

NATIONAL GMDSS TASK FORCE

Newsletter and Summary Record of 27 September 2017 Meeting

1. **The Task Force Meeting.** This Newsletter reports on the recent meeting of the Global Maritime Distress and Safety System (GMDSS) Task Force sponsored by the U.S. Coast Guard and dedicated to monitoring the success and shortcomings of the GMDSS. The Task Force is also active in current efforts to modernize the GMDSS and monitors related developments in maritime radio and electronic navigation (e-navigation). The Task Force advocates voluntary use of radio safety equipment by all vessels and makes recommendations to government authorities to improve safety at sea regulations for vessels subject to those regulations.

2. **Task Force membership.** Membership is open to individuals associated with commercial vessel operations, recreational vessel interests, training institutions, service agents, manufacturers, government authorities and any interested person or organization and there is no fee for participation. New members are welcome, to join, send your name, organization (if any), email address, and telephone number (optional) to gmdsstf@gmail.com. Members who are unable to attend Task Force meetings are invited to participate by email and to connect with Task Force meetings by conference call. This Newsletter goes out to about 4000 members after each quarterly meeting. The Task Force also maintains a website at: <https://www.navcen.uscg.mil/?pageName=MaritimeTelecomms> (click GMDSS/TF)

3. **The summary record.** This record of the meeting is provided for information and will be posted on the Task Force portion of the Coast Guard web site. The GMDSS Task Force met on 27 September 2017 at the Bellevue, Washington Hilton Hotel during the Annual meeting of the national Marine Electronics Association (NMEA).

4. **Distribution of Information Papers:** The following Papers of interest were distributed and are available to non-attendees on request:

13th District MSIB 01-17 on GMDSS guidance to commercial F/V
Maritime Safety Alert No. 08-17 of 3 August 2017 on HF SSB
Marine Safety Information Bulletin 009-17 of 25 August 2017 on ECDIS
Allocation of U.S. MMSI Number Blocks to Registering Organizations
“Will Maritime Save the Day for GPS?” by Dana Goward
Coast Guard Maritime Comms. Blog of 21 Sept. 2017 re Navigation in GPS Outages
Special Meeting of the GMDSS Task Force 11 November in New Orleans

5. **The FCC Reports:** Ghassan Khalek reported with the following highlights:

a. **ICOM AMERICA Inc. Request for Waiver to Permit Manufacture, Importation, Sale, and installation of Class E Digital Selective Calling Radio.** Ghassan explained that ITU R M. 493-13, Annex 4 establishes new requirements which are not met by the Icom M802 radio commonly used by vessels needing an HF/DSC radio. Icom has applied for a waiver to continue

selling this popular radio to non-SOLAS vessels. Approval was expected any day but was not announced publically until after the meeting on October 3rd.

b. FCC Public Notice DA 17-670 of 13 July 2017 Request to use High Seas Marine Frequencies During Disasters. Ghassan explained that this waiver for Shipcom was originally granted in 2010 and a renewal had been requested to include Global HF Net that is now commonly owned. There is every indication that the waiver will be approved and the Task Force expressed no objection in principal to the waiver. The comment period ended 14 August and reply comments were accepted until 29 August.

c. FCC Second Further NPRM of 30 December 2016 Proposing that FCC No Longer Perform International Accounting Authority Role for U.S. The FCC has still not taken final action on this issue but is expected to discontinue its role as an accounting authority. Operators whose terminals were commissioned using FCC as international accounting authority (US01) will need to make other arrangements for payment, and re-commission their terminal, otherwise they will find their terminal barred by Inmarsat once FCC's role as accounting authority ends and a call is attempted. A barred Inmarsat C terminal can still be used for distress alerting and will receive SafetyNET messages but cannot be used for Long Range Identification and Tracking (LRIT) or Ship Security Alert System (SSAS) including piracy alerts via SSAS. The comment period ended 14 March 2017 and we await the FCC's decision.

d. Progress on the RTCM Petition to Update the FCC Rules. This very sizeable Petition would not only update the Rules but would reformat them in a more logical manner and incorporate all references to standards, which have been approved. The Petition was put out for Public Comment that closed 31 May 2016. The public responses have been generally positive and early action is anticipated. More recently it was reported that a few sections had been adopted through action on other proceedings. The FCC's intended action on the Task Force Petition on small passenger vessels is included in the proposed RTCM updates.

