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

In the Matter of	)	
	)	
	)	
Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems	)	PR Docket No. 93-61

To: The Commission

PETITION FOR RECONSIDERATION AND CLARIFICATION

OF

METRICOM, INC.

AND

SOUTHERN CALIFORNIA EDISON COMPANY

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Dated: April 24, 1995

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SUMMARY

1. The Commission should remove antenna height from being part of any criteria to determine if a Part 15 device is causing harmful interference to LMS multilateration systems. Under such a model, a Part 15 device that complies with the 6 dBi provisions of new Rule Section 90.361 (c)(1) could be located at any height and still be deemed not to be causing harmful interference to LMS multilateration systems.

2. If the Commission cannot be persuaded to adopt the above model, then it should modify new Rule Section 90.361(c)(2) to read "(2) The antenna is 15 meters or less in height above ground." Such a revision would a fortiori result in a deletion of new Rule Section 90.361 (c)(2)(ii) which is the power/height tradeoff as antenna height increases from 5 to 15 meters.

3. The Commission should prohibit wideband forward links under any circumstances in the 902-928 MHz band and should not hold out the possibility of there ever being wideband forward links in this band.

4. The Commission should specify exactly what type of field tests are required by new Rule Section 90.353 (d). Without such specificity, the parties will become mired in endless debates over what is required by the FCC to demonstrate that a LMS system does not cause harmful interference to Part 15 devices. That the parties are given to such debates is proven by the troubled history of this proceeding.

5. The Commission should clarify that the entire compliment of Part 15 devices which carries, or is available to carry, communications for entities eligible under Subparts B or C of Part 90 of the FCC's Rules constitutes the final link as that term is used in new Rule Section 90.361(c)(2)(ii)(B). The Commission should also clarify that any amount of communications of entities eligible under Subparts B or C of Part 90 is sufficient to bring such a compliment of Part 15 devices within the parameters of new Rule Section 90.361(c)(2)(ii)(B).

6. The Commission needs to clarify whether, when it uses the term "outdoor antenna," it means a "fixed" antenna, and, if so, what constitutes a "fixed" antenna. This is intimately related to the issue of the Commission's need to specify that it intended to deem all portable and mobile Part 15 devices not to be causing interference to LMS multilateration systems, regardless of the circumstances or location at which such devices are operated.

7. The Commission should modify new Rule Sections 90.353(b)&(c) to clarify what types of messages may be transmitted by LMS licensees and their subscribers and to provide that no voice communications that interconnect with the public switched telephone network will be permitted. This is necessary because the 902-928 MHz band is an intensely congested and shared one; voice services are not good band sharers and will add greatly to the congestion.

8. The Commission should clarify that new Rule Section 90.361 applies to currently operating multilateration AVM licensees forthwith. Since the FCC has made the policy determination that balances the interests of the embedded base of Part 15 devices and the interests of multilateration LMS systems, it is not in the public interest to postpone the application of this sound policy determination until current AVM licensees convert to LMS licensees.

9. The Commission should modify all new Rule Sections so that they apply with equal force to both wideband non-multilateration LMS systems as well as multilateration LMS systems. Both types of systems suffer from the same interference problems due to the wideband nature of their operations. There is no reason to favor one type of system over the other.

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1. Metricom, Inc. and Southern California Edison Company (the "Petitioners"), by their attorneys, and pursuant to Section 1.429 of the Commission's Rules, request the Commission to reconsider and clarify the Report and Order in this proceeding released on February 6, 1995 (the "Order").[1/]

I. Upon Reconsideration, The Commission Should Delete New Rule Section 90.361(c)(2). Alternatively, The Commission Should Revise New Rule Section 90.361(c)(2)(i) To Read "15 Meters Or Less" And Should Delete Section 90.361(c)(2)(ii).

