

GMDSS TASK FORCE

Newsletter and Summary Record of 18 January 2024 Meeting

- The Task Force Meeting.** This Newsletter reports on the recent virtual 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). 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.
- 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>.
- 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 18 January 2024. The virtual meeting was attended by 37 members through Microsoft Teams or by phone.
- Distribution of Information Papers:** The following Papers of interest were displayed and are available to all on the website: <https://www.joecel.com/GMDSSTaskForce>
FCC Improving e911 Call Routing DOC-399578A1.pdf
FCC-23-90A1-GLA-Order.pdf
GLA FR 2023-24678.pdf
Inmarsat – rtcn jan 2024
MSC.1-Circ.1676 - Delays Affecting the Availability Of New GMDSS Equipment
MSIB 05-23 FCC Radio Regs for Great Lakes Vessels.pdf
New GMDSS SOLAS Carriage Requirements.pdf
SCANDIES ROSE ROI - 30DEC21_Final - Redacted.pdf
SOLAS 1974 (182) - RESOLUTION MSC.496(105) (Secretary-General) [E-F-S-A-C-R].pdf
SARSAT report from NOAA
Richard Swanson obituary
- SOLAS GMDSS amendments with entry into force of 1 January 2024:** Joe Hersey noted the new GMDSS carriage requirements and related performance standards for NAVTEX, Radar SART, ICS, aero VHF handheld, etc. The TF agreed that a summary of changes of the old standards to the new standards is needed. Joe Hersey and Ed Thiedeman agreed to lead an

offline WG to articulate these changes. Kurt Anderson, Ghassan Khalek, Pat Gallagher, Eric Weber, and Malachi Clark agreed to participate in this work.

a. GMDSS Modernization: Bob Markle reported on the following items from the IMO GMDSS Modernization project:

i. Revision of IMO Resolution A.1001: The last piece of work at IMO related to GMDSS modernization is the completion of a revision to resolution A.1001, *Criteria for the provision of mobile satellite communication systems in the GMDSS*. The work is being done by a correspondence group coordinated by France. Their report will be considered at the June meeting of the IMO NCSR Subcommittee, where it is expected to be approved and sent to the Maritime Safety Committee for adoption. The present version of the resolution is based on the Inmarsat geostationary satellite system. The new revision broadens the criteria to include other satellite systems and incorporates lessons learned in the recognition of the Iridium system. The group has just a short list of comments to resolve, so NCSR approval is expected. One significant decision to be made by NCSR is how the revised resolution will apply to existing recognized services. One option is to apply the revised resolution to existing services, but without requiring those systems to reapply for recognition. The second option would allow existing systems to continue recognition under the present resolution. In any case, any new system introduced by legacy providers would need to be evaluated and recognized under the new resolution.

ii. Revision of IEC Standards: Other work to implement GMDSS Modernization is to revise relevant IEC test standards to reflect newer IMO performance standards which came into force on 1 January of this year along with the new revision of SOLAS Chapter IV. IMO has issued a circular that allows national Administrations to delay implementation of three new performance standards until 1 January 2028 in order to allow IEC to complete its work on companion test standards: IEC 61097-7 VHF, IEC 61097-9 MF/HF, and IEC 61097-4 Inmarsat-C. IEC TC80 has completed IEC 61097-4 and is working on some of these revisions to IEC 61097-7 and 61097-9 and has scheduled work on others, so that equipment manufacturers will have time to have new equipment approved by the 2028 deadline.

iii. RTCM has had an interactive guide to GMDSS requirements on its website for almost 20 years. We are now in the process of updating that guide to the 2024 SOLAS amendments. We have started to test the revised guide and hope to have it online in a few weeks.

6. MMSI WG and related issues: Joe Hersey noted that the MMSI WG met on 17 January and the following issues are relevant.

a. MMSI Management: Joe Hersey suggested there is a need to get the Power Squadron and ShineMicro MMSI databases into the USCG MISLE database. NTIA is taking over registration of USG vessels and their database will also need to be added to MISLE. A further update has been added to the USCG [MMSI FAQ webpage](#). Shine Micro has opened access to their database to USCG SAR watchstanders. MMSI Working Group documents, including summary records of meetings, are available [here](#).

b. Resolution of duplicate MMSI Numbers issued by Sea Tow: SeaTow no longer issuing MMSI Numbers, only maintaining numbers they have already issued.

c. 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.

