GMDSS TASK FORCE

Newsletter and Summary Record of 12 Dec 2024 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 virtually on 12 Dec. 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 bcairns@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 a virtual meeting on 12 Dec 2024. The meeting was attended by 24 members 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
RTCM Comment RM-11765 to FCC Part 80 standards incorporated by reference
FCC A-24-1111A1 ship safety certificates Oct 2024
ICAO-IMO JWG-SAR-31-11 - 4 to 8 November 2024 (Secretariat)
IMO-ITU EG 20-9 - Report to the NCSR Sub-Committee and ITU (Secretariat)
MSC 109-13-3 - Ineffectiveness of the radar SART (United States).
MSC 109-WP.1 - Draft Report of The Maritime Safety Committee
MSC.1-Circ.1656 - GMDSS Operating Guidance For Ships In Distress
MSIB-07-24 VHF Maritime Radio Four Digit Channels
NATO GMDSS Requirements
b. RTCM Assembly April 2025/Sponsorship Opportunities
Bill Cairns and Ed Wendlandt announced the RTCM Assembly, scheduled for April 14-17 at the One Ocean Resort and Spa in Atlantic Beach, FL. They highlighted sponsorship opportunities and the inclusion of a Digital@Sea session and the Beacon Manufacturer's Workshop, a NOAA SARSAT-sponsored event.

5.   **FCC Reports**:

a. Waiver of Rules to allow use of IEC Standard for MOB in the U.S: Ghassan Khalek 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. RTCM SC119 completed its work on the relevant RTCM Standard 11901.2 for Maritime Survivor Locating Devices (MSLD) with publication date of November 15, 2024. AIS Mobile AtoNs were addressed in new RTCM Standard 12110.0 and published on November 30, 2024.

An FCC position 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. She invited anyone with questions about the process to reach out to her or Ghassan.

b. Plans to Improve Routing of Emergency Calls: The FCC has embarked on a program to improve the prompt handling of emergency calls through the "e911" call system for prompt routing of calls from vessels to Coast Guard RCCs. The public safety/private wireless team was working on improving the routing of emergency calls and would keep the task force updated. FCC recommended removing this item from the agenda unless there were specific questions. This item will be REMOVED from the agenda.

c. Part 80 Standards: Katie Knox reported that the FCC had opened a Public Notice for Part 80 standards, received comments, and was reviewing them. She noted that the transition period was affecting the speed of the process.

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

A question was raised regarding the status within FCC of AIS fishnet markers. It was noted that FCC Legal was reviewing the new standard for these. The Task Force felt it needed to be ADDED to the TF agenda.

6.   **Coast Guard Reports:** USCG reported the following highlights:

a. Planning for/results of IMO NCSR/MSC meetings: MSC-109 was held last week. The draft report is available but is not complete yet. We had a few topics that would be of interest to the GMDSS TF. The US submitted a paper on Radar SARTs but was instructed not to submit a new output request, so they created a draft circular which was edited and accepted by the Committee. Introduction of digital technology for VHF voice communications was added to the 2026-2027 Outputs with work to start during the 2025 Joint Experts Group. S-100 was added to the official Outputs to work on a road map and some of the preliminary efforts, but did not approve any changes to the current ECDIS standard to prevent an impact to manufacturers preparing products for the 2026 deadline. This will have future impacts on potential delivery of information to the vessels with this equipment.

MSC adopted a resolution on Criteria for the provision of mobile satellite communication systems in the Global Maritime Distress and Safety System (GMDSS).

MSC 109 also adopted performance standards for the reception of maritime safety information and search and rescue related information by MF and HF digital navigational data (NAVDAT)

systems and revision 1 to MSC.509(105) on Provision of radio services for the Global Maritime Distress and Safety System (GMDSS)

NCSR-12 planning is underway and paper submission deadlines will start after the new year. The meeting is mid-May. The first paper deadline is 10 February. Agenda items of interest:

5 Developments in GMDSS services, including guidelines on maritime safety information,

7 Development of global maritime SAR services including harmonization of maritime and aeronautical procedures and amendments to the IAMSAR Manual,

11 Development of guidelines for EPIRB which implement the two-way communication services via SAR/Galileo Return Link service as a complement to the EPIRB performance standards. Currently the US does not have any planned papers but would expect to see several submissions as the deadline gets closer.

    b. ITU/IMO Joint Experts Group: JEG20 was held in October. 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. The group finished the edits to a draft NAVDAT manual. This will be forwarded to NCSR-12.

    c. ICAO/IMO Joint Working Group: Dave Edwards provided an email on this subject. 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:

