GMDSS TASK FORCE

Newsletter and Summary Record of 16 April 2025 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 the Radio Technical Commission for Maritime Services (RTCM) and held 16 April 2025 in person/hybrid during the RTCM Annual Assembly at the One Ocean Resort in Atlantic Beach, Florida. The Task Force is 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 the Director, Bill Cairns, at gmdsstf@rtcm.org. Members who are unable to attend Task Force meetings are invited to participate by email correspondence and to connect with Task Force meetings by conference call or virtual meeting platform. This Newsletter goes out to over 6000 members after each meeting. The Task Force also maintains a website at https://www.navcen.uscg.gov/task-force-background.

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 NAVCEN web site and the RTCM web site. The GMDSS Task Force held an in person/hybrid meeting on 16 Apr 2025. The meeting was attended by 43 members in person, through Microsoft Teams, or by phone.

4. Distribution of Information Papers:

a. The following Papers of interest were displayed and are available to all on the website: https://www.joecel.com/GMDSSTaskForce

2024-SC121-0153 RTCM SC121 FCC updated Statement Rev1.pdf
2025-ARC-0001 RTCM Comment 23-135.pdf
2025-GEN-PET-0002 RTCM Pt 95 Petition.pdf
COMSAR.1/Circ.32 (Rev.3) - Harmonization of GMDSS Requirements For Radio Installations
Elite Navigator M24A0269-ENG.pdf.
FCC GPS alternatives DOC-410436A1.pdf
FCC KDB 553680 Part 80 Marine HF Radio Frequencies.pdf
FCC NG911 DOC-410438A1.pdf
FCC Wireless 911 location DOC-410440A1.pdf
NCSR 12-1 – Agenda for the 12th session of the NCSR Sub-Committee

5. Recreational Vessel Group: Gene Danko from the US Power Squadron led the Recreational Vessel Task Group discussion, emphasizing the importance of the work done for

recreational mariners. He mentioned that small boats outnumber big boats by about 1000 to one and are highly under-regulated compared to commercial mariners.

Gene highlighted the structured problem-solving and market response over the years, which has reduced the task list from a dozen items 10-20 years ago to just two items now. This indicates that they are effectively reducing risk for recreational mariners.

a. Report of the National Boating Safety Advisory Committee: Brian Moore from the Coast Guard's Office of Boating Safety provided an update on the National Boating Safety Advisory Committee, mentioning the committee is being reformed under the new Administration and the upcoming virtual meeting of this Committee is tentatively planned for October.

6. Commercial Vessel Task Group: The Director sought additional contributors to the Commercial Vessel Task Group. Those expressing interest were Bill Haynes (Furuno), Eric Verdin (USCG), and Eric Weber (American Radio Association).

7. Service Agents and Manufacturers Task Group: Bill Cairns requested assistance to reinforce the Service Agents and Manufacturers Task Group, asking for volunteers from the group. Abel Jarque (Intellian) expressed interest in contributing to this group.

a. GMDSS Inspection Procedures: Eric Verdin from the USCG Outer Continental Shelf National Center of Expertise (OCS NCOE) gave a brief on the procedures for conducting GMDSS inspections, emphasizing the importance of verifying certificates and the competency of operators.

Coast Guard marine inspectors primarily look for certificates from FCC licensed technicians and the GMDSS approval certificates for equipment. They do not test the actual equipment, as that is the responsibility of the FCC technicians.

Verifying the competency of GMDSS operators is required by 46 CFR part 15. Inspectors ensure that operators are competent in using the equipment and navigation systems, and if they are not, they recommend training or other mechanisms to bring them up to speed.

Testing procedures for GMDSS equipment include conducting DSC calls and test calls to ensure the equipment is working properly and the operator is competent. It was noted that some manufacturers have a test feature for MF/HF DSC and operators can send test calls to the Coast Guard RCC to verify functionality.

8. Training Task Group: Kurt Anderson from MITAGS gave an update on the Group's efforts. Following on Eric Verdin's brief, he addressed GMDSS operator requirements noting the varying levels of scrutiny between different National Administrations. He noted a final draft was available of an Iridium STCW Lab proficiencies.

