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

In the Matter of	)	
	)	
Amendment of Part 97 of the Commission's Rules Governing the Amateur Radio Services	)	WT Docket No. 04-140
	)	RM-10313, RM-10352, RM-10353, RM-10354, RM-10355, RM-10412, RM-10413, RM-10492, RM-10521, RM-10582, RM-10620, RM-10621
	)	
Amendment of Section 97.111 of the Amateur Radio Service Rules to Limit Transmissions of Information Bulletins	)	
	)	
Conforming Amendments to Part 97 of Commission's Rules to Implement the World Radio Conference 1997 Final Acts	)	
	)	
Amendment of Part 97 to Provide Color-coded License Documents	)	
	)	
Amendment of Part 97 to Allow Instant Temporary Licensing	)	
	)	
Amendment of the Amateur Service Rules to Limit One–way Voice Broadcasting on Frequencies Allocated to the Amateur Service	)	
	)	
Amendment of Sections 97.111 and 97.113 of the Commission's Rules to Curb Certain Abuses in the Amateur Radio Service	)	
	)	
Amendment of Section 97.3(a)(26) to Establish Two Classifications of Information Bulletins	)	
	)	
Amendment of Section 97.305(c) to Authorize Image Emissions in Additional High Frequency Segments	)	

NOTICE OF PROPOSED RULEMAKING AND ORDER

Adopted: March 31, 2004 **Released: April 15, 2004**

Comment Date: June 15, 2004
Reply Comment Date: June 30, 2004

By the Commission:

TABLE OF CONTENTS

I. INTRODUCTION AND EXECUTIVE SUMMARY

1. In this *Notice of Proposed Rulemaking* (*Notice*), we propose to revise operating privileges for amateur radio service licensees as well as to eliminate obsolete and duplicative rules in the Amateur Radio Service. Specifically, we propose to amend the Part 97 Amateur Radio Service rules[1] in response to the filing of nineteen petitions for rulemaking and one informal request (collectively petitions).[2] Four petitions address on-the-air operating privileges

[1] *See* 47 C.F.R. Part 97.

[2] *See* Kenwood Communications Corporation, Inc., Petition for Rulemaking (filed May 1, 2001) (Kenwood Petition); Mr. Jeffery T. Briggs and Mr. William R. Tippett II, Petition for Rulemaking (filed Sep. 10, 2001) (160 m Petition); The Quarter Century Wireless Association, Inc., Petition for Rulemaking (filed Dec. 17, 2001) (QCWA Petition); Mr. John S. Rippey, Petition for Rulemaking (filed Dec. 27, 2001) (Rippey Petition); NASA John H. Glenn Research Center Amateur Radio Club, Petition for Rulemaking (filed Dec. 27, 2001) (Glenn Petition); Mr. Nickolas E. Leggett, Petition for Rulemaking (filed Feb. 11, 2002) (Leggett Petition); American Radio Relay League, Inc., Petition for Rulemaking (filed Mar. 22, (continued....)

for amateur service licensees.[3] Six petitions relate to the types of communications an amateur station may transmit.[4] Three petitions concern the vanity call sign and special event call sign systems.[5] Two petitions focus on the amateur service operator licensing system.[6] Because some of the petitions have presented sufficient evidence to warrant proposing rule changes, and in the interest of administrative efficiency, we have consolidated these matters in this *Notice*. We also propose, on our own motion, other amendments to our Rules to conform the amateur radio service rules to the international *Radio Regulations*,[7] revise portions of our amateur radio service rules, and amend certain rules to reflect changes in Commission organization and practices.

2. The major rule changes we propose today are as follows:

- Revise the operating privileges[8] of amateur radio operators in four High Frequency bands;
- Permit auxiliary stations to transmit on the 2 m amateur service band;
- Permit amateur stations to transmit spread spectrum communications on the 1.25 m band;
- Permit amateur stations to re-transmit communications from the International Space Station;
- Allow amateur service licensees to designate the amateur radio club to receive their call sign, *in memoriam*;
- Prohibit an applicant from filing more than one application for a specific vanity call sign;

(...continued from previous page)
2002) (ARRL Petition); Mr. Robert H. Birdsey, Petition for Rulemaking (filed Mar. 19, 2002) (Birdsey Petition); Dr. Michael C. Trahos, Petition for Rulemaking (filed Jan. 2, 2002) (Trahos Petition); Messers. Marvin W. Edwards, Frank A. Lynch, and C. Norman Young, Jr., Petition for Rulemaking (filed Sep. 10, 2002) (Edwards Petition); Radio Amateur Satellite Corporation, Petition For Rule Making (filed Dec. 2, 2002) (AMSAT Petition); Mr. John J. Elengo, Petition for Rulemaking (filed Apr. 11, 2002) (Elengo Petition); Mr. Bob Sherin, Notice of Inquiry (filed Jan. 30, 2003) (Sherin Petition); Mr. Phillip E. Galasso, Petition For Rule Making (filed Feb. 12, 2003); Mr. Dale E. Reich, Petition For Rule's Change (filed Nov. 14, 2002); Mr. Dale E. Reich, Petition For Rule Change (filed Dec. 4, 2002); Mr. Dale E. Reich, Petition For Rule Change (filed Dec. 10, 2002); Mr. Jonathan S. Gunn, Petition For Rule Making (filed Jan. 22, 2003) (Gunn Petition); Mr. Mark Miller, Petition For Rule Making (filed Feb. 25, 2003) (Miller Petition); Mr. Peter Chadwick, April 9, 2001 e-mail "ITU-R Recommendation SM.329" (Chadwick Request).

[3] *See* Kenwood Petition, 160 m Petition, ARRL Petition, Rippey Petition.

[4] *See* Glenn Petition, Birdsey Petition, Elengo Petition, Gunn Petition, Galasso Petition, Sherin Petition.

[5] *See* ARRL Petition, QCWA Petition, Edwards Petition.

[6] *See* Reich Petition (Nov. 14, 2002), Reich Petition (Dec. 4, 2002).

[7] *See Final Acts of the World Radiocommunication Conference (WRC-97*), Geneva, 1997, and *Final Acts of the World Radiocommunication Conference (WRC-2000*), Istanbul, 2000, (*Radio Regulations);* Chadwick Request.

[8] In the amateur service, "operating privileges" generally refer to the frequency bands available to the control operator of an amateur station and to the emission types an amateur station may transmit.

- Eliminate unnecessary restrictions imposed on certain equipment manufacturers;
- Allow amateur radio stations in or near Alaska more flexibility in providing emergency communications; and
- Eliminate unnecessary rules in the amateur radio operator license examination system.

3. We believe that these proposals will: (1) promote the development of the amateur radio service by providing licensees greater flexibility in the utilization of amateur service frequencies; (2) eliminate unduly burdensome or duplicative requirements that may discourage individuals from becoming amateur radio service licensees; and (3) promote efficient use of spectrum allocated to the Amateur Radio Service. We solicit comments on these proposed rule changes.

II. BACKGROUND

4. Our Rules define the Amateur Radio Service as a radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateur radio operators.[9] This definition underlies the five principles that describe the fundamental purpose of the amateur service in the Unites States.[10] Amateur radio operators are duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest,[11] who carry out technical investigations[12] and engage in voluntary, non-commercial communications with other amateur radio operators located in the United States and in foreign countries.[13] Amateur radio operators may, on a purely voluntary basis, provide essential communication links and facilitate relief actions when normal communications systems are overloaded, damaged or disrupted.[14]

5. The *Radio Regulations* require operators of stations in the amateur service to be licensed.[15] Over time, the number of operator license classes has varied from three[16] to six.[17] As

[9] *See* 47 C.F.R. §§ 2.1(c), 97.3(a)(4).

[10] *See* 47 C.F.R. § 97.1. The purpose of the amateur service includes recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communications service, continuation of the amateur's proven ability to contribute to the advancement of the 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. 47 C.F.R. § 97.1(a)-(e).

[11] *See* 47 U.S.C. § 153(2); 47 C.F.R. §§ 2.1(c), 97.3(a)(4), 97.113.

[12] *See* 47 C.F.R. § 97.1.

[13] *See* 47 C.F.R. § 97.111(a)(1).

[14] *See* 47 C.F.R. § 97.401.

[15] *See Radio Regulation* S25.6.

[16] *See* Amendment of Part 12, Rules Governing Amateur Radio Service, Docket 9295, *Report and Order*, 42 FCC 198 (1951) (*1951 License Structure Decision)*. At that time, the Commission converted the three classes of amateur service operator licenses, the Class A, B, and C operator licenses, to the Advanced Class and the General or Conditional Class operator licenses, respectively. The *1951 License Structure Decision* added the Novice, Technician, and Amateur Extra operator licenses classes to the amateur service license structure. After adoption of the *1951 License Structure Decision*, the amateur service operator license (continued....)

a licensee advances to each successive class, the licensee earns more frequency privileges.[18] In 1999, the Commission adopted the *License Restructure Report and Order* which substantially simplified the amateur service operator license structure and examination system.[19] Although the Commission retained incentives in the license structure, such as additional frequency privileges, it declined to consider a comprehensive restructuring of operating privileges.[20] The Commission concluded that because simplifying the license structure was independent of restructuring operating privileges,[21] the amateur service community should have an opportunity to weigh in on such revisions before the Commission considers a comprehensive restructuring of operating privileges.[22] Some of the petitions represent efforts within the amateur service community to restructure operating privileges for such licensees. On the basis of the petitions before us, we conclude that a comprehensive restructuring of operating privileges is now ripe for consideration.

III. DISCUSSION

A. Amateur Station Frequency Privileges.

6. *Background*. Our Rules authorize amateur stations to transmit communications and other radio frequency emissions in certain frequency bands.[23] The class of operator license determines the frequency band, or segment of a frequency band, on which an amateur station may transmit.[24] There are six classes of amateur service operator license grants currently recognized under our Rules.[25] Among other privileges, our Rules permit a station controlled by a Novice Class licensee or a Technician Class licensee who has received credit for passing a Morse code examination[26] to transmit a CW emission[27] on the 3675-3725 kHz, 7100-7150 kHz, and 21100-21200 kHz frequency segments and a CW, RTTY, and data emissions on the 28100-28300 kHz

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classes, in ascending order of frequency privileges, were: Novice, Technician, Conditional and General, Advanced, and Amateur Extra Class.

[17] The Commission added a sixth operator license, the Technician Plus Class operator license, in 1994. *See* Amendment of the Amateur Service Rules to Change Procedures for Filing an Amateur Service License Application and to Make Other Procedural Changes, *Order*, 9 FCC Rcd 6111 (1994).

[18] *See* 47 C.F.R. § 97.301.

[19] *See* 1998 Biennial Regulatory Review -- Amendment of Part 97 of the Commission's Amateur Service Rules, *Report and Order,* WT Docket No. 98-143, 15 FCC Rcd 315, 316 ¶ 3 (1999) (*License Restructure Report and Order)*, which reduced to three the number of amateur service operator licenses for which an individual may qualify (the Technician Class, General Class, and Amateur Extra Class operator licenses) and reduced the number of examination elements from eight to four.

[20] *See* 47 C.F.R. §§ 97.301, 97.305.

[21] *See License Restructure Report and Order*, 15 FCC Rcd at 325 ¶ 17.

[22] *See id.*

[23] *See* 47 C.F.R. § 97.301.

[24] *See* 47 C.F.R. § 97.9(a).

[25] *See id.*

[26] Technician Class licensees who have received credit for passing a Morse code examination are known within the amateur service community as “Technician Plus” Class licensees.

[27] We define a CW emission as International Morse code telegraphy emissions having certain emission designators. *See* 47 C.F.R. § 97.3(c)(1).

frequency segment.[28] Moreover, our Rules permit a station controlled by a General Class licensee to transmit phone emissions on the 3850-4000 kHz, 7225-7300 kHz, and 21300-21450 kHz frequency segments.[29] Additionally, a station controlled by an Advanced Class licensee may transmit phone emissions on the 3775-4000 kHz and 7150-7300 kHz frequency segments of the 75 m and 40 m bands.[30] Finally, our Rules permit an amateur station controlled by an Amateur Extra Class licensee to transmit phone emissions on the 3750-4000 kHz and 7150-7300 kHz frequency segments of the 75 m and 40 m bands.[31] As discussed in further detail below, four petitioners request that we change the operator privileges authorized Novice Class, certain Technician Class, General, Advanced, and Amateur Extra Class amateur radio operators on the High Frequency (HF), Very High Frequency (VHF) and Medium Frequency (MF) amateur service bands.[32]

1. High Frequency Privileges.

7. ARRL Petition. *Background.* On March 22, 2002, the ARRL requested that we eliminate the telegraphy frequency segments currently authorized to Novice and Technician Plus Class licensees, and to restructure the operating privileges authorized licensees in certain HF amateur service bands.[33] The ARRL based its request on over 4,700 responses to a survey it conducted regarding different emission subband options for four of the eight HF amateur service bands.[34] The ARRL notes that while the survey results did not reflect a consensus on any one HF band frequency alternative,[35] most respondents favored dissolving the Novice and Technician Plus Class telegraphy subbands so that additional spectrum could be authorized for phone communications.[36] The ARRL requests the Commission to amend Section 97.301 of its Rules to expand the frequency segments of the 80-, 40-, and 15 m HF amateur service bands that licensees may use for phone communications.[37] The ARRL states that a "refarming" plan based on eliminating the Novice and Technician Plus Class subbands is critical because the segments presently authorized for phone and digital communications are severely overcrowded.[38]

8. Specifically, the ARRL Petition seeks the following: (1) Novice and Technician Plus Class licensees should be authorized to control an amateur station transmitting in any portion of the 80-, 40- and 15 m amateur service bands that provide for telegraphy operation by General

[28] 47 C.F.R. § 97.301(e).

