

GMDSS TASK FORCE

Newsletter and Summary Record of 10 December 2020 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 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 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>
- 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 10 December 2020 supported by the RTCM on Microsoft Teams Meeting with almost 50 members and guests participating.
- Distribution of Information Papers:** The following Papers of interest were displayed and are available to all on the website: <https://www.joecel.com/GMDSSTaskForce>

TF Information Bulletin: Applicability of GMDSS To Warships
Email Exchange between Director and USN Rep, N-6 Norfolk
BIMCO Advocating International Guidelines for Ship-Shore Communications
USCG MSIB 19-20 Reports on Malicious Email Spoofing
Federal Communications Capabilities in the U.S. Arctic
BOATUS News on Fall Boating Emphasizing VHF, EPIRBs and PLBs
NBSAC Resolution 2012-90-01 of 11 November 2012 – (Beacons on Offshore R/Vs)
USCG MSIB 20-20 on VHF Marine Radio Checks
BOATUS and Others ask FCC to Reconsider Ligado L-Band Wireless Plan
USCG CVC Policy Letter 20-03 on Lithium-ion batteries on Small Passenger Vessels
Email from a Task Force member regarding observed inspection practices
NTSB Release of Summary on MV Conception Dive Boat Casualty
USCG Federal Notice – Proposal to drop watch on HF Voice Distress Channels
Iridium Status Document – As of Launch of Service, 11 Dec 2020

5. **The Coast Guard Reports:** Jerry Ulcek and others reported with the following highlights:

a. 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 discussion at the meeting but Coast Guard representatives were asked to review the document off line and let us know later if they thought it correctly represented Coast Guard policy.

b. 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.

c. Coast Guard Report on Malicious Spoofing: Coast Guard MSIB 19-20 reports on increasingly sophisticated malicious email spoofing impersonating Coast Guard email addresses and Coast Guard industry communications regarding Area Maritime Security Committee meetings. The Coast Guard urges non military addressees to validate incoming messages by use of DMARC (Domain-based Message Authentication Reporting and Conformance see <https://DMAARC.org>). These potentially serious cyber attacks should be reported to the National Response Center at 1-800-424-8802 or CyberWatch@uscg.mil.

d. Federal Communications Capability in the Arctic: This item is for information to recognize the document provided which outlines the facilities of the Coast Guard, NOAA, the FAA and the Corps of Engineers in Alaska.

e. Iridium's new GMDSS Service: Kyle Hurst provided a briefing on the status of the GMDSS aspects of the Iridium System that are being declared operational on 11 December 2020. Note status document provided, Kyle's brief included the following highlights:

1) Lars Thrane LT 3100S Ship Earth Station is available and can be sold after 11 Dec in US, Canada, Italy, Marshall Islands, and other countries when European approval (Wheelmark) is granted.

2) U.S. RCCs Norfolk and Alameda are Iridium qualified along with RCCs in UK, Norway, and New Zealand. US will receive all other alerts until other RCCs certified.

3) MSI via SafetyCast should launch as providers become ready, the US is ready for METAREAS IV and XII.

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). The Special Committee will also look into LED interference to MF/HF and L Band systems such as GPS. Contract field testing originally planned for October with Coast Guard support has been delayed. The goal is to have the standard available by mid 2021 to support the ABYC effort and the IEC plan to begin working on a new international standard.

g. 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 could be an effort to standardize the requirements internationally. The new circular would include 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 is expected to be finalized at NCSR 8 in 2021.

h. USCG Federal Register Announcement of Intent to Drop Live Watch on HF Voice Distress Channels: Joe Hersey noted that watch on these voice channels by either vessels or shore facilities is not mandated by SOLAS and that Coast Guard experience is that they are rarely used. There was limited discussion as to whether this would apply to watch on 4125 kHz by Kodiak that has been more active in supporting fishing vessels in the vicinity in the absence of a SOLAS watch on 2 MHz frequencies. It was assumed by those familiar with the Alaska fisheries that the 4125 kHz watch at Kodiak would be continued. Comments on the proposal are due by 17 January 2021.

i. Implementation of Return Link Service on EPIRB Alerts: Chris Hoffman and others reported at the May 2020 meeting on a recent Cospas-Sarsat document providing details on how countries can sign up for the new Return Link Service (RLS) on the Galileo System that was designed to acknowledge receipt of EPIRB (and other 406 MHz beacons) Distress Alerts thus providing confidence to the end user that their alert had been received. The service was declared operational by the European Commission in January 2020 and while there are currently no RLS beacons with type approval, some are expected soon. EPIRBs (and other 406 MHz beacons) with RLS can currently be offered for sale only in about a dozen countries, mainly in Europe. RLS beacons will work globally, but in some places there could be delays in the RLS response back to the beacon until the system is fully operational. RLS beacons are not currently approved for sale in the U.S.

