

## NATIONAL GMDSS IMPLEMENTATION TASK FORCE

Newsletter and Summary Record of August 6, 2009 Meeting

**The Summary Record.** This summary record is provided for information and will be posted on the Task Force portion of the Coast Guard web site at [www.navcen.uscg.gov/marcomms/](http://www.navcen.uscg.gov/marcomms/) (click GMDSS, then GMDSS Task Force). The summary record is also distributed to all Task Force members to serve as a Newsletter summarizing GMDSS developments and other issues in marine telecommunications. The GMDSS Task Force met on 6 August 2009 in Arlington, Virginia at the RTCM Headquarters. The documents listed below were distributed and are available on request:

Admiral Gilbert's Summary Paper on GMDSS Modernization Issues  
Coast Guard Status Report on Long Range Identification and Tracking (LRIT)  
Coast Guard Status Report on Rescue 21, VHF-DSC Implementation  
Coast Guard Safety Alert on Interference from Compact Fluorescent Lights  
Coast Guard Safety Alert on EPIRB and PLB Registration with NOAA  
FCC Public Notice of 26 June Inviting Comments on TF Handheld Petition  
News from BOATUS: Towboat U.S. Offers VHF-DSC Radio Checks

1. **Summary Record of 7 May 2009 Meeting:** The Summary Record of the 7 May, 2009 meeting which had been distributed earlier, was noted.

2. **The Coast Guard Reports:**

**a. Status Report on Rescue 21 VHF-DSC for Sea Area A1.** Capt. Lisa Festa provided an update for the Rescue 21 Program. The following are highlights:

1.) Handouts were distributed showing operational Sectors and planning for the Western Rivers and Alaska. There are now some 28,000 miles of coastline covered by the upgraded Rescue 21 system. The Rescue 21 Disaster Recovery units can be quickly deployed to any Sector to provide a V-Sat link back to Martinsburg WV for continuity of operations. Completion of the CONUS coastline is projected for 2011 which should be accompanied with a declaration that Sea Area A1 is operational on the CONUS coastline.

2.) It was reported that Sectors Boston and North Carolina were now operational but with limited coverage in the Outer Banks area until May 2010. The MMSI numbers for these Sectors were published in the last Newsletter along with the other operational Sectors and Groups.

3.) An issue was raised as to whether the Sector watchstanders will respond to routine DSC calls. They will definitely respond to Distress Alerts and should respond to routine calls proposing traffic on a working channel. The Coast Guard will clarify this in their Policy and Procedures Manual, but suggests that callers propose working channel 22A which is available at all Sectors. The Coast Guard will also address whether to precede Urgent Marine Broadcasts with an alerting signal on channel 70 to activate DSC

receivers on vessels.

**b. Status Report on Safety of Navigation Issues Including Automatic Identification Systems (AIS) and Electronic Chart Display Systems (ECDIS).** Jorge Arroyo provided an update with the following highlights:

1.) The IMO Safety of Navigation Subcommittee met recently and agreed on 21 different binary messages which could be transmitted via AIS including such shore to ship topics as vessel clearance, marine traffic reports, weather observations, and area notices. Vessel originated messages could deal with such topics as vessel cargo, persons on board, and route information.

2.) The Subcommittee also agreed to mandatory inspection of AIS and other safety equipment as a condition of issuing the Safety Certificate. This would appear to pave the way for conducting the inspection concurrently with the required annual inspection of GMDSS equipment. In the case of mandatory AIS fittings on non-SOLAS vessels, the inspection might be combined with the Bridge-to-Bridge Radiotelephone.

3.) The IMO Maritime Safety Committee is expected to mandate Electronic Chart Display Systems (ECDIS) at its May 2010 meeting but if for some reason it does not, the U.S. will move forward with its rulemaking to mandate the use of ENC's (any Electronic Navigation Chart system approved by government hydrographic authorities) in the U.S. as part of its ongoing effort to implement recent SOLAS equipment requirements.

4.) The U. S. Notice of Proposed Rulemaking proposing to extend AIS carriage produced over 150 comments which are now being evaluated and considered in the drafting process of the Final Rule which we anticipate publishing late this year or early next year.

