

NATIONAL GMDSS TASK FORCE

Newsletter and Summary Record of 11 January 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 11 January 2018 at the RTCM Headquarters in Arlington, Virginia.

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

Inmarsat Introduces SafetyNET II, RescueNET and Satellite Migration
Hersey Email of 9 Nov on "911" Capability for Emergency Use of Satellite Comms
Hersey Email of 15 Nov on Critical Mass Interference to Shipboard HF Receivers
Hersey Email of 26 Dec on U.S. Paper to NCSR-5 on INS Standards

5. **Reports from Other Agencies:**

a. Inmarsat Update by John Dodd, Inmarsat Safety Services: John reviewed new developments with the following highlights:

1.) Some of the changes in the Inmarsat constellation as they migrate from the I-3 series of satellites to the I-4 constellation.

2.) In addition to the new satellites, new ship terminal standards will be needed to accommodate new services as well as a new series to accommodate Iridium GMDSS services. The new terminals should include an MRCC look up capability and be able to search to identify other nearby vessels. So far JRC and Cobham have new Voice Distress terminal designs awaiting IMO approval.

3.) SafetyNET II is an enhancement to SafetyNET, enabling MSIPs to broadcast Maritime Safety Information simultaneously to Inmarsat C, Mini C and FleetBroadband Safety terminals via an interactive web interface giving greater flexibility, control and monitoring of their broadcasts.

4.) Another new system, RescueNET provides, RCCs with additional flexibility and functionality such as Broadcast of SAR MSI to Inmarsat C, Mini C and FleetBroadband Safety terminals, Access to additional Inmarsat databases, RCC lookup, nearby vessel lookup, Priority Messaging ship to shore and shore to ship, as well as Distress Chat. This service is free to RCCs.

5.) Fleet Safety, the Inmarsat FleetBroadband Safety terminal is currently under GMDSS approval by the IMO and enables seafarers to receive MSI, Distress Alert, Voice Distress, Distress Chat, Priority Messaging, Distress Chat and also facilitates pre-voyage planning with the availability of the 30 days of still active alerts on demand. There will also be an archive of all shore to ship and ship to shore broadcasts for 3 years held on the Inmarsat Maritime Safety Servers. In response to questions, John indicated that Inmarsat had no plans to discontinue Inmarsat-C.

b. Introduction of New GMDSS Website by Darren Wright of NOAA/NWS: This Website is a product of the Worldwide Met-Ocean Information and Warning System (WWMIWS) which is being updated as part of the GMDSS. The website, <http://weather.gmdss.org>, is hosted by Meteo-France in partnership with JCOMM and WMO. Meteo-France has suggested major updates to the format and Metarea Coordinators for each of the 21 NavMet areas have been invited to review the plans and make recommendations. Members desiring more information are advised to contact darren.wright@noaa.gov.

c. Introduction to Simplified Consolidated Communications Consoles for GMDSS & Other Command and Control Systems by Frequentis: Alexander Neuhaus and John Wherry of Frequentis made a presentation entitled Integrated Control Center Solutions for Maritime. The firm, with a local office in Columbia, Maryland has utilized these concepts in work for the U.S. Navy, the Canadian Coast Guard, and multiple other entities around the globe that is very similar to the integration of facilities to concentrate GMDSS services in both shipboard and land based MRCC consoles. The concepts embodied in their design include ISO 9001 compliance, Commercial Off the Shelf components, and cyber security net-worthiness.

6. The Coast Guard Reports: Russ Levin, Derrek Croinex and Joe Hersey reported with the following highlights:

a. MMSI Management and Assignment Policy Issues. It was 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.

b. The Task Force Petition to Require Emergency Beacons on Recreational Vessels Offshore. Captain Scott Johnson was introduced to the Task Force. He is the new leader of the Coast Guard's Office of Boating Safety and Coast Guard Auxiliary affairs. The Task Force proposal to require emergency beacons on R/Vs offshore has not been either approved or rejected but is not expected to advance during the current administration in view of their deregulatory policy. It is expected, however, 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.

