

NATIONAL GMDSS TASK FORCE

Newsletter and Summary Record of 16 May 2019 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.

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 16 May 2019 at the RTCM Headquarters in Arlington, Virginia.

4. **Distribution of Information Papers:** The following Papers of interest were distributed and are available to all on the website

GMDSS Circ23 on new GMDSS Master Plan of Shore Facilities

Guidelines for Approval of Training Courses and Programs

ITU R-Rec-M.493-15 on new ITU DSC Standard

Joe Hersey Email of 2/21/19 on Results of USCG/FCC Meeting affecting Task Force

MSC 101/11/1 on Interim Preliminary Draft Iridium Safety Cast Manual

FCC Public Notice Transition and Outreach Plan re Withdrawal as Accounting Auth.

New Draft Inspection Check Lists: AIS, Bridge to Bridge, FCC GMDSS;
Great Lakes, Small Passenger Vessels

5. **The Coast Guard Reports:** Several presentations previously scheduled for the meeting on 10 January had to be deferred until the May meeting because the presenters were not available on the 30 January rescheduled date. Russ Levin and others reported with the following highlights:

a. **Report on MMSI's for Diver Radios** – Joe Hersey reported that discussions at the joint FCC/USCG meeting revealed that the FCC has not yet agreed that MMSI providers have the legal authority to grant MMSI's to radios used by divers but not associated with a specific boat, but that question is still open.

b. Use of Four Digit Channel Numbers on VHF Marine Radios – Joe Hersey reported that some manufacturers had recently begun to include at least as an option, four digit channel numbering as decided by the ITU. These four-digit channels could eliminate confusion in the U.S. caused by Duplex Channels being used as Simplex channels because the other half of the duplex channels were allocated to land mobile uses by the FCC. Now that radios capable of displaying four digit channels are beginning to be available, the Task Force will consider means for educating users in them.

c. Enabling Aircraft to Contact Merchant Ships in Emergency – Jim Stabile of Aeronautical Data Systems (ADS) outlined a new system he developed that uses marine VHF-DSC handheld radios on Aircraft to alert merchant ships that an aircraft in distress is approaching the ship's position and may need to ditch alongside. Merchant ship locations are made available to the aircraft from a near real time database of AIS derived positions. Aircraft in distress can legally use any means of communications available but to create an approved system for pre-positioning equipment on aircraft is more complicated, for instance how to assign an MMSI number for use in emergency? Jim's proposal stimulated discussion and at least one suggestion that a proposal be introduced to the Joint IMO/ICAO Conference for recognition.

d. Update on LED Lighting and Interference to VHF Radios – Russ Levin reported on this problem noting that at least one firm was offering LED Lights which did not interfere with the radios and that general guidance was to keep even IEC 60945 compliant LED lights at least 15 meters from VHF antennas. Other LED lighting should not be used near antennas at all unless tests confirm an absence of interference. Subsequent to the Task Force meeting, the RTCM Board of Directors authorized a new Special Committee to address the issue and recommend standards.

e. IMO's MSC Session 101 will Revise Resolution A.1001 in Light of Iridium Acceptance – Joe Hersey noted that revisions were found to be needed due to shortcomings discovered during the review of the Iridium system. The Resolution sets the conditions for acceptance of new providers of satellite service in the GMDSS and the Iridium System has been provisionally accepted. *Note: IMO MSC 101 agreed to include this work item.*

f. IMO's MSC Session 101 will examine the Navigational Decision Support System (NDSS) to improve Collision Avoidance – We will carry over this item to see what action the Maritime Safety Committee (MSC) takes. *Note: MSC 101 did not accept this work item.*

g. IMO's Master Plan of Shore-Based GMDSS Facilities – Joe Hersey reported that IMO's GMDSS Circ23 announces a new format for the Plan that is now a GISIS Database. The new plan requires that Administrations notify IMO when discontinuing a GMDSS Service.