2. Deletion of new Rule Section 90.361(c)(2) would remove antenna height from being part of any criteria to determine if a Part 15 device is causing harmful interference to LMS multilateration systems. Therefore, Part 15 devices using an

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[1/] Report and Order, FCC 95-41, released Feb. 6, 1995, 60 Fed. Reg. 15,248 (1995).

outdoor antenna that met the 6 dBi provisions of new Rule Section 90.361(c)(1) could be located at any height and still be deemed not to be causing harmful interference to LMS multilateration receivers. The height/power limitation of new Rule Section 90.361(c)(2)(ii)(A) is simply inadequate for the many beneficial applications which Part 15 devices can provide.[2/]

3. Antenna height is a significant issue for Metricom. Metricom provides Part 15 radios for various applications throughout the country, approximately 1,000 of which are located up to several hundred feet above the ground (on building tops, water tanks and on communication towers) to attain necessary building penetration, coverage and network connectivity. As of the end of 1994, there was a total investment of approximately $27.6 million in Metricom Part 15 radios, $1.3 million of which are owned by Metricom. The $27.6 million investment does not include installation costs or ancillary equipment designed for use with the radio network. (e.g., meters, remote terminal units, headend equipment, etc.). This investment is, by any measure, a significant one and could be placed in extreme jeopardy by new Rule Section 90.361(c)(2). In the overwhelming majority of cases, these Part 15 devices are located on street light poles up to 15 meters above the ground. The power reduction proposed for 15 meter above-the-ground operations by new Rule Section 90.361(c)(2)(ii)(A) would not permit all of these pole-top radios to function in an

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[2/] See, e.g., Comments of Metricom at Attachment A, 21-25, filed Mar. 15, 1994.

acceptable manner. At the absolute minimum, any Commission resolution to this proceeding on reconsideration must provide for the continued and expanded operation of existing and new devices, within the limits of existing Part 15 Rules, at pole-top and higher locations.

4. Metricom mounts its radios on pole-tops and at other high locations because they: (1) cannot be tampered with or modified in violation of Part 15 Rules; (2) are easily installed in as few as 10 minutes per pole; (3) can draw power from the street light at that location; (4) provide favorable and efficient coverage; and, (5) were specifically designed for this type of deployment. Metricom knows of no useable light poles that are five meters high.

5. If the Commission does not modify new Rule Section 90.361(c)(2) as requested herein, the Part 15 radios of Metricom used in providing a regional wide area network are vulnerable to being shut down by providers of the newly created LMS due to the interference these Part 15 radios will undoubtedly cause multilateration systems. This is manifestly unfair to Metricom and other manufacturers and users whose radios are deployed and operate in complete compliance with all Part 15 Rules, and share the spectrum extremely well with all current users of the band. Metricom's state of the art technology and system architecture should not be made the scapegoat in this proceeding; the record in this proceeding is replete with evidence about the vulnerability of

multilateration system receivers to interference.[3/] Multilateration systems are not good spectrum sharers. Metricom and the rest of the Part 15 Community have been informing the FCC of that fact since the beginning of this proceeding.[4/] A technology that is a poor spectrum sharer is a poor candidate for placement in a shared band. If the Commission cannot be dissuaded from enacting some type of height criteria, it is absolutely critical for Metricom's radios that the height criteria be no less than 15 meters and that radios at that height be permitted to operate at the fully authorized Part 15 effective radiated power levels.

6. Antenna height is also a significant issue for Southern California Edison ("SCE"). SCE currently has approximately 8,000 Metricom radios in its service area, and has invested $29 million in project costs to purchase and install these radios, ancillary equipment and facilities. In addition, SCE has 8,300 Metricom Part 15 radios in stock for planned installation. In total, SCE plans to install approximately 30,000 Metricom Part 15 radios in order to complete this project. Finally, it should be noted that since

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[3/] See, e.g., Ex Parte Comments of the Ad Hoc Gas Distribution Utilities Coalition at 7, filed Aug. 12, 1994; Ex Parte Comments of Itron at 1, filed Aug. 12, 1994; Ex Parte Comments of Part 15 Coalition at 3, filed Aug. 12, 1994; Comments of Ademco at 6-8, filed Mar. 15, 1994; Comments of Metricom at 8-11, filed Mar. 15, 1994; G.K. Smith, "Interf. Analysis of Part 15 Devices and LMS Wideband Systems," attached as Annex 2 to Further Comments of MobileVision, filed Mar. 15, 1994; TIA Study, Technical Conclusions at 10, filed Oct. 22, 1993; Comments of Metricom at App. A, filed Jun. 29, 1993.

[4/] See Comments of Cylink at 5-7, filed Feb. 8, 1993; Comments of Metricom at App. A, filed Jun. 29, 1993.

