NATIONAL GMDSS IMPLEMENTATION TASK FORCE

Newsletter and Summary Record of May 10, 2007 Meeting

<u>The Summary Record.</u> This summary record is provided for information and will be posted on the Task Force portion of the Coast Guard web site at www.navcen.uscg.gov/marcomms/ (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 at the Tradewinds Hotel in St. Pete Beach, Florida on 10 May 2007 during the RTCM Annual Assembly. The documents listed below were distributed and copies of most are available on the internet:

Draft Report to the Task Force from the MMSI Policy ad hoc group Draft Petition to the FCC from the MMSI Policy ad hoc group Summary Record of the 4 January 2007 Task Force meeting Coast Guard Press Release on AIS Reception by Satellite BOATUS Warning on the "Radio Licensing Service" FCC Public Notice DA 07-1732 on MMSI Registration Agents Coast Guard Request for Comments on HF Broadcast Program

- 1. <u>Brief Meeting of the MMSI Policy ad hoc group:</u> The MMSI ad hoc group convened briefly to approve the edited versions of their Report to the Task Force and a new Petition to the FCC on MMSI Policy and Procedures. Brian Mullan of Inmarsat assured the group that Inmarsat used only one MMSI per ship and offered to work with the Coast Guard's Operational Systems Center (OSC) to resolve the issue of apparent MMSI duplication involving Inmarsat equipped ships. Both documents were approved and later brought up for discussion by the Task Force.
- **2.** Summary Record of January 2007 Meeting: The Summary Record of the 4 January 2007 meeting which had been distributed earlier was noted without correction.

3. The Coast Guard Reports:

- a. Upgrade of MF Coastal Network to DSC for Sea Area A2. Captain Len Ritter reported that the Coast Guard's program to complete the necessary upgrades to the coastal MF watch sites is being managed by Dave Fowler whose report will be submitted in June. As reported earlier, the MF-DSC equipment is largely in place but antenna upgrades needed to meet coverage standards are a significant cost item and may raise the issue of whether proceeding with the MF-DSC upgrade will be cost effective in view of the limited use of MF by vessels. The Coast Guard agreed to make Dave Fowler available to brief the Task Force at the August meeting.
- **b.** Coast Guard RFQ on HF Weather Broadcasting. Captain Ritter repeated his earlier report that the Coast Guard is conducting a market survey of the users of their

various HF broadcasting services (voice, narrow band direct printing, and fax). This review is motivated by the aging inventory of HF transmitters and the difficulty of acquiring parts. The Request for Comment (RFQ) was published in the Federal Register on 26 April 2007 with a comment date of 24 August. He noted that the Coast Guard was especially looking for detailed comments responding to the following questions:

- 1). Identity of the commenter and type of vessel
- 2). The primary source of marine weather information for the vessel
- 3). Whether HF voice broadcasts are used, how often, and how safety critical
- 4). Whether HF Fax broadcasts are used, how often, and how safety critical
- 5). Whether HF SITOR/NPDB broadcasts are used and how safety critical
- 6). What alternatives are available to HF broadcasts, cost? Usefulness?
- 7). How would loss of Coast Guard HF broadcasts affect you?
- 8). How far to seaward do you operate & in what geographical area of ocean?

Vessel operators of all types are urged to respond since the collective comments will be factored into important decisions about the future of Coast Guard HF broadcasts. The full Notice including instructions for responding can be found at http://dms.dot.gov.

- c. Feasibility of Automated Radio Test Call Facilities. Joe Hersey reported that the Coast Guard is planning to introduce an Automated Digital Selective Calling Answering System (ADSCAS) facility for responding to HF-DSC test calls which would answer on 4 MHz only. This project is in response to a determination that 75-80% of the DSC calls received were for test purposes. With respect to VHF-DSC test calls, the current problem is that there is no convenient way to test the automated distress alerting feature. Joe advised that the ITU has recently approved an automated test facility for mobile users. The shore equipment is not presently programmed for Rescue 21 stations but could be retrofitted. Most mobile equipment doesn't yet have the test capability but newer models will likely include it. Chuck Husick emphasized that boaters want that capability and that they need to be able to test the automatic positioning feature. Presently, both Sea Tow and Tow Boat US respond to test calls.
- **d. Status Report on Rescue 21 VHF–DSC for Sea Area A1.** Captain Mike Christian, the new Director of the Rescue 21 Program, provided an excellent update briefing with the following highlights:
- 1). The system is designed to close 81 known coverage gaps in the legacy VHF system, provide direction finding capability, and enable protected inter-agency communications.
- 2). The system is up and running in the Tampa St. Petersburg area and the response from users has been very complimentary.
- 3). The excellent performance of the new Direction Finding capability was also noted as having quickly resolved a local distress incident where the boat in distress had provided an incorrect position. The DF capability is accurate to about 2-1/2 degrees and

has proven valuable in the fast resolution of hoax cases.

