

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

In the matter of )
Application for Consent to the Assignment of a ) File No. 0001217770
Five-Channel 220 MHz Nationwide License (Call )
Sign WPWY753, formerly WPTC968) from Rush ) File No. 0001217811
Network Corp. to the Association of American )
Railroads )
Request by Rush Network Corp. for Waiver )
Of the Ten-Year Construction Requirement )

Order

Adopted: November 21, 2003

Released: November 24, 2003

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

I. INTRODUCTION

1. We have before us an application filed by Rush Network Corp. (Rush) and the Association of American Railroads (AAR) to assign the 220-222 MHz (220 MHz) nationwide, commercial Phase I license, call sign WPWY753 (License) from Rush to AAR. AAR also seeks a waiver of four rules in conjunction with its proposed use of the subject 220 MHz spectrum. In this order, we grant, in pertinent part, AAR's waiver request to enable AAR to implement portable locomotive control technology (PLCT) on its proposed 220 MHz system, and direct the Licensing and Technical Analysis Branch (LTAB) to process the above-referenced assignment application.

II. BACKGROUND

2. On March 3, 2003, Rush and AAR jointly submitted an application to assign 220 MHz call sign WPWY753 from Rush to AAR. In the application, AAR requests that the Commission waive four of its rules to allow AAR to use the frequencies to develop a private, non-commercial system for the freight railroad industry to operate switching locomotives in railroad yards using radio control links. Specifically, AAR seeks a waiver of sections 90.713(a) and 90.717(b) of the Commission's rules, both of which restrict the spectrum covered by the License to commercial use only. AAR also seeks a waiver of

1 ULS File No. 0001217770 (Assignment Application). Frequencies in the 220-222 MHz band are available for Government and non-Government operations by commercial and private land radio stations licensed in the Wireless Telecommunications Service. See 47 C.F.R. § 90.701.

2 Appendix A, Assignment Application, AAR Petition for Waiver, (ULS File No 0001217770), filed February 28, 2003 (AAR Waiver Request).

3 AAR Waiver Request at 1, 4-7. According to AAR, this technology, known as Portable Locomotive Control Technology (PLCT), was approved for use in the U.S. by the Federal Railroad Administration in 2001. Id. at 4-6.

4 Id. at 2. 47 C.F.R. §§ 90.713(a), 90.717(b).

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section 90.715(a), which designates one frequency in each 220 MHz channel pair as the "base station" frequency and the other as the "mobile station" frequency.<sup>5</sup> Finally, AAR requests that the Commission waive rule section 90.709(c), which subjects an assignee of a Phase I nationwide 220 MHz license to the four construction benchmarks set forth in section 90.725 of the Commission's rules, and allow AAR to comply instead with the substantial service criterion of Part 90.<sup>6</sup>

3. On February 28, 2003, Rush filed a waiver seeking a two-year extension of the requirements of section 90.725 to expand its current system and meet the final construction benchmark for the License.<sup>7</sup> In support of its extension request, Rush cites to a lack of 220 MHz equipment and the potential assignment to AAR.<sup>8</sup> However, on July, 28, 2003, Rush notified the Commission that it had completed its final ten year build-out requirement.<sup>9</sup> Rush's License was renewed and the request for extension was dismissed as moot on October 7, 2003.<sup>10</sup>

4. On March 17, 2003 the Bureau sought comment on the assignment and waiver requests filed by Rush Network and AAR.<sup>11</sup> On April 17, 2003, Access Spectrum filed a Petition to Deny against Rush's request for waiver. On April 28, 2003, Rush filed an Opposition and on May 5, 2003, Rush filed its Reply. AAR, NRTC LLC, and Motorola, Inc. also filed comments in this proceeding.

