

## NATIONAL GMDSS TASK FORCE

### Newsletter and Summary Record of 30 September 2015 Meeting

- 1. The Task Force Meeting.** This Newsletter reports on the recent meeting of the Global Maritime Distress and Safety System (GMDSS) Task Force, a group 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 for vessels subject to those 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 [gmdss@comcast.net](mailto:gmdss@comcast.net). Members who are unable to attend Task Force meetings are invited to participate by email and to connect with Task Force meetings by webcast or conference call. This Newsletter goes out to over 5000 members after each quarterly meeting.
- 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: [www.navcen.uscg.gov/?pageName=MaritimeTelecomms](http://www.navcen.uscg.gov/?pageName=MaritimeTelecomms) (click GMDSS, then GMDSS Task Force). The summary record is also distributed to all Task Force members to serve as a Newsletter summarizing GMDSS developments and other issues in marine telecommunications. The GMDSS Task Force met on 30 September 2015 at the Sheraton Inner Harbor Hotel in Baltimore, Maryland during the Annual Meeting of the National Marine Electronics Association (NMEA).
- 4. The FCC Reports:** Ghassan Khalek reported with the following highlights:

  - a. Comments on NPRM for changes to Part 80:** The FCC has reviewed the comments received on earlier notices has sent forward for approval a new NPRM to make adjustments to the Rules on all of the issues reported in the last Newsletter.
  - b. Action on the Task Force Petition regarding Small Passenger Vessels.** The FCC issued a Public Notice (Report No. 3006, RM No. 11726) inviting interested persons to file statements opposing or supporting the petition for Rulemaking. Responses to the Notice were generally positive and the FCC has been in discussion with the Coast Guard to coordinate their positions. The FCC plans to initiate regulatory proceedings as appropriate.
  - c. Management of MMSI Numbers Being Assigned by Agents:** The FCC and the Coast Guard have entered into Memoranda of Understanding (MOU) with several private sector agencies to issue MMSIs to vessels not requiring a Station License. Those MOUs are being

revised but the new format has not yet been published. The new Draft MOU is being coordinated with those agencies.

**d. End to FCC Waivers for VHF-DSC and Class A VHF for non-SOLAS Vessels.**

Ghassan noted that the waiver of VHF-DSC capability for mandatory non-SOLAS vessels provided by the Rules would be ending effective 20 January 2016, the one year anniversary of the Coast Guard's declaration of Sea Area A1. He also noted that the FCC had been in discussion with the Coast Guard on granting waivers to non-SOLAS mandatory vessels to use Class D VHF Radios in lieu of the Class A VHF Radios. They plan to incorporate this change in the FCC Rules to avoid acting on numerous waiver requests.

**e. Waiver Request for PLB with Iridium in Lieu of 121.5 Homing.** This waiver request is still pending but it appears to have merit. The ability to establish two-way communications seems to be a great improvement to the one-way alerting that PLBs do so well.

**f. Use of VHF Handhelds in Lieu of Reserve Power.** The FCC is concurring with the recommendations of the National Transportation Safety Board (NTSB) and the Task Force that small mandatory vessels without Reserve Power capability should carry a VHF Handheld for emergency use.

**5. The Coast Guard Reports:** The following presentation summaries were made by Tim Strickland except where indicated otherwise:

**a. Coast Guard Integrity Evaluation of Cell Phone Call Data via Next Generation 911 Call Centers (NG911).** Tim Strickland reported on behalf of Val Arris of the Research and Development Center with the following highlights:

**1.) Scope of the Project.** The project was created to validate the accuracy of position and other data transferred from cell phone mariners through NG911 Operators to the Coast Guard. The project was begun in recognition that an increasing percentage of near shore distress calls are coming from cell phones, many with embedded position information. In 2010 about 40% of SAR cases originated from cellphone calls while in 2014 the percentage had increased to 65%. Preliminary results seem to indicate that in 80% of cellular calls position data is available. The validation testing was scheduled for the Maine coast since that state has fully implemented the new standards for NG911 Call Centers.

**2.) Project Results to Date.** The final phase was completed this summer in Maine. The Metadata transferred included 5-meter position, call back number of the originating cellphone and images if available. The ability of the NG911 networks to successfully transfer the full data set was demonstrated and has the potential to greatly improve SAR response but it will take some time before all coastal call centers have fully implemented NG911. A side benefit of this new system will be improved ability to track the origination of Hoax calls.

