

GMDSS IMPLEMENTATION TASK FORCE

Newsletter and Summary Record of 2 May 2014 Meeting

1. **The Task Force Meeting.** The meeting was very well attended with over 60 participants. The Task Force presently has a membership of over 3500 interested parties worldwide. The membership is composed of commercial vessel operators, recreational vessel interests, training institutions, service agents, manufacturers, and government authorities. Membership is open to any interested person or organization and there is no fee. New members are welcome, to join send your name, organization (if any), email address, and telephone number (optional) to gmdss@comcast.net. Members who are unable to attend Task Force meetings are invited to participate by email.

The summary record 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 (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 2 May 2014 at the Loews Hotel in Annapolis, Maryland during the joint annual meetings of the RTCM and the CIRM. The documents listed below were distributed and are available on request:

Draft Task Force Concepts for Small Passenger Vessels
Flyer on use of Cellular Signal Boosters to extend range
Flyer on ABSEA Small Vessel AIS-B Tracking by Satellite

2. **The Coast Guard Reports:** The following presentations were made by the persons indicated:

a. The Case for Emergency Beacons for R/Vs Offshore. Mr. Jeff Ludwig of the Office of Boating Safety briefed the group on the status of the Task Force recommendation that the Coast Guard implement its new Congressional Authorization to require “emergency beacons” on recreational vessels more than 3 miles offshore. The recommendation has been endorsed by the National Boating Safety Advisory Council (NBSAC) which also suggested that a broad interpretation of “emergency beacons” could include several devices in addition to EPIRBs such as PLBs, SPOT, Inreach, and for vessels remaining within 20 miles of the coast, a VHF-DSC with integral GNSS.

The Coast Guard’s Office of Boating Safety is presently conducting an extensive cost/benefit analysis of Search and Rescue statistics as a preliminary step before deciding to commence regulatory action. For the period selected for analysis, over 20,000 SAR cases had to be sorted manually to identify 738 cases that were more than 3 miles offshore. Those cases generated over 7000 sorties by Coast Guard cutters and aircraft which cost the Coast Guard an average of \$63,000 per case. Aside from the obvious

benefits of improving the timeliness of response and accuracy of position, the objective is to save more lives.

b. Coast Guard Proposal for Changes to the FCC Rules. Bill Kautz acknowledged that the Coast Guard had compiled comprehensive recommendations for upgrading the Part 80 Rules. This was a huge undertaking but for various reasons the recommendations were never released from Coast Guard Headquarters. It now appears that the Coast Guard no longer intends to formally transmit the proposals to the FCC. This is unfortunate since a lot of work went in to compiling the recommended changes and they had the potential of making the FCC Rules much easier for users to understand. A question was raised as to whether the Task Force or the RTCM might take over the project and submit the proposal to the FCC. The Task Force will follow up to determine if the Coast Guard is willing to have another organization take over the project and whether the Task Force or the RTCM might be in a position to do so.

c. Declaration of Sea Area A1. Bill Kautz reported that with the essential completion of the Rescue 21 Project, the Coast Guard had earlier committed to declaring Sea Area A1 operational. Some new concerns have emerged which may further delay an official announcement. Even though VHF-DSC is fully implemented in the Great Lakes, that area is exempt from SOLAS GMDSS Rules since it is covered by the bilateral Great Lakes Agreement with Canada. In addition, there is some concern over declaring the system operational without Alaska, which may never be fully covered, and the Western Rivers which have not yet been completed.

Sea Area A1 is created when there is a continuous shore watch on the VHF-DSC Calling and Distress channel 70. The initial declaration of Sea Area A1 was proposed to not include Alaska but to include the Continental U.S. coasts, the Great Lakes, Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands. According to provisions of the FCC Rules, a declaration of Sea Area A1 will require that all non-SOLAS vessels mandatorily equipped with VHF but operating with a DSC waiver, upgrade to VHF-DSC within one year of the declaration. The present regulations require a class A VHF-DSC for these mandatory non-SOLAS vessels, but the FCC and the Coast Guard are consulting on procedures that could accept a lower cost Class D radio for these vessels.

