

Steve Carson has been an operations commander at the NMOC since 2014, having worked his way up from watch officer at MRCC Belfast over 15 years



COMING TO THE RESCUE

How to respond to distress calls

Responding to a call for help at sea is an age-old obligation for seafarers, but what should yacht sailors do if they hear a distress call? Will Bruton spoke to Commander Steve Carson at the HM Coastguard's new headquarters to find out...

Most sailors will be familiar with the procedure for making a Mayday call on the VHF radio. It is drilled into anyone who does one of the RYA cruising courses, it's printed in log books and on stickers posted next to the VHF.

Some of us may even have heard a Mayday call over the radio when a diver who has got into trouble needs airlifting, or a motor boat that's got caught out after a sunny day on the Solent starts to experience problems. But how often do sailors step in and assist? And would we know what to do or say if we did respond? For some reason, many courses gloss over this element of summoning help, and a lot of us aren't quite sure what to do. Around the UK coast we are fortunate that someone from the Coastguard will almost always pick up the call and take charge of the situation, at which point we breathe a sigh of relief and carry on with our passage.

What happens, however, if you are the closest yacht to a distressed vessel's location? As fellow seafarers, we have a legal obligation to help if we can, and a moral obligation knowing that others would do the same for us. The staff at the Maritime and Coastguard Agency's Operations Centre (NMOC) in Fareham know more than anyone about responding to sailors in distress,

so I went along to learn more about what happens when a sailor sends out a Mayday, and what other yachtsmen can do to help if they receive the call.

Operating 24 hours a day, and responsible for coordinating the rescue and assistance of seafarers in distress, the NMOC has response plans in place for every conceivable emergency on the water. All coastguard staff at the NMOC undergo an intensive initial training course and all complete the RYA Yachtmaster theory course as part of this.

Four highly experienced commanders, working in shifts, are in charge of everything that happens and they each have a wealth of operational search and rescue experience. Steve Carson has been an operations commander at the brand new NMOC facility since 2014, having worked his way up from watch officer at MRCC Belfast over the course of 15 years. He also has more than 23 years of experience as a volunteer helmsman for the RNLI Bangor lifeboat. Like the other three Fareham NMOC commanders, he is on duty for 12 hours at a time and has overall responsibility for responding to calls of distress, whether big or small. He was well-placed therefore, to answer our questions about the best way to respond to a distress call.



It's not just large vessels that can assist a ship in distress – as boat owners, we are all expected to assist if we can



The UK Coastguard has a number of response options at its disposal, though you may still be asked to assist

Q WHAT ARE THE LEGAL OBLIGATIONS TO RESPOND TO DISTRESS CALLS?

The legal obligations of yachtsmen are set out in a number of international agreements, including SOLAS (Safety of Lives at Sea), UNCLOS (United Nations Conventions on the Law of the Sea), and the 1958 Convention of the High Seas. The key phrase in all of the regulations is: 'A master of a vessel – in so far as he can do so without serious damage to the vessel, crew or passengers – should render assistance to a person found at sea or in danger of being lost.' This is the definition that applies to each and every one of us.

The Coastguard will try to implement plans that reduce the risk in responding to emergencies, and will normally send lifeboats or other assets to assist if required. While skippers should always consider their own vessel's safety when responding to a Mayday call, if they are in a position to assist without endangering themselves then they should do so.

Standing by a vessel in difficulty can help keep the Coastguard informed



Q WHAT SORT OF ASSISTANCE MIGHT A YACHT BE ASKED TO GIVE?

Assistance could range from remaining on scene to provide a visual contact with the casualty vessel, relaying updates to the Coastguard, to assisting in the evacuation of crew from a vessel, or bringing the vessel to a safer location. You will only be asked to do this as long as it is safe to do so, and this should only be done when directly asked by the Coastguard.

Q HOW DO I RESPOND TO A MAYDAY?

Your VHF crackles into life and you hear the words 'Mayday Mayday Mayday, this is yacht...'. No doubt you'll turn it up and listen, because we all do, but if there's no reply, what action should you actually take?

