

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

In the Matter of)	
)	
MCMURDO GROUP)	WT Docket No. 15-110
)	
Request for Waiver to Permit Equipment)	
Authorization and Use of Emergency Position-)	
Indicating Radio Beacon with Automatic)	
Identification System Homing)	

ORDER

Adopted: September 25, 2015

Released: September 28, 2015

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

1. *Introduction.* On January 16, 2015, McMurdo Group (McMurdo) filed a request for waiver of Sections 80.1061 and 80.1101(c)(5) of the Commission's Rules¹ to permit equipment authorization for its emergency position indicating radio beacon (EPIRB) with Automatic Identification System (AIS)² position locating (EPIRB-AIS).³ For the reasons set forth below, we grant McMurdo's request for waiver.

2. *Background.* EPIRBs are emergency radiobeacons carried on board ships to alert others of a distress situation, and to assist search and rescue (SAR) units in locating those in distress by transmitting a distress signal on 406.0-406.1 MHz for communication with the COSPAS-SARSAT satellite system⁴ and a lower-powered homing signal on frequency 121.5 MHz. EPIRBs must conform to international and domestic standards that contain minimum requirements for EPIRBs' functional and technical performance.⁵

¹ 47 C.F.R. §§ 80.1061, 80.1101(c)(5).

² AIS is a VHF maritime navigation safety communications system standardized by the International Telecommunication Union that "provides vessel information, including the vessel's identity, type, position, course, speed, navigational status and other safety-related information automatically to appropriately equipped shore stations, other ships, and aircraft; receives automatically such information from similarly fitted ships; monitors and tracks ships; and exchanges data with shore-based facilities." 47 C.F.R. § 80.5; *see also* Amendment of the Commission's Rules Regarding Maritime Automatic Identification Systems, *Report and Order*, WT Docket No. 04-344, 21 FCC Rcd 8892, 8894-8901 ¶¶ 4-11 (2006).

³ Request for Waiver, dated Jan. 16, 2015.

⁴ COSPAS-SARSAT is an international satellite-based SAR system established by Canada, France, Russia, and the United States. COSPAS is an acronym for a Russian phrase meaning space system for search and distress vessels; SARSAT stands for Search and Rescue Satellite Aided Tracking.

⁵ Section 80.1061 requires EPIRBs to meet the technical and performance standards contained in Radio Technical Commission for Maritime Services (RTCM) Standard 11000.2 for 406 MHz Satellite Emergency Position-Indicating Radio Beacons (EPIRBs), dated June 20, 2002. (In 2014, the Commission sought comment on whether to amend the rule to require EPIRBs to meet the requirements in RTCM Standard 11000.3 for 406 MHz Satellite Emergency Position Indicating Radio Beacons (EPIRBs), dated June 12, 2012. *See* Amendment of the Commission's Rules Regarding Maritime Radio Equipment and Related Matters, *Notice of Proposed Rulemaking*,

(continued....)

3. McMurdo's beacon adds AIS for position locating and offer three options: a) AIS and 121.5 MHz position locating, b) AIS position locating only, and c) 121.5 MHz position locating only. McMurdo's EPIRB-AIS is designed to operate on the AIS VHF Data Link to transmit identity and GPS location information to SAR personnel on the international AIS channels (AIS A – 161.975 MHz and AIS B – 162.025 MHz). The AIS position locating signal uses burst technology to increase the probability that the message is received. Additionally, the AIS message is programmed with a unique nine-digit identification code in which the first three digits identify the device as an EPIRB and the last six digits identify the manufacturer and the individual unit.

4. Because the Commission's rules do not provide for the use of AIS position locating with EPIRBs, the McMurdo beacon cannot be certified without a waiver of Sections 80.1061 and 80.1101(c)(5). McMurdo seeks a waiver to permit the certification and use of the 406 MHz EPIRB with AIS position locating only and the 406 MHz EPIRB with AIS and 121.5 MHz position locating. McMurdo contends that such a waiver is appropriate because AIS position locating will provide additional information that will increase the effectiveness of search and rescue operations.⁶

5. *Discussion.* Under Section 1.925(b)(3) of the Rules, we may grant a waiver if it is shown that (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.⁷ We find that the waiver requested by McMurdo 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. On June 1, 2015, Special Committee No. 110 of the Radio Technical Commission for Maritime Services (RTCM) adopted RTCM Standard 11000.4 for 406 MHz Satellite Emergency Position Radiobeacons (EPIRB) (with AIS) (RTCM 11000.4 Standard). The RTCM 11000.4 Standard sets forth various functional and technical requirements for EPIRBs utilizing AIS to transmit homing signals. RTCM supports McMurdo's request for waiver, provided the device meets RTCM 11000.4 Standard.⁸ McMurdo states that its EPIRB-AIS complies with the RTCM 11000.4 Standard.⁹

7. McMurdo's EPIRB adds AIS position and identity transmission, and offers improvements to current EPIRBs such as interoperability with existing AIS equipment, location technology, and

WT Docket No. 14-36, 29 FCC Rcd 2516, 2519 ¶ 9 (2014). McMurdo states that its EPIRB-AIS otherwise meets this revised standard except with regard to features at issue in the waiver request.) Section 80.1101(c)(5) requires EPIRBs to meet the requirements in International Maritime Organization (IMO) Resolution A.810(19) Performance Standards for Float-Free Satellite Emergency Position-Indicating Radio Beacons (EPIRBs) Operating on 406 MHz, as amended by IMO Resolution MSC.56(66), and IMO Resolution MSC.120(74); IMO Resolution A.662(16) Performance Standards for Float-Free Release and Activation Arrangements for Emergency Radio Equipment; and ITU-R M.633-3 Transmission Characteristics of a Satellite Emergency Position-Indicating Radio Beacon (satellite EPIRB) System Operating Through a Satellite System in the 406 MHz band.

⁶ See Request for Waiver at 3.

⁷ 47 C.F.R. § 1.925(b)(3).

⁸ See Comments filed by Radio Technical Commission for Maritime Services (RTCM), dated June 5, 2015, at 2. On May 7, 2015, we sought comment on McMurdo's waiver request. See Wireless Telecommunications Bureau Seeks Comment on McMurdo Group Request for Waiver to Permit Equipment Authorization and Use of Emergency Position-Indicating Radio Beacon With Automatic Identification System Homing, *Public Notice*, 30 FCC Rcd 46236 (WTB MD 2015). RTCM was the only commenter.

⁹ See Request for Waiver at 3.

identification of persons in distress. We agree with McMurdo that a waiver would serve the public interest because use of the EPIRB with AIS position locating will facilitate recovery of lost mariners and other persons in distress. We therefore grant McMurdo's waiver request to permit the certification and use of its EPIRB with AIS position locating. As with any EPIRB, McMurdo must submit information regarding the equipment and test results to the United States Coast Guard prior to seeking equipment approval.¹⁰

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 by McMurdo Group on by January 16, 2015, 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

¹⁰ See 47 C.F.R. § 80.1061(c). The current contact information for the United States Coast Guard is typeapproval@uscg.mil or the Commandant (CG-ENF-4), U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Ave. SE, Washington, DC 20593-7509.