### III. DISCUSSION

5. As discussed below, we grant, in pertinent part, AAR's waiver request, subject to further processing of the assignment application by LTAB. We note that Access Spectrum only opposed Rush's request for extension of time to meet the construction build-out for call sign WPWY753, which was dismissed as moot, and did not specifically oppose AAR requests for waiver of rules restricting use of the subject spectrum to commercial purposes and/or related technical rules.<sup>12</sup> Pursuant to the Commission's

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<sup>5</sup> *Id.* at 2-3. 47 C.F.R. § 90.715(a).

<sup>6</sup> *Id.* at 3-4, 7-8. 47 C.F.R. §§ 90.709(c), 90.725(b). The final benchmark requires the holder of a nationwide Phase I 220 MHz license to construct base stations and place those base stations in operation in all 70 geographic areas designated in the original application for the license, including at least 28 urban areas listed in section 90.741 of the rules, within ten years of the original license grant - which, in the case of the License, was July 29, 2003. 47 C.F.R. §§ 90.725(b)(4), 90.741. AAR requests that, in lieu of the current final construction benchmark, it be subject to a "substantial service" requirement.

<sup>7</sup> Rush requested an extension of time to meet the final construction requirements for the License ULS File No. 0001217811 (Rush Network Corp. Request for Rule Waiver "Waiver – Expedited Action Requested" filed February 28, 2003 (Rush Waiver Request). Section 90.725 requires that 220 MHz licensees meet certain construction deadlines at two, four, six and ten years from when the license is initially granted. *See* 47 C.F.R. § 90.725.

<sup>8</sup> Rush Waiver Request at 5.

<sup>9</sup> *See* Ten Year Construction Report for WPWY753 (Nationwide Commercial 220 MHz License) filed by Rush Network Corp, Addison, Texas, July 28, 2003.

<sup>10</sup> *See* ULS File No. 0001399105 (Application for Renewal Only), ULS File No. 0001217811 (Request for Extension of Time).

<sup>11</sup> "Wireless Telecommunications Bureau Seeks Comment on an Assignment of and a Request for Extension of Time to Construct a 220 MHz Nationwide Commercial License," *Public Notice*, DA 03-798, 18 FCC Rcd 4964 (WTB 2003).

<sup>12</sup> *See* Access Spectrum Petition to Deny at 19; Reply at 23. *See also* AAR Reply at 2-3.

rules for processing waiver requests, section 1.925 provides that waivers may be granted based on a showing that the purpose of the rules would not be served, would be frustrated, or that the grant would be in the public interest.<sup>13</sup> Alternatively, an applicant's request for waiver may also be granted if in view of the unique or unusual factual circumstances of the instant case, application of the rules would be inequitable, unduly burdensome or contrary to the public interest or the applicant has no reasonable alternative.<sup>14</sup> Additionally, section 1.3 of the Commission's rules provides authority for a rule waiver upon a showing of good cause.<sup>15</sup>

6. First, AAR seeks a waiver of sections 90.713(a) and 90.717(b) of the Commission's rules, both of which restrict the spectrum covered by the License to commercial use only.<sup>16</sup> We grant AAR's request because of the special circumstances detailed in the waiver request and because we conclude it is in the public interest. As discussed below, AAR has made a showing that allowing AAR to operate the proposed PLCT system on a 220 MHz system is in the public interest because of its public safety, spectrum, and efficiency benefits, consistent with the Commission's prior findings on the use of spectrum for railroad services.<sup>17</sup> We find that this action is also consistent with the Commission's policies regarding flexible use of spectrum.<sup>18</sup>

7. AAR requests a waiver of the commercial use only restriction in order to implement the PLCT<sup>19</sup> utilizing the nationwide 220-222 MHz spectrum.<sup>20</sup> AAR states that PLCT offers significant benefits to customers, employees and the public, including "improved safety, lower operating costs and improved productivity."<sup>21</sup> AAR states that it will be the licensee on behalf of member railroads, will coordinate channel assignments and maintain a database of locations and operating characteristics of railroads.<sup>22</sup> PLCT systems have been implemented using other frequencies, but because of interference have led to the search for alternative frequency bands for PLCT operations.<sup>23</sup> AAR asserts that granting the requested waiver is in the public interest because it provides for flexible use of the spectrum, and promotes public safety by eliminating the use of congested 450-460 MHz band spectrum.<sup>24</sup> AAR further

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<sup>13</sup> See 47 C.F.R. §1.925(a)(3).

