



HM Coastguard

Coastguard Programme

COURSE	SMOO MISSION CONDUCT
MODULE	
UNIT NUMBER	
UNIT NAME	
SESSION NUMBER	1
SESSION NAME	SMC Theory
SCHEDULED SESSION TIME	1 DAY
RESOURCES NEEDED	POWERPOINT
LINKS TO OTHER UNITS/ MODULES	

OVERVIEW	THE AIM OF THIS UNIT IS TO ALLOW SMOO DELEGATES TO GAIN AN UNDERSTANDING OF MISSION CO-ORDINATION AND GAIN PRACTICAL EXPERIENCE WITHIN THE ROLE OF SMOO MISSION CO-ORDINATOR
Learning Outcomes	<ol style="list-style-type: none"> 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. Evaluate the likelihood of success compared to the risk to rescuers inherent in SAR operations 8. Appraise under what circumstances SAR Action is terminated 9. Distinguish the differences and identify the roles of the OSC and ACO 10. Describe in broad terms: the National Risk Picture, Contingency Planning, Command and Control and the Commonly Recognised Information Picture (CRIP) 11. Outline the procedure for alerting on-call duty personnel 12. Identify the importance of Leadership and Human Factors within Mission Co-ordination

Slide Number: 2

Title of Slide: Aim and Objectives

Aim: The aim of this unit is to allow SMOO delegates to gain an understanding of Mission Co-ordination and gain practical experience within the role of SMOO 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. Evaluate the likelihood of success compared to the risk to rescuers inherent in SAR operations
8. Appraise under what circumstances SAR Action is terminated
9. Distinguish the differences and identify the roles of the OSC and ACO
10. Describe in broad terms: the National Risk Picture, Contingency Planning, Command and Control and the Commonly Recognised Information Picture (CRIP)
11. Outline the procedure for alerting on-call duty personnel
12. Identify the importance of Leadership and Human Factors within Mission Co-ordination

Explain

Talk through the above slide and explain what will be covered

Slide Number: 3

Title of Slide: UK Coastguard Challenge

- **UK around 20,000 miles of coastline**
This includes all the inlets and rivers
- **Highly accessible / varied geography**
The furthest anyone in the UK lives is only 72 miles from the coast, most of our shores are generally accessible to the public with easy access to the coastal paths, cliffs and beaches
- **Inch per inch most dangerous part of UK**
Some of the other Emergency Services may disagree with this statement but if for example someone is stuck in the mud at the edge of a lake, then the Fire Brigade can rescue them as quickly as necessary...if the same scenario were re-enacted along the coast, especially near Morecambe Bay, with a 7 meter tidal range, a mud extraction needs to occur very rapidly so the casualty isn't caught by the incoming tide. The same can be said for cliff rescue... In the mountains, Rope Rescue teams can extract the casualty but the same on the sea cliff may necessitate the rapid extraction or use of another resource due to the incoming tide, putting both the casualty and rescuers at risk.
- **Nowhere in UK is more than 72 miles (116km) from the coast**
On a Sunny day in summer, anyone can access the coast and may not have any understanding of the tidal conditions or the difficulties they may encounter in the sea. They still come to the coast for a good day out, this increases the amount of people that may access and use the coastline.
- **Estimated 11.5 million people take part in coastal activities in the UK every year.**
And this number is increasing. Also with no legislation regarding boating activities, anyone can buy a boat and take their friends and family out for the day with no knowledge of the IRPCS or necessarily a full understanding of the potential dangers. Activities such as coasteering and sea kayaking are becoming ever more popular.

Slide Number: 4

Title of Slide: Coastguard Remit, Legislation and Functions

Explain

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

Slide Number: 5

Title of Slide: HMCG Responsibility Statement

Within the UK Government, The Department of Transport, of which the Maritime and Coastguard Agency forms a department, has overall responsibility for the establishment, operation and maintenance of an adequate and effective civil maritime and aeronautical Search and Rescue Service. For Maritime SAR, the Coastguard Act of 1925 outlined duties that the Coastguard needed to carry out. Further to this, an act of Parliament in 1992 stated that

“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.”