You should respond to the vessel directly and attempt to relay the Mayday call to us, either via VHF Channel 16 or by dialing 999 and asking for the Coastguard. Ensure you take accurate details down including the location (latitude and longitude), the vessel's name, how many people are on board and the nature of the distress. Positions are something that people often get wrong in the heat of the moment. If you're reading from an electronic plotter, make sure you're reading the correct vessel position, not that of the cursor!

The reason you aren't hearing a reply from the Coastguard can vary. Our aerials are extremely powerful, but there can still be small black spots around certain geological features, which can block the line of sight of aerials. Your own radio may be outside the nominal 30-mile range of Coastguard radio, though the casualty vessel may be inside this. Either way, you should never assume that the Coastguard has heard the Mayday. Always relay the information just in case.

You should always relay a Mayday message if you don't think the Coastguard has heard





It's vital to remain in touch with the Coastguard until the vessel in distress has been rescued



The NMOC computer system can access multiple sources of chart data to accurately plot your position

Q WHAT DOES 'STAND BY' MEAN?

'Stand by' means that you should remain at a safe distance from the vessel, continue to monitor the channel you are communicating to the Coastguard on, keep monitoring the casualty vessel, and report any change in situation.

You should also be ready to receive further information or instructions that may be passed to you by the Coastguard.

Q WHAT HAPPENS AT NMOC WHEN A MAYDAY CALL COMES IN?

Whoever receives the call ensures the incident is created on our system. The position is then plotted on the map. A Mayday relay will then be formulated and broadcast back to the vessel in distress. The nearest appropriate assets will then be dispatched to go to their assistance.

Q WHAT MIGHT A CRUISER BE ASKED TO DO BY THE COASTGUARD?

Depending on the situation, you may be asked to do a range of things. We might ask you stay on the scene and maintain visual contact with the casualty vessel, whilst relaying updates to us. We may also request you to remain in the vicinity to assist in the evacuation of the vessel if it is safe to do so.



If you are in range and only if it's safe to do so, the Coastguard may ask you to assist

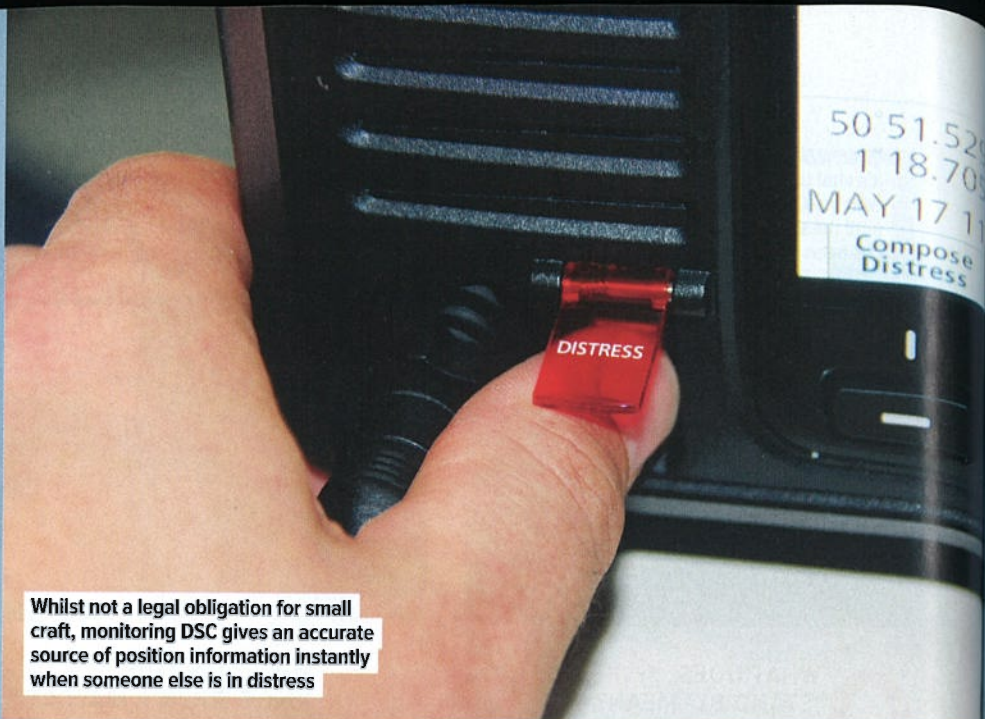
Pan-Pan and DSC

Q IS PAN-PAN STILL USED?