[29] 47 C.F.R. § 97.301(d).

[30] 47 C.F.R. § 97.301(c).

[31] 47 C.F.R. § 97.301(b). All frequency segments refer to ITU Region 2 authorizations.

[32] The MF amateur service bands are between 300 kHz and 3,000 kHz. The HF amateur service bands are between 3000 kHz and 30,000 kHz. The VHF amateur service bands are between 30 MHz and 300 MHz. *See* 47 C.F.R. § 2.101.

[33] *See* ARRL Petition at 5.

[34] *See id.* at 6-8.

[35] *See id.* at 7.

[36] *See id.* at 7.

[37] *See id.* at 9.

[38] *See id.* at 5.

Class licensees.[39] The ARRL also requests that we authorize these licensees to control an amateur station transmitting CW, RTTY and data emissions in the 28000-28300 kHz frequency segment of the 10 m band;[40] (2) General Class licensees should be authorized to control an amateur station transmitting voice communications on the 3800-4000 kHz, 7175-7300 kHz and 21275-21450 kHz frequency segments;[41] (3) Advanced Class licensees should be authorized to control an amateur station transmitting voice communications on the 3750-4000 kHz and 7125-7300 kHz frequency segments;[42] and (4) Amateur Extra Class licensees should be authorized to control an amateur station transmitting voice communications on the 3725-4000 kHz and 7125-7300 kHz frequency segments.[43]

9. *Discussion.* The Commission received over one hundred and twenty comments regarding the ARRL's Petition. Several commenters express general support for the ARRL's refarming request.[44] Other commenters also note that the Novice Class subbands are underutilized thus agreeing with the ARRL's request that we reallocate these subbands to other uses.[45] Other commenters supporting the ARRL's request suggest that we either establish different frequency limits for the phone subbands,[46] reallocate the Novice subband spectrum for only digital and experimental communications,[47] allow Novice and Technician Plus Class licensee use of CW in all HF and MF bands,[48] or allow Novice and Technician Plus Class licensee use of all narrowband digital modes in addition to CW in 80-, 40-, 15-, and 10 m bands.[49] As an alternative to the ARRL's request, two commenters suggest that we eliminate subbands altogether and allow the amateur service community to address emission separation on its own through voluntary band planning.[50] This suggestion, we note, was opposed by others.[51]

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[39] *See* ARRL Petition at 8. The ARRL explains that Novice Class and these Technician Class operators would be precluded from transmitting in segments of these bands where General, Advanced and Amateur Extra Class Licensees are authorized to transmit a phone emission. *Id.*

[40] *See id.* at 12.

[41] *See* ARRL Petition at 9-12.

[42] *See* ARRL Petition at 9-12.

[43] *See* ARRL Petition at 9-12.

[44] *See, e.g.,* Richard Fowler Comments at 1, William R. Tippett Comments at 1, Jeffery T. Briggs Comments at 1, Neil J. Nitzberg Comments at 1, Wayne C. Klusman Comments at 1, Frederick C. Gantzer Comments at 1, Ed Murphy Comments at 1, Thomas F. Giella Comments at 1, William R. Tippett Reply Comments at 1.

[45] *See, e.g.,* Kenneth V. Hudelson Comments at 1, Timothy J. Fiebig Reply Comments at 1, Robert S. Hartman Comments at 1, Mark Richards Comments at 1, Patrick E. Freeman Comments at 1.

[46] *See, e.g.,* Donald B. Chester Comments at 2, Alan J. Wormser Comments at 1, Howard Parrish, Jr., Comments at 1, John L. Barber Comments at 1, James l. Burke Comments at 1.

[47] *See, e.g.,* Timothy J. Fiebig Comments at 3, Scott D. Hernalsteen Comments at 1, Brian P. Burke Comments at 2, Timothy J. Fiebig Reply Comments at 2, Hans Brakob Reply Comments at 1, ADC Telecommunications Amateur Radio Club Reply Comments at 1, Mark Spatny Comments at 1, Nickolaus E. Leggett Comments at 1, C. K. Brakob Comments at 1.

[48] *See* James Miccolis Comments of at 1.

[49] *See, e.g.,* Alan J. Wormser Comments at 1, Jim Evans Comments at 1, William F. Osler Comments at 1.

[50] *See* Donald B. Chester Comments at 1-2, Philip E. Galasso Comments at 1.

[51] *See* William R. Tippett Reply Comments at 1, John S. Rippey Reply Comments at 1.

10. On the other hand, some commenters oppose the request explaining that the current allocation of spectrum for voice communications is sufficient.[52] Two commenters in particular state that allocating additional spectrum for single sideband (SSB) phone communications is spectrum-inefficient.[53] Others oppose the request explaining they would prefer allocation of the spectrum for digital and experimental communications,[54] or that Novice and Technician Plus Class licensees receive authorization to transmit CW in all HF and MF bands.[55] In addition, some commenters believe that the proposal will not have any significant effect on congestion in the amateur service phone bands,[56] or that the request for refarming of the amateur service frequencies should wait until after completion of the World Radio Conference in June 2003.[57]

11. As an initial matter, we applaud the efforts of the ARRL in developing emission subband options[58] and presenting these options to the amateur service community.[59] We believe that the tremendous volume of survey responses indicates intense interest on the part of the amateur service community to promote spectrum efficiency. Because the ARRL Petition addresses the operating privileges of all classes of licensees on these amateur service bands, we believe that the ARRL Petition provides a basis for a comprehensive restructuring of operating privileges. We note that, as proposed, no licensees would lose any spectrum privileges and that General, Advanced, and Amateur Extra Class licensees would gain spectrum for phone emissions, one of the most popular operating modes on the HF bands. For these reasons, we will propose amending Part 97 of our Rules as the ARRL requests. We seek comment on this proposal.

12. Rippey Petition. *Background.* On December 27, 2001, Mr. John S. Rippey[60] requested that we authorize additional telegraphy and phone privileges in the 80-, 40-, 30-, 17-, 15-, 12-, and 10 m amateur service bands to Novice and Technician Plus Class amateur service licensees.[61] The petitioner claims that the public interest would be served by increasing both the total number of amateur radio licensees and the number of licensees who are proficient in Morse

[52] *See, e.g.,* Mark Farr Comments at 1, Merritt W. Olson Comments at 1, Ken Cubilo Comments at 1.

[53] *See* Brandon White Comments at 1, William K. Mebry Comments at 1.

[54] *See, e.g.,* Mark Spatny Comments at 1, Nickolaus E. Leggett Comments at 1, C. K. Brakob Comments at 1.

[55] *See* James Miccolis Comments at 1.

[56] *See, e.g.,* Stephen L. Wolfcale Comments at 1, Michael Dinelli Comments at 1, Edwin R. Kessler Comments at 1.

[57] *See* Donald R. Putnick Comments at 1, John P. Flynn Comments at 1.

[58] *See id.* at 7.

[59] *See id.* at 6, n.3.

[60] *See* Mr. John S. Rippey Petition For Rule Making at 9 (filed Dec. 27, 2001) (Rippey Petition).

[61] The petition requests the Commission to authorize Novice and Technician Plus Class amateur service licensees telegraphy privileges in the 3650-3750 kHz, 7050-7150 kHz, 10.110-10.130 MHz, 18.080-18.168 MHz, 21.050-21.200 MHz, 24.900-24.930 MHz, 28.060-28.500 MHz frequency segments, and phone privileges in the 18.100-18.168 MHz and 24.930-24.990 MHz frequency segments, in addition to the phone and RTTY/Data privileges currently authorized in the 10 m amateur service band. The Rippey Petition was placed on *Public Notice* on January 8, 2002. *See Public Notice,* Report No. 2522 (rel. Jan. 8, 2002). A list of commenters is presented in Appendix B.

code.[62] The petitioner also states that the rule change would provide a greater opportunity for Novice and Technician Plus Class licensees to establish contacts with other amateur radio operators, thus enhancing their operating experience.[63]

13. *Discussion*. Over forty comments were filed in response to this petition. The majority of commenters opposed the petition as unnecessary due to the ease in upgrading from the Novice and Technician Plus Class to the General or Amateur Extra Class.[64] Other commenters argue that Novice and Technician Plus Class privileges have already expanded significantly,[65] and that operating privileges would be more valued if they were achievement-based.[66] Other commenters support the petition so long as the frequency subbands remain combined[67] and a call sign system is developed to allow licensees to determine whether an operator has the requisite privileges for the frequency on which the station is transmitting.[68]

14. Based on our review of the record, we are not persuaded to amend our rules as the petitioner requests. We believe that a Novice or Technician Plus Class licensee can easily upgrade to the General or Amateur Extra Class,[69] thereby obtaining access to significantly more spectrum and greatly increasing the chance of establishing contacts with other amateur radio stations. Additionally, because the number of Novice and Technician Plus Class licensees has declined significantly,[70] we believe that we should address operating privileges for these license classes only in a comprehensive restructuring of operating privileges for all license classes.[71]

15. Miller Petition. *Background*. On February 25, 2003, Mr. Mark Miller requested that we amend Section 97.305(c) of our Rules to allow an amateur station to transmit an image emission that occupies a bandwidth of 500 Hz or less on the frequency segments of HF amateur

[62] *See* Rippey Petition at 6.

[63] *See id.*

[64] *See, e.g.,* Alan J. Wormser Comments at 1, Paul Carpenter Comments at 1, Michael J. Lyness Comments at 1.

[65] *See, e.g.,* Mike Mello Comments at 1, Hans Brakob Comments at 1.

[66] *See, e.g.,* Jay Jenkins Comments at 1, Michael H. Lajoie Comments at 1, David M. Colburn Comments at 1, William R. Eaton Comments at 1.

[67] *See, e.g.,* James May Comments at 1.

[68] *See, e.g.,* Dew McCarsky Comments at 1.

[69] We note that a person who either holds or has held either of these operator licenses receives credit for the five words per minute telegraphy examination after passing an examination for a General or Amateur Extra Class operator license.

[70] Between September 30, 1997 and May 1, 2003, the number of Novice Class licensees declined from 65,142 to 34,666, and the number of Technician Plus Class licensees declined from 138,078 to 69,362. *See* The W5YI Report, July 15, 1999 at 8; June 1, 2003, at 8. Current licensing statistics are available at http://WWW.AH0A.ORG/FCC/Licenses.html. On the basis of the trends in this data, we are persuaded that licensees who hold Novice or Technician Plus Class operator licenses are either choosing to not renew their licenses or are using the telegraphy element examination credit provided in 47 C.F.R. § 97.505(a) to increase their operator privileges to General Class or Amateur Extra Class operator privileges.

[71] We note that the ARRL, the National Association for Amateur Radio, requests a significant expansion of frequency privileges for Novice and Technician Plus Class licensees as part of a comprehensive restructuring of operating privileges it has proposed. *See* paras. 7-11, *infra*.

service bands now authorized for data and RTTY emission types.[72] In support of this request, Mr. Miller states that personal computers with sound cards and software have made it possible for amateur radio operators to develop new communication systems and that these systems are being used on the amateur service HF bands.[73] Petitioner explains that one system in use combines a digital emission and a narrowband facsimile (FAX) emission,[74] thereby allowing the operator to establish communications using text, then automatically switch to a FAX emission, then automatically switch back to the digital emission.[75] He also explains that another system[76] uses transmitted pulses to directly write images on paper or a computer screen.[77] Petitioner notes that amateur radio operators worldwide have been using these communication systems since late December, 2002, and that the use of these systems has not caused harmful interference to other amateur service communications, but that our Rules do not authorize an amateur station to transmitting an image emission type in frequency segments of the HF bands that are authorized for data emission types.[78] He requests, therefore, that our Rules be amended to reflect current emission and operating practices, and to limit the occupied bandwidth of image emissions in data segments of the HF bands to 500 Hz or less so that the narrow bandwidth nature of these band segments is maintained.[79]

16. *Discussion*. As an initial matter, we note that one of the purposes of the amateur service is to contribute to the advancement of the radio art.[80] We believe that amateur radio operators using amateur service spectrum to develop new communications systems are using the service in a manner that is consistent with the basis and purpose of the amateur service. We also believe that our Rules should not be an impediment to amateur radio operator's development of new or improved communication systems. In this regard, we note that the reason amateur radio operators currently may not transmit communications that combine image emission types and data emission types on HF frequency segments where data emissions are authorized is not a technical reason, but rather is because our Rules do not authorize stations to transmit both image and data emission types on any HF frequency segments.[81] We also note that amateur radio operators apparently have developed communication systems and technologies that transmit both image and data emission types, and that they are using these systems for communicating. For this reason, we are persuaded that our Rules are not in harmony with current emission and operating practices and that our Rules may be impeding amateur radio operators in advancing the radio art. We believe, therefore, that petitioner has presented sufficient reason to justify the requested rule amendment. We will not, however, propose to revise Section 97.307(c) as requested by the petitioner. Rather, we believe that revising the definition of data emission types in Section

[72] *See* Mark Miller Petition For Rule Making at 1 (filed Feb. 25, 2003) (Miller Petition).

