

GMDSS TASK FORCE

Newsletter and Summary Record of 13 May 2021 Meeting

1. **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 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 6000 members after each quarterly meeting. The Task Force also maintains a website at: <https://www.navcen.uscg.gov/?pageName=gmdssTaskForce>

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. Due to the Corona Virus Pandemic, the GMDSS Task Force held a virtual meeting on 13 May 2021 supported by the RTCM on Microsoft Teams Meeting with almost 40 members and guests participating.

4. **Distribution of Information Papers:** The following Papers of interest were displayed and are available to all on the website: <https://www.joecel.com/GMDSSTaskForce>

National Maritime Cyber Security Plan
USCG D13 Safety Alert: Don't Disable AIS
FCC Rejects NTIA Petition to Reverse Ligado Decision
MMSI Working Group Report of January and March meetings
NDAA Act impact on DOD and USCG Maritime Responsibilities;
Revision of MSC Circ 803: Participation of non-SOLAS vessels in GMDSS
USCG seeks comments on Safety Mgmt System for Passenger Vessels
USCG CVC-1 Policy Letter 21-01 on Large RV (24 meters plus)
USCG MSIB 21-05 on Worldwide Marine Safety Broadcasts
USCG CVC Working Guidance on Cybersecurity for Shipboard Management Systems
DOT Report on Complimentary PNT & GPS backup technologies
NCSR 8-INF.9 - Analysis of VHF DSC cases (United States)

5. **GMDSS Modernization.** Bob Markle made the following report on Modernization: The GMDSS Modernization project was essentially completed during the IMO NCSR 8 Subcommittee meeting held virtually 19-23 April 2021 following a virtual meeting of the

Communication Working Group a week earlier. This work included a complete revision of SOLAS Chapter IV on Radiocommunication, as well as consequential amendments to other SOLAS chapters, the 1988 SOLAS Protocol, ship certificates, and the SPS, HSC and MODU Codes. In addition, 3 new circulars and related revisions to 14 resolutions, recommendations, and circulars were completed. In addition, 20 more instruments were identified for revocation. All of these actions are scheduled to be considered for approval at the 104th session of the IMO Maritime Safety Committee in the Spring of 2022 and adoption at the 105th session of MSC in the Fall of 2022. All of these would come into force on 1 January 2024 unless enough negative votes are received during the adoption process, which is not expected.

Exceptions are revisions to COMSAR/Circ.32 on guidelines for GMDSS installations and COMSAR/Circ.33 on the GMDSS Coast Station Operator's Certificate (CSOC) model course. These circulars were too extensive to be completed at this session, so they are scheduled for consideration at the 17th session of the IMO/ITU Experts Group on Radiocommunication to be held in November of this year. We also expect work on revision of resolution A.1001 on GMDSS Satellite Communication Systems to begin at the NCSR 9 Subcommittee meeting in 2022.

The major accomplishment of the modernization project was to permit the authorization of mobile satellite systems other than Inmarsat for GMDSS satellite communications. The “core” changes for GMDSS satellite systems came into force in January 2020, but the new amendments will establish a ship’s Sea Area A3 as the coverage area of the ship’s GMDSS satellite service, rather than the present Inmarsat geostationary satellite coverage area (regardless of satellite system). This will allow the full coverage area of global systems to be recognized, removing the present exclusion of polar areas. It will also allow the recognition of smaller regional satellite systems.

Other revisions clarify carriage requirements and make other editorial and administrative improvements. For instance, wording requiring equipment for reception of Maritime Safety Information has been generalized to allow the possible future additions of new MSI systems.

