

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

In the Matter of Application of)	
)	
SYOSSET FIRE DISTRICT)	File No. 0001314863
)	
To Operate a Public Safety Radio)	
Communications System in Frequency Band)	
470-480 MHz in Syosset, New York and Nearby)	
Communities)	

MEMORANDUM OPINION AND ORDER

Adopted: August 18, 2003

Released: August 18, 2003

By the Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. We have before us an application and a waiver request filed by the Syosset Fire District, New York, for authority to operate a public safety radio system on eleven UHF frequencies¹ in the New York Metropolitan area.² The applicant (“Syosset” or “the District”) seeks a waiver, pursuant to Section 337(c) of the Communications Act of 1934, as amended (“the Act”),³ of Section 22.621 of the Commission’s Rules,⁴ to use frequencies allotted for non-public safety use.⁵ For the reasons stated herein, we grant Syosset’s waiver request.

II. BACKGROUND

2. Syosset is the parent agency to the all-volunteer Syosset Fire Department.⁶ The District, which is located near the north shore of Long Island, New York, serves the communities of Syosset,

¹ Frequencies in the 300 MHz to 3 GHz range are Ultra High Frequencies (“UHF”) but land mobile frequencies in the 450-512 MHz range are sometimes referred to as the land mobile “UHF band.” In this *Memorandum Opinion and Order*, references to UHF mean 450-512 MHz. *See, e.g.* Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, WT Docket No. 99-87, *Notice of Proposed Rule Making* 14 FCC Rcd 5206, 5215 ¶¶ 11-12 (1999).

² *See* FCC File No. 0001314863, Syosset Fire District (filed May 16, 2003) (“Request”), as amended on May 19, 2003, May 20, 2003, July 30, 2003, and August 5, 2003.

³ 47 U.S.C. § 337(c). Alternatively, Syosset seeks a waiver pursuant to Section 1.925 of the Commission’s Rules, 47 C.F.R. § 1.925. *See* Request at 1.

⁴ 47 C.F.R. § 22.621. *See* Request at 1.

⁵ Request at 1.

⁶ *Id.* at 2.

Woodbury, part of Jericho, and the villages of Oyster Bay Cove, Laurel Hollow, and Muttontown.⁷ The District is at the crossroads of major transportation rights-of-way.⁸ These transportation systems include the Long Island Expressway, many major secondary thoroughfares, and the main branch of the Long Island Rail Road.⁹ More than 300,000 vehicles travel Syosset's roads daily.¹⁰ Consequently, emergency rescue calls within the District have increased by 400% in the last twenty years.¹¹ In addition to providing street-level radio coverage, the District also requires in-building radio coverage for firefighting operations.¹²

3. The District currently provides three types of service. First, the District provides day-to-day dispatch services, emergency services, and mutual aid to Syosset and several neighboring communities.¹³ Second, the District provides emergency operations services to one of Nassau County's nine fire battalions. The District is a member of the Fifth Battalion, which contains a much broader geographic area than the collective communities served by the first tier. Syosset is the Emergency Operations Center for the Fifth Battalion, which serves twelve fire departments.¹⁴ Third, the District provides technical rescue services throughout Nassau County, including rescues at scenes of structural collapses, confined spaces, and from above ground at great heights.¹⁵

4. Syosset states that its current public safety radio communications system is inadequate to meet the critical communications needs of its staff and firefighters.¹⁶ The District operates 150 radios on frequency pair 453/458.1000 MHz from one site in support of both dispatch and paging operations.¹⁷ The District also operates a simplex "fireground" channel on 458.7125 MHz and two mutual aid channels on 46.10 and 46.12 MHz.¹⁸ Syosset states that its current system cannot support the three tiers of service that the District provides.¹⁹ Moreover, Syosset contends that its communications are subject to interference due to its proximity to New York City.²⁰ Specifically, its current frequency pair is excessively loaded and fails to provide coverage across the District's service area.²¹ In its Request, the District cites instances

⁷ *Id.*

⁸ *Id.*

⁹ *Id.* The District asserts that the Long Island Rail Road is the nation's busiest commuter railroad. *Id.*

¹⁰ *Id.*

¹¹ *Id.* at 3.

¹² *Id.* at 2.

¹³ *Id.* at 3.

¹⁴ *Id.* at 4.

¹⁵ *Id.*

¹⁶ *Id.* at 3. The District utilizes approximately 120 volunteer firefighters. *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.* at 5.

