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**6712-01**

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Part 90**

**[PS Docket No. 13-229, FCC 15-103]**

**Amendment of the Commission's Rules to Facilitate the Use of Vehicular Repeater Units**

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** This document implements certain changes to the rules governing six remote control and telemetry channels in the VHF band. We will allow the licensing and operation of vehicular repeater systems (VRS) and other mobile repeaters on these channels. In addition, we revise and update the technical rules for these channels to allow greater use of VRS systems while providing protection for incumbent telemetry users who rely on these frequencies for control of critical infrastructure systems.

**DATES:** Effective [**INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], except for the addition of § 90.175(b)(4), containing new or modified information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act of 1995, which will become effective after such approval, on the effective date specified in a notice that the Commission publishes in the Federal Register announcing such approval and effective date.

**FOR FURTHER INFORMATION CONTACT:** Roberto Mussenden, Policy and Licensing Division, Public Safety and Homeland Security Bureau, (202) 418-1428. For

additional information concerning the information collection requirements contained in this document, send an email to [PRA@fcc.gov](mailto:PRA@fcc.gov) or contact Nicole Ongele, Office of Managing Director, Performance Evaluation and Records Management, 202-418-2991, or by email to [Nicole.Ongele@fcc.gov](mailto:Nicole.Ongele@fcc.gov).

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Report and Order in PS Docket No. 13-229, FCC 15-103, released on August 10, 2015 and Clarification Order in PS Docket No. 13-229, FCC 15-165, released on December 11, 2015. These documents are available for download at [http://fjallfoss.fcc.gov/edocs\\_public/](http://fjallfoss.fcc.gov/edocs_public/). The complete text of these documents are also available for inspection and copying during normal business hours in the FCC Reference Information Center, Portals II, 445 12th Street, SW., Room CY-A257, Washington, DC 20554. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to [FCC504@fcc.gov](mailto:FCC504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

In 2013, the Commission's Notice of Proposed Rulemaking (NPRM) sought comment on whether to make additional spectrum available to support mobile repeater capability. The Commission declined to seek comment on VRS operations on nine channels in the 170-172 MHz band, but proposed to allow mobile repeater use on six telemetry channels in the 173 MHz band. In addition, the Commission sought comment on whether other spectrum bands or frequencies could also be used for public safety mobile repeater operations; whether to allow Industrial/Business use of mobile repeater stations on these channels; whether to impose bandwidth restrictions on these frequencies; whether frequency

coordination could protect telemetry users from interference; whether to allow wide-area mobile repeater operations on these frequencies; and whether to allow VRS units to exceed the 2 watt power limit that applies to these channels.

In the Report and Order the Commission decides to allow all users of these channels – including telemetry licensees – to operate using 11.25 kHz bandwidth. In addition, we will make these six telemetry channels co-primary with adjacent channel land mobile operations and remove the restrictions on omni-directional antennas, fixed station power limits and antenna heights for telemetry stations. The Commission also decides that the only way to accommodate both telemetry and VRS on these frequencies is through frequency coordination to both ensure geographic separation as well as minimizing the risk of commingling voice and data operations. However, since no party provided the Commission with a specific coordination protocol, it directs the coordinator community to develop a consensus protocol for VRS coordination. The Commission also decides to only allow area-wide or state-wide authorizations on a secondary basis. The Commission imposes loading requirements for licensees seeking to license mobile repeaters on these frequencies. The Commission allows VRS to operate with 5 watts ERP but declines to increase the 2-watt power limit for telemetry and remote control use. As a result of our decision to allow the licensing of VRS units on these frequencies, we dismiss as moot several requests for waiver filed during the pendency of this rulemaking. On December 11, 2015, the Commission released a Clarification Order to ensure that the Commission's rules aligned with the text of the August Report and Order.

## **Procedural Matters**

### **A. Final Regulatory Flexibility Analysis**

The Final Regulatory Flexibility Analysis required by section 604 of the Regulatory Flexibility Act, 5 U.S.C. 604, is included in Appendix B of the Report and Order.

### **B. Paperwork Reduction Act of 1995 Analysis**

This document contains new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on the new information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.