**b. Status of the Task Force Petition to Upgrade Radio Safety Equipment on Small Passenger Vessels.** Russ Levin reported that the Petition was moving ahead and would soon be presented to the Coast Guard's Merchant Marine Safety and Security Council for permission to

initiate regulatory action. It appears that most of the Task Force recommendations to the Coast Guard have been accepted at this stage with the possible exception of the proposal to require small uninspected passenger vessels carrying 6 or fewer passengers to carry satellite emergency beacons.

**c. The Task Force Petition to Require Emergency Beacons on Recreational Vessels Offshore.** There was no update report from the Coast Guard's Office of Boating Safety but Jack Fuechsel provided some background on the Task Force Proposal. The objective is to save more lives but there is also a significant collateral benefit to the Coast Guard Search and Rescue forces in fuel savings and prompter rescues with a good starting position. The Task Force is very supportive of the NBSAC Resolution that would accept EPIRBs, PLBs and other satellite emergency services such as SPOT, DeLorme Inreach, Iridium, and also VHF-DSC with GPS for R/Vs staying within 20 miles of the coast. The timeline to date is as follows:

- 1.) October 2010 – Congress provides enabling legislation for beacons on R/Vs
- 2.) January 2011 – Task Force Letter to USCG Advocates beacons on offshore R/Vs
- 3.) October 2011 – USCG refers issue to Natl. Boating Safety Advisory Council
- 4.) November 2012 – NBSAC Resolution Agreeing with Task Force Proposal
- 5.) November 2012 to present – Data Analysis leading to Regulatory Decision

**d. New Coast Guard Communications Command (COMMCOM).** The Coast Guard has established a new Communications Command (COMMCOM) at Chesapeake, Virginia. From this location it will continue to remotely operate the HF stations on the east coast, west coast, Hawaii and Guam. The Kodiak station will retain a small staff of operators.

**e. Coast Guard Briefing on standard electronics outfit for Boat Crew Communications System (BCCS).** Separately from the Task Force meeting, a Coast Guard contingent from the C4IT Service Center briefed interested NMEA attendees on the Coast Guard's prospective need for a standard BCCS outfit of equipment for up to 800 hulls. The BCCS suite provides noise protection, an inter-communications capability between crewmembers, and an interface to the boat's external radios. The Coast Guard is interested in standardizing a BCCS system with the following components throughout the fleet.

- ECS or ECDIS
- Multi-Function Display Radar
- GPS (single and dual)
- Depth Sensor
- Heading Sensor
- Auto Pilot
- Marine Grade Power Supply and Convertors

**6. Special Report on new standards developments for maritime systems that are expected to have far-reaching impact on the design of new radio navigation and radio communications equipment.** Ross Norsworthy provided an in-depth report with a forecast of major new manufacturing opportunities as follows:

**a. The guiding principles that the technical working groups are striving to achieve are as follows:**

- Need for improved human-machine interface
- Need for better cyber security
- Pressure to modernize and automate systems
- Increasing number of functions and complexity
- Pressure to control cost and carriage requirements
- Need to replace aging and outdated equipment on ships
- Desire to utilize advancing digital technology
- Manufacturers seeking to exploit opportunities

**b. The VHF Data Exchange System (VDES) will include AIS and make data transfer more efficient with a data rate 32 times faster than AIS.**

- Subsumes AIS (one box, one antenna)
- Adds toll-free digital communications links
  - Ship-ship
  - Ship-shore
  - Shore-ship
  - Ship-satellite
  - Satellite-ship
- Efficient communications (32X faster than AIS)

**c. The Integrated Communications System (ICS) embraces all GMDSS functions and becomes a system of functions rather than a rack of radios**

- ICS (Integrated Communication System)
  - Integrates communications, GMDSS functions
  - Intuitive human-machine interface
  - Improves cyber-security
- Integrates GMDSS communications functions
- MF/HF DSC radios
- VHF DSC radios
- INMARSAT-C (and/or IRIDIUM) satcom
- NAVTEX (to be overtaken by NAVDAT)
- Adds non-GMDSS comm functions, e.g., VDES
- Automatic, intuitive human-machine interface
- Provides redundancy
- Uses cyber-secure network (IEC 61162-450/460)

**d. The Multi System GNSS Receiver (MSGNSS) with terrestrial backup meets the IMO performance standard as follows:**

As a minimum, a receiver that can receive signals and derive PVT solutions from each of the GNSS constellations in the L1 band (1559 MHz to 1610 MHz), i.e., GPS, GLONASS, Beidou, and Galileo, independently.