[73] *See id.*

[74] Emission type F2C (FAX) is an image emission type in the amateur service. *See* 47 C.F.R. § 97.3(c)(3).

[75] *See* Miller Petition at 1.

[76] *See id.* This system is commonly referred to as the Hellschriber system and uses emission type A1C, which also is an image emission type.

[77] *See id.* at 1-2.

[78] *See id.*

[79] *See id.* at 2.

[80] 47 C.F.R. § 97.1(b).

[81] *See* 47 C.F.R. § 97.305(c).

97.3(c) to include image emission types currently being used and to limit image emissions to 500 Hz or less is consistent with the petitioner's request and will provide the amateur service community greater flexibility in developing communication systems and communication technology while maintain the narrow bandwidth nature of the data emission band segments. Specifically, we propose to revise the definition of data emission types that amateur stations may transmit to include emission types A1C and F2C[82] (FAX) having an occupied bandwidth of 500 Hz or less. We request comment on this proposal

2. Very High Frequency Privileges.

17. Auxiliary stations. *Background.* The amateur service rules define an auxiliary station as an amateur station, other than one in a message forwarding system,[83] that is transmitting point-to-point communications within a system of cooperating amateur stations.[84] Section 97.213(a)[85] of the Commission's Rules provides that an amateur station on or within 50 km of the Earth's surface may be under telecommand[86] where there is a radio or wireline control link between the control point and the station sufficient for the control operator to perform his or her duties.[87] If the control link between the control point and the amateur station is a radio control link, then the control link must use an auxiliary station.[88] An amateur station that is an auxiliary station may transmit on the 1.25 meter (m) and shorter wavelength bands, with certain exceptions.[89] The underlying purpose of limiting auxiliary stations to these bands is to minimize the possibility of harmful interference[90] to other amateur service stations and operations, particularly "weak signal"[91] activity in the 2 m (144-148 MHz) band.[92]

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[82] *See* 47 C.F.R. §§ 2.201, 2.202 for the rules that apply to emissions.

[83] *See* 47 C.F.R. § 97.3(a)(31). A "message forwarding system" is a voluntary amateur station arrangement whereby communications are sent from the control operator of an originating station to the control operator of one or more destination stations by one or more forwarding stations. Examples of message forwarding systems in the amateur service include linked repeater systems and packet radio message forwarding systems.

[84] *See* 47 C.F.R. § 97.3(a)(7).

[85] *See* 47 C.F.R. § 97.213(a).

[86] *See* 47 C.F.R. § 97.3(a)(41). "Telecommand," or remote control, is a one-way transmission to initiate, modify or terminate functions of a device at a distance.

[87] *See* 47 C.F.R. § 97.105. The control operator ensures proper operation of the station in accordance with the privileges authorized in the license.

[88] *See* 47 C.F.R. § 97.213(a).

[89] *See* 47 C.F.R. § 97.201(b). Auxiliary stations do not have authorization to use the 219-220 MHz, 222.000-222.150 MHz, 431-433 MHz and 435-438 MHz frequency segments.

[90] "Harmful interference" is interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service operating in accordance with the ITU *Radio Regulations*. *See* 47 C.F.R. § 2.1.

[91] "Weak signal" communications are primarily Morse code telegraphy and single sideband voice messages transmitted over very long distances in the Very High Frequency (VHF) and Ultra High Frequency (UHF) amateur service bands.

[92] *See* Deregulation of Part 97 of the Commission's Rules to Simplify the Licensing and Operation of Complex Systems of Stations and Modify Repeater Subbands in the Amateur Radio Service, *Report and Order*, Docket No. 21033, 66 FCC 2d 207, 215 ¶ 6 (1977). In 1986, the Commission reaffirmed this (continued....)

18. On November 4, 1999, Kenwood Communications Corp. (Kenwood), a manufacturer of amateur radio equipment, requested a declaratory ruling confirming that its "Sky Command System" (Sky Command)[93] complies with the amateur service rules.[94] Alternatively, Kenwood requested the Commission to grant blanket rule waivers so that amateur service licensees could utilize Sky Command.[95] In 2000, the Public Safety and Private Wireless Division denied Kenwood's request, concluding that Section 97.201(b) of the Commission's Rules does not authorize auxiliary stations to transmit on the 2 m band, and that Kenwood did not meet the standards for a waiver request.[96]

19. Subsequently, on May 1, 2001, Kenwood requested that we amend Section 97.201(b) of our Rules to allow auxiliary stations to transmit on the 2 m band above 144.5 MHz, except 145.8-146.0 MHz, in addition to the frequency segments previously authorized.[97] Kenwood states that this proposed rule change would increase the flexibility of amateur radio licensees without adversely affecting other services or amateur radio stations that use the 2 m band, and would promote the development and use of new technology, including Sky Command.[98]

20. *Discussion*. The Commission received twenty-four comments supporting Kenwood's request and sixteen comments opposing the request. Those supporting Kenwood's request state that (a) the 2 m band is not heavily used[99] and such use is no different than other uses already occurring on the band,[100] (b) auxiliary stations transmit on short distance simplex channels which would not cause interference to other stations on the band,[101] (c) it would allow for the development of new emergency communication systems and capabilities[102] and support other

(...continued from previous page)
interference-minimization approach by rejecting a proposal to eliminate the frequency restrictions applicable to auxiliary stations. *See* Amendment of the Amateur Service Rules to Allow Auxiliary Operation on All Amateur Service Frequencies, except 431-433 MHz and 435-438 MHz, *Order,* 51 Fed. Reg. 11759, 11760 ¶ 4 (1986).

[93] Kenwood's "Sky Command system" permits amateur service licensees who do not have sufficient space for HF antennas, or who live in areas with restrictive covenants, to operate their HF equipment at remote locations through the use of VHF and UHF channels.

[94] *See* Kenwood Communications Corp. Request for Declaratory Ruling or Waiver of Applicable Rule Sections (filed Nov. 4, 1999) (Kenwood Request).

[95] *See* Kenwood Request at 9.

[96] *See* Kenwood Communications Corp. Request for Declaratory Ruling to Determine Compliance With Applicable Sections of Part 97 of the Commission's Rules or Waiver of Applicable Rule Sections, *Order*, 15 FCC Rcd 13819, 13821 ¶ 8 and 13824 ¶ 14 (2000).

[97] *See* Kenwood Petition at 1. The Kenwood petition was placed on public notice on October 19, 2001. *See* Public Notice, Report No. 2507 (rel. Oct 19, 2001). A list of commenters is presented in Appendix B.

[98] *See id*.

[99] *See, e.g.*, Richard C. Baum Comments at 1, Scott Honaker Comments at 1, Rodger Alexander Comments at 1, Kenneth Richards Comments at 1, Brian Badger Comments at 1, Martin S. Wilcoxson Comments at 1, Doug Young Comments at 1, Gary P. Standorf Comments at 1.

[100] *See* Brad Bollinger Comments at 1.

[101] *See* Ron Karger Comments at 1, John McAuley Comments at 1. "Simplex communications" are direct, or on-channel, station-to-station communications.

[102] *See e.g.,* Rodger Alexander Comments at 1, Brian Badger Comments at 1, Greg Peralta Comments at 1, Timothy P. Dugan, Jr. Comments at 1, Richard Illman Comments at 1.

applications such as controlling an HF station[103] in a vehicle,[104] or from an antenna-restricted residence,[105] and (d) it is consistent with flexible service rules.[106]

21. On the other hand, some commenters state that it is not necessary for auxiliary stations to transmit on the 2 m band because sufficient amateur service spectrum is available on and above the 220 MHz band.[107] Others claim that the 2 m band is heavily used,[108] and argue that increased interference will occur if the rules are revised as Kenwood requests.[109] Some commenters believe that existing rules are sufficient to address this concern,[110] or that licensees can either address this issue amongst themselves or through existing coordination policies.[111]

22. Because we have no basis to conclude that auxiliary stations transmitting on the 2 m band would cause harmful interference or that user coordination would not be possible,[112] we believe that Kenwood's proposed rule change will be consistent with our flexible-use policy in the amateur service. In this regard, we note that the frequency segments Kenwood requests does not affect the frequency segments authorized to automatically controlled beacon stations,[113] space stations,[114] earth stations[115] or those frequency segments that amateur radio operators have voluntarily agreed to use for simplex and weak signal communications.[116] We therefore believe the record in this proceeding warrants proposing the amendment of Section 97.201(b) of our Rules as Kenwood requests, and we seek comment on this proposal.[117]

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[103] The frequency range from 3,000 kHz to 30,000 kHz is denoted as HF. *See* 47 C.F.R. § 2.101. In the metric system, it is called the shortwave range and, expressed in wavelengths, it lies between 100 meters and 10 meters. Thus, the amateur service bands between 3,000 kHz and 30,000 kHz are also known as shortwave bands.

[104] *See, e.g.,* James Rick Sohl Comments at 1.

[105] *See, e.g.,* Robert Koerner Comments of at 1, Richard Illman Comments at 1.

[106] *See, e.g.,* Kenneth Richards Comments at 1, Greg Peralta Comments at 1.

[107] *See, e.g.,* William J. Gallager Comments at 1, Richard M. Winter Comments at 1, Nickolaus E. Leggett Comments at 1, Steven James Robeson Comments at 1, D. Platt Comments at 1, Thomas E. Walsh Comments at 1, R. Merhar Comments at 1.

[108] *See, e.g.,* William J. Gallager Comments at 1, D. Platt Comments at 1, Robert Mitileri Comments at 1.

[109] *See, e.g.,* Steven James Robeson Comments at 1, Matthew W. Sadler Comments at 1, Philip Karras Comments of at 1, W. Lee McVey Reply Comments at 2.

[110] *See*, *e.g.,* Mr. Galasso Comments at 2.

[111] *See, e.g.,* Leonard J. Umina Comments at 1, Robert Fuller Comments at 1.

[112] This prohibition was adopted as a means to minimize the possibility of harmful interference to other amateur service stations and operations in the 2 m band.

[113] *See* 47 C.F.R. § 97.203 (d).

[114] *See* 47 C.F.R. § 97.207 (c).

[115] *See* 47 C.F.R. § 97.207 (b).

[116] *See* The ARRL's FCC Rule Book, (John Hennessee et al. eds.) 4-14, 4-15 (2000) (discussion of the 2 m voluntary band plan).

[117] *See* 47 C.F.R. § 97.201(b).

23. Spread spectrum. *Background.* Currently, we authorize amateur stations to transmit Spread Spectrum (SS) emission types on any amateur service frequency above 420 MHz.[118] In its petition, the ARRL also requests that we amend the rules to authorize amateur stations to transmit SS emission types on an additional 3 MHz of amateur service spectrum.[119] Specifically, the ARRL requests that we amend Section 97.305(c) to authorize amateur stations to transmit SS emission in the frequency segment 222-225 MHz.[120] In support of this request, the ARRL states that presently there is no VHF band in which amateur stations may transmit SS emissions[121] and that authorizing amateur stations to transmit these emissions on the 1.25 m band would be consistent with the flexible regulatory framework the Commission provided in 1999 when it revised the rules[122] to permit amateur stations to transmit different types of SS emissions.[123] The ARRL also states that this requested rule revision would allow amateur radio operators to continue the development of new services through experimentation, would promote technological innovation, and would eliminate unnecessary regulatory burdens.[124] With regard to the impact of this requested revision on other amateur stations using the 1.25 m band, the ARRL states that there are significant opportunities for re-use of this spectrum for SS communications and experimentation[125] and that SS emissions in the 1.25 m band would remain subject to the restrictions set forth in Section 97.311[126] of our Rules.[127] Two comments were received concerning this requested rule change. One commenter states he supports this request.[128] Another commenter, however, opposed the request explaining that interference to other amateur stations using the 220 MHz band in Southern California may result.[129]

24. *Discussion*. The Commission adopted the present limitation restricting amateur stations to transmitting SS emission types only on frequencies above 420 MHz in 1985.[130] These limitations were adopted to reduce the interference potential of SS transmissions.[131] We note that there has been no showing that SS transmissions have caused or would cause harmful interference. Additionally, we do not believe that mere speculation of interference to other

[118] *See* 47 C.F.R. § 97.305(c).

[119] *See* ARRL Petition at 13.

[120] *See id.* at 14. The 222-225 MHz frequency segment is part of the 1.25 m amateur service band.

[121] *See* ARRL Petition at 14.

[122] *See* Amendment of the Amateur Service Rules to Provide For Greater Use of Spread Spectrum Communication Technologies, *Report and Order*, WT Docket No. 97-12, 64 Fed. Reg. 51471 (Sep. 23, 1999).

[123] *See* ARRL Petition at 13.

[124] *See id.* at 13-14.

[125] *See id.* at 14.

[126] *See* 47 C.F.R. § 97.311.

[127] *See* ARRL Petition at 14.

[128] *See* Frank A. Lynch Comments at 1.

[129] *See* Rich Eyre-Eagles Comments at 1.

[130] *See* Amendment of Parts 2 and 97 of the Commission's Rules and Regulations to authorize spread spectrum techniques in the Amateur Radio Service, *Report and Order* GEN. Docket No. 81-414, 99 FCC 2d 1432 (1985). The text of the *Report and Order* was printed at 50 Fed. Reg. 23423 (1985).

