



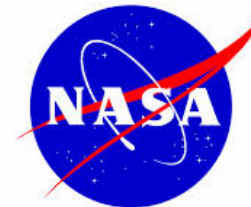
RTCM 2014 Annual Meeting Beacon Manufacturer's Workshop

Regulatory Update: EPIRBs, ELTs, & PLBs

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ELT Regulatory Update

- Review of Part 87 of the Commission's Rules Concerning the Aviation Radio Service
 - WT Docket No. 01-289
- History
 - In June 2010, the Commission amended section 87.195 of its Rules to prohibit certification, manufacture, importation, sale or use of emergency locator transmitters (ELTs) that operate solely on frequency 121.5 MHz (121.5 MHz-only ELTs)
 - In January 2011, the Commission at the request of the NTIA stayed its June 2010 Order, and the rules adopted therein
 - In May 2012, FAA announces intent to cancel TSO-91a effective 1 December 2012
 - In January 2013, the Commission issued Third Further Notice of Proposed RuleMaking and solicited comment on its tentative conclusion to reinstate the June 2010 Order, as well as on the appropriate effective dates for the proposed prohibitions



ELT Regulatory Update

- In NTIA, as Executive Branch agency that is principally responsible for advising the President on telecommunications and information policy issues, began a 13 month process to develop and coordinated Executive Branch agency position on the issue.
 - In February 2014, that position was forwarded to FCC for inclusion into Docket 01-289
- The NTIA recommended that the Commission prohibit:
 - Certification of 121.5 MHz-only ELTs as of the effective date of a final order in this proceeding
 - Manufacturing and importation of such devices 12 months after the effective date of a final order in this proceeding
 - Sale and use of 121.5 MHz-only ELTs 96 months after the effective date of a final order in this proceeding



ELT Regulatory Update

- Current Status

- Public Comment period is closed and FCC is looking at comment and preparing for next step in rule making process

FCC Rulemaking



- Notice of Proposed Rulemaking No. 14-36
 - Publication Date: Tuesday, April 01, 2014
 - Comment Date: June 02, 2014
 - Reply Comment Date: June 30, 2014
 - <https://www.federalregister.gov/articles/2014/04/01/2014-07140/maritime-radio-equipment-and-related-matters>
- The proposed rulemaking addresses petitions for rulemaking filed by the National Global Maritime Distress and Safety System (GMDSS) Implementation Task Force (GMDSS Task Force) and the Radio Technical Commission for Maritime Services (RTCM) regarding the Maritime Radio Services and certain other proposed rule changes. It also address a National Transportation Safety Board (NTSB) recommendation regarding maritime safety equipment and, on FCC's own motion, additional maritime related rule changes.

FCC Rulemaking



- The proposal seeks comment on whether to amend Parts 80 and 95 of the rules to:
 - (1) require emergency position indicating radio beacons (EPIRBs) to be capable of broadcasting position data when activated, which will improve the ability of rescue personnel to locate distressed ships;
 - (2) update the equipment standards for Personal Locator Beacons (PLBs) to ensure that PLBs meet updated functional and technical parameters;
 - (3) authorize equipment certification and use of Satellite Emergency Notification Devices (SENDs) that comply with RTCM standards, providing for the use of additional technologies for safety of life and rescue scenarios;
 - (4) permit equipment certification and use of Maritime Survivor Locating Devices (MSLDs) that comply with RTCM standards, in order to enhance maritime safety;
 - (5) provide for equipment certification and use of Automatic Identification System Search and Rescue Transmitters (AIS-SARTs) that comply with international standards, which will contribute to maritime safety;



FCC Proposed Rules

Notice of Proposed Rulemaking No. 14-36

- § 80.7 Incorporation by reference.
 - IMO Resolution MSC.246(83), (“IMO Resolution MSC.246(83)”) “Adoption of Performance Standards for Survival Craft AIS Search and Rescue Transmitters (AIS-SART) for Use in Search and Rescue Operations.” IRB approved for § 80.233.
 - IEC 61097-3:1994 (“IEC 61097-3”), First edition, 1994-06, “Global maritime distress and safety system (GMDSS)–Part 3: Digital selective calling (DSC) equipment–Operational and performance requirements, methods of testing and required testing results,” with Annexes, IBR approved for § 80.1101.
 - RTCM Standard 11000.3 (“RTCM 11000”), “RTCM Standard 11000.3 for 406 MHz Satellite Emergency Position-Indicating Radiobeacons (EPIRBs),” June 12, 2012, IBR approved for § 80.1061.
 - RTCM Standard 11020.1 (“RTCM 11020”), “RTCM Standard 11020.1, Ship Security Alert Systems (SSAS) Using the Cospas-Sarsat System,” October 9, 2009, IBR approved for § 80.277.
- § 80.1053 Prohibition on certification, manufacture, importation, sale or use of Class A, Class B, Class S, and INMARSAT-E EPIRBs.

