Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets	)	WT Docket No. 00-230

WRITTEN EX PARTE SUBMISSION OF AERWĀV, INC.

Pursuant to Section 1.1206, 47 C.F.R. § 1.1206, Aerwāv, Inc. ("Aerwāv") hereby respectfully submits written input for the record in the above-captioned docket.[1] Aerwāv was formed in September 2001 and did not exist as a corporate entity during the comment and reply comment phases of the *Secondary Markets Proceeding*. Therefore, Aerwāv takes this opportunity to express its support for and provide comments on the implementation of secondary markets mechanisms by the Commission.

I. BACKGROUND AND SUMMARY

A. Aerwāv

Aerwāv was formed for the purpose of developing wireless communications businesses in the 220-222 MHz spectrum band ("220 MHz band") and in other bands. In January 2002 Aerwāv acquired Securicor Wireless Holdings, Inc. ("Securicor"), the predominant licensee in the 220 MHz band.[2] Additionally, Aerwāv was the winning bidder of all of the 220 MHz

[1] *See In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Notice of Proposed Rulemaking, WT Docket No. 00-230, 15 FCC Rcd 24203 (2000)("*Secondary Markets Proceeding*").

[2] As part of the Securicor transaction, Aerwāv gained control of the spectrum licensed to Roamer One, Inc. and Intek License Acquisition Corp ("ILAC"). Aerwāv currently has a nationwide footprint and serves customers throughout the United States. Aerwāv's licenses are used to provide integrated mobile data and voice applications

licenses recently auctioned as part of Auction 43, which closed on January 22, 2002.[3] Aerwāv is now the principal licensee in the 220 MHz band and is dedicated to the success of the band. Further, on January 18, 2002, Aerwāv and Motorola jointly announced their partnership to develop a new line of 12.5 kHz product for the 220 MHz band.[4] This product, which will be distributed through Motorola's nationwide dealer network, holds great promise for the 220 MHz band. In order to fully realize this promise, early adoption of the Commission's proposals in this Docket is critical. Aerwāv believes that the Commission's secondary markets initiative, and in particular spectrum leasing, is the key to unlocking the potential of the 220 MHz band. To this end, Aerwāv believes that the 220 MHz band presents the ideal candidate for the introduction of liberalized secondary market policies as proposed in the *NPRM*.

B. The 220 MHz Band

The 220-222 MHz spectrum band historically has been allocated for innovative uses. The 220 MHz service was created by the Commission in 1988,[5] and was dedicated for narrowband usage to provide an incentive for users to develop narrowband technology to facilitate efficient channelization.[6] The history of the 220 MHz band, however, has been difficult.

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for fleet management, including Automatic Vehicle Location ("AVL"), status messaging, and "one-to-many" wireless communications. Aerwāv's subsidiaries operate as commercial providers of PMRS service.

[3] *See Multi Radio Service Auction Closes*, Public Notice, DA 02-157 (rel. Jan. 22, 2002).

[4] *See Motorola to Design, Manufacture, and Market Equipment for Aerwāv's 220 MHz Spectrum Pipeline,* Press Release (Jan. 18, 2002) *available at* http://www.aerwav.com/press_aerwavpr.htm (Attached).

[5] *See Amendment of Part 2 of the Commission's Rules Regarding the Allocation of the 216-225 MHz Band*, Report and Order, GN Docket No. 87-14, 3 FCC Rcd 5287 (1988).

[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 Services*, Report and Order, PR Docket No. 89-552, 6 FCC Rcd 2356 ¶ 9 (1991).

For example, mutually exclusive licenses in the 220 MHz band were initially awarded by lottery. This method of licensing, coupled with an excess of thinly-capitalized licensees, essentially balkanized the band. Legal challenges to the lottery process itself further delayed network construction and dampened investment in the band.[7] In addition to these licensing problems, modifications to the Commission's technical and service rules for the 220 MHz band also fostered further uncertainty.[8]

Recent events, including Motorola's development of 220 MHz band equipment, presage a revitalization in the band. As of the end of Auction 43, the 220 MHz band is now fully licensed. Aerwāv believes that the success of the 220 MHz band now depends, in large part, on the ability of licensees to lease spectrum consistently with the proposals in the *Secondary Markets Proceeding*.