For the Sea Area A1 issue, Tim Rulon of NOAA made a comment for further consideration by the Coast Guard, the Task Force and the FCC. NOAA, the Coast Guard, and NGA cooperatively contribute Maritime Safety Information (MSI) for broadcast on NAVTEX and SafetyNET. Now that there are no longer Coast Guard 2 MHz broadcasts of MSI it is perhaps time to review policy for MSI broadcasts on VHF. These are probably ongoing as required for SAR cases but broadcast of routine weather on VHF may be at the discretion of Sector Commanders. This issue will be added to the agenda for the periodic 'UNCLOG' meetings where the Coast Guard, NGA, FCC and Task Force are represented.

d. Developments in E-Navigation and AIS/ECDIS Regulations. LCDR Megan Cull reported with the following highlights:

1.) Automatic Identification Systems (AIS) Phase 2: The rulemaking for expanding U.S. AIS Carriage closed for comments in April of 2009, and is in its final stages for publication but has yet to be reviewed by OMB; according to the Semi-Annual Regulatory Agenda its publication is tentative for June of this year.

2.) ECS/ECDIS Rulemaking, 33 CFR 164.30 & Others: The U.S. Marine Transportation and Security Act (MTSA) of 2004 mandated Electronic Navigation Charts (ENC) for all vessels required to be fitted with Automatic Identification Systems (AIS). The Coast Guard has been working closely with the RTCM and its Special Committee 109 to amend the RTCM Electronic Chart System (ECS) Standard. Version 6 of the Standard that is now under development will most likely be used in forthcoming regulatory action for which the Coast Guard is standing up a Rulemaking team. SOLAS vessels are outfitting with ECS and ECDIS in accordance with a phased in schedule that began in July of 2012. A Federal Register Notice is currently being routed for clearance at Headquarters that will explain the forthcoming changes.

3.) Voyage Data Recorders (VDR and S-VDR), 33 CFR 164.61: Provisions for the IMO Annual Inspection are included in draft Federal Register Notice regarding implementation of SOLAS ECDIS carriage requirements. Carriage requirements for domestic vessels are an action item of the National Transportation Board (NTSB) which uses the data in conducting investigations but is not viewed by the Coast Guard as a safety of navigation issue. The RTCM work on the ECS standard includes the S-VDR to avoid a requirement for another “box.”

4.) Tanker Integrated Navigation System (INS), 33 CFR 154.13 (d) & (e): The Coast Guard issued MSIB 13-10 suspending a provision allowing the use of advance auto pilot systems by tank vessels in safety fairways and traffic separation schemes (TSS). Since then a provision of 33 CFR 164.55 has been utilized to allow Captains of the Port (COTP) to grant waivers to the suspension (thereby allowing use by Tankers) provided the onboard equipment meets or exceeds 33 CFR 164.13 (e). A Rulemaking team has been stood up to formally lift the suspension.

5.) Inland Navigation Rules, 33 CFR 83-88: The NPRM was published 28 August 2012 (77FR52176). The major changes were to relocate Annex V, align with provisions of the COLREGS and adopt Navigation Safety Advisory Committee Resolutions. The 10 comments on the NPRM are now being adjudicated, and a Final Rule can be expected by late spring 2014.

e. SOLAS Working Group to Prepare for Upcoming Meetings of the IMO Subcommittee on Navigation, Communications and Search and Rescue (NCSR). Russ Levin reported that the new Subcommittee, which replaces the Communications Search and Rescue (COMSAR) and Safety of Navigation Subcommittees, will have its

first meeting in London June 30 through 4 July 2014. The new Subcommittee encompasses the work of both old Subcommittees but is only allocated one week for the combined agenda. The U.S. Delegation will be headed by Mr. Gary Rasicot of the Navigation Office assisted by senior officials from Communications and Search and Rescue. There is one more meeting of the Working Group scheduled for Wednesday 11 June at the RTCM Headquarters. Participation in the SOLAS Working Group for NCSR is open to all interested parties. Task Force members desiring to be added to the Working Group should contact Jack Fuechsel.