Clearly sets out our responsibilities, and can be used to reinforce this with other emergency services if necessary.

Slide Number: 6

Title of Slide: UK SRR

The NMOC or CGOC is the base from which all maritime functions are discharged, principally search and rescue coordination, counter pollution and vessel traffic monitoring. It has a distant horizon, not limited geographically, monitoring UK maritime interests. In the past, this was limited by the boundaries of the UK Search and Rescue Region as shown on this slide. Such limits are now interpreted more as extending to wherever national maritime interests exist, which includes UK territories and wherever a UK registered vessel is present. Talk through the lines on the slide and the boundaries. As far North as 62 degrees N, South to 45 Degrees N, West to 30 degrees W, East to 3 degrees 18 minutes E. Worth noting that the eastern boundary is made up of median lines between the UK and European neighbours.

There is a difference between Maritime and Air SRRs – Air goes further north. There is also a difference between SRR and CP&VTM areas.

Slide Number: 7

Title of Slide: HMCG Primacy

Discuss – who has primacy for different types of incident? What happens if the incident occurs in the littoral area but would normally be coordinated by another authority?

As given in the HMCG Responsibility Statement, if it is within our AoR, we have primacy, regardless of the type of incident. The only exception is missing people – but we will coordinate the search of the coastal/maritime environment.

In addition, it is worth noting we have primacy in areas outside the littoral area as well, due to various MoU agreements. Examples are the Norfolk & Suffolk Broads, the main lakes of the Lake District, and Loch Ness.

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.

However, not having primacy is NOT a reason to take no action. If we are informed of an incident outwith our normal AoR, ensure the appropriate authority is aware and take any action that may be necessary in the interim.

Slide Number: 8

Title of Slide: Littoral Area

ASK

What do you understand as the Littoral Area?

Answer

The Farmer's Fence? The Coastal Path?

The actual definition according to the dictionary is....

"The **littoral zone** is the part of a sea, lake or river that is close to the shore. In coastal environments the littoral zone extends from the high water mark, which is rarely inundated, to shoreline areas that are permanently submerged. It always includes this intertidal zone and is often used to mean the same as the intertidal zone. However, the meaning of "littoral zone" can extend well beyond the intertidal zone."

There is no single definition. It can extend well beyond the intertidal zone – is it easily accessible or will specialist knowledge and equipment be required if someone were in difficulties – if so, could this possibly make the Littoral area bigger than the official definition? It is worth having a discussion that encompasses the next three slides according to the interpretation of what we perceive as the Littoral area and why.....

Slide Number: 9

ASK

Where do you think the Littoral area would be on this slide?

Answer

The Farmer's Fence? The Coastal Path?

There is a steep slope and thick undergrowth where someone who got into difficulties would not be able to easily be extracted. This would probably extend the Littoral Area to the Farmer's Fence, and depending on the accessibility of the field, beyond. The Coastal Path looks dangerous and certainly this would be our area of responsibility.

Slide Number: 10

ASK

Where do you think the Littoral area would be on this slide?

Answer

The Promenade? The Fence?

The beach looks fairly accessible but imagine the Ambulance Service trying to extract a casualty....The Paramedics don't have stretchers that can be carried, they are wheeled – could you wheel a stretcher onto and off this beach? No – the CRTs are trained to carry stretchers and would be required to assist with an extraction in this scenario. The Promenade however is easily accessible and would not fall into the Littoral Area

Slide Number: 11

ASK

Where do you think the Littoral area would be on this slide?

Answer

The cliffs are steep and dangerous and appear to be inaccessible. The fact that there is a stack, would indicate that the cliffs are unstable as once this would have formed part of the coastline. Certainly all the visible areas would form the Littoral Area and possibly beyond, depending on the accessibility of the areas that are not apparent on the slide.

Slide Number: 12

Title of Slide: Legislation

The United Nations Convention on the Law of the Sea (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.

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.

The 1979 Convention was aimed at developing an international SAR plan, so that, no matter where an accident occurs, the rescue of persons in distress 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 organization able to provide assistance promptly and efficiently, in others there was nothing at all.