A receiver that can derive PVT solutions from combinations of any two or more of these GNSS constellations

A receiver that utilizes GNSS augmentation systems in the L1 band

A receiver that accepts augmentation from an external source by SC104 interface

A receiver that provides co-site (on-ship) and terrestrial adjacent band interference protection

A receiver that can derive PVT solutions from terrestrial radionavigation systems in a protected band, e.g. e-Loran

**7. Reports and Issues of the Service Agents and Manufacturers Group:** Hugh Lupu moderated the discussion with the following highlights

**a. New ITU-R Recommendation M.585 on Assignment and Use of Identities in the Maritime Mobile Service allows new format for MMSI on a radio not associated with a vessel.** This new ITU Recommendation that is likely to be adopted offers a solution to Diver Radios and other problems but needs to be implemented by the Administration. The new optional format would use the digit '8' ahead of the 3-digit country code. There was extensive discussion at the last meeting as to whether the Task Force should urge the U.S. to authorize the new format in the U.S. A consensus seems to be emerging to implement the new system nationally but there are problems to be worked out relative to Licensing and whether the MMSI Registration Agents would be permitted to issue the MMSIs.

**b. Reaction of Manufacturers to the Task Force Proposal to Make Changing MMSI Easier.** This project was undertaken to mitigate the so called "3 strikes" rule which limited the number of attempts to enter an MMSI in a VHF radio after which the use of a service agent was required. The Group is still collecting data as to which manufacturers have accommodated the Task Force recommendation to make such changes easier to accomplish in the hope that more users of DSC radios will have activated the DSC features.

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

**a. Cybersecurity is becoming a Major Issue in the Maritime Community.** The Commandant of the Coast Guard has promulgated his Cybersecurity Policy and the IMO has begun to address the issue. In the commercial sector, the RTCM, BIMCO and CIRM are developing plans for recommended action. The Task Force has added a new Cybersecurity item to its work program and will monitor developments to report to the membership. Separately, NMEA members received an excellent Cybersecurity update from Mr. Levin who had presented a similar update at the RTCM Annual Meeting.

**b. Updating of Task Force Radio Carriage Proposals for Fishing and Towing Vessels.** The Group is prepared to recommend updates to the earlier Task Force proposals on these vessel categories. The intent is to wait to see if the Coast Guard and the FCC accept the

proposals for Small Passenger Vessels since any further recommendations would likely be similar to those proposed for small passenger vessels.

**9. Reports and Issues, Recreational Vessel Group:** David Kennedy moderated the discussion on Recreational Vessels with the following highlights:

**a. New Coast Guard Smart Phone App Getting Good Reviews.** The new Coast Guard App for Smart Phones was released on 16 May in recognition that about 65% of calls for assistance were originating from cell phones. As noted in paragraph 5.a.1.) above, the take up of smart phones by the public indicates that position information is available in about 80% of such calls.

**b. New BOATUS Foundation/U.S. Power Squadrons On-Line Course on VHF Communications.** Time did not permit discussion of this new course but Task Force members are encouraged to review the synopsis on-line ([www.boatus.org/marine-radio/](http://www.boatus.org/marine-radio/)) and encourage boat operators to take the course.

**c. Gordy Garrett's Power Point Presentation of Survival Principles and Selected SAR Cases.** Gordy continues to do a fantastic job of tracking SAR cases for the Task Force and his work will prove very beneficial to the NSBC Campaign. Goody's selected SAR cases included both successful outcomes and outright failures. Several Task Force members in attendance asked for copies of the slides for use in promoting safety on the water. This version of his PowerPoint slides are more inclusive than earlier editions and will be placed on the Task Force website. They are also available by email to any Task Force member on request to Jack Fuechsel at [gmdss@comcast.net](mailto:gmdss@comcast.net).