II. SPECTRUM LEASING IS VITAL TO THE SUCCESS OF THE 220 MHz BAND

Aerwāv believes that, given the right conditions, the 220 MHz band holds much promise. One key to the success of the band is the availability of infrastructure and equipment tailored to the 220 MHz band. As mentioned above, this has recently been achieved by way of an agreement between Aerwāv and Motorola, whereby Motorola will design, manufacture, and market 220 MHz band equipment for Aerwāv's 220 MHz spectrum pipeline.[9] The new Motorola equipment will enable two-way trunked radio features such as group dispatch, one-to-

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[7] *See, e.g.,Evans v. FCC,* Order, per curiam, Case No. 92-1317 (D.C. Cir. Mar. 18, 1994). This litigation "placed all of the more than 3,000 authorizations the Commission granted in doubt for nearly a two-year period, and the uncertainty with respect to the finality of the Commission's grant of their licenses caused many licensees to refrain from constructing their stations." *See In the Matter of 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, 13 FCC Rcd 14569 ¶ 7 (1998).

[8] *See, e.g., Id.*, Second Report and Order, 11 FCC Rcd 3668 (1996)(adopting a license modification window); *Id.* Fourth Report and Order, 12 FCC Rcd 10752 (1997)(repealing the "40-mile rule").

one selective calling, wide-area seamless roaming, and efficient channel utilization. As part of the agreement, both Aerwāv and Motorola (along with its extensive network of nationwide dealers) plan to market and distribute 220 MHz communications solutions directly to end-users. These new equipment and service options are poised to energize and revitalize the 220 MHz band. Motorola's methodology for the 220 MHz band, however, calls for the utilization of 12.5 kHz frequencies (as opposed to the 5 kHz channels currently used by Phase I 220 MHz systems). Accordingly, a robust secondary market in the 220 MHz band is vital to a successful deployment of this new technology.

The second key to the vitality of the 220 MHz band is the availability of spectrum leasing as a means to maximize the efficient use of the band. Aerwāv has been preparing for the possibility of spectrum leasing through its efforts to consolidate the band and by developing the most efficient potential spectrum pipeline for communications. Aerwāv believes it is imperative that the Commission act expeditiously to allow spectrum leasing arrangements. Spectrum leasing will allow licensees to lease out portions of their spectrum holdings that would otherwise be unused without losing their core asset—licensed spectrum. Further, the inability to lease 220 MHz spectrum resources will hamper the efficiency, development, and the ultimate success of the band. The 220 MHz band would offer an ideal "test bed" for spectrum leasing if the Commission feels the need to selectively implement or "phase in" secondary markets. It is a relatively small amount of spectrum, is manageable in terms of size, and is in a stage of development conducive to the deployment of new products and services.

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[9] *See Motorola to Design, Manufacture and Market Equipment for Aerwāv's 220 MHz Spectrum Pipeline*, Aerwāv Press Release (Jan. 18, 2002) *available at* http://www.aerwav.com/press_aerwavpr.htm.

III. PROCEDURAL ASPECTS OF SPECTRUM LEASING

Like all commenters in the docket, Aerwāv supports the concept of secondary markets arrangements for all exclusive licensees.[10] Aerwāv takes this opportunity to provide specific input on some of the items raised by the Commission in its *Secondary Markets NPRM*. Aerwāv agrees with the overwhelming majority of the parties commenting in the docket that the procedural aspects of spectrum leasing arrangements should be minimized. Private contract provisions and traditional contract dispute mechanisms will give licensees and lessees much needed flexibility that will create the optimum environment for secondary markets. Further, Commission intervention that is limited, to the greatest extent possible, to essential technical and interference protection issues, will help secondary markets thrive. In sum, minimal regulatory intervention will foster the most efficient and widespread use of spectrum and spectrum leases.