The Civil Contingencies Act 2004 (c 36) is an [[HYPERLINK "http://en.wikipedia.org/wiki/Act_of_Parliament"](http://en.wikipedia.org/wiki/Act_of_Parliament) \o "Act of Parliament"] of the [[HYPERLINK "http://en.wikipedia.org/wiki/Parliament_of_the_United_Kingdom"](http://en.wikipedia.org/wiki/Parliament_of_the_United_Kingdom) \o "Parliament of the United Kingdom"] 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 three ways, by implementing:

- The National Contingency Plan for Marine Pollution.
- Major Incident Plans
- Business Continuity Plans

Slide Number: 13

Title of Slide: Ultimate Objective

By working through this process, we will hopefully achieve the best possible outcome, given the scenario we are presented with.

Discuss – what constitutes a successful outcome? Body recovery could be considered successful as it gives a family closure.

From the outset of any given incident, we are behind time, and we therefore have to plan as best we can on how to make up this time; or at the very least, to not lose any more. At the outset, you need to work out what outcome you are trying to achieve – is it to get a casualty to medical attention or recover a vessel to harbour?

This model is dynamic, and the steps should be repeated as necessary until the incident is concluded.

Talk though all the stages in brief – they will be discussed in more detail later on.

Slide Number: 14

Title of Slide: 30 second Exercise

In this exercise, you will be given a scenario. You will then have 30 seconds to determine your intended outcome and the tasks you will need to complete to achieve it – eg what units should be tasked.

Slide Number: 15

Title of Slide: 30 second Exercise

Read the scenario then give them 30 seconds to complete the exercise.

Discuss their answers.

Slide Number: 16

Title of Slide: SAR Co-ordination

Slide Number: 17

Title of Slide: SAR Operation Stages

The IAMSAR manual is now online and accessible through OMS

Reference Tab –

SAR Response and Co-ordination

IAMSAR Vol 1, 2, 3

The IAMSAR Manual comprises three volumes, each written with specific SAR system duties in mind. The Mission Co-ordination volume (volume II) can be used as a stand-alone document or in conjunction with the other two volumes as a means to attain a full view of the SAR system and can assist personnel who plan and co-ordinate SAR operations and exercises.

The response to a SAR incident usually proceeds through a sequence of five stages. These stages are groups of activities typically performed by the SAR system in responding to a SAR incident from the time the system becomes aware of the incident until its response to the incident is concluded. The response to a particular SAR incident may not require the performance of every stage. For some incidents, the activities of one stage may overlap the activities of another stage such that portions of two or more stages are being performed simultaneously.

Slide Number: 18

Title of Slide: SAR Operation Stages

Awareness Stage

The awareness stage is where we become aware that an incident is occurring or about to occur.

Discuss – what are some ways in which we become aware of incidents?

Slide Number: 19

Title of Slide: SAR Operations Stages

Awareness stage ->

Initial Action Stage

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.

Slide Number: 20

Title of Slide: Initial Action Stage

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.

1. Information Gathering

- MIPNANO / 6Ws

M- Mayday

I – Identification

P – Position

N – Nature of distress

A – Assistance Required

N – Number of POB

O- Other information – including the vessels intentions

6ws (999 call)

Who? Who is in trouble or requires assistance

Where? Where is the incident (location?)

What? What is the problem?

When? When did this happen?

Weather? What is the weather at the location now/at the time of the incident?

Watch? Keep watching the "Who" is in trouble.

- Vision MLPs

Message Logging Protocol Form (2nd Form)

These are the forms that appear when an incident is classified and can be used as an aide memoire to help with the information gathering process. This also encompasses the use of the broadcast forms that are used whilst prosecuting an incident.

- OmS SOP

Standard Operating Procedure

The SOPs in OmS will prompt the operator in the tasks required to prosecute an incident dependant on the incident type.

- **JESIP Methane**

Used by other emergency services to pass information on an incident. Although designed for Major Incidents, it can be used for any – M can be ‘No’.

Slide Number: 21

Title of Slide: JESIP METHANE

May be used by another emergency service to notify HMCG of an incident they are running, which requires our assistance.