9. Coast Guard Reports: USCG reported the following highlights:

a. Planning for/results of IMO NCSR/MSC meetings: Patrick Gallagher noted the NCSR and MSC preparations. He also addressed limitations being placed on the US delegations (not only to IMO, but also ITU-R) as the new Administration establishes its positions. IMO NSCR-12 coming in May 2025: The United States is currently determining the way forward and

how/what we will do at these meetings. Until clear guidance is given the United States will mostly be monitoring topics rather than trying to lead the way. The new way forward impacted our ability to submit input papers and the only three papers the United States submitted were information papers on the annual AMVER report, Polar SAR response and information on Maritime Survivor Locating Devices (MSLD) for crew and maritime workers. NCSR-12 will cover the results of the IMO/ITU Joint Experts Group from October 2024. Of interest to this group Agenda Item 5: Developments in GMDSS Services, including guidelines on Maritime Safety Information - the NAVTEX Report, the Iridium Performance Report, the Inmarsat Performance Report, and the Enhanced Group Call Report. Besides the long-term nature of some of the United States long term NAVTEX outages the reports were just routine reports. Additional items that may interest the Task Force include the efforts to deliver S-100 products to the field and the developments on the VHF Data Exchange System (VDES).
IMO MSC-110 coming after NCSR-12: We were unable to submit a new output request for the potential phasing out of radar SARTS in favor of AIS SARTS. We are currently holding this paper and hope to submit a version of this paper to MSC-111 in May of 2026. Of interest was a paper submitted by Germany on Background information on the risks emanating from the use of marine distress signals. This information paper discusses the testing of various flares and the results. 15 out of the 17 devices that were tested failed. (power point link below). The rest of the topics are not related to the GMDSS Task Force.

b. ITU/IMO Joint Experts Group: IMO/ITU Joint Experts Group from October 2024: Completed edits to the NAVDAT Manual, preliminary input to the World Radiocommunication Conference 2027 from the IMO position standpoint, discussed potential DSC updates needed in the guidelines, and MSI distribution to cover all approved satellite providers. The group prepared a liaison to ITU on Blockage of AIS signals caused by VHF Radiotelephony – the final conclusion is more work needs to be done on this topic. The US will continue to nudge this item to a final solution.

c. ICAO/IMO Joint Working Group: The annual session was held 4-8 NOV 2024 in Dublin, Ireland. In addition to IMO reporting on decisions made at NCSR and MSC including great concerns about NCSR/MSC workload, topics brought up by States/organizations included: A copy of JWG report is available in advance of the NCSR meeting May 2025.

d. NAVTEX outages: Patrick Geddes from the US Coast Guard addressed the issue of NAVTEX outages (12,450 hours), explaining the challenges with the age of their equipment and the efforts to improve the situation.
Equipment Challenges: Patrick Geddes explained that the main issue with NAVTEX outages is the old and obsolete equipment, which is difficult to repair when it goes down. The Coast Guard is working on developing the expertise and ability to repair some of the equipment components themselves to improve the situation. Network connectivity issues are a factor, and the Coast Guard is switching network providers from Verizon to AT&T in hopes of better response and reliability. He highlighted the need for better training of technicians to handle the older equipment. The Coast Guard is working with Nautel, the equipment transmitter provider, to develop training programs for their technicians. He discussed the efforts to replace the old NAVTEX equipment, although funding has been a challenge.

e. ITU-R WP5B Update: Johnny Schultz provided updates on the ITU Working Party 5B, including the review and advancement of several recommendations, the introduction of digital voice communications in the VHF maritime mobile band, and the adoption of two maritime study questions. He discussed the implementation of digital voice in the maritime

industry, highlighting the flexibility and the added capability it provides. WP5B has advanced several ITU recommendations, including M.2092-1 (VDES), M.1371-5 (AIS), M.585-9, M.2010-2 (MF NAVDAT), and M.2058-2 (HF NAVDAT).

The implementation of digital voice in the maritime industry involves introducing the technology on a secondary basis, ensuring it does not impose on the current system. This allows different countries to have different channel plans and designate specific channels for digital voice as needed.

The importance of backward compatibility with analog radios was emphasized, allowing for a smooth transition from analog to digital voice. The goal is to provide added capability without disrupting existing services.

