

NATIONAL GMDSS TASK FORCE

Newsletter and Summary Record of 27 September 2018 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 over 5000 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 2018 at the PGA Resort in Palm Beach Gardens during the Joint Annual Meetings of the Radio Technical Commission for Maritime Services (RTCM) and 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:

- Message from Gordon West re VHF Watch on radios in Public Address Mode
- Singapore Announces Plans for VDES Service
- Australia Mandates Upgrade to Float-Free EPIRBs
- Coast Guard Blog on AIS Discrepancies and Encoding Guide
- Coast Guard Blog on Alternatives to Pyrotechnic Distress Signals
- BOATUS News on Potential LED Light Interference to VHF
- Coast Guard “Ready for Rescue” Challenge to Improve Survivor Location

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

a. **Report on IMO/ITU Joint Experts Group meeting** – Christian Rissone summarized the meeting results that were passed to the Navigation, Communications Search and Rescue Subcommittee. (NCSR). There will also be further papers from the GMDSS Modernization Correspondence Group. The NCSR Subcommittee workload has gotten so heavy that additional days have been allotted for their next meeting scheduled for 16 to 25 January 2019.

b. Inmarsat Satellite System Update – John Dodd reprised briefly his earlier presentation to the RTCM with the following highlights:

1.) John reviewed the various Inmarsat constellations with I-5 being the most recent and a new I-6 being planned to provide L and Ka band service with a projected 15 years life.

2.) The “Fleet Safety” concept was approved by IMO in May and embodies all basic safety services including priority “505” calling, MSI SafetyNET II, RCC originated “Chat” and look up capability for nearby vessels. The Fleet Safety concept requires a new Maritime Safety terminal for ships. FleetBroadband service will be available through the new terminals and in the future is expected to reach speeds in excess of 1Mbps.

c. Iridium Satellite System Update – Larry Solomon reprised briefly his earlier presentation to the RTCM with the following highlights:

1.) Iridium has been approved by IMO to provide GMDSS services commencing in 2020. This is a truly global voice and data service covering both polar regions.

2.) Special new shipboard terminals will be required for full GMDSS service and IEC will provide a test standard for the new terminals.

d. Canadian perspective from the Department of Transport – Alexandre Lavoie of Transport Canada reported that they are generally aligned with U.S. policy in matters affecting maritime safety. They are requiring AIS on small passenger vessels and others above 65 feet. The Great Lakes Agreement is of concern because amendments are difficult and time consuming. They would actually prefer that the Agreement be cancelled if both countries agree.

e. “911 Type Response” to Emergency Calls on Satellite Systems – Joe Hersey provided background on this issue that arises when a non-GMDSS satellite system is allowed as a substitute for a required service such as MF-DSC which the U.S. does not offer. In granting the waiver, government authorities must be satisfied that the satellite system provides coverage for the vessels operating area and has a 24x7 watch for emergency calls.

f. ITU Study: Impact of Critical Mass Land Based HF Interference on Shipboard MF/HF Receivers – Joe Hersey also provided background on this issue that originated in ITU Working Group 5B and is a further concern for vessels using MF/HF-DSC as a safety service. The Task Force agreed to monitor developments at ITU

g. Task Force Effort to Facilitate Changing MMSI Number in DSC Radios. For some time, the Task Force has tried to make it easier to change MMSI numbers with limited success. Efforts by the Coast Guard to change international restrictions have generally been rebuffed by other countries that do not have the huge problem the U.S. has with millions of recreational boats. Current efforts to approach U. S. manufacturers have had mixed results with most saying they will change if the international guidance is changed. The European standards

organization, ETSI, has proposed that users be able to contact manufacturers to obtain a one-time code to enter into the radio that would clear the programmed MMSI and permit a new MMSI to be entered. Our best chance for easing the international rules may be to implement a solution such as that proposed by ETSI through an IEC TC80 Class D DSC Maintenance Team chaired by the U.S.

h. Analysis of Potential Interference Between Solid State and Magnetron Radars –

After extensive discussion it was agreed that Ross Norsworthy would study the issue and make a recommendation as to how to proceed.

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

a. Mobile Satellite Requirement for ‘911 type’ Guard in U.S. Waters. The FCC has been receiving numerous requests from regulated but non-SOLAS vessels for waivers of the GMDSS requirements for MF-DSC capability in view of the Coast Guard’s termination of coastal MF watches. These waivers usually propose substitution of a non-GMDSS satellite system. These requests are routinely coordinated with the Coast Guard before approval is granted. Required system satellite capabilities include back up power, external antenna, 24-hour service and a ‘911 type’ ability to locate the vessel and route calls to a responsible call center. In addition, a key issue is how far off the U.S. coasts the service is reliable. Further work on refining these requirements is needed.

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 the 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 principle to the waiver. The comment period ended 14 August 2017 and reply comments were accepted until 29 August. Final action awaits Commissioners decision.

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). The comment period ended 14 March 2017. The continuing holdup is Inmarsat’s unwillingness to provide a listing of users citing privacy concerns.

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 was 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's Petition on Small Passenger Vessels is included in the proposed RTCM updates. This Petition is still pending but action is uncertain in view of the current administration's de-regulatory policy.

