

NATIONAL GMDSS IMPLEMENTATION TASK FORCE

Newsletter and Summary Record of 27 September 2012 Meeting

1. **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 27 September 2012 at Loews Royal Pacific Hotel in Orlando, Florida during the joint Annual Meetings of the RTCM and the NMEA. The documents listed below were distributed and are available on request:

Summary of Coast Guard Petition to FCC for Rule Changes
BOATUS News Release on Availability of both EPIRBs and PLBs for Rent
New NBF Brochure Promoting Carriage of EPIRBs/PLBs for R/Vs Offshore
Status of Task Force Recommendations for Small Passenger Vessels

2. **The Coast Guard Reports:** The following updates were provided by Joe Hersey:

a. Declaration of Sea Area A1. With the approaching completion of the Rescue 21 Project, the Coast Guard plans to declare Sea Area A1 operational, probably by the end of the year. 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 not include Alaska but will include the Continental U.S. coasts, the Great Lakes, Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands. According to provisions of the FCC Rules, a declaration of Sea Area A1 will require that all vessels mandatorily equipped with VHF, upgrade to VHF-DSC within one year.

b. Sea Area A2 (MF Coverage). Joe Hersey also announced a new decision that the coastal Medium Frequency safety watch on 2182 kHz and its DSC counterpart 2187.5 kHz will no longer be watched at most Sector commands because funding is not available to upgrade the system which suffers from deteriorated antennas and ground planes. Watches on 2182 kHz and 2187.5 kHz will continue at the Communications Stations and selected Sectors which support the fishing fleet. In addition, the traditional watch on 4125 kHz throughout Alaska will continue. As a practical matter the equipment is the same as that used for Sea Area A3 (High Seas or Inmarsat coverage) since almost all MF equipment is packaged as a combined MF/HF Radio. There is no plan to declare Sea Area A2 operational which means that mandatory vessels sailing beyond Sea Area A1 (about 20 miles) will have to outfit for Sea Area A3.

c. Sea Area A3 (HF or Inmarsat Coverage) Joe noted that 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. SOLAS A3 ships can also use

Inmarsat terminals. Non-SOLAS U.S. ships have other options including some domestic satellite services.

d. Sea Area A4 (High Seas beyond Inmarsat Coverage) is basically only the polar regions and the ocean areas surrounding the Antarctic are covered by Inmarsat. The Arctic ocean areas are now becoming accessible to shipping during the summer season and are only serviced by HF Radio for SOLAS ships. Non-SOLAS shipping has other satellite options including Iridium which has full global coverage. Other domestic satellite systems may have partial Arctic coverage. There is increasing interest in further developing the IMO Polar Code and this will be discussed further at Comsar 17.

e. Coast Guard Plans to Recommend Changes to the FCC Rules. Joe announced that the Coast Guard's long awaited changes to the FCC Rules were now available and a summary of the proposed changes was distributed. After a brief discussion, further detailed discussion was invited for those interested at a special meeting that afternoon. At the afternoon session, those attending were given an opportunity to download to their computers all 300 plus pages of Part 80 with the recommended changes shown in track change format. Copies of the Summary and the track changes are available from Jack Fuechsel (gmdss@comcast.net).

f. Coast Guard changes to the Navtex MSI Broadcast System. Joe announced that changes to the identifiers and broadcast times had been made to be more in line with IMO recommended procedures and minimize interference to other Navtex broadcasts.

g. U.S. SOLAS Working Group to Prepare for IMO COMSAR 17. Joe reminded the Group that planning for Comsar 17 in London (21-25 January 2013) is already underway and that Task Force members can participate by emailing Russ Levin (russell.s.levin@uscg.mil).