5.) The Tampa Bay VTS Demonstration Project is evaluating the work of RTCM Special Committee 121 on binary messaging and has completed phase 1. This phase includes broadcast of NOAA's Physical Oceanographic Real Time System (PORTS) current and water level data and the pilots are very supportive of the project. Phase 2 will encompass safety zones and area notice messages.

**c. Long Range Identification & Tracking (LRIT).** CDR Kevin Keast provided an update on implementation of LRIT. The following are highlights of his briefing:

1.) As of July, there are 400 U.S. vessels certified for LRIT of an expected total of about 600.

2.) There are currently four dedicated LRIT terminals approved for U.S. ship in addition to those existing GMDSS and SSAS which have LRIT compliant software. All LRIT terminals must pass a Conformance Test by a recognized testing service, which in the case of the U.S. is by Pole Star. The approved stand alone terminals are as follows:

Thrane & Thrane	TT-3000LRIT
Japan Radio Co.	JUE95LT
Skywave Mobile Comms	DMR-800LRIT
CLS (Iridium based, A4 capable)	CLS Thorium LRIT

The existing GMDSS and SSAS units complying with LRIT regulations are from the following manufacturers (as far as is currently known) who should be consulted for the particular models:

Debeg	Raytheon
Furuno	SEA
JRC	Sperry
Kelvin Hughes	Thrane & Thrane (Aka SP Radio & Skanti)

3.) The International Data Exchange (IDE), operated temporarily by the U.S., has been in operation since late 2008 and is committed through 31 December 2011. The U.S. National Data Center has also been operational since December 2008 and as of July 42 other Data Centers, some cooperative, are in operation or testing. Exchange of data has not yet begun until procurement contracts with the other centers can be negotiated.

**d. Status of MF-DSC Coastal Network Upgrade to DSC for Sea Area A2.** Joe Hersey gave an update on the Coast Guard study for upgrading the MF-DSC coastal network. There are four decision options including repairing existing Sector sites; upgrading existing Sector sites and closing coverage gaps; discontinuing 2 MHz watch at the Sectors and guarding all six International MF/HF Telephony Distress Frequencies and MF/HF DSC frequencies from the CAMS and COMMSTAs; and including NOAA's Vessel Monitoring System (VMS), recognizing one or more mobile satellite systems, and discontinuing MF operations. If the latter option should be chosen, carriage regulations would need to be changed for mandatorily equipped domestic vessels. Meanwhile, hardware upgrades remain in place and watches are being stood on 2182 kHz and the DSC calling and distress channel, 2187.5 kHz. Since the coverage is uneven, the system remains in a pre-operational status and a final determination is not expected until the end of the year.

**e. Working Group Preparations for COMSAR 14.** Russ Levin reported that Comsar 14 would meet in London on 8 March 2010. The primary issues for the U.S. will be GMDSS Modernization and a review of EPIRB performance standards with a view to incorporating AIS technology as an alternative to the local homing signal on 121.5 MHz. The SOLAS Working Group for COMSAR will have meetings at RTCM on November 4<sup>th</sup>, December 15<sup>th</sup>, and February 23<sup>rd</sup>, 2010. Anyone wishing to be accredited to the Working Group should contact Russ at 202-475-3555 or by email at russell.s.levin@uscg.mil.

**3. The FCC Reports:** Jim Shaffer reported for the FCC, the following are highlights of his report:

**a. Further Part 80 Rule Making.** There were no further developments on outstanding items expected to be addressed in Part 80. We can hopefully expect further action now that the Commission is fully manned and key staff positions have been filled. The new Chief of the Wireless Telecommunications Bureau is Ruth Milkman.

**b. Task Force Petition to Authorize Use of Marine Handheld Radios ashore in Maritime Areas.** On 26 June, the FCC published the Task Force Petition requesting authority to use VHF handheld radios ashore in maritime areas allowing 30 days for comment. There were no responses either pro or con. The FCC will now take the proposal under consideration and we will hope to have results in the near future.

