

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

In the Matter of)
COMMONWEALTH OF VIRGINIA) WT Docket No. 20-241
DEPARTMENT OF STATE POLICE)
Request for Waiver of Section 22.565(f) of the)
Commission's Rules to Increase Mobile)
Transmitter Power Output from 60 Watts to 100)
Watts for Call Sign WQFA919)

ORDER

Adopted: December 19, 2023

Released: December 19, 2023

By the Chief, Mobility Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. The Commonwealth of Virginia, Department of State Police (Commonwealth or VA State Police) requests waiver of section 22.565(f) of the Commission's rules¹ to increase the limit on its part 22 transmitter power output for its mobile transmitters from 60 watts to 100 watts, using a maximum effective radiated power (ERP) of 150 watts for one part 22 paging authorization, call sign WQFA919.²

2. In 2020, the Commonwealth requested a waiver substantially identical to the instant request, identifying 64 part 22 paging authorizations to which the waiver would apply.³ The Mobility Division of the Wireless Telecommunications Bureau (WTB or Bureau) granted the waiver request (subject to certain conditions) on March 31, 2022.⁴ The Commonwealth now states that one paging authorization (WQFA919) was unintentionally omitted from the 2020 Waiver Request and by way of its instant request, seeks to correct this error by requesting identical relief for the omitted license. For the reasons stated below, we grant the VA State Police 2023 Waiver Request, subject to the conditions herein.

II. BACKGROUND

3. VA State Police reiterate that the purpose of its current request, as with the 2020 Waiver Request, is to increase the capacity of its existing land mobile radio network (LMR), referred to as the Statewide Agencies Radio System (STARS), by upgrading to Time-Division Multiple Access (TDMA)

¹ 47 CFR § 22.565(f).

² Commonwealth of Virginia, Department of State Police, Request for Waiver, WT Docket No. 20-241 (filed February 16, 2023) (2023 Waiver Request). VA State Police state that at the time of this request, the FCC's Universal Licensing System listed the "Output Power" and "Maximum ERP" of all mobile frequencies associated with call sign WQFA919 at 50. Consistent with this request, the VA State Police propose to increase these values to 100 and 150, respectively.

³ Commonwealth of Virginia, Department of State Police, Request for Waiver, WT Docket No. 20-241 (filed June 25, 2020) (2020 Waiver Request).

⁴ In the Matter of Commonwealth of Virginia Department of State Police Request for Waiver of Section 22.565(f) of the Commission's Rules to Increase Mobile Transmitter Power Output from 60 Watts to 100 Watts, Order, WT Docket No. 20-241, 37 FCC Rcd 4462, (WTB, MD 2022) (2022 Waiver Order).

technology, while maintaining the existing geographic coverage on which the STARS public safety communication system depends.⁵ STARS is a statewide shared LMR system utilizing part 90 public safety channels,⁶ part 80 VHF Public Coast channels,⁷ and part 22 VHF paging channels, licensed according to Basic Economic Area markets.⁸ STARS provides digital voice and data wireless communications for 22 Virginia state agencies.⁹ STARS has been in operation since 2006, facilitating interoperability with local government and federal agencies.¹⁰ Its infrastructure allows “talk groups” to communicate privately, even while located in different parts of the state.¹¹ According to the VA State Police, it takes many conventional VHF channels to support public safety-grade radio communications for approximately 336 talk groups.¹²

4. VA State Police contends that in the *2022 Waiver Order* approving the 2020 Waiver Request, the Mobility Division found “that the underlying purpose of section 22.565(f) would not be served by strict application in the present case and further [found] that grant of the waiver is in the public interest. Additionally, the waiver request is unopposed and grant is consistent with Commission precedent.”¹³ Now, VA State Police requests this additional waiver be approved for the same reasons cited in the 2020 Waiver Request.¹⁴

5. On March 22, 2023, the Bureau released a Public Notice seeking comment on the VA State Police request for waiver of section 22.565(f) to increase mobile transmitter output power from 60 to 100 watts for call sign WQFA919.¹⁵ The two commenting parties responding to the public notice both

⁵ See 2020 Waiver Request at 1; 2023 Waiver Request at 1.