f. Coast Guard Crada to Preserve Position in Smart Phone ‘911’ Calls. Jack Fuechsel reported that the Coast Guard’s Research and Development Center has issued an invitation for interested companies to enter into a Cooperative Research and Development Agreement (CRADA), the goal of which is “to identify and investigate the advantages, disadvantages, required technology enhancements, performance costs, and other issues associated with using maritime-related smart phone NG911 forwarding (voice image position and text) capabilities.” The next generation of ‘911’ calling will accept text in addition to voice and the Coast Guard is ramping up for the next generation technology. It is estimated that as much as 80% of calls to the Coast Guard come from cell phones.

g. Coast Guard Program to Equip Cutters with Ku Band Satellite Systems. Jack Fuechsel reported that the February 2014 issue of OCEAN NEWS & TECHNOLOGY contained an article describing plans to equip Coast Guard Cutters with KVH TracPhone V7 and mini-VSAT Broadband service. The article indicated that 105 systems had already been deployed on eight different classes of cutters. The 10 year contract for hardware, airtime, and support was first announced in September 2010.

3. The FCC Reports: Ghassan Khalek reported for the FCC with the following highlights:

a. FCC NPRM WT Docket 14-36 Proposing Changes to Parts 80 & 95 of the Rules. Ghassan outlined the scope of the proposed changes that were largely in response to Petitions by the RTCM and the Task Force. The items contained are as follows:

- 1.) Require integral GPS in EPIRBs and PLBs (Adopt RTCM Standards)
- 2.) Incorporate Marine Survivor Locating Devices (MSLD) in the Rules
- 3.) Incorporate Satellite Emergency Notification Devices (SEND)
- 4.) Clarify Radar Rules
- 5.) Implement Small Digital Messaging on VHF
- 6.) Authorize use of VHF handhelds ashore within 3 miles of vessel
- 7.) Allow transfer of Radio Station License when ship is sold

Responses to the NPRM are due by 2 June 2014 and may be filed electronically. The Task Force established an ad hoc group that has been working on our response. We basically agree with all proposals but note that the FCC is not inclined to agree to the use

of VHF handhelds ashore and accordingly the Task Force will probably propose that it be authorized but restricted to VHF-DSC handhelds with integral GPS to minimize interference potential and encourage users to use those advanced handhelds. Other Task Force members were invited to join the ad hoc group.

b. Problems Associated with Coast Guard Discontinuing Coastal Watch on 2 MHz frequencies: The FCC is experiencing a sharp increase in requests for waivers by Non-SOLAS vessel operators asking to use satellite systems other than Inmarsat to meet their regulatory requirements. Recognition of alternative satellite systems has long been recommended by the Task Force but no provisions have been made in the Rules as to what systems parameters alternate satellite providers would need to meet. It has been reported that the FCC has granted waivers to use an alternative satellite system in the past based on whether a particular Coast Guard Station in the vicinity has agreed to answer satellite calls. Current Task Force recommendations suggest accepting satellite systems that cover the vessels operating area, support the vessels with a 24x7 watch ashore, and that the vessel have an active account with the satellite service provider. SOLAS vessels are required to watch 2 MHz regardless of the shore coverage and Non-SOLAS vessels using Inmarsat do not need a waiver since Inmarsat is a recognized GMDSS provider.

c. Improved Management of MMSI Numbers. With the advent of AIS using the same MMSI numbers for identification as those used with DSC radios, and the use of these MMSI numbers for prosecuting SAR cases, it has become important that all agencies update their data bases to eliminate duplication and purge numbers no longer in use. The FCC has delegated assignment of MMSI numbers to selected agents who are required to revalidate their base of assignments periodically. The FCC has agreed with the Task Force's recommendation for improved management of the numbers they issue but for various reasons have not undertaken to verify the continued use of the block of numbers issued directly by the FCC. The Task Force again recommends that the FCC send post cards or emails periodically to all holders of FCC issued MMSI registrations to verify their status. This system has worked very well for NOAA to maintain an accurate database of EPIRB and PLB registrations.