- **e.** Current Status of Automatic Identification Systems (AIS). Jorge Arroyo reported on the status of AIS implementation. The following are highlights:
- 1). Jorge noted that some vessels have sent alerts by the text messaging capability of AIS. This can be confusing to other vessels in the vicinity since there is no protocol for action to be taken on receipt of such an alert.
- 2). The long awaited promulgation of regulations providing for expansion of AIS carriage to over 17,000 additional vessels is still pending. Hopefully, the proposed rules will be published this summer. Details on the requirements for vessels to file notices of arrival and departure are also still pending.
- 3). The Coast Guard is also expected to outline the proposed requirement for Electronic Chart Display Systems to be used in conjunction with AIS. The Congressional mandate called for a report by 1 January 2007 but the release is now targeted for the fall of 2007.
- 4). Trials of AIS used for survival craft as an alternative to the Search and Rescue Transponder (SART) have been very successful, generally providing better range than the SART.
- 5). The National Plan (NAIS) for shore monitoring of AIS includes the current use in all Vessel Traffic Service (VTS) areas. Planned coastal monitoring will utilize 250-300 sites. The system can be extended to about 2000 miles offshore by satellite monitoring.
- **f. IMO Initiative for Long Range Identification and Tracking (LRIT).** Bob Markle reported on the status of the LRIT Program as follows:
- 1). IMO's Maritime Safety Committee meeting in December decided that the International Maritime Satellite Organization (IMSO) would be designated as the LRIT coordinator. IMSO has declared that it can fill that role but they need start up capital to establish the International Data Center and an International Data Exchange.
- 2). IMO had initially determined that the LRIT program should be in operation by 1 January 2008 with vessels reports starting 1 January 2009 but it not appears that this is highly unlikely in view of the work remaining. Funding for IMSO is uncertain and development of billing procedures are still pending.
- 3). At a previous Task Force meeting the possibility was raised that the Coast Guard might institute a limited form of LRIT data collection on a voluntary basis if the LRIT system is delayed. However, when IMO accepted an aggressive schedule to have the LRIT system in full operation by the end of 2008, the Coast Guard did not move to implement the voluntary system and it is not know if they would do so if the planned

implementation dates cannot be met.

- **g.** Results of the IMO COMSAR Meeting 19-23 February. Russ Levin outlined the various Agenda items and invited those interested to attend the SOLAS Working Group meeting that afternoon. The principal decisions were as follows:
- 1). <u>E-Navigation</u>. The Safety of Navigation Subcommittee has the lead on this issue but Comsar noted that broadband global satellite communications would be needed.
- 2). <u>Arctic Maritime Safety Information (MSI) Services</u>. Comsar agreed to extend MSI services northward to 90 degrees North and Canada, Norway, and Russia were designated as coordinators of the new Navareas.
- 3). <u>AIS-SART</u>. Comsar finalized a performance standard for the AIS-SART and invited final approval by MSC 83 in October.
- 4). Replacement of Narrow Band Direct Printing (NBDP). Comsar noted several issues with replacing NBDP with HF Data and E-mail services but deferred action pending completion of ITU's new Recommendation on HF Radio for Exchange of Digital Data and E-mail in the Maritime Mobile Service.
- **h. Report of the MMSI Policy ad hoc group.** Jack Fuechsel introduced the report which had received final approval from the ad hoc group earlier in the meeting. The Task Force approved the report which is addressed to the Coast Guard, the FCC, and the RTCM. The principal recommendations are as follows:
- 1). To all boating safety organizations: There is a clear need for a public relations campaign to sensitize boat operators to the need to register DSC radios for an MMSI number in order to activate the automated functions and to connect the radio to a navigation receiver so that an accurate position is transmitted along with the automated distress alert.
- 2). To the Federal Communications Commission (FCC): The management of MMSI numbers by the FCC needs to be improved so as to recognize numbers already issued by assignment agents when a boat operator applies for a Station License. There is a similar need to manage the MMSI numbers assigned with a Station License when the Licensee decides not to renew the License. There is a further need to institute a periodic validation program to insure that MMSIs issued with Station Licenses remain current. The Task Force approved a revised Petition to the FCC which is an expanded version of the one approved in January 2006.
- 3). To the U. S. Coast Guard: There is a need to make the OSC database of MMSI numbers publicly available so that service agents and assignment authorities can verify existing MMSIs and ensure proper listing of their new MMSIs. It is recommended that the Coast Guard make this data available on the public access side of the database subject to review of any privacy issues involved. MMSI assignment agents could be given access

to the database until the public access can be implemented. On a related issue, the group noted that the ITU does not publish the expanded vessel descriptive data under the IMO mandate to improve search and rescue operations. The Coast Guard as the lead agency in IMO matters, should undertake to correct this through appropriate channels.