It is a standardised format to ensure all relevant information is passed in a clearly understandable way. You should familiarise yourself with the format and utilise as and when appropriate.

Slide Number: 22

Title of Slide: Initial Action Stage

2. Evaluation

Validity

The information need to be validated – where has it come from? Who is reporting it? Have there been any other reports? We need to be able to identify that which is totally reliable, may be reliable but requires further validation or unreliable.

As part of this process, information can be analysed and developed into a sequence. It can also be assessed and placed in an order of priority and can become the basis for “Facts, Factors, Deductions and Outputs”

Urgency for Action

Based on the information gathered so far and the validity of the report, what is the appropriate response? Do we need to send resources instantly, for example - a person on a cliff, about to fall would require immediate assistance where a vessel broken down, not in immediate danger may require a response less urgently

Extent of Operation Required

Once again – this depends on the validity and severity of the incident- what resources need to be sent? A measured and appropriate response is required – there is no point in being Sir Launch-a-lot if that involves utilising resources that may be better used elsewhere.

Slide Number: 23

Title of Slide: Initial Action Stage

3. 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.

Uncertainty – possibly the initial stage of an overdue vessel

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

Distress – Grave and imminent danger requires immediate assistance

Slide Number: 24

Title of Slide: Initial Action Stage

4. 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**'

Slide Number: 25

Title of Slide: SAR Operations Stages

Awareness stage ->

Initial Action Stage ->

Planning Stage

A Mission Plan is derived from identified courses of action. When you have identified the intended outcome, and worked out what steps need to be taken to achieve it, how you will do those steps becomes your Mission Plan.

Slide Number: 26

Title of Slide: Planning Exercise

In small groups, delegates to make a list of the plans which would be necessary to deal with the given scenario.

Slide Number: 27

Title of Slide: Planning Stage

From their lists, discuss the different types of plans and why they are necessary.

- Search Plans – start early
- Resource Plan – what assets will you require and what is the best way to use them?
- Comms Plan – reduce amount of unnecessary traffic being received at CGOC/NMOC
- Rescue Plan – how are we going to extricate the casualty?
- Media Plan – reduce number of media calls – do we need to liaise with other authorities?
- Contingency Plan – Plan B (and C, and D)
- Welfare Plan (SAR units, ops room staff..) – ensure SRUs have the chance to refuel and change crews. Ensure Ops Staff can have a break, fresh brew, something to eat. Ensure Debriefs are carried out with everyone.

Slide Number: 28

Title of Slide: SAR Operations Stages

Awareness stage ->

Initial Action Stage ->

Planning Stage ->

Operations Stage

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 focused 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, within the guidelines of the Mission Statement. Mission statements are expressed using defined language, this is particularly important as terminology has to be understood and interpreted in a common way. The Mission statement will articulate: Who, What, Where, When and 'In Order to....', not the How.

Slide Number: 29

Title of Slide: Operations Stage

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.

Slide Number: 30

Title of Slide: SAR Operations Stages

Awareness stage ->

Initial Action Stage ->

Planning Stage ->

Operations Stage ->

Conclusion Stage

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

Slide Number: 31

Title of Slide: 60 second Exercise

Same as the 30 second exercise done previously – you will be given a scenario and then a minute to determine the desired outcome and steps required to achieve it.

Slide Number: 32-33

Title of Slide: 60 second Exercise

Read the scenario, then give the delegates 60 seconds to complete the exercise. Discuss their results.

Slide Number: 34

Title of Slide: Mission Conduct

A review of past incidents has shown that in the past there has been an inconsistent approach to information gathering and analysis. Sometimes there have been assumptions made and tasks actioned based on incomplete facts. There has also been an inconsistent approach to incident reviews. 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.

Slide Number: 35

Title of Slide: Ultimate Objective

An incident starts when you are made aware of it – and the operator presses F9. As the SMC you should then monitor that initial call, and support and prompt the operator as required.

Discuss – how do delegates prefer to monitor calls?

The method of monitoring should work for both the SMC and their team. Even if you prefer to stand on someone's shoulder, if they dislike it, it is counter-productive to do so and another method should be considered.

The SMC should select the appropriate incident type and emergency phase.

