

GMDSS Task Force
1600 North Oak Street; #427
Arlington VA 22209

11 December 2008

COMMENTS TO THE U. S. COAST GUARD

In the Matter of

Proposed changes to Coast Guard commercial) USCG docket No. USCG-2003-16158
fishing industry vessel safety equipment)
regulations to enhance maritime safety

**COMMENTS OF THE TASK FORCE FOR THE IMPLEMENTATION OF THE
GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)**

The GMDSS Implementation Task Force respectfully submits these Comments in response to USCG docket No. USCG-2003-16158 inviting comment regarding proposed changes to Coast Guard commercial fishing industry vessel safety equipment regulations to enhance maritime safety as announced in the Federal Register 31 March 2008.

The GMDSS Task Force. The GMDSS Task Force was chartered by the U.S. Coast Guard to supplement government functions through outreach to the private sector and recommendation to regulatory authorities. The Task Force membership is broad based including more than 2000 representatives of commercial vessel operations, recreational boating interests, training institutions, service agents, manufacturers, and government authorities. The Task Force maintains a website at www.navcen.uscg.gov/marcomms which contains numerous GMDSS Information Bulletins, records of Task Force meetings, various letters and petitions seeking regulatory action, and comments to pending regulatory proceedings.

The Task Force Recommendations. The Task Force wishes to go on record that it considers the current regulations regarding safety radio equipment required to be carried by regulated commercial fishing vessels to be out of date and in need of review and updating. While the Advanced Notice of Proposed Rulemaking specifically mentions Emergency Position Indicating Radio Beacons (EPIRBs), the Task Force considers that the regulations requiring other radio equipment required for vessel safety also require updating. These internationally recognized safety requirements include distress alerting, vessel to vessel emergency communications, receipt of Marine Safety Information (MSI) broadcasts, and enabling the vessels to be alerted by shore authorities when needed to assist other vessels. The Task Force recommendations were coordinated with the Commercial Fishing Industry Vessel Safety Advisory Committee (CFVISAC) which issued recommendations supportive of the Task Force initiative.

The GMDSS. The GMDSS is a new international radio safety system which has been in effect since 1999 when it was adopted by the International Maritime Organization (IMO). It consists of many sub-systems designed to provide global coverage, take advantage of new technology, provide for uniform radio equipment outfitting of vessels, training of operators and standardized response capability by shore authorities. The GMDSS organizes its carriage requirements by operating areas (Sea Areas 1-4 based on distance offshore and Inmarsat satellite coverage). The GMDSS also requires equipment which will enable ships to comply with the following basic functional requirements, many of which can be performed by the same basic radio equipments:

- a. transmitting ship-to-shore alerts
- b. receiving shore-to-ship distress alerts
- c. transmitting and receiving ship-to-ship distress alerts
- d. transmitting and receiving search and rescue coordinating communications
- e. transmitting and receiving locating signals
- f. transmitting and receiving on-scene communications
- g. transmitting and receiving maritime safety information
- h. transmitting and receiving ship-to-ship communications
- i. transmitting and receiving bridge to bridge communications

The GMDSS Applied to Fishing Vessels. The GMDSS is required for all commercial vessels over 300 tons sailing internationally but this has been extended by FCC regulations to domestic vessels over 300 tons. The FCC Regulations require fishing vessels over 300 tons to be fully GMDSS compliant. The International Maritime Organization (IMO) has adopted recommended safety radio equipment standards for fishing vessels of several size categories, typically drawing on the various sub systems of the GMDSS. The U.S. Coast Guard regulates fishing vessels below 300 tons but has not yet followed the recommended fishing vessel standards of the IMO. The current U.S. Coast Guard regulations for fishing vessels below 300 tons are considered deficient in several categories as described below.

Digital Selective Calling (DSC). GMDSS standards for VHF, MF, and HF radio communications call for use of DSC techniques to enhance alerting with automatic

identification and inclusion of an exact position from the navigation receiver. The U. S. Coast Guard has updated its HF coastal network for DSC and has been operating in that mode for several years. The U. S. VHF coastal network is presently being upgraded for DSC under the Rescue 21 Program which is about half implemented at this time. The U.S. MF coastal network has been upgraded with DSC capability but deficient coverage due to deteriorated antenna systems has led the Coast Guard to delay in declaring it operational. It is understandable that the fishing vessel regulations have not yet required the use of VHF-DSC and MF-DSC since the coastal networks are not yet fully operational but now is the time to update the requirements. It should be noted that commercial shipping over 300 tons has been required to have DSC capability in all three systems since 1999 despite delays in completing coastal upgrades. All U.S. fishing vessels should be fitted with a fixed mount VHF-DSC and all U.S. fishing vessels operating outside VHF range should have MF/HF SSB equipment with the capability to receive weather appropriate to the area of operations. This could include weather fax receivers and/or Navtex receivers. All MF/HF SSB equipment should be DSC compliant. All DSC fixed mounted transceivers should be properly registered with the FCC to receive a Maritime Mobile Service Identity (MMSI) and the MMSI number programmed into the radio along a connection to the GPS or Loran navigation receiver.

Long Range Communications. U.S. fishing vessels operating outside VHF range and over 100 miles from shore are required to have MF/HF Radio but should be permitted to substitute a satellite system which covers the area of operations. This is consistent with GMDSS rules except that the only satellite system currently recognized by IMO is

several sub systems of the Inmarsat system. The Task Force believes this unnecessarily limiting and approves the use of alternative satellite systems as long as they meet the basic functional requirements of the GMDSS. The substitution of a satellite system might require additional equipment to receive MSI broadcasts, weather forecasts and warnings, and safety alerts regarding vessels needing assistance. There is a traditional regional arrangement for the use of 4125 KHz in Alaskan waters which is recognized by the Coast Guard in that they watch the frequency at Kodiak and 5 remote sites but its use is not reflected in the regulations. The Task Force feels that such widespread traditional use of a particular frequency should be reflected in the regulations.