**10. Reports and Issues of the Training Task Group.** Kurt Anderson reported on his Group's activity that includes reopening review of the Question Pools for GMDSS Operator exams and assisting the Task Force effort to completely revise the FCC Rules to update them and arrange them in a more logical order. The basic issues are as follows:

**a. Revision of the GMDSS Question Pools.** Some of the issues being watched are the role of SITOR which is rarely used but accounts for about 8% of the questions, display of Navtex and SafetyNET Marine Safety Information (MSI) on various integrated display devices and Inmarsat-C which appears destined to become the only GMDSS qualified Inmarsat system once Inmarsat-B is terminated at the end of 2016. Kurt has contacted all of the schools teaching GMDSS courses and invited input from their instructors.

**b. General Revision of the FCC Rules for Improved Clarity and More Logical Arrangement.** This Rules Revision project is listed under the Training Group since most of the suggestions for revision have come from that source. Mr. Joe Hersey is the project leader for this effort and progress to date can be viewed on his personal website, [www.joecel/documents.htm](http://www.joecel/documents.htm). Additional input is welcomed addressed to [Joe@joecel.com](mailto:Joe@joecel.com). The following are categories that continue under study for revision:

- 1.) Electronic Radio Log Keeping
- 2.) Frequency of equipment testing prior to departure
- 3.) How to make references to Inmarsat more Generic
- 4.) Documents to be carried on board
- 5.) Move all references to Standards to one Section
- 6.) Create a new Section on MMSIs and passwords
- 7.) Watchkeeping on 2182 kHz
- 8.) Hi Speed Craft

**11. GMDSS Modernization.** Ed Gilbert, Member of the International GMDSS Modernization Correspondence Group and Delegate to the Joint IMO/ITU Experts Group and the IMO NCSR Subcommittee provided the following report:

*Note: Included below in (bold italics) are updates subsequent to the Task Forces' meeting. The IMO/ITU Experts Group met in London 5-9 October subsequent to the Task Force meeting and conducted a comprehensive review of the Correspondence Group's report on the GMDSS Modernization's Detailed Review so ably led by Bob Markle. The review included a complete day of examining draft changes to Chapter IV of the SOLAS Convention. The Experts Group's output will be forwarded for consideration by NCSR-3, which is scheduled to meet 2/29--3/4 2016. Because there is a structured process to amend the Convention, the following timeframes are important regarding changes to Chapter IV of the Convention:*

*March 2016—NCSR-3 using inputs from the Experts Group and an updated input from the Correspondence Group will attempt to finalize a preliminary approval for changes to Chapter IV, which will be available for considerations by administration for approximately a year until the meeting of NCSR-4 during 2017.*

*2017 NCSR-4 meeting (dates not scheduled yet). Based on inputs from the Correspondence Group, Experts Group and administrations, hopefully NCSR-4 will complete the final approval for the Chapter IV changes and submit them to the Maritime Safety Committee for its work on them. If all this goes according to schedule, final changes can be approved by the IMO in 2020 to become effective in 2022. If any of these gates are missed the process will be delayed for four years.*

*Some other highlights of the Experts Group meeting are included below. There was an emphasis throughout to ensure consideration of issues about new satellite providers in the IMO and ITU processes, including placeholders for future ITU conferees.*

a. Framework and Progress to Date. Ed explained the Modernization framework that included a High Level Review of major issues followed by a Detailed Review. The schedule for the project has been extended for one year. The Correspondence Group will prepare a final draft of the Detailed Review that went to the IMO/ITU Experts Group meeting in October of this year and then submit a revised version to the NCSR-3 in March 2016. The Correspondence Group prepares the input for these reviews and it seems safe to say that there are few dramatic changes in prospect except for the pending application of Iridium to become a GMDSS service provider.

In general, most of the review activity has taken place in the Experts Group because the newly merged NCSR group has a huge agenda for a one-week meeting.

**a. Modernization Decisions Tentatively Agreed.** Earlier reviews have accepted the functional requirements with only minor adjustment and have endorsed the changes proposed to Chapter IV of SOLAS. The Sea Area A3 definition (and consequently the meaning of Sea Area A4) will be changed to account for entry of satellite systems other than Inmarsat for GMDSS service.

**b. Modernization Issues still to be decided.** There are still a number of issues of concern that should be dealt with and may be included in the Detailed Review. The following is a partial list:

1.) The need for higher data speeds to accommodate e-Nav and MSI *There was general agreement about this need as well as inclusion of NAVDAT and other means such as VDES for disseminating MSI. Also, there was general agreement that relevant documents should be amended to become more agnostic about specific technical ways to do various functions. Functions should be included in the basic documents and specific implementation techniques should be addressed by performance standards.*

2.) The dwindling number of HF Coast Stations still available for service

3.) Are all functional requirements needed for non-SOLAS vessels? *There will be a recommendation that non SOLAS vessels be described as those not covered by SOLAS Chapter 4/1.*

4.) Incorporate functional requirements for Man Overboard devices

5.) Should PLB's (or another kind of device) be required for/or packaged with survival craft?

