

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
MARINE RESCUE TECHNOLOGIES LIMITED) WT Docket No. 13-99
)
Request for Waiver to Allow the Equipment)
Certification and Use of Sea Marshall AU9)
Maritime Survivor Locating Device (MSLD))

ORDER

Adopted: August 9, 2013

Released: August 12, 2013

By the Deputy Chief, Mobility Division, Wireless Telecommunications Bureau:

1. *Introduction.* On March 4, 2013, Marine Rescue Technologies Limited (MRT) filed a request for waiver to allow the equipment certification and use of its Sea Marshall AU9 Maritime Survivor Locating Device (MSLD), which transmits on Automatic Identification System (AIS)¹ frequencies.² For the reasons set forth below, we grant the request.

2. *Background.* MSLDs are intended for use by persons at risk of falling into the water such as mariners and workers on marine installations or docks.³ They can be worn on or as part of a garment or life jacket, and are intended to facilitate the rescue of personnel in the vicinity of their vessel or structure so that immediate assistance can be rendered without a time-consuming and expensive search and rescue operation. Because the Commission's Rules do not currently permit certification or use of MSLDs, they have been authorized by waiver.⁴

3. A waiver was granted to allow the equipment certification and use of an earlier version of

¹ AIS is an international maritime navigation safety communications system adopted by the International Maritime Organization and Safety of Life at Sea Convention intended for collision avoidance, monitoring, and tracking.

² Letter dated February 5, 2013 to the Federal Communications Commission from David Marshall, Chairman, Marine Technologies Limited (Waiver Request).

³ MSLDs have sometimes been referred to as “man-overboard” devices. See, e.g., Wireless Telecommunications Bureau Clarifies that Certain 121.5 MHz Devices Are Permitted Despite Termination of Satellite Processing of 121.5 MHz Distress Signals, *Public Notice*, 24 FCC Rcd 8483, 8483 (WTB MD 2009).

⁴ Specifically, we have granted waivers of Section 80.1061 of the Commission’s Rules, 47 C.F.R. § 80.1061, which authorizes Emergency Position Indicating Radio Beacons (EPIRBs). See David Marshall, *Letter*, 13 FCC Rcd 23688, 23688-89 (WTB PSPWD 1998); Letter dated August 4, 2000 from D’wana R. Terry, Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, to Cal Havens, ACR Electronics; Briar Tek Incorporated, *Order*, 17 FCC Rcd 2204 (WTB PSPWD 2002); McMurdo Limited, *Order*, 17 FCC Rcd 7999 (WTB PSPWD 2002); Briar Tek Incorporated, *Order*, 21 FCC Rcd 11979 (WTB MD 2006). MSLDs differ from EPIRBs in that EPIRBs transmit a digital signal on 406.0-406.1 MHz that is detected by the search and rescue satellite-aided tracking system operated by the National Oceanic and Atmospheric Administration. MSLDs do not meet all the requirements for EPIRBs because, in light of their narrower focus, MSLDs do not operate on a frequency monitored by satellite, and do not transmit with as much power or for as long as EPIRBs. Instead, MSLDs transmit on frequencies that are received on a device monitored by personnel at the MSLD-wearer’s vessel or facility.

the AU9⁵ that transmitted on frequency 121.5 MHz at a maximum of 100mW effective radiated power (ERP) and met the applicable parts of Radio Technical Commission for Maritime Services (RTCM) Recommended Standard for MSLDs.⁶ MRT now seeks a waiver to upgrade the device to transmit identity and location information on the international AIS channels (AIS A – 161.975 MHz and AIS B – 162.025 MHz) at 500 mW ERP using a modulation scheme of Self-Organizing Time Division Multiple Access (SOTDMA) employing Gaussian minimum shift keying at 9600 bps to access channels as defined in ITU R M.1371-4.⁷ The enhanced AU9 is programmed with a unique nine-digit identification code in which the first three digits (972) identify the device as a MSLD and the last six digits identify the manufacturer and the individual unit.

4. On April 19, 2013, we sought comment on MRT's waiver request.⁸ The sole commenter supports the request.⁹

5. *Discussion.* Section 1.925(b)(3) of the Commission's Rules provides that we may grant a waiver if it is shown that (a) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and grant of the requested waiver would be in the public interest; or (b) in light of unique or unusual circumstances, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.¹⁰ We find that the waiver requested by MRT is warranted under the circumstances presented. Specifically, we conclude that the underlying purpose of the subject rules would not be served by application to the instant case and grant of the requested waiver would be in the public interest.