[131] *See* 50 Fed. Reg. 23424 ¶ 5

stations is a basis for continuing to prohibit amateur stations from transmitting SS emission types in an additional frequency band. We believe that authorizing amateur stations to transmit SS emission types in the 1.25 m band would be consistent with the experimental purpose of the amateur service[132] and possibly allow amateur radio operators to contribute to the advancement of communications technology. We also believe that retaining the requirement that SS emission in the 1.25 m band remain subject to the restrictions set forth in Section 97.311[133] would be sufficient to insure that amateur stations transmitting SS emission types do not impact the operation of other amateur stations. Therefore, we propose to revise Section 97.305(c) as requested by the ARRL and we request comment on this proposal.

25. We note, however, that in addition to the 1.25 m band, we authorize amateur stations to transmit on two other frequency bands in the VHF portion of the spectrum and that these bands, the 6 m[134] and the 2 m[135] amateur service bands, each contain 4 MHz of spectrum as compared to the 3 MHz of spectrum in the 1.25 m band. It appears to us that because both of these bands are wider than the 1.25 m band, these two additional bands may be even more useful for SS experimentation than the 1.25 m band because more spectrum is available for spreading of the emissions. We also see no reason that the restrictions on SS emissions in other bands[136] would not be sufficient to insure that amateur stations transmitting SS emission types do not impact the operation of other amateur stations in the 6 m and 2 m amateur bands. Additionally, we see no technical reason why we should propose authorizing amateur stations to transmit SS emissions in the 1.25 m band, but not the 6 m or 2 m amateur bands. Therefore, we request comment regarding whether we should allow amateur stations to transmit SS emission types on either or both of the 6 m and 2 m amateur service bands, in addition to the 1.25 m band.

3. Medium Frequency Privileges.

26. *Background.* The 160 m amateur service band[137] is the only MF[138] amateur service band and the lowest frequency band the amateur service is authorized.[139] Because the 160 m amateur service band experiences very high ionospheric absorption during daylight hours and high levels of atmospheric noise during the summer, the distance communications can be transmitted and received on this band is limited, absent very sophisticated receiving systems.[140] Conversely, at night and during sunset and sunrise time periods, because the ionospheric absorption is significantly less, and during the winter because atmospheric noise is less, longer

[132] *See* 47 C.F.R. § 97.1.

[133] *See* 47 C.F.R. § 97.311.

[134] The 6 m band is the 50-54 MHz frequency segment.

[135] The 2 m band is the 144-148 MHz frequency segment.

[136] *See* 47 C.F.R. § 97.311.

[137] The 160 m band is the 1800-2000 kHz frequency segment.

[138] The frequency range from 300 kHz to 3,000 kHz is denoted as MF. *See* 47 C.F.R. § 2.101. In the metric system, this range is referred to as the medium frequency range and, expressed in wavelengths, lies between 1000 m and 100 m. Thus, the amateur service band between 1800 kHz and 2000 kHz is an MF band.

[139] *See* 47 C.F.R. § 97.301(b).

[140] *See* Steve Ireland, Mike Bazley, and Bob Brown, *Equinoctial and Diurnal Path Switching*, CQ Magazine, Feb. 2002 at 22-28, and Mar. 2002 at 24-29.

distance two-way communications on this band are more likely to result.[141]

27. The Commission authorizes amateur stations to transmit either an international Morse code telegraphy (CW) or a voice emission type on any channel in the 160 m band.[142] Specifically, an amateur station controlled by a General, Advanced, or Amateur Extra Class amateur service licensee may transmit a CW, RTTY (radioteletype), data, phone, or image emission on any channel in the band.[143] In order to accommodate specific operating activities, the amateur service community has developed a voluntary band plans for the 160 m amateur service band. The goal of this voluntary band plan is to minimize interference between stations simultaneously engaging in different operating activities.[144] Voluntary band planning also allows the amateur service community to reallocate spectrum to accommodate changes in operating interests and technologies. Prior to July of 2001, the generally recognized 160 m voluntary band plan recommended use of the 1800-1840 kHz frequency segment for CW, RTTY and other narrowband modes, and use of the 1840-2000 kHz frequency segment for phone, image and other wideband modes.[145]

28. In response to increased use of the 160 m band and concerns about whether the voluntary band plan was meeting the needs of 160 m users, the ARRL established a committee to review the 160 m band plan and to provide recommendations.[146] The committee members included Mr. Jeffery T. Briggs and Mr. William R. Tippett II.[147] After consideration of the committee's proposed revisions to the voluntary band plan, the ARRL recommended a division of the band into two segments: (a) the 1800-1843 kHz segment for narrowband, data and CW emissions; and (b) the 1843-2000 kHz segment for telephony, image, and other wideband emissions.[148]

29. On September 10, 2001, Mr. Briggs and Mr. Tippett (160 m Petition) requested that we amend Section 97.305(c) in accordance with the revised voluntary 160 m band plan.[149] Petitioners argued that the revised band plan should be mandatory rather than voluntary.[150] In support of this request, petitioners state that the 160 m amateur band's unique propagation

[141] *See* Steve Ireland, *Go Surf the Grey and Dark Lines*, CQ Magazine, Feb. 2001 at 38-41, and Mar. 2001 at 28-30. On the 160 m band, long-distance communications also are likely to occur during the "grey line" period, immediately before or after sunrise or sunset.

[142] *See* 47 C.F.R. § 97.305(c).

[143] *See id*.

[144] *See* The ARRL's FCC Rule Book, (John Hennessee et al. eds.) 4-3 (2000).

[145] *See* The FCC Rule Book, (Rick Palm et al. eds.) 5-4 (1993); *see also* http://www.arrl.org/announce/reports-0107/160-meter.html.

[146] *See* http://www.arrl.org/announce/reports-0107/160-meter.html.

[147] *See* http://www.arrl.org/announce/reports-0107/160-meter.html.

[148] *See* http://www.arrl.org/announce/board-0107/ at para. 57.

[149] *See* Jeffery T. Briggs, K1ZM and William R. Tippett II, W4ZV Petition For Rule Making at 1 (filed Sep. 10, 2001) (160 m Petition). The 160 m Petition was placed on *Public Notice* on January 8, 2002. *See Public Notice,* Report No. 2522 (rel. Jan. 8, 2002). A list of commenters is presented in Appendix B. The terms "wideband" and "narrowband" are not used in the rules to describe different emission groups.

[150] *See* 160 m Petition*,* Appendix at 3.

anomalies[151] require the division of the band into wideband and narrowband frequency segments.[152] Petitioners explain that such a division would greatly ease the interference that occurs between stations transmitting CW and voice emissions, particularly in the frequency segment 1800-1843 kHz during contests,[153] and when stations are using CW to attempt long distance international communications during the nighttime, at sunrise, and at sunset.[154]

30. Over five hundred twenty comments were filed in response to this petition. The majority of commenters support the petition, explaining that stations transmitting wideband and narrowband signals cannot share the same frequency segment without interfering with each other.[155] These commenters also agree that we should set aside a segment of the 160 m for stations using CW and other narrowband emissions.[156] Commenters also generally support a mandatory band plan, explaining that voluntary band plans may not be followed by all licensees.[157] Other commenters agree that a mandatory band plan is needed, but suggest alternate frequency segmentation for narrowband and wideband modes.[158]

31. On the other hand, those opposing the petition argue against setting aside frequency bands on the basis of personal operating interests.[159] Other commenters state that weak signal CW communications is a minority operating interest that does not warrant a special frequency set-aside.[160] In addition, some commenters believe that the proposal will not protect stations using CW from interference[161] and aver that subdividing the band would result in inefficient use of spectrum.[162] Moreover, some commenters generally oppose the notion of mandating a band plan.[163]

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[151] *See id.*

[152] *See id.* at 1, Appendix at 6-7.

[153] *See id.,* Appendix at 3.

[154] *See id*., Appendix at 4.

[155] *See, e.g.*, M. Robin Critchell Comments at 1, Scott Hudler Comments at 1, Steve Ireland Comments at 1, James Cook Comments at 1, George H. Hippisley Comment at 1, Joseph T. Subich Reply Comments at 1.

[156] *See, e.g.*, Scott Jones Comments at 1, Henry Perras Comments at 1, Ken Caruso Comments at 1, Greg Smith ZL3IX Comments at 1, Kurt Pauer Comments at 1, Jerry Houinar K5YAA Comments at 1, G3OIT Comment at 1, Tom Rauch W8JI Comments at 1.

[157] *See, e.g.*, Charles Rauch Comments at 1, Bill Kennamar Comments at 1, M. Robin Critchell Comments at 1, Eric Scace Comments at 2, Anthony B. McClenny, Jr., W3UR Comments at 1, Joseph T. Subich Reply Comments at 1, Jeffery A. Maass Reply Comment at 1.

[158] *See, e.g.*, M. Robin Critchell Comments at 2, Melvin Lehmann Comments at 1, Leo Drescher Comments at 1, Gary A. Breed K9AY Comments at 1, J. Jorgensen Comments at 1.

[159] *See, e.g.*, Paul S. Courson Comments at 1, David Humbertson Comments at 1, Robert Tiller Comment at 1, Louis Cruz Comments at 1.

[160] *See, e.g.*, Art Pightling Comments at 1, Warren H. Ziegler, Jr. Comments at 1.

[161] *See, e.g.*, Art Pightling Comments at 1, Owen Mitchell Comments at 1, M. Taylor Comments at 1.

[162] *See, e.g.*, David Humbertson Comments at 1, James H. Young Comments at 1.

[163] *See, e.g.* Mr. Cowart Comments at 1, Warren H. Ziegler, Jr. Comments at 1, Ralph L. Duvall, Jr. Comments at 1, David Calhoun Comment at 1, R.A. Walls Comment at 1, M. Sawyer Comment at 1, Roger Johnson Comment at 1, Richard Wilder K3DI Comments at 1-2, Y. A. Feder W1UX Comment at 1.

32. *Discussion.* The Public Safety and Private Wireless Division (Division) previously addressed the issue of a mandatory band plan in lieu of a voluntary band plan in 1999.[164] In the *Order*, the Division denied a request[165] that it declare that any amateur radio station control operator who selects a transmitting frequency not in harmony with those voluntary band plans is in violation of the Commission's Rules.[166] It noted that such a result would be inconsistent with the fundamental principle of shared frequencies in the amateur service.[167] Additionally, the Division stated that granting the request would effectively transform voluntary band plans into *de facto* required mandates.[168] Rather, the Division found that because all amateur service frequencies are shared, our Rules do not assign a particular operating activity (such as using CW to attempt long distance international communications) to a specific frequency segment.[169] Because the petitioner has not presented any unique or changed circumstances to warrant a mandatory band plan, we find no basis to disturb this fundamental principle.

33. We further believe that the recently modified voluntary band plan, which provides an additional 3 kHz of spectrum for CW and narrowband operating activities, adequately accommodates the operating interests of all licensees who use the 160 m band because it was based on input from those who use this spectrum.[170] We note that the voluntary nature of the band plan allows amateur service licensees the flexibility to make any changes if and when they are needed to reallocate the spectrum among operating interests as new operating interests and technologies emerge or certain operating interests and technologies fall into disfavor. We also find unpersuasive the petitioner's concern that contests and special events, because they result in increased operating activity, justify a mandatory band plan. On this point, we note that participation in contests and special events is voluntary and that these operating activities are infrequent and primarily weekend or evening events. We also note that sponsors of contests, special events, and awards may choose to include in their rules a requirement that stations operate in harmony with voluntary band plans, thereby mitigating the impact of these events on other users of the band.[171]

34. The issue of willful or malicious interference between amateur service stations engaging in different operating activities was also previously addressed in the *Order,* where the Division noted that we already prohibit such interference in Section 97.101(d) of our Rules.[172] In the absence of a showing that Section 97.101(d) no longer serves its purpose, we are not persuaded that a more comprehensive rule is necessary. Rather, we believe that cooperation

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[164] *See* Compliance With Applicable Voluntary Band Plans in the Amateur Radio Service, *Order*, 14 FCC Rcd 20595 (1999) (*Order*).

[165] *See* American Radio Relay League, Inc., Request for Declaratory Ruling (filed Apr. 3, 1998) at 1.

[166] *See Order,* 14 FCC Rcd 20595. *See also* 47 C.F.R. § 97.101(b).

[167] *See Order,* 14 FCC Rcd 20595.

[168] *See Order*, 14 FCC Rcd at 20604 ¶ 18.

[169] *See Order*, 14 FCC Rcd at 20603 ¶ 17.

[170] 160 m Petition, Appendix 1.

[171] *See, e.g.,* http://www.rsgbhfcc.org/ and http://www.cq-amateur-radio.com/awards.html. We note, for example, that the "Islands On The Air" contest rules prohibit operation on the 3560–3600 kHz, 3650-3700 kHz, 14060-14125 kHz and 14300-14350 kHz frequency segments, thereby mitigating impact of the contest on users of the 80- and 20 m amateur service bands.

[172] *See Order*, 14 FCC Rcd at 20604 ¶ 19.

between licensees, education, and compliance with Section 97.101(d) of our Rules is sufficient to minimize interference. For these reasons, we dismiss the 160 m Petition.