²¹ *Id.*

where a lack of coverage prevented communications in critical situations.²² Syosset's radio vendors analyzed the problems and concluded that they are caused by a lack of repeater sites.²³ The vendors suggested digital simulcast technology as the appropriate solution, but it would require new, interference-free channels.²⁴ Syosset proposes to address these problems by replacing its current system with a new, trunked 12.5 kHz bandwidth system that would include five frequency pairs and a single voice paging frequency currently designated for non-public safety use.²⁵ The system will support 300 mobiles, with 150 mobiles utilized by the District's firefighters and the remainder utilized by four neighboring fire and rescue districts in a consolidated system. The system will initially support mixed-mode analog and digital simulcast signals, ultimately leading to only digital service. Upon implementation of the new system, Syosset will surrender its existing license authorizing the use of frequency pair 453/458.1000 MHz.²⁶

5. Syosset amended its application on May 19, 2003, May 20, 2003, July 30, 2003, and August 5, 2003 to provide additional information or analysis concerning its proposed system.²⁷ On June 13, 2003, the Wireless Telecommunications Bureau ("Bureau") placed Syosset's May 2003 application and waiver request on public notice.²⁸ As the frequencies in question are not designated for public safety use, Syosset requires a waiver of Sections 22.7, 22.501, 22.621, 22.651, and 90.311 of the Commission's Rules.²⁹ Syosset seeks such a waiver, pursuant to Section 337(c) of the Act, or alternatively, Section 1.925 of the Commission's Rules, to use the frequencies.³⁰

²² *Id.* For example, while one of the District's paramedics was driving, a tree limb crashed into the windshield of the car in front of him. The paramedic tried unsuccessfully to call the dispatcher using both his portable radio and his vehicle's mobile radio. He was forced to leave the scene and drive to a higher elevation to successfully complete a call for assistance. In another instance, after responding to a house fire, the Syosset fire chief was told that someone might still be in the burning house. The chief tried unsuccessfully to contact the dispatcher from his portable radio to indicate he was going to attempt a rescue. A second chief arrived and after several attempts completed the call from a vehicle radio. *Id.*

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.* at 2. The Request seeks authority for eleven Part 22 frequencies, paired as follows: 476.0375/479.1625 MHz, 476/479.1375 MHz, 476/479.1875 MHz, 476/479.2375 MHz, 476/479.2875 MHz, and the single frequency assignment 470.1375 MHz.

²⁶ *Id.* at 6.

²⁷ Amendments (filed May 19, 2003, May 20, 2003, Jul. 30, 2003, and Aug. 5, 2003).

²⁸ See Wireless Telecommunications Bureau Seeks Comment on Request for Waiver by Syosset Fire District, New York, to Operate a Public Safety System Serving Firefighters in Syosset and Nearby Communities, *Public Notice*, DA 03-1948, released June 13, 2003. The Commission received forty timely comments and four late-filed comments, all of which support the grant of Syosset's waiver request and application. There were no comments submitted in opposition.

²⁹ 47 C.F.R. §§ 22.7, 22.501, 22.621, 22.651, 90.311. Section 22.7 limits eligibility to operate on Part 22 frequencies to common (*i.e.*, commercial) carriers. Section 22.501 defines the scope of the licensing and operation of the public paging and radiotelephone service. Section 22.621 requires the use of point-to-multipoint operation on six of the requested frequencies. Section 22.651 requires the use of trunked mobile operations on the other five frequencies requested. *But see* 47 C.F.R. § 22.655 (FCC is redesignating public mobile channels in the 450-470 MHz range from trunked mobile operation to point-to-multipoint operation as the demand for trunked mobile service decreases). Section 90.311 excludes frequencies in the 470-512 MHz range from assignment to private land mobile radio applicants if the frequencies are allocated for services under Part 22.

³⁰ See 47 U.S.C. § 337(c), 47 C.F.R. § 1.925.

III. DISCUSSION

6. Section 337(c) of the Act provides that we must waive any rules necessary to authorize entities providing public safety services to operate on unassigned non-public safety spectrum, if we make five specific findings:

- public safety spectrum is not immediately available;
- the proposed use will not cause harmful interference to protected spectrum users;
- public safety use of the unassigned frequencies is consistent with public safety spectrum allocations in the geographic area;
- the unassigned frequencies have been allocated for non-public safety use for more than two years; and
- grant of the application is consistent with the public interest.³¹

7. Public safety services are services whose principal purpose is to protect the safety of life, health, or property, provided by governmental entities whose primary mission is the provision of such services, or by non-governmental entities authorized by such a governmental entity, and that are not made commercially available to the public.³² Based on the record before us, we find that Syosset is an entity providing public safety services.³³ We therefore move to examining whether Syosset meets the statutory requirements supporting a waiver under Section 337(c) of the Act.