4. Reports and Issues: GMDSS Modernization Group. Bob Markle, Chairman of the international Correspondence Group, reported that the IMO/ITU Experts Group had reviewed two reports of the Correspondence Group at their meeting in London 14-18 October 2013. The first, EG 9/4, entitled "Preliminary Draft Outcome of the High Level Review of the GMDSS" was the next step in the work plan following approval of the earlier report by COMSAR 17. The other document, EG 9/4/1, entitled "Discussion of Issues and Preliminary Outline of the Detailed Review of the GMDSS" was to begin the detailed review.

The Experts Group Report commented on and revised both documents and in the absence of a definitive overview by Comsar 17, is considered the primary guidance for further work by the Correspondence Group. The Experts Group report revised the

definition of 'Security Related Communications' and recommended two choices for the definitions of 'Sea Area A4'. Functional Requirements were increased from 9 to 10 to allow for transmission and reception of marine safety and security information as well as reception of MSI. There was no support for the option of creating a GMDSS Code. The report of the review by the Experts Group is on the agenda for the Navigation, Communications, and Search and Rescue (NCSR) Subcommittee meeting in June 2014, with a view to approving the report of the High Level Review as the final report on that subject. The report on the Detailed Review will be the basis for further work. A further report from the Correspondence Group has also been submitted to NCSR-1.

5. **Reports and Issues, Commercial Vessel Task Group.** Jack Fuechsel reported for the Commercial Vessel Group with the following highlights:

a. Review of the Standards for Safety Radio Equipment on Small Passenger Vessels. The Task Force project to recommend an upgrade of radio safety equipment for small passenger vessels was motivated by a determination that the passengers were entitled to better protection than was afforded by the present Coast Guard and FCC Regulations. When the Coast Guard suddenly terminated all coastal watches on 2182 and 2187.5 MHz without changing the carriage and watch requirements for mandatory non-SOLAS vessels more than 20 miles offshore, it became apparent that the Task Force would also need to make further recommendations to deal with the situation. The latest draft of the Task Force concept paper was distributed and approved by the group. The next step will be to separate the issues in the paper into separate Petitions to the FCC and Coast Guard and file them.

b. Changes to Carriage Requirements for Other Mandatory Non-SOLAS Vessels as a Result of the Coast Guard Discontinuing 2 MHz Watches Ashore. The Task Force will be upgrading its earlier recommendations regarding Fishing Vessels, Towing Vessels and other mandatory commercial vessels needing to go farther than 20 miles offshore. In most cases the main upgrade recommended will probably be to eliminate any watches on 2 MHz channels and require watch on HF or satellite systems.

c. ABSEA Small Vessel Tracking of AIS-B by Satellite: Jack Fuechsel reported on a new service offering for Advanced class B Satellite Enhanced AIS (ABSEA) tracking which reliably tracks AIS-B transponders by satellite. The service was developed jointly by Exact Earth and SRT and utilizes Spectrum Decollision Processing (SDP) as well as On Board Processing (OBP) to achieve reliability. The service appears to be of primary interest to governments who want to monitor fishing vessels since the transponder unit is locked in a bracket and alarms if tampered with. ABSEA would also be of interest to voluntary users who wish to be tracked such as yachts cruising on the high seas.

6. **Reports and Issues, Service Agents and Manufacturers Task Group.** Ralph Sponar reported for his group with the following highlights:

a. Standardized Inspection Checklists. The Group has worked with the Coast Guard, the FCC, and Classification Society inspectors to update checklists for mandatory inspections of selected vessel types. The three Inspection Checklists on the FCC website are linked to the Task Force website. Further review is being conducted on Checklists for Bridge-to-Bridge Radiotelephone and AIS Class A and B that appear to be agreeable to the Coast Guard. There is also a need for a check list for the IMO mandated annual VDR inspection. The Fishing Vessel Checklist published in 2003 is being reviewed prior to posting on the web sites along with the other checklists. The checklist issue is complicated by the fact that neither the Coast Guard nor the FCC wants copies of completed inspection reports. This leaves the only option as retention of the latest inspection report on board with an entry in the log. In at least some cases, the interval between inspections needs to be reduced to provide realistic oversight of EPIRB battery replacement schedules. Most of these issues would be resolved if the Coast Guard's proposed changes to Part 80 of the Rules are submitted by RTCM or the Task Force and accepted by the FCC.

