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

In the Matter of	)	
Rulemaking under Part 97 of the Communications Act of 1934, as amended to Establish Technical Standards for Certain Amateur Radio Telephony Transmissions	)	RM-10740

ORDER

Adopted: November 24, 2004 **Released: November 24, 2004**

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

1. In this *Order*, we deny a petition for rulemaking[1] filed by Michael D. Lonneke and Melvin J. Ladisky (Petitioners)[2] seeking to amend Part 97 of the Commission's rules[3] to provide that amateur radio stations transmitting a single sideband (SSB) emission,[4] (emission type J3E[5]), may not occupy more than 2.8 KHz bandwidth on amateur frequencies below 28.8 MHz, and that amateur radio stations transmitting an amplitude modulated (AM) emission, (emission type A3E[6]), may not occupy more than 5.6 KHz bandwidth on amateur frequencies below 28.8 MHz.[7] For reasons discussed, herein we deny Petitioners' request.

[1] *See* Petition for Rulemaking, RM-10740 (filed May 27, 2003) (Petition); *see also* Correction to Petition for Rulemaking, RM-10740 (filed July 17, 2003).

[2] Michael D. Lonneke is the licensee of Amateur Service station W0YR, and Melvin J. Ladisky is the licensee of Amateur Service station W6FDR.

[3] 47 C.F.R. Part 97 contains the Amateur Radio Service rules.

[4] A transmission that uses only one sideband or modulating signal with the carrier suppressed, in contrast to an AM-modulated radio signal, in which the carrier is continuously present and the modulating signal is contained in both sidebands. A SSB emission occupies approximately 2.7 KHz of bandwidth, as compared to approximately 6 KHz for an AM emission. Thus, SSB modulation is a more efficient use of spectrum, because more stations can transmit on a given segment of spectrum in a given time.

[5] Commonly referred to as a "single sideband" by amateur radio operators. *See id.* and associated text.

[6] Commonly referred to as "AM phone" or the type of signal that an AM broadcast station transmits.

[7] Petition at 4.

I. BACKGROUND

2. Commission rules define "Amateur Service" as a "radio-communications service for the purpose of self-training, intercommunication and technical investigations carried out by amateur radio operators. . . ."[8] Amateur service has a fundamental purpose reflected in the principles of recognition and enhancement of the value of amateur service to the public as a voluntary noncommercial communications service; continuation and extension of the amateurs' proven ability to contribute to the advancement of radio art; expansion of the existing reservoir of trained operators, technicians, and electronic experts; and continuation of the amateur's unique ability to enhance international goodwill.[9]

3. The Amateur Radio Service is allocated spectrum that must be shared in a cooperative manner by literally thousands of individual stations. Section 97.101 of the Commission's rules sets forth the general standards that amateur stations must follow;[10] they include the basic principle that all frequencies are to be shared; no frequency can be assigned for the exclusive use of any station.[11] Amateur service licensees and amateur station control operators are required to cooperate in selecting frequencies and in making the most effective use of the amateur service frequencies.[12] Shared use and cooperation by licensees allow the amateur service community to accommodate the widely varied operating interests of licensees and the specific operating activities that a station or group of stations wishes to engage in, without explicit regulation.

4. Voluntary band planning allows amateur stations that desire to pursue different operating activities to pursue these activities by dividing or segmenting the amateur service spectrum. Voluntary band planning also allows the amateur service community the flexibility to "reallocate" the amateur service spectrum among operating interests as new operating interests and technologies emerge or operating interests and technologies fall into disfavor.

5. Section 97.101(d) of the Commission's rules states that "[n]o amateur [service] operator shall willfully or maliciously interfere with or cause interference to any radio communication or signal."[13] All amateur service operators are required to ensure that their stations conform to the Commission's rules and that they operate "in accordance with good engineering and good amateur practice."[14] The Commission's long-standing role in amateur operation frequency utilization generally has been limited to establishing the types of emission that can be transmitted in different frequency segments.

II. DISCUSSION

6. On May 27, 2003, Petitioners filed a Petition for Rulemaking, requesting that the Commission amend Part 97 of its rules, to provide that amateur stations transmitting emission type J3E not be authorized to occupy more than 2.8 KHz bandwidth on amateur frequencies below 28.8 MHz, and that amateur stations transmitting emission type A3E not be authorized to occupy more than 5.6 KHz bandwidth on amateur frequencies below 28.8 MHz.[15] Petitioners indicate that within the last few years,

[8] *See* 47 C.F.R. §§ 2.1(c), 97.3(a) (4). Herein, "amateur radio service", "Amateur Service" and "Amateur Radio Service" are synonymous.

