

NATIONAL GMDSS IMPLEMENTATION TASK FORCE

Newsletter and Summary Record of 10 May 2012 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: www.navcen.uscg.gov/?pageName=MaritimeTelecomms (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 10 May 2012 at the new RTCM Headquarters in Arlington, Virginia. The documents listed below were distributed and are available on request:

Draft Task Force position on Equipment for Small Passenger Vessels
New GMDSS Brochure by National Safe Boating Institute
Coast Guard Notices re Marginal 2MHz Coastal Watch & SITOR Services
BOATUS News Release of February 8th on Vessel Safety Check Program
BOATUS News Release of April 10th Emphasizing VHF-DSC-GPS
New Issue: Auto shift to Ch 16 on C/V with multiple VHF-DSC radios
Progress Report from Coast Guard Auxiliary on VHF-DSC-GPS
Sea Tow Announcement of new “App” for I-Phones and Droids

1. **Reports and Issues: GMDSS Modernization Group.** Bob Markle reported that the COMSAR 16 meeting in March had completed work on the ‘Scoping Exercise’ for organizing the Modernization work effort. Assuming that the parent Maritime Safety Committee (MSC) approves the proposal at their May meeting, the Correspondence Group headed by Bob Markle will commence work by email. The initial effort is expected to be a high level review of GMDSS fundamentals such as Functional Requirements, Sea Areas, and Levels of Priority. There will be annual status reports to the COMSAR meetings each year. The IMO/ITU Panel of Experts which typically meets in September each year will also review progress on modernization in order to keep IMO and ITU efforts in alignment. As this document goes to press, we have learned that the MSC has approved the modernization plan including communications support for e-navigation and approved the Terms of Reference for the Correspondence Group with a target completion date of 2017.

2. **The RTCM Report:** RTCM President Bob Markle reported on the status of Special Committees of interest to the Task Force. His report is summarized here:

a. **RTCM SC 101 on GPS in VHF-DSC Handhelds.** The Committee has completed an edition of its standard on GPS in handhelds. The only portion of the standard still pending is a testing scenario spread sheet being developed by NASA which is expected in about one month. Prompt approval by the FCC is expected.

b. **RTCM SC 104 on Global Navigation Satellite Systems (GNSS).** This Committee is working on incorporating Galileo and Glonass into the standards which

have been developed for GPS. Further meetings are scheduled at RTCM the week of 14 May and the Committee will meet again with the Institute of Navigation in the fall.

c. RTCM SC 109 on Electronic Charting. The Committee is working on a new version of the standard and plans to include provisions for Voyage Data Recorder (VDR) functionality in Electronic Charting Systems.

d. RTCM SC 110 on Emergency Beacons. The Committee has completed a revised EPIRB standard with accompanying test standards for EPIRBs with GPS. They are also working on standards for a new generation of EPIRBs that will take advantage of certain characteristics of the next generation of Search and Rescue satellites. Existing EPIRBs will be compatible with the new satellite system.

e. RTCM SC-119 on Maritime Survivor Locating Devices. This Committee was reactivated to consider man overboard AIS applications and other relevant technologies. The new standard will be published soon and the FCC will be petitioned to adopt it.

f. RTCM SC-121 on Automatic Identification Systems (AIS). This Committee continues work on AIS messaging and has a Working Group addressing AIS Application Specific Messages such as those used in harbors and at locks.

g. RTCM SC-123 on Data over VHF Channels. RTCM has petitioned the FCC to adopt RTCM Standard 12301.1 for transmitting data on VHF channels. The comment period closed with all comments favorable to the proposal. Early approval action by the FCC was expected but is still pending. The Committee is expanding its work to include data messaging on MF and HF channels.

h. RTCM SC 127 on Enhanced Loran. The work of this Committee is now is directed toward development of an integrated navigation receiver which incorporates Loran and the various GNSS systems under the new Special Committee 131 (see below).

i. RTCM SC-128 on Satellite Emergency Notification Devices (SEND). This Committee was chartered at the request of the Coast Guard to develop performance standards for emergency notification systems using private satellite systems such as SPOT. The Committee has completed and approved its new standard. The FCC will be petitioned to include the new standard in its Rules.