Very much so, it remains an internationally recognised broadcast for a 'situation wherein apprehension exists as to the safety of an aircraft or marine vessel, and the person on board.' In simple terms, a Pan-Pan is an urgent situation that might not require immediate assistance from the Coastguard but could later develop into a Mayday situation. If in doubt, get in contact with us; the situation can always be escalated later on.

If the master of a vessel feels the situation they are in justifies a Pan-Pan call (they're in an urgent situation) then it should be used, as it informs potential rescuers, emergency services and other craft in the area that a safety problem exists. A Pan-Pan or Mayday broadcast will tell everyone within range what your situation is, even if you cannot see them – there might be someone within range who can come to your assistance quickly. We will always respond to a pan-pan call.

Engine failure on a lee shore, if not quickly resolved, could become a Mayday situation. Advising the Coastguard early of your predicament is good seamanship and can always be escalated to a Mayday



Whilst not a legal obligation for small craft, monitoring DSC gives an accurate source of position information instantly when someone else is in distress

Q DO I NEED TO WORRY ABOUT DSC ALERTS?

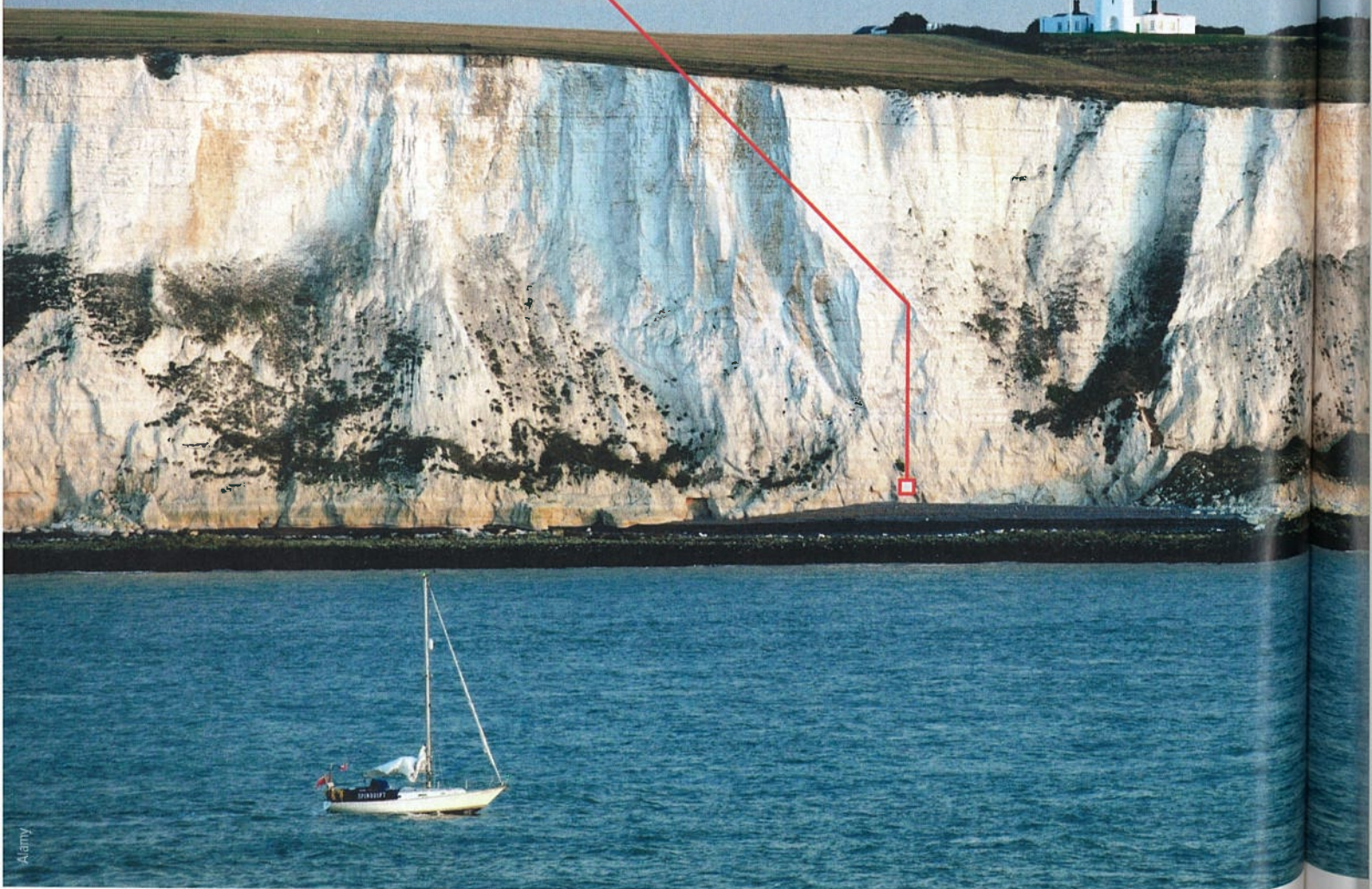
Many mariners turn off their Digital Selective Calling (DSC) VHF function as the number of alerts can become disruptive.