Slide Number: 36

Title of Slide: Mission Conduct

- **PART 1: MISSION PLANNING**

The Mission planning process focuses on the delivery of an appropriate and effective mission. There is an understanding that the use of initiative is acceptable so long as it does not put the rescuers or casualty at risk.

For Example: If we need to rescue a person in the water, then any safe action that supports this is acceptable.

Mission Conduct however provides the guidance and can help provide the focus on the correct execution of the incident.

Mission Conduct has a wide understanding and is used by the Cabinet Office for Civil Contingencies, and is based on the current processes of the Military.

Information Gathering

The key to a successful operation is accurate and timely information. The gold standard is a linked process of validation, analysis, and assessment.

- **Validation**

Validation should grade information and identify that which is totally reliable, that which may be reliable but requires further validation, and that which is unreliable.

- **Analysis**

Analysis takes the information and develops it into a sequence normally time lined, but it should deliver a coherent story.

- **Assessment**

Assessment takes the information and places it in an order of priority. This information becomes a factor.

Slide Number: 37

Title of Slide: Mission Conduct

- **PART 1: MISSION PLANNING**

Information Gathering

- **Validation**

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**

Whilst an initial response may be based on initial information such as that from a First Informant, the 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.

Slide Number: 38

Title of Slide: 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 refreshed as further information is gathered.

Slide Number: 39

Title of Slide: Ultimate Objective

At the outset of an incident, a Quick Mission Brief can be used to inform the team of the incident. It should be brief, use SMEAC and can be used to task people if required.

Slide Number: 40

Title of Slide: 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'

Slide Number: 41

Title of Slide: Mission Conduct

- **PART 1: MISSION PLANNING**

Develop the Plan

The mission plan is developed using the following headings:

- **What? - Facts and Factors**

**Information / Consideration /
Modifying Influence**

Facts – these are considerations, or other issues relevant to the current situation

Factors – is a modifying influence to the situation

- **So What? - Deductions
Implications / Might Result**

Deductions – What are the implications of the facts?
What might occur?

Deductions can be ordered into a sequence of what is most likely to have occurred

- **And So? - Output
Action / Constraint / Risk /Question**

Outputs will create Actions, Constraints, Questions or Risks involved with the situation

Slide Number: 42

Title of Slide: Mission Conduct

- **PART 1: MISSION PLANNING**

Develop the Plan

Action

- task that needs completing

An action is anything that needs to occur, it should map the order in which things must happen for a successful outcome of the incident. Actions may be required for the best and worst case scenarios.

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.

Slide Number: 43

Title of Slide: Mission Conduct

PART 1: MISSION PLANNING

Develop the Plan

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.

Slide Number: 44

Title of Slide: 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.

Slide Number: 45

Title of Slide: Mission Conduct

PART 1: MISSION PLANNING

Recording the Mission Plan aids the Mission Coordinator and enables them to follow a logical process. It allows them to gather information and formulate a plan. It also helps with post incident analysis, reviews and any investigations that may occur, as anyone can look through the incident and understand the reasoning behind any actions that were taken.

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

Slide Number: 46

Title of Slide: Mission Conduct

Table Top Exercises on Mission Conduct

We will conduct a table top exercise to illustrate the use of Facts, Factors, Deductions and Outputs. Will have two different scenarios which we will work through.

Type of Activity/Task:

Table Top Exercise putting into practice Mission Conduct

Time:

30 mins in total for both exercises

Instructions for completing activity:

Split into two groups

Use whiteboards / flipcharts and draw up a Mission plan (Facts, Factors, Deductions and Outputs)

Slide Number: 47

Title of Slide: Mission Conduct

Type of Activity/Task:

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

Instructions for completing activity:

Split into two groups and put together Facts, Factors, Deductions and Outputs

Discuss answers

Slide Number: 48

Title of Slide: Mission Conduct

Type of Activity/Task:

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.

Instructions for completing activity:

Stay in the groups and put together Facts, Factors, Deductions and Outputs

Discuss answers

Slide Number: 49

Title of Slide: Mission Conduct

PART 2: STATEMENT

The Mission Statement is a Message Logging Protocol or Form in Vision. A Mission Statement must have an 'in order..... to / that ' statement. This is focal point for an action. Any action that meets this core element so long as it is safe will be appropriate. It allows freedom of action for those involved in a Mission to act without immediate reference to the Mission Coordinator

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/Controllers 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.