[9] *See* 47 C.F.R. § 97.1.

[10] *See* 47 C.F.R. § 97.101.

[11] *See* 47 C.F.R. § 97.101(b).

[12] *Id.*

[13] *See* 47 C.F.R. § 97.101(a).

[14] *See id.*

[15] *See* Petition at 4.

a group of amateur radio operators has cast aside the *de facto* SSB signal width of approximately 3 KHz on the high-frequency bands, and has purposefully adjusted or misadjusted their equipment to transmit an emission that occupies more bandwidth than necessary.[16] Petitioners refer to this practice as purposeful "splattering" by this particular group, in an effort to gain more "elbow room" during international radio contests on a crowded band.[17] Petitioners also indicate that another group of amateur radio operators has begun experimenting with transmitting "high-fidelity" audio, in order to simulate a sound usually heard on the FM broadcast band.[18]

7. Petitioners further indicate that letters sent from the Commission's Enforcement Bureau to several amateur licensees concerning similar subject matter, failed to articulate a standard for SSB transmission bandwidth.[19] Petitioners therefore state that they are requesting that the Commission "establish SSB bandwidth standards, *de jure,* . . . in order to remove the ambiguity of the Commission's Rules and to provide a clear basis for amateur practice and enforcement action when it is required."[20] Petitioners argue that this relief is necessary in order to protect responsible amateur operators who use "good amateur practice" from the "opprobrious and intentional actions" typical of groups described in its Petition.[21] Petitioners contend that, unless this problem is alleviated, the "capacity of the radiotelephony bands will be reduced, perhaps to the point of emergency communications being hampered or made impossible by "splatter" from broad and overmodulated stations."[22]

8. The Commission sought comment on the Petition on June 26, 2003.[23] Numerous comments were filed,[24] the majority of which oppose the Petition on various grounds.[25] Some generally maintain that Part 97 of the Commission's rules[26] adequately addresses bandwidth limitations by requiring that amateur transmissions not occupy more bandwidth than necessary for the information rate, and that emission type be transmitted in accordance with good amateur practice.[27] A number of the commenters who oppose the Petition submit that the regulated amendment of the Commission rules would not only be unjustified, but would also have a potentially adverse effect on the Amateur Radio Service.[28] Commenters opposing the Petition also note that the Petitioners mention only two groups of amateur radio operators -- an indication that the Petitioners' claims are not representative of the amateur

[16] *See* Petition at 2.

[17] *Id.*

[18] *Id.*

[19] *See* Petition at 2.

[20] *Id.*

[21] *See* Petition at 4.

[22] *See* Petition at 5.

[23] *See Public Notice*, Petition for Rulemaking Filed, Consumer & Governmental Affairs Bureau, Report No. 2612, (rel. June 26, 2003).

[24] *See* Appendix attached hereto.

[25] *See, e.g.,* Robert Callahan Comments at 1; Douglas T. Smith, Editorial Services Comments at 1-2; William Ramsey Comments at 1-2; Brian L. Crow Comments at 1-2; David Payne Comments at 1-2; Michael K. Wingfied Comments at 1-2; Marc Guitard Comments at 1-2; Philip E. Galasso Comments at 1-6; and David M. Boeher Comments at 1-2.

[26] 47 C.F.R. Part 97.

[27] *See, e.g*., David A. Olsen Comment at 1-2; *see also* 47 C.F.R. §97.307(a), (b).

[28] *See, e.g.,* Herbert J. Ulrich, Jr. Comments at 2; William Pasternak Comments at 3-4; Anthony Whitmore Comments at 1; Paul R. Goodman Comments at 2; and Nikolaus E. Legget Comments at 4.

service community generally.[29] Commenters opposing the Petition also suggest that, if the Petitioners proposals were adopted, enforcement of bandwidth limitations would be unmanageable,[30] and that restriction of emissions to specific bandwidths could hamper future development of new transmission methods and technologies.[31] Additionally, some note that it is not necessary to include a restrictive bandwidth for AM emissions since the Petitioners do not acknowledge in the Petition a particular problem with AM stations.[32]

9. We have carefully considered all comments filed, including comments filed in support of the Petition,[33] and some alternative proposals.[34] We conclude that Petitioners' request for an amendment of our rules is inconsistent with the Commission's objective of encouraging the experimental aspects of amateur radio service.[35] The Petition also fails to demonstrate that a deviation from the Commission's longstanding practice of allowing operating flexibility within the amateur service community[36] -- is either warranted or necessary. In this regard, we note that most operators use the amateur service spectrum in a manner consistent with the basic purpose of the amateur service. Further, we believe that our existing rules -- including the provisions that no amateur station transmission shall occupy more bandwidth than necessary for the information rate and emission type being transmitted, in accordance with good amateur practice,[37] and that emissions outside the necessary bandwidth must not cause interference to operations on adjacent frequencies[38] -- are adequate to address any noncompliant practices by amateur operators.