8. *Immediate availability of public safety spectrum.* Syosset contends no public safety spectrum is immediately available that would support its proposed radio system.³⁴ In support of its contention, Syosset submitted a spectrum analysis report compiled by an engineering consulting firm.³⁵ This report made the following observations concerning Syosset's proposed system:

- The 150-160 MHz band has no available frequencies that we could grant without violating the adjacent channel protection requirements that govern trunked systems (*see* 47 C.F.R. § 90.187);
- The Part 90 450-454 MHz and 460-466 MHz bands have no available frequencies that we could grant without violating the adjacent channel protection requirements that govern trunked systems (*see* 47 C.F.R. § 90.187);
- Although the 470-473 MHz and 476-479 MHz bands contain 6.25 kHz bandwidth channels, these frequencies are not available because no manufacturer provides equipment for this narrow bandwidth. The report further states that coordination of these channels is not possible due to the close proximity of existing co- or adjacent channel users;

³¹ *See* 47 U.S.C. § 337(c).

³² *See* 47 U.S.C. § 337(f).

³³ *See* Nassau County Police Department, *Memorandum Opinion and Order*, 17 FCC Rcd 14252, 14258 ¶ 11 (2002).

³⁴ Request at 10.

³⁵ *See generally* Request, Exhibit A, Appendix A.

- The 764-776 and 794-806 MHz bands, while designated for public safety use, are not immediately available for Syosset because of existing television broadcast stations;³⁶
- The 806-821 MHz and 851-866 MHz bands do not have unassigned channels;
- The 821-824 MHz and 866-869 MHz bands do not have wide area channels available to construct a multi-channel district wide trunked system.³⁷

The Association of Public-Safety Communications Officials International, Inc. (APCO), a FCC-certified public safety frequency coordinator and Syosset's Regional Planning Coordinator (Regional Planning Committee-FCC Region 8), support the spectrum analysis report.³⁸ Based on the record before us, we concur with Syosset's contentions and find that no other public safety spectrum is immediately available to satisfy the requested public safety service use.

9. *Technical feasibility of requested use without causing harmful interference.* Syosset's proposed frequencies are in the 470-480 MHz band, which is allocated on a geographically-shared basis with television broadcast stations.³⁹ In the New York metropolitan area, the Commission regulates the eleven requested frequencies under Part 22 of its Rules.⁴⁰ Specifically, the Commission has designated six of the frequencies requested herein for point-to-multipoint transmitters used to support transmitters that provide public mobile service, *e.g.*, paging control.⁴¹ The Commission designated the other five frequencies requested herein for trunked mobile operations, although the Commission is redesignating channels in this range to point-to-multipoint operation as demand decreases for trunked mobile operations.⁴² According to the Commission's licensing records, the Commission has not authorized Part 22 stations in the geographic area in question, and thus there is no issue of co-channel interference to Part 22 stations before us. We note, however, that there are co-channel and adjacent channel public safety land mobile radio stations operating as a result of prior waivers issued pursuant to Section 337 of the Act. The interference analysis provided in the Request shows that Syosset's proposed radio system would not interfere with those other licensed public safety systems.⁴³ Furthermore, we note that APCO conducted an interference analysis and concluded that Syosset's proposed radio system would not cause interference

³⁶ We have previously held that frequencies in these bands cannot be considered "immediately available" until the Commission has approved a regional plan developed by the appropriate regional planning committee. *See* DuPage Public Safety Communications, 16 FCC Rcd 12394, 12398 ¶ 10 (WTB PSPWD 2001). No such plan has been submitted or approved for Region 8, the region to which Syosset belongs.

³⁷ Request, Exhibit A at 3-5, Appendix A at 1-3.

³⁸ Request, Appendices B-1 and B-2.

³⁹ Frequencies in the 470-512 MHz band, normally assigned to UHF Television channels 14 through 20, were made available for land mobile radio use in 11 cities in the early 1970's in the "UHF-TV Sharing" proceeding. *See* Land Mobile Use of TV Channels 14 through 20, Docket No. 18261, *Report and Order*, 23 FCC 2d 325 (1970).

⁴⁰ 47 C.F.R. § 22.1 *et. seq.*

⁴¹ *See* 47 C.F.R. §§ 22.621, 22.627.

⁴² *See* 47 C.F.R. §§ 22.621, 22.651, 22.655.

⁴³ *See* Request, Exhibit A, which demonstrates interference protection to co- and adjacent channel land mobile licensees and applicants, including Somerset County, City of Bayonne, and Jersey City's public safety radio systems.

to existing public safety radio systems.⁴⁴ Consequently based on the record before us and our analysis thereof, we conclude that Syosset's proposed system would protect existing public safety land mobile licensees and television stations from harmful interference. Accordingly, we believe the operational and technical parameters of Syosset's proposed system meet the Commission's requirements for interference protection to incumbent public safety licensees. We therefore find that Syosset's proposed system is technically feasible and will not cause harmful interference to protected spectrum users.