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

e. Update on NMEA Activities & plans to issue MMSIs: Nothing new to report.

7. Reports and Issues, Recreational Vessel Group: Gene Danko's report included the following highlights:

a. Report of the National Boating Safety Advisory Committee: No report available.

b. Should Task Force reopen Beacon Proposal for R/Vs Operating Offshore? Nothing new to report on this issue. Since most recreational vessels are managed at the state level, adding national beacon requirements is difficult. It was noted that some states are, however, offering incentives (on registration cost) to rec boaters to carry beacons when traveling offshore. This item to be DELETED pending further action.

c. Aqua Alert Bill in Congress for Relaying MSI Alerts to Cell Phones That Register for the Voluntary Service: Ed Thiedeman briefed TF that CG Authorization provided for investigation of this service. CG has developed policies and procedures and defined the performance capabilities. Selected CG Sectors will be identified for a pilot program. This item will be continued on the Agenda pending further developments.

d. Revised GMDSS Information Bulletins for R/V and R/V with VHF. These items were previously developed by Gene Danko and CAPT Fueschel and are available on NAVCEN website. Point of contact needs to be updated to reflect new GMDSS Director, who has this item for action. This Agenda item will be carried over until resolved.

8. Report and Issues of the Commercial Vessel Task Group: Johnny Lindstrom,

a. Shipboard Weather and Environmental Observations by AIS: Bryan Hinderberger noted that the prototype system of shipboard weather observations had moved to a more operational system hosted by NOAA NDBC. The Marine Exchange of Alaska has received a grant from MARAD to outfit the system on 5 vessels in the Alaska Marine Highway system plus 5 more in 2024. It was further noted that the system had received high praise from NOAA/NWS.

9. Reports and Issues of the Service Agents and Manufacturers Group:

a. How to conduct a GMDSS Inspection: Joe Hersey noted that the Task Force is required to maintain the FCC checklists for GMDSS Inspections, Small Passenger Vessels, Great Lakes vessels, and Bridge to bridge. Joe Hersey recommended a small WG to update these checklists. Tom Derenge (FCC) suggested this update be deferred to the May TF meeting pending an FCC review.

10. Reports and Issues of the Training Task Group. Kurt Anderson reported with the following highlights:

a. Training Group will review FCC Elements 3, 8 and 9 Relating to GMDSS Maintainers: No progress to report. As previously noted, most of the work of maintaining the question pool for Operator Licenses is based on FCC Element 7 but the other Elements contain guidance appropriate to Maintainer Licenses. Minimal progress has been made on this issue. This item will be carried on the Agenda until the review has been completed.

b. Carriage requirements for Training Vessels, Equipment for All Sea Areas. This equipment is addressed under Subpart W. No further action is required by the TF and this Agenda item will be DELETED.

c. Iridium and STCW Lab Proficiencies: Kyle Hurst of Iridium has been working with the Training Group to develop Lab Proficiencies as Iridium enters full GMDSS Service. Question Pools for Operator Licenses will be adjusted to apply to the Iridium environment and submitted to NMC for approval. The draft proficiencies are being proofed and should be ready in the early Spring. This item will be retained on the Agenda pending further developments.

d. Task Force Information Bulletins on Iridium Services New Bulletins are in drafting by the Training Task Group.

e. F/V Exemptions, Waivers & Tonnage Issues: The many exemptions and waivers issued and the tonnage rules in general complicate the training of new operators. This is a longstanding issue and there is nothing new to report. This will be carried over on the Agenda.

f. GMDSS Operator Requirements, Checks During Inspections: Refer to items 5 and 9a.