**4. GMDSS Modernization Initiative.** RADM Ed Gilbert, USCG (Ret), reported that the IMO Maritime Safety Committee (MSC) had authorized a two session 'scoping' exercise for review of GMDSS standards and technology by the COMSAR Subcommittee. Input from the Task Force is needed and may be submitted to Admiral Gilbert at [gilbinc@aol.com](mailto:gilbinc@aol.com) or Jack Fuechsel at [gmdss@comcast.net](mailto:gmdss@comcast.net). The following points were emphasized:

1.) The U.S. plans an input paper and will seek to have it jointly sponsored by several other countries. It is hoped that it can be finalized early so that other countries will have an opportunity to comment before the meeting.

2.) To be successful, we need good data about how well the current system is performing and if possible, data about specific shortcomings observed in practice. The extensive Coast Guard records on SAR cases will be particularly useful but we would like to have any available data on distress cases where no alert was received.

3.) Existing GMDSS functional requirements will be examined to see if all remain valid and vessels can still perform them. Similarly, data from cases involving all of the various long and short range systems will be reviewed in both voice and data modes to identify gaps in the overall system.

4.) While outfitting of SOLAS vessels has apparently met expectations, reports of Port State inspections frequently comment that the equipment is not used regularly and that operators are no longer proficient in its use. This may be partially due to the fact that the original concept called for emergency alerting on systems that ships used for routine communications but some of those systems are no longer available and ships are tending to use non-GMDSS systems to handle their routine communications.

5.) The upgrading of shore networks for MF-DSC and VHF-DSC GMDSS communications has been slow in many areas and may never be accomplished in others. The volume of Marine Safety Information (MSI) broadcasts in coastal areas has grown to the point of overloading the system. Are new techniques required?

6.) Improved outfitting of survival craft may also be needed but will require coordination with the Lifesaving and Appliances Subcommittee of IMO.

7.) In reviewing the GMDSS we must keep in mind that non-SOLAS vessels account for the vast majority of SAR cases and we need to shape the GMDSS in ways which preserve interoperability.

**5. Coast Guard Auxiliary Communications Training Program.** Chuck Rippel gave a report on the Auxiliary's excellent training program for Auxiliary Telecommunications Operators (TCO). The following are highlights:

**a. Role Played by Auxiliary TCOs.** Auxiliary TCOs augment Coast Guard watchstanders for special events such as hurricane recovery and western river flooding. The TCOs have a continuing role in monitoring Coast Guard MSI broadcasts for quality of reception amassing over 14,000 hours since 2007 in the Atlantic Area alone. They also brief courtesy examiners on issues such as registering for MMSIs and connecting GPS receivers.

**b. Training of Auxiliary TCOs.** All training is based on Coast Guard policy documents with the goal of maintaining full interoperability with Coast Guard facilities. The training incorporates new technology such as DSC and AIS.

**6. The RTCM Report:** RTCM President Bob Markle reported on the status of Special Committees of special interest to the Task Force are as follows:

**a. RTCM SC 101/110 on Incorporating GPS in VHF Handhelds.** The Special Committee continues to work on recommended specifications for a VHF handheld with integral GPS and is also considering replacement of the 121 MHz homing beacon in EPIRB's with AIS for improved range of on scene location.

**b. RTCM SC-121 on Automatic Identification Systems (AIS).** A Working Group of this committee is exploring expanded use of the binary messaging system in Vessel Traffic Service (VTS) areas.

**c. RTCM SC-123 on Data over VHF Channels.** This committee is developing proposed guidelines for transmitting data on VHF channels in a manner which would best protect adjacent voice channels and utilize the unused space between channels.

**d. RTCM SC-128 on Satellite Location Devices.** This new Committee was chartered at the request of the Coast Guard to develop performance standards for new systems such as SPOT which are being advertised for emergency or life saving applications with the goal of enhancing reliability and consumer protection.

**e. Other RTCM Announcements of Interest.** The RTCM filed in opposition to a MariTEL petition to the FCC to disaggregate Marine VHF channels for land mobile use near the California coast. The 2010 RTCM Assembly including a Task Force meeting will be held at the Catamaran Hotel in San Diego, California May 16-21, 2010.