Is this at odds with obligations under SOLAS? Are you obliged to listen in?

The Coastguard recommends that all vessels, if they are fitted with it, should

monitor DSC. It is a very effective method of alerting vessels and shore stations of distress, and when registered and linked to a GPS, provides enough information to send a response, DSC is digital and therefore has a greater range, alerting the maritime environment that a safety, urgency or distress situation is happening within your locality – normally within 30 miles.

Only SOLAS-compliant vessels are legally required to keep DSC VHF's active, however.



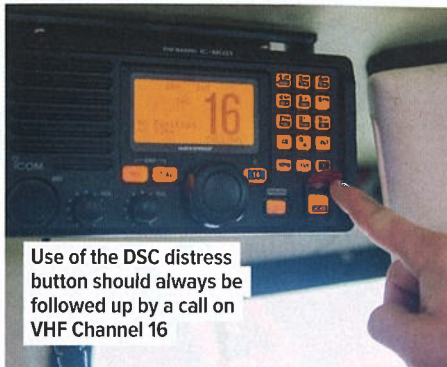


Hazards to navigation should be reported directly to the Coastguard

Q DO I NEED TO RESPOND TO 'ALL STATIONS' AND PAN-PAN CALLS?

With a Pan-Pan call there is no legal obligation to respond, but we would always advise you take action if it's safe to do so; you might be much nearer than the assets we have at our disposal. If you don't hear a response to a pan-pan call, you should contact them and relaying the call to the Coastguard if required.

If a mariner spots a hazard to navigation, then it is advised they contact the Coastguard to report this. The mariner should pass the latitude and longitude, a description of the hazard and any other relevant information.



Use of the DSC distress button should always be followed up by a call on VHF Channel 16

Q DOES ANYONE ACTUALLY USE DSC?

Has the cascade of alerts dried up as cruisers become familiar with DSC and how it works, or are they all switched off?

The Coastguard will always recommend the use of DSC, and a number of vessels and lives have been saved because of its usage.

The number of false DSC distress alerts has fallen in recent years due to more familiarity with DSC by sailors.

Despite this, DSC is still an important tool as it allows a vessel's crew to alert ship and shore stations of their situation – even if they have to abandon the yacht quickly.

Q WHAT ACTION SHOULD YOU TAKE ON RECEIVING A DSC ALERT?

The action required depends on what type of alert is received.

