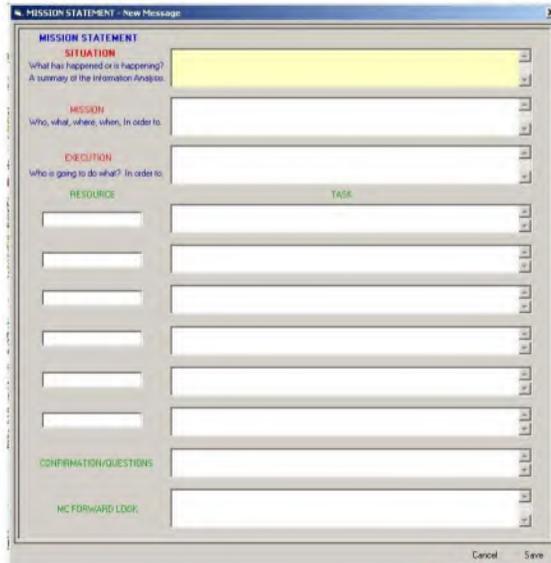
If the Rapid Response search fails to find the PIW, the datum will need to be extended and a Datum Point Search will need to be created and executed.

If the PIW is located, the HLS will need to be manned and the hospital notified to receive a casualty.

Here is where the Mission Co-ordinator will think about the "What ifs.." and "What could happen and what we will do when it happens" It enables the Mission co-ordinator to gather their thought and look at a logical progression of the incident. In our example, we are looking at what we will do if the person in the water is found, and what we will do if they are not.

Mission Conduct

- PART 2: MISSION STATEMENT MLP



RESOURCE	TASK

Safer Lives, Safer Ships, Cleaner Seas

Here we can see an image of the Message Logging Protocol (or Form) for the Mission Statement. As you can see, it is a simple form, which is easy to complete and update. Once the initial form has been saved, it can be updated, and any changes made, without having to fill the entire form in again, and version two will then be saved, and so on.

Mission Conduct

- PART 3: RECORDING

To enable effective post mission review

- Technical Recording Systems
 - NICE - Captures all audio traffic on ICCS
 - ViSION - Incident Management System
 - SARIS - Search and Rescue Information System
- Manual Records
 - Charts/ Maps



Maritime &
Coastguard
Agency

Safer Lives, Safer Ships, Cleaner Seas

Mission Conduct

- PART 4: MISSION REPORTS

Formal Reports

- SAR SITREP, POLREP, DEFREP, ...
- Raised during the incident as appropriate

During and after an incident there is a need to generate reports these include formal reports such as the SAR SITREP, POLREP, DEFREP, etc. and Post mission reports which contain a short synopsis of the incident and are generated at the conclusion of an incident.

There may be additional reports required for some qualifying incidents and we will look at these separately.

Formal reports are a message in a standard format intended to update all involved parties on the progress of an incident and indicate future plans. They are for external as well as internal addressees. The addressee list for formal reports will vary according to the type of incident (SAR, CP, VTM, etc.), the type of report and the involved authorities to whom HM Coastguard has a mandatory requirement for reporting.

They need to be sequentially numbered and sent when changes occur during the incident. A 'XX and final' report must be sent at the end of an incident for which a formal report has been written.

Mission Conduct

- PART 4: MISSION REPORTS

Post Mission Review

- Includes GIN, incident start / finish, situation, mission statement, short synopsis (who to whom, where, when)
- Raised at conclusion of incident

The GIN (Global Incident Number)

Incident start and finish times in DTG format

The situation

Mission statement

A short synopsis, no more than four lines, indicating who did what, with what, to whom; when, where and what was the outcome

Mission Conduct

- PART 4: MISSION REPORTS

Additional Reports

- Evidence of HMCG's contribution to maritime safety and support requirements for procedural changes or technical enhancement
- Raised for qualifying incidents

Safer Lives, Safer Ships, Cleaner Seas

Additional reports are required to show our contribution to maritime safety and support any procedural changes or technical enhancements that could have been made. These could also indicate where an incident could have been executed better or learning points may have been picked up. In these cases there is a need to show a more detailed analysis of the activities in which we have been involved whilst prosecuting an incident.