j. RTCM SC 129 on Portrayal of Nav-Related Information on Shipboard Displays. This Committee is just beginning its work.

k. RTCM SC 130 on Electro-Optical Imaging Systems (EOIS). The work of this Committee deals primarily with night vision systems.

l. RTCM SC 131 on Multi System Shipborne Navigation Receivers. This new Special Committee is under consideration by the RTCM Board. In addition to

incorporating space based and terrestrial navigation systems, it is proposed to include inertial and differential systems as well.

m. Other RTCM Announcements of Interest. The 2012 RTCM Assembly including a Task Force meeting will be held concurrently with the NMEA International Marine Electronics Conference and Exposition at Loews Royal Pacific Hotel in Orlando, Florida the week of 23-29 September 2012. It is expected that this joint meeting including a combined exhibit will prove popular with members of both organizations.

3. Summary Record of 11 January Meeting: The Summary Record of the 11 January 2012 meeting which had been distributed earlier and posted on our website, was noted without change.

4. Reports and Issues: The Recreational Vessel Group Report. Jack Fuechsel reported that David Kennedy of Boat U.S. had agreed to accept leadership of this group. The main issues addressed at this session included the following:

a. Task Force Proposal that R/V carry Emergency Beacons if More than 3 Miles Offshore. As we reported before, the Coast Guard decided to refer the proposal to the National Boating Safety Advisory Council (NBSAC) for a recommendation. NBSAC assigned the issue to its Boats and Equipment Committee which has been reviewing the proposal with the assistance of several Task Force members. So far their deliberation has been very thorough and the several conference calls exhibited a very positive approach. NBSAC met in mid April and the Boats & Equipment plans to make its recommendation to the Council at its fall meeting. In addition to a review of the basic recommendation, the Committee has spent some time discussing whether certain other radio devices might be deemed 'equivalent' to the term 'emergency beacons' cited in the enabling legislation.

b. ad hoc Group to Promote Proper Use of VHF-DSC Radios Including Registration for MMSI and Connection to GPS Receiver. The following are highlights of reported activity:

1). Robert Shafer, Director of the Coast Guard Auxiliary Response Department reported that their vessel examiners, public affairs personnel, and public education instructors are aware of the need to interface VHF-DSC radios with GPS receivers and are working to bring that issue to the attention of recreational boaters. They have also added a "GMDSS/DSC" tab to the homepage of their website with useful DSC information, links to MMSI providers, and the NMEA interconnection chart.

2). Two new brochures on use of radio for boating safety were announced. One entitled "Your VHF-DSC Marine Radio" was produced by the United Safe Boating Institute with a grant from the Coast Guard Office of Boating Safety. This 8 page brochure is currently being printed but is available on the USBI website www.usbi.org. In addition, the National Boating Federation is developing a new brochure stressing the importance of carrying an EPIRB or a Personal Locating Beacon when cruising offshore.

3). BOATUS published two New Releases on vessel safety. One announces their sponsorship of vessel safety inspections conducted by the Coast Guard Auxiliary and the U.S. Power Squadrons. The other, on the anniversary of the TITANIC sinking, calls attention to the value of VHF-DSC radios with connected GPS, especially with the near completion of the Coast Guard's Rescue 21 system establishing a continuous coastal watch on the DSC Distress and Calling channel 70 in addition to an upgraded watch on the voice Distress and Calling channel 16.

4). Sea Tow announced availability of an "App" for I-Phones and Droids with integral GPS. The App enables callers to contact the nearest Coast Guard Sector Command for maritime emergencies or to contact "911" for an emergency on land. In both cases the GPS coordinates are furnished automatically. The App is free and not limited to Sea Tow members. Other services provided include tides, weather forecasts, and position information.

5). ICOM has announced the availability of the IC-M92D a Handheld VHF-DSC with integral GPS and active noise cancelling which also floats. The Task Force has advocated such handhelds for the GPS feature and for their survivability in the event of sinking or capsizing.

c. New Issue – Should Registration of MMSI be Mandatory? A discussion on whether registration of MMSI numbers for use in DSC radios should be mandatory was tabled for further discussion at the next meeting. It was noted that registration of EPIRBs and PLBs is mandatory under NOAA Rules and that registration of MMSI numbers for use in AIS devices is also mandatory. While the Task Force decided to take more time to consider the issue, it was learned after the meeting that the Coast Guard interpretation of the FCC Rules is that registration is mandatory but that the Rules are not clear and need to be clarified.