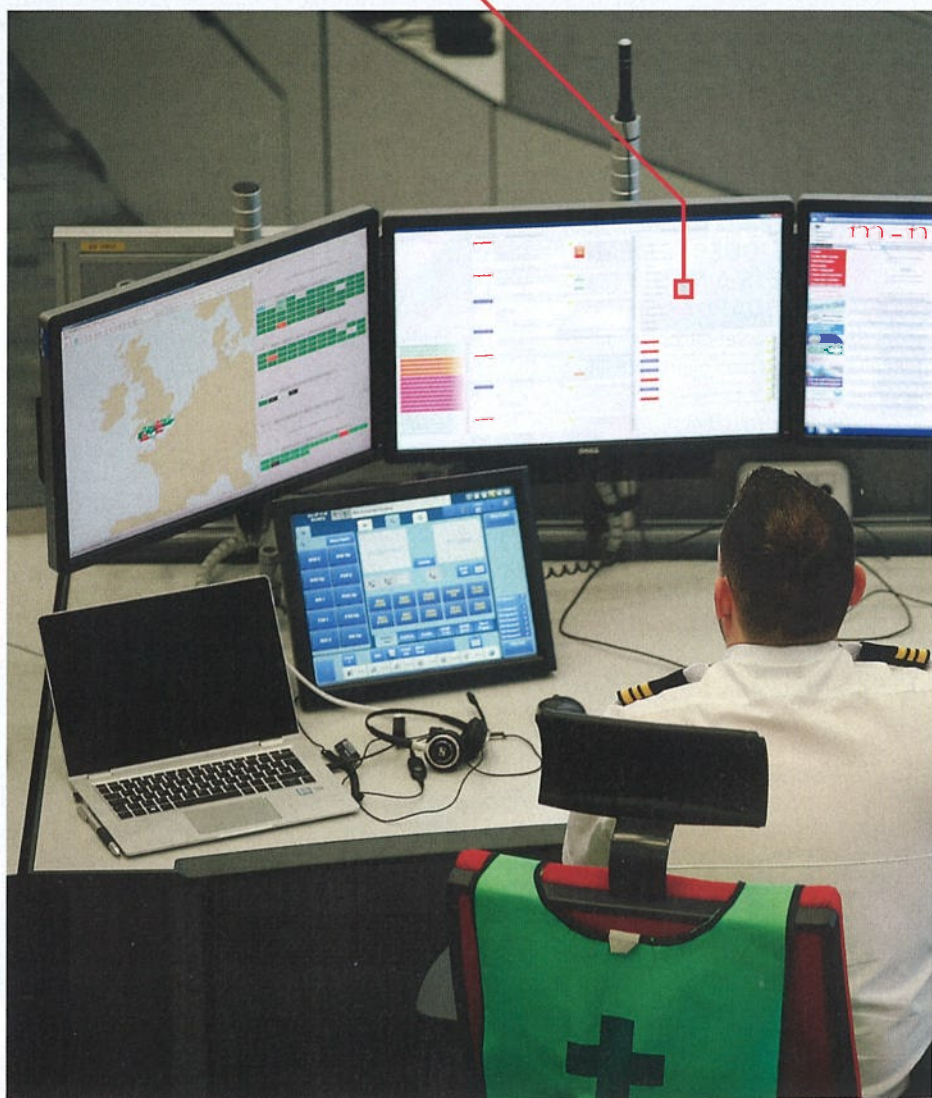
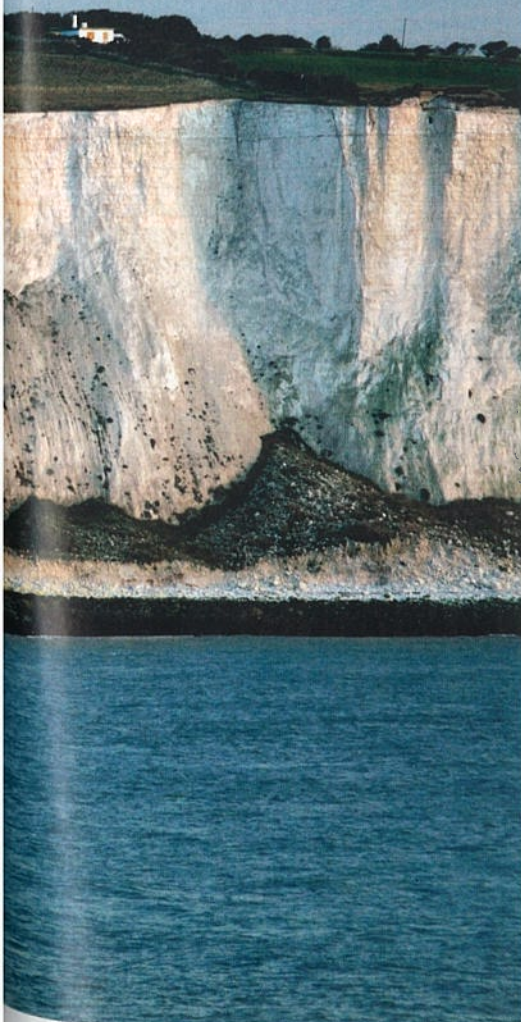
If it is addressed to an individual directly, then a reply should be sent. If the DSC is an Urgency or Distress status, and acknowledgment is not sent, then the sailor who hears it should reply. All sailors should refer to their VHF radio manual as sets vary in how they work.