B. Station Operation Standards

1. Retransmission of Space Station Communications.

35. *Background*. Prior to 1993, our Rules prohibited amateur stations from transmitting any communications that facilitated the business or commercial affairs of any party.[173] In 1993, the Commission allowed amateur radio operators to provide communications for public service projects and to satisfy personal communications needs.[174] To insure that amateur radio operators do not use the amateur service as a substitute for other communication services, our Rules generally prohibit an amateur station from re-transmitting programs or signals emanating from any other type of radio station except communications originating on United States Government frequencies between a space shuttle and its associated Earth stations.[175] Currently, there is no exception for retransmission of communications involving the International Space Station (ISS).[176]

36. On December 27, 2001, the NASA John H. Glenn Research Center Amateur Radio Club requested that we amend our amateur service rules to allow retransmission of communications between a manned spacecraft and its associated Earth stations.[177] Specifically, the petitioner requests authority for amateur stations to retransmit space shuttle communications as well as communications between the ISS, or any other manned spacecraft, and its associated earth stations.[178] In support of this request, the petitioner states that manned occupation of the ISS (a permanent space structure) has introduced a technicality into the definition of "space shuttle" (a transport for astronauts between Earth and space) communications.[179] Petitioner's concern is that because the ISS is not a shuttle, the retransmission of ISS communications may be a technical violation of our Rules.[180] Moreover, petitioner believes that retransmitting ISS audio on amateur service frequencies is within the spirit of the exception in our Rules that allows

[173] 47 C.F.R. § 97.113(a) (1992).

[174] *See* Amendment of Part 97 of the Commission's Rules to Relax Restrictions on the Scope of Permissible Communications in the Amateur Service, PR Docket No. 92-136, *Permissible Communications Report and Order*, 8 FCC Rcd 5072 (1993). *See also*, Reorganization and Deregulation of Part 97 of the Rules Governing the Amateur Radio Service, PR Docket No. 88-139, *Report and Order*, 4 FCC Rcd 4719, 5073 ¶ 7 (1989).

[175] *See* 47 C.F.R. § 97.113(e). *See also* Amendment of Part 97 of the Commission's Rules to Relax Restrictions on the Scope of Permissible Communications in the Amateur Service, PR Docket No. 92-136, *Permissible Communications Report and Order*, 8 FCC Rcd 5072 (1993).

[176] We note that our Rules were revised to allow retransmission of space shuttle message prior to the development of the ISS. *See* Reorganization and Deregulation of Part 97 of the Rules Governing the Amateur Radio Service, PR Docket No. 88-139, *Report and Order*, 4 FCC Rcd at 5073 ¶ 7.

[177] *See* NASA John H. Glenn Research Center Amateur Radio Club Petition For Rule Making at 2 (filed Apr. 12, 2001) (Glenn Petition). The Glenn Petition was placed on public notice on January 8, 2002. *See Public Notice*, Report No. 2522 (rel. Jan. 8, 2002). A list of these commenters is presented in Appendix B

[178] *See id.* at 1.

[179] *See id.*

[180] *See id.* at 2.

amateur stations to retransmit space shuttle communications.[181]

37. *Discussion.* Eight commenters supported the request stating that retransmission of space communications is a public service because these retransmissions provide an excellent signal to test and adjust station equipment[182] and allow the general public to monitor the space program,[183] is used as a resource that allows schools to follow the space program,[184] and serves other educational purposes such as providing information in the areas of science and space exploration.[185] On the other hand, three commenters oppose this request explaining that such retransmissions may cause interference to the transmissions of other amateur service stations,[186] that one-way transmissions are not in the best interest of ham radio,[187] and that these transmissions are prohibited broadcasts under our Rules.[188]

38. Based on our review of the record, we are persuaded to propose the requested rule amendment. As an initial matter, although we believe there are no distinctions between the retransmission of space shuttle and ISS communications, we seek comment on whether any distinctions exist that should result in disparate treatment between the two retransmissions. We do not anticipate that retransmissions of ISS communications would cause any significant increase in harmful interference to other amateur station's transmissions. Moreover, rules that prohibit harmful interference are already in place, should such interference occur.[189] In addition, we agree that the request is consistent with the intent of the current rule, which allows amateur stations to retransmit space shuttle communications. Accordingly, we seek comment on the proposed rule change.

2. Broadcast and Music Transmissions.

39. *Background.* In addition to the prohibition on certain transmissions, our Rules also prohibit amateur stations from engaging in any form of broadcasting.[190] The Commission adopted this prohibition to ensure that amateur service frequencies were not used as a substitute for other communication services.[191]

40. On March 19, 2002, Robert H. Birdsey requested that we delete Section 97.113(a)(4)[192] and (b),[193] to allow an amateur station to broadcast and transmit music.[194] In

[181] *See id.*

[182] *See* Matt Gilbert Comment at 1.

[183] *See* Scott Lindsey-Stevens Comment at 1.

[184] *See* James M. May Comment at 1.

[185] *See, e.g.,* John C. Holliman Comment at 1, John L. Gafford Comment at 1, John Chamberlin Comment at 1, David Duke Comment at 1, Matt Gilbert Comment at 1.

[186] *See, e.g.,* Harold Tate Comment at 1.

[187] *See, e.g.,* Keith E. Wyatt Comment at 1.

[188] *See, e.g.,* Dr. David M. Colburn Comment at 1.

[189] *See* 47 C.F.R. § 97.101(d).

[190] *See* 47 C.F.R. § 97.113(b).

[191] *See* n.175, *supra*.

[192] Section 97.113(a)(4) of the Commission's Rules generally prohibits an amateur station from transmitting music using a phone emission; communications intended to facilitate a criminal act; messages (continued....)

support of this request, petitioner argues that our Rules violate the First Amendment because they allow amateur stations to make one-way transmissions, or broadcasts, of information that is determined to be of interest to other amateur radio operators, but not the general public, and to transmit tones, as long as the tones can not form music.[195] Our Rules define "broadcasting" as "transmissions intended for reception by the general public, either direct or relayed."[196] These limitations, petitioner claims, result in the Federal government regulating non-commercial individual expression.[197]

41. *Discussion*. We are not persuaded that the petitioner has presented sufficient reason to justify the requested rule amendment. The rules allow amateur stations to transmit one-way communications only for specified purposes and that these purposes are related to the operation of, or to communications between, amateur stations.[198] Amateur stations are prohibited from broadcasting and transmitting music so that the amateur service and amateur service frequencies are not used as an alternative to broadcast services and the frequencies these other services are authorized.[199] With regard to the petitioner's claim that amateur stations currently are permitted to make only certain one-way "broadcast" transmissions, we note that not all one-way transmissions are broadcasts as the term is defined in our Rules because not all one-way transmissions are intended for reception by the general public.[200] In this regard, we note that the one-way transmissions petitioner refers to are information bulletins, which we permit amateur stations to transmit.[201] We also note that tones transmitted by amateur stations are not transmitted with the intent of forming "music," but rather are the result of transmitting a test emission to adjust equipment,[202] transmitting a CW emission,[203] or transmitting a data emission.[204] To allow amateur stations to transmit music or broadcast, as the term is defined in our rules, would be

(...continued from previous page)
in codes or ciphers intended to obscure the message's meaning; obscene or indecent words or language; or false or deceptive messages, signals or identification.

[193] Section 97.113(b) of the Commission's Rules generally prohibits an amateur station from engaging in any form of broadcasting or program production or news gathering activities for broadcasting purposes, except communications directly related to the immediate safety of human life or the protection of property where no other means of communication is available.

[194] *See* Robert H. Birdsey Petition For Rule Making at 1 (filed Feb. 20, 2002) (Birdsey Petition). The petition was placed on public notice on July 3, 2002. *See Public Notice*, Report No. 2561(rel. Jul. 3, 2002). No comments were received.

[195] *See id.*

[196] *See* 47 C.F.R. § 97.3(a)(10). *See also* 47 C.F.R. § 2.1(c).

[197] *See id.*

[198] 47 C.F.R. § 97.111(b).

[199] 47 C.F.R. § 97.113(b). *See also,* Reorganization and Deregulation of Part 97 of the Rules Governing the Amateur Radio Service, PR Docket No. 88-139, *Report and Order*, 4 FCC Rcd 4719 (1989).

[200] 47 C.F.R. § 97.3(a)(10).

[201] 47 C.F.R. § 97.111(b)(6).

[202] 47 C.F.R. § 97.3(c)(9).

[203] 47 C.F.R. § 97.3(c)(1).

[204] 47 C.F.R. § 97.3(c)(2).

inconsistent with the definition and purpose of the amateur service.[205] For these reasons, we deny the petition.

3. Information Bulletin Transmission Limitations.

42. *Background.* Our Rules authorize amateur stations to transmit one-way communications to assist persons in learning the international Morse code[206] and to disseminate information bulletins.[207] On April 11, 2002, Mr. John J. Elengo requested that we amend our Rules to impose three conditions on amateur stations that transmit information bulletins: (a) limit these stations to a single transmission that does not exceed fifteen minutes; (b) require a time period between successive transmissions of not less than two hours; and (c) limit such transmissions in any given amateur service band to four per amateur station per 24-hour period.[208] Petitioner argues that such transmissions should be short and to the point and not continue unabated.[209] Petitioner notes that lengthy transmissions of information bulletins precludes other amateur stations from transmitting other communications, and that there are other avenues available for disseminating the information contained in such bulletins.[210]

43. On January 22, 2003, Mr. Jonathan S. Gunn requested that we amend our Rules to define the term "one-way voice broadcast"[211] transmissions and impose limitations on these transmissions.[212] Gunn proposes that we define "one-way voice broadcasts" as any voice transmission which is primarily intended to convey information, but which is not reasonably designed to establish immediate two-way communications with the station emitting the broadcast.[213] Additionally, he requests that we impose four limitations on amateur stations that transmit one-way voice broadcasts, including information bulletins: (a) limit a single transmission from a station to not more than thirty minutes; (b) limit multiple transmissions from any amateur station to sixty minutes per [each] 24-hour period; (c) require a time period of not less than eight hours between successive transmissions on the same amateur service band; and (d) require that the control operator of a station take reasonable steps to assure that these transmissions will not cause interference to ongoing communications.[214] Petitioner explains that because the amateur service rules presently do not contain any clear limitations on one-way voice broadcasts, an amateur station theoretically could transmit these broadcasts twenty-four hours a day, seven days

[205] *See* para. 4, *supra*. *See also,* 47 C.F.R. § 2.1(c) for the definitions of the amateur service and broadcasting service.

[206] *See* 47 C.F.R. § 97.111(b)(5).

[207] *See* 47 C.F.R. § 97.111(b)(6). An information bulletin is a message directed only to amateur operators consisting of subject matter solely directed to the amateur service. *See* 47 C.F.R. § 97.3(a)(26).

[208] *See* John J. Elengo Petition For Rule Making at 1 (filed Mar. 18, 2002) (Elengo Petition).

[209] *See id.,* citing the AARA's occasional use of a talk show format similar to that used by broadcast stations.

[210] *See id.* at 3. Petitioner states that information bulletins can be distributed via readily obtainable and periodically printed publications and via the internet.

[211] *See* Jonathan S. Gunn Petition For Rule Making at 2 (filed Jan. 22, 2003) (Gunn Petition).

[212] *See id.*

[213] *See id.* at 2.

[214] *See id.*

a week, thereby effectively claiming a frequency or number of frequencies for its exclusive use.[215] Petitioner argues that lengthy transmissions of one-way voice broadcasts are inconsistent with shared use of amateur service frequencies because such transmissions make it impracticable for other licensees to use the frequency, may impede the use of amateur service frequencies for emergency communications, may disrupt ongoing communications when they commence, and are inconsistent with the purpose of the amateur service.[216]

44. On January 30, 2003, Mr. Bob Sherin requested that we amend our Rules to delineate two types of information bulletins: (a) spontaneous bulletins such as weather alerts and (b) recurrent bulletins.[217] The petitioner requests that we examine the subject matter of recurrent bulletins and that we directly regulate these bulletins, and that we limit the number and length of transmissions and the frequency diversity of recurrent bulletin transmissions.[218] Petitioner argues that there has been long misuse of recurrent information bulletin transmission on the HF bands.[219]

45. On February 12, 2003, Mr. Phillip E. Galasso requested that we amend our Rules to prohibit amateur stations from transmitting information bulletins on amateur service frequency bands between 1.8 MHz and 30 MHz and to define information bulletin transmissions as a prohibited broadcast transmission.[220] Petitioner argues that such transmissions cause harmful interference to other communications[221] and that information bulletin transmissions have become obsolete in light of avenues, such as the sites on the internet and electronic mail to members of amateur radio organizations, that are available for disseminating information.[222] Petitioner also notes that FCC-licensed HF broadcast stations may sell air-time to anyone who wants wide coverage of their views and that individuals who desire to broadcast on the amateur service bands may buy time on these commercial stations.[223]

46. *Discussion*. An information bulletin is a one-way transmission consisting solely of subject matter directly related to the amateur service.[224] In 1988, the former Private Radio Bureau considered and denied a request to limit information bulletin transmissions to ten minutes per twenty-four hours.[225] The Private Radio Bureau stated that the degree of congestion caused by stations transmitting information bulletins was not sufficiently serious to warrant an enforced time limit on such transmissions and that there was no showing that such bulletins were of lesser importance than other types of permitted transmissions.[226] For these reasons, the Commission

[215] *See id.* at 1.