Coast Guard Needs Reliable Means of Alerting Fishing Vessels to Assist Others. One

of the most significant problems with fishing vessel communications is the difficulty in contacting vessels when their assistance is needed to assist another vessel. This is one of the specified functional requirements but has often been difficult or impossible as in the case of the ARCTIC ROSE sinking. The problems range from equipment limitations to watchstanding lapses. This is also the reason that the Task Force has reservations as to the adequacy of the Vessel Monitoring Service (VMS) outlined in the following paragraph.

Vessel Monitoring Systems (VMS). Many fishing vessels are required by the National Marine Fisheries Service (NMFS) of NOAA to carry special radio equipment to enable the location of the fishing vessels to be tracked for law enforcement purposes. In some cases but not all, the approved equipment also has the capability to meet the Coast

Guard's need to be able to contact the vessel in an emergency. While the Task Force understands that the VMS requirements of the NMFS are different from the safety needs of the Coast Guard, we feel that the commercial fishing vessel community has a right to expect that equipment required for the VMS program also meet the Coast Guard's needs to the extent possible in order to avoid fitting additional equipment. The Task Force recommends that the Coast Guard and NMFS negotiate a common VMS and safety requirement for these vessels that includes GMDSS distress alerting functionality, full two way data communications, and MSI capabilities.

Cellular Radios. Current Coast Guard regulations for fishing vessels permit the substitution of cellular radios for VHF radio (presumably when remaining within cellular coverage). There are significant disadvantages in using cellular phones in lieu of VHF radios in that there is no priority system for use in emergencies and that other nearby vessels will not hear a cellular distress call and will be unaware of the need to render assistance. Further, in the cellular radio system, reliable and accurate position information which is so vital for SAR prosecution, cannot be assured with all presently available cell phone systems. Personal use of cellular phones may also result in low battery capability for emergency use. On balance, the Task Force feels that the use of cellular phones to substitute for VHF radios should be limited to areas where the Coast Guard does not have VHF coastal coverage. When cellular phones are substituted for VHF radios, they should have enough battery capacity for the entire voyage.

Survival Craft Radios. GMDSS rules require additional radio equipment in lifeboats or life rafts including a Search and Rescue Transponder (SART) or a recently approved alternative, the Automatic Identification System (AIS) SART, and VHF portable radios for on scene communications. The Task Force believes that larger fishing vessels should carry at least minimal survival craft electronics. The Task Force also believes that all U.S. fishing vessels should have at least one waterproof VHF-FM handheld radio with at least one extra battery, but not required to be loaded into life rafts.

Emergency Position Indicating Radio Beacons (EPIRBs). The task force believes that all US fishing vessels that operate more than 3 nm from shore should carry an EPIRB, and that all new EPIRBs fitted should include an integral GPS receiver to permit automatic inclusion of position in the distress alert.

Other IMO Specified Systems. The IMO has adopted several systems for GMDSS ships which are not technically part of the GMDSS system and some of these are being carried on smaller vessels either on a voluntary basis or as specified by the government. These include the Automatic Identification System (AIS), the Long Range Identification and Tracking system (LRIT), and the Ship Security and Alerting System (SSAS). The Task Force is not advocating that fishing vessels below 300 tons should carry these systems but if the government has such a requirement for Maritime Domain Awareness, that need should be factored into a general review and updating of radio requirements.

Emergency or Reserve Power requirements. The Task Force recommends that all distress alerting communications equipment have emergency power capability to provide operations following a primary power system failure. The emergency power should be sufficient to operate the radio installations VHF, MF, and HF and if DSC equipped, the navigation input for at least three hours. The emergency power should be independent and physically separated from the primary power system of the vessel. The emergency power system should have means of monitoring voltage available and be isolated from the vessels electrical system by a simple switch in the vicinity of the emergency distress alerting communications equipment. The emergency power battery or batteries should have an automatic charging capability and be capable of recharging to minimum capacity within 10 hours. The emergency power system should be checked at regular intervals and prior to getting underway.

Recommendations for Other Factors in the Regulations. The current regulations fail to address many factors which are typically included in radio regulations. These include the following which are part of the GMDSS regulations and the IMO recommended standards for fishing vessels:

- Type acceptance standards for equipment
- Maintenance and testing requirements for equipment
- License and training requirements for operators
- Watchstanding requirements

Equipment changes. Equipment upgrades necessitated by revised regulations should be accomplished when the basic equipment is due for routine replacement but no later than 10 years from the date of the new Regulations. Addition of newly required equipment should be phased in sooner with due regard for the need to provide owners with as much advance notice as feasible.

Size of the Vessel. The CFIVAC has urged that any new requirements for safety radio equipment take into account the various sizes of fishing vessels affected. The Task Force agrees and notes that the recommended voluntary guidelines of the International Maritime Organization (IMO) for fishing vessels are broken down by vessel length.

Summary. The Task Force believes advances in radiocommunication systems have made them attractive and affordable additions for fishing vessel safety. Their incorporation into a more systematic set of safety regulations is now essential.

Task Force Offer to Assist in Development of New Emergency Radio Requirements.

The Task Force is pleased to submit these recommendations for updating the emergency radio requirements for U.S. fishing vessels below 300 tons and stands ready to assist the Coast Guard and/or the Commercial Fishing Industry Vessel Safety Advisory Committee (CFIVSAC) in refining the recommendations with input from the commercial fishing community.

For the GMDSS Task Force

JACK FUECHSEL
Director, GMDSS Task Force
703-527-0484
gmdss@comcast.net

file: uscg-11.5.doc