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

a. Pending Further Changes to FCC Rules. Ghassan welcomed the nearly complete Coast Guard recommendations but was unable to speculate as to when they might be processed for adoption. 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 the new Coast Guard recommendations.

b. Updated Question Pools from the Task Force Training Group. Ghassan thanked the Task Force and especially Owen Anderson, Head of the Training Group, for his dedicated leadership in maintaining the question pools over the years. For more on the Question Pools, see paragraph 7 below.

c. FCC Decision on the Riverside, California Petition to Use Marine VHF Channels for Land Mobile Applications. The FCC has granted the petition but stipulated that it must not interfere with current or future maritime operations in the band.

d. FCC review of Changes to Part 13 of the Rules Opens Access for New COLEMs. Ghassan noted that there were only 10 COLEMs presently authorized to conduct examinations and that the Part 13 review proceeding would “open the door” for new applicants to be certified as COLEMs. This could prove advantageous to Training Schools which could have a certified COLEM on the staff to conduct exams.

e. Check Lists for GMDSS Inspections. Ghassan expressed his appreciation for the work of Ralph Sponar’s Service Agents & Manufacturers Group for their excellent work in updating a series of Inspection Check Lists which are used in conducting periodic inspections of SOLAS ships, Passenger Vessels, Fishing Vessels, Great Lakes Vessels and special categories such as Bridge-To-Bridge and AIS inspections. Hugh Lupo, Larry Yarbrough and Rich Beattie have also been very active in updating these lists.

4. Reports and Issues, Commercial Vessel Task Group. Jack Fuechsel reported for the Commercial Vessel Group with the following highlights:

a. Inmarsat Update Presentation. Peter Blackhurst of Inmarsat provided a general review of the system’s current status and future plans with the following highlights:

1). Shipboard Terminals. There are currently over 240,000 Inmarsat terminals in use of which 145,000 are Inmarsat C. Inmarsat C will be continued indefinitely, Inmarsat B will terminate at the end of 2014. Fleet 77 continues but few are being sold. The Fleet Broadband Series (FBB) is proving popular and the IMO will be requested to waive temporarily the requirement for a backup satellite to enable the FBB 500 to satisfy SOLAS requirements for Voice Distress on Fleet Broadband until a backup satellite constellation is available. The Voice Emergency “505” service is available on all FBB services

2). SafetyNET Broadcast. The SafetyNET broadcast via Inmarsat C will continue indefinitely but will be supplemented by a new service which will be available through FBB. Broadcast MSI notices will be archived in a database so that ships can review notices by date or ocean region for voyage planning.

3). Future System Developments. The Isat Phone Pro has sold over 100,000 terminals and a new Ka Band Global Express constellation will be completed by 2014. The Oceanus 800 Fleetphones are also “505” enabled for Voice Emergency.

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. Most of the remaining work on this effort is to identify which classes of small passenger vessels are applicable for each recommendation. In the afternoon following the meeting, several members of the ad hoc group met again to refine the document and an

updated version will be produced and distributed to all ad hoc group members. After any final updates, it will be placed on the agenda for the January meeting.

c. New Issue – Alerts Causing Auto Shift to Channel 16 on C/V with Multiple VHF-DSC Radios. Before our May 2012 meeting, 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 discussion in May and revisited at the September meeting:

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.

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.

4). The Task Force was unable to offer other specific solutions but requested that the Coast Guard and the FCC consider the issue further at their monthly meetings and advise the Task Force of any further suggestions which would be acceptable to the government.

5. Reports and Issues, Service Agents and Manufacturers Task Group. Ralph Sponar reported for his 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 earlier 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 was an IEC requirement and apparently all manufacturers are complying with it. Further discussion suggested that a passcode which could be furnished to dealers by manufacturers might be a more convenient arrangement. The Coast Guard and FCC were requested to discuss the issue further at their monthly meeting and advise the Task Force whether there was any government problem with making changes of MMSI numbers more user friendly.

c. NBSAC Requests Assistance in Estimating the number of VHF Radios in Service. As part of its review of the proposal for emergency beacons on R/Vs offshore, a National Boating Safety Advisory Council (NBSAC) representative asked if the Task Force could be of assistance in estimating the number of VHF radios in service in the U.S. The Task Force was not able to provide such an estimate but invited the NMEA to assist if possible. Ralph reported that inquiries within NMEA had also been unproductive but he doubted that reports of the number of radios sold in the U.S. would be very useful since there is no way to account for those removed from service.