1993, SCE has spent approximately $30 million researching Part 15 radio networks and associated automatic metering technology. It is quite significant that the California Public Utility Commission authorized SCE's investment in these Part 15 devices with electric utility ratepayer money.[5/] This very substantial ratepayer funded investment could compromise system flexibility if new Rule Section 90.361(c)(2) is not eliminated or revised to read: "(2) The antenna is 15 meters or less in height above ground."[6/]

7. New Rule Section 90.361(c)(2) will make Part 15 operate like a licensed service. This is antithetical to the philosophy underlying the creation of an unlicensed service. If a Part 15 operator is faced with such location-sensitive limitations as height on its operations, then each location must be scrutinized to be sure the limitations are not violated which is the same way a licensed service must choose its locations.

8. Location-sensitive limits placed on Part 15 operations will immediately increase the administrative, overhead and engineering costs of Part 15 operations. Therefore, the rapid deployment and relatively inexpensive nature of Part 15 operations, a major consumer benefit and one which has made Part 15 devices so popular, is eliminated, and demand for Part 15 service will be significantly impacted.

[5/] SCE estimates that this investment will result in total annual savings of approximately one billion kW hours. See Reply Comments of SCE, July 29, 1993.

[6/] Such a revision would a fortiori result in a deletion of new rule section 90.361(c)(2)(ii).

9. The Commission must consider that this Rule could have a devastating impact on a significant portion of the Part 15 industry for no discernable reason. The Commission must understand that what the Commission has done is to adopt a Rule solely to protect a fragile technology in a shared band. With all due respect, protecting such technology in such an environment seems to Petitioners to be a self-defeating exercise and a totally dysfunctional approach in an inherently shared band.

10. Several companies in addition to Petitioners depend on outdoor antennas transmitting with full Part 15 power at heights more than 5 meters above ground. To limit these operations could cause the demise of many Part 15 services which are currently being provided in the public interest. This is true even though not all outdoor antennas would be affected. It is not possible to develop and operate a Part 15 business when a necessary component of the service (e.g. antennas, at locations above 5 meters) may not be offered at arbitrary times and places. This Rule will cast a severe chilling effect on innovation and investment in Part 15 operations.

II. Upon Reconsideration, The Commission Must Prohibit Wideband Forward Links In The 902-928 MHZ Band Under Any Circumstances.

11. Throughout this proceeding, the entire Part 15 Community has consistently been opposed to wideband forward links in the 902-928 MHz band.[7/] Petitioners remain opposed. The Order at

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[7/] See, e.g., Ex Parte Comments of Itron at 3, filed Aug. 12, 1994; Ex Parte Comments of Symbol Technologies, filed Aug. 12, 1994.

paragraph 76 permits wideband forward links subject to testing. New Rule Section 90.353(d) states: "Additionally, MTA multilateration LMS licenses will be conditioned upon the licensee's ability to demonstrate through actual field tests that their systems do not cause unacceptable levels of interference to Part 15 devices." While this testing proviso and the maximum allowable power provision for forward links contained in new Rule Section 90.357(a) is of some comfort to the Part 15 Community, the notion that the Commission will entertain wideband forward links in the 902-928 MHz band under any circumstances is extremely disconcerting.

12. The "unacceptable levels of interference to Part 15 devices" standard is not clear in the Order.[8/] The Commission does not specify to whom the level of interference must be unacceptable nor does it specify exactly what constitutes an unacceptable level of interference. Therefore, it is entirely possible that a wideband forward link could be deployed in the band that interferes with Part 15 devices in the band.

13. The record in this proceeding is filled with evidence that wideband forward links are band jammers and are antithetical to a band premised on sharing by a multitude of different users.[9/] That the FCC would continue to entertain the possibility of such an incompatible use of the 902-928 MHz band under the refined

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[8/] Report and Order ¶ 82.

[9/] See Comments of TIA at 4, filed Aug. 12, 1994; Comments of the Part 15 Coalition at 2, filed Mar. 15, 1994. See also supra note 8.

standards of new Rule Section 90.353(d) creates a chilling effect on investment in, and research and development by, the Part 15 Community. The Commission should not allow wideband forward links in the 902-928 MHz band under any circumstances or suggest that they might be acceptable due to the extreme congestion in this band and high level of shared use.

III. Upon Reconsideration, The Commission Should Specify Exactly What Type Of Field Tests Are Required By New Rule Section 90.353(d).