e. Further developments in GMDSS Requirements for Alaskan F/V below 300 tons: Alaskan fishing vessels, whether home ported in Seattle or Alaska, have been a concern to Coast Guard inspectors in both Seattle and Alaska. The problem relates to waivers that were previously granted for VHF and MF DSC pending upgrade of the coastal networks. It is now clear that Sea AREA A2 for MF-DSC will not be declared in the U.S., and Sea Area A1 for VHF-DSC has been declared in the Continental U.S. but will likely not be declared in Alaska as a whole. Some of these waivers may have been renewed routinely with little investigation. It also appears that some of these waivers were broader than the DSC issues and are causing confusion not only to inspectors but to vessel owners and servicing agents who issue the safety certificates. After a lengthy discussion involving all parties, the Task Force agreed to make specific recommendations to the FCC and the Coast Guard.

6. The Coast Guard Reports: Russ Levin and others reported with the following highlights:

a. MMSI Management and Assignment Policy Issues. Russ noted that the pending changes to the FCC's Part 80 included several improvements in MMSI management. Because

the failure to properly register for an MMSI number is greatest among recreational vessels, the Task Force is working with the Coast Guard Office of Boating Safety to modify the latter's check list for voluntary inspections. The intent is not to collect more data but to open a dialog between the inspector and boat operators on the importance of following proper registration procedures and the need to connect GPS receivers. The FCC is cooperating with this effort by adding contact information to MMSI registrations going to the ITU and requiring the vessel registration number on Ship Station Licenses. One of the handouts at the meeting was a Coast Guard MMSI Block Allotment showing what government agency or registration agent issued certain blocks of MMSI numbers.

b. The Task Force Petition to Require Emergency Beacons on Recreational Vessels Offshore. There were no new developments on this Petition and no new report from the Office of Boating Safety at this meeting except to note that the decision point was now above the Office of Boating Safety. It is expected that the Coast Guard will permit satellite beacons as an alternative to the requirement to carry pyrotechnic flares. Meanwhile, the Task Force continues to advocate voluntary carriage of some version of satellite emergency beacon by all vessels going more than 20 miles offshore and voluntary carriage of VHF radios, preferably with DSC for use within 20 miles of the coast.

d. NTSB Recommendations to NOAA/NWS & USCG re Weather Warnings: The NTSB has been reviewing the loss of the EL FARO during a hurricane and has concluded that the ship was probably not getting sufficient weather warnings. Her track toward Puerto Rico probably took her outside of NAVTEX range but she should have been getting SafetyNET warnings. Their recommendations were to the Weather Service to improve forecasts and warnings and to the Coast Guard to improve dissemination to the extent possible. After the Task Force meeting, there was an announcement that the Coast Guard was releasing its Marine Board of Investigation. Among early reports of its conclusions were questions about the materiel condition of the EL FARO and the inspection process. It was also reported that the Investigation would recommend that all life jackets be equipped with PLBs, if so we may see renewed interest in the Task Force's proposal for emergency beacons on all vessels going offshore.

e. ITU WARC 12 and 15 Requires New Four Digit Channel Numbers for Simplex Use of Duplex VHF Channels. The new numbering system is displayed on a new posting on the Coast Guard website (<http://www.navcen.uscg.gov/?pageName=mtVhf>). The Coast Guard has requested the assistance of the NMEA and the Task Force to help in understanding when and how manufacturers implement this change and help in preparing users for this four-digit channel numbering change. While GMDSS radio manufacturers have indicated they have adopted a four digit channel capability in new radio models, IMO's Navigation, Communications and Search & Rescue (NCSR) Subcommittee agreed at its 4th session earlier this year to delay four-digit implementation in SOLAS ships until after 2024.

f. Potential Interference between Digital and Magnetron Radars. This issue originated with a report from Germany at the 11th meeting of the IMO/ITU EG in 2015. The Coast Guard has contracted a study with the Institute for Telecommunication Sciences in Boulder CO but results won't be available for some time.

g. Comparison of Radar SARTs and AIS SARTs. Russ noted the substantially greater ranges at which aircraft could detect the AIS SART as compared with the Radar SART summarized as follows:

Aircraft Altitude	20,000 ft	10,000 ft	5000 ft	1000 ft
Detection Range to 5 AIS SARTs	119-132	84-97	59-79	28-65
Detection range to Radar SART	23	22	30	33
Detection range to EPIRB	126	115	68	52
Detection range to 121.5 homer	8	7	5	4

Given this significant range difference and reports that the Radar SARTs do not work well with ship's solid state radars, Task Force members questioned whether it was time to propose phasing out the Radar SART. It was agreed that the Coast Guard would consider an input paper to the next IMO Navigation, Communications, Search and Rescue (NCSR) meeting with that recommendation. Another way forward might be through the GMDSS Modernization Correspondence Group.