j. Digitalization of VHF Maritime Voice Channels: This proposal would enable creation of four voice channels from a single voice channel as presently configured. A U.S. position on the proposal is being formulated and further developments will be monitored by the Task Force.

k. Update on an Earlier Proposal to Facilitate Rescue of Aircraft Ditching at Sea: Jim Stabile had briefed the Task Force before on his prototype system to enable aircraft that needed to ditch at sea to locate nearby vessels using a satellite derived plot of AIS transmissions

and to communicate with potential rescue vessels on maritime channels to make arrangements. With help from some Task Force members a U.S. paper was presented at a recent Joint IMO/ICAO meeting that received a favorable reception and suggestions for further work. Ed Thiedeman provided an update that the next steps were defining requirements and exploring solutions that could be submitted to a future NCSR session. We look forward to further updates as this proposal advances through international channels.

1. MMSI Management Issues: There were several pending issues on MMSIs listed on the Agenda but very little time available for discussion. Instead, Joe Hersey proposed to chair an ad hoc group of interested parties that would refine the various issues, propose solutions and report back to the Task Force. There were a number of volunteers and the Chairman has called for an initial meeting of the ad hoc group by Webex on 12 January 2021.

6. The FCC Reports by Ghassan Khalek and others with the following highlights:

a. New Issue: Falsified Inspection Documentation Found on Some Vessels: This is a new issue noticed during service calls on certain smaller vessels and duly reported to the FCC. There has been little information available so far but we need to follow up and see how often this is happening. 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.

b. New Subscription Fee for Inmarsat-C Terminals Announced: A document from Comsat was received announcing that Inmarsat would be imposing a new monthly recurring subscription charge applicable to all Inmarsat C User Terminals regardless of use, including terminals that had been barred, effective July 2020. This charge appears to also be applicable to those who use their terminals solely for receipt of SafetyNET broadcasts. Very little other information is currently available but it appears that the FCC has officially dropped its role as the Accounting Authority for U.S. customers effective 15 October 2020.

c. 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. There has been no new FCC activity so this item will be carried over to the next meeting.

d. 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.

7. **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.

b. NBSAC Virtual Meeting on 5 November 2020: Jack Fuechsel participated in the virtual meeting and reported that there are a number of Resolutions still in effect. Specifically, Resolution 2012-90-01 of 11 November 2012 which adopts our Task Force Proposal for Emergency Beacons on R/Vs going more than 3 miles offshore. The Office of Boating Safety had apparently done an exposure survey in 2018 that indicated about 650,000 R/Vs exceed 3 miles offshore, especially from the states California, Florida, New York, New Jersey, North and South Carolina, Michigan, Ohio and Wisconsin. Of these only about 30% carry EPIRBs and 20% carry PLBs. Perhaps the new Administration will provide a better climate for further consideration.

c. 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 connecting GPS and LED lighting interference) may also need to be highlighted suggests that a separate check list for voluntary inspectors may be an alternative solution. This item will be carried over to the next meeting.

d. BOATUS and Others ask FCC to Reconsider Ligado L-band Wireless Plan: Dave Kennedy called attention to their filing with the FCC seeking better protection of GPS signals from interference from land mobile services for the protection of the boating public. There was only limited discussion since any reconsideration would involve the Executive Branch of the Federal Government that has yet to take a definitive position.

e. BOATUS News Item on Fall Boating: Dave also noted their News Item that emphasized ensuring safety communications facilities (VHF, EPIRBs and PLBs) along with winterizing.

f. Coast Guard/DHS Response to Challenge Competition: Marty Jackson provided an update on this prize contest to develop innovative ways to enhance detection of people in the water. Four finalist devices are being tested and the results were expected soon but are not yet available. We will request a further update at our next meeting.

g. Sea Tow Automated Radio Check System Discontinued . George Hallenbeck reported that change 1 to Coast Guard MSIB 20-20 reported that the Sea Tow automated radio check system was discontinued on 2 October 2020. Mariners equipped with DSC radios with a test call feature are advised instead to utilize the Coast Guard automated test call system on channel 70 that is active throughout the coastal VHF Rescue 21 system. Note that all VHF radios sold in the U.S. since 2011 have been required to have DSC with a test call function.

h. Coast Guard Boating Safety Office Releases R/V Safety Survey: Jack Fuechsel reported on a Boating Safety Survey conducted by the Coast Guard Office of Boating Safety. 257,000 questionnaires were distributed and the 50,000 returned indicated that 84 million engaged in boating (about 25% of the total), for about 3.4 billion hours (about 130 per boat). There were 12 million registered boats and about 13 million unregistered, mostly kayaks.