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

a. Planning for the IMO NCSR-11 meeting: Patrick Gallagher highlighted issues for the upcoming 11th session of the International Maritime Organization (IMO) Sub-Committee for Navigation, Communications, and Search & Rescue (NCSR 11) to be held 4-13 June 2024. The following NCSR 11 agenda items (listed by those agenda items) are relevant for the GMDSS TF:

5. Developments in GMDSS services, including guidelines on maritime safety information (MSI)

6. Response to matters related to the ITU-R Study Groups and ITU World Radiocommunication Conference, including Interference of AIS by VHF Voice Transmissions and RADAR SART

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

This agenda item includes IAMSAR Manual amendment, SAR Capability Assistance, IAMSAR Manual Volume II 2028 addition – guidance to ICAO/IMO JWG, Iridium GMDSS SAR implementation, and AMVER annual report

8. Development of performance standards for a digital navigational data system (NAVDAT)

9. Development of amendments to SOLAS chapters IV and V and performance standards and guidelines to introduce VHF Data Exchange System (VDES)

10. Review of the appropriateness and effectiveness of SOLAS regulation IV/5 (Provision of radiocommunication services)

11. Revision of the Criteria for the provision of mobile satellite communication services in the Global Maritime Distress and Safety System (GMDSS) (resolution A.1001(25)). US to develop a Comment paper once the report comes out to capture US and Iridium issues with the recommended changes.

b. Update on Four Digit Numbering of VHF Channels: Joe Hersey noted that the new date for implementation of four-digit numbering of VHF channels was by the first radio survey after 1 January 2028. This will require a revised GMDSS Circular for SOLAS ships, amending the IEC standard for class D radios. Changes to FCC Regulations will likely not be in place to meet ITU timeline so this will need to be accomplished via standards vice regulation. The new RTCM Standard being developed by SC-101 will require 4 Digit numbering and the Task Force plans to query manufacturers to ascertain their plans to implement the change in their equipment. This item will be retained on the Agenda.

c. Report on IMO/ITU Joint Experts Group-19: Ed Thiedeman noted that the Joint Experts Group met 9-13 October 2023. A draft NAVDAT Performance Standard was prepared for consideration at NCSR 11. The EG also considered VDES and AIS security and integrity issues. EG-20 is scheduled to meet Oct 7-11, 2024 and the results of that meeting will be addressed at a future Task Force.

d. LED Lighting – Report from SC-137: Joe Hersey, the Chair of RTCM SC-137, noted that the SC-137 standard on LED lighting interference to VHF and AIS serves as a normative reference in the ABYC navigation light standard. Review by IEC (60533 whole ship std) is now being considered in TC18 using the RTCM standard and interference to navigational lights will be included. This item will be retained on the Agenda.

e. SC-101 Action on Class D DSC Radios: Joe Hersey, the chairman of SC-101 reported that the SC is meeting regularly to produce recommended changes to the IEC Class D DSC Standard IEC 62238 (chaired also by Joe Hersey). The SC-101 recommendations were submitted to IEC in early September and subsequently adopted while a maintenance team to revise IEC 62238 was adopted, creation of a maintenance team has been delayed to allow work on the GMDSS DSC standards to progress. This item will be retained on the Agenda.

f. Radar SART Performance: As evidenced in the SEACOR POWER casualty, Joe Hersey reported that solid state radars do not reliably detect Radar SARTs or RACONS until control settings are changed. Radar operators may be reluctant to adjust controls which degrade radar performance but are necessary to make a radar SART visible on the display, including during a search and rescue operation. A survivor in that casualty had held on to the Radar SART but was not located. AIS SARTs have a much higher detection range. It was noted that it is possible to detune a radar to better receive the radar SART and that NMC training standard in fact addresses that. The Task Force felt that a Safety Alert should be issued to encourage the replacement of Radar SARTS with AIS SARTs when the Radar SART is due for its 5-year battery replacement. Alexandre Lavoie noted Canada may support such a position at IMO. Eric Weber and Kurt Anderson suggested outreach to operators on this issue. Ross Norsworthy noted that some USCG aircraft are not capable of receiving AIS SARTs.

g. MSI Dissemination – NAVDAT vs Satellite: Jerry Ulcek reported that NAVDAT is still under development. It was previously reported that USCG is updating its NAVDAT infrastructure. NAVTEX is incapable of transmitting S-100 updates due to the relatively huge file size for NBDP.