<sup>14</sup> *Id.*

<sup>15</sup> See 47 C.F.R. § 1.3.

<sup>16</sup> AAR Waiver Request at 2. 47 C.F.R. §§ 90.713(a), 90.717(b).

<sup>17</sup> See generally, *FCC Staff Report on NTIA's Study of Current and Future Spectrum Use by the Energy, Water and Railroad Industries*, July 30, 2002 (FCC Staff Report). The FCC Staff Report states that the railroad industry has been deploying positive train control systems to protect against train collisions and incursions into roadway worker locations and enforcing train speeds. *Id.* at 5.

<sup>18</sup> *Id.* at 19. See also *Spectrum Policy Task Force Report*, ET Docket No. 02-135, at 16-17 (2002).

<sup>19</sup> PLCT enables radio link remote control of locomotives in railroad yards and depots to move cars in assembling and disassembling trains. AAR Waiver Request at 4. AAR notes that PLCT systems have been in use in Canadian railroads and have lowered employee accident rates. *Id.*

<sup>20</sup> The Commission has previously certified AAR as the frequency advisory coordinator for land mobile frequencies used by the railroad industry. AAR Waiver Request at 4.

<sup>21</sup> *Id.* at 5. See also NRTC Comments at 7-8 (supporting the flexible use of spectrum).

<sup>22</sup> AAR Waiver Request at 7.

<sup>23</sup> *Id.* at 6. AAR notes that in the Commission's report to Congress the Commission identified interference and congestion problems faced by railroads. AAR Waiver Request at 10, citing FCC Staff Report at 13, 19.

<sup>24</sup> *Id.* at 8-10. AAR states that it will perform the same role it performs for six channel pairs at 900 MHz. See *Modification of AAR Licenses for Use in Positive Train Control Systems, Order*, 16 FCC Rcd 3078 (WTB 2001).

notes that the Commission has previously granted waivers to AAR for Advanced Train Control System (ATCS) use in 900 MHz spectrum, concluding that it would “improve railroad safety ... dramatically.”<sup>25</sup>

8. AAR states that the proposed PLCT system on 220 MHz spectrum will be efficient because it will operate on 5 kHz narrowband channels and will foster technological innovation by developing an open standard for a time division access protocol.<sup>26</sup> AAR states that narrowband channels are important for railroads because they must simultaneously operate in a given rail yard or adjacent yard,<sup>27</sup> and that it is currently developing an open standard to enable industry wide interoperability.<sup>28</sup> AAR further states that it will be prepared to commence operations after assignment of the license and that freight railroad industry PLCT systems will be deployed in at least 300 locations in the next three years.<sup>29</sup> Based on the described benefits in public safety, spectrum efficiency, and spectrum flexibility, we conclude it is in the public interest to waive section 90.713(a) and 90.717(b) to enable AAR to implement its PLCT private system, subject to grant of the assignment application.

9. In addition, AAR seeks a waiver of section 90.715(a), which designates one frequency in each 220 MHz channel pair as the "base station" frequency, and the other as the "mobile station" frequency.<sup>30</sup> AAR proposes to use mobile-to-mobile and portable-to-mobile communications on the PLCT system.<sup>31</sup> We conclude that this associated rule waiver is consistent with our finding that the proposed PLCT system is in the public interest. As designed, the benefits of the proposed system rely on the ability to implement portable-to-mobile station communications and, absent a waiver, we agree that the PLCT system would lose some of its functional enhancements.<sup>32</sup> In addition, we find that reversing the base/mobile frequencies in this instance does not pose co-channel interference concerns because AAR will be the sole nationwide licensee on this spectrum.