Q DO YOU KNOW IF SOMEONE HAS RECEIVED A DSC ALERT?

No, the Coastguard would not know which vessels have received a DSC alert.

However, DSC is monitored at all times by the Coastguard. If you send a DSC alert, the Coastguard will send an acknowledgement to all stations when they receive it.

The Coastguard will receive your information from a DSC alert and will reply at once





If an AIS alert appears on your plotter screen you should immediately inform the Coastguard

AIS Beacons

Q IF I SEE AN AIS BEACON ALERT, DOES IT MEAN THERE IS A MAN OVERBOARD?

An AIS-SART can be set off for any manner of situation, not just man overboard.

The reason for this is to be visible to other vessels, the Coastguard and other stations such as port VTS. AIS is readily visible to all vessels around you with AIS receivers, which makes it a good means of raising an alarm, although it only has a limited range, so the Coastguard would always recommend vessels have a PLB and an EPIRB, as these have global coverage.



AIS beacons are not just for man overboard situations

Q WHAT CAN I USE MY AIS BEACON FOR?

If there was a fire at the chart table, meaning you couldn't get to your fixed VHF radio, would it be a good idea to fire up your AIS beacon if there are other boats in the vicinity, to attract attention?

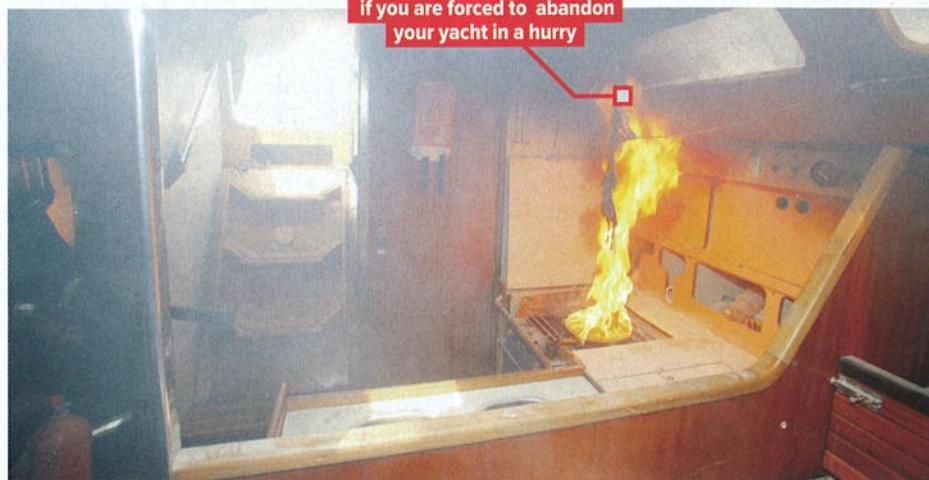
Any vessels in distress should use all available means to signal for assistance. DSC is the perfect equipment for a situation like this – lift the red cover for the distress button and press and hold for five seconds, but your AIS could also be used, particularly if you couldn't access your VHF radio.