Technical details on digital voice implementation were provided, including the use of single slot ATON messages and enhancements to locating devices like AIS SARTs and manual beacons. They also discussed the removal of channel management requirements and the introduction of new capabilities for digital voice communication.

f. LED Lighting: Joe Hersey discussed the status of EMC standards and the integration of RTCM SC137 work into IEC standards to protect devices from LED interference. He also mentioned the need to update standards to include frequency bands up to 6 GHz. He noted that RTCM SC137's recommendations were integrated into the ABYC navigation light standard to protect devices from LED interference. Joe Hersey explained that while there was no regulatory requirement yet, the standard was incorporated into IEC 60533, and certain equipment, like navigation lights, would need to comply with it.

g. Four Digit Numbering of VHF Channels: The Coast Guard previously issued a Maritime Safety Information Bulletin on this topic. Joe Hersey provided an update on the transition to four-digit channel numbers for VHF radios, noting that new radios are already being sold with the updated numbering system. Several commenters noted the differing responses from various manufacturers internationally.

h. VHF-FM voice blocking AIS on own ship and close by: Joe Hersey discussed the AIS blocking issue caused by VHF radio transmissions. RTCM SC117 has a voluntary standard to address this problem, and ITU WP5B is considering changes to the blocking standard for Class A and Class B AIS.

i. Status of Class D DSC Radios: Joe Hersey reported that RTCM SC101 developed recommended changes to the IEC Class D DSC Standard IEC 62238 and this work has been held since September 2023 by the IEC TC80 secretariat until the end of 2024 when GMDSS radio standards were completed.

j. Radar SART Performance: The United States submitted a paper to IMO Maritime Safety Committee 109th session. As part of the submission, they submitted a draft circular. The circular was approved but MSC did not act on the USCG attempt to get rid of the Radar SART and replace it with an AIS SART, but did invite USA to submit a request for a new output at a future session. The USCG will submit a paper requesting this topic be added to the NCSR Work Program. Currently, when radar SARTs fail, they are typically replaced by another radar SART vice an AIS SART. It was suggested that a Safety Alert by the USCG could recommend replacing radar SARTs with an AIS SART when the radar SART battery needs replacement.

k. AIS Mobile ATON: Joe Hersey noted that the RTCM SC121 AIS mobile ATON standard was completed and submitted to the FCC for rulemaking. The standard addresses fishnet markers and the transmission of course and speed information for mobile aids to navigation.

l. Changes to COMSAR.1/Circ.32: Joe Hersey discussed the revision 3 changes to COMSAR Circular 32, which now allows a single MF/HF radio installation to meet both primary and duplicated MF/HF radio installation requirements in Sea Area A3. The footnote in the circular included by MSC109 was incorrect in inadvertently applying this interpretation to Sea Area A4 as well and needed to be addressed.

m. Interpreting USCG uninspected fishing vessel carriage requirements: 46 CFR 245(c) addresses satellite communications capability. The USCG is developing a Safety Alert to notify the public that satellite system providers other than Iridium and Inmarsat do not meet the regulations for fishing vessels.

10. MMSI WG and related issues: Joe Hersey noted that the MMSI WG was going to meet on 17 April 2025. The following are being considered by this group:

a. MMSI Management: Registered MMSI data from FCC, ITU and all licensed-by-rule providers except Sea Tow are now being accepted by USCG MISLE (Marine Information for Safety and Law Enforcement) at least on a weekly basis. Federal MMSIs have been provided to the USCG by NTIA by spreadsheet, but that data has not been added into MISLE. USCG MMSIs are also not being updated in MISLE.

b. MMSI reset: RTCM SC101 draft Standard 10160.*0 Procedures for the Resetting of Own-Ship Maritime Mobile Service Identities (MMSIs) on DSC Marine Radios, and Setting and Resetting Static Data on Automatic Identification Systems (AIS)* has been circulated for voting. Voting closes on 21 June 2025. Once adopted and incorporated into DSC radios, users should find it much easier to reset their own-ship MMSIs in that radio. Standard Horizon and Icom have already included this feature in new models of their radios. Currently approximately 60% of DSC distress calls received by the USCG have an unregistered or false MMSI. This standard should allow that percentage to be reduced.

c. US Power Squadrons incorporation of Sea Tow-registered MMSIs: USPS is now ready to proceed assuming MMSI registered data and is arranging a meeting with the USCG to ensure that data submitted retains its integrity.

d. Amending MMSI registrations for devices that are stolen: The MMSI working group has been developing procedures for indicating in the MMSI registry that a radio has been stolen Gene Danko was recognized for contributing to this effort. Awaiting FCC review..
Note: Those procedures were completed at the MMSI Working Group meeting which met on 17 April. Procedures will be posted on the USCG NAVCEN website by summer.