10. Finally, AAR requests that the Commission waive section 90.709(c), which subjects an assignee of a Phase I nationwide 220 MHz license to the four construction benchmarks set forth in section 90.725 of the Commission's rules.<sup>33</sup> Instead, AAR requests that it be regulated pursuant to the criterion in the 800 MHz band pursuant to Section 90.685(b), which requires a substantial service standard for measuring the use of spectrum, including “service which is sound, favorable, and substantially above a

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<sup>25</sup> Waiver of the Commission's Rules to License Use of Six Conventional 900 MHz Frequency Pairs for Advanced Train Control System, *Order*, 3 FCC Rcd 427, 428 (1988).

<sup>26</sup> AAR Waiver Request at 10.

<sup>27</sup> *Id.* at 7.

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> *Id.* at 2-3. 47 C.F.R. § 90.715(a).

<sup>31</sup> AAR states that PLCT usually involves a control unit on a switching locomotive and a portable remote unit worn by an operator. A remote operator can use the portable remote unit within a maximum range of 2-3 miles and controls various functions of the associated locomotive, such as speed, brake, direction, horn and bell. In addition, the portable remote unit has a built in safety feature that automatically stops a locomotive. AAR Waiver Request at 5.

<sup>32</sup> NRTC LLC supports the request to operate mobile stations on the base station frequencies because it will increase spectrum efficiency, essentially doubling the available spectrum. NRTC Comments at 6-7.

<sup>33</sup> AAR Waiver Request at 3-4, 7-8. 47 C.F.R. §§ 90.709(c), 90.725(b).

level of mediocre.”<sup>34</sup> We dismiss as moot AAR’s request for waiver of this rule, because Rush has previously met the applicable construction requirements for the 220 MHz spectrum subject to the proposed assignment. We also deny Access Spectrum’s Petition to Deny Rush Network’s request for waiver, since Access Spectrum only opposed Rush’s request for extension of time, which was dismissed as moot.<sup>35</sup>

#### IV. CONCLUSION AND ORDERING CLAUSES

11. We conclude that it is in the public interest to grant AAR a waiver to implement a private PLCT nationwide railroad communications system in the 220-222 MHz band and therefore grant, in pertinent part, AAR’s request for waiver, subject to grant of the assignment application, ULS File No. 0001217770.

12. Accordingly, IT IS ORDERED that, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.925 of the Commission’s Rules, 47 C.F.R. § 1.925, the Petition for Waiver filed by the American Association of Railroads on February 28, 2003 is GRANTED as set forth herein, and is otherwise DENIED.

13. IT IS FURTHER ORDERED that the Petition to Deny filed by Access Spectrum on April 17, 2003 is DENIED.

14. IT IS FURTHER ORDERED that the Commercial Wireless Division, Licensing and Technical Analysis Branch, SHALL PROCESS the application for assignment of license filed by Rush Network Corp. to the Association of American Railroads, ULS File No. 0001217770.

15. 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

Roger S. Noel  
Deputy Chief, Commercial Wireless Division  
Wireless Telecommunications Bureau

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<sup>34</sup> AAR Waiver Request at 7. *See* 47 C.F.R. 90.685(b).

<sup>35</sup> *See* fn. 10, *supra*. In the Petition to Deny, Access Spectrum objects to Rush Network’s request for an extension of time arguing in part that there was equipment available for the service and therefore no extension was justified. Access Spectrum Petition to Deny at 3. Access Spectrum states, however, that if Rush Network meets the 10 year construction deadline and receives license renewal, “then there would be no impediment to assigning its license to AAR.” Access Spectrum Reply at 23. *See also* NRTC LLC comments at 3-5 (supporting the need for a waiver because of the dearth of voice dispatch equipment.); Motorola Reply at 1-2 (indicating problems developing 5 kHz equipment).