7. Reports and Issues of the Service Agents and Manufacturers Group: Hugh Luppo reported with the following highlights:

a. IMEA has strong Interest in building a Master Website for MMSI Numbers: IMEA and NMEA are still quite interested in developing a master on-line database of all MMSI Numbers. Further sources of funding are being explored as IMEA continues to pursue the project.

b. Need to expand carriage requirements so that trainees can be trained on all equipment appropriate for Sea Areas A1, A2, A3 and A4. The Task Force will develop a Petition recommending special equipment requirements for Training Vessels to enable students to train on equipment they will find on ships operating in all areas.

c. Testing during inspections should verify that DSC Radios transmit Position: Inspections have revealed 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 draft revised Rec. M493-15 as currently drafted but not yet released by ITU-R would reinstate position report request capability in both Class D, E and Class H (handheld) VHF DSC radios. The Task Force agreed to take on this issue, ETSI Standard EN 300 338-4 applies to Class E radios.

d. LED Lighting Emissions Possibly Interfering with AIS/VHF. As lighting using LED technology is becoming more common in maritime applications there is concern that it may be severely desensitizing shipboard VHF radios and AIS. The USCG issued a Safety Alert regarding this matter and BOATUS made a news release to its members. There was consensus to amend the FCC's radio inspection check lists to include a check to ensure LEDs do not interfere with VHF marine radios or with AIS.

e. Solid State Radars Incompatible with Racons and Radar SARTs. The U.S. submitted a paper to NCSR-5 suggesting elimination of Radar SARTs that did not receive approval. The IMO/ITU Experts Group considered the matter and decided to retain the radar SARTs as currently designed. There was no support for improving the radar SART.

f. NMEA "One Net" Standard nearly ready for release. Beta testing of the standard is underway and they hope to publish the standard in 2019.

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

a. 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 the intent to open a dialog on the need to register with NOAA for MMSI numbers and connect GPS to DSC Radios.

b. Developments in Cybersecurity. There were no new reports under this item but earlier in the RTCM sessions Captain Glenn Hernandez (Ret.) moderated a discussion of cybersecurity with three presenters followed by a workshop with David Levin. We will plan to schedule further presentations at the next Task Force meeting.

c. VHF Radios in Public Address Mode need to Maintain Channel 16 Watch – This issue was raised by Gordon West in a June email to Bob Markle. A whale watching vessel compulsorily fitted with an inspected VHF radio was using the radio's Public Address feature to broadcast to the passengers for extended periods. With this particular radio, use of the PA feature blocks the required channel 16 guard. The Task Force will investigate the extent of the problem with other VHF radios and formulate an action plan.

d. Licensing Seminar by Ghassan Khalek, Rich Beattie and Russ Levin – This informative session was conducted earlier in the Joint meeting and answered typical questions about licensing procedures. A question about fleet licenses prompted the response that if any vessels in the fleet had DSC or AIS equipment, separate individual licenses were required. Useful contact information was also provided:

To apply for a License: <http://wireless.fcc.gov/uls/index.htm?job=home>

To request help: <https://esupport.fcc.gov/onlinerequest.htm>

To call for help: 1-877-480-3201

9. Reports and Issues, Recreational Vessel Group: David Kennedy reported with the following highlights:

a. 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. The issue generated much discussion at the meeting but can only be resolved by a government solution by the FCC and the Coast Guard. A proposal to address the situation was included in the Coast Guard's and RTCM's Part 80 Petition to the FCC that is still pending adoption.

b. Modify Voluntary Inspection Check List to Invite Discussion on MMSI Registration and Connection of GPS. 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 registering with NOAA for an MMSI number and the need to connect GPS receivers.

c. The Task Force Petition to Require Emergency Beacons on Recreational Vessels Offshore. The Task Force proposal to require emergency beacons on R/Vs offshore has been neither approved nor rejected but is not expected to advance during the current administration in view of their deregulatory policy. 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 with DSC and connected GPS for use within 20 miles of the coast.

d. New DHS/Coast Guard “Ready for Rescue Challenge Competition.” This new effort is to come up with an innovative solution of locating persons in distress on or in the water. The Coast Guard Research and Development Center is partnered with the Homeland Security Science and Technology Directorate to manage the competition. Persons participating in the challenge were to submit their concept by 15 October. Winning solutions will compete in phase II and in Phase III the Coast Guard will field test prototypes and the judging panel will award prize money.

e. Change in Leadership for the Recreational Vessel Group; David Kennedy of BOATUS has led this group for many years and the Task Force thanks him sincerely for this effort. He has offered to pass the chairmanship on to George Hallenbeck of the U.S. Power Squadrons and George is willing so we welcome him as the new leader for this group.

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

a. GMDSS Question Pool Revisions: 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. There are presently 10 GMDSS instructors participating in the review and it was suggested that FCC designated COLEMs also be invited to participate.

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 there may be other alternatives that should be considered.

c. Possible Recertification of GMDSS Operators Every Five Years. There has been a strong consensus among training specialists that licensed GMDSS Operators should be required to be recertified periodically but it seems unlikely that the Coast Guard’s National Maritime Center would entertain such a proposal after years of accepting FCC’s Licenses for Life and the lack of compelling evidence supporting the need for recertification.

11. GMDSS Modernization. Bob Markle noted briefly that modernization was still an active project at the International Maritime Organization, but their procedures require a lot of time. It is helpful that Iridium has been accepted as a GMDSS satellite service provider and will hopefully be able to provide formal GMDSS services by 2020. The GMDSS Modernization Correspondence Group that Bob chairs is still active in both NCSR and the IMO/ITU Group of Experts.

12. Review Summary Record of 24 May 2018 Meeting and Continuing Work List. The summary record 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. Task Force Recognized for 25 years of Service. During the earlier RTCM sessions, Rear Admiral David Dermanelian, on behalf of the Commandant, presented Jack Fuechsel with a Distinguished Public Service Award recognizing his service as Director of the GMDSS Task Force since 1993. The citation acknowledges Task Force roles in formulation and implementation of the GMDSS and its significant contributions to maritime safety.

14. Next Meeting of the GMDSS Task Force: The next regular Task Force meeting will be held at 9:30 am at the RTCM Headquarters in Arlington, Virginia on 10 January 2019.

GMDSS TASK FORCE CONTINUING WORK LIST

27 September 2018

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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