10. Regarding Petitioner's request that amateur stations transmitting emission type A3E not be authorized to occupy more than 5.6 KHz bandwidth on amateur frequencies below 28.8 MHz, we agree with commenters who note Petitioners have not demonstrated there to be a particular problem with stations that transmit AM emissions.[39] Moreover, the Commission has previously declined to restrict bandwidth for AM because to do so would be inconsistent with the basic purpose of amateur service and

[29] *See, e.g.,* Michael K. Wingfield Comments at 2.

[30] *See, e.g.,* Frank Aguilar Comments at 1.

[31] *See, e.g.,* Robert E. McGraw Comments at 1.

[32] *See, e.g.,* Victor M. Magana Comments at 1; William Ramsey Comments at 1-2; Andrew E. Howard, Sr. Comment at 1; and Dale Gagnon Comment at 1-2.

[33] *See, e.g.,* Robert Sherwood Comments at 1; Ken Barber Comments at 1; Robert Tiller Comment at 1; Mark Francis Comments at 1-2; Richard Kessler Comments at 1; Norm Stetson Comments at 1; Thomas F. Poland Comments at 1; William E. Sabin Comments at 1-3; and Dale E. Reich Comments at 1-3.

[34] *See, e.g.,* David S. Forsman Comments at 1-2 and Paul L. Schmidt Comments at 1-4.

[35] *See* 47 C.F.R. § 97.1. The Commission has noted elsewhere the experimental nature of the amateur radio service. *See, e.g.,* Amendment of Amateur Service Rules to Provide For Greater Use of Spread Spectrum Technologies, *Notice of Proposed Rulemaking,* 12 FCC Rcd 2591, 2595 ¶ 8 (1997).

[36] *See, e.g.,* Amendment of Parts 2 and 97 of the Commission's Rules Governing the Amateur Service to Authorize Operation on Additional Frequency Bands in American Samoa, Amendment of Part 97 of the Commission's Rules Governing the Amateur Service to Permit Certain Amateur Radio Operators to Accept Compensation While Transmitting Disaster Relief Messages, Amendment of Part 97 of the Commission's Rules Regarding the Radio Amateur Civil Emergency Service, Compliance With Applicable Voluntary Band Plans in the Amateur Radio Service, *Order,* 14 FCC Rcd 20595, 20598 ¶ 7 (1999); *see also* Amendment of the Amateur Service Rules to Provide For Greater Use of Spread Spectrum Communication Technologies, *Report and Order,* 15 FCC Rcd 1482, 1483 ¶¶ 3, 8 (1999); *see also* Allocation of the 219-220 MHz Band for Use by the Amateur Radio Service, *Memorandum Opinion and Order,* 11 FCC Rcd 3522, 3524 ¶ 15 (1996).

[37] *See* 47 C.F.R. §97.307(a).

[38] *See* 47 C.F.R. §97.307(b).

[39] *See, e.g.,* note 32, *supra.*

our desire to offer amateur operators the opportunity to experiment with various types.[40]

11. We continue to encourage amateur operators to act in good faith in the exercise of their operations as required by Section 97.101(d) of the Commission's rules,[41] which provides that no amateur operator shall willfully or maliciously interfere with or cause interference to any radio communication or signal. The Commission's Enforcement Bureau will continue to monitor nonconforming activities of operators not abiding by the Commission rules through its complaint process. In instances of willful and malicious interference, the Enforcement Bureau will not hesitate to take appropriate action. In sum, we are not persuaded by Petitioner's claims that bandwidth restrictions are necessary, and, therefore, deny the Petition.

III. ORDERING CLAUSES

12. IT IS ORDERED that the Petition for Rulemaking, RM-10740, submitted by Michael D. Lonneke and Melvin J. Ladisky on May 27, 2003, IS DENIED.

13. 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

Michael J. Wilhelm
Chief, Public Safety and Critical Infrastructure Division
Wireless Telecommunications Bureau

[40] *See, e.g.,* Amendment of the Amateur Service Rules to Revise Transmitter Power Standards and Authorized Emissions, RM-7401, RM-7402, RM-7403, RM-7404, *Memorandum Opinion and Order,* 6 FCC Rcd 4433 (1991); *see also*, Amendment of the Amateur Service Rules to Revise Transmitter Power Standards and Authorized Emissions, RM-7401, RM- 7402, RM-7403, RM-7404, *Order,* 5 FCC Rcd 6374 (1990).

