



Report of Activities

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Global Maritime Distress & Safety System (GMDSS)

- **IMO Current Guidance**
- **EPIRB Standard Status**
- **FCC Waivers**
- **NCSR 10 Outcomes**
- **Iridium GMDSS SAR Service**





IMO GUIDANCE



MSC Resolution 471(101), Performance Standards For EPIRBs, in effect as of 01 July 2022

Associated Guidance

- MSC.1/Circ.1039/Rev.1 – Guidelines for Shore-based Maintenance of Satellite EPIRBs
- MSC.1/Circ.1040/Rev.2 – Guidelines on Annual Testing of 406 MHz Satellite EPIRBs
- Resolution MSC.493(104), Amends MSC.163(78), Performance standards for S-VDRs
- Resolution MSC.494(104), Amends MSC.333(90), Revised performance standards for VDRs





EPIRB Standard Status



Status of RTCM 11000.5 Standard

- RTCM 11000.5 with Amendment 1 published
 - Amendment 1 supports optional RLS functionality in US beacons
 - Aligns with both MSC.471 & IEC 61097-2 ED-4
- FCC action pending on RTCM petition to update of 47 CFR 80 to include RTCM Standard 11000.5, and thus by reference, MSC.471 and IEC 61097-2
- FCC will accept and process Waiver Requests to substitute RTCM Standard 11000.5 instead of the cited RTCM 11000.3
- USCG supportive of Waiver Requests





FCC Waivers



FCC waiver requests to use RTCM 11000.5 should include:

- The manufacturer and the models needing a waiver.
- Statement that waiver of FCC rule sections 80.7(f)(2) and 80.1061 needed to allow important safety of life devices to keep up with international standards by meeting the RTCM standard 11000.5 instead of the outdated 11000.3 specified in the FCC rules.
- IMO requires EPIRBs installed on or after July 1, 2022 comply with the resolution MSC.471(101) performance standards.
- The new performance standard allows increased reliability and battery life of these safety of life systems and meets signaling protocols with new satellite systems.
- The request meets the FCC waiver standards in Sections 1.103 and 1.925 because the underlying purpose of the rule would not be served by requiring compliance with an outdated standard. Further the public interest and safety is served by allowing deployment of the improved EPIRBs while the FCC considers updating its rules.
- The frequencies remain the same and there is no harm in granting the waiver.





NCSR 10 Outcomes



AIS Cancellation Protocol

- Proposal to add “EPIRB – CANCEL” to ITU-R M.1371 in support of the Cospas-Sarsat second-generation beacon (SGB) 406 cancellation messages
- Topic discussed at NCSR 9 and again at NCSR 10, and addressed in a liaison statement to the ITU Working Party 5B to propose including in ITU-R M.1371 the following:
 - ‘ When manually deactivated, a safety related text message stating "SART OFF", "MOB OFF" and "EPIRB OFF" should be broadcast from such a device. If a cancel function is provided and activated, the following safety related text message should be broadcast: "MOB CANCEL" or "EPIRB CANCEL". ’
- Next step is monitor the ITU WP-5B discussion and its outputs.





NCSR 10 OUTCOMES



Coding of Beacons with a Vessel MMSI

- Discussed at NCSR 10 with a liaison statement to ITU WP-5B prepared, noting:
 - Cospas-Sarsat advised administrations warning against coding of 406-MHz distress beacons with a country code (MID) in the forms "98M" or "974"
 - Critical change to the Cospas-Sarsat ground segment was approved with implementation date of November 2023 to prevent messages with maritime mobile service identity (MMSI) in the format 98MIDXXXX and 974XXYYYY from being processed as "invalid"
 - Timing of implementation of the Cospas-Sarsat change is in the hands of States providing ground segment, and the change does not provide for the automatic recovery of the MID from the 98M identity
 - Cospas-Sarsat Joint Committee will examine the issue with a view towards identifying an optimal long-term recommendation





NCSR 10 OUTCOMES



Recognition of PLBs within IMO

- NCSR was asked to clarify the status of a PLB within the IMO guidance:
 - Considering the ITU Radio Regulations guidance for 406.0 – 406.1 MHz distress devices, is a PLB considered to be like an EPIRB device?
 - Or is a PLB considered to be like a man over-board (MOB) or Autonomous Maritime Radio Device (AMRD) as described in ITU-R M.493, ITU-R M.1371 and ITU-R M.541?
- Based on the comments, NCSR determined a new work output would be necessary to undertake a review.
- USCG intends to submit a request to MSC 108 to add a new output to clarify the PLB status within IMO.





Iridium GMDSS SAR Service



Iridium GMDSS Service implementation status

USCG RCC Norfolk serves as the associated RCC for world-wide non-US regions and the US Atlantic SRR; RCC Alameda serves as the associated RCC for the US Pacific SRR and as the RCC Norfolk back-up for world-wide non-US regions

- Process & procedures are in place for adding new associated RCCs
- In addition to RCCs Norfolk and Alameda; RCC New Zealand is in the process of being associated at Stage 3
- Ten RCCs are associated at Stage 2
- Twenty-four additional RCCs are in processing to become Iridium Associated RCCs





Global Aeronautical Distress & Safety System (GADSS)

- **Autonomous Distress Tracking**
- **ELT(DT) Status**





Autonomous Distress Tracking



ADT Implementation required by 01 January 2025

Location of an Aircraft in Distress Repository (LADR):

- LADR provides Secure Storage for Position/Location Data of Aircraft in Distress or Potentially in Distress
- Not defined as an Alerting Means
- Supports timely access of Aircraft Event Data by stakeholders (Operator, ATSU, RCC & Others)
- LADR operation awarded to EURO-CONTROL, with a regional LADR operated by BENIN
- LADR development to complete the interface & deploy the operational system continues
- US SARSAT Program participating in the LADR workshops
- USCG monitoring progress and advocating SAR interests





ELT(DT) Status

- Cospas/Sarsat Declared MEOSAR System FGB ELT(DT) at Initial Operational Capability (IOC) as of 01 January 2023
- Development of Cospas/Sarsat MEOSAR System SGB ELT(DT) capability work continues with goal to attain IOC by 01 January 2024
- SAR Authorities are developing doctrine and processes for managing and responding to ADT / ELT(DT) alerts, using operational guidance provided in recently updated COMSAR.1/Circ.59-Rev.1
- Registration data and the LADR data are key elements which support SAR response planning and actions





Other Topics

- **Upcoming IMO Events**





Upcoming IMO Events



- Joint IMO/ITU Experts Group (EG-19) to meet 9-13 October 2023
- ICAO/IMO Joint Working Group On Search & Rescue to meet 6-10 November 2023
- Maritime Safety Committee (MSC 108) to meet in 13-24 May 2024
- Navigation, Communications and Search and Rescue Sub-Committee (NCSR 11) to meet 3-13 June 2024





Questions?

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