7. **Reports and Issues: The Recreational Vessel Group Report.** Chairman Chuck Husick's made a general report including his testing of a VHF-DSC handheld by Standard retailing for about \$250 and one from Lowrance expected to retail for about \$190. Both contain a GPS chip and float. He is also testing a combined GPS and Loran receiver expected to retail for about \$1000 initially, with significant price reduction when the receiver is produced in volume. The general discussion covered the following items:

**a. Free VHF-DSC Test Calls Will be Answered By TowBoatU.S.** A BOATUS Newsletter described a new free service to enable boat operators to test their VHF-DSC radios along the Atlantic coast from New Jersey through Florida and in the Gulf of Mexico from Florida to Alabama. TowBoatU.S. boats and towers will respond to the universal MMSI Number 0-338-04000 for this purpose. The Newsletter described the advantages of DSC and suggested that boaters who planned to use the test capability first call their local TowBoatU.S. agent on the telephone (see [www.boatus.com/mmsi](http://www.boatus.com/mmsi)) and ask what channel they use for working since it saves time if the channel number for response to the test call is proposed in the test request. The test call can also verify that your position is being provided automatically.

**b. MMSI Policy for Identifying DSC Handhelds and Small Craft Associated with a Mother Vessel.** The Task Force MMSI Policy paper approved at the May meeting was sent to both the Coast Guard and the FCC. The Coast Guard responded that most could be implemented but that use of the 10<sup>th</sup> digit to identify dependent craft needed more study since some equipment might not display the extra digit.

**c. Concern Over Lagging MMSI Registrations and GPS Connections.** At the May meeting it was decided to concentrate on a public awareness campaign on ways to encourage registrations and promote use of the publicly available "Can You Hear Me" tutorial on the use of DSC. The recent BOATUS Newsletter mentioned above and the Coast Guard Safety Alert mentioned under paragraph 9 a. below are certainly along those lines. There was a consensus that we should enlist the support of other maritime groups and the government in this endeavor including our Task Force Advocacy that vessels of all sizes going as much as a mile offshore should carry a VHF radio or an EPIRB/PLB.

**d. Encouraging ALL Vessels Offshore to Carry VHF Radio or EPIRB/PLB.** This initiative, enacted into law by the State of Hawaii requires that all vessels going a mile or more offshore carry a VHF radio (handheld & non-DSC OK) or an EPIRB. This was endorsed by the Task Force including the option of a Personal Locator Beacon (PLB) and encouraged by the National Association of State Boating Law Administrators (NASBLA) which adopted a Model Act patterned after the Hawaii Law. The Task Force recommended that the Coast Guard require this by regulation but the Coast Guard responded that Congressional authority would be required.

Joe Carro reported that Congress appeared poised to approve the Marine Safety Act of 2009 which contains a provision authorizing the Coast Guard to require EPIRBs on voyages as they deemed appropriate. If enacted as expected, this would give the Coast Guard the broad authority but they might not be prepared to implement it without further

study and public input. The Task Force approved contacting other maritime organizations seeking sponsorship of the concept.

**8. Reports and Issues: the GMDSS Service Agents & Manufacturers Group.**

Ralph Sponar's Group is following two initiatives through an ad hoc group working with NMEA representatives as follows:

**a. Better Definition of "Qualified" Technical Support.** The FCC Rules relating to Class B AIS call for installation by a qualified technician but the public needs better guidance on who is a qualified technician. An NMEA ad hoc group has been addressing this issue and may suggest the NMEA CMET qualification to the FCC.

**b. NMEA Proposal for Master Database of MMSI Registrations.** The first step proposed by the NMEA is to become an approved "registration agent" for issuance of MMSI numbers to vessels not requiring a station license. Afterward, the NMEA may elect to create a master database of MMSI assignments which is not available to the public elsewhere.

**9. Reports from the Commercial Vessel Group.** Chairman Nino Martini reported that his company's vessels operating off east Africa were taking a number of measures to combat the threat of piracy including armed guards and extreme noise generators. Also noted:

**a. Coast Guard Safety Alert on EPIRB and PLB Registration.** The Coast Guard has called attention to a recent major marine casualty involving a commercial fishing vessel with an improperly registered EPIRB. The Identification number embedded in the EPIRB did not match the number registered with NOAA's SARSAT Office and this delayed notification to the Coast Guard and launch of rescue assets. Vessel operators should ensure that the Unique Identification Number (UIN) printed on the EPIRB or PLB is the same as the UIN printed on the Proof of Registration decal sent to you by NOAA. This can also be cross-checked on the National Beacon Registration website at [www.beaconregistration.noaa.gov](http://www.beaconregistration.noaa.gov) and choosing one of the links to your registration. If there are any discrepancies, contact NOAA at 301-817-4515 or 1-888-212-SAVE. You should update your registration if there is any change in vessel information, owner/ operator, or emergency contact information. EPIRB/PLB registration is mandatory.