[41] *See* 47 C.F.R. § 97.101(d).

LIST OF COMMENTING PARTIES

Ian E. Abbott
Frank Aguilar, Jr.
Arden W. Allen, KB6NAX
Manuel R. Alonso
John M. Anning
David M. Antler
Robert L. Atkinson
Nick Balsamo, KG2IR
Ken Barber
Jeffrey E. Barnard, KA1OGM
John P. Basilotto
Jeffery Lee Belknap
Arthur W. Bell
Mark S. Bell
Albert L. Bergren
Robert Blacka
David M. Boehner
Brian E. Brachel
George A. Brock-Fisher, K1KP
Dan Brown
Gregory A. Buchanan, WB9DNZ
Todd Buiten
Wiley L. Bunce III
Robert Callahan, W1QWT
Duncan Cameron
Lee F. Carroll, N2UDF
Robert Casey
Thomas T. Cathley, K1JJ
Bob Cave, KW4CQ
Thomas Chambers
Donald B. Chester
Julius B. Chiller Jr., WD8BIL
Bonnie Crystal
William G. Cooper
Paul S. Courson, WA3VJB
Philip A Covington
Brian L. Crow
J. Franklin Dayton
Alan Davis
John Dewey
Larry E. Dodd
John Ellis
Yves A. Feder, W1UX
Frank W. Fisher
Don Flenner
David S. Forsman
James R. Forgione
Steven J. Fraasch
Mark Francis
Dale Gagnon

Philip E. Galasso, KZPG
Ruben Gonzalez, Jr.
Paul R. Goodman
George, ABZKC
Ron Grandmaison
Martin P. Granica
Barry J. Griffin
Anthony D. Grogan
Marc A. Guitard
Horace W. Hall
Thomas Hamilton
James T. Hanlon
Charles W. Heard
Bob Heil, K9EID
William O. Hooper
Andrew E. Howard, Sr.
David Humbertson.
William D. Hummer
Patricvk Jankowiak
Gert E. Janssens, K5WW
Dale M. Johnson
Roger D. Johnson
Jimmy J. Jones
Julius Jones
Richard Kalt, W1FYI
Anthony Kahn
Richard J. Kessler
Edward Keyes
Melvin J. Ladisky
W. Edwin Lambert, Jr
Ashley Lane
Nicholaus E. Leggett
Jeffrey Lehmann
Seymour Lesonsky
Brian Levy
B. Scott Lovell
Michael D. Lonneke *et al.*
John T. M. Lyles
Frank A. Lynch
James MacDonald, W98MAQ
John R. MacDougall
David L. Maudlin
Victor M. Magana
Frank Materiale
David McDaniel
Robert E. McGraw, K4TAX
Brian McIntosh
Peter C. McNulty, WA1SOV
Matthew F. Morris
Gerald J. Mehrab
David P. Metzger
Robert Mitilieri

Tom Moore, N1OGC
Donald Morton
T. Lynn Neece, KB6OKS
Philip Neidlinger
Greg Nolan
Roy H. Norris, III
David A. Olsen
James Olson
Kenneth Parker
William M. Pasternak
David W. Payne, KA2J
Ronald L. Phoenix
Art Pightling
Thomas F. Poland
David Pope
David B. Popkin
George Pritchard, AB2KC
Thorsten C. Prutz
C. Richard Pumphrey
Jayson Quilantan
Richard Raide
William Ramsey
Michael J. Rauchle, KA7THA
Ronald G. Reams
Dale E. Reich
Marvin Richardson
Larry Robison
Thomas A. Rounds
William E. Sabin
Don Saladin
Michael Sawyer
Martin Shapiro
Robert E. Sheppard
Paul L. Schmidt
Gordon Schlesinger
Robert Sherwood
Chris O. Sierra
Steven D. Sims
Douglas T. Smith, Editorial Services
Charles Stealey
Norm Stetson, W1GYY
David L. Stinson
Bruce E. Stock
Laurence M. Szendrei
Paul Tabatschkow, N3UD
Jacob N. Thomas
Robert Tiller
Herbert J. Ulrich, Jr., Ph.D., K2VH
Sundee M. Vendiver
Michael A. Vlasich
Ralph C. Warlow
Larry M. Wassman, WCOZ

James E. Watts
Anthony Whitmore, NOPG
Jim Wilson
Michael K. Wingfield
Terry J. Yoder
Grant Youngman
William E. Zeisler
Peter C. Zilliox
Glen W. Zook