⁶ 47 CFR Part 90. STARS uses statewide mobile FCC Part 90 Public Safety pool trunked frequencies to transmit talk-in to base stations. Most of these frequencies are authorized for a mobile maximum transmitter power output of 125 watts, and a maximum ERP of 250 watts. 2023 Waiver Request at 4.

⁷ 47 CFR Part 80. VA State Police acquired auctioned spectrum for two FCC Part 80 Public Coast licenses. These part 80 licensed mobile transmit frequencies have a maximum mobile transmitter power output of 125 watts and maximum ERP of 285 watts. See Commonwealth of Virginia, *Order*, 19 FCC Rcd 15454 (WTB 2004) (granting Virginia’s request for a waiver of part 80 of the Commission’s Rules to permit its public safety operations on VHF Public Coast (VPC) spectrum to be governed by part 90 of the Commission’s rules).

⁸ In addition to holding part 90 and part 80 licenses, VA State Police purchased sixty-five (65) part 22 paging authorizations, sixty-four (64) of which were the subject of the 2020 Waiver Request (lead call sign WPVE519). VA State Police assert that in listing the paging authorizations in the 2020 Waiver Request, the Commonwealth unintentionally omitted one such authorization: WQFA919. 2023 Waiver Request at 5.

⁹ 2023 Waiver Request at 2.

¹⁰ *Id.* at 2–4.

¹¹ See 2023 Waiver Request at 5; Virginia State Police, *Statewide Agencies Radio System (STARS)*, <https://vsp.virginia.gov/sections-units-bureaus/bass/communications/statewide-agencies-radio-system-program-stars/> (last visited October 17, 2023).

¹² *Id.*

¹³ 2023 Waiver Request at 9 (citing *2022 Waiver Order*, DA 22-282, para. 7 (released March 31, 2022)).

¹⁴ The Commonwealth incorporates the 2020 Waiver Request into its 2023 Waiver Request by reference.

¹⁵ See *Wireless Telecommunications Bureau Seeks Comment on the Commonwealth of Virginia, Department of State Police Request for Waiver of Section 22.565(f) of the Commission’s Rules to Increase Mobile Transmitter Output Power from 60 to 100 Watts for Call Sign WQFA919*, Public Notice, WT Docket No. 20-241, DA 23-247 (2023 Public Notice).

supported the 2023 Waiver Request.¹⁶

III. DISCUSSION

6. To obtain a waiver of the Commission's rules, a petitioner must demonstrate either that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the present case, and that a grant of the waiver would be in the public interest;¹⁷ 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.¹⁸ An applicant seeking a waiver faces a high hurdle and must plead with particularity the facts and circumstances that warrant a waiver.¹⁹

7. Just as we found in the *2022 Waiver Order*, we find that the underlying purpose of section 22.565(f) would not be served by strict application in the present case and further find that grant of this waiver request is in the public interest. Additionally, the waiver request is unopposed and grant is consistent with Commission precedent. Further, as we did in the *2022 Waiver Order*, we ensure that the risk of harmful interference to adjacent part 22 licensees is mitigated by conditioning this waiver grant as described below.

8. *Underlying purpose would not be served.* Section 22.565(f) limits the transmitting power of mobile transmitters in order to eliminate or severely limit occurrences of harmful interference between one-way or two-way mobile communications systems. The intent and underlying purpose of this and other related part 22 rule sections is to afford part 22 licensees flexibility in providing service to the public and expand access to mobile radio networks and services while preventing harmful interference.²⁰ As we found in the *2022 Waiver Order*, we find, in this specific case, that the purpose of section 22.565(f) and other related rule sections would be better served by a waiver, with the conditions imposed below, than by strict adherence to the terms of the rule.²¹ Strictly applied, section 22.565(f) limits the services that VA State Police is able to provide on its public safety network, rather than enabling flexibility. Waiver of the rule will allow the STARS network, including call sign WQFA919, to continue to provide high quality and cost-effective portable radio coverage covering 97% of Virginia's population (with over 90% geographical coverage) without unduly impacting adjacent licensees.