[216] *See id.*

[217] *See* Bob Sherin Notice of Inquiry at 1 (filed Jan. 30, 2003) (Sherin Petition).

[218] *See id.*

[219] *See id.*

[220] *See* Phillip E. Galasso Petition For Rule Making at 3 (filed Feb. 12, 2003) (Glasso Petition).

[221] *See id.* at 2.

[222] *See id.* at 2-3.

[223] *See id.* at 3.

[224] *See* 47 C.F.R. § 97.3(a)(26).

[225] *See* Petition to Amend Section 97.113(d)(2) of the Commission's Rules to Impose a Time Limit on Information Bulletins, *Order*, 3 FCC Rcd 1859 (1988).

[226] *See id*.

concluded that it would not serve the public interest to amend the rules as requested.[227]

47. The Commission has historically relied on the judgment of the station's control operator in determining the content, length, frequency, and emission type of information bulletins. We do not believe that it would serve the interest of the amateur service community to impose rules limiting the flexibility of licensees regarding these transmissions. Rather, we believe that limiting such bulletins to the extent requested would prohibit or severely restrict[228] the ability of an amateur station to provide near real-time information other amateur stations and the public desire, including information concerning severe weather, disasters, and operating information.[229] Petitioners have provided no evidence that frequency congestion is being caused by stations transmitting information bulletins, that permitting amateur stations to transmit information bulletins is hindering other amateur service communications, or that such bulletins are not serving the public interest. Accordingly, we find no reason to warrant proposing changing our Rules at this time and we deny the petitions.

C. Amateur Station Call Sign Systems.

1. Vanity Call Sign System.

48. *In Memoriam* provisions. *Background.* The license trustee of an amateur service club station may request assignment of a deceased club member's station call sign to the club with the written consent of a relative, before the call sign becomes generally available for assignment.[230] However, our Rules for the vanity call sign system do not permit the licensee of an amateur station, while living, to designate the recipient club, *in memoriam*.[231]

49. On October 26, 2001, the Quarter Century Wireless Association, Inc., sought amendment of our Rules to allow currently licensed amateur radio operators to designate a specific amateur radio club to acquire their call sign *in memoriam*.[232] In support of this request, QCWA explains that the vanity call sign system omits the most qualified individuals – licensees – from executing a written statement expressing a desire as to which radio club receives their call signs *in memoriam*.[233] This omission, QCWA notes, requires a relative to make this designation *post mortem*.[234] QCWA recommends that the *in memoriam* provision should rely on either a

[227] *See id.*

[228] For example, these restrictions would prohibit a station from transmitting brief but frequent one-way messages concerning tornadoes, hurricanes and floods. These restrictions would also prohibit an amateur station from transmitting brief (but more than once every two hours) information bulletin messages that other amateur stations desire to receive, such as timely notifications of another station's frequency and scheduled on-air operation.

[229] *See e.g.*, DX Summit at http://oh2aq.kolumbus.com/dxs/.

[230] The relative may be a spouse, child, grandchild, stepchild, parent, grandparent, stepparent, brother, sister, stepbrother, stepsister, aunt, uncle, niece, nephew, or in-law of the deceased licensee. *See* 47 C.F.R. § 97.19(c)(3).

[231] *See id.*

[232] *See* Quarter Century Wireless Association, Inc. Petition For Rule Making (filed Oct. 26, 2001) (QCWA Petition). The QCWA Petition was placed on public notice on January 8, 2002. *See Public Notice*, Report No. 2522 (rel. Jan. 8, 2002). A list of commenters is presented in Appendix B.

[233] *See id.* at 2-3.

[234] *See id.* at 1.

written statement of licensee consent *ante mortem*, or a written document provided by a relative of the club member *post mortem*.[235] QCWA avers that this additional option would allow its chapters to fulfill the expressed desire of a member *in memoriam.*[236]

50. *Discussion.* A majority of commenters agree with QCWA that a licensee should be able to express his or her desire as to which radio club receives their call signs *in memoriam*.[237] Two commenters state that it would be much easier for the licensee to make the bequest than for his or her relatives.[238] Those who oppose the amendment want the Commission to maintain control over call sign grants by requiring radio clubs to apply for such call signs.[239] One commenter opposes the petition on the basis that widespread retirement of scarce call signs would force future generations of amateur operators to use less efficient call signs.[240] Another commenter opposes the amendment because it may complicate legal issues regarding wills, remove the ability to monitor license classes, and may affect the Commission's policies on revoking call signs and licenses.[241]

51. We believe that the record supports proposing QCWA's amendment of our Rules. We also believe that the request is consistent with the filing priorities already incorporated in the vanity call sign system and the Commission's determination to maintain a fair and equitable vanity call sign assignment system.[242] Accordingly, we invite comment on QCWA's proposal.

52. Multiple Applications. *Background.* Under our Rules, an applicant may file multiple applications requesting a specific vanity call sign, along with the attendant filing fee for each application.[243] When multiple applicants request the same vanity call sign as their first choice, we use a lottery to select the first application to be processed.[244] Applicants who file multiple applications requesting the same vanity call sign as their first choice have a greater chance that we will select one of their applications in the lottery than applicants who file a single application. Applicants who file an application that we do not select in the lottery are eligible to request a refund of the filing fee.[245]

53. On September 10, 2002, Messrs. Edwards, Lynch, and Young requested that we amend Part 97 to prohibit acceptance of more than one application per applicant per vanity call

[235] *See id.* at 3.

[236] *See id.* at 4.

[237] *See, e.g.,* Dave Bowker Comments at 1, Jeffery Goodnuff Comments at 1, Sam R. Kelly Comments at 1, Collin Dvork Comments at 1.

[238] Dave Bowker Comments at 1, Jeffery Goodnuff Comments at 1.

[239] *See, e.g.,* Harold Tate Comments at 1, Steven E. Matda Comments at 1.

[240] *See, e.g.,* Ken Alan Comments at 1.

[241] *See, e.g.,* Steve Bryant Comments at 1.

[242] *See* Amendment of the Amateur Service Rules to Implement a Vanity Call Sign System, *Report and Order*, 10 FCC Rcd 1039, 1039 ¶ 4 (1995).

[243] *See* 47 C.F.R. § 97.19(b).

[244] *See* 47 C.F.R. § 97.3(a)(11).

[245] *See* 47 C.F.R. § 1.913.

sign.[246] Petitioners explain that this restriction will ensure that all applicants receive an equal chance to receive the requested call sign.[247] In support of this request, petitioners note that for very desirable call signs, such as the "W" or "K" 1 X 2 call signs,[248] and the 2 X 1 call signs,[249] there are almost always multiple applicants for a single call sign,[250] and often those who file multiple applications are successful in being awarded the desired call sign in the random selection process.[251] Thus, petitioners state that the Commission's practice of allowing an applicant to file multiple applications has created a *de facto* lottery which favors wealthy applicants.[252]

54. *Discussion.* When the Commission established the vanity call sign system in 1995,[253] the license process permitted an applicant to file more than one application requesting a particular call sign, but very few did so. While there is no shortage of call signs that amateur service licensees may request as a vanity call sign, many licensees have expressed a strong preference for having a W or K 1 X 2 format call sign assigned to their station. Call signs of this format, however, are almost all assigned and seldom become available for assignment to other stations. Due to the preference of licensees for a W or K 1 X 2 format call sign we usually receive numerous applications when one of these call signs becomes assignable. The scarcity of these call signs persuades us to consider revising the rules to promote our goals of equity and fairness. We note that limiting the acceptance of applications to one application per applicant per vanity call sign will not eliminate refunds of fees for those submitting multiple applications for the same call sign. We request comment on this proposal.

2. Special Event Call Sign System.

55. *Background.* The special event call sign system[254] allows the licensee of an amateur station, when transmitting in conjunction with an event of special significance to the amateur service community, to select a call sign from a list of 750 "1 X 1" call signs.[255] A licensee may

[246] *See* Marvin W. Edwards, Frank A. Lynch, C. Norman Young, Jr., Petition For Rule Making at 1 (filed Sept. 10, 2002) (Edwards Petition). The Edwards Petition was placed on public notice on September 27, 2002. *See Public Notice*, Report No. 2578 (rel. Sept. 27, 2002).

[247] *See id.*

[248] A "1 X 2" call sign has a one letter prefix (K, N, W) and a two letter suffix (AA-ZZ) separated by a numeral 0-9 (for example W1AW).

[249] A "2 X 1" call sign has a two letter prefix (AA-AL, KA-KZ, NA-NZ, WA-WZ) and a one letter suffix separated by a numeral 0-9 (for example KL1B).

[250] *See* Edwards Petition at 2.

[251] *See id.* at 3.

[252] *See id.* at 6.

[253] *See* Amendment of the Amateur Service Rules to Implement a Vanity Call Sign System, *Report and Order*, PR Docket No. 93-305, 10 FCC Rcd 1039 (1995), *Memorandum Opinion and Order*, 10 FCC Rcd 11135 (1995), and *Second Memorandum Opinion and Order*, 11 FCC Rcd 5283 (1996).

[254] *See* Amendment to the Amateur Service Rules Including Amendments for Examination Credit, Eligibility for a Club Station License, Recognition of the Volunteer Examiner Session Manager, a Special Event Call Sign System, and a Self-Assigned Indicator in the Station Identification Process, *Report and Order*, 12 FCC Rcd 3804 (1997).

[255] The format of special event call signs is limited to call signs that have the single letter prefix K, N or W, followed by a single numeral 0 through 9, followed by a single letter except the letter X (for example K1B).

substitute the special event call sign for the call sign shown on the station license grant while the station is transmitting.[256] The ARRL requests that we amend our Rules[257] to add to the special event call sign system certain call sign blocks that designate territories and possessions that have no specified mailing addresses.[258] These territories and possessions include, among others, Kingman Reef, Baker and Howland Islands, and Wake Island in the Pacific Ocean, and the islands of Navassa and Desecheo in the Caribbean Sea.[259] The ARRL notes that each of these locations has a call sign prefix associated with it in the sequential call sign system, but no call sign may be assigned to any station because there is no mailing address.[260] For this reason, the ARRL asserts that these call sign blocks are not used.[261]

56. In support of this request, the ARRL states that amateur station operation from uninhabited United States territories and possessions for avocational interest, in support of a scientific expedition, and radiosporting is an event of special significance to the amateur service community and, therefore, a special event within the meaning of the special event call sign program.[262] The ARRL also states that while a 1 X 1 call sign indicates the station is participating in a special event, these call signs do not denote that the location of the station is in one of these United States territories or possessions, or denote the location of certain types of special events.[263] Two commenters support the ARRL's request.[264] One commenter opposed the request by asserting that the call signs available to the special event call sign system are sufficient to address the need.[265]

57. *Discussion.* We do not believe that the requested rule amendment is necessary because there is no requirement in the rules that a station transmit its location or denote that it is transmitting from a territory or possession when it does so. As a convenience to the amateur radio operators, however, our Rules already provide various options amateur radio operators may use to indicate that the station is transmitting from a particular US territory or possession. Specifically, Section 97.119(c) permits the control operator of a station to include one or more indicators before, after, or both before and after, the call sign.[266] We note that self-assigned indicators that control operators routinely use include the prefix reserved in the sequential call sign system for the offshore location, the name of the island, an *Islands On The Air* reference number, and grid square designators. Self-assigned indicators have been used successfully by many FCC and foreign licensees and have been accepted by other amateur radio operators. In addition, our Rules provide for the use of special event call signs to inform other stations of

[256] *See* 47 C.F.R. § 97.3(a)(11).

[257] *See id.*

[258] *See* ARRL Petition at 16-18.

[259] *See id.* at 17.

[260] *See id. citing* 47 C.F.R. § 97.19(d)(4).

[261] *See id* at 17.

[262] *See id.* at 16-17.

[263] *See* ARRL Petition at 17.

[264] *See* Frank A. Lynch Comments of at 1 and Rich Eyre-Eagles Comments at 1.

[265] *See* Michael Bucklaew Comments at 2 (citing the use of the special event call sign K5K by stations transmitting from Kingman Reef).

[266] *See* 47 C.F.R. § 97.119(c).

transmissions from locations without a mailing address.[267] In this regard, we note there is no shortage of special event call signs and that many licensees have successfully used this alternative. [268]

D. Field Repair Requirements for Equipment.

58. *Background.* On February 11, 2002, Mr. Nickolaus E. Leggett requested amendment of the amateur service rules to require all commercially-built amateur radio equipment to be field-repairable.[269] In support of his request, Leggett states that most commercially-built amateur radio systems are difficult to repair in the field due to a very densely packaged structural design that is optimized for machine assembly thereby making it extremely difficult to access, diagnose, and replace parts in the field.[270] The petitioner also requests the rules to include specific equipment design requirements.[271]

59. *Discussion.* We received over eighty comments to the Leggett Petition. All but three commenters oppose the amendment explaining that the petition is vague;[272] that there is no need to regulate the repairability of amateur radio equipment;[273] that commercially produced

[267] *See* 47 C.F.R. § 97.3(a)(11). Allowing call sign blocks that denote specific offshore locations in the sequential call sign system to also be used in the special event call sign system, may result in licensee confusion. We note that Hawaii, Alaska, and geographic locations in the Caribbean and Pacific Insular Areas where the Commission regulates the amateur service, are designated as "entities" by the ARRL for operating award purposes. As a convenience to the amateur service community, a station whose licensee has a mailing address at one of these locations is permitted a call sign with a prefix denoting the ARRL entity or "country". Although it is not currently possible to obtain a mailing address for certain of these ARRL entities, small blocks of call signs are provided for amateur operators who, while operating their stations from such locations, use these call signs as self-assigned indicators to announce their unique location to other amateur operators.