Slide Number: 50

Title of Slide: Mission Conduct

PART 2: STATEMENT

Mission Statement Elements:

Mission statements are expressed precisely and unequivocally using defined language, this is particularly important. Terminology has to be understood and interpreted in a common way. The use of abbreviations, and jargon should be omitted. The Mission statement will articulate: Who, What, Where, When and 'In Order to....', not the How.

The Mission Statement is broken down into component parts and we will be examining each of these in turn.

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

Slide Number: 51

Title of Slide: SMEAC

SITUATION (What is happening / has happened)

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.

Slide Number: 52

Title of Slide: SMEAC

MISSION (Who, What, Where, When, In Order to...)

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.

Slide Number: 53

Title of Slide: SMEAC

EXECUTION (How mission will be conducted)

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

Slide Number: 54

Title of Slide: SMEAC

RESOURCES (Who will do what)

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.

Slide Number: 55

Title of Slide: SMEAC

Any Questions / Confirmation

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.

Slide Number: 56

Title of Slide: SMEAC

Forward Look:

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 thoughts and think of 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.

Slide Number: 57

Title of Slide: Ultimate Objective

Mission Statements should be clearly understandable by someone outside the room, but should not take an extended period of time to write. They should be used as the basis for any verbal briefs, and to record taskings for SRUs.

Slide Number: 58

Title of Slide: SMEAC Exercise

Task – delegates to create a SMEAC brief based on the given scenario, and then deliver a briefing to the rest of the group.

Slide Number: 59

Title of Slide: Ultimate Objective

A Full Brief should be held at an appropriate time – not just after a relay broadcast or paging units! Use the SMEAC structure, stick to the point, and include your team. Ask for suggestions and questions, and ensure you’ve checked they fully understand their tasks.

Slide Number: 60

Title of Slide: Mission Conduct

PART 3: RECORDING

During any incident information will be received, decisions made and instructions given. The situation may change which may require a change to the plan and the actions required to achieve the desired outcome. It is essential that this information is recorded in a timely and accurate manner. This is done via a combination of technical and manual processes.

Some of the technical processes are as follows:

NICE, - captures and records all the radio and telephone traffic that passes through ICCS (Integrated Coastguard Communication System). All the audio material is held for 60 days and then archived.

ViSION. - our Incident Management System is the core tool for recording all of the information received, decisions that have been made and the thought processes behind those decisions; instructions given, and the tasking of any resources; along with, of course the Mission Statement. A good maxim to remember is.... **“If it’s not in ViSION, it didn’t happen”**. All entries should be made at the time, but sometimes if this is not practicable, then a “Late Entry/Retrospective” notation must be made. As all notes and information may be required as evidence for both internal and external review and legal proceedings, it is vital that they are accurate

SARIS. – is the Search and Rescue Information system which is used for the development, creation and storage of search plans.

There are occasions when it is acceptable for **manual records** to be made where no electronic methods are practicable such as:

Plotting on charts and ordnance survey maps or on “Pinkies” in the unlikely event of total system failure.

The use of occasional notepads, and scraps of paper is not acceptable as there is no record of the notes

Any manual records should be scanned and emailed in to Vision, where practicable – including anything done on the Surface Hub – and then kept securely.

Slide Number: 61

Title of Slide: Mission Conduct

PART 4: MISSION REPORTS

Formal Reports

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.

Slide Number: 62

Title of Slide: Mission Conduct

PART 4: MISSION REPORTS

Post Mission Report

The post mission report is an internal MCA report that takes the form of an incident summary and is used for the production of the Daily Operations Report, which is a consolidated report containing all the day’s incidents. The Post Mission report needs to include:

- 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

You must use the structure and guidance given on OmS – the DOR is sent to external agencies.

Slide Number: 63

Title of Slide: Mission Conduct

PART 4: MISSION REPORTS

Additional Reports

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.

