

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

In the Matter of)
)
Procedures To Govern The Use Of Satellite)
Earth Stations On Board Vessels In The 5925-) IB Docket No. 02-10
6425 MHz/3700-4200MHz Bands And)
14.0-14.5 GHz/11.7-12.2GHz Bands)

To: The Commission

Reply Comments of the Association of American Railroads

The Association of American Railroads (“AAR”), by its undersigned counsel, hereby submits its Reply Comments in response to the Commission’s Notice of Proposed Rulemaking (“NPRM”) in the above-referenced matter.

AAR is a voluntary non-profit organization composed of Class I member railroad companies operating in the U.S, Canada and Mexico. One of AAR’s roles is to represent its members in connection with federal regulatory matters of concern to the railroad industry, including matters relating to communications and access to radio frequency spectrum¹.

¹ Also, the Commission has certified the AAR as the designated frequency advisory committee that coordinates licensing in the Private Land Mobile Radio (PLMR) bands for railroad use. In this regard, AAR serves as the frequency coordinator not only for its own members, but also for other companies that

This proceeding proposes to allow satellite earth stations on board moving vessels (ESVs) to operate in the 3700-4200/5925-6425 MHz and 14.0-14.5/11.7-12.2 GHz bands². Railroads operate vital radio communications systems in the 5925-6425 MHz band (the “6 GHz Band”), and as such have a strong interest in this proceeding. Specifically, AAR’s member railroads deploy and depend upon a complex and comprehensive radio communications network consisting of Fixed Service (“FS”) point-to-point microwave links that support a nationwide network of mobile radio facilities used for meeting safety and reliability requirements in the day-to-day operation of trains throughout the United States, many of which occur in rail depots, train yards and along railroad rights-of-way near major harbors, coastal ways, and port cities.

Radio communication systems in support of train operations, including links in the 6 GHz Band, carry vital information for the safe movement of trains, such as dispatcher-to-crew movement authorizations; control information for signaling, rerouting, and track switching; and critical telemetry data from trackside defect detectors concerning damaged rail, overheated wheel bearings, dragging equipment. The latter information is automatically transmitted from trackside detectors not only to crew members in trains via mobile radio links, but also via FS links (including those in the 6 GHz Band) to dispatchers in distant locations who are required to know the status of the equipment along the routes for which they are responsible.

In summary, the 6 GHz links used by the railroads are critical (requiring reliability at the level of “five nines”), and warrant the highest degree of protection from

meet the definition of “railroad licensee” (such as transit authorities and regional and short-line railroads) in Section 90.7 of the Commission’s rules.

² NPRM at paras. 43-46.

the unacceptable interference that is possible from coastal ESV transmissions in the 6 GHz Band.

Accordingly, AAR agrees with, and supports fully, the Comments and Reply Comments filed by the Fixed Wireless Communication Coalition (“FWCC”), of which AAR is a member. In particular, AAR endorses and supports the following six measures posited by FWCC as absolutely essential for protecting FS links operating in the 6 GHz Band within 300 km of the U.S. coastline: (1) there must be prior frequency coordination; (2) vessels must be equipped with on-board GPS-based devices that will automatically shut down the ESV if the vessel departs from the frequency-coordinated route, or enters a route segment that could not be successfully coordinated, or drops below the coordinated speed; (3) ESV coordination must be limited to the bandwidth for which the ESV operator can demonstrate actual need, not to exceed 36 MHz in each direction on each of two satellites per operator, and to the azimuths and elevations for those individual satellites; (4) there must be real-time access by FS operators (or their designee) to ESV vessel itineraries, frequency, bandwidth, and satellites, and access to a 24/7 point of contact capable of shutting down ESV transmissions if necessary; (5) ESV license terms must be limited to two years; and (6) ESV operation must be limited to ships of 5,000 gross tons or larger.

AAR also agrees with FWCC’s suggestion³ that ESVs be required to meet both the long-term and short-term interference criteria, *i.e.*, a long-term objective of -154 dBW/4kHz and a short-term objective of -131 dBW/4kHz.

³ FWCC Comments at 14-15, and FWCC Reply Comments at 24-25.

In conclusion, AAR respectfully requests the Commission to take action in this proceeding in a manner consistent with the views expressed herein.

Respectfully submitted,

ASSOCIATION OF AMERICAN RAILROADS

Louis P. Warchot
Senior Vice President-Law
and General Counsel
Dennis J. Starks
Senior Commerce Counsel
Association of American Railroads
50 F Street, N.W.
Washington, D.C. 20001
(202) 639-2502

By: Thomas J. Keller
Thomas J. Keller
50 F Street, N.W.
Washington, D.C. 20001
(202) 639-2568

Its Attorneys

Date: March 24, 2004