Previous rule prohibited the certification, manufacture, importation, or sale of Class A, Class B, Class S and INMARST-E EPIRBs. New rule includes prohibiting use.



FCC Proposed Rules

Notice of Proposed Rulemaking No. 14-36

- § 80.1061 Special requirements for 406.0-406.1 MHz EPIRB stations.
 - Requires 406.0-406.1 MHz EPIRBs to meet all the technical and performance standards contained in RTCM 11000
 - For all certification applications for 406.0-406.1 MHz radiobeacons:
 - Requires certifying by a test facility recognized by one of the COSPAS-SARSAT Partners that the equipment satisfies the design characteristics associated with the measurement methods incorporated in RTCM Standard 11000 (incorporated by reference, *see § 80.7*).
 - *Must be* subjected to the environmental and operational tests associated with the test procedures described in Appendix A of RTCM Standard 11000 *by a test facility accepted* by the U.S. Coast Guard for this purpose.
 - After a 406.0-406.1 MHz EPIRB has been certified by the recognized test facilities the following information must be submitted to Commandant CG-ENG, U.S. Coast Guard Headquarters, 2100 2nd Street, SW Stop 7126, Washington, DC 20593-1726:
 - Copies of the certificate and test data obtained from the test facility recognized by a COSPAS/SARSAT Partner showing that the radiobeacon complies with the COSPAS-SARSAT design characteristics associated with the measurement methods described in the COSPAS/SARSAT Standard C/S T.001 and COSPAS-SARSAT Standard C/S T.007, and RTCM 11000



FCC Proposed Rules

Notice of Proposed Rulemaking No. 14-36

Subpart K — Personal Locator Beacons (PLB) and Maritime Survivor Locating Devices (MSLD)

- § 95.1402 Special requirements for 406 MHz PLBs.
 - All 406 MHz PLBs must meet all the technical and performance standards contained in the Radio Technical Commission for Maritime (RTCM) Service document “RTCM Standard 11010.2 for 406 MHz Satellite Personal Locator Beacons (PLBs),” with Amendment 1, and with Amendment 2, dated June 8, 2012. This RTCM document is incorporated by reference in accordance with 5 U.S.C. 552(a), and 1 CFR part 51. Copies of the document are available and may be obtained from the Radio Technical Commission for Maritime Services, 1611 N. Kent Street, Suite 605, Arlington, Virginia 22209. The document is available for inspection at Commission headquarters at 445 12th Street SW., Washington, DC 20554.



FCC Proposed Rules

Notice of Proposed Rulemaking No. 14-36

- § 95.1043 Special requirements for Maritime Survivor Locating Devices.
 - Maritime Survivor Locating Devices (MSLDs) are devices intended to aid in the location of persons in the water. Use on land is not authorized.
 - Every MSLD sold in the United States after [INSERT DATE ONE YEAR AFTER EFFECTIVE DATE] that provides the functions described in this section, must meet all the technical and performance standards contained in RTCM document “RTCM Standard 11901.1 for Maritime Survivor Locating Devices (MSLD), dated June 4, 2012.” This RTCM document is incorporated by reference in accordance with 5 U.S.C. 552(a), and 1 CFR part 51. Copies of the document are available and may be obtained from the Radio Technical Commission for Maritime Services, 1611 N. Kent Street, Suite 605, Arlington, Virginia 22209. The document is available for inspection at Commission headquarters at 445 12th Street SW., Washington, DC 20554.
 - All MSLDs must:
 - Transmit on at least one of the following frequencies: 121.5 MHz, 156.525 MHz, 156.750 MHz, 156.800 MHz, 156.850 MHz, 161.975 MHz, 162.025 MHz; or (2) Include a function intended to send a distress message directly to the U.S. Coast Guard or any other search and rescue organization.
 - No device may be marketed or sold in the United States as a “MSLD” or “Maritime Survivor Locating Device” unless it is compliant with the requirements in this section.
 - Before an MSLD certification application is submitted to the Commission, the applicant must have obtained test report from a test laboratory which shows that the MSLD complies with the electrical and environmental standards associated with RTCM 11901.1. The test laboratory must be accredited to ISO/IEC 17025 with a scope covering the applicable requirements and test procedures.



Future Considerations

- Define 406 MHz Beacon identifier to be unique and accommodate current 406 MHz beacons and future Second Generation Beacons
- Required Carriage of EPIRBs by Pleasure Craft Operating Greater Than 3 NM Offshore
 - Current requirement in State of Hawaii
- Correct administrative elements such as organizational identifiers, addresses, and contact information



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