6.) Interoperability among shore facilities in the GMDSS

7.) Include the new NAVDAT service? (MSI broadcast on 500 kHz)

8.) Include the new VHF Digital Exchange Service (VDES)?

9.) Role of AIS in GMDSS, if any?

10.) Government's reluctance to pay for duplicate satellite broadcasting of MSI?

*There is still much concern about this*

11.) The role of text messaging in GMDSS, if any? *Please note above about spelling out functions vice techniques*

**12. The RTCM Report:** RTCM President Bob Markle was unable to attend the meeting but provided the following updates on the continuing work of the RTCM Special Committees:

**a. RTCM SC-101 on GPS in VHF-DSC Handhelds.** The Committee has completed an edition of its standard on GPS in VHF-DSC handhelds. Incorporation in the FCC regulations is awaited.

**b. RTCM SC-104 on Differential Global Navigation Satellite Systems (GNSS).** This Committee is working on incorporating new differential GNSS messages to accommodate new global and regional systems such as the Chinese BeiDou System (BDS) and the Japanese QZSS System into its standards that were originally developed for GPS. The committee met in Tampa in September 2015 and considered the Coast Guard's notice regarding closure of some of the

Nationwide Differential GPS system. The May 2015 meeting was in Xi'an, China, which emphasized the committee's commitment to include all operating GNSS systems.

**c. RTCM SC-109 on Electronic Charting Technology.** The committee has completed and published a new version of the standard (RTCM 10900.6), including provisions for Voyage Data Recorder (VDR) functionality in Electronic Charting Systems.

**d. RTCM SC-110 on Emergency Beacons.** Current work is on beacons that will be optimized for the new Second Generation MEOSAR Satellite System. Existing beacons will also work with the new satellite system. A new standard is being developed to allow homing on both 121.5 MHz and AIS in the same EPIRB. A new PLB standard has been approved which includes integral GNSS. This is not expected to be a problem since virtually all PLBs on the market already include GNSS receivers. The Committee met again during the RTCM Assembly.

**e. RTCM SC-112 on Marine Radar Standards.** This Committee is developing language for this and other standards to require the use of "NMEA Network" messages, worded in such a way that NMEA OneNet can be used when it is ready along with NMEA 2000 and NMEA 0183. The Committee met again during the RTCM Assembly and a revised standard is expected to be out for vote soon.

**f. RTCM SC-119 on Maritime Survivor Locating Devices (MSLD).** This Committee amended the man overboard standard to accept either closed or open loop networks. The Committee voted approval prior to the RTCM Assembly and the amendment is now published. The group was advised that Australia has accepted the RTCM MSLD Standard.

**g. RTCM SC-121 on Automatic Identification Systems (AIS) and Digital Messaging.** This Committee has completed the standard that establishes the process for developing Application Specific Messages (ASM). The new standard is expected to be out for Committee vote soon.

**h. RTCM SC-123 on Digital Small Messaging Services on Maritime Frequencies.** In response to an RTCM petition, the FCC has proposed to adopt RTCM Standard 12301.1 for transmitting data on VHF channels. The Committee may expand its work to include data messaging on MF and HF channels as well as Encrypted AIS (EAIS).

**i. RTCM SC-127 on E-Loran.** This Committee is developing an eLoran standard in connection with the eLoran demonstration project taking place in the United Kingdom under the General Lighthouse Authorities. The RTCM and the GMDSS Task Force commented on the DOT Notice seeking comments on e-Loran as a back up for GPS that closed on 22 May.

**j. RTCM SC-128 on Satellite Emergency Notification Devices (SEND).** This Committee was chartered at the request of the Coast Guard to develop performance standards for emergency notification systems using private satellite systems such as SPOT. The Committee has completed and approved a clarifying amendment to this standard. The FCC initially declined to include the revised standard in its Rules, but RTCM has asked for reconsideration.

**k. RTCM SC-129 on Portrayal of Nav-Related Information on Shipboard Displays.**

This Committee has completed a first draft of the portrayal standard but the issues are very complex. Additional input will likely be required from SC-112.