The actions taken in the Report and Order in PS Docket No. 13-229 have been analyzed with respect to the Paperwork Reduction Act of 1995, Pub. L. 104-13, and found to impose new or modified recordkeeping requirements or burdens on the public.

### **C. Congressional Review Act**

The Commission will send a copy of this Report and Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

## **Final Regulatory Flexibility Analysis**

As required by the Regulatory Flexibility Act (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the NPRM of this proceeding. The Commission sought written public comment on the IRFA. The RFA requires that an agency prepare a regulatory flexibility analysis for notice-and-comment rulemaking proceedings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.” The RFA generally defines “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act. A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA). The present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

### **A. Need for, and Objectives of, the Proposed Rules**

In the *Report and Order*, we amend the Commission’s rules we amend the Commission’s Rules to allow the licensing and operation of vehicular repeater systems (VRS) and other mobile repeaters on six remote control and telemetry channels in the VHF band. The rule changes adopted are intended to promote flexible and efficient use of these channels.

In order to achieve these objectives, we:

- Allow the use of mobile repeaters on the following six telemetry channels:  
173.2375, 173.2625, 173.2875, 173.3125, 173.3375, and 173.3625 MHz.
- Allow the use of bandwidths up to 11.25 kHz on these channels.

- Require frequency coordination for applications seeking primary status on these frequencies.
- Limit applicants to a license a maximum of three channels on a primary basis

**B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA**

There were no comments filed that specifically addressed the rules and policies proposed in the IRFA.

**C. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply**

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

Public Safety Radio Licensees. As a general matter, Public Safety Radio Licensees include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services. For the purpose of determining whether a Public Safety Radio Licensee is a small business as defined by the SBA, we use the broad census category, Wireless Telecommunications Carriers (except Satellite). This definition

provides that a small entity is any such entity employing no more than 1,500 persons. For this category, census data for 2007 show that there were 11,163 establishments that operated for the entire year. Of this total, 10,791 establishments had employment of 999 or fewer employees and 372 had employment of 1000 employees or more. The Commission does not require Public Safety Radio Licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many Public Safety Radio licensees constitute small entities under this definition. Nonetheless, the Commission estimates that the majority of Public Safety Radio Licensees are small entities.

Private Land Mobile Radio Licensees. The Private land mobile radio (PLMR) systems serve an essential role in a vast range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories. Because of the vast array of PLMR users, the Commission has not developed a small business size standard specifically applicable to PLMR users. The SBA rules, however, contain a definition for Wireless Telecommunications Carriers (except Satellite) which encompasses business entities engaged in *radiotelephone communications employing no more than 1,500 persons*. According to the Commission's records, there are a total of 3,374 licenses in the frequencies range 173.225 MHz to 173.375 MHz, which is the range affected by this NPRM. Despite the lack of specific information, however, the Commission believes that a substantial number of PLMR licensees may be small entities.

Frequency Coordinators. Neither the Commission nor the SBA has developed a small business size standard specifically applicable to spectrum frequency coordinators. There

are nine frequency coordinators certified by the Commission to coordinate frequencies allocated for public safety use. The Commission has not developed a small business size standard specifically applicable to frequency coordinators. The SBA rules, however, contain a definition for Wireless Telecommunications Carriers (except Satellite) which encompasses business entities engaged in radiotelephone communications employing no more than 1,500 persons. Under this category and size standard, we estimate that a majority of frequency coordinators can be considered small.

**D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements**

This Report and Order adopts a rule that will entail reporting, recordkeeping, and/or third-party consultation. Specifically, the *Report and Order* requires applicants for mobile repeater authorizations receive frequency coordination prior to filing a license application with the Commission. While the preparation of an application does not require the hiring of professionals, frequency coordinators do charge a fee for their services. Therefore, licensees will incur a one-time burden each time an application is filed with the Commission. The estimated burden and cost levels are described in more detail in the supporting statement for OMB 3060-1198, ICR Ref. No. 201404-30.

**E. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered**

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the

clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.

The Report and Order adopts changes to the rules covering operation on six telemetry channels in the 173 MHz band. In formulating rule changes in the *Report and Order*, we strived to promote efficient use of spectrum.