5. Reports and Issues, Service Agents and Manufacturers Task Group. Jack Fuechsel reported for Ralph Sponar's group with the following highlights:

a. Standardized Inspection Check Lists. The Group has worked with the Coast Guard, the FCC, and Classification Society inspectors to update check lists for mandatory inspections of selected vessel types. A final version of a new check list for vessels on the Great Lakes was made available at the May 2011 Task Force meeting and is now on the NMEA and FCC websites along with the Check Lists for GMDSS and Small Passenger Vessel inspections. The three Inspection Check Lists on the FCC website are linked to the Task Force website. Further review is being conducted on Check Lists for Bridge-to-Bridge Radiotelephone and AIS Class A and B. The Fishing Vessel Check List published in 2003 is being reviewed prior to posting on the web sites along with the other check lists.

b. New Issue – Should "3 Strikes Rule be Rescinded?" Some Task Force members raised the issue that the rule limiting to three the number of 'tries' to enter

MMSI numbers in VHF-DSC radios was proving counter productive. The discussion revealed that it was not an ITU Rule but that it had been ‘suggested’ to manufacturers who were all using it. It was decided to discuss the rule further at the next meeting and in the meantime seek to find out what would need to be changed to rescind the rule.

c. NBSAC Requests Assistance in Estimating the number of VHF Radios in Service. As part of its review of the proposal for beacons on R/Vs offshore, a NBSAC representative asked if the Task Force could be of assistance in estimating the number of VHF radios in service in the U.S. A discussion during the Task Force meeting did not produce a suggested means of doing this but it was decided to refer the question to MNEA to see if they could be of assistance.

d. Publications in Paper or Electronic Format on Vessels Requiring Inspection. There was no new information available at this meeting.

6. Reports and Issues, Commercial Vessel Task Group. Nino Martini reported for the Commercial Vessel Group with the following highlights:

a. Ship Owners Concern over Phase-out of Inmarsat-B Service. Frank August briefed the Task Force on Inmarsat’s plans to have the Fleet Broadband (FBB) 500 terminal qualified for GMDSS and the timetable relative to the planned phase-out of the Inmarsat-B terminals at the end of 2014. The FBB 500, 250, and 150 all provide emergency calling and priority preemption is also available with an equipment add-on. The FBB 500 is planned to be GMDSS qualified and the only remaining obstacle is a realignment of the space segment so as to provide a back up satellite in case of a failure of the primary satellite. This issue was raised by ship owners who need to have replacement terminals operational by the December 2014 phase-out of the Inmarsat-B. These replacements have to be planned well in advance to accommodate ship schedules and insure that replacement equipment is available in a timely manner. Frank acknowledged that Inmarsat was aware of the tight timing and was working with IMSO and IMO to arrange a “preliminary approval” of the FBB 500 for GMDSS in order to resolve any uncertainty as to its pending qualification for GMDSS. Frank also noted that Inmarsat has no present plans to terminate the Inmarsat-C system.

b. Review of the Standards for Safety Radio Equipment on Small Passenger Vessels. One of the handouts at this meeting was an updated draft outline of principles to consider in recommending updated radio carriage requirements for small passenger vessels. This update had been produced for use in a meeting with Beth Gedney of the Small Passenger Vessel Association. Beth intended to extend an invitation to their members to work with the ad hoc group but did not see any immediate concern in the Task Force plans. The Working Group members were identified earlier and plan to conduct most of their work by email. The ad hoc group members present suggested that a phone conference workshop be scheduled to take the next step.

c. New Issue – Alerts Causing Auto Shift to Channel 16 on C/V with Multiple VHF-DSC Radios. Canadian member, Peter Ryan, reported that many of their small

commercial vessels carrying multiple VHF-DSC radios were complaining about incoming alerts automatically shifting all the radios to channel 16. The cumulative effect is degrading the operational environment which requires continuing watch on other channels for operational and navigation safety needs. Peter asked that the Task Force review this situation. The following points were made during the ensuing discussion:

1). As Peter noted, retention of the old non-DSC radios for certain watches, especially bridge-to-bridge, would avoid the situation but those radios are getting older and replacements are hard to come by since sale of non-DSC radios have been severely curtailed by governments.