6. The Coast Guard Reports: Pamela Murray and others reported with the following highlights:

a. Report on the NCSR-8 Conference: Pat Gallagher supplied the following report: The International Maritime Organization (IMO) sub-committee for Navigation, Communications, and Search & Rescue (NCSR-8), met virtually from Monday 19 April to Friday 23 April. The major outcome of this meeting was the approval of SOLAS revisions for the modernization of Global Maritime Distress and Safety System (GMDSS)(see paragraph 5). The topic on using public broadband communications and technical standardization for public mobile networks in the context of maritime safety was briefly discussed. Due to the meeting constraints the topic will be referred to the IMO-International Telecommunications Union (ITU) Joint Experts Group (JEG) meeting in November for further consideration. A brief discussion took place on the electromagnetic interference effects on light emitting diodes (LED) and the impact on maritime safety. This issue will remain on the agenda and will continue to be worked on

by ITU and the IMO-ITU JEG. The United States expects to have a significant input at the next meetings as we report out the results of our current LED Study. Iridium Communications Inc. completed their first year as a recognized GMDSS satellite provider. Several issues have arisen due to this recognition. Most notably is the cost to provide Maritime Safety Information (MSI) by the twenty-one Navigation/Meteorological Area providers. This topic was referred to the Maritime Safety Committee for resolution. The other items of note on this agenda item was the work on the Iridium SafetyCast service manual, the methodology for broadcast, the implementation of Iridium GMDSS SAR services, monitoring of GMDSS broadcasts and other interoperability issues that didn't exist under a single provider system. Additional work will be needed for a future session to complete.

b. Update on Four Digit Numbering of VHF Channels: We now have a new date for implementation since SOLAS ships must be able to use four-digit numbering by the first survey after January 1st, 2024. George Hallenbeck noted that new high-end radios were already incorporating four-digit numbering. This item will be retained on the Agenda.

c. Addressing DSC Problems (See NCSR 8/Inf.9): There was limited discussion of this item, but it will be kept on the Agenda due to expected further development at IMO.

d. Applicability of GMDSS to Warships: This is the subject of a revised Task Force Information Bulletin that was placed on the agenda in response to a query from a Navy contractor. The Bulletin outlines the Task Force view of the proper role of GMDSS in warship operations but it has never been officially endorsed by either the U.S. Navy or the Coast Guard. There was no further discussion at the meeting and this item will be dropped from the Agenda.

e. Status of Coastal NAVTEX Broadcast System: Jerry indicated that the system was continuing to operate normally and it appears that the proposal to terminate the system and shift to satellite broadcasting was no longer being actively considered. This does not mean that problems such as long-term funding to sustain NAVTEX have been resolved. In response to a question, Jerry indicated that no final decision had been made and that an appropriate announcement would be published in the Federal Register if and when a final decision was reached. This item will be dropped from the Agenda.

f. LED Lighting Interference with Radio Communications: Joe Hersey, the Chair of SC-137, gave an update on progress toward developing a standard to deal with LED lighting interference to VHF maritime radios and Automatic Identification Systems (AIS). Of the twenty-one LED lights tested, eleven were 2nm navigation lights (masthead, side lights and tricolor lights), eight were 3, 5 and 6nm navigation lights, one was a floodlight, and one was a deck light. No VHF interference was found from any of the 2nm navigation lights, nor from the floodlight. All of the remaining 3, 5 and 6nm lights and the floodlight radiated VHF interference to varying degrees. No interference was found from any of the lights at L band (e.g. GPS). The Special Committee will next meet virtually to review these test results on 31 Aug – 01 Sep and hopes to complete a draft standard by the end of the year. This item will be retained on the Agenda.

g. NOAA Request for Comments on Whether U.S. should implement Return Link Service on EPIRB Alerts: There was limited discussion on this item but it is understood that NOAA extended the time for comments until 1 June 2021. This Agenda item will be continued.

h. Status of Extended VHF Outages in Alaska: Jerry and others indicated that the main reason for most of the outages has been inaccessibility due to remote locations and thus will be a continuing problem especially during winter months. This item will be dropped from the Agenda pending further developments.

i. IMO Initiative on GMDSS for Non-SOLAS Vessels: A draft revision to IMO MSC Circular 803 being developed as part of the GMDSS modernization project, updates the GMDSS plan for non-SOLAS vessels. Most Administrations have required selected components of the GMDSS for non-SOLAS vessels and this should help to standardize the requirements internationally. The new circular includes revisions for consistency with revised SOLAS Chapter IV, and also explains why GMDSS systems are preferable to non-GMDSS such as mobile telephones in an emergency. The revised circular was finalized at NCSR 8 and this item will be dropped from the Agenda.