9. *Waiver is in the public interest.* As we found in the *2022 Waiver Order*, we also find that grant of this waiver request is in the public interest. Grant of this waiver will allow VA State Police to continue to operate its entire system using a more spectrally efficient technology while allowing it to continue unique public safety missions. Specifically, grant of this waiver will enable VA State Police to continue to operate its entire STARS public safety network, which as mentioned above, supports 22 state agencies, facilitates interoperability with local governments and federal agencies, and is routinely called

¹⁶ See Comments of the National Wireless Communications Council (NWCC), WT Docket No. 20-241 (April 24, 2023) (NWCC Comments); Reply Comments of Commonwealth of Virginia, Department of State Police, WT Docket No. 20-241 (May 9, 2023) (VA State Police Comments).

¹⁷ 47 CFR § 1.925(b)(3)(i).

¹⁸ *Id.* § 1.925(b)(3)(ii).

¹⁹ *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969) (citing *Rio Grande Family Radio Fellowship, Inc. v. FCC*, 406 F.2d 664 (D.C. Cir. 1968)); *Birach Broadcasting Corp.*, Memorandum Opinion and Order, 18 FCC Rcd 1414, 1415, para. 6 (2003).

²⁰ See Federal Communications Commission 2002 Biennial Regulatory Review, Staff Report of the Wireless Telecommunications Bureau, WT Docket No. 02-310, 18 FCC Rcd 4243, 4299 (2002) (Staff Report).

²¹ See *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) ("The FCC may exercise its discretion to waive a rule where particular facts would make strict compliance inconsistent with the public interest.").

upon to meet new communications and interoperability needs such as multi-agency response to public safety emergencies, requiring the addition of many new users.²² Further, the network is used in more than 3,600 first responder and some public service vehicles.²³ Without the requested waiver, the Commonwealth would likely not be able to use a more spectrum-efficient technology which would yield more capacity, throughout its entire network, including call sign WQFA919, ensuring that it would not likely lose coverage and quality in some cases due to signal imbalance.²⁴

10. *Waiver is consistent with Commission precedent.* The Bureau has granted multiple waivers of its part 22 paging (one-way or two-way) mobile operation rules in general,²⁵ and of section 22.565(f) in particular, to increase the mobile transmitter power output limits involving public safety networks.²⁶ In both the *Wyoming Waiver Order* and the *Maine Waiver Order*, the Bureau likewise increased the mobile transmitter power output limits from 60 to 100 watts for similar state public safety systems.²⁷ In the *Maine Waiver Order*, the Bureau specifically noted that forcing the state to maintain a 60-watt limit for its part 22 mobile units when the rest of its system was operating at 110 watts would be spectrally inefficient, unnecessarily costly, and thus unduly burdensome.²⁸ In each instance, the waiver grant supported state public safety/service entities when grant of such conditional waivers was not likely to cause harmful interference to adjacent users. As in the *2022 Waiver Order*, we find a very similar fact pattern present here and thus find grant of VA State Police's request for waiver consistent with the Commission's precedent.

11. *Waiver is unopposed.* We also note that the Bureau sought comment on the waiver request, including from any parties whose operations could be impacted by grant of the waiver request.²⁹ Yet the waiver request was unopposed, with one supporting comment and one supporting reply comment.³⁰

12. *Conditions to mitigate risk of harmful interference.* In light of the lack of opposition from adjacent, co-channel part 22 licensees, the lack of complaint in the last year regarding the VA State Police STARS network since the release of the *2022 Waiver Order*, and for the reasons discussed above, we will allow VA State Police to increase the power output of the mobile transmitters of call sign WQFA919 to 100 watts, subject to conditions to minimize the risk of harmful interference caused by this power increase. These conditions are consistent with the approach we have used with success in similar past instances, including the original 64 call signs of VA State Police.³¹ With the goal of not changing the

²² See 2023 Waiver Request at 2–5.

²³ *Id.* at 2.

²⁴ Switching from FDMA to TDMA causes more or larger dead spots by increasing the imbalance for two-way communications. 2023 Waiver Request at 7.