2). Another of Peter's suggestions, that ITU and IEC Rules be adjusted to make the DSC radio unable to transmit DSC calls until the MMSI is entered. The ITU has already made this change and the FCC has followed up with Rule M483 which prevents sale of VHF-DSC radios in the U.S. unless this feature is available. Follow up action is already underway to address this issue in the IEC standard. If the primary DSC watch radio failed, it would be necessary to enter the MMSI in one of the other radios to enable transmission.

3). Another approach which should be taken regardless of equipment fixes is to restrain the excessive use of Urgency priority by shore broadcasts to those situations which warrant shifting DSC receivers on all vessels within range to channel 16.

7. Reports and Issues: Training Task Group. Owen Anderson reported by email that his ad hoc group to update the GMDSS Question Pools had completed a final draft for the GMDSS Operator Certificate (GOC) and Restricted GMDSS Operator Certificate (ROC) test pools. Work on revision of the Question Pools for GMDSS Maintainer is about half completed. The Task Force approved the work of the ad hoc group and the revised GOC and ROC Question Pools will be posted on the website. The FCC is also expected to post the new Question Pools on their website.

8. The Coast Guard Reports: The following updates were provided by the indicated presenters:

a. Rescue 21 Upgrade of VHF Coastal Watch for DSC and Direction Finding. Mike Edwards provided an update presentation with the following highlights:

1.) Project status: Rescue 21 is operational on the entire east, west and gulf coasts and the Great Lakes. Since the last Task Force meeting Sectors San Juan and Honolulu have been declared operational. The only remaining work is Sector Guam and tower work in a number of already operational Sectors. Rescue 21 has aided 37,067 Search and Rescue cases, a number growing by almost 900 per month. All remaining work should be completed by the end of 2012.

2). Planning for Alaska is proceeding with acquisition and deployment of consoles and DSC equipment. The Western Rivers are also in a planning stage with

additional VHF-DSC radios being procured for 49 sites in Sectors Ohio River Valley, Upper Mississippi, and Lower Mississippi.

b. Declaration of Sea Area A1. Captain Dave Dermanelian reported that with the approaching completion of the Rescue 21 Project, the Coast Guard planned to declare Sea Area A1 operational on a date to be determined. Sea Area A1 is created when there is a continuous shore watch on the DSC Calling and Distress channel 70. Declaration of Sea Area A1 will require that all vessels mandatorily equipped with VHF, upgrade to VHF-DSC within one year.

c. Sea Areas A2 (MF Coverage), A3 (HF & Inmarsat Coverage) and A4. Captain Dermanelian also announced that the coastal Medium Frequency safety watch on 2182 MHz and its DSC counterpart 2187.5 MHz continues at the Sector commands but there is no plan to declare Sea Area A2 operational because funding is not available to upgrade the system which suffers from deteriorated antennas and ground planes. As a practical matter the equipment is the same as that used for Sea Area A3 (High Seas within Inmarsat coverage) since almost all MF equipment is packaged as a combined MF/HF Radio. Sea Area A3 has been operational since the earliest days of GMDSS since the global HF Coast Stations cover all ocean areas with proper HF channel selection. GMDSS A3 ships can also use Inmarsat terminals. Sea Area A4 (High Seas beyond Inmarsat Coverage) is only serviced by HF Radio for GMDSS ships.

d. Developments in E-Navigation and AIS/ECDIS Regulations. Mr. Jorge Arroyo reported that there had been no new developments in this area.

e. U.S. SOLAS Working Group to Prepare for IMO COMSAR 16. Russ Levin summarized the results of Comsar 16 with the following highlights:

- 1). The “scoping exercise” for GMDSS Modernization as reported above.
- 2). Discussions of the utility of “social networking” for safety applications.
- 3). The possible use of AIS messaging for Distress communications.
- 5). Further efforts to define path for alternative satellite systems in GMDSS.
- 6). Whether Accounting Authorities are still required? Perhaps for Inmarsat-
- 7). Coordinating liaison with the ITU through the IMO/ITU Experts Group.
- 8). Trying to resolve the issue of excessive cost of LRIT Data Center audits.
- 9). Comsar 17 will meet in London 21-25 January 2013

