



Federal Communications Commission
Washington, D.C. 20554

April 8, 2009

DA 09-793

Dennis C. Brown, Esq.
8124 Cooke Court
Suite 201
Manassas VA 20109-7406

RE: Request by Maritime Communications/Land Mobile, LLC for clarification of Sections 80.385 and 80.215 of the Commission's Rules

Dear Mr. Brown:

This letter responds to your December 18, 2008, request, filed on behalf Maritime Communications/Land Mobile, LLC (MC/LM), that we clarify certain rules governing the Automated Maritime Telecommunications System (AMTS) service.¹ As set forth below, we agree in part with your proposed interpretations.

First, you request that we clarify Section 80.385(b)(1) of the Commission's Rules, which provides that AMTS geographic licensees may locate stations within 120 kilometers of co-channel site-based AMTS licensees only upon a showing that at least 18 dB protection will be provided to the site-based licensee's predicted 38 dBu signal level contour.² You note that the maximum permissible effective radiated power (ERP) for many AMTS stations is one thousand watts,³ and propose that, for purposes of calculating a site-based AMTS station's predicted 38 dBu signal contour, the site-based station be assumed to operate with one thousand watts ERP, rather than the maximum ERP of which the station is actually capable.

We decline to adopt your proposed interpretation. Instead, we conclude that the Commission intended for an AMTS geographic licensee's obligation to provide co-channel interference protection to an incumbent site-based station to be based on the site-based station's actual operating parameters. The Commission based the AMTS co-channel interference protection rules on the analogous rules governing the spectrally adjacent 220-222 MHz service.⁴ When it adopted those rules, the Commission expressly stated that the 38 dBu contours of incumbent licensees were to be calculated on the basis of actual

¹ Letter dated Dec. 18, 2008 from Dennis C. Brown to Scot Stone, Deputy Chief, Mobility Division, Wireless Telecommunications Bureau.

² See 47 C.F.R. § 80.385(b)(1).

³ Specifically, AMTS stations with an antenna height up to 61 meters that are located more than 129 or 169 kilometers, respectively, from a Channel 10 or 13 television station. See 47 C.F.R. § 80.215(h)(1).

⁴ See Amendment of the Commission's Rules Concerning Maritime Communications, *Second Memorandum Opinion and Order and Fifth Report and Order*, PR Docket No. 92-257, 17 FCC Rcd 6685, 6700 ¶ 31 (2002) (*Fifth Report and Order*) (holding that "AMTS geographic licensees should adhere to the co-channel interference protection standard that is used in the adjacent 220-222 MHz band"), *on recon.*, *Third Memorandum Opinion and Order*, 18 FCC Rcd 24391 (2003). We note, moreover, that the language of Section 80.385(b)(1) follows the analogous 220-222 MHz service rules. Compare 47 C.F.R. § 80.385(b)(1) with 47 C.F.R. §§ 90.723(k), 90.763(b)(1)(ii).

operating parameters, rather than maximum permissible operating parameters.⁵ In denying reconsideration of those rules, the Commission noted that providing protection to incumbents based on their theoretical maximum operating facilities, rather than on their actual operating facilities, would be spectrally inefficient and disserve the public interest.⁶ This concern applies equally to the AMTS service.⁷ Moreover, assuming that incumbent site-based stations are operating with one thousand watts ERP would underprotect any stations not subject to the ERP limit that are operating with a higher ERP, which also would be contrary to the Commission's intent.⁸ Finally, basing the AMTS geographic licensee's co-channel interference protection obligations on the site-based station's actual operating parameters is consistent with our recent decision applying the AMTS interference protection rules to determine whether a geographic licensee's proposed stations provided the requisite protection to co-channel site-based stations.⁹

⁵ See Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Third Report and Order; Fifth Notice of Proposed Rule Making*, PR Docket No. 89-552, GN Docket No. 93-252 & PP Docket No. 93-253, 12 FCC Rcd 10943, 11026 ¶ 174 (1997) (stating that "[t]he predicted 38 dBuV/m contour of the Phase I licensees will be calculated based on the licensee's authorized effective radiated power (ERP) and antenna height-above-average-terrain (HAAT) – not on the maximum allowable ERP and HAAT provided in our rules for the 220-222 MHz band").

⁶ See Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Memorandum Opinion and Order on Reconsideration*, PR Docket No. 89-552, GN Docket No. 93-252 & PP Docket No. 93-253, 13 FCC Rcd 14569, 14604 ¶ 73 (1998) ("If we were to assume that all 220 MHz Phase I licensees are operating at the maximum power and antenna height for the 220 MHz service . . . when many are not operating at such parameters and may never operate at such parameters, we could force Phase II licensees to provide considerably greater protection to co-channel Phase I licensees than necessary, and thereby potentially deny service to the public in areas beyond the Phase I licensee's actual 38 dBu service contour").

⁷ It is our understanding that MC/LM is concerned that, unless Section 80.385(b) is interpreted as requested, there exists the potential for a geographic AMTS licensee to interpose a station between two of the incumbent's stations. The Commission has concluded, however, that such a scenario will not occur if the incumbent licensee constructed its system in compliance with the then-existing requirement to maintain continuity of service, *see* 47 C.F.R. § 80.475(a) (1999). See Amendment of the Commission's Rules Concerning Maritime Communications, *Third Memorandum Opinion and Order*, PR Docket No. 92-257, 18 FCC Rcd 24391, 22401 ¶¶ 23-24 (2003).