b. Continuing Issue – Should “3 Strikes Rule” be Rescinded? It is now clear that almost everyone agrees that the rule limiting to three the number of ‘tries’ to enter MMSI numbers in VHF-DSC radios is proving counter productive. Discussion at an earlier meeting suggested that a manufacturer furnished passcode that could be furnished to dealers and service agents would be a more convenient arrangement. The Coast Guard and FCC discussed the issue and had no objection to removing the “three strikes” rule. The Coast Guard proposal to the FCC on Part 80 is reported to contain appropriate recommendations but that fix is now on hold. Joe Hersey provided the background on international standards that led to implementation of the “3 strikes” rule and proposed action as follows:

ITU-R Rec M.493-13; Para 12.4: “Once stored, it should not be possible for the user to change the MMSI without advice from the manufacturer” The draft -14 revision does not change this requirement.

IEC 62238 Class D DSC (2003); Para 5.4: “After the MMSI has been stored, it shall not be possible to change the identity number using any combination of operator controls.” Jon Turban of the Coast Guard R&D Center has the draft to revisions of this IEC document and is holding it until M493 is stabilized and after the revised GMDSS standard 61097-3 is submitted.

7. Reports and Issues: The Recreational Vessel Group Report. David Kennedy of Boat U.S. reported that BOAT US has now issued over 140,000 MMSIs. He reported for his group with the following highlights:

a. Emergency Beacons on R/Vs Offshore. This is a very important Task Force initiative the status of which was reported in paragraph 2. a. above.

b. ad hoc Group to Promote Proper Use of VHF-DSC Radios Including Registration for MMSI and Connection to GPS Receiver. It is important to note that the FCC Rules require registration for an MMSI number and embedding the number in all DSC radios. The Rules need to clarify this point because many owners of DSC radios have failed to register for an MMSI and enter it into the radio. The Task Force continues to advocate connecting GPS to fixed mount VHF-DSC radios, we realize that the connection is difficult for owners to accomplish without technical help. Our reason for stressing the benefit of handheld DSC radios with integral GPS is that it resolves the GPS connection problem and that R/Vs are especially prone to capsizing which renders fixed mount radios inoperable.

c. Publicity Campaign to Encourage Registration for MMSI and Connection of GPS. Many comments at the meeting stressed the continuing need for an aggressive public relations program to address this problem. Jack Fuechsel reported receipt of an email from Bonnier Corporation that articles supporting this project would appear in MARLIN and BOATING magazines.

d. Use of Cellular Signal Boosters to Extend Range: Jack Fuechsel reported on the availability of a Marine Signal Booster Kit from Wilson Electronics which can be used to extend range and in some cases deliver faster downloads. Similar devices have been used in vehicles and shore offices for some time to improve service in spotty areas. The kit from Wilson pairs their AG SOHO 60 signal booster with its marine antenna and includes all cables needed to complete the installation. The booster is carrier and device agnostic and works with all operating systems and provider networks.

8. Reports and Issues: Training Task Group. Kurt Anderson, Head of the Training Group was unable to attend the meeting but he had previously laid out a number of issues recommended by his Group for improvement of GMDSS Training. There have been no new developments on these issues recently but the status at the last meeting is repeated here for information.

a. Make Changes to the Question Pool Format? There had been various suggestions that the ROC Question Pool be combined with the GOC Question Pool to constitute the first half of the combined Pool. The Training Group was split on this suggestion and it appears that most of the effort would be in combining the Pools. This issue will be revisited in 2014 when further changes to the Question Pools will be considered.

b. Offer Joint ROC/GOC Classes with the ROC being the first part of the combined class? The Group's opinion was against offering a combined class at this time. A Task Force comment was that this might not be attractive to students unless the Declaration of Sea Area A1 generated a big increase in applicants for the ROC Course. Further consideration of this proposal is deferred to gauge the impact of the still pending declaration of Sea Area A1.