e. MMSI impact on AIS navigation displays: The MMSI working group and RTCM SC129 have been studying the effect AIS devices having duplicate MMSIs will have on shipboard AIS displays. AIS SARTs, particularly those used on man-overboard devices, and AIS mobile AtoNs developed by RTCM SC121 may exhibit this problem. In reviewing the duplicate MMSI problem, it was also found that AIS used on search and rescue aircraft in which the 7th digit of its MMSI equal to zero will likely not be seen on ship's AIS displays. The USCG brought both these problems to the attention of the ITU-R, requesting they also notify IEC.

f. MMSIs for AIS used on autonomous vessels: USCG MSIB released today (16 APR 2025). Ship MMSI for larger vessels, AIS Mobile AtoN for smallest vessels. Vessel must have a hull number and be registered to have a ship MMSI. USCG has been developing a policy for autonomous vessels, but it is unlikely that policy will be completed anytime soon. Some but not all license by rule MMSI providers have been registering MMSIs used by autonomous vessels. The MMSI working group has consequently been discussing how best to proceed.

Note: As a result of the 7 April 2025 USCG Sector Maryland MSIB 10-25 *Autonomous Unmanned Vessel or Craft Operations*, which indicated that identifiers for autonomous vessels or craft may include AIS, the MMSI working group which met on 17 April agreed in principle on how MMSIs used for AIS on autonomous craft should be assigned and registered. Written procedures for inclusion on the USCG NAVCEN website will be developed at the next meeting of the MMSI working group, scheduled for 6 August 2025.

11. Satellite systems: Peter Broadhurst provided some updates on Inmarsat. Upgrades have been performed on all Land Earth Stations and Network Coordination Stations allowing the system to operate out to 2040 with no additional investment. Two new satellites are scheduled for launch in 2027. All manufacturers' new terminals now meet the latest performance standard. Mark Lawson of Iridium provided items of interest to the TF. Iridium providing 100% availability, no issues regarding outages below requirements in the past year. Launched Surface GMDSSS platform (Internet connected terminal) in Dec 2024. Certus is the existing Iridium data provision service, and this new service will allow everything in one terminal, including high-speed data, LRIT, SSAS, and all GMDSS services. Chris Hoffman gave an update on COSPAS/SARSAT activities. C/S first generation beacons within MEOSAR at FOC. First and second-generation ELTs in operational use.

12. FCC Reports: Ghassan Khalek and Katie Knox from the FCC provided updates on various topics, including the incorporation of IEC standards, inspection forms, and the status of the AIS fishnet marker NPRM..

a. Waiver of Rules to allow use of IEC Standard for MOB in the U.S: Katie Knox noted that a waiver of FCC Rules was being granted by the FCC on a case-by-case basis for MOBs, PLBs, AIS ATON, and EPIRBs to allow the use of the new International Standard IEC 63269 for MOBs in the U.S. The procedure is for manufacturers to request the Coast Guard first review the certification test report EPIRBs and devices using AIS before formally requesting a waiver from the FCC. An FCC position, intertwined with the Public Notice on Part 80 issue below, has not been finalized. Katie Knox explained that the FCC accepts and encourages the filing of new standards from entities like IEC to update their rules.

b. Part 80 Standards: Katie Knox reported that the FCC Public Notice for Part 80 standards had received comments, and the reply comments were posted. She noted that there was no date yet for action.

c. Notice Advising Inspectors Public Notice: Ghassan Khalek discussed the PN for advising inspectors on new certificates for GMDSS, SOLAS, etc. He emphasized the need to use updated forms and mentioned efforts to provide direct links to relevant entities to facilitate the process.

d. AIS Fishnet Markers: Regarding the status within FCC of AIS fishnet markers, it was noted that FCC Legal was reviewing the new standard for these.

13. Reports from other Governmental and International Agencies:

a. NOAA/National Weather Service: Darin Figurskey from the Ocean Prediction Center provided an update on the transition of the primary contact for the National Weather Service to Melinda Bailey.

b. Committee on the Marine Transportation System: Ashley Chappell reported on the issues at CMTS. The major focus areas of CMTS are Maritime Workforce, Executive Order on Maritime Dominance and Shipbuilding, and the SHIP Act.

c. National Geospatial-Intelligence Agency (NGA): Don Meyer from NGA provided updates on the S124 datasets, the Marlin app, and the modernization of the radio navaids publication.