[268] We note that recently K1B was used from Baker Island, K2G from Guam, K5K from Kingman Reef, K7K from Kure Island, K8O from Ofu Island, American Samoa, and K8T from Tutuila Island, American Samoa.

[269] *See* Mr. Nickolas E. Leggett Petition For Rule Making at 4 (filed Nov. 21, 2001) (Leggett Petition). The Leggett Petition was placed on public notice on April 16, 2002. *See* Public Notice, Report No. 2543 (rel. Apr. 16, 2002). A list of commenters is presented in Appendix B.

[270] *See id.* at 2.

[271] The Leggett Petition recommends the following as examples of design requirements that should be mandated by the Commission: field-replaceable modules or circuit boards; required minimum spacing of components on circuit boards for access and replacement; test points and test jacks for measuring voltages, currents, and wave forms; light-emitting diode (LED) displays of bus signals on digital systems; chassis with access doors and removable shielding sections for radio frequency probing and field repair without removal of all the enclosures; removable integrated circuits (ICs) mounted in sockets; availability of spare ICs and other special components used in amateur radio equipment, and availability of service manuals and fully-detailed schematic diagrams of the amateur radio equipment (including specifications of the normal voltages, currents, and wave forms at the equipment test points), as examples of design requirements that could be mandated. Leggett Petition at 4-5.

[272] *See, e.g.*, Neil J. Nitzberg Comments at 1, Randall Winchester Comments at 1, Fred C. Kelly, III, Comments at 1.

[273] *See, e.g.*, Paul Hadley Comments at 1, Willis Whatley Comments at 1, Randall Winchester Comments at 1, John Flynn Comments at 1.

equipment already is repairable in some manner;[274] that adopting the requirements requested in the petition would result in less reliable equipment;[275] that those interested in field repairability can buy kits,[276] and having a backup radio available can solve the problem of field repairability of equipment.[277]

60. Based on our review of the record, we are not persuaded that proposing the requested rule amendment is warranted. From the comments received, there appears to be strong sentiment within the amateur radio community against requiring field-repairable equipment. Because we are particularly concerned that the requested rule is vague and would impose an apparently unnecessary requirement on manufacturers, we believe that this request, if adopted, would reduce the availability and reliability of commercially produced amateur radio equipment. We believe that such a result is not in the public interest and, for this reason, we deny the petition.

E. Unlicensed Operation in the 420-450 MHz Band.

61. *Background.* In the United States, the 420-450 MHz frequency band is allocated to government radiolocation services on a primary basis and the amateur service on a secondary basis.[278] Part 95 Personal Radio Services are not authorized in this frequency band.[279] On January 2, 2002, Dr. Michael C. Trahos (Trahos Petition) requested amendment of the amateur service rules and the Personal Radio Service rules to authorize a service similar to the Family Radio Service (FRS) in the 420-450 MHz band.[280] In support of his request, the petitioner states that in 1998, Europe adopted a 446 MHz Personal Mobile Radio (PMR) Service, PMR 446, that is similar to the FRS, except that PMR 446 utilizes eight channels between 446.0 MHz and 446.1 MHz.[281] The petitioner alleges that individuals are illegally importing PMR 446 radios into the U.S.[282] Moreover, he asserts that there appears to be no effort to stop this illegal importation or use of these PMR 446 radios in the US.[283] Thus, the petitioner requests that we legalize the current use of PMR 446 radios by visiting non-US resident foreign nationals on a license exempt

[274] *See, e.g.*, William C. White Comments at 2, Rich Eyre Comments at 1, Jay D. Berringer Comments at 2, Randall Winchester Comments at 1, Ed Bodnar Comments at 1, Charles Johnson Comments at 1, Carl R. Stevenson Comments at 3, Larry L. Ledlow, Jr., Comments at 1.

[275] *See, e.g.*, Thomas P. Currie Comments at 1, Rickey D. Pierce Comments at 1, Howard Stickly Comments at 1, Kerry Steffens Comments at 1, Hans Brakob Comments at 1, Mark Richards Comments at 1, John Getz Comments at 1, W. Lee McVey Comments at 1, Phillip Brittenham Comments at 1, David Reynolds Comments at 1.

[276] *See, e.g.*, Marc Pohm Comments at 1, Christopher J. Cieslak Comments at 2, Larry L. Ledlow, Jr., Comments at 1.

[277] *See, e.g.*, Robert Boehmer Comments at 1, Francis Bradley Comments at 1, Richard Thommason Comments at 1, Vincent Mastroglovanni Comments at 1.

[278] *See* 47 C.F.R. § 2.106.

[279] *See id.*

[280] *See generally* Trahos Petition. The Trahos Petition was placed on public notice on August 8, 2002. *See* Public Notice, Report No. 2567 (rel. Aug. 8, 2002). A list of commenters is presented in Appendix B.

[281] *See id.* at 5.

[282] *See id.* at 6.

[283] *See id.*

secondary basis to amateur service operations.[284]

62. *Discussion.* We received over 120 comments were received, each strongly opposing the Trahos Petition. Commenters generally argue that the 420-450 MHz band is allocated to the U.S. government radiolocation services on a primary basis and should not be authorized to the unlicensed personal radio services.[285] The ARRL and others oppose the requested rule amendments on the basis that unlicensed operation on 446.0-446.1 MHz is contrary to the fundamental regulatory structure of the amateur service,[286] and would cause interference to amateur service repeaters and other amateur service stations.[287] Other commenters state that the requested rule revision is unnecessary because visitors can purchase inexpensive FRS radios while visiting the U.S., thereby keeping unlicensed operators on unlicensed frequencies.[288] In addition, some commenters aver that unlicensed operation by foreign visitors to the U.S. can be addressed by educating such visitors as to our Rules through foreign consular offices and the internet.[289]

63. As stated previously, in the United States, the 420-450 MHz frequency band is allocated to government radiolocation services on a primary basis and the amateur service on a secondary basis.[290] Part 95 Personal Radio Services are not authorized in this frequency band.[291] Therefore, absent a new allocation in the 420-450 MHz frequency band for an unlicensed personal radio service, we can not propose revising the rules as requested. We do not believe that a new allocation is necessary because alternative services exist to meet the communication needs of such individuals. For example, visitors may use FRS units, Multi-Use Radio Service units,[292] and communications devices approved under Part 15 of our Rules to meet their need for personal communications. Furthermore, we agree that an effective method of curtailing illegal personal use by foreign visitors can be achieved through awareness programs and other educational material offered via foreign consular offices and the Internet. Therefore, we decline to seek comment on the Trahos Petition.

F. Station Identification.

64. *Background.* Our Rules generally require each amateur station to transmit its assigned call sign on its transmitting channel.[293] Specifically, the station must transmit the call

[284] *See id.*

[285] *See, e.g.,* Todd Ellis Comments at 2, Tim Osborne Comments at 1.

[286] *See, e.g.,* ARRL, Inc. Comments at 3.

[287] *See, e.g.,* ARRL, Inc., Comments at 4, Phillip E. Glasso Comments at 2, Danny L. Musten Comments at 1, BJ Jenkins, Sr., Comments at 1, Ken Meyer at Comments 1, James A.. Pierson, Jr., Comments at 1, JR Bayford Comments at 1.

[288] *See, e.g.,* Susan Swiderski Comment at 1, Don Byrer Comments at 1, Lee Hendrickson Comments at 1, Tim Osborne Comments at 1, ARRL Comments at 5.

[289] *See* Todd Ellis Comments of at 2, Philip E. Glasso Comments at 3.

[290] *See* 47 C.F.R. § 2.106.

[291] *See id.*

[292] *See* 47 C.F.R. Part 95 Subpart J.

[293] *See* 47 C.F.R. § 97.119(a). There are two exceptions to this general rule. We do not require space stations and telecommand stations to transmit their assigned call sign on their transmitting channel at the end of each communication and at least every ten minutes during a communication.

sign with an emission authorized for the transmitting channel in one of four ways, including a CW emission[294] or a phone emission in the English language.[295] A phone emission includes tone-modulated telegraphy (MCW) for the purpose of performing the station identification procedure.[296]

65. In its petition, the ARRL requests that we amend the definition of a CW emission in Section 97.119(b)(1)[297] to include MCW to permit an amateur station operating as a repeater[298] to identify itself using an MCW emission, in addition to a CW emission type.[299] The ARRL states that because phone emissions include MCW for the purpose of performing the station identification procedure, repeater station identification using an MCW emission type should be authorized similar to CW emission types.[300] ARRL also states that this amendment would allow a repeater to identify using an MCW emission type. Two commenters supported the ARRL's request.[301]

66. *Discussion.* As an initial matter, we note that our Rules authorize an amateur station operating as a repeater to transmit a phone emission on any channel on which a repeater may transmit.[302] Further, a station may transmit its call sign using a phone emission, which includes a MCW emission when it is transmitted for the purpose of identifying the station. Therefore, because our Rules permit an amateur station operating as a repeater to identify the station using an MCW emission, we find no reason to revise Section 97.119(b)(2) as requested by the ARRL.

G. Amateur Station Operation on the 902-928 MHz Band

67. *Background.* Our Rules set forth a geographic restriction on amateur station operation in the 33 cm band (902-928 MHz) in certain areas of Colorado and Wyoming.[303] In 1990, the Commission waived this rule to authorize amateur stations in that restricted area to transmit in specified frequency segments of the 33 cm band.[304] Under the terms of this waiver, this authorization was for an indefinite time period.[305] The ARRL requests that we incorporate the terms of this waiver in the Rules so that the operating limitations in Colorado and Wyoming

[294] *See* n. 27, *supra*.

[295] *See* 47 C.F.R. § 97.119(b).

[296] *See* 47 C.F.R. § 97.3(c)(5).

[297] *See* 47 C.F.R. § 97.119(b)(1).

[298] A "repeater" is an amateur station that simultaneously retransmits the transmissions of another amateur station on a different channel or channels.

[299] *See* ARRL Petition at 15.

[300] *See id.*

[301] *See* Michael Bucklaew Comments at 1 and Frank A. Lynch Comments at 1.

[302] *See* 47 C.F.R. §§ 97.205(b), 97.305(c).

[303] *See* 47 C.F.R. § 97.303(g)(1).

[304] *See* Waiver of Parts 2 and 97 of the Rules Concerning Frequency Sharing Requirements Applicable to the Amateur Service in Portions of Colorado and Wyoming, *Order*, 5 FCC Rcd 3041 (1990). (Amateur stations may transmit on the 902.0-902.4 MHz; 902.6-904.3 MHz; 904.7-925.3 MHz; 925.7-927.3 MHz, and 927.7-928 MHz frequency segments.)

[305] *See id.*

may be known to all amateur stations.[306]

68. *Discussion.* We agree that placing these operating limitations in our Rules would increase their availability to all amateur station licensees. Accordingly, we believe that inserting these limitations into our Rules is a reasonable manner to make these limitations known. For these reasons, we propose to amend Section 97.303(g)(1) as the ARRL requests.

H. Color Coded Amateur Radio Licenses

69. *Background.* Section 97.5 of our Rules sets forth the various types of amateur service station license grants we issue.[307] We print amateur service license documents for the different types of station licenses and the different classes of operator licenses on the same license form using an automated process. On December 10, 2002, Mr. Dale E. Reich asked that we issue color-coded amateur radio license documents.[308] Specifically, the petitioner requests that we print Advanced and Amateur Extra Class operator licenses on blue paper stock, General Class operator licenses on Federal Gold paper stock, and Technician Class operator licenses on red paper stock.[309] Mr. Reich states that there is no real advantage to his request other than it would be a positive image maker for the amateur radio community.[310] The petitioner also requests that we continue to print other amateur service license documents on the paper stock we presently use.[311]

70. *Discussion.* As an initial matter we note that whether an individual is an amateur service licensee and the class of operator privileges a person has qualified for is determined only by entries in our Universal Licensing System database.[312] Possession of a license document is not necessary for an individual to be an amateur service licensee or determinative of an individual's class of operator license. For this reason, we believe the color-coding of license documents is unnecessary. We also will not propose this change because we note that, if granted, color-coded license documents would obligate us to maintain additional paper stocks to print amateur service licenses, thereby increasing our cost of administering the amateur service. This change also would adversely affect our automated license printing system because we could not print licenses in a continuous batch but rather we would have to print them in groups based on the color of the paper stock to be used, thereby further increasing the cost of administering the amateur service. The petitioner presents no reason to issue color-coded licenses. We also do not believe this change is necessary or serves any significant purpose. Accordingly, we find no reason to revise the rules as requested by Mr. Reich and we deny this petition.

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[306] *See* ARRL Petition at 18-19.

[307] *See* 47 C.F.R. § 97.5.

[308] *See* Mr. Dale E. Reich Petition For Rule Change at 1 (filed Dec. 10, 2002) (Dec. 10, 2002, Reich Petition).