6. RTCM supports MRT's request for waiver, provided that the device meets RTCM's Recommended Standard for MSLDs, which RTCM has revised and now includes requirements for MSLDs transmitting on AIS frequencies.¹¹ RTCM has petitioned the Commission to require MSLDs to conform to the new standard¹² and believes that until a decision on its petition is reached MRT's enhanced AU9 should comply with new standard.¹³ We agree and note that MRT's enhanced AU9 adds AIS position and identity transmission to the currently certified AU9, and offers improvements to current man-overboard recovery systems such as interoperability with existing AIS equipment, location technology, and identification of the person overboard.¹⁴ We agree with MRT that a waiver would serve the public interest because use of the enhanced AU9 will facilitate recovery of lost mariners and other

⁵ See FCC IDENTIFIER YFGAU9, granted July 20, 2010.

⁶ RTCM Standard 11901.0 for Maritime Survivor Locating Devices (MSLD), dated Dec. 10, 2004.

⁷ ITU-R Recommendation M.1371-4, Technical Characteristics for an Automatic Identification System Using Time Division Multiple Access in the VHF maritime mobile band (2010).

⁸ See Wireless Telecommunications Bureau Seeks Comment on Request for Waiver by Marine Rescue Technologies Limited for Waiver to Allow Certification and Use of Automatic Identification System Maritime Survivor Locating Device, *Public Notice*, WT Docket No. 13-99, 28 FCC Rcd 5264 (WTB MD 2013).

⁹ See Comments of Radio Technical Commission for Maritime Services, dated May 31, 2013.

¹⁰ 47 C.F.R. § 1.925(b)(3); see also WAIT Radio v FCC, 418 F. 2d 1153, 1159 (D.C. Cir. 1969).

¹¹ RTCM Standard 11901.1 for Maritime Survivor Locating Devices (MSLD), dated June 4, 2012. See Annex D, AIS Type MSLD System.

¹² See Petition for Rulemaking to Amend Part 95 of the Commission's Rules to Provide for Certain Personal Radio Service Devices, RM-11667 (filed June 20, 2012) (proposing to amend the rules to, *inter alia*, authorize MSLDs).

¹³ RTCM comments at 2.

¹⁴ See Waiver Request at 1.

persons in distress.¹⁵

7. We therefore grant MRT's waiver request to permit the certification and use of its enhanced AU9 MSLD pending the resolution of RTCM's rulemaking petition.¹⁶ Prior to submitting an equipment authorization application to the Commission, MRT must submit the following information, in duplicate, to the Commandant CG-ENG, U.S. Coast Guard Headquarters, 2100 2nd Street, SW, Stop 7126, Washington, DC 20593-7126: a) the manufacturer name and model number of the device; and b) copies of the test report and test data obtained from a test facility showing that the device complies with the environmental and operational requirements identified in RTCM Standard 11901.1 for Maritime Survivor Locating Devices (MSLD). After reviewing the information, the Coast Guard will issue a letter stating whether the device satisfies all of the applicable requirements specified in RTCM Standard 11901.1. This letter must be submitted to the Commission as part of MRT's equipment authorization application, along with a copy of the technical test data, and the instruction manual(s). This procedure applies to the initial application for certification, and any subsequent permissive change requests.

8. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and 303(i) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(i), and Section 1.925 of the Commission's Rules, 47 C.F.R. § 1.925, that the Request for Waiver filed Marine Rescue Technologies Limited on by March 4, 2013, IS GRANTED.

9. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Scot Stone
Deputy Chief, Mobility Division
Wireless Telecommunications Bureau

¹⁵ *Id.*

¹⁶ That is, after the effective date of MSLD rules adopted in that proceeding, MRT must comply with those rules. To the extent that any AU9s already in circulation do not comply with any requirements in those rules, those units will be grandfathered but manufacture or import of additional non-compliant units will not be permitted.

**U.S. Department of
Homeland Security**



**United States
Coast Guard**

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March 06, 2014

Marine Rescue Technologies
Attn: Terry Rowson
Marshall House Zarya Court Grovehill Road,
Beverley, East Yorkshire, HU17 0JG
United Kingdom

Terry Rowson:

Our office has evaluated the Marine Rescue Technologies Automatic Identification System (AIS) Man Overboard (MOB) Alerting Unit (AU) (AU9-AIS / AU10). Based on the information you submitted, the system meets the environmental and operational requirements outlined in RTCM 11901.1.

This equipment is not subject to U.S. Coast Guard type-approval per Title 46 U.S. Code of Federal Regulations (CFR) subpart 159 nor should it be marketed as having received such type-approval. However, this letter may be used during the review and approval process performed by the U.S. Federal Communications Commission, as applicable.

If you have any questions please feel free to contact this office at the email address or phone number above.

Sincerely,

A handwritten signature in blue ink that reads "C. K. MARCY".
C. K. MARCY
Commander, U.S. Coast Guard
Office of Design and Engineering Standards
Chief, Systems Engineering Division
By direction