h. Iridium Developing New SafetyCast Service to distribute Maritime Safety Information (MSI) – Kyle Hurst provided an update on measures Iridium is taking to be ready to offer full GMDSS service noting that MSC 101 is expected to approve an Interim Preliminary Draft Iridium SafetyCast Manual for MSI dissemination. Equipment development is also moving

ahead with new Iridium Ship Earth Stations ready for certification. *Note: MSC 101 did approve the draft manual as proposed.*

i. ITU will consider New AMRD Devices – New devices such as AIS and mobile Aids to Navigation devices will be considered as part of the Autonomous Maritime Radio Devices (AMRD).

j. RTCM SC-119 will Reopen its Man Overboard Devices Standard to Address IMO and ITU Positions: Joe Hersey raised this issue because IMO and ITU have prohibited DSC being used on man overboard devices unless they also use an AIS capability. IMO NCSR 6 also asked that AIS MOB devices have DSC to avoid AIS being used as a Distress Alerting system. The RTCM Standard and ITU permit both Open Loop and Closed Loop DSC man overboard systems. SC-119 will meet to address and reconcile, the differences between the RTCM and ITU standards.

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

a. MMSI's not Registered with ITU MARS for all R/Vs Going Foreign: This issue has been known for some time but is currently being addressed to see if there is some way to screen the FCC database to determine those MMSIs which still should be notified to ITU.

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 system capabilities include back up power, external antenna, 24-hour service and a '911 type' ability to locate the vessel and route vessel calls to a responsible call center. In addition, a key issue is how far off the U.S. coasts the service is reliable. The FCC/USCG Forum will consider whether any further action is needed.

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 taken final action on this issue and will discontinue its role as an accounting authority effective 22 April 2020. 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 FCC/USCG Forum will further consider whether to request Inmarsat assistance in notifying affected users.

d. RTCM Petition for Extensive Update to FCC Rules, Part 80: There has been no new action on this long pending issue but an extensive update to the Aeronautical Rules was recently published which raises hope that the Maritime Rules Update will soon follow.

7. **Reports and Issues, Recreational Vessel Group:** George Hallenbeck reported 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 hopefully 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 to VHF radios. This issue has been on hold pending completion of updates to a series of mandatory GMDSS Checklists that has now been completed and may affect the proposed additions to the voluntary checklists.

b. 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.

c. 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. The handout provided announced the selection of five Phase I winners who each received a \$5000.00 prize and 16 Honorable Mention winners. In Phase II winners can pitch their solutions in a "Piranha Pool" to compete for \$120,000.00 in prizes to assist winners in developing a working prototype for Phase III testing alongside standard USCG approved safety equipment with a further \$110,000.00 in prizes.

d. Sea Tow Discontinuing Issue of MMSI Numbers. George reported that Sea Tow had elected to stop issuing MMSI Numbers and that the Power Squadrons would take over that block and manage its existing MMSI holders. There was a problem however, in that a number of duplicate MMSI assignments had been made and the USPS did not want to take responsibility for the Sea Tow assignments until the duplicate assignments had been resolved. It was determined that George would meet with Russ Levin and David Kennedy at BOATUS in the near future to resolve the problem but so far that meeting has not been held.

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

a. Revised Radio Inspection Checklists for GMDSS; Small Passenger Vessels; Bridge to Bridge; Great Lakes Vessels; and a New Checklist for AIS Inspections: This project has been underway for some time by email and the final editing was done in a special

afternoon session following the morning Task Force meeting. Once accepted by the FCC, the final versions will be posted on the FCC website.

b. Modified Voluntary Check Lists to Include Discussion of MMSI Policy and GPS Connections 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.

c. Developments in Cybersecurity. There were no new reports under this item. The Coast Guard has promulgated outlines of Cybersecurity goals for various segments of the maritime industry, most recently addressing port facilities. The Task Force is awaiting development of a Cybersecurity game plan by the RTCM to see how we might best support that plan. The RTCM Annual Assembly will include a Cybersecurity Session similar to last years.