There are certain incidents where a review may need to take place and we will explore these in the following slide. If we have a qualifying incident, all the information that has been recorded, both technically and manually, will need to be kept.

Mission Conduct

- PART 4: MISSION REPORTS

Qualifying Incidents

- When a fatality has occurred
- Accident, incident or injury involving a SRU
- Another authority has declared its intention to conduct an investigation
- Directed by MCA HQ
- When a vulnerability in procedures or processes has been identified

Safer Lives, Safer Ships, Cleaner Seas

OmS Link:

http://oms.mca.gov.uk/oms_procedures/mission_conduct_-_reports.htm

Qualifying incidents (QI) are defined as incidents where:

1. A fatality has occurred during an incident coordinated by HM Coastguard.
2. There has been an accident, incident or injury involving an SRU.
3. Another authority has declared its intention to conduct an investigation e.g. MAIB, Police, AAIB. Or where they have requested an investigation
4. It is directed by MCA HQ. and
5. All incidents where a vulnerability with current procedure or process was identified
6. the outcome of an incident was affected by technical failure or limitations

Qualifying incidents are to be notified to the DNSARO as soon as is practicable

Mission Conduct

- PART 4: MISSION REPORTS
 - Qualifying Incidents – Actions Required
 - Attach all recorded NICE data to incident
 - Allocate revised incident type on closure
 - Save and print SARIS model report
 - Retain all other recorded material

Safer Lives, Safer Ships, Cleaner Seas

As said previously, all information pertaining to a qualifying incident must be kept. The Mission Co-ordinator must ensure that the incident has been closed with the correct revised type. All of the incident voice recordings must be tagged, any SARIS reports and models and all other recorded material must be saved. If charts or maps have been used, they need to be kept and stored with all the other pertinent information relating to the incident.

Mission Conduct

- PART 5: POST MISSION REVIEW
 - Identify individual or team learning requirements
 - Alert Senior Managers to significant incidents
 - Highlight any requirements for procedural changes
 - Provide feedback for technical improvements

A Post Mission Review has to be completed for all qualifying incidents, as discussed previously and all incidents where a vulnerability with the current procedure has been identified, or if an incident outcome was affected by a technical failure or limitation.

The Post Mission Review may identify individual or team learning requirements, highlighting requirements for procedural changes, or provide feedback for technical improvements, it also alerts Senior Managers to significant incidents, Post Mission Reviews are to be conducted in a no blame environment, any concerns that are identified should be regarded as learning opportunities, both for the Agency as a whole, the team or individual.

Mission Conduct

- PART 5: POST MISSION REVIEW

Post Mission Review

Mission:

Task	What was planned to happen?
What really happened?	
Why did it happen?	
What went well and/or what can we do better next time?	

Task

Task	What was planned to happen?
What really happened?	
Why did it happen?	
What went well and/or what can we do better next time?	

Safer Lives, Safer Ships, Cleaner Seas

The best time for a post incident review is immediately after the completion of the Mission and associated reports. It should detail what was planned, including the Mission Statement. Define what actually happened and what the difference was between the two and set down some achievable learning points. It should also highlight and identify any requirements for procedural changes and any technical improvements, which would help with the prosecution of future incidents. Normally PMR will be carried out as a team however Mission Coordinators may need to consider the potential for team members to be affected by exposure to traumatic events. There may be occasions when a one to one review will be more appropriate

Mission Conduct

- PART 6: POST MISSION INVESTIGATION

The post mission investigation is when things need to be looked into in a little more depth or at a higher level. It is normally conducted exclusively by senior officers (MOS, Controller, Commander COAC etc). It is always used when a qualifying incident occurs. It may also be used when a serious equipment failure has occurred or the post mission review suggests that there are significant lessons to be learnt, either positive or otherwise, from an incident.

