

eNATIONAL GMDSS TASK FORCE

Newsletter and Summary Record of 24 May 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 24 May 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:
 - 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 29 March summarizing ETSI and CIRM on resetting MMSI
 - Levin Email of 22 March on Instructor to Student ratio for GMDSS Training
 - ALCOAST 4/18 of 1/05/18 on Coast Guard Unmanned Aircraft Systems (UAS)
 - Hersey Emails of 8 & 20 May on I-3 TO I-4 Migration for Inmarsat-C Users
 - 1 May Revision of Allocation of U.S. MMSI Numbers
 - NCSR 3/INF.14 on Interference from LED Lighting
 - MARAD Advisories 2018-006 (Cyber Exploitation) & 2018-007 (GPS Interference)
 - Sector Anchorage News on VHF Coverage in Prince William Sound
 - Coast Guard Testing New Method for Delivering Marine Safety Information (MSI)
5. **The Coast Guard Reports:** Russ Levin, Derrek Croinex and Joe Hersey reported with the following highlights:
 - a. **Introduction of Captain Joseph Sundland, Chief of Telecommunications.** Captain Sundland outlined briefly the recent reorganization of CG-6 at Coast Guard headquarters where

he became the Chief Technology Officer, CG-67, and Derrick Croinex became Chief of the Office of Spectrum Policy and Telecommunications Management, CG-672.

b. Report on the IMO's NCSR-5 Session in London 19-23 February 2018: Derrick Croinex and others reported that recent action by IMO's Maritime Safety Committee (MSC) dealt with some of the issues raised by NCSR-5. In particular, the next NCSR meeting will probably be 8 days rather than the usual 5 in an effort to make more time available for the increasing workload. In another decision, MSC accepted the Iridium Satellite System as a recognized provider of GMDSS services subject to completion of certain preliminary steps needed to meet all requirements. China has submitted a paper to the MSC to start the approval process seeking Recognition of a new Messaging System hosted by their BeiDou Navigation Satellite System.

c. Inmarsat's Migration of Services from the I-3 to the I-4 Constellation Causing Brief Outages to Users of Inmarsat-C Terminals. Joe Hersey reported that the migration from the (AORW) I-3 satellite to the (AMER) I-4 satellite scheduled for 9 May 2018 caused brief outage of Inmarsat F-77 services. In the same fashion, the migration from the (POR) I-3 satellite to the (APAC) I-4 satellite scheduled for 9 July 2018 is expected to proceed smoothly. Nevertheless on 8 November 1977 AORW experienced a brief Inmarsat-C GMDSS outage unrelated to the transition which was not reported to IMO.

d. Coast Guard Policy on Unmanned Aircraft Systems (UAS). One of the information papers distributed was Coast Guard ALCOAST 4/18 setting forth the policy outline. We were not able to arrange a briefing for this meeting but will attempt to schedule it for a future meeting.

e. 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 a potential for interference. A full report is planned for the next RTCM Assembly in September 2018.

f. 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 an ITU meeting. The essence of the shared use assumption is that the sheer 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. This issue will be carried forward awaiting further information.

g. Coast Guard Introducing New Delivery Method for Marine Safety Information (MSI). The Coast Guard's Fifth District, comprising the states of Delaware, Maryland, Virginia and North Carolina in cooperation with the Coast Guard Navigation Center, is testing a system to make available to mariners by internet delivery, information currently only available through broadcast notices to mariners. Mariners may request delivery by topic or the 25 most recent notices from any of the four Sectors or all of the Fifth District. The system has been under test

since January of this year and has the potential to become a standard throughout the Coast Guard. For more information contact the NAVCEN for Subscriptions.

h. Coast Guard Sector Anchorage, Alaska Advises Limited VHF Coverage in Prince William Sound. A news release from the 17th Coast Guard District lists the following areas of Prince William Sound as lacking a channel 16 VHF Radio guard: North Western Prince William Sound, Port Wells, Whittier, Northern Culross Passage, and Passage Canal.

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

a. Further developments in GMDSS Requirements for Alaskan F/V above 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. 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 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.

c. 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.

d. 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.

e. 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:

a. IMEA has strong Interest in building a Master Website for MMSI Numbers: Jack Fuechsel reported that IMEA and NMEA are still quite interested in developing a master on-line database of all MMSI Numbers. The IMEA applied for grant funding for a related project endorsed by the Task Force letter of 13 January but were not successful. 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. Hugh Lupo recommended that the Task Force undertake a new issue regarding 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: Hugh Lupo reported 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, 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 increased concern that it may in some instances be severely desensitizing shipboard VHF radios and AIS. An old IMO paper from France, NCSR 3/INF.14 of 23 December 2015 and a new input to ITU-R WP5B dated 14 May 2018 summarized the problem. France recommended that relevant standards be updated to address this problem. The Task Force will monitor this issue pending further developments. The USCG is considering issuing a Safety Alert regarding this matter.

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 but is getting further study along with the Racon problem. The Task Force will monitor this issue pending further developments.

f. 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.

g. NMEA “One Net” Standard nearly ready for release. Beta testing of the standard is underway and likely to take about a year to complete.

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 it was noted that there are a number of on-line Newsletters dealing with various aspects of Cybersecurity. One of these is Phish & Ships, a monthly Newsletter published by JWC International, see www.becyberswareatsea.com. Members are requested to nominate other Cyber Newsletters worthy of listing as resources.

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

a. 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.

b. 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. Pending its adoption, the issue will be placed on the agenda for regular FCC/Coast Guard coordination meetings.

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 for use within 20 miles of the coast.

d. The Coast Guard Summary of MMSI Allocations Updated. One of the Information Papers distributed was a 1 May update to a master list of U.S. MMSI numbers indicating the government Agency or Licensing Agent responsible for each block of numbers.

e. Note the new Website, www.BoatBeat.org which Includes Radio Fact Sheets.

10. Reports and Issues of the Training Task Group. Jack Fuechsel reported 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. Ghassan Khalek reported that he has the authority to modify or eliminate questions from the standardized pool if they become obsolete or confusing. The Task Force asked that any such changes made at his level also be promptly any reported to the Coast Guard's NMC and the head of the Task Force Training Group.

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. Status of NMC Oversight of Student to Instructor Ratio in GMDSS Training. Russ Levin agreed to contact the Coast Guard's National Maritime Center and the response was that they did not have a rigid policy in this regard but considered a ratio of 1 instructor to 6 students to be an appropriate goal. It was considered especially appropriate that a single instructor not attempt to train more than 6 students in the equipment lab at the same time.

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 which Bob chairs is still active in both NCSR and the IMO/ITU Group of Experts.

12. Review Summary Record of 24 May 2018 Meetings 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.

(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

File: TFSR-93.doc