14. New Rule Section 90.353(d) states: "Additionally, MTA multilateration LMS licenses will be conditioned upon the licensee's ability to demonstrate through actual field tests that their systems do not cause unacceptable levels of interference to Part 15 devices." Petitioners applaud this provision given the Part 15 Community's inability, thus far, to dissuade the Commission from authorizing LMS. However, this proceeding has been marred by the inability of the LMS Community and the Part 15 Community to agree on the parameters of testing to demonstrate the harmful interference that Part 15 devices would cause LMS multilateration receivers and the harmful interference that LMS multilateration systems would cause the Part 15 Community.[10/]

[10/] AirTouch, for instance, has been unwilling to cooperate with the Telecommunications Industry Association in its efforts to find a technical solution to interference problems, and it has been unwilling to participate in tests to determine the validity of its claim that no appreciable interference from Part 15 operations will occur.

15. Petitioners are not encouraged that any other result is likely or possible under the Commission's new Rule Section 90.353(d). Much of the problems concerning testing that have arisen among the parties is the inability to do field tests today which simulate fully loaded LMS systems or conditions in which, for example, Metricom networks are widely in use. The Commission must be mindful that the situation between the parties is not a static one. Rather, it is extremely fluid and will change as the use of one or the other parties' systems grow. Therefore, a field test which determines that a LMS system using a wideband forward link does not cause unacceptable levels of interference to a Part 15 system today is not going to reflect accurately the interference situation when Metricom networks, Part 15 spread spectrum cordless telephones and other Part 15 devices are fully deployed.[11/] Furthermore, the new Rules are not clear about how all concerned Part 15 operators are informed about the test so that they may participate. Therefore, it is imperative that the Commission define the test parameters and give guidance to the LMS and Part 15 Communities about exactly: (i) how to conduct these tests; (ii) how to inform all concerned Part 15 operators about the fact that such tests will occur; (iii) how the FCC is going to interpret the results; and, (iv) what procedures the Part 15 Community must

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[11/]Another facet that must be included in any field test since the Report and Order was issued is the effect on a fully deployed Part 15 systems by a LMS system which is fully loaded with voice traffic.

undertake to get a LMS license revoked and the licensee off the air if the field test criteria are not met.

IV. If The Commission Does Not Delete New Rule Section 90.361(c)(2) Or Modify It As Specified Above, Upon Reconsideration, The Commission Should Clarify That The Entire Compliment Of Part 15 Devices Which Carries, Or Is Available To Carry, Communications For Entities Eligible Under Subparts B Or C Of Part 90 Of The Rules Constitutes "The Final Link," As That Term Is Used In New Rule Section 90.361(c)(2)(ii)(B); The Commission Should Also Clarify That Any Amount Of Communications Of Entities Eligible Under Subparts B or C of Part 90 Is Sufficient To Bring Such A Compliment Of Part 15 Devices Within The Parameters Of New Rule Section 90.361(c)(2)(ii)(B).

16. It is unclear that the Commission intends to include within new Rule Section 90.361(c)(2)(ii)(B) the entire compliment of Part 15 facilities that handles, or is available to handle, communications for entities eligible under Subparts B or C of Part 90 of the Rules (the "Eligibles"). The confusion arises from the use of the words "final link." Because the Commission does not define this term, "final link" is subject to interpretation.

17. It would be illogical to interpret this term as meaning that only the last few radios involved in such communications are included in the new Rule Section because it is the entire compliment of Part 15 devices that is responsible for the carriage of the message to or from Eligibles. Furthermore, in a packetized data network, it is difficult to tell which radios are the last few radios involved in the communication. It could be many different radios which comprise the "final link." This is also true of a Part 15 operation making use of a mesh network architecture carrying messages to and from Eligibles using a portable or mobile device.

18. Furthermore, if the term "final link" were interpreted to mean just a last few radios used in delivering a message, different parts of the network carrying messages for Eligibles would be within the purview of the new Rule Section at different times depending on the order in which the packets were received, or where the mobile/portable device was located, or whether there were malfunctioning or busy radios employed in a mesh architecture.

19. Such a construction would be impossible to enforce or to let the affected parties attempt to reconcile their differences because they would not know which radios were within the purview of the new Rule Section and which were not. Therefore, the Commission should clarify this Rule by stating that it is the entire compliment of Part 15 devices employed in carrying or available to carry messages for Eligibles which are included in the new Rule Section.

20. To accomplish this, the following should be added to new Rule Section 90.362(c)(2)(ii)(B). "The 'final link' constitutes all those Part 15 devices involved in or available for such communications."