**b. Coast Guard Safety Alert on Compact Florescent Bulbs.** Although FCC Rules require that these bulbs be labeled with a warning that they could cause interference to radio circuits, some have been found on the navigation bridge of vessels and in other locations. Operators should be aware of the potential interference with communications.

**10. Reports and Issues: the GMDSS Training Group:** Chairman Owen Anderson has noted that the new website of the Coast Guard's National Maritime Center (NMC) no longer shows the GMDSS Question Pools separately; instead, the GMDSS questions are

mixed in with almost 1000 Deck Safety questions and there is no identification of questions for the Restricted examination. Russ Levin offered to take the issue under advisement.

**11. Other Business and the Next Meeting of the GMDSS Task Force:** Minor updates have been made to the GMDSS Information Bulletins on our website. The next Task Force meeting will be held on Thursday morning 1 October 2009 at the Sanibel Harbor Resort in Fort Myers, Florida during the NMEA Annual Meeting. The follow-on meeting will be held on Thursday morning January 7, 2010 at the RTCM Headquarters in Arlington, Virginia

### **GMDSS TASK FORCE CONTINUING WORK LIST**

6 August 2009

1. Monitor FCC continuing action to update GMDSS Rules (TF)
2. Recommend actions to reduce false alerts in GMDSS systems (TF)
3. Monitor Coast Guard Port State GMDSS inspection program (TF)
4. Monitor MSI broadcasting programs for compliance with GMDSS Standards (TF)
5. Review GMDSS Internet Web Sites and update Task Force portion of USCG site (TF)
6. Support SOLAS Working Group planning for IMO COMSAR meetings (TF)
7. Advocate Canadian coordination to extend GMDSS services to the Great Lakes (TF)
8. Review GMDSS concepts and make modernization recommendations (TF)
- 9. Advocate voluntary carriage of VHF or EPIRB/PLBs by all vessels offshore (TF)**
10. Advocate overhaul of FCC policy and practice on MMSI assignments (TF)
11. Monitor non-GMDSS systems: AIS, LRIT, SSAS, VDR, VMS, & E-Navigation (TF)
- 12. Recommend updates for Coast Guard NVIC on GMDSS Requirements (TF)**
- 13. Recommend means to facilitate Distress Alerts by Cell Phone & Internet (TF)**
14. Advocate intership calling on HF GMDSS channels (CV)
15. Review Safety Radio and VMS Requirements for Small Fishing Vessels (CV)
16. Recommend training programs for non-mandatory users of GMDSS systems (RV)
17. Encourage GMDSS handbooks and Internet and video training aids (RV)
18. Encourage voluntary users of VHF-DSC Register for MMSI and connect GPS (RV)
19. Advocate FCC enable R/Vs keep existing MMSI when applying for Station Lic. (RV)
20. Encourage Mfgs. to upgrade GMDSS explanations in equipment manuals (SA)
21. Monitor guidelines for GMDSS equipment maintenance & maintainer standards (SA)
22. Recommend proper interconnection of GPS receivers with DSC Radios (SA)
23. Advocate better FCC & USCG management of annual GMDSS inspections (SA)
24. Maintain GMDSS Question Pools for FCC and Coast Guard Examinations (TR)

Key to cognizant groups:      (TF) Task Force  
                                         (CV) Commercial Vessel Task Group  
                                         (RV) Recreational Vessel Task Group  
                                         (SA) Service Agents and Manufacturers Task Group  
                                         (TR) Training Task Group

Attachment: Draft Agenda for Task Force Meeting 1 October 2009 in Fort Myers, Florida

during the NMEA Annual meeting.

**Please refer questions and proposals to Captain Jack Fuechsel at 703-527-0484 or [gmdss@comcast.net](mailto:gmdss@comcast.net) If you have an Internet server with spam filters, please authorize receipt of messages from [gmdss@comcast.net](mailto:gmdss@comcast.net)**

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