7. Reports and Issues of the Service Agents and Manufacturers Group:

b. NMEA "One Net" Standard nearly ready for release. Lee Luft of the Coast Guard reported that Beta testing of the standard is underway and likely to take about a year to complete. Among other changes, the two NMEA 0183 DSC data sentences will be expanded to sixteen sentences and the NMEA 2000 DSC Parameter Group Message will be expanded to sixteen messages, to accommodate new applications on NMEA 0183, NMEA 2000, and IMEA OneNet.. Steve Spitzer added that two consensus based interoperability groups were working independently with a goal to complete their work by the end of 2018.

a. IMEA has strong Interest in building a Master Website for MMSI Numbers: Judy Johnson, chairman of the International Marine Electronics Alliance (IMEA), reported that IMEA and NMEA are quite interested in developing a master on-line database of all MMSI Numbers. The IMEA applied for grant funding for the project endorsed by the Task Force letter of 13 January but were not successful. The thrust of the request for funding was to support a project to facilitate the connection of GPS receivers to DSC radios, long a key Task Force goal. IMEA continues to seek funding for this project and the master database.

c. Testing during inspections should verify that DSC Radios transmit Position: Hugh Lupo reported at the last meeting that during inspections his Company had observed that not all radios transmit the position information automatically. This is a requirement for Class A radios but should also be available in Class E Radios. The Task Force agreed to take on this issue and determine whether a revised standard is needed for Class E radios. ETSI Standard EN 300 338-4 applies.

d. Training Vessel Incident Involving the U.S. and Canada reveals possible need to expand carriage requirements so that trainees can be trained on all equipment appropriate

for Sea Areas A1, A2, A3 and A4. Hugh Lupo recommended at the last meeting that the Task Force undertake a new issue regarding special equipment requirements for Training Vessels. This issue was carried over to the next meeting.

8. Reports and Issues of the Commercial Vessel Task Group. Rich Beattie reported with the following highlights:

a. Current status of the Vessel Monitoring System (VMS) used to track commercial F/V. Kelly Spalding of NOAA's National Marine Fisheries Service (NMFS) reported that they were moving toward a regulation codifying acceptable combinations of GPS and satellite communications that would apply in all five Fisheries Regions but in the interim, check the specific region's website for requirements. They are evaluating various systems including Iridium and Inmarsat-C but so far have not made a concession to permit a single Inmarsat-C to satisfy both GMDSS and VMS requirements. There is also no assurance that F/Vs would be eligible for reimbursement of the costs to outfit for VMS.

b. Modified Check Lists to Include MMSI Registrations for GMDSS Inspections. This item has been accomplished with respect to formal GMDSS Inspections for U.S. SOLAS ships. The Task Force plans to add this item to dockside examinations for commercial fishing vessels. With respect to voluntary safety inspections conducted on recreational vessels by the Coast Guard Auxiliary and the U.S. Power Squadrons, see paragraph 5.b. above regarding working with the Coast Guard Office of Boating Safety to revise their official form.

c. Action to develop Task Force recommendations to the FCC to clarify the F/V waiver procedures and clarify GMDSS requirements. Rich Beattie will lead an ad hoc group of interested parties in developing the Task Force recommendation to resolve the issues cited in paragraph 5.e above.

9. Reports and Issues, Recreational Vessel Group: Jack Fuechsel moderated the discussion on Recreational Vessels with the following highlights:

a. Management of MMSI Numbers Being Assigned by Agents: The FCC and the Coast Guard have entered into Memoranda of Understanding (MOU) with several private sector agencies to issue MMSIs to vessels not requiring a Station License. Those MOUs are being revised but the new data format has not yet come into effect with all of the designated agents. These assignment agents are also known as Licensed By Rule (LBR) agents.

b. Modify Voluntary Inspection Check List to Invite Discussion on MMSI Registration and Connection of GPS: The object is to include an item on the voluntary check lists mentioned in paragraph 6.a above, not to record more data but to use the occasion to emphasize the importance of applying for an MMSI number and connecting a GPS receiver.

c. MMSIs for Radios Used to Support Diving Operations: U.S. policy for assignment of MMSI numbers to divers who use their own radio but do not have their own boat needs to be finalized. A proposal to address the situation was included in the Coast Guard's and RTCM's Part 80 Petition to the FCC.

