## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D. C. 20554

In the Matter of)Part 80 of the Commission's Rules and the Use of)The Automatic Identification System for Devices)That Can Be Used to Mark Fishing Equipment)

WT Docket No. 21-230

To: The Commission

## COMMENTS OF ARRL THE NATIONAL ASSOCIATION FOR AMATEUR RADIO

ARRL, the National Association for Amateur Radio, also known as the American Radio Relay League, Incorporated ("ARRL"), submits these comments in support of authorizing devices on an Automatic Identification System (AIS) or other appropriate VHF channel to mark fishing equipment.<sup>1</sup> Providing for fishing buoy and equipment markers on an appropriate VHF channel would provide substantial public interest benefits that are not attainable using the 1900 – 2000 kHz band.

Commercial fishing vessels can utilize fishing equipment markers that operate in the 1900 – 2000 kHz band. The Commission requested comment on the advantages and disadvantages of continuing to use these frequencies to mark fishing equipment. <sup>2</sup> These frequencies are within the 160 meter band allocated on a primary basis to, and used worldwide

<sup>&</sup>lt;sup>1</sup> In the Matter of Part 80 of the Commission's Rules and the Use of The Automatic Identification System for Devices That Can Be Used to Mark Fishing Equipment, Notice of Proposed Rulemaking, WT Docket No. 21-230, 86 Fed.Reg. 35700 (publ. July 7, 2021) ("NPRM").

 $<sup>^{2}</sup>$  Id. at para. 11.

by, radio amateurs with up to 1500 watts output power. Efficient antennas are comparatively large (one-quarter wavelength is 154 feet). Propagation supports mostly local (up to 100 mile) paths during daylight, but during darkness signals routinely travel up to about 2500 miles, and at times amateur stations communicate on paths that exceed 10,000 miles.

By contrast, propagation is stable and supports consistent line-of-sight reception both day and night in the VHF 160 MHz spectrum used for the AIS 1 and 2 channels and the 160.900 MHz AMRD Group B channel discussed by the Commission.<sup>3</sup> An efficient quarter-wave antenna for these frequencies is only 1.9 feet long. These characteristics of the VHF frequencies would permit smaller and lower-powered devices to be deployed while improving the capability of vessels to find and recover their fishing gear as intended.

Furthermore, a wide variety of vessels today already have the equipment needed to monitor the channels in this spectrum range. Aggregating this type of maritime use within the same spectrum band would tangibly benefit those needing to avoid interfering with, or becoming entangled with, the type of fishing gear on which markers generally are used.

For these reasons, we conclude that authorizing these types of devices to operate on an appropriate VHF channel would benefit those who use such devices to mark their fishing gear. Moving to a VHF channel would put the devices within spectrum that already is monitored by a wide variety of vessels and would remove them from a spectrum band in which they operate less efficiently and are susceptible to widely varying propagation effects and interference, especially during nighttime hours. Of additional significance is that more reliable markers would contribute to maritime safety and lessen incidents in which fishing gear is irretrievably lost and becomes a danger to marine life.

<sup>&</sup>lt;sup>3</sup> *Id.* at paras. 14-20.

Respectfully submitted,

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