IV. CONTROL STANDARDS

The current standards utilized by the Commission to determine whether a transfer of control has occurred are confusing, inconsistent, and outdated. The primary wireless precedents, namely *Intermountain Microwave* and *Motorola*, provide different and possibly inconsistent standards.[11] This creates an environment where licensees have difficulty resolving the threshold issue of what standard applies. Further, the industry has received mixed signals from the Commission regarding the actual applicability of the various control standards and the applicability of *Intermountain Microwave*.[12]

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[10] Spectrum leasing will encourage broader deployment of spectrum, promote more efficient spectrum usage, increase service options, and benefit small businesses by providing more flexible spectrum options.

[11] *See Applications of Motorola, Inc. for 800 MHz Specialized Mobile Radio Trunked Systems,* File Nos. 507505 et al., Order (rel. July 30, 1985)(Private Radio Bureau); *Intermountain Microwave*, 12 FCC 2d 559, 24 RR 983 (1963). *Motorola* is the standard for PMRS licenses, whereas *Intermountain Microwave* is used for CMRS transactions.

[12] For example, the Commission's Order establishing 700 MHz Guard Band Managers authorized spectrum leasing without applying the *Intermountain Microwave* or *Motorola* tests for *de facto* transfers of control. *See In the Matter*

Aerwāv, like most of the other commenters in the secondary markets proceeding, agrees with the Commission's tentative conclusion that the *Intermountain Microwave* standard is not appropriate for determining whether a lease constitutes a *de facto* transfer of control.[13] A resounding message in the comments and reply comments filed is that the *Intermountain Microwave* standard for analyzing transfers of control under Section 310 (d) of the Communications Act is outdated and needs to be replaced. Spectrum leasing in the broad context being contemplated is a new application that rationally deserves a new analysis for determining whether transfers of control occur.

The Commission has exercised a wide range of discretion in determining and enforcing its standards for what constitutes "control" under Section 310 (d).[14] In the 700 MHz Guard Band proceeding, the Commission applied its most flexible and best application of transfers of control to date. The *700 MHz Guard Band Order* enabled spectrum leasing without invoking *Intermountain Microwave* or any other test for determining transfers of control. Rather, the Commission exercised regulatory forbearance and imposed certain requirements and obligations for Guard Band Managers that would ensure that unauthorized *de facto* transfers would not occur.[15]

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of Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, Second Report and Order, WT Docket No. 99-168, 15 FCC Rcd 5299 (2000)("*Guard Band Order*").

[13] *See NPRM* ¶¶ 74-76, 78.

[14] *See, e.g., Lorain Journal Co. v. FCC*, 351 F.2d 824, 828-29 (D.C. Cir. 1965), *cert. den.*, 383 U.S. 967 (1966); *Application of Stereo Broadcasters, Inc.*, Memorandum Opinion and Order, Docket No. 20590, 55 FCC 2d 819, 821 (1975), *modified*, 59 FCC 2d 1002 (1976).

[15] For example, the Commission holds band managers directly responsible for compliance with all obligations that the Communications Act imposes on licensees, interference and for the misuse of frequencies by unlicensed entities, the Commission exercises its general enforcement powers against lessees, and it mandates several contract provisions, as discussed in more detail below. *See Guard Band Order* ¶¶ 47-49, 93.