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

a. Watch Continuity should be Maintained when VHF Radios are used in the Public Address Mode. The issue applies to compulsory fitted small passenger vessels with more than six passengers such as whale watching vessels some of which operate their VHF in a public address mode for the entire trip that renders the channel 16 guard inoperative. A survey of the various VHF manufacturers is needed to determine which radio models fail to guard channel 16 in the PA mode.

b. 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 was prohibited by Rec. ITU-R M. 493-14 in class D, E, and H (handheld) radios. ITU-R M 493-15 reinstates position report request capability in all Class D, E and H (handheld) VHF DSC radios. ETSI Standard EN 300 338-4 applies to Class E radios. The Task Force will review whether any further action is needed.

c. 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.

d. Are Solid State Radars Incompatible with Racons and Radar SARTs? This item is a copy of the report from the January 2019 report and is retained while the Task Force determines whether further action is needed: Joe Hersey reported that unless the radar's peak transmitter power is high enough to trigger the racon or radar SART, the radar will not be compatible with either device. IMO requires that X-Band radars carried on ships subject to the SOLAS Convention be compatible with both racons and radar SARTs. Solid state radars of sufficient peak pulse power can be compatible with racons and SARTs, but lower power (e.g. FMCW) radars will not be compatible. Note that RTCM's recently adopted RTCM standard

11201,0 for Marine Radar Equipment for Ships Not Required to Comply with SOLAS Radar Carriage Requirements does not require compatibility with racons or radar SARTs

10. Reports and Issues of the Training Task Group. Kurt Anderson 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. GMDSS Modernization is creating a need to revise many of the questions but the slow implementation of the new services has delayed the formal adoption of new questions. Consultation with the FCC and the Coast Guard has determined that the adoption of new questions should proceed now, especially those dealing with Iridium.

b. Whether COLEMs and Training Schools are Actually Following Coast Guard and FCC Guidance in Generating 100 questions Exams is Under Review. This item is copied from the January 2019 report pending government guidance: Kurt has raised issues that have not yet been fully addressed by the government sponsors. Russ Levin will contact the responsible parties at their National Maritime Center (NMC) and then meet with the FCC to resolve any pending issues and provide guidance to the Task Force Training Group.

c. 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. Because neither the Coast Guard nor the FCC wants copies of the inspection reports, it is hard to determine the qualifications of the persons actually doing the inspections.

11. GMDSS Modernization. Bob Markle noted briefly that modernization was still an active project at the International Maritime Organization. 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 1 January 2020. Among issues yet to be resolved is whether duplication of satellite terminals requires one each of Inmarsat and Iridium or whether there could be two of the same service. The Chinese are asking that their satellite navigation system, BeiDou, which also has a communication component, be accepted as a GMDSS service provider, this will be referred to NCSR for evaluation that will probably be assigned to IMSO.

12. Review Summary Record of 30 January 2019 and Continuing Work List. The summary record of this meeting 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 1:30 pm on 19 September 2019 in Portsmouth, Virginia during the Joint Annual Assemblies of the RTCM and the NMEA scheduled for 16-20 September 2019 at the Renaissance Hotel. The Assembly will have a very strong agenda of many technical papers and

updates plus more than 50 exhibits of likely interest to Task Force members. The Coast Guard has agreed to make a Fast Response Cutter available for tours on the afternoon of Wednesday 18 September. Please see <http://www.expo.nmea.org> for information about the Assemblies. Registration is not necessary for cutter tours or attending the Task Force meeting.

GMDSS TASK FORCE CONTINUING WORK LIST

16 May 2019

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 better FCC & USCG management of annual GMDSS inspections (CV)
24. Maintain Inspection Guidelines and Check Lists for selected vessel types (CV)
25. Advocate voluntary training programs for users of GMDSS systems (RV)
26. Encourage GMDSS handbooks and Internet and video training aids (RV)
27. Encourage users of VHF-DSC to Register for MMSI and connect GPS (RV)
28. Advocate FCC let R/Vs retain existing MMSI when applying for Station Lic. (RV)
29. Encourage Mfgs. to upgrade GMDSS explanations in equipment manuals (SA)
30. Recommend proper interconnection of GPS receivers with DSC Radios (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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