**l. RTCM SC-130 on Electro-Optical Imaging Systems (EOIS).** The work of this Committee deals primarily with night vision systems but the Committee work has been suspended pending industry resources to support it.

**m. RTCM SC-131 on Multi System Shipborne Navigation Receivers.** This new Special Committee has been approved by the RTCM Board to develop a standard incorporating space based and terrestrial navigation systems, and to possibly include inertial systems as well. The standard will include provisions for resistance to interference, spoofing, and jamming. In cooperation with IALA, RTCM has been developing an IMO performance standard and will begin work on an IEC technical standard. The Committee met during the RTCM Assembly.

**n. RTCM SC-132 on Electronic Visual Distress Signaling Devices.** This new Committee was chartered at the request of the Coast Guard to review devices that might be used to replace flares on vessels. In addition to safety factors, it has been reported that in 87% of reported flare sightings, no distressed vessel was found. The U.S. Coast Guard Research and Development Center has reported on the most effective light characteristics for this purpose.

**13. Next Meeting of the GMDSS Task Force:** The next Task Force meeting will be held on Thursday 14 January 2016 at the RTCM Headquarters in Arlington, Virginia. The follow-on meeting will be held on Thursday 19 May 2016 during the RTCM Annual Assembly at the Duval Conference Center in Clearwater Beach, Florida.

**GMDSS TASK FORCE CONTINUING WORK LIST**

30 September 2015

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 MSI broadcasting programs for compliance with GMDSS Standards (TF)
5. Review GMDSS Internet Web Sites and update Task Force portion of USCG site (TF)
6. Support SOLAS Working Group planning for IMO NAVCOMSAR meetings (TF)
7. Advocate Canadian coordination to extend GMDSS services to the Great Lakes (TF)
8. Advocate voluntary carriage of VHF and EPIRB/PLBs by all vessels offshore (TF)
9. Advocate overhaul of FCC policy and practice on MMSI assignments (TF)
10. Monitor non-GMDSS systems: AIS, LRIT, SSAS, VDR, VMS, & E-Navigation (TF)
11. Recommend updates for Coast Guard NVIC on GMDSS Requirements (TF)
12. Recommend means to facilitate Distress Alerts by Cell Phone & Internet (TF)
13. Advocate GNSS for U.S. EPIRB and PLB Standards (TF)

14. Advocate mandatory Distress Beacons on R/V more than 3 miles offshore (TF)
15. Advocate use of the Alaska AIS Monitor Network for VHF Distress Guard (TF)
16. Monitor Developments in Cybersecurity and advise membership (TF)
17. Review GMDSS concepts and make modernization recommendations (MOD)
18. Advocate intership calling on HF GMDSS channels (CV)
19. Recommend Safety Radio and VMS Requirements for Small Fishing Vessels (CV)
20. Recommend Safety Radio & Navigation Requirements for Towing Vessels (CV)
21. Recommend Safety Radio & Nav. Outfit for Small Passenger Vessels (CV)
22. Advocate applications for new MF/HF Digital Communications Service (CV)
23. Advocate voluntary training programs for users of GMDSS systems (RV)
24. Encourage GMDSS handbooks and Internet and video training aids (RV)
25. Encourage users of VHF-DSC to Register for MMSI and connect GPS (RV)
26. Advocate FCC let R/Vs retain existing MMSI when applying for Station Lic. (RV)
27. Encourage Mfgs. to upgrade GMDSS explanations in equipment manuals (SA)
28. Recommend proper interconnection of GPS receivers with DSC Radios (SA)
29. Advocate better FCC & USCG management of annual GMDSS inspections (SA)
30. Maintain Inspection Guidelines and Check Lists for selected vessel types (SA)
31. Recommend Certification Path For GMDSS Maintainer (SA) and (TR)
32. Maintain GMDSS Question Pools for FCC and Coast Guard Examinations (TR)
33. Advocate 5 Year USCG Recertification Training of GMDSS Operators (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) Modernization Task Group

**Please refer questions and proposals to Captain Jack Fuechsel at 703-527-0484 or [gmdss@comcast.net](mailto:gmdss@comcast.net). If you have an Internet server with spam filters, please authorize receipt of messages from [gmdss@comcast.net](mailto:gmdss@comcast.net)**

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