10. *Public safety use of the frequencies is consistent with other public safety spectrum allocations in the geographic area.* As Syosset notes, the frequencies it proposes to use in its public safety communications system are within a frequency band (470-512 MHz) where public safety land mobile radio operations are authorized, and are currently being used by other public safety agencies in the New York metropolitan area (e.g., Burlington County, New Jersey and the Borough of Fort Lee, New Jersey).⁴⁵ We therefore find that the use of the unassigned frequency pairs for the provision of the proposed public safety services is consistent with other allocations for the provision of such services in the geographic area for which the application is made. Moreover, because other governmental agencies in the New York Metropolitan Area are using these frequencies, we believe that granting the request will promote interoperability capability among the public safety community in this area. In this regard, we note that Syosset is responsible for providing emergency communications to twelve fire departments during a state of emergency.⁴⁶

11. *The frequencies have been allocated for non-public safety use for more than two years.* The Commission allocated these frequencies for paging use in 1994.⁴⁷ Thus, these frequencies have been allotted for their present use for more than two years.

12. *Granting this application is consistent with the public interest.* Based upon the record in this proceeding, we believe Syosset's filings demonstrate that it needs access to additional spectrum in order to promote effective public safety communications. We believe that it would further the public interest by affording Syosset's public safety community access to additional radio spectrum in order to allow it to safely protect the lives and property in its care. Indeed, Section 1 of the Act defines one of the Commission's over-arching purposes as "promoting safety of life and property through the use of...radio communication."⁴⁸ We also find Syosset's commitment to surrender its existing UHF authorization to be a decisionally significant factor in our reasoning that granting the Request serves the public interest by easing the congestion on these shared channels in the New York City metropolitan area.⁴⁹ Additionally,

⁴⁴ See Letter from Joseph L. Yurman, P.E., APCO Local Advisor, Southern New York State to D'wana Terry, Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau (dated Jul. 31, 2003, filed Aug. 5, 2003).

⁴⁵ Request at 7.

⁴⁶ Request at 4. Twelve departments comprise the Fifth Battalion. The District, as the Fifth Battalion's Emergency Operations Center, has a responsibility to provide for adequate radio coverage across the entire Fifth Battalion.

⁴⁷ See Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services, CC Docket 92-115, *Report and Order*, 9 FCC Rcd 6513 (1994).

⁴⁸ 47 U.S.C. § 151.

⁴⁹ We anticipate that Syosset will effectuate its representation to the Commission that it will relinquish its authorizations for the frequency pair 453.100/458.100 MHz within one year after the District certifies completion of construction of the facilities proposed in the instant application. As a result, we will direct Syosset to provide written notification to the Division within thirty days of such action.

we find it significant that granting the instant request will promote interoperability capability among the public safety community in the New York metropolitan area.

IV. CONCLUSION

13. We find that Syosset's Request satisfies the criteria set forth under Section 337(c) of the Act to obtain a grant of its application to operate a public safety communications system on frequencies in the 470-480 MHz band. We therefore grant Syosset's Request for Waiver.⁵⁰

V. ORDERING CLAUSES

14. Accordingly, **IT IS ORDERED** that, pursuant to Sections 4(i) and 337(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), 337(c), the request for waiver associated with the captioned application filed by the Syosset Fire District on May 16, 2003, as amended, to use frequencies 476.0375/479.1625 MHz, 476/479.1375 MHz, 476/479.1875 MHz, 476/479.2375 MHz, 476/479.2875 MHz, and 470.1375 MHz, for public safety services as requested in the captioned application **IS GRANTED**.

15. **IT IS FURTHER ORDERED** that, pursuant to Sections 4(i) and 337(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), 337(c), that the Licensing and Technical Analysis Branch SHALL PROCESS File No. 0001314863 consistent with this *Memorandum Opinion and Order* and the Commission's Rules.

⁵⁰ In view of the conclusion that a grant of a waiver for Syosset is warranted under Section 337(c) of the Act, we need not reach the question of whether Syosset's waiver request should be granted under Section 1.925(b)(3) of the Commission's Rules.

16. **IT IS FUTHER ORDERED** that Syosset Fire District shall provide written notification to the Public Safety and Private Wireless Division within thirty days of relinquishing frequency pair 453.000/458.100 MHz as discussed in note 49 *supra*.

17. 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

D'wana R. Terry
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