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

a. NTSB Release of Summary on MV Conception dive boat casualty: This is the start of expected new recommendations to deal with possible causes of the casualty. The first new recommendations are expected to include a required live watch while passengers and other crew are sleeping, alternative exits from sleeping compartments and regulations on Lithium-Ion batteries.

b. Lithium-ion batteries on small passenger vessels: Coast Guard CVC Policy Letter 20-03 of 29 October 2020 addresses the carriage of Lithium-Ion batteries on Small Passenger Vessels. This policy letter addresses Li-ion batteries brought aboard by passengers for devices such as rechargeable batteries for diving gear, cameras, cell phones, recording devices, lights, computers, portable radio communications devices (handheld VHF), portable power tools, and electric scooters, skateboards and bicycles. The emphasis is on fire safety and briefing passengers during the safety brief to avoid recharging in closed spaces or with ‘daisy chains’ of multiple chargers.

c. Email re Jamaican Registry and EPIRB Battery Service: An email was received from a Task Force member who does safety inspections complaining about lax inspections on Jamaican registered vessels. He also cited multiple occasions when he had discovered an EPIRB that had been recently serviced but the battery had not been replaced. There was limited discussion and other servicing agents are hereby alerted to be on watch for similar breaches. A copy of the complaint was also made available to the Coast Guard Office of Marine Inspections.

d. Developments in Cybersecurity. There were no new reports under this item but the Coast Guard MSIB 19-20 mentioned in paragraph 5.c. above is a related issue. Subsequent to the Task Force meeting, the White House released the National Maritime Cybersecurity Plan that provides guidance for cyber protection throughout the maritime industry. This will be on our Agenda for the next Task Force meeting.

e. 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.

f. Paris M.O.U. on Port State Inspections: The U.S. is not a member of the Paris Group but is an observer and we take note of periodic reports which summarize inspections by the Group members. The Paris group concentrated on Emergency systems during the period September through November 2019. Total inspections were over 4000 during the period and 833 ships had one or more safety deficiencies, 120 failed fire drill or abandon ship drill and 48 were detained to take corrective action. Ships with the most deficiencies were livestock carriers followed by refrigerator ships and general cargo ships.

g. Retirement of Rich Beattie, Leader of the Commercial Vessel Task Group: We are sorry to report that Rich Beattie, a stalwart member of the Task Force retired from Radio Holland at the end of the year. We very much appreciate his dedicated assistance over the past several years especially updating all of our inspection checklists, and wish him all the best in retirement. Johnny Lindstrom of Westport Yachts has agreed to take over as leader of this Group and we welcome him aboard!

9. Reports and Issues of the Service Agents and Manufacturers Group: Hugh Lupo was unable to attend the meeting and because of suddenly increased business demands on his time has asked to be replaced as leader of this group. There had been little activity on most agenda items listed for review. The status of each issue is updated from the summary record of an earlier meeting:

a. Watch Continuity should be Maintained when VHF Radios are used in the Public Address Mode. The issue applies to compulsory fitted small passenger vessels with more than six passengers such as whale watching vessels, some of which operate their VHF in a Public Address (PA) mode for the entire trip rendering the channel 16 watch inoperative. Since this problem was addressed in the recently updated small passenger ship radio inspection checklist and should be further clarified in the FCC Part 80 rulemaking, this item is now closed.

b. 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 is becoming more timely with the addition of Iridium as a GMDSS service provider.

c. 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.

d. Are Solid State Radars Incompatible with Racons and Radar SARTs? Joe Hersey reported that unless the radar's peak transmitter power is high enough to trigger the racon or radar SART, the radar will not be compatible with either device. IMO requires that X-Band radars carried on ships subject to the SOLAS Convention be compatible with both racons and radar SARTs. Solid state radars of sufficient peak pulse power can be compatible with racons and SARTs, but lower power (e.g. FMCW) radars will not be compatible. Note that RTCM's recently adopted RTCM standard 11201.0 for Marine Radar Equipment for Ships Not Required to Comply with SOLAS Radar Carriage Requirements, does not require compatibility with racons or radar SARTs. This issue will be closed pending any further developments.

e. Change in Leadership of the Service Agents and Manufacturers Group. Hugh Lupo has held this position for several years and his contributions as an experienced service agent have been greatly appreciated. John Barry of Technical Marine Support has agreed to take over as leader of this Group and we welcome him aboard!

10. 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 an exchange of emails subsequent to the 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 notify the COLEMs and Training Schools to shift to the new Question Pool on 31 January 2021.

11. GMDSS Modernization. Bob Markle noted that modernization is still an active project at the IMO. Revisions to supporting Resolutions are being worked on by Administrations, and there is a critical path to complete approvals by the 2021 NCSR 8 meeting (now scheduled for April) so that amendments to SOLAS can enter into force by 1 January 2024 as planned. The requirement to be able to print MSI has been removed from Chapter IV which prompted a question whether Narrow Band Direct Printing (NBDP) was still required, the response was that NBDP was already gone if you have an alternative printing capability.

12. Review Summary Record of 10 September 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 Meetings of the GMDSS Task Force: The next virtual Task Force meeting has been scheduled for Thursday 13 May 2021.

GMDSS TASK FORCE CONTINUING WORK LIST

10 December 2020

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 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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