j. BIMCO Advocating International Guidelines for Ship-Shore Communications: There was no information available on this item that will be continued on the Agenda if it can be confirmed that BIMCO has made a recommendation.

k. Report of MMSI Management ad hoc Group: Joe Hersey reported as Chair of the ad hoc Group. The FCC has approved a format for permitting MMSI Agents to issue MMSIs to Divers but is waiting for BOATUS and USPS to confirm that they are prepared to do this. It was previously agreed to refer the matter of fake MMSI numbers to the next joint USCG/FCC meeting and the FCC agreed to refer the matter to its Enforcement Bureau. This item will be retained on the Agenda.

l. DOT Report on Backup Systems for GPS: This item was listed to acknowledge the January 2021 Report from the DOT Volpe Center on Complementary PNT and GPS Backup. The 2018 NDAA charged DOD, DOT and DHS with developing such a backup plan and this report summarized extensive testing conducted in 2018 of various candidate systems proposed by vendors. The summary of findings indicated that all qualified systems provided something of value in most scenarios with Next Nav succeeding in all scenarios. Neither of the two eLoran technologies succeeded in the difficult “basement” scenario and the R-mode MF Ranging failed to meet readiness standards. The Report concluded that deployment efforts and coverage achievable involved significant cost factors. This item will be dropped from the Agenda.

m. ADAC Research Project on Maritime Communications and Connectivity: This project addressing communications connectivity in Alaska involves a Coast Guard contract with the University of Alaska to study needed systems. The RTCM is also contributing information and the data collected so far includes a listing of U.S. Distress Watchkeeping services and Marine Safety Information broadcast services.

n. NDAA Act with respect to Alaskan F/V & F/V Special Use of AIS: This Defense Authorization Act includes a waiver of certain GMDSS requirements for F/V over 300 tons that will require changes to the FCC Rules. There is also a provision extending use of AIS by F/V that will require similar action. NTIA and the FCC have these issues for action and we will continue this item on the Agenda.

o. Update on Iridium Progress: Ed Thiedeman reported that full GMDSS SAR services were being provided for Iridium users at both U.S. Area RCCs and that RCCs in Australia, New Zealand, Norway and the U.K. would soon be furnishing services to the Iridium customers. This Agenda item will be kept active.

p. Current Canadian Maritime Issues: Alexandre Lavoie reported that Canada was experiencing many of the same problems the U.S. identified with respect to MMSI management. They had to delay implementation of some new regulations due to shortages of equipment. Joe Carro noted that some equipment available online doesn't meet Canadian requirements. The UK representative noted that the UK has far less problems with fake MMSIs since the MMSI is issued with the station license.

7. The FCC Reports by Tom Derenge, Janet Moran and others with the following highlights:

a. New Issue: Falsified Inspection Documentation Found on Some Vessels: Janet Moran of the Enforcement Bureau noted that this had not come to their notice previously and that they would pursue it if details were provided. All Task Force inspectors are hereby requested to report any such suspicions to the Director when observed so that we can ensure that the proper officials at the FCC are notified. Kurt Anderson noted that he advises students in his GMDSS classes to log the license number of the inspector. Follow up is made more difficult in that neither the Coast Guard nor the FCC want to receive copies of inspection reports that instead are kept on the vessel. This item will be kept on the Agenda pending further developments.

b. FCC Enforcement on Unauthorized AIS Devices: This item was put on the Agenda because of widespread use of AIS for unauthorized applications such as marking fishing nets. One Task Force member reported after the meeting that he had found such devices offered for sale on e-Bay. The FCC Enforcement representatives indicated that they would follow up if provided with detailed information. If changes to the Rules are needed, a Petition should be submitted. This item will be carried over to the next meeting.

c. FCC Rules now Require EPIRBs Sold in U.S. to Have Integral GNSS: There is no action required under this item which is simply a reminder that the FCC required all new EPIRBs sold in the U.S. from January 17, 2020 to have integral GNSS, existing EPIRBs were grandfathered indefinitely for most vessels. However, all mandatory vessels subject to 47 CFR subparts R, S, and W must carry EPIRBs with integral GNSS from January 17, 2023. It was also noted that IMO introduced new rules for EPIRBs on SOLAS vessels last year, that come into force on July 1, 2022, with additional requirements above those currently required on U.S. vessels. This Agenda item will be continued until completed.