To the extent that the Commission believes Section 310 (d) is implicated by spectrum leasing arrangements, it should consider exercising regulatory forbearance pursuant to Section 10 (a) of the Communications Act and/or proactively determine that all qualifying lease transactions are in the public interest.[16] Such a course of action is consistent with the Commission's past actions regarding SMR end-user licensing.[17]

Aerwāv recognizes that licensees must retain ultimate responsibility for the actions of any lessees on their spectrum, including the possibility of liability for monetary forfeitures or potential license revocation based on the actions of lessees. This is consistent with the Commission's proposals in the *NPRM*.[18] Regardless, Aerwāv believes that the Commission has ample jurisdiction and ability to take enforcement action directly against lessees. Third party spectrum users that violate Communications Act provisions or the Commission's rules are subject to forfeitures under Section 503 of the Communications Act, other administrative sanctions, and criminal prosecution.[19] For example, pursuant to Section 503, the Commission may assess forfeitures against any person in willful or repeated violation of its Rules.[20] Further, Aerwāv is confident that traditional contract rights and remedies that will be included in lease arrangements will provide for an added layer of security for the Commission, as discussed in greater detail below. For example, contract provisions can facilitate faster responses to rule violations or harmful interference (*e.g.*, automatic cancellation of leases, the ability of lessors to

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[16] *See* 47 U.S.C. § 160.

[17] *See NPRM* ¶ 81 n. 121.

[18] *See NPRM* ¶¶ 27, 29, 32.

[19] *See Guard Band Order* ¶ 47.

[20] *See* 47 U.S.C. §§ 152, 503.

immediately act to correct lessee interference problems) than can formal Commission action initiated pursuant to the requirements mandated by the Act.[21]

V. "SAFE HARBOR" LEASE PROVISIONS

As a threshold matter, Aerwāv believes that the Commission generally should defer to the private contractual arrangements between licensees and lessees. Even without Commission intervention, the parties to leasing arrangements have every economic and business incentive to draft prudent provisions and to contract for sufficient protections. Aerwāv is currently developing model agreements that include provisions such as the following:

- A provision that allows licensees to terminate leases/lessee operations upon Rule violations or the causation of harmful interference.
- A provision stating that the licensee retains all rights under the license.
- A provision obliging lessees to submit to Commission jurisdiction.
- A provision that forbids lease assignment absent written consent by the licensee.
- A provision that immediately terminates the lease agreement if the licenses expire or are revoked by the Commission.
- A provision that neither party shall represent themselves that the legal representative of the other before the Commission, but will cooperate with each other with respect to FCC maters concerning the license or the systems.
- The requirement that each customer of the lessee, upon initiation of service, shall execute a service agreement to use the systems in which the customer is advised that service is provided on systems operated by lessee pursuant to this lease agreement and that licensee holds the license.
- The requirement for the lessee to provide the licensee with copies of any customer complaints it receives concerning the systems and any correspondence from federal or state regulatory authorities, including the Commission, regarding the systems. The lessee also must provide the licensee with notice of any claims it receives that it is in default

[21] For example, Section 503 requires notice and an opportunity for a hearing or other means of response prior to levying a forfeiture. If the violator is not a licensee or an applicant, the Commission must also send a citation and provide a personal interview at an FCC field office. *See* 47 U.S.C. § 503 (b)(3)-(5).

under any of the site leases or other material agreements necessary to its operations hereunder within three business days of its receipt of such notice.

Aerwāv believes that these contract provisions will successfully facilitate spectrum leasing arrangements within the current confines of the Communications Act.[22]

VI. CONCLUSION

For all of the foregoing reasons, Aerwāv respectfully requests that the Commission take immediate action to enable the use of spectrum leasing and the creation of secondary markets in the 220 MHz band.