IAMSAR Manual Volume III, required to be carried on SOLAS ships, will have the following bullet point added regarding radar SART:

> *Ship and aircraft radar signal processing and other functions may have to be disabled or adjusted to detect a radar SART. Doing so may degrade the radar's performance in detecting other targets. Consult the radar operating manual or radar's manufacturer.*

IMO discussion on its Maritime Autonomous Surface Ship (MASS) initiative is handled only at the MSC level and no lower. The JWG discussed IAMSAR Manual-related text focused on craft with no persons on board since International Civil Aviation Organization already decided that issue whereas IMO has yet to discuss it. JWG report stated:

> *the JWG agreed that SAR services were not required to conduct searches for craft with no persons on board. The JWG also agreed that distress beacons should not be used for alerting on craft with no persons on board, and was of the view that as such distress beacons should not be carried or operated on such craft. The JWG invited the NCSR Sub-Committee to confirm these understandings. Recognizing the need for harmonization between aeronautical and maritime SAR for craft without persons onboard, and noting that the term "craft" was currently defined in IAMSAR Manual as "Any air or sea-surface vehicle, or submersible of any kind or size", the JWG agreed that existing terminology was sufficient.*

Australia submitted a broad ranging paper on optimizing homing operations for 406 MHz distress beacon and automatic identification system (AIS) signals. U.S./Ed Thiedeman committed to submitting a focused working paper on this matter.

A copy of JWG report is available in advance of the NCSR meeting May 2025.

    d. MSI Dissemination – NAVDAT vs Satellite: USCG has not done anything recently on this topic. Due to technical problems with its NAVTEX infrastructure they will have to reassess

their position to determine the best way forward. As mentioned previously, the NAVDAT performance standard was approved at MSC 109. The Coast Guard sent out a public notice requesting comments on possible reduction of MF NAVTEX services, noting its antiquated equipment and availability of satellite reports. It was not well received. Cost constraints and service delivery methods may bring this topic back to life.

e. ITU-R WP5B Update: Jerry Ulcek 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. WP5B reviewed and 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). He noted that inputs from various countries were integrated, and the status of some documents was raised. Jerry Ulcek discussed the introduction of digital voice communications in the VHF maritime mobile band, highlighting the framework for transmitting digital voice and the potential expansion of VHF channels. He mentioned that the document's status was raised to a working document toward a preliminary draft new recommendation. He noted the adoption of two maritime study questions by ITU Study Group 5, focusing on digital voice communications and the coexistence of VDES with R mode. These questions will support maritime communications for upcoming WRC agendas.

f. Transition of SARSAT Program from NOAA to Coast Guard: Nothing to report.

g. Recommendation to IMO MSC that all mariners carry PLBs: The USCG is working on a paper to NCSR 12 to discuss the various types of maritime survivor locating devices (MSLD) available in the market, their capabilities and limitations, and seeks to provide guidance to support the selection and voluntary carriage of MSLDs, which include man overboard (MOB) devices as well as personal locator beacons (PLB).

h. MSLDs: Ed Wendlandt reported that SC119 had completed a revision to its standard on MSLDs and this standard would be submitted to the FCC.

i. 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 provided an update on the status of EMC standards, mentioning that IEC TC18 was working on a comprehensive rewrite of the whole ship EMC standard, which would be available for commenting after the New Year. He noted that RTCM SC137's recommendations were integrated into the standard to protect devices from LED interference. He mentioned the need to update EMC standards to include frequency bands up to 6 GHz, as current maritime standards do not cover these frequencies. He indicated that this update would be necessary in the future to address emerging EMC issues. Ed Wendlandt inquired about the certification and compliance process for the RTCM SC137 standard. 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. He noted that Europe was key to driving these updates.

j. Four Digit Numbering of VHF Channels: The Coast Guard issued a Maritime Safety Information Bulletin on this topic. A copy was forwarded to the GMDSS Task Group Chair as well as posted online (search Maritime Safety Information Bulletin to find the link). 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. Brian Moore mentioned plans to get the word out through NASBLA and the Coast Guard website.