d. NTSB: Adam Tucker from NTSB mentioned the ongoing recommendations for seafarers to be equipped with PLBs and the current status of those recommendations.

e. Transport Canada: Alexander Lavoie provided updates on various topics, noting Canadian issues were similar to US, including the implementation of ECS carriage requirements, the MSI mandate, and the transition to AIS SARTs and associated radar SART phase-out.

f. CIRM: It was noted that CIRM had previously given presentations during the RTCM Assembly. Chris Jones is the new Technical Officer at CIRM and will serve as the liaison to RTCM in the future.

g**. Transition of SARSAT Program from NOAA to Coast Guard:** Ed Thiedeman reported that USCG and NOAA were progressing the transition of SARSAT from NOAA to USCG. Updates to relevant USCG and NOAA websites were forthcoming. Brent Vizbulis is the USCG SARSAT officer.

h. Recommendation to IMO MSC that all mariners carry PLBs: Ed Thiedeman reported that the USCG is submitting on an INF paper to NCSR 12 to discuss the various types of maritime survivor locating devices (MSLD) available in the market, their capabilities and limitations, and provides guidance to support the selection and voluntary carriage of MSLDs, which include man overboard (MOB) devices as well as personal locator beacons (PLB).

i. MSLDs: Ed Thiedeman reported that SC119 had completed a revision to its standard on MSLDs and RTCM standard 11901 would be submitted to the FCC.

j. Aqua Alert Bill in Congress for Relaying MSI Alerts to Cell Phones That Register for the Voluntary Service: Ed Thiedeman reported on the Aqua Alert pilot program, which uses the existing FEMA emergency warning system (phone based, e.g., Amber and Silver Alerts) to notify the public of potential maritime distress situations. Following the pilot program completion in about a year, USCG will prepare a report to Congress.

14. Review Summary Record of 8 May 2024 and Continuing Work List. The summary record of the previous Task Force meeting is posted on the Task Force website. The Continuing Work Program is appended to each agenda and updated as needed.

15. Next Meeting of the GMDSS Task Force: The Task Force will next meet, virtually, on 10 September 2025. The draft agenda for the next meeting will be posted in the What's New section of www.rtcm.org once it is available.

GMDSS TASK FORCE CONTINUING WORK LIST

16 April 2025

1. Monitor FCC 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 programs that broadcast MSI for GMDSS Standards conformance (TF)
5. Review GMDSS Internet Web Sites and update Task Force portion of NAVCEN site (TF)
6. Support SOLAS Working Group planning for IMO NCSR and Joint Experts meetings (TF)
7. Advocate voluntary carriage of VHF and EPIRB/PLBs by all vessels offshore (TF)
8. Monitor FCC policy and practice on MMSI assignments (TF)
9. Monitor non-GMDSS systems: AIS, LRIT, SSAS, VDES, VMS, & E-Navigation (TF)
10. Recommend means to improve Distress Alerts by Cell Phone & Internet (TF)
11. Advocate mandatory Distress Beacons on R/V more than 3 miles offshore (TF)
12. Advocate use of the Alaska AIS Monitor Network for VHF Distress Guard (TF)
13. Monitor Developments in Cybersecurity and educate membership (TF)
14. Advocate Earliest Fitting of AIS on Coast Guard Helicopters (TF)
15. Review GMDSS concepts and make modernization recommendations (MOD)
16. Monitor automatic response to test calls to USCG HF Commstas (CV)
17. Recommend Safety Radio and VMS Requirements for Small Fishing Vessels (CV)
18. Recommend Safety Radio & Navigation Requirements for Towing Vessels (CV)
19. Recommend Safety Radio & Navigation Outfit for Small Passenger Vessels (CV)
20. Advocate better FCC & USCG management of annual GMDSS inspections (CV)
21. Maintain Inspection Guidelines and Check Lists for selected vessel types (CV)
22. Advocate voluntary training programs for users of GMDSS systems (RV)
23. Encourage GMDSS handbooks and Internet and video training aids (RV)
24. Encourage users of VHF-DSC to Register for MMSI and connect GPS (RV)
25. Encourage Mfgrs. to upgrade readability of GMDSS items in equipment manuals (SA)
26. Recommend proper interconnection of GPS receivers with DSC Radios (SA)
27. Coordinate with USCG-NMC and FCC on training uniformity (TR)
28. Maintain GMDSS Question Pools for FCC and Coast Guard Examinations (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) GMDSS Modernization Task Group

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