

SAFETY ON THE SEA GMDSS GUIDELINES

The Global Maritime, Distress & Safety System (GMDSS) became fully operational on 1 February 1999. This article explains some of the more important concepts of the system.

GMDSS has been developed in the International Maritime Organisation (IMO) to replace the existing world - wide distress and safety communications system. GMDSS regulations are compulsory requirement for all commercial vessels over 300 tons and for various classes of passenger and fishing vessels.

Fitting of GMDSS communications will be voluntary option for virtually every class of small non commercial craft e.g. leisure fishing vessels and pleasure craft representing a huge armada of small craft operating within European coastal waters.

For the foreseeable future existing distress alerting arrangements for small craft (**Particularly VHF Channel 16**) will operate in parallel with GMDSS. However GMDSS will eventually replace it and become the sole means of initiating distress and safety communications.

SAVE LIVES

GMDSS was developed to save lives by modernisation and enhancing the current radio communications system, by utilising satellite and digital selective calling technology.

GMDSS provides a more effective distress alerting system. It improves the current system by:

- Increasing the probability that an alert will be sent when the vessel is in distress
- Increasing the likelihood that the alert will be received.
- Increasing the ability to locate survivors
- Improving rescue communications and co-ordination
- Providing mariners with vital maritime safety information

WATCHKEEPING AT SEA

VHF DSC (Digital Selective Calling) Radios automatically keep watch on VHF Channel 70 and will alarm when there is an incoming call from a vessel, an 'all ships' call, Urgency or Safety, a distress call or distress relay.

The radio will indicate which channel to use for the subsequent communications such as Channel 16 or nominated working Channel.

In the UK, HM Coastguard's present policy is to continue to provide a distress watch on Channel 16 for the foreseeable future, but consideration is being given to a cut - off date, probably some way in the future.

SMALL CRAFT

If you are already fitted with VHF DSC then an automatic watch should be kept on Channel 70 and a dual watch on Channels 16 and 13 (Bridge to Bridge safety channel) to ensure that you monitor distress, safety and shipping traffic. If you want to speak to another vessel with regard to safety of navigation you should call them first on Channel 13.

EMERGENCY POSITION INDICATING RADIO BEACONS (EPIRB's)

A further benefit of GMDSS is to provide the mariner with at least two independent means of transmitting a distress alert. An EPIRB provides the simplest means. The most common EPIRB system is operated on 406Mhz by the COSPAS/SARSAT organisation which uses polar orbiting satellites. If a vessel sinks, the 406Mhz EPIRB is designed to detach itself, automatically float free and transmit a distress signal via satellite system (which calculates the position of the casualty) and relays information to the nearest Rescue Co-ordination Centre. EPIRB's also transmit a signal on 121.5Mhz which enables search and rescue vessels to obtain a radio bearing of the EPIRB.

HOW DO GMDSS RADIO PROCEDURES WORK?

The difference between current procedures and GMDSS is that DSC is used to transmit the initial call. For example, currently you would initiate the call on Channel 16 to agree a working channel, whereas under the GMDSS procedure you would send a DSC call on Channel 70 containing the proposed voice working channel. Once the other station has accepted the call then it can respond directly on the working channel. If you are in distress, a DSC Distress Alert will activate alarms in any DSC radios within range and alert any radio operators to listen on distress working channel (i.e. for VHF Channel 16) for any subsequent MAYDAY call. The DSC alert contains your identification number and should contain a valid position (preferably as an automatic input for your navigation receiver).

- DSC Urgency Alert is sent if the vessel is fitted with DSC followed by Pan Pan Medico on Channel 16.
- The message should give the following details if possible. Identity of the vessel, vessel's present position, course, speed and intentions.
- HM Coastguard will then take the vessel to a working channel and connect the vessel via Link call to a doctor for advice.
- The following information should be available to doctor if he or she requires it. Name, gender and age of the patient. Patients symptoms, condition and medical history. Treatment already taken.

However, notification should not be delayed if all the information is not immediately available.

HM COASTGUARD BROADCASTING OF NAVIGATIONAL & WEATHER BROADCASTS.

As from the 1 June HM Coastguard will carry out all weather and Navigational broadcasts on VHF Channel 10 (Provisionally allocated at this time) and MF 1883khz. As from the 1 June 1999 all United Kingdom Coast Radio Stations (CRS) will no longer provide a Link Call service or carry out weather and navigational broadcasts to shipping. As there is a safety aspect to some of these services (i.e. Medical Advice, weather and navigation broadcast) HM Coastguard will take over providing of these services:

FOR MEDICAL ADVICE THE FOLLOWING PROCEDURE SHOULD BE USED:

PAN - PAN - MEDICO - (then Vessels Name) - OVER

The Coastguard Station will acknowledge the call and ask the vessel to move to a working channel (Normally channel 67) when within VHF range.

Once the vessel has set watch on the working frequency the call will be transferred to a doctor.

(You should have as much information as possible about the patient before the call, do not delay the call if you do not have this information readily at hand)

Once you have finished the medical advice call, remain on the working frequency. As the doctor will be discussing the situation with the Coastguard.

The Coastguard will then call the vessel and either arrange SAR Resources to evacuate the casualty ashore, or ask the vessel to proceed to the nearest port if necessary, where medical assistance will have been arranged by the Coastguard prior to your arrival.

MARITIME SAFETY INFORMATION - BROADCAST

Clyde CG Broadcast Times 08.20/12.20/16.20/20.20/00.20/04.20 UTC

The following information is broadcast

MF Gale Warnings (GW)

Shipping Forecast (WX)

08.20 & 20.20

Navigational Warnings (WZ)

VHF Local Inshore Forecast (MNEM:LF)

Local Inshore Forecast Mull of Galloway to Mull of Kintyre, Mull of Kintyre to Ardnamurchan Point & Ardnamurchan Point to

Cape Wrath

Gale Warnings (GW)

Strong Wind Warnings if required (SWWW)

Shipping Forecast (WX)

08.20 & 20.20

Malin (South) Malin & Hebrides (North)

Navigational Warnings (WZ)

SUBFACTS & GUNFACTS (SUB)

Clydeport Authority Navigational Warnings (CPA)

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