Respectfully submitted,

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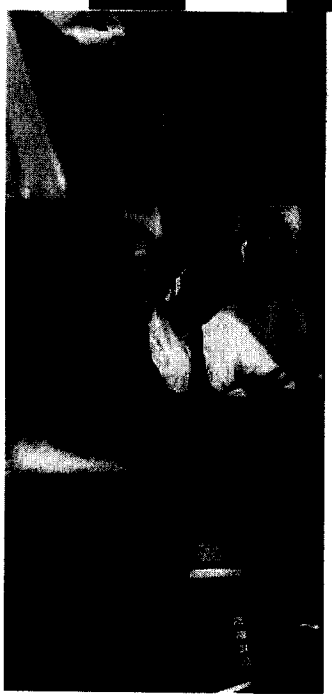
[22] *See Guard Band Order* ¶¶ 47-50. For example, the *Guard Band Order* requires the following contractual provisions: lease terms may not extend beyond the term of the Band Manager's license, the spectrum user must agree to operate its system in compliance with all technical specifications for the system consistent with Commission policy and must use Commission approved equipment where appropriate, all existing licensee obligations must apply to the spectrum users (*e.g.*, they must agree to comply with all Commission rules and accept Commission oversight and enforcement consistent with the Guard Band Manager's license), spectrum user must be obligated by agreement to cooperate fully with any investigation or inquiry conducted by either the Commission or the Guard Band Manager, in the event that the Guard Band Manager has knowledge or reason to believe that its customer is in violation of Commission rules or is causing harmful interference, the Guard Band Manager will have the right to conduct onsite inspections, if the Guard Band Manager determines that there is an ongoing violation of Commission rules or harmful interference, the Guard Band Manager shall have the right to suspend or termination the operation of the system or take other measures to resolve the interference until the situation can be remedied, the agreement must stipulate that if the customer refuses to comply with a suspension or termination order, the Guard Band Manager will be free to use all legal means necessary to enforce the order, Guard Band Manager written agreements must be maintained with spectrum users at their principal place of business and must be retained for two years post termination.

ATTACHMENT A: AERWĀV PRESS RELEASE

aerwāv



press

Motorola to Design, Manufacture and Market Equipment for Aerwāv's 220 MHz Spectrum Pipeline

Schaumburg, IL and New York, NY (January 18, 2002) - Motorola Inc. (NYSE:MOT) and Aerwāv, Inc. today announced an agreement through which Motorola will design, manufacture and market infrastructure, portable and mobile two-way radio products for use in the 220 MHz band.

"This event marks Motorola's first ever entry into the 220 MHz band," said Ken Notter, Motorola Communications and Electronics Inc. vice president. "Building on our position as a leading manufacturer in the two-way radio industry, we believe the soon-to-be-released suite of Motorola products will energize the 220 MHz market, since these products will provide enterprises and private carriers with significant new choices in wireless communications solutions."

As the largest owner of licenses in the 220 to 222 MHz frequency band, Aerwāv intends to leverage this dominant spectrum position for the development of new wireless communications businesses throughout the United States

"Our agreement with Motorola establishes the type of strategic relationship that will help us advance our spectrum-leasing model," said Robert J. Shiver, Aerwāv chairman and chief executive officer. "Motorola's dedication to innovative and quality two-way radio products, coupled with the spectrum 'pipeline' that Aerwāv will provide, opens up significant new opportunities for wireless services nationwide."

Offering two-way trunked radio features such as group dispatch, one-to-one selective calling, wide-area seamless roaming, and efficient channel utilization, the Motorola products will be ideal for a wide cross-section of markets, including security, manufacturing, transportation, and utilities. Overall, these products will provide customers with a balance of high-level features, versatility, and cost. Motorola expects to begin introducing its 220 MHz products in the second half of 2002. Both companies will market and distribute these communications solutions directly to end-customers, as well as through Motorola's extensive nationwide network of dealers.

About Aerwāv

Aerwāv is a new company established to invest in and develop wireless communications businesses. Founded in 2001 and headquartered in New York City, Aerwāv currently owns Securicor

Wireless, America's largest owner of national, regional and local spectrum licenses in the 220 to 222 MHz spectrum band. Aerwāv is focused on fostering the use and development of spectrum, the most valuable resource of the New Economy.

About Motorola

Motorola, Inc. (NYSE:MOT) is a global leader in providing integrated communications and embedded electronic solutions. Sales in 2000 were $37.6 billion. For more information, please visit the company's web site at www.motorola.com

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