21. The new Rule Section is not clear about what amount of public safety and medical communications insures that a Part 15 operation is within the purview of new Rule Section 90.361(c)(2)(ii)(B). This type of line drawing is always difficult to interpret and to enforce and is made much more difficult in this situation because public safety and medical communications can be very infrequent in nature and, yet, the necessary facilities must

be there when communication is required. Petitioners suggest that the Commission simplify the matter by adding the following to new Section 90.361(c)(2)(ii)(B): "Any amount of such communication during any 24 hour period is sufficient to bring a Part 15 operation within the purview of this Rule for the same 24 hour period."

V. Upon Reconsideration, The Commission Should Clarify What New Rule Section 90.361(b) Means When It Uses The Term "Outdoor Antenna" And Should Specify That All Mobile And Portable Part 15 Devices Are Deemed Not To Cause Interference To LMS.

22. It is not clear exactly what the Commission means when it uses the term "outdoor antenna" in new Rule Section 90.361(b) and (c). The Commission should clarify whether the antenna must be a fixed antenna and, if so, exactly what constitutes a "fixed" antenna.

23. Similarly, it is not clear that the Commission intended to deem all portable and mobile Part 15 devices not to be causing interference to LMS multilateration systems, regardless of the circumstances or location at which such a device was being operated. This failure, together with the Commission's failure to specify what "outdoor antenna" means, leaves in question situations exemplified by a cordless phone being operated on a balcony of an apartment located on the 50th floor of an apartment building or a mobile device for a wireless local or wide area network being operated outdoors; does such an operation come within new Rule Section 90.361(b) & (c)? The Commission should resolve all questions by amending new Rule Section 90.361 by redesignating

current Rule Sections "a," "b" and "c" as "b," "c" and "d" respectively and adding new Section "a" as follows: "(a) It is a mobile or portable Part 15 device; or,"

VI. Upon Reconsideration, The Commission Should Modify New Rule Sections 90.353(b)&(c) To Clarify What Types Of Messages May Be Transmitted By LMS Licensees And Their Subscribers And To Provide That No Voice Communications That Interconnect With The Public Switched Telephone Network Will Be Permitted.

24. The Commission should not permit LMS systems to interconnect with the public switched telephone network ("PSTN") nor should permissible messages on LMS systems be voice messages. The 902-928 MHz band is a shared band. The band is inherently unsuitable for a high-powered voice service due to the continuous nature of voice communications. This is true of real time or store and forward voice communications. In a shared band environment, parties sharing the band must use it in ways that will permit sharing. High-powered voice communications in a shared band that is as congested as the 902-928 MHz band is very likely to make other uses of the band infeasible. The limitations the Commission has placed on voice communications in LMS systems are insufficient to avert the type of congestion envisioned by Petitioners.

25. There is no reason that LMS needs an ability to interconnect with the PSTN in order to provide a vehicle location service. Voice is a totally different service from vehicle location and is totally independent from vehicle location. LMS providers can locate vehicles without a voice service. Besides, if LMS subscribers want voice capability from their vehicles, those subscribers have many alternatives available to them, foremost

among which is cellular telephone service which is extremely capable of providing emergency interconnection to the PSTN as envisioned by new Rule Section 90.353(c). Special Mobile Radio Service, Citizens Band Radio and the soon to be developed Personal Communications Service are, or will be, also available. There is no need to overburden the 902-928 MHz band with a very spectrum inefficient voice service, particularly one that interconnects with the PSTN.

26. If the Commission cannot be dissuaded from permitting LMS systems to provide voice service, the Commission must clarify new Rule Sections 90.353(b) & (c) and specify what constitutes permissible transmissions. Failure to do so will lead to an unrestricted voice use of the band that will intensify congestion. For example, it is unclear just what constitutes "status and instructional messages . . . related to the location or monitoring functions of the system." Would a message to one's spouse that one is at a specific location and is late be such a message? The Commission cannot have meant to be so liberal in its definition of permitted voice messages. The Commission says as much in paragraph 26 of the Order: "We do not intend for this service to be used for general messaging purposes." If this is true, the Commission must be much more specific in its definition of what types of messaging are permitted.