Examples include immersion forms and diving incident forms.

Slide Number: 64

Title of Slide: Mission Conduct

PART 4: MISSION REPORTS

Qualifying Incidents

Qualifying incidents (QI) are defined as incidents where:

1. There has been an accident, incident or injury involving an SRU.
2. A fatality has occurred during an incident coordinated by HMCG.
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 Operational Commanders.

Qualifying incidents are to be notified to the Duty Commander as soon as is practicable.

Slide Number: 65

Title of Slide: Mission Conduct

PART 4: MISSION REPORTS

Qualifying Incidents – Actions Required

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.

Slide Number: 66

Title of Slide: Mission Conduct

PART 5 & 6: POST MISSION REVIEW

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.

Slide Number: 67

Title of Slide: Mission Conduct

PART 5 & 6: POST MISSION REVIEW

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.

When a PMLR is conducted, it is essential all relevant stakeholders are involved.

Slide Number: 68

Title of Slide: Ultimate Objective

SAR Plan – make sure it is started early – it can always be tweaked later. Support your search planner – discuss your thoughts and variables with them. Search instructions must be available for SRUs prior to them arriving on scene, otherwise they are likely to do their own thing, and you start to lose control of the search.

Slide Number: 69

Title of Slide: Ultimate Objective

Ensure that appropriate Duty Officers are briefed in a timely manner. If you do not have the capacity in your Ops Room, contact the Duty Controller and request that they allocate another station to assist.

Slide Number: 70

Title of Slide: The Rescue Dilemma

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

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.

Slide Number: 71

Title of Slide: The most appropriate unit.....

The video on the left is where the helicopter tries to tow the boat and ends up crashing into the sea. Let the students watch the video and then

 **ASK**

What would have been a more appropriate SAR asset up use?

ANSWER

Lifeboat? Another boat? – Certainly not a helicopter.

The video on the right is where the lifeboat is trying to recover a dead body – it is obviously a dead body as it is face down and drifting about. The lifeboat capsizes and all three crew drown. Let the students watch the video and then

ASK

Should the crew have been there? Should the lifeboat have been tasked to this incident? What were the alternatives?

ANSWER

The lifeboat should not have been put in such a position of danger and the crew should not have attempted to recover the body. Wait until not so rough or wait for body to wash ashore.

Slide Number: 72

Title of Slide: OSC Role

If we have an incident when there are two or more SAR resources working together, it is prudent for the Mission Co-ordinator to assign an On Scene Co-ordinator to co-ordinate the units on scene. This ensures that there is someone in charge who is involved in the incident and can make decisions as necessary.

Normally, the person in charge of the first SAR unit on scene will assume the role of On Scene Co-ordinator. They should be the most capable person available on scene to undertake the role. They should have the relevant training and experience to oversee SAR operations. They need the capability to communicate effectively with all parties and they need to be able to stay on scene for what may be an extended period of time.

They may be a lifeboat coxswain, who may be in charge of effectively utilising a number of non-professional search units and making the search more effective. It could be a Warship that may be available and utilised during search operations – they have the equipment and the expertise. The role may be undertaken by a SCOO (Senior Coastal Operations Officer) or even a qualified CRO (Coastguard Rescue Officer) who is trained as an OIC (Officer in Charge).

Slide Number: 73

**Title of Slide: ACO
Role**

The duty of the Aircraft Co-ordinator is to maintain high flight safety and co-operate in the rescue action to make it more effective.

- An Aircraft Co-ordinator needs to be deployed when there are multiple air assets involved in an incident.
- An ACO should be a unit or facility that has the most appropriate mix of radios, radar and trained personnel to co-ordinate effectively the involvement of multiple aircraft in SAR operations while maintaining flight safety.

- It can be carried out by fixed wing aircraft, helicopter, some ships, a fixed structure such as an oil installation, or an appropriate land unit such as ARCC. Maritime patrol aircraft and warships will have suitably qualified Air Direction Officers who can perform this role.
- The ACO is normally designated in consultation with ARCC or, if that is not practical, by the OSC.

Slide Number: 74

Title of Slide: On Scene Commander

Used for protracted and multi-agency incidents. Likely to be a SCOO or COAC, depending on location, availability and level of command required on scene.

