## THE VHF RADIO

#### **VHF ROUTINE CALLS**

Normal VHF routine calls to other vessels and coast stations can be made using open calling on channel 16.



WHEN TURNED ON, CHANNEL 16 WILL AUTOMATICALLY BE SELECTED.



IN ADDITION TO SHOWING THE CHANNEL IN USE, BATTERY CONDITION AND OPERATION STATUS IS DISPLAYED.

When the person or vessel you are trying to contact responds, you can select the correct working channel to change to - and continue transmissions.

When calling on CH16, all other vessels monitoring 16 will hear your transmission when within a range of approximately 20km.

### VHF emergency calls on CHI6

With a normal VHF radio,- emergency calls can be made on CH16, using the internationally recognised distress call of MAYDAY.

"MAYDAY MAYDAY MAYDAY this is yacht Seaspray Seaspray we are on fire. Our position is 54 78 06 North 01 22 025 West. We have three adults aboard and require immediate assistance. MAYDAY MAYDAY MAYDAY."

This message will be received by the coast station, which will initiate a search and rescue response. Also other vessels in the area may be in a position to assist in the search and rescue operation that is co-ordinated by the coastguard.

Lifeboats and the rescue helicopters will also talk directly to the stricken vessel on channel 16 to conduct the rescue operation.

# THE VHF RADIO WITH DSC

#### **ROUTINE CALLS**



DSC Digital selective calling enables general communications to be conducted more efficiently - and to transmit and receive distress signals, relay emergency and safety calls,- and automatic alerts.

This will all be done automatically, which in practical terms will free mariners from having to continuously listen to Channel 16 or other distress channels - if a distress call is transmitted, an alarm will be triggered on all vessels and stations within range.

DSC will also be used for general communications, and the system will make this far more efficient. The system

will allow digital messages to be sent to a specific location. To do this, each user - ships, boats, coastguard stations, radio stations are assigned an individual MMSI (Maritime Mobile Service Identity) number. Allowing users to "dial up" a specific location and send a message, rather than have to transmit a general "all ships" call on channel 16 in the hope that the desired station or vessel is listening.

Once the other station's number is programmed into your set it is a simple matter to call up using DSC, and on acknowledgement of your call the VHF will automatically select the working channel to be used.

You can then continue your conversation over the radio in the normal way.

#### **GROUP CALL**



Group calling enables you to call up a specific group of DSC users. This can be particularly useful during a yacht regatta or for a sailing flotilla.

By selecting group call and send on the radio menu, all the called DSC users will receive an alarm call even if they are not tuned to the same channel.

When the alarm call is acknowledged the radios switch to the working channel. This could be to receive a regatta course change or a local weather conditions update.



#### **ALL SHIPS SAFETY**



All ships safety calls are made by the coastguards - these are generally weather or navigation warnings.

On receipt of this type of DSC call your radio will sound an alarm, and pressing the button to acknowledge and silence the alarm causes the radio to switch to the designated channel so you can listen to the forecast or the navigation warning.

"All ships – all ships safety – A strong wind warning is in place for inshore coastal waters in areas Dover Wight and Portland"

#### **ALL SHIPS URGENCY**



Any vessel that may require urgent assistance, but where life is not in immediate danger, can initiate an all ships urgency call. The vessel may be drifting without power or lost steering, and requires assistance to be towed to safety.

Once an All Ships Urgency call is sent, any vessel in the area receiving the DSC call may respond with an offer of assistance. If the coast radio station is in range, they may also offer assistance and co-ordinate the operation.

"Yacht Seaspray this is trawler Morning Star, we are in a position to help you and have altered course to your position. Our ETA is approximately twelve minutes. Please prepare to receive a tow line"

"trawler Morning Star this is Seaspray – thank you for your offer of assistance we are standing by for your arrival"

#### **DISTRESS**



In an emergency situation the DSC radios have dedicated distress functions that can be directly activated with the distress button.

Your position, that is obtained from the satellite navigator, is automatically transmitted with the nature of the distress. This alarm message will be sent many times automatically until the coastguard acknowledges the signal.

The coastguard will then activate the rescue operation sending all the available resources to assist and co-ordinate the operation on channel 16.

Other vessels may also assist and will be able to contact the rescue services, including life-boats and helicopters.

DSC will increase your chances of early rescue should the unthinkable happen! It does not replace the radio telephone but uses the latest technology to enhance it.