The Report and Order requires applicants obtain frequency coordination prior to filing a license application with the Commission. Given the Commission's previous reliance on frequency coordination as a mechanism to minimize the occurrence of harmful interference, we did not consider other alternatives to frequency coordination. In addition, we note that there are no methods by which to reduce the burden of frequency coordination on smaller entities. The Report and Order concludes that the benefits of frequency coordination outweigh any potential economic burden associated with frequency coordination.

**F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules**

None.

**G. Report to Congress**

The Commission will send a copy of the Report and Order, including the FRFA, in a report to be sent to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996. In addition, the Commission will send a copy of the Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

## **Ordering Clauses**

Accordingly, **IT IS ORDERED** that, pursuant to sections 1, 4(i), 303, 316, 332 and 337 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 303, 316, 332 and 337, the Report and Order **IS HEREBY ADOPTED**.

**IT IS FURTHER ORDERED** that the amendments of the Commission's rules as set forth in Appendix B of the Report and Order **ARE ADOPTED**, effective [**INSERT 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], except for those rules and requirements in Section 90.175 containing new or modified information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act of 1995, which **WILL BECOME EFFECTIVE** after such approval, on the effective date specified in a notice that the Commission publishes in the Federal Register announcing such approval and effective date.

**IT IS FURTHER 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(b)(3) of the Commission's rules, 47 CFR § 1.925(b)(3), the Request for Waiver filed by the Washington Metropolitan Area Transit Authority on June 18, 2013, **IS DISMISSED AS MOOT**.

**IT IS FURTHER 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(b)(3) of the Commission's rules, 47 CFR § 1.925(b)(3), the Modification Application and associated Request for Waiver filed by Trinity County, California on January 31, 2014 **ARE DISMISSED**.

**IT IS FURTHER 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(b)(3) of the Commission's rules, 47 CFR § 1.925(b)(3), the Application and associated Request for Waiver filed by Williams County Sheriff's Department on December 26, 2013, ARE DISMISSED.

IT IS FURTHER 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(b)(3) of the Commission's rules, 47 CFR § 1.925(b)(3), the Application and associated Request for Waiver filed by Panhandle Regional Planning Commission on August 5, 2013, ARE DISMISSED.

**IT IS FURTHER ORDERED** that the Commission **SHALL SEND** a copy of the Report and Order in a report to be sent to Congress and the General Accounting Office pursuant to the Congressional Review Act, 5 U.S.C. 801(a)(1)(A).

**List of Subjects in 47 CFR Part 90**

Radio.

FEDERAL COMMUNICATIONS COMMISSION.

Sheryl Todd,  
Deputy Secretary.

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR part 90 as follows:

**PART 90—PRIVATE LAND MOBILE RADIO SERVICES**

1. The authority citation for Part 90 continues to read as follows:

**Authority:** Sections 4(i), 11, 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), and 332(c)(7), and Title VI of the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. 112-96, 126 Stat. 156.

2. Amend § 90.20:

a. In the table in paragraph (c)(3) by revising the entries for 173.2375, 173.2625, 173, 2875, 173.3125, 173.3375, and 173.3625; and

b. By adding paragraphs (d)(90) through (93).

The revisions and additions read as follows:

**§ 90.20 Public Safety Pool.**

\* \* \* \* \*

(c) \* \* \*

(3) \* \* \*

**PUBLIC SAFETY POOL FREQUENCY TABLE**

Frequency or band	Class of station(s)	Limitations	Coordinator
* * *	* * *		
Megahertz			
* * *	* * *		
173.2375 .....	....do.....	90, 91, 92, 93	PX
173.2625 .....	....do.....	90, 91, 92, 93	PX

173.2875 .....	....do.....	90, 91, 92, 93	PX
173.3125 .....	....do.....	90, 91, 92, 93	PX
173.3375 .....	....do.....	90, 91, 92, 93	PX
173.3625 .....	....do.....	90, 91, 92, 93	PX
*       *	*       *		

(d) \* \* \*

(90) The maximum effective radiated power (ERP) may not exceed 2 watts for mobile stations, and 5 watts for mobile repeater stations and hand-carried transmitters that communicate directly with mobile repeater stations. .

(91) This frequency is available on a shared basis both for remote control and telemetry operations and for mobile repeater operations. The authorized bandwidth may not exceed 11.25 kHz.