²⁵ See *State of Wisconsin*, Order and Proposed Order of Modification, 33 FCC Rcd 11080 (WTB 2018) (*Wisconsin Waiver Order*).

²⁶ See *State of Wyoming*, Order, 23 FCC Rcd 9572 (PSHSB 2008) (*Wyoming Waiver Order*); *State of Maine—MSCommNet Project, Request for Waiver of Sections 90.35(a), 20.9(a)(6), 22.377, and 22.565(f) of the Commission's Rules*, Order, 27 FCC Rcd 8891 (PSHSB/WTB 2012) (*Maine Waiver Order*).

²⁷ See *Wyoming Waiver Order*, 23 FCC Rcd at 9580, para 21; *Maine Waiver Order*, 27 FCC Rcd at 8895, para. 18.

²⁸ See *Maine Waiver Order*, 27 FCC Rcd at 8895, para. 14.

²⁹ 2023 Public Notice, WT Docket No. 20-241, DA 23-247 at 2.

³⁰ NWCC states that to the best of its knowledge, there have been no interference complaints from parties affected by any of the 64 already approved call signs in the VA State Police system. NWCC Comments at 2.

³¹ See *Wyoming Waiver Order*, 23 FCC Rcd at 9580, para. 20 (Wyoming must accept any interference that may result from operation of co-channel transmitters authorized to incumbent licensees); *Maine Waiver Order*, 27 FCC

(continued...)

potential for interference to neighboring licensees at their license boundaries,³² we approximated the potential effect that the increased mobile transmitter power could have on an interfering contour. As such, we condition our grant on VA State Police providing notice to their adjacent, co-channel paging geographic neighbors and resolving any concerns that arise over harmful interference arising from its system, including call sign WQFA919, or if any such concerns cannot be resolved, then the VA State Police must maintain a five-kilometer set back of its mobile transmitters from the objecting licensee's geographic license area. Specially, we require that:

- 1) At least 30 days prior to operating under the waiver in a market, VA State Police must notify all adjacent market, co-channel part 22 licensees of the grant of the waiver and the intended date to begin operating at the higher transmitter power, and provide a point of contact for the licensees to express technical concerns.
- 2) If an objection is received from an adjacent market, co-channel part 22 licensee within the 30-day period, VA State Police must address the objection to the satisfaction of the adjacent licensee prior to operation, or else refrain from operations at the higher transmitter power within five (5) km³³ of that objecting party's license boundary.
- 3) If an objection is received after the 30-day notice period, VA State Police must address the objection to the satisfaction of the adjacent market licensee within a reasonable timeframe, or else cease operations at the higher transmitter power within five (5) km of that objecting party's license boundary until the objection can be addressed.

13. With these conditions, and for the reasons discussed above, we find that the Commonwealth of Virginia, Department of State Police has satisfied the standard for waiver of the 60-watt limit for mobile units, specified in section 22.565(f) of our rules for call sign WQFA919.

IV. ORDERING CLAUSE

14. Accordingly, IT IS ORDERED that the 2023 Request for Waiver filed by the Commonwealth of Virginia Department of State Police IS GRANTED conditioned as discussed herein.

15. This action is taken under delegated authority pursuant to sections 0.131(a) and 0.331 of the Commission's Rules, 47 CFR §§ 0.131(a), 0.331.

Rcd at 8895, para 15 (limiting the area in which Maine may operate mobile units at 110 watts on part 22 frequencies to reduce the potential for interference to part 22 licensees in adjacent regions). The State of Maine was required to operate its mobile units at least eight kilometers from the edge of its part 22 service area when transmitting at power levels above 60 watts on part 22 paging frequencies. *See Maine Waiver Order*, 27 FCC Rcd at 8895, para 19.

³² See 47 CFR § 22.503(h).

³³ Five kilometers represents the distance between interfering contours generated for the mobile transmitter, using a transmitter power output of 60 watts and 100 watts. *See* 47 CFR § 22.567.

FEDERAL COMMUNICATIONS COMMISSION

Roger Noel
Chief, Mobility Division