6. Reports and Issues: The Recreational Vessel Group Report. David Kennedy of Boat U.S. reported for his group with the following highlights:

a. Task Force Proposal that R/V carry Emergency Beacons if More than 3 Miles Offshore. As 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. The Boats & Equipment Chairman plans to make his recommendation to the Council at the November meeting. In addition to a review of the basic recommendation, the Committee has spent some time discussing whether carriage of certain other radio devices might qualify for an exemption from carrying an ‘emergency beacon’ 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). Sea Tow reported that they had surveyed their 11,850 registrants and asked for responses from those with GPS connected to the VHF radios. They received affirmative responses from only 33, a further indication that the Task Force needs to mount a significant public education campaign on this issue.

2). The National Boating Federation has finalized a new brochure stressing the importance of carrying an EPIRB or a Personal Locating Beacon when

cruising offshore. The brochure also recommends that boats carry a VHF radio with connected GPS. Copies of the new Brochure were distributed at the meeting

3). BOATUS published a News Release announcing that their EPIRB rental program had been expanded to include Personal Locator Beacons (PLB). Copies of the News Release were distributed at the meeting.

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 was also recently completed. The Task Force approved the work of the Training Group and the revised GOC, ROC, and Maintainer Question Pools will be posted on the website and transmitted to the Coast Guard's National Maritime Center (NMC) upon completion of the FCC's approval process. The FCC is also expected to post the new Question Pools on their website. Owen expressed his thanks for the many contributions of his Question Pool working group and especially to Cliff Walker's ARA Group and Joe Allen for his extensive contributions to the GMDSS Maintainer Question Pool.

It is with deep regret that the Task Force accepted Owen Anderson's desire to step down as head of the Task Force Training Group, a position he has held from the earliest dates of the Task Force. Owen's contributions included formulation of the Model Course for GMDSS instruction in the U.S. and streamlining the FCC and Coast Guard Question Pools into a single set adopted by both Agencies. The Task Force confirmed Kurt Anderson, Owen's son and an experienced GMDSS instructor, as his replacement.

8. Reports and Issues: GMDSS Modernization Group. Bob Markle reported as chairman of the international Correspondence Group which has been formed to advance modernization efforts between IMO COMSAR meetings. The initial effort will be a high level review of GMDSS fundamentals such as Functional Requirements, Sea Areas, and Levels of Priority. The Correspondence Group reports to the COMSAR meetings each year, and COMSAR is the lead IMO committee responsible for progressing the work. The IMO/ITU Panel of Experts which meets in October this year has been tasked to review the initial report from the Correspondence Group and will report to COMSAR 17. Their participation will serve to keep IMO and ITU efforts in alignment. Task Force participation in the modernization is being coordinated by RADM Ed Gilbert who serves as head of the Task Force Modernization Group.

9. 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 VHF-DSC handhelds. Prompt approval by the FCC is expected.

b. RTCM SC 104 on Global Navigation Satellite Systems (GNSS). This Committee is working on incorporating Galileo, GLONASS, and the Japanese QZSS regional system into the standards which were originally developed for GPS. The next meeting is scheduled with the Institute of Navigation International Technical Meeting in January.

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 has been published and the FCC has been 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 as well as Encrypted AIS (EAIS).

h. 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 has been petitioned to include the new standard in its Rules.

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

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

k. RTCM SC 131 on Multi System Shipborne Navigation Receivers. This new Special Committee has been approved 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.

I. Other RTCM Announcements of Interest. The 2013 RTCM Assembly including a Task Force meeting will be held concurrently with the NMEA International Marine Electronics Conference and Exposition at the Sheraton Hotel in San Diego, California the week of 22-28 September 2013. It is expected that this joint meeting including a combined exhibit will prove popular with members of both organizations.

9. Other Business and the Next Meeting of the GMDSS Task Force: The next Task Force meeting will be held at 9:30 a.m. on Thursday morning 31 January 2013 at the RTCM Headquarters in Arlington, Virginia. For more information see the RTCM website at www.rtcn.org. The follow-on meeting will be held tentatively on Thursday morning 9 May 2013, at the RTCM Headquarters in Arlington, Virginia.

GMDSS TASK FORCE CONTINUING WORK LIST

27 September 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 Mfgs. 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 31 January 2013 at the RTCM Headquarters in Arlington, Virginia.

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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