d. Small Passenger Vessel Inspection Checklist Needs Updating to include Iridium:

The Task Force prepared checklist has already been updated. A copy will be passed to the FCC so it can be adopted as FCC policy. This Agenda item will be included until completed.

e. Waiver Needed to Allow Iridium to Meet GMDSS Sea Area A4 Requirements:

This item is needed to allow ships operating in current Sea Area A4 to utilize the Iridium option until the IMO regulations revising the Sea Areas takes place in 2024. This Agenda item will be continued pending completion.

f. Report on Results of FCC and Coast Guard Meeting of 20 April 2021: FCC and Coast Guard representatives outlined progress made at the recent meeting including cooperation on MMSI Violation Notices. The Enforcement Bureau will be active on issues that are reported to them with enough detail to follow up. Since the long-awaited major revision to Part 80 of the Rules is not moving forward, individual items considered urgent should be identified for possible separate action. This Agenda item will be continued when joint meetings have been held.

8. Reports and Issues, Recreational Vessel Group: George Hallenbeck reported with the following highlights:

a. Revised GMDSS Information Bulletins for Recreational Vessels: There are two Bulletins dealing with recreational vessels, one dealing with GMDSS as a whole and the other addressing R/Vs using VHF only. It is planned to update the Bulletin dealing with GMDSS as a whole and discontinue the one for VHF only. The updated version was not available at the time of the meeting so it will be circulated for comment and the final version will be placed on the web site along with the others that were approved for posting earlier. This Agenda item will be continued until completed.

b. 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 for an MMSI number and the need to connect GPS receivers to VHF radios. The reluctance of Boating Safety to modify their checklist and the possibility that other issues (such as LED lighting interference) may also need to be highlighted suggests that a separate check list for voluntary inspectors may be an alternative solution. This Agenda item will be carried over until resolved.

c. Coast Guard/DHS Response to Challenge Competition: There was no further information available on this Agenda item but it will be carried forward.

d. Be Wary of Commercial Letters Offering Renewal of Documentation: George Noted that this process is easily done directly with the Coast Guard and there is no need to pay a commercial firm to handle it for you. This Agenda item will be discontinued.

e. USCG Policy Letter CVC-1 on RV over 24 meters: George noted that these are very large yachts and the inspection policy referred to affects very few RV operators. This Agenda item will be discontinued.

f. USCG Policy Letter extending Documentation of RVs: This policy letter extends the validity of Documentation from one year to five for RVs that have chosen documentation. There is no change for RVs registered by States. This Agenda item will be discontinued.

g. Registrations for MMSI Numbers by USPS & Nature of Distress: George reported that the Auxiliary is seeing an increase in RVs applying for MMSI Numbers and that his block of numbers is running out. BOATUS also reports a sharp increase as the Pandemic is easing up. He has also been tracking new VHF Radios and has noticed that the high-end radios already make provision for the expected need to identify channels by 4 digit numbers, these same radios frequently allow originators of a Distress Alert to specify the nature of distress by checking the appropriate description on a drop down table.

9. Report and Issues of the Commercial Vessel Task Group. Johnny Lindstrom was introduced as the new leader of this Group and he moderated the discussion with the following highlights:

a. New National Maritime Security Plan & CVC Working Instructions: This item is the Coast Guard's effort to assist vessel managers in complying with MSC Resolution 428 (98) on 'Maritime Cyber Risk Management in Safety Management Systems.' CVC-WI-027(2) was issued 27 October 2020 and revised on 18 February 2021. It contains general working guidance for managers and Coast Guard Marine Inspection offices.

b. USCG re Safety Management Systems (SMS) for Passenger Vessels: The Coast Guard is seeking public input on the potential use of Safety Management Systems (SMS) on small passenger vessels. The latest revision asks how costs and benefits might change if SMS procedures were extended to small passenger ships. This Agenda item will be dropped.