Q WHAT SHOULD YOU DO WHEN A MOB STARTS FLASHING ON YOUR AIS PLOTTER SCREEN?

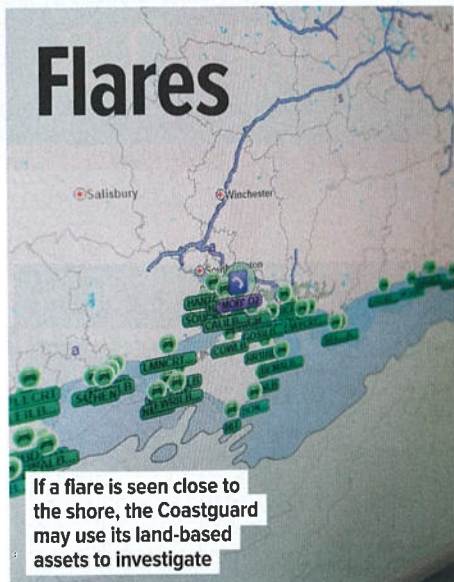
Vessels should inform the Coastguard immediately; they should pass their position and a range and bearing to the position of the AIS beacon. They may be asked to proceed towards the AIS beacon position if safe to do so (making sure you check your depth and any obstructions to the distress position). The Coastguard will carry out broadcast action on Channel 16 and would then

send rescue assets as required.

DSC can very quickly transmit an automated distress signal if you are forced to abandon your yacht in a hurry



Flares



If a flare is seen close to the shore, the Coastguard may use its land-based assets to investigate

Q WHAT HAPPENS AT THE COASTGUARD STATION WHEN A CALL ABOUT A FLARE OR SMOKE COMES IN?

Red flare or orange smoke indicate distress. In this instance we would create an incident, and details would be taken by the Channel 16 operator or the operator who has received the call. The approximate position will be plotted and a Mayday relay will be formulated and broadcast if the report is attributed to a vessel; if not a Pan-Pan relay will be broadcast. The nearest appropriate assets will be sent to assist with the incident, ensuring that any persons involved are taken to the nearest place of safety. In the case of other smoke colours, investigations will still be made to determine the source of the smoke.

Providing a bearing from the known position of your vessel will help the Coastguard



Q WHAT MIGHT A CRUISER IN THE AREA BE ASKED TO DO IF FLARES ARE SPOTTED?

A cruiser may be asked to carry out a range of different things, depending on the situation. From remaining on scene and providing a visual of a casualty vessel and relaying updates to the Coastguard, to assisting in the evacuation of a vessel (but only if it is safe to do so and if asked by the coastguard). If you spot a flare at sea, take the bearing, approximate distance and be prepared to fully describe what you see to the Coastguard.



Red flares and orange smoke indicate distress. If you think you have spotted a signal, report it to the Coastguard

As yachtsmen our ability to directly assist fellow mariners in distress will always be a compromise.

We aren't experts or trained rescue professionals, and lack the specialist equipment, experience and high-tech vessels that empower the rescue services to deliver help. However, the message from

HM Coastguard is clear: common on-board technology has greatly enhanced the ability of yachts to assist, thanks to the flow of more accurate information it provides.

Whether it is responding to an activated AIS beacon nearby, a DSC alert or relaying a Mayday for a yacht that has lost its mast,

circumstances remain where a practical response from us as yacht sailors can make all the difference to another mariner in trouble.

Ensuring our yachts are equipped with an EPIRB, AIS and DSC radio makes us and those around us inherently safer every time we go out on the water, as well as supporting the Coastguard.