The Rescue Dilemma



Safer Lives, Safer Ships, Cleaner Seas

The environment in which the Service operates is potentially dangerous for the rescuers as well as the casualty. The health and safety of all members of the Coastguard Rescue Service is therefore of paramount importance. To this end, we will investigate the Rescue Dilemma

The Rescue Dilemma

Decision

To attempt rescue or not?

The most appropriate unit/back up?



Safer Lives, Safer Ships, Cleaner Seas

In hazardous conditions the risks to rescue units must be carefully considered. Consultation with the appropriate operating authority may be prudent, this may be the Launching Operations Manager (LOM) for a lifeboat, or the Station Officer (SO) for a Coastguard Rescue Team (CRT). It is seldom the case that only one course of SAR action is possible. Normally choices have to be made between the type and number of units selected. . It may be sensible to request more than one unit, not only for the benefit of the casualty but to act in mutual support in hazardous operating conditions.

An assessment of the rescue scene, geography, prevailing conditions, casualty conditions, assets available, communications, back-up rescue options and risks to casualty, rescuers and bystanders will assist in determining the acceptability of the risk and how to minimise it or when the risk is unacceptable and alternative arrangements must be considered.

The most appropriate unit...



Safer Lives, Safer Ships, Cleaner Seas

40 Minutes

Termination

We will now explore the termination criteria for a search. This will always be done in consultation with the SMOO but you need to be aware of what they will be looking for when considering termination of search

SAR Action Termination

“Search and Rescue Operations shall continue, when practicable, until all reasonable hope of rescuing survivors has passed”

The International Convention of Maritime Search and Rescue 1979

OmS Link;

http://oms.mcga.gov.uk/oms_procedures/search_termination_criteria.htm

Safer Lives, Safer Ships, Cleaner Seas

This quote has been taken from The International Convention of Maritime Search and Rescue 1979 and specifies when a search should be terminated in broad terms. We will be addressing in detail the criteria which help us to make the decision when to terminate a search.

SAR Action Review

- Active review of entire case
- Decisions & Planning
- Validity of input data & methodology
- Key leads and clues
- All areas searched
- Possibility of Detection
- Probability of Area
- Proper allowance for weather etc.

Safer Lives, Safer Ships, Cleaner Seas

Before a decision can be reached regarding search termination, the incident must be reviewed to ensure that it has been correctly conducted.

The review should include checking that correct assumptions and reasonable planning scenarios have been used throughout the search plan.

Initial position, error margins and drift factors need to be ensured that they were the best possible choice and that the accuracy of information was utilised to best effect within the search plan.

Were all the clues and leads followed up and taken into account? Any assumption which may have been allowed to go unquestioned may have an impact on an otherwise excellent search because the search planner's judgement was clouded by a false assumption being used as factual information.

What was the Possibility of detection and consider the Probability of Area - was the casualty likely to be in that search area and why, and if so what was the coverage factor for the completed searches?

Have all search units been consulted as to the quality of their search, visibility and likelihood of finding the casualty?

Taking the existing weather into account and the survivor mentality, and consulting SAR Graphs and Tables, was is the survivability rate - is there a chance that the casualty may still be alive? - We will explore all these options in the next slide.

Termination Criteria

No longer any probability survivors alive given -

Sea Temperature

Wind – air temp and chill factor

Sea Conditions

Personal characteristics & physique

LSA & detection aids

Availability and risks versus gains to the search units

Safer Lives, Safer Ships, Cleaner Seas

Environment-related factors may severely limit survivability. Casualty life expectancy varies with the use of lifejackets, immersion suits, the type of clothing worn, the clothing's wetness, survivor activity, initial body temperature, physical and psychological condition, thirst, exhaustion, hunger, and will to live. Individuals can exceed common life expectancies or tolerance times

Factors that slow the loss of body heat are:

- o high body fat
- o heavy clothing
- o survival clothing
- o the use of a protective behaviour

Factors that make a person lose body heat faster are:

- o gender (females are more prone to hypothermia)
- o age (children and the elderly are more prone to hypothermia)
- o low body fat
- o light clothing
- o exercising (such as situations where persons without lifejackets have to swim)
- o seasickness.