h. Transition of SRSAT Program from NOAA to Coast Guard: Ed Thiedeman noted that the USCG had established a Division, CG-SAR-3, for the transition and that Layne Carter is serving as Division Chief and Program Manager. Integrated Product Teams are developing procedures on Administration, Operations, Technical Support, Systems Security, Financial, and Program Management. FY2025 is the target date for the transition.

i. NTSB Advocacy of PLBs for Most Mariners: Nothing further was reported on this issue. It will be deleted from the Task Force agenda until further progress is made that requires reporting and discussion. Ed Thiedeman noted that USCG is preparing a submission to MSC (and seeking co-sponsors) on guidance to mariners on MSLDs for their particular areas of operation.

j. Satellite Panel

i.Update Briefing on the Inmarsat Satellite System: Roger Barry gave a PowerPoint status report on Inmarsat, noting the Viasat acquisition of Inmarsat in early 2023. This briefing was uploaded to the documents site.

ii. Update Briefing on the Iridium Satellite System: Nothing new to report.

k. ICAO/IMO Joint Working Group: Written report provided by Dave Edwards and briefed by Pat Gallagher. ICAO/IMO JWG now established as an annual recurring session no longer needing IMO MSC approval. Its 30th session met November 2023 in Cape Town South Africa, USCG (Dave Edwards) continues to Chair. JWG finalized proposed extensive amendments, especially details regarding GMDSS, for inclusion in the 2025 edition of the International Aeronautical and Maritime SAR Manual. In-depth discussion held on Iridium's implementation of GMDSS SAR services, in particular, the need for guidance on electronic delimitation of SAR regions and a naming convention for RCCs. Several JWG attendees and members participated in the Africa SAR Workshop held immediately after JWG 30. IMO plans to conduct a follow-on Africa SAR Workshop to continue the momentum for improving regional SAR and GMDSS services. JWG provided a key role in convincing ICAO to amend its standard so that the 121.5 MHz homing signal is retained on all emergency locator transmitters. The U.S. experienced its first incident of the ICAO autonomous distress tracking device being activated on a commercial aircraft in flight. The incident was non-distress, handled by USCG RCCs and Air Force RCC, and revealed the need for further documented procedures.

l. Results of ITU-R WRC23: Jerry Ulcek gave a verbal brief and provided a detailed written brief on WRC-23. International Telecommunication Union (ITU) World Radiocommunication Conference 2023 (WRC-23) and Conference Preparatory Meeting 2027 was held in Dubai, United Arab Emirates from 20 November to 19 December 2023. The written brief has been uploaded to the TF documents site.

m. New USCG GMDSS Manager: Jerry Ulcek noted that a new GMDSS Manager, Pat Geddes, had been hired by the USCG. He plans to participate in the next meeting of the TF.

n. Update on MSLDs/SC-119: Ed Thiedeman, chair of SC-119, noted that a draft MSLD standard had been developed and should be ready for CDV by 31 January.

o. VHF-FM voice blocking AIS on own ship and close by: Joe Hersey reported that AIS will be blocked by VHF when the mic is keyed, even when antennas are separated by as much as 136m. USCG is developing a Safety Alert to notify mariners of this situation. Ross Norsworthy noted that changes to AIS could be rolled into ITU-R M.1371 which is under review. Jerry Ulcek suggested an on air test could be performed by USCG to validate the current situation.

p. Wireless e911 FCC R&O: Ed Thiedeman reported that the USCG is in the preliminary stages. USCG discussions involving better integration of RCCs into e911. It was noted that States control waters out to 3 nm and 911 calls within that range would be routed to a State PSAP. Tom Derenge offered to facilitate USCG and the relevant FCC office to discuss USCG integration into e911.

q. SCANDIES ROSE NTSB Report of Investigation: Joe Hersey noted the release of the SCANDIES ROSE Report of Investigation and that there are several recommendations being put forward to the USCG, including several to NOAA/NWS and one to FCC. The TF will consider the report in detail at the next meeting and develop a position for the USCG reply.