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9. The FCC Reports: Ghassan Khalek reported for the FCC, the following are highlights of his report:

a. Pending Further Changes to FCC Rules. There are petitions from RTCM and the Task Force which have already been through the public comment phase and are ready for approval but are being held to be consolidated with a new Petition expected from the Coast Guard in the very near future. As an exception, the RTCM Petition on new Radar Standards is being expedited. The various actions being held up for these reasons include the following:

- 1.) RTCM petition for the VHF-FM Digital Small Message Services.
- 2.) Task Force Petition to permit use of marine VHF handhelds ashore.
- 3.) Require GMDSS vessels to test radiotelephone equipment daily.
- 4.) Require vessels with mandatory EPIRBs to upgrade to GPIRBs.

b. Updated GOC & ROC Question Pools from the Task Force Training Group. Under the streamlined procedures adopted earlier, the FCC will accept the revised Question Pools and place them on their website without a Public Notice.

c. FCC Decision on the Riverside, California Petition to Use Marine VHF Channels for Land Mobile Applications. The FCC has still not announced a decision in this case.

10. Other Business and the Next Meeting of the GMDSS Task Force: The next Task Force meeting will be held at 9:00 a.m. on Thursday morning 27 September 2012 at Loews Royal Pacific Hotel in Orlando, Florida during the joint RTCM/NMEA annual meetings. For more information see the RTCM website at www.rtc.org and the NMEA website at www.nmea.org . Government attendees are encouraged to request travel orders early due to scheduling near the end of the government's fiscal year which is sometimes accompanied by a freeze on unscheduled travel. The follow-on meeting will be held tentatively on Thursday morning 31 January 2013, at the new RTCM Headquarters in Arlington, Virginia.

GMDSS TASK FORCE CONTINUING WORK LIST

10 May 2012

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. Advocate voluntary carriage of VHF or EPIRB/PLBs by all vessels offshore (TF)
9. Advocate overhaul of FCC policy and practice on MMSI assignments (TF)
10. Monitor non-GMDSS systems: AIS, LRIT, SSAS, VDR, VMS, & E-Navigation (TF)
11. Recommend updates for Coast Guard NVIC on GMDSS Requirements (TF)
12. Recommend means to facilitate Distress Alerts by Cell Phone & Internet (TF)
13. Advocate GPIRBs for U.S. Vessels Required to Carry EPIRBs (TF)
14. Advocate mandatory Distress Beacons on R/V more than 3 miles offshore (TF)
15. Review GMDSS concepts and make modernization recommendations (MOD)
16. Advocate intership calling on HF GMDSS channels (CV)
17. Recommend Safety Radio and VMS Requirements for Small Fishing Vessels (CV)
18. Recommend Safety Radio & Navigation Requirements for Towing Vessels (CV)
- 19. Recommend Safety Radio & Nav. Outfit for Small Passenger Vessels (CV)**
20. Recommend training programs for non-mandatory users of GMDSS systems (RV)
21. Encourage GMDSS handbooks and Internet and video training aids (RV)
- 22. Encourage users of VHF-DSC to Register for MMSI and connect GPS (RV)**
23. Advocate FCC let R/Vs keep existing MMSI when applying for Station Lic. (RV)
24. Recommend through NASBLA that State's boat Registrations include MMSIs (RV)
25. Encourage Mfrs. to upgrade GMDSS explanations in equipment manuals (SA)
26. Monitor guidelines for GMDSS equipment maintenance & maintainer standards (SA)
27. Recommend proper interconnection of GPS receivers with DSC Radios (SA)
28. Advocate better FCC & USCG management of annual GMDSS inspections (SA)
29. Monitor Inspection Guidelines and Check Lists for selected vessel types (SA)
30. 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
- (MOD) Modernization Task Group

Attachment: Draft Agenda for Task Force Meeting 27 September 2012 at Loews Royal Pacific Hotel in Orlando, Florida during the joint RTCM and NMEA Annual Meetings.

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

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