Slide Number: 75

Title of Slide: OIC

This role is for CRTs. They cannot undertake any tasking unless an OIC is in attendance or on route. If they make a request for additional assets or support, it should be taken seriously, and supported unless there is a valid operational reason for declining.

Slide Number: 76

Title of Slide: Ultimate Objective

By following this process all the way through, we will achieve the ultimate objective – a well-coordinated, well prosecuted incident.

Slide Number: 77

Title of Slide: Termination

We will now explore the termination criteria for a search.

Slide Number: 78

Title of Slide: SAR Action Termination

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.

DISCUSS – what do delegates understand by ‘when practicable’ and ‘reasonable hope of survivors’

Slide Number: 79

Title of Slide: SAR Action Review

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.

Slide Number: 80

Title of Slide: Termination Criteria

Before termination, survivability of the casualty needs careful consideration. No decision should be made without consulting the Commander. Some of the factors that will need to be taken into account are shown here.

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:

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

Factors that make a person lose body heat faster are:

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

Slide Number: 81

Title of Slide: Termination Criteria

You must always make the decision together with the Controller or Commander as appropriate and consult:

- the rest of the Ops team
- the units involved
- other authorities involved, such as the police
- the On Scene Commander
- Relatives are usually more inclined to accept the decision to terminate a search if they have been allowed to follow the progress, however they must always be forewarned that the search will be terminated and this needs to be timely, with notice given as well in advance as possible, which enables the relatives time to come to terms with the possibility that the search will be terminated.
- If the media has been involved, then the MCA Press office need to be given timely notification also. The involvement of the media usually leads to a search being prolonged, as public opinion needs to be satisfied.
- If there are political ramifications, then this will also lead to a prolonged search. This may be in the case of another foreign SAR partner being in charge of the search for a UK flagged vessel, or us searching for a foreign vessel – **DISCUSS: Cheeki Rafiki**
- Ensure that a SAR SITREP has been sent to notify all interested parties.

Slide Number: 82

Title of Slide: and Afterwards?

- The search details must be maintained and all records kept in the eventuality where new information may come to light and the search is renewed.
- All the resources involved in the search must be notified that the search is terminated and all the units debriefed, bearing in mind that sometimes the search units may become emotionally involved in the search and may be reluctant to stop the search. The Operations room staff also need a full debrief and may also be affected by the termination. This also includes a full briefing with the Controller which will explain why the search will be terminated.
- The incident must be reviewed and a Post Mission Report produced, if there have been any learning points or anywhere where the procedures could have been improved. The search needs to be examined to see whether it was efficient or effective –
 - Effective search – what was the visibility, did the sweep width and track spacing allow for an effective search, and what was the POA and POD?

[PAGE * MERGEFORMAT]

- Efficient search – did the units search thoroughly and without distractions or were for example the weather conditions such that the searchers may not have been efficient.

A review might also include an example where the casualty has been found but outside of the search area or by another unit that was not directly involved in the search efforts. This is when valuable lessons can be learnt and the information may enable us to plan a search better next time.

- All records pertaining to the search must be kept and filed in well labelled folders, with all the relevant information and records for further examination if there is an investigation.

Slide Number: 83-84

Title of Slide: Alerting On-Call Duty Personnel

ASK

Who Might we call and for what?

ANSWER

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

The Duty Commander's role is to provide advice, re-assurance, decisions and support to Controller / SMC during routine and major Coastguard operations

The DOD (Duty Operations Director) role is to provide support to the Commander, 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 there 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.

Slide Number: 85

Title of Slide: Highly Important

Don't over think – deal with the incident as you would normally, based on the information you have available at the time

Take time – If you feel overwhelmed, just take a few seconds to gather your thoughts before continuing

Think before you speak – know what you are going to say before you start

Don't assume – ensure you do thorough information gathering

Be clear – be specific as to what you want someone to do – don't assume they automatically understand your intentions

RV Points – consider where is best suited given other responder agencies – usually require road access!

Slide Number: 86

Title of Slide: Process

Work through the steps to help keep your response structured.