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

l. Status of Class D DSC Radios: Joe Hersey reported that RTCM SC101 had 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 would be completed. RTCM SC101 is also developing a new standard addressing Class D DSC MMSI and Class B AIS static data reset capability. NMEA is simultaneously developing a new NMEA 2000/OneNET PGN supporting this reset capability.

m. 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 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. When the opportunity presents itself, USCG will submit a paper requesting this topic be added to the NCSR Work Program

n. AIS Mobile ATON: Joe Hersey noted that the RTCM SC121 AIS mobile ATON standard had been completed and will be submitted to the FCC. The standard addresses the transmission of course and speed information for mobile aids to navigation.

o. Changes to COMSAR.1/Circ.32: Joe Hersey discussed the recent 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. Alexandre Lavoie noted that 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 (see page 96 of the MSC109 Draft Report).

p. Interpreting USCG uninspected fishing vessel carriage requirements: 46 CFR 245(c) addresses satellite communications capability. The TF agreed to establish a Commercial Fishing Satellite Communication task group. Interested parties for this included John Miller, Joe Hersey, Katie Knox and Chris Hoffman, tentatively under the leadership of John Miller. Other interested parties should contact Bill Cairns at bcairns@rtcm.org in order to join the task group.

7.   Satellite systems: Mark Lawson of Iridium provided two items to the TF. MSC108 mandated MSIPs to broadcast their information across all Recognized Mobile Satellite Services (RMSS) as soon as possible and no later than 31 December 2026. ASAP, is what the recommendation says. Outstanding MSIPs should contact mark.lawson@iridium.com urgently, to arrange onboarding to the SafetyCast system.
GMDSS over Certus launched 4 December 2024. Certus is the existing Iridium data provision service, and this new service will allow everything in one convenient terminal, including high-speed data, LRIT, SSAS, and all GMDSS services.

8.   MMSI WG and related issues: Joe Hersey noted that the MMSI WG met on 04 September and the following issues are relevant.
a. MMSI Management:
- USCG MISLE database is now accepting MMSI data from all providers. MISLE change request has been submitted allowing all MMSI registration fields be available to SAR watchstanders.
- US Power Squadrons incorporation of Sea Tow-registered MMSIs into its own database is underway.
- Developing procedures for handling MMSI registrations for radios that have been stolen.
- Reviewing duplicate MMSI registrations with FCC or NTIA and private registrants.

b. Supplemental TF Check Lists for MMSI, GPS & PLB during Voluntary Inspections: CGAUX is in the process of adding an MMSI check to its courtesy inspection checklist. This is complete and can be removed.

c. Revised MOU with Agents that Assign MMSIs: This is being deferred by USCG and FCC to the future and can be removed.

d. Update on NMEA Activities & plans to issue MMSIs: Nothing new to report. This can be removed.

e. MMSI impact on AIS navigation displays
- Considering display impact of AIS having duplicate MMSIs (e.g.) AIS MSLDs, mobile AtoNs)
- Noted AIS on SAR aircraft having MMSIs 111 MID 000 to 111 MID 099 will not be shown on ship navigation displays.

f. MMSIs for AIS used on autonomous vessels:
Ship MMSI for larger vessels, AIS Mobile AtoN for smallest vessels (e.g. wavegliders are self-propelled buoys). Vessel must have hull number and be registered to have a ship MMSI.

9. Recreational Vessel Group: It was noted that Gene Danko had finalized revisions to GMDSS Information Bulletins for R/V and R/V with VHF. These items are now available on NAVCEN website. Gene Danko's report included the following highlights:

a. Report of the National Boating Safety Advisory Committee: Brian Moore from USCG Boating Safety noted NBSAC efforts regarding its efforts on reset of MMSI numbers. NBSAC will meet next in Oct.

b. Aqua Alert Bill in Congress for Relaying MSI Alerts to Cell Phones That Register for the Voluntary Service: Still ongoing – pilot program in Long Island Sound is upcoming and will expand as it matures. No significant challenges, just need to complete the process. The draft report to Congress was submitted to OMB in September and USCG is currently addressing comments to the report.

9. Commercial Vessel Task Group: Nothing to report.

10. Reports and Issues of the Service Agents and Manufacturers Group: Nothing to report.

11. Training Task Group: Nothing to report

13. Reports from other Governmental and International Agencies:
a. NOAA/National Weather Service: Nothing to report
b. Army Corps of Engineers: Nothing to report.
c. National Geospatial-Intelligence Agency (NGA): Nothing to report.
d. NTSB: Nothing to report.
e. Transport Canada: Alexandre Lavoie noted Canada is engaged on the COMSAR Circular 32 and the AIS vs Radar SART issue.
f. CIRM: It was noted that Chris Jones replaced Michael Richards as the Technical Officer at CIRM and would likely serve as the liaison to RTCM in the future.

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 is tentatively planned to meet in person at the RTCM Annual Assembly during the week of 14-17 April 2025 at the OneOcean Resort and Spa in Atlantic Beach, FL. The Task Force is tentatively scheduled for Wed 16 April with time/room TBD. 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

12 December 2024

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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