c. Planning for the IMO's NCSR-5 Session in London 19-23 February 2018: Derrick Croinex and others reported that the U.S. had an input paper seeking to phase out the Radar SART in view of its inferior performance relative to the AIS SART and a growing feeling that Radar SARTs and Racons are restraining new Radar developments. There will also be a paper on Ship Earth Station (SES) standards needed for the expected approval of the Iridium system as a recognized GMDSS provider. A public meeting to review the Agenda for the NCSR-5 meeting will be held at the RTCM headquarters on February 13th, persons planning to attend are asked to call George Detweiler at 202-372-1566 by the 6th of February.

d. New Coast Guard CRADA for Direction Finding on Cell Phone Transmissions: Jack Fuechsel reported on this new development which builds on the R&D Center's earlier work to ensure that position information is retained when calls come in through 911 call centers. This new effort is at a very early stage and the project leader indicated that there was nothing to discuss now but a further report will be scheduled for the next meeting.

e. New Issue on "911 Type" Capability for Emergency Use of Satellite Communications Systems: FCC regulations require mobile satellite systems operating in the U.S. to have a 911 type of capability including locating and identifying the originator of the emergency call and routing the call to a responsible 911 type center. While the FCC Regulation applies to satellite systems operating in the U.S. or in U.S. waters, their jurisdiction is less clear offshore unless they have made it a condition of granting a waiver for an alternative system. There are also numerous operational issues that need to be explored.

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 and some results are now becoming available which indicate that there is such a potential for interference. A full report is planned for the next RTCM Assembly in September.

g. ITU Study of Critical Mass Land Based HF Interferers on Shipboard MF/HF Receivers: Joe Hersey provided information on this report of a study presented at the ITU

meeting in November. The essence of the shared use assumption is that the shear distance between the land sources and ships at sea would be sufficient to protect receivers operated within the Maritime Mobile Service. As interfering sources increase in number a critical mass could be reached that would cause a notable negative effect on shipboard MF/HF receivers.

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

a. 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 upgrades of the coastal networks. 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. Ghassan Khalek and Russ Levin met with all concerned in Seattle recently and have agreed on necessary changes. The FCC will adopt a much stricter policy on waivers and Russ Levin will revise the Coast Guard's NVIC 3-99 outlining GMDSS requirements

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 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). 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 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 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.

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

a. IMEA has strong Interest in building a Master Website for MMSI Numbers: 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. Further sources of grant funding are being explored as IMEA continues to pursue the project of simplifying connection of GPS to DSC radios and the master database.

b. 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 September 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.

c. Testing during inspections should verify that DSC Radios transmit Position: Hugh Lupo reported at the September 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. This item was carried over to the next meeting.

d. NMEA “One Net” Standard nearly ready for release. Beta testing of the standard is underway and likely to take about a year to complete. This item was carried over to the next meeting.

9. Reports and Issues of the Commercial Vessel Task Group.

a. Action to develop Task Force recommendations to the FCC to clarify the F/V waiver procedures and clarify GMDSS requirements. This item has been resolved by action to be taken by the FCC and the Coast Guard (see paragraph 7.a. above)

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 the intent to open a dialog on the need to register with NOAA for MMSI numbers.

c. Developments in Cybersecurity. There were no new reports under this item.

10. Reports and Issues, Recreational Vessel Group: David Kennedy moderated the discussion on Recreational Vessel issues with the following highlights:

a. New Streaming Video Tutorial from the U. S. Power Squadrons: George Hallenbeck announced the new video which should be helpful to those who are confused about the requirements and the importance of maintaining a current registration.

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, registering with NOAA 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. The issue will be placed on the agenda for regular FCC/Coast Guard meetings.

11. 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.

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. Russ reported that he did call NMC and explained the question, he was told they would check and call back but so far have not done so. Russ will follow up.

12. 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 still expected that Iridium will be accepted as a GMDSS satellite services provider, probably in 2020. The GMDSS Modernization Correspondence Group which he chairs is still active in both NCSR and the ITU Group of Experts.

13. Review Summary Records of 27 September and 30 November 2017 Meetings and Continuing Work List. The summary records of both meetings are 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.

14. Next Meeting of the GMDSS Task Force: The next regular Task Force meeting will be held at the RTCM Headquarters in Arlington, Virginia on 24 May 2018. The follow-on meeting will be held at the PGA Resort in West Palm Beach, Florida during the Joint Annual meetings of the Radio Technical Commission for the Maritime Services (RTCM) and the National Marine Electronics Association (NMEA).

GMDSS TASK FORCE CONTINUING WORK LIST

11 January 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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