27. Furthermore, the Commission must specify how it is going to enforce any limitations on the permissible types of messages that can be transmitted utilizing a LMS system. It is not obvious

to Petitioners just how the Commission is going to enforce such a Rule short of monitoring every message that is transmitted. Inability to enforce the Rule will lead to abuse and congestion in the band. The same is true of emergency messages that are permitted in real time to interconnect with the PSTN. How can the Commission know that these are the only types of messages being sent on a real time interconnection basis?

28. The Commission must also define what it means by "store and forward" messages. How long does a message have to be stored before it can be forwarded in order to qualify to be transmitted on an LMS system because it is a "store and forward" message? If the storage time is de minimis, a possibility that will be obvious to LMS providers, the distinction between store and forward and real time is a distinction without any difference, and the Commission will not have achieved what it says it wants to achieve in terms of limiting the types of messages that can be transmitted by means of a LMS system.

VII. Upon Reconsideration, The Commission Should Clarify That New Rule Section 90.361 Applies To Grandfathered Multilateration AVM Licensees Forthwith.

29. New Rule Section 90.363 does not provide that grandfathered AVM systems converting to LMS status must operate pursuant to new Rule Section 90.361 immediately. Paragraph 64 of the Order provides that grandfathered AVM systems may operate pursuant to the old or new Rules until these systems convert to the spectrum specified in the new Rules at which time, presumably, the

new Rule Sections govern operation. Obviously, Petitioners are most concerned about the immediate applicability of new Rule Section 90.361 to grandfathered AVM systems. However, new Rule Section 90.363 is silent on precisely when the new Rules govern operation. The Commission should clarify that all new Rule Sections adopted by the Order apply to all grandfathered AVM systems upon the issuance by the Commission of a final order in this proceeding. The Commission has made a determination in this proceeding that in its judgment balances the interests of the owners and users of the embedded base of Part 15 devices and the interests of the owners and users of LMS systems. Having made that determination, it is in the public interest to implement that balancing of interests upon the issuance of the Commission's final order in this proceeding. Having found that its balancing of interests is in the public interest, the policy is as much in the public interest now as it will be when current systems convert their AVM licenses to LMS licenses. This is not a situation where the Commission is creating services which do not exist at the time of the Commission acts. These systems exist now and there have been instances of interference between these systems.[12/] The Commission should act to make its new interference Rules applicable to existing AVM systems upon issuance of a final order in this proceeding.

[12/] See, e.g., Letter from Henry L. Razor, Network Field Engineer, Pactel Teletrac to George Martin, Sherwin-Williams Co. of Dec. 29, 1992 (demanding that Sherwin-Williams cease operation of a spread spectrum device "causing harmful interference" to Teletrac's vehicle location system).

VIII. Upon Reconsideration, The Commission Should Modify Its New Rules So That They Apply To Both Multilateration and Non-Multilateration LMS Systems.

30. New Rule Section 90.361 as currently written, does not include Non-Multilateration LMS Systems. Most of new Rule Section 90.353 does not include Non-Multilateration LMS Systems. New Rule Section 90.357 does not include Non-Multilateration LMS Systems. No reasons exist not to include Non-Multilateration LMS Systems within these new Rule Sections. Petitioners are particularly concerned that these systems will have the same problems sharing the 902-928 MHz band that their multilateration cousins do. It is the nature of the wideband operation in multilateration LMS systems that has caused the Part 15 Community problems all through this proceeding.[13/] The Part 15 Community has consistently told the Commission that Part 15 devices will interfere with wideband LMS operation. [14/] Petitioners are convinced that the same will be true of wideband Non-Multilateration Systems, if they are allowed to exist. The wideband receivers will receive interference from the extraordinary number of Part 15 devices operating in the band. Therefore, it makes little sense for the Commission to create a paradigm where Part 15 devices are deemed not to interfere with multilateration LMS systems but are not deemed not to interfere with wideband Non-Multilateration LMS Systems. It is only logical to infer that the Commission's purpose in creating the model embodied in the new Rules was to balance the interests of the

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13/ See supra note 3.

14/ Id.; supra note 4.

owners and users of the embedded base of Part 15 devices with the interests of the owners and users of all wideband LMS systems, including Non-Multilateration Systems. Therefore, the Commission must review its new Rule Sections and modify them to apply to all LMS systems regardless of whether they are multilateration or Non-Multilateration.

CONCLUSION

31. For the foregoing reasons, Petitioners request the Commission to reconsider and clarify its new LMS Rules in accordance with the views set forth herein.

Respectfully Submitted,

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