⁸ See *Fifth Report and Order*, 17 FCC Rcd at 6699-6700 ¶ 31 ("We conclude that allowing incumbent licensees to continue operating under the terms of their current station licenses will further the public interest by avoiding interruption of the services they provide."); *cf.* Ralph Haller, *Letter*, 23 FCC Rcd 4714, 4716 (WTB/PSHSB 2008) (declining to adopt interpretation of Section 90.187 of the Commission's Rules that would underprotect incumbents with respect to new mobile-only stations).

⁹ See *Northeast Utilities Service Company, Order*, DA 09-643, ¶¶ 11-12 (WTB MD rel. Mar. 20, 2009). As we noted in that decision, we expect incumbent AMTS licensees "to cooperate with geographic licensees in order to avoid and resolve interference issues. This includes, at a minimum, providing upon request sufficient information to enable geographic licensees to calculate the site-based station's protected contour." *Id.* at n.12 (citing *Fifth Report and Order*, 17 FCC Rcd at 6704 ¶ 39). This is necessary because a station's predicted 38 dBu signal contour is a function of its ERP, *see* 47 C.F.R. § 73.699 Figs. 10-10c, but the power limit for site-based AMTS stations in the rules and on their licenses is based on transmitter output power rather than ERP, *see* 47 C.F.R. § 80.215(h)(5), and determining a station's ERP requires additional information, such as antenna gain and line loss. See Amendment of the Commission's Rules Concerning Airport Terminal Use Frequencies in the 450-470 MHz Band of the Private Land Mobile Radio Services, *Report and Order*, WT Docket No. 02-318, 20 FCC Rcd 1966, 1970 ¶ 9 (2005) (citing Amendment of Part 90 of the Commission's Rules and Policies for Applications and Licensing of Low Power Operations in the Private Land Mobile Radio 450-470 MHz Band, *Report and Order*, WT Docket No. 01-146, 18 FCC Rcd 3948, 3954 ¶¶ 12-13 (2003)).

Second, you request that we clarify that a ship station that is transmitting with an output power of fifty watts pursuant to Section 80.215(i)(1)-(2) of the Commission's Rules is permitted to operate with an ERP of up to thirty-six watts. We agree with this interpretation. Section 80.215 provides,

A ship station must have a transmitter output [(TPO)] not exceeding 25 watts and an ERP not exceeding 18 watts. The maximum transmitter output power is permitted to be increased to 50 watts under the following conditions: (1) Increases exceeding 25 watts are made only by radio command from the controlling coast stations; and (2) The application for an equipment authorization demonstrates that the transmitter output power is 25 watts or less when external radio commands are not present.¹⁰

Although Section 80.215(i) expressly authorizes only an increase in transmitter output power under the specified circumstances, and not an increase in ERP, it is evident that the Commission contemplated a corresponding increase in ERP.¹¹ Interpreting the rule to limit ERP to eighteen watts even when the station is operating with fifty watts TPO would defeat the Commission's purpose in allowing the exceptions to the general twenty-five watt TPO limit.¹² We accordingly clarify Section 80.215(i), as requested, concluding that ship station transmitters operating with a transmitter output power of fifty watts pursuant to that rule may have an ERP of up to thirty-six watts during such operation.

Accordingly, IT IS ORDERED that, pursuant to Sections 4(i) and 5(d) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 155(d), and Section 1.2 of the Commission's Rules, 47

¹⁰ 47 C.F.R. § 80.215(i).

¹¹ See Amendment of Parts 2, 81 and 83 of the Commission's Rules to Allocate Spectrum for an Automated Inland Waterways Communications System (IWCS) along the Mississippi River and Connecting Waterways, *Memorandum Opinion and Order*, Gen Docket No. 80-1, 88 FCC 2d 678, 685 ¶ 24, 686 ¶ 28 (1981) (noting that the proponent of the rule, Waterway Communications Systems, Inc. (Watercom), expressly asked that the Commission "authorize[] ship station transmitter power be increased to a maximum of 50 watts provided the power is automatically reduced to produce an ERP not exceeding 18 watts within the grade B contour of a protected television station", and explaining that "Watercom requests that the rules be revised to allow ship transmitters to employ up to 50 watts output power provided the system is designed to automatically reduce power to an ERP not exceeding 18 watts when the vessel is in the grade B contour of protected television station").

¹² See *id.* at 688 ¶ 36 ("Accordingly, we will amend . . . the rules substantially as requested by Watercom to permit [AMTS] ship station transmitters [sic] to utilize maximum output power of 50 watts provided power is automatically reduced to an ERP not exceeding 18 watts wherever it has not been specifically shown that television reception within the grade B contour is unlikely to be affected").

Dennis C. Brown, Esq.
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C.F.R. § 1.2, the request filed by Maritime Communications/Land Mobile, LLC on December 18, 2008 IS GRANTED IN PART and DENIED IN PART to the extent indicated herein.

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

Dennis C. Brown, Esq.
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