c. Require Recertification of GMDSS License Holders? Five year GOC recertification is now recommended by the 2010 Manila STCW Convention to assure better qualified operators. There is already precedent for recertification in the U.S. that has long required recertification for Radar/ARPA. Most of the Training Group also disapproves of recertification based on sea time alone. Recent action by the FCC to issue GOC Licenses for life has further clouded the recertification issue. This issue is difficult because it would change what has been the U.S. approach for 15 years, but one the Task Force believes important to improve operator qualification and enhance marine safety. The Task Force plans to study this issue further and consult with Coast Guard officials who represent the U.S. at STCW meetings and manage U.S. Training Policy at the National Maritime Center (NMC).

d. Should the U.S. Have a Certified Path to Qualification as a GMDSS Maintainer? Although the STCW Convention deals extensively with GMDSS Maintainers, there is no course offered in the U.S. leading to such certification. The Task Force Service Agents Group has long advocated a meaningful certification of technicians capable of maintaining GMDSS equipment and felt that holding the FCC Maintainer License was not sufficient evidence of competence. With IMO Rules calling for a “qualified” technician in many cases, this remains an open issue. We were earlier informed that the California Maritime Academy is considering developing a GMDSS Maintainer’s course as part of their Extended Learning program. This issue remains under active consideration.

e. Reinstate Training in the IAMSAR Manual? SAR training was dropped by the Coast Guard’s National Maritime Center (NMC) as a requirement for all Deck Officers despite the STCW requirement that all Deck Watch Officers on ships over 500 tons have a working knowledge of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual. The 70-hour GMDSS Course is too crowded to work in IAMSAR training but it is a needed competence. The Task Force referred this issue to U.S. SAR authorities but has not yet received a response. It will be considered further in conjunction with a review of Training Policy with the National Maritime Center.

10. The RTCM Report: RTCM President Bob Markle provided the following updates on the continuing work of the RTCM Special Committees during his report to the Task Force. The following are highlights:

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. Prompt approval by the FCC is expected and is part of the Coast Guard’s proposal to revise the FCC Rules.

b. RTCM SC-104 on Differential Global Navigation Satellite Systems (GNSS). This Committee is working on incorporating new 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

group will meet in Germany next month to discuss differential GNSS which is needed by the high accuracy community.

c. RTCM SC-109 on Electronic Charting Technology. The Committee is working on a new version of the standard and plans to include provisions for Voyage Data Recorder (VDR) functionality in Electronic Charting Systems. The Committee voted approval of the new standard and is adjudicating comments received.

d. RTCM SC-110 on Emergency Beacons. Current work is on beacons that will be compatible new Second Generation MEOSAR Satellite System. Existing beacons will also work with the new satellite system. 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.

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 vote approved the new standard during the RTCM Assembly

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 during the RTCM Assembly.

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). Final approval awaits the completion of two appendices.

h. RTCM SC-123 on Digital Small Messaging Services on Maritime Frequencies. RTCM petitioned the FCC to adopt RTCM Standard 12301.1 for transmitting data on VHF channels. This issue is included in the FCC NPRM mentioned in Para 3.a. above. The Committee is expanding 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 will meet next via Tele Conference to make further progress on the standard. Russia and South Korea are participating. It was announced separately that most of the U.S. Loran towers have been dropped and that only about 8 remain standing.

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 its new standard. The FCC has been

petitioned to include the new standard in its Rules. The NPRM mentioned in Para 3.a. above includes this issue.

k. RTCM SC-129 on Portrayal of Nav-Related Information on Shipboard Displays. This Committee has completed a first draft of the portrayal standard.

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 include inertial systems as well. The standard will include provisions for resistance to interference, spoofing, and jamming.

n. RTCM SC-132 on Visual Emergency 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.