- **4.** The FCC Reports: Ghassan Khalek reported for the FCC. The following are highlights of his report.
- **a. Pending FCC Rulemaking Issues.** There have been no reports released since the last meeting but some on further Part 80 decisions are awaiting clearance. In addition it seems likely that there will be further requests for comments on issues such as the Coast Guard proposal that all VHF-DSC handhelds be required to incorporate GPS positioning.
- **b. Pending approval of AIS Class B Units.** The Coast Guard has approved 4 AIS Class B Units and those same units are expected to receive routine FCC approval which has not yet been released, however.
 - **c. FCC Licenses Issued.** Ghassan noted that the following total FCC Licenses:

GMDSS Maintainer 1400 GMDSS Operator 16,500 General Radio Operator 283,109 Station Licenses 31,756

- **d.** No Sunset date for non-DSC VHF Radios. In response to a question, Ghassan acknowledged that while new VHF radios submitted for type approval were required to have a DSC capability, earlier approved non-DSC VHF radios could continue to be produced and sold as long as they met new frequency tolerance standards.
- e. Private "Radio Licensing Service" Scam exposed by BOATUS. Ghassan thanked BOATUS for their item in the May 2007 BOATU.S. Magazine warning boat operators of alarming letters that some have received from a Company called Business Radio Licensing stating that your radio license "has been terminated or cancelled by the FCC" and saying that it will cost \$290.00 in processing fees to get it reinstated. Business Radio Licensing is not affiliated with the FCC and is not in a position to make threats on behalf of the federal agency. The FCC always notifies holders if their license is about to expire.
- **f. Report of the MMSI Policy ad hoc group.** Ghassan reviewed the issues under consideration by the ad hoc group which were reported under item 3h above. The group expressed appreciation that the FCC has been an active participant in the ad hoc work despite the prospect of committing some funding to modification of the Universal Licensing System (ULS) if the recommendations of the Task Force are adopted by the FCC.

- 4. GMDSS Modernization Initiative. Chuck Husick reported that the Task Force was continuing to look at new technology which could be utilized in the GMDSS and existing sub systems which needed updating. Past successes included the paperless Navtex receiver and the AIS alternative to the SART. Currently the COMSAR group is addressing use of the internet as a replacement for Narrow Band Direct Printing (NBDP). Introduction of alternative satellite systems is also a goal which is likely to be adopted for domestic use under the equivalency provisions of SOLAS. A new initiative which the Task Force is following closely is termed "E Navigation" and encompasses a variety of integrated digital applications including electronic chart displays and an enhanced Loran service termed E Loran.
- **The RTCM Report:** RTCM President Bob Markle reported that the 2008 RTCM Assembly will be at the Catamaran Hotel in San Diego, California May 4-10, 2008. The Task Force expressed its appreciation for the continued sponsorship of the Task Force by RTCM.
- **S.** Reports and Issues: The Recreational Vessel Group Report. Chuck Husick led the discussion for the Recreational Vessel Group which included the following highlights:
- **a. DSC Tutorial:** The Task Force has been monitoring the DSC tutorial posted on the BOAT US website at www.boatus.com/mmsi. There have been 9000 'hits' on the website between January and April but there is not yet enough detail to know how many of these stayed long enough to go through the tutorial.
- **b. MMSI Registrations.** BOAT US has registered about 39,113 vessels for MMSI numbers and Sea Tow reports about 8000 registrations.
- c. Recreational Vessel Summit scheduled for Washington 19 June 2007. Chuck announced that the Coast Guard and the Department of Homeland Security were hosting a summit meeting in Washington to take input from recreational vessel advocates on how these vessels can assist the Coast Guard and the Department in enhancing the Coast Guard's maritime Domain Awareness program. The Coast Guard is on record as having requested recreational vessels to report suspicious activities on the water but has never followed through with a suggested mechanism. One suggestion at the meeting was to set up a special Coast Guard MMSI number for submitting such reports using a Coast Guard working channel rather than one in the public domain.
- **d. Approval of new Petition to the FCC on MMSI Procedures.** Jack Fuechsel introduced the new Petition to the FCC approved earlier in the meeting by the MMSI ad hoc group. The petition addresses the issues outlined in paragraph 3.h.2) above. It was approved by the Task Force and filed with the FCC on 21 May 2007, a copy will be posted on the website.
- **Reports and Issues: the GMDSS Service Agents & Manufacturers Group:**Ralph Sponar's report covered the following highlights:

- a. VHF-DSC Radio must have MMSI for Automated Functions. Ralph confirmed that the automated emergency and other DSC functions in VHF-DSC radios do not operate without an embedded MMSI number. This is one of the principal motivations for the public appeal noted in paragraph 3.h.1), above. Ralph also pointed out that the DSC functionality could be activated by embedding a random number in place of an MMSI but this defeats one of the principal benefits of the MMSI number, providing identification and descriptive information on the user.
- **b. Some R/Vs not Maintaining EPIRBs Properly.** Ralph reported his experience that while SOLAS vessels have been generally in compliance with EPIRB testing and battery replacement schedules, many recreational vessels with voluntary EPIRBs are failing to keep them properly maintained.
- **Reports and Issues: the GMDSS Commercial Vessel Group:** There were a few discussions of interest to this group as follows:
- **a. Inmarsat Status Report.** Brian Mullan reported that there were about 170,000 Inmarsat terminals in service of which about 130,000 were furnishing a safety service. The Inmarsat C terminal with enhanced data reporting capability is expected to play a major role in the LRIT program although billing arrangements are still unresolved. Future plans include an Inmarsat handheld and expansion of Fleet Broadband data rates to 250 and 500 kbps.
- **b. Paris MOU Report of Concentrated GMDSS Inspections During Port State Control Activities.** The Paris MOU is a regional group of member countries (the U.S. is an observer) which undertook a concentration on GMDSS items during Port State Control inspections from 1 September 2005 through 30 November 2005. The results were published in IMO Document FSI 15/INF.6 on 30 March 2007 and tabulated the results of 5834 inspections of which 4794 concentrated on GMDSS, 82% of all inspections. There were 253 ship detentions of which 34 were related to GMDSS deficiencies.
- **c. Discussion of the need to Update Commercial Fishing Vessel Regulations.** There was limited discussion of the possible need to update Coast Guard equipment carriage regulations for commercial fishing vessels below 300 tons. It has been reported that commercial fishing interests in Alaskan waters would like to see recognition of the widespread use of 4125 kHz SSB among other issues. A further report on this subject will be scheduled for the August meeting.
- **8.** Reports and Issues: the GMDSS Training Group: The only issue currently pending for this group it to establish better liaison with the Coast Guard's National Maritime Center (NMC) to ensure that NMC acceptance of updated GMDSS Question Pools from the Task Force is acknowledged in a way that training institutions are advised of the availability and approval of the new versions.

The Next Meeting of the GMDSS Task Force: The Task Force agreed to meet next in Arlington, Virginia at the RTCM Headquarters on Thursday morning 9 August 2007. A Draft Agenda for the August meeting is attached.

GMDSS TASK FORCE CONTINUING WORK LIST

10 May 2007

- 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 COMSAR meetings (TF)
- 7. Advocate Canadian coordination to extend GMDSS services to the Great Lakes (TF)
- 8. Review GMDSS concepts and make modernization recommendations (TF)
- 9. Advocate regulatory action to require VHF or EPIRBs for all vessels offshore (TF)
- 10. Advocate overhaul of FCC policy and practice on MMSI assignments (TF)
- 11. Monitor non-GMDSS systems: AIS, LRIT, SSAS, VDR, VMS, & E-Navigation (TF)
- 12. Advocate intership calling on HF GMDSS channels (CV)
- 13. Recommend training programs for non-mandatory users of GMDSS systems (RV)
- 14. Encourage GMDSS handbooks and Internet and video training aids (RV)
- 15. Recommend Class 'D' VHF-DSC as superior to RTCM SC-101 format (RV)
- 16. Advocate FCC enable R/Vs keep existing MMSI when applying for Station Lic. (RV)
- 17. Encourage Mfgrs. to upgrade GMDSS explanations in equipment manuals (SA)
- 18. Recommend to FCC clarifications to their List of Approved GMDSS Equipment (SA)
- 19. Monitor guidelines for GMDSS equipment maintenance & maintainer standards (SA)
- 20. Recommend proper interconnection of GPS receivers with DSC Radios (SA)
- 21. 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

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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