c. USCG CVC Releases Revised Checklists for Small Passenger Vessels: The Coast Guard has released revised checklists in both short and long versions for T and K passenger boats. T boats are those under 100 tons and K boats are those carrying 150 passengers or 49 passengers overnight. This Agenda item will be dropped.

d. USCG D13 Safety Alert: Don't Disable AIS: The 13th Coast Guard District issued a Safety Alert reminding vessels not to disable AIS. It is suspected that this is a greater problem with F/V off the northern west coast seeking to deprive competitors of their movements. This Agenda item will be discontinued unless there is further action.

e. USCG MSIB 21-05 on Worldwide Marine Safety Broadcasts: This Coast Guard Marine Safety Information Bulletin was issued as a result of excitement caused when several F/V operating in Alaskan waters encountered a Russian Navy Fleet Exercise. The MSIB points out that the Russians had properly announced their fleet exercise in advance over international MSI

channels and that the F/V would have been aware had they been copying the broadcasts as required. This Agenda item will be discontinued.

f. New Issue: Can the Task Force Assist in Getting More Ships to Report Weather Observations: This is a modest program at present but has the potential to greatly assist high seas weather forecasting in the future. The Task Force should consider ways it might assist this program such as encouraging participating AMVER vessels to join the program. John Barry noted that NMEA and others were also seeking increased oceanographic data collection and that this item should be broadened to include both. We should also look at the feasibility of broadcasting such data on AIS for collection by satellite. This issue is also a work item for MSC 103. This Agenda item will be carried forward.

10. Reports and Issues of the Service Agents and Manufacturers Group: John Barry was introduced as the new leader of this Group and he moderated the discussion with the following highlights:

a. 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 may develop a Petition recommending special equipment requirements for Schools and Training Vessels to enable students to train on all equipment they may find on ships operating in all Sea Areas. This item has become very timely with the addition of Iridium as a GMDSS service provider. This Agenda item will be carried forward.

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 reinstated 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. NMEA Releases Version 1.0 of One Net: This is a significant step in the long development period required to implement this latest version. This Agenda item will be reactivated whenever there are new milestones to report.

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

a. GMDSS Question Pool Revisions: The Training Group has noted the entry of Iridium as a GMDSS provider and will make necessary adjustments to the Question Pools in the next revision.

b. Effective Date for Training Schools to Use the New Question Pool: At the last meeting it was agreed that the date to start using the new question pool should be 31 January 2021. The FCC and/or the Coast Guard, through the National Maritime Center (NMC), should have notified the COLEMs and Training Schools to shift to the new Question Pool on 31 January

2021. This did not happen however, and it is now important that the FCC release the necessary documentation to start the transition to the already approved Question Pool Revision.

12. Review Summary Record of 10 December 2020 and Continuing Work List. The summary record of this 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.

13. Review Website Changes: The other changes recommended by the Workshop on 14 May have been implemented. With respect to GMDSS Task Force Information Bulletins, updating of the remaining Bulletin on Recreational Vessels will be pursued by email.

14. Next Meeting of the GMDSS Task Force: The next Task Force meeting will be scheduled in the week following the NMEA Annual Meeting in Orlando, Florida 22-23 September 2021. The RTCM is planning a virtual update meeting on 29 September and the virtual meeting of the Task Force is scheduled for Thursday, 30 September.

GMDSS TASK FORCE CONTINUING WORK LIST

13 May 2021

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 replacement or update of current Great Lakes Agreement with an MOU or equivalent document. (TF)
8. Advocate voluntary carriage of VHF and EPIRB/PLBs by all vessels offshore (TF)
9. Monitor FCC policy and practice on MMSI assignments (TF)
10. Monitor non-GMDSS systems: AIS, LRIT, SSAS, VDES, VMS, & E-Navigation (TF)
11. Recommend means to improve Distress Alerts by Cell Phone & Internet (TF)
12. Advocate mandatory Distress Beacons on R/V more than 3 miles offshore (TF)
13. Advocate use of the Alaska AIS Monitor Network for VHF Distress Guard (TF)
14. Monitor Developments in Cybersecurity and educate membership (TF)
15. Review GMDSS concepts and make modernization recommendations (MOD)
16. Monitor automatic response from USCG HF Commstas to test calls for validation of HF-DSC performance (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

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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