11. Other Highlights from the Week Long RTCM/CIRM Joint Meeting:

a. The RTCM Presented its Chuck Husick Memorial Award to Rear Admiral Marshall E. (Ed) Gilbert, USCG, Retired. Admiral Gilbert was cited for his lifetime of contributions to maritime communications and related safety issues. As Chief of Coast Guard Telecommunications he led the U.S. Delegation to IMO's COMSAR Subcommittee during the development of the GMDSS and since his retirement has continued to support the GMDSS Task Force and the RTCM as a Board member. He is also an active participant in the GMDSS Modernization effort. The award honors the memory of Chuck Husick, an RTCM Board Member who made lasting contributions to the goals of RTCM.

b. Update on the Inmarsat System by Peter Blackhurst. Highlights included a review of several Inmarsat systems. The SafetyNET broadcast system by Inmarsat C will continue into the 2020s using the Inmarsat 4 constellation. The "505" Emergency System on Fleet Broadband (FBB), while not part of GMDSS, has been enabled on all new maritime terminals, and it is hoped that IMO will approve Voice Distress on FBB as an alternative to F77 service. The new Global Express Ka Band service will have 3 Inmarsat 5 satellites in service by 2015 aiming to support telemedicine, ship security, a business center, and crew skype and internet access.

c. Update on the Iridium System by Brian Pemberton. The Iridium Service has been sponsored by the U.S. in its bid to be qualified by the IMO as a GMDSS service provider. The system has 66 Low Earth Orbit satellites with 6 on orbit spares in a configuration that provides full global coverage. Iridium's pager system is being

repurposed into a broadcast system that can deliver Maritime Safety Information (MSI). The Broadband data service is two way and fully global. The overall system reliability for 2013 was 99.9%, 99.98% for telephony and 99.94% for data. Iridium's application will be considered by the NCSRS Subcommittee in June of this year, the earliest approval date by IMO's Maritime Safety Committee (MSC) would be the 4th quarter of 2015.

d. From NOAA's Beacon Manufacturers Workshop – The Cospas-Sarsat System preparations for the shift to the new MEOSAR satellite constellation by Dany St. Pierre. First a few statistics, 37,000 people have been rescued, there are about 1.4 million beacons in service including EPIRBs, PLBs, and aeronautical ELTs. Only 15 countries have over 500 beacons registered and none has more than 5000. The PLB sector is the fastest growing. The MEOSAR constellation consists of most of the navigation satellite systems including GPS, GALILEO, GLONASS, and BEDIOU. The advantages of the Medium Earth Orbit system include many additional host satellites, an improved time to resolve location, and tracking of moving beacons. Additional land based LEOLUTs will improve response, especially in the southern hemisphere. Although existing beacons will continue to work with the new space segment, a new generation of beacons is under development applying improved technology. The GALILEO system plans to include a return link to let the survivors know that their alert has been received. There is also work to improve the crash survivability of aeronautical ELTs.

12. Other Business and the Next Meeting of the GMDSS Task Force: The next Task Force meeting will be held at 9:30 a.m. on Thursday morning 31 July 2014 at the RTCM Headquarters in Arlington, Virginia. The follow-on meeting will be at the Sunset Harbor Resort in Fort Myers, Florida during the Annual Conference and Exhibition of the National Marine Electronics Association (NMEA).

GMDSS TASK FORCE CONTINUING WORK LIST

2 May 2014

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. Review GMDSS concepts and make modernization recommendations (MOD)
17. Advocate intership calling on HF GMDSS channels (CV)
18. Recommend Safety Radio and VMS Requirements for Small Fishing Vessels (CV)
19. Recommend Safety Radio & Navigation Requirements for Towing Vessels (CV)
20. Recommend Safety Radio & Nav. Outfit for Small Passenger Vessels (CV)
21. Advocate applications for new MF/HF Digital Communications Service (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. Advocate FCC let R/Vs retain existing MMSI when applying for Station Lic. (RV)
26. Recommend through NASBLA that State's boat Registrations include MMSIs (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)
34. Advocate Reinstatement of SAR Training for Deck Watch Officers/STCW (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. If you have an Internet server with spam filters, please authorize receipt of messages from gmdss@comcast.net

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