(92) This frequency is available on a shared basis with the Industrial/Business Pool for remote control and telemetry operations. Licensees seeking primary status for the use of this frequency for mobile repeater stations and hand-carried transmitters that communicate directly with mobile repeater stations must describe the area of normal day-to-day operations either in terms of operation in a specific county or in the terms of maximum distance from a geographic center (latitude and longitude) and shall be subject to the frequency coordination requirements of § 90.175.

(93) Mobile repeaters operating on this frequency are subject to a channel loading requirement of 50 transmitter-receivers. Loading standards will be applied in terms of the number of units actually in use or to be placed in use within 8

months following authorization. A licensee will be required to show that an assigned frequency is at full capacity before it may be assigned a second or additional frequency. Channel capacity may be reached either by the requirements of a single licensee or by several users sharing a channel. Until a channel is loaded to capacity it will be available for assignment to other users in the same area.

\* \* \* \* \*

3. Amend § 90.35:

a. In the table in paragraph (b)(3) by revising the entries for 173.2375, 173.2625, 173, 2875, 173.3125, 173.3375, and 173.3625; and

b. By adding paragraphs (c)(92) through (95).

The revisions and additions read as follows:

**§ 90.35 Industrial/Business Pool.**

\* \* \* \* \*

(b) \* \* \*

(3) \* \* \*.

**INDUSTRIAL BUSINESS POOL FREQUENCY TABLE**

Frequency or band	Class of station(s)	Limitations	Coordinator
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* * *	* * *	* * *	* * *
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Megahertz

* * *	* * *	* * *	* * *
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173.2375 .....	Fixed or mobile	92, 93, 94, 95	
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* * *	* * *	* * *	* * *
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173.2625 .....	Fixed or mobile	92, 93, 94, 95
* * * * *		
173.2875 .....	Fixed or mobile	92, 93, 94, 95
* * * * *		
173.3125 .....	Fixed or mobile	92, 93, 94, 95
* * * * *		
173.3375 .....	Fixed or mobile	92, 93, 94, 95
* * * * *		
173.3625 .....	Fixed or mobile	92, 93, 94, 95
* * * * *		

(c) \* \* \*

(92) This frequency is available on a shared basis both for remote control and telemetry operations and for mobile repeater operations. The authorized bandwidth may not exceed 11.25 kHz.

(93) This frequency is available on a shared basis with the Public Safety Pool for remote control and telemetry operations. In cases where § 90.35(c)(95) applies to this frequency, licensees seeking primary status for the use of this frequency for mobile repeater stations and hand-carried transmitters that communicate directly with mobile repeater stations must describe the area of normal day-to-day operations either in terms of operation in a specific county or in the terms of maximum distance from a geographic center (latitude and longitude) and shall be subject to the frequency coordination requirements of § 90.175.

(94) Mobile repeaters operating on this frequency are subject to a channel loading requirement of 50 transmitter-receivers. Loading standards will be applied in terms of the number of units actually in use or to be placed in use within 8 months following authorization. A licensee will be required to show that an assigned frequency pair is at full capacity before it may be assigned a second or additional frequency. Channel capacity may be reached either by the requirements of a single licensee or by several users sharing a channel. Until a channel is loaded to capacity it will be available for assignment to other users in the same area.

(95) The maximum effective radiated power (ERP) may not exceed 2 watts for mobile stations, and 5 watts for mobile repeater stations and hand-carried transmitters that communicate directly with mobile repeater stations.

\* \* \* \* \*

4. Section 90.175 is amended by adding paragraph (b)(4) to read as follows:

**§ 90.175 Frequency coordinator requirements.**

\* \* \* \* \*

(b) \* \* \*

(4) For any application for mobile repeater station operations on frequencies denoted by both § 90.20(d)(90) and (92), or by both § 90.35(c)(93) and (95) the frequency coordinator responsible for the application must determine and disclose to the applicant the call signs and the service areas of all active co-channel incumbent remote control and telemetry stations inside the applicant's proposed area of operation by adding a special condition to the application, except when the

applicant has obtained written concurrence from an affected incumbent licensee,  
or when the applicant and the incumbent licensee are the same entity.

\* \* \* \* \*

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