For inshore incidents, survival time may be lessened due to breaking waves and adverse currents making it more difficult for the casualty, however the person may also made it ashore.

Predicting survival times in is not an exact science; there is no formula to determine exactly how long someone will survive, or how long a search should continue. There are some difficult decisions that will have to be made based on the best information available. A search should always extend beyond the time that which a casualty can reasonably be expected to survive.

Termination Criteria

- Consultation with players, own team and service hierarchy
- Media
- Next of kin given early warning
- Political implications

and Afterwards?

- Be ready to reactivate the case
- Debrief all facility/unit commanders
- Prepare a Casualty Action Report
- Review the case – effective Vs efficient
- Capture lessons learned & promulgate
- Archive files
- Consider individuals – welfare & counselling

Ensure OmS is referenced

Alerting On-Call Duty Personnel

There are instances when we will need to call one of the duty personnel. On call duty personnel are identified on the HQ & Regional Operations Personnel on Call Duty Roster, which is the link you see below and is easily accessible from OMS. It shows the specific officer who is on call for the period and their contact details.

Alerting On-Call Duty Personnel

- SMOO
- Duty Controller
- Duty Commander
- DOD
- DCPSO
- SOSREP
- RoW

- Enforcement
- Surveyors
- Media

Safer Lives, Safer Ships, Cleaner Seas

□ ASK

Who Might we call and for what?

□ ANSWER

The SMOO – If any of the functions other than SAR are involved, If search planning is involved above a very basic level or if the incident involves lots of other agencies or is complicated the SMOO should be involved. In any case the SMOO should ALWAYS be informed of what is going on as a heads up now saves time later.

The DAO (Duty Area Officer) / Controller is available 24/7 to provide advice, guidance, reassurance, decisions and support to SMCs and Incident Officers

The DNSARO (Duty National SAR Officer) / Commander's role is to provide advice, re-assurance, decisions and support to DAO/SMC during routine and major Coastguard operations

The DOD (Duty Operations Director) role is to provide support to the DNSARO, the DCPSO and SOSREP and to brief Agency & Departmental colleagues, Ministers etc as appropriate

The DCPSO (Duty Counter Pollution and Salvage Officer) if there is a significant risk due to pollution of damage to persons, property, or the environment

SOSREP (Secretary of States Representative) may only be contacted by the DCPSO

RoW (Receiver of Wreck) for Items recovered from a wreck, illegal diving activities, Fishes Royal (Dolphins, Sturgeons and Whales - in Scotland only Sturgeons and Whales over 25 foot), grounded vessels resulting in salvage claims etc.

SENIOR ENFORCEMENT OFFICERS - to be contacted if there is a significant breach of legislation, such as a work related death, foundering or loss of vessel, collision, and pollution, anything alcohol related.

SURVEYORS – in all cases where either is a serious injury or fatality on-board a vessel, an MCA customer requires dispensation to

sail at short notice, any vessel showing incorrect AIS or VTM notification, any vessel involved in a collision, grounding, fire etc.

MEDIA - Any incident of national importance, when there is a safety message relevant to the incident, when the ops room is too busy to deal with the media.

Aim & Objectives

Aim: The aim of this unit is to allow MOO delegates to gain an understanding of Mission Co-ordination and their role of Mission Co-ordinator

Objectives: By the end of this unit delegates should/will be able to;

1. *Recognise the remit under which HMCG operates, the Coastguard functions and associated acts and the role of the Mission Co-ordinator*
2. *Identify the UK SRR*
3. *Distinguish the 5 IAMSAR operational stages*
4. *Identify the 6 stages of Mission Conduct*
5. *Apply SMEAC as an aid to briefing*
6. *Recognise the importance of recording information and the completion of the Mission Statement, Post Mission Review and other relevant forms*
7. *Recognise the rescue dilemma and appropriate unit selection, Termination criteria and when to alert duty personnel*