10. Reports and Issues of the Training Task Group. Kurt Anderson reported with the following highlights:

a. Question Pool Revisions and Policy on Publishing Questions and Answers: The Training Group is proceeding with plans to review the Question Pools for GMDSS Operator exams, and they welcome input by all GMDSS Training Personnel. A question was raised as to whether the Questions and Answers should be published together making it easier for applicants to memorize answers, after discussion, it was agreed not to pursue the issue

b. Tightening Qualification Requirements to Ensure Competency of Holders of the GMDSS Maintainers License: The Task Force has long believed that holding a GMDSS Maintainers License was insufficient evidence of competency for persons conducting GMDSS inspections. Requiring the NMEA's CMET certification is an attractive solution but changes in the CMET standards would need to be coordinated with the NMEA.

c. Applicants for GMDSS Radio Licenses can take on line courses but must be properly identified when taking exams. Kurt reported that some COLEMs were offering to test applicants for GMDSS Licenses remotely without taking steps to verify identity of the person purportedly taking the test. The FCC took prompt action to remind COLEMs that identification of persons taking the exams was required.

d. Status of NMC Oversight of equipment competencies and performance standards. Russ Levin agreed to remind the Coast Guard's National Maritime Center that GMDSS training companies are required to adhere to the revised standards in the new Standards of Training and Watch Convention.

11. GMDSS Modernization. Jack Fuechsel noted briefly that modernization was still an active project at the International Maritime Organization but their procedures require a lot of time. It is still expected that Iridium will be accepted as a GMDSS satellite services provider.

12. Review Summary Record of 27 July 2017 Meeting and Continuing Work List. The summary record of the 27 July is posted on the Task Force website and no corrections have been suggested. The Continuing Work Program is appended to each agenda and updated as needed.

13. Next Meeting of the GMDSS Task Force: The next regular Task Force meeting will be held at the RTCM Headquarters in Arlington, Virginia on 11 January 2018. Approval has been granted to hold a special Task Force meeting in New Orleans, Louisiana at 9:30 am on 30 November 2017 in Room 203 of the Convention Center during the annual Workboat Show. The intent is to hold a different kind of meeting appealing to all groups of the membership and focusing on educational efforts to improve Search and Rescue operations and emergency communications with participation by the local Coast Guard District Headquarters.

GMDSS TASK FORCE CONTINUING WORK LIST

27 September 2017

1. Monitor IMO 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 NAVCOMSAR meetings (TF)
7. Advocate Canadian coordination to extend GMDSS services to the Great Lakes (TF)
8. Advocate voluntary carriage of VHF and 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 GNSS for U.S. EPIRB and PLB Standards (TF)
14. Advocate mandatory Distress Beacons on R/V more than 3 miles offshore (TF)
15. Advocate use of the Alaska AIS Monitor Network for VHF Distress Guard (TF)
16. Monitor Developments in Cybersecurity and advise membership (TF)
17. Review GMDSS concepts and make modernization recommendations (MOD)
18. Advocate intership calling on HF GMDSS channels (CV)
19. Recommend Safety Radio and VMS Requirements for Small Fishing Vessels (CV)
20. Recommend Safety Radio & Navigation Requirements for Towing Vessels (CV)
21. Recommend Safety Radio & Nav. Outfit for Small Passenger Vessels (CV)
22. Advocate applications for new MF/HF Digital Communications Service (CV)
23. Advocate voluntary training programs for users of GMDSS systems (RV)
24. Encourage GMDSS handbooks and Internet and video training aids (RV)
25. Encourage users of VHF-DSC to Register for MMSI and connect GPS (RV)
26. Advocate FCC let R/Vs retain existing MMSI when applying for Station Lic. (RV)
27. Encourage Mfgs. to upgrade GMDSS explanations in equipment manuals (SA)
28. Recommend proper interconnection of GPS receivers with DSC Radios (SA)
29. Advocate better FCC & USCG management of annual GMDSS inspections (SA)
30. Maintain Inspection Guidelines and Check Lists for selected vessel types (SA)
31. Recommend Certification Path For GMDSS Maintainer (SA) and (TR)
32. Maintain GMDSS Question Pools for FCC and Coast Guard Examinations (TR)
33. Advocate 5 Year USCG Recertification Training of GMDSS Operators (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

Please refer questions and proposals to Captain Jack Fuechsel at 703-963-3747 or gmdsstf@gmail.com. If you have an Internet server with spam filters, please authorize receipt of messages from gmdsstf@gmail.com

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