12. 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. RTCM SC-119 has been reactivated to complete action. This item will remain on the agenda.

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 “911” call system for prompt routing of calls from vessels to Coast Guard RCCs. This item will be continued on the Agenda.

c. Follow up on the Termination of Great Lakes Agreement: The Agreement expired on 2 November 2023. The FCC released an Order on 31 October 2023 which continued the FCC Part 80 Subpart T (Great lakes Vessels) requirements, but extending the time period between inspection of the required radiotelephone installation to every 48 months instead of every 13 months. This change is consistent with Canadian regulations for these vessels. At that point, FCC rules Part 80 Subpart T (Great Lakes vessels) had no treaty basis to continue. Regulated vessels of both countries on the Great Lakes will need to carry full GMDSS equipment suites and comply with licensing rules. This item has been completed and will be DELETED from the TF agenda.

d. Foreign Flag large recreational vessels registered via USPS assigned block This item had been previously addressed under the Recreational Vessel Task Group. Some Foreign Flag Vessels have registered for MMSIs from the USPS Number Block: This violation was apparently done by foreign applicants seeking to obtain MMSI identity at no cost. FCC Enforcement Bureau has been advised and it is still under investigation. It was noted that typically the vessels in question were larger recreational yachts, not commercial vessels, and this has been changed above to reflect large recreational vessels. This item will be continued on the Agenda until resolved.

13. Reports from other Governmental and International Agencies:

a. Update from NOAA’s National Weather Service: Wayne Presnell provided a written update on NWS activities because he had to leave the virtual meeting early. The NWS has **not** transitioned to SafetyNET II for broadcasts to the METAREAs yet but is on the verge. Inmarsat has created the accounts for NWS (that is why Roger Barry had NOAA as recently upgrading to SafetyNET II in his presentation), however, NWS technical team discovered some errors during testing the code this week. When they fix those errors, NWS will be operational with SafetyNET II. I anticipate that should happen soon. NWS will notify Patrick Gallagher when the NWS is operational with SafetyNET II so he can update the GISIS database/webpage. The NWS will send out official notifications and a message on SafetyNET indicating we are operating via SafetyNET II.

b. NOAA SARSAT Update: Al Knox provided a written report due to a conflict with the TF meeting. The full report, which includes details on the space segment and ground segment, has been uploaded to the TF documents. The calendar year 2023 save totals:

349 lives saved in the U.S. during CY 2023

Rescues at sea: 254 people rescued in 83 incidents.

Aviation rescues: 44 people rescued in 22 incidents.

Terrestrial rescues: 51 people rescued in 40 incidents.

Number rescued in United States since 1982: 10,455

Beacon Status:

More than 771,149 U.S. beacons in the NOAA Registration Database as of January 4, 2024

143,483 ELTs

295,227 EPIRBs

332,174 PLBs

265 SSAS

118,986 DoD devices registered in JSETS
Estimated worldwide beacon population at the end of 2022:
2,006,000 (+2.8% annual increase)

c. Army Corps of Engineers: No report available.

d. National Geospatial-Intelligence Agency (NGA): No report available.

e. Canadian Maritime Issues: Alexandre Lavoie of Transport Canada noted the termination of the Great Lakes Agreement regulations and that Canada was preparing a submission to IMO MSC 108 on the subject. Canada phasing out Radar SART.

f. CIRM: No report available.

14. Review Summary Record of 14 September 2023 and Continuing Work List. The summary record of that meeting is posted on the Task Force website and only minor corrections have been made. The Continuing Work Program is appended to each agenda and updated as needed.

15. Next Meeting of the GMDSS Task Force: The Task Force tentatively planned an in-person meeting to be held in conjunction with the RTCM Annual Assembly and the Digital@Sea North America conference in Atlantic Beach, Florida during the week of 6-10 May 2024. The draft agenda for the next meeting will include the date and details and RTCM will post the details in the What's New section of www.rtc.org once they are known.

GMDSS TASK FORCE CONTINUING WORK LIST

18 January 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 Mfgs. 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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