[309] *See id.*

[310] *See id.*

[311] *See id.*

[312] *See* Amendment of the Amateur Service Rules to Change Procedures for Filing an Amateur Service License Application and to Make Other Procedural Changes, *Order*, 9 FCC Rcd 6111 (1994).

I. Instant Licensing

71. *Background.* When an individual initially qualifies for an amateur radio license, the volunteer examiners (VEs) submit the examinee's application to the coordinating volunteer examiner coordinator (VEC) who then electronically transmits the applications to us.[313] After we receive the file from the VEC, we revise the amateur service database to grant the examinee a station license and to show that the examinee has qualified for a particular class of amateur service operator license. When an entry for a person appears in the amateur service database, that person may be the control operator of an amateur station.[314] On December 4, 2002, Mr. Dale E. Reich requested that we amend the amateur service rules to allow VEs to issue an "instant temporary license" to examinees who qualify for an amateur radio operator license for the first time.[315] In support of this request, the petitioner states that issuing an "instant temporary license" to successful examinees would allow these individuals an option to gain rapid access to amateur radio upon passing the examinations.[316]

72. *Discussion.* As an initial matter, we note that the Commission considered "instant licensing" of amateur radio operators when it established the VEC system.[317] Specifically, the Commission noted that it does not permit private organizations to issue temporary or permanent licenses.[318] We note that since that time the Commission has not received statutory authority to allow VEs or VECs to issue amateur service operator or station licenses.[319] We also note that technological changes have resulted in the VECs filing applications electronically with the Commission thereby allowing individuals who have qualified for their first amateur service license, the only individuals who could benefit from instant licensing,[320] to be on the air within a few days of passing their examination. We do not believe that this minimal wait is unreasonable, especially in light of the obligation of the VECs to screen collected information, verify the VEs certifications, resolve all discrepancies, and perform other duties required of them.[321] We conclude the petitioner presents no new information that warrants changing the rules. Accordingly, we find no reason to revise the rules as requested by Mr. Reich and we deny this petition.

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[313] *See* 47 C.F.R. §§ 97.509(m), 97.519(b).

[314] *See* 47 C.F.R. § 97.7.

[315] *See* Mr. Dale E. Reich Petition For Rule Change at 1 (filed Dec. 4, 2002) (Dec. 4, 2002, Reich Petition).

[316] *See id.* at 2.

[317] *See* Amendment of Parts 0, 1, and 97 of the Commission's Rules to Allow the Use of Volunteers to Prepare and Administer Operator Examinations in the Amateur Radio Service, *Notice of Proposed Rulemaking*, PR Docket No. 83-27, 48 Fed. Reg. 8090 (1983).

[318] *See id.* at ¶ 21.

[319] *See* 47 U.S.C. § 154 (f)(4)(A).

[320] An licensee who has qualified for a higher class of operator license is authorized to exercise the rights and privileges of the higher class operator license until final disposition of the application or until 365 days after the passing of the examination. *See* 47 C.F.R. § 97.9(b).

[321] *See* 47 C.F.R. § 97.519(b).

J. Space Station Launch Notification

73. *Background*. Any amateur station may be a space station.[322] Moreover, the license grantee of a space station must file with the Commission written pre-space station notifications twenty-seven and five months before initiating space station transmissions, seven days following initiation of these transmissions, and no later than three months after termination of these transmissions.[323] These notifications are required so that the ITU Radiocommunications Bureau may be informed of space stations in the amateur-satellite service when these stations operate in bands shared with other services.[324]

74. On December 2, 2002, the Radio Amateur Satellite Corporation (AMSAT) requested that we amend our Rules to require the filing of pre-space station notification information within thirty days after obtaining a launch commitment rather than twenty-seven and five months before initiating space station transmissions.[325] In support of this request, AMSAT argues that, as a practical matter, amateur service licensees can not comply with the twenty-seven month notification requirement because secondary payload launch commitments, which amateur-satellite service space stations invariably fly as, rarely become available twenty-seven months or more in advance.[326] Petitioner also states that the present notification requirements are an unnecessary burden both for amateur service licensees and the Commission because they result in the Commission receiving a request to waive all or part of Section 97.207(g) every time an amateur-satellite service space station is launched.[327] In order to continue notification to others in case harmful interference occurs, however, AMSAT states that a more practical procedure would be to require the filing of pre-space station notification information within thirty days after obtaining a launch commitment.[328] Finally. AMSAT asserts that amateur service licensees can file additional information if significant changes occur in spacecraft design or launch parameters between the original filing and launch.[329]

75. *Discussion*. We received twenty six comments in response to the AMSAT Petition. All of the commenters support the amendment explaining that the present requirement can not be met,[330] that the twenty-seven month notification requirement is excessively long,[331] and that the requested amendment would eliminate the need for the Commission to process waiver requests.[332]

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[322] *See* 47 C.F.R. § 97.207(a).

[323] *See* 47 C.F.R. § 97.207(g), (h), (i).

[324] *See Radio Regulations* No. 25.11.

[325] *See* Radio Amateur Satellite Corporation Petition For Rule Making at 2 (filed December 2, 2002) (AMSAT Petition). The petition was placed on public notice on December 18, 2002. *See Public Notice*, Report No. 2589 (rel. Dec. 18, 2002). A list of commenters is presented in Appendix B.

[326] *Id.*

[327] *Id.,* 47 C.F.R. § 97.207(g).

[328] *Id.*

[329] *Id.*

[330] *See* Stephen Michael Kellett Comment at 1.

[331] *See, e.g.,* Mark Ryan Comment at 1, James E. Whedbee Comments at 1, Terry L. Nixon Comments at 1, Nickolaus E. Leggett Comments at 1, ARRL, Inc., Comments at 2-3.

[332] *See, e.g.,* James E. Whedbee Comments at 1, Howard DeFelice Comments at 1,

We agree that because amateur radio space stations are secondary payload launch commitments and these commitments rarely become available twenty-seven months or more in advance, it is not possible for licensees to meet a twenty-seven month notification requirement. We also believe that a rule that we routinely waive because it cannot be met serves no useful purpose. Additionally, we note that the intent of notification, to inform others of transmissions in case harmful interference occurs, can be satisfied by using other benchmarks for the dates notification must be submitted.

76. We will not propose to require that notification information be submitted within thirty days after obtaining a launch commitment as AMSAT requests because we do not believe that thirty days after a launch commitment is obtained provides adequate time for us to review the notification and make a determination as to its sufficiency. Rather, we propose to use the date the space station launch vehicle is determined and the date integration of the space station into the launch vehicle occurs as dates for determining when notification must be submitted. Specifically, we propose to require that pre-space notification be submitted within 30 days after the launch vehicle is determined, but no later than 90 days before the space station is integrated into the launch vehicle. In this regard, we note that the date a launch vehicle is determined usually occurs well before a launch commitment is obtained. We believe that requiring a licensee to provide notification within thirty days after the launch vehicle is determined and no later than 90 days before integration of the space station into the launch vehicle provides adequate time before launch to make changes in the space station if we find that the notification is deficient in some material way. We also propose to consolidate all notification requirements in one paragraph of the Section 97.207. We request comment on these proposals.

77. We also seek comment on what actions the Commission should take if it is presented with an orbital debris mitigation plan that raise concerns as to the debris mitigation practices of an amateur service space station.[333] In this regard, we note that the submission of a plan that is deficient in some way might require that the Commission take further action, such as modification of the licensee's station license grant, in connection with that space station.[334] In light of this concern, we also seek comment on whether we should require an affirmative prior approval of amateur service space station launches and operations, and on whether there are alternative processes, such as the use of licensing procedures based under or upon procedures in Part 25 of our rules, that may help to address our and amateur radio operators' concerns with the timing of amateur space station notification filings.

K. Examination Credit for Merit and Service

78. *Background*. When a person takes an examination for an amateur radio operator license, our Rules require that the VE must give that person examination credit for certain examination elements if that person can show he or she holds or has held certain amateur radio license grants, other Commission licenses, or certain other documents.[335] No credit is granted based on length of licensure, operating or participation activities, or any other service activities a licensee may have performed.

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[333] *See Mitigation of Orbital Debris*, Notice of Proposed Rulemaking, IB Docket No. 02-34, 17 FCC Rcd 5586 (2002). The Commission has proposed to adopt orbital debris mitigation requirements for Commission-authorized space stations, including space stations in the amateur radio service. A debris mitigation showing would be required in connection with the notification.

[334] *See, e.g.,* 47 CFR § 97.27.

[335] *See* 47 C.F.R. § 97.505.

79. On November 14, 2002, Mr. Dale E. Reich requested that we amend our Rules to allow VEs to give examination credit to Novice and Advanced Class licensees for length of licensure and merit.[336] Specifically, petitioner requests that we authorize VEs to give Novice and Advanced Class licensees examination credits necessary for them to qualify for a Technician or Amateur Extra Class operator license, respectively, if those licensees have been licensed twenty or more years or who have been without a serious FCC rule violation.[337] In support of this request, Mr. Reich states that we should allow some of the remaining Novice and Advanced Class licensees to advance to the next higher class operator license without examination because more difficult examinations were required of licensees in the past.[338]

80. *Discussion.* We received over one hundred and seventy comments in response to the Reich Petition. The majority of commenters oppose the petition explaining that the request is vague;[339] that upgrading from the Novice and Advanced Class operator licenses to the Technician or Amateur Extra Class is not difficult;[340] that length of licensure or credit for public service is unrelated to whether a person qualifies for the operating privileges of a higher class operator license;[341] and that the proposal would impose unreasonable administrative and record keeping burdens on VEs and VECs.[342]

81. Based on our review of the record, we are not persuaded that proposing the requested rule amendment is warranted. As an initial matter, we note that the issue of whether to upgrade Advanced Class licensees who had been licensed more that twenty years to the Amateur Extra Class operator license was considered but declined when the Commission simplified the amateur service license structure in 1999.[343] This decision was influenced by the request of other commenters in that proceeding that current licensees not receive additional privileges without passing the required examination elements.[344] From the comments received, there still appears to be strong sentiment within the amateur radio community against allowing examination credit based on length of licensure. The petitioner presents no new information or reason that causes us to change our view. Additionally, we are particularly concerned that length of licensure in and of itself does not show that a licensee possesses the operational and technical qualifications of a higher class operator license.

82. Likewise, we do not believe that operating without a serious FCC rule violation shows that a licensee necessarily possesses the operational and technical qualifications of a higher

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[336] *See* Mr. Dale E. Reich Petition For Rule's Change at 1 (filed Nov. 14, 2002) (Nov. 14, 2002, Reich Petition). The petition was placed on public notice on December 18, 2002. *See Public Notice*, Report No. 2589 (rel. Dec. 18, 2002). A list of commenters is presented in Appendix B.

[337] *Id*.

[338] *Id*.

[339] *See, e.g.*, William Houlne Comments at 1 and Nathan Bargmann Comments at 1.

[340] *See, e.g.*, Tim Hagfors Comments at 1, Nathan Bargmann Comments at 1, Bill Strickland Comments at 1, and James T. Ferrell Comments at 1.

[341] *See, e.g.*, Steven E. Matda Comments at 1, Justin Cox Comments at 1, John A. Reynolds Comments at 1, Thomas H. Busch Comments at 1, and Charles Ristorcelli Comments at 1.

[342] *See, e.g.*, William Houlne Comments at 2 and Steven E. Matda Comments at 1.

[343] *See License Restructure Report and Order*, 15 FCC Rcd at 323 ¶ 15.

[344] *See License Restructure Report and Order*, 15 FCC Rcd at 323 n.55.

class operator license. Rather, we believe that passing an examination concerning the operational and technical privileges of a higher class operator license shows that a licensee qualifies for that license. In this regard, we note that because current examination questions reflect current technological advances and operating practices that did not exist twenty years ago[345] the examinations an examinee must pass today may be more difficult than the examinations required of licensees in the past. For these reasons, we deny the petition.

L. Commission Proposals and Order

83. In addition to the changes recommended by the petitioners, we also propose various amendments to our Rules. We believe these changes will streamline our proceedings, simplify our administration of the amateur service, and eliminate unnecessary restrictions and requirements imposed on licensees.

84. Third-party communications. Third party communications are messages from the control operator of an amateur station to another amateur station control operator on behalf of another person, the third party.[346] Generally, the third party is an individual who is not a licensee in the amateur service. Authorization to transmit third party communications allows amateur radio operators to assist the public, particularly with respect to providing emergency communications, because amateur radio operators may transmit messages on behalf of members of the public.[347] In order to prevent individuals who have violated our Rules in the past from communicating via amateur radio stations, however, our Rules prohibit certain former licensees from being third parties.[348] We propose to revise Section 97.115 of our Rules to add to the existing list of individuals who are not eligible to be third-parties a former licensee whose license was not renewed after a hearing, and to clarify that only a station transmitting a RTTY or data emission may be automatically controlled while transmitting third-party communications.[349] We request comment on these proposals.

85. Limitations imposed on manufacturers. Our Rules prohibit commercial manufactures from marketing power amplifiers that are capable of transmitting on the 12 m and 10 m amateur service bands to amateur radio operators.[350] We believe that these rules impose unnecessary restrictions on manufacturers of amateur radio equipment, are inconsistent with the experimental nature of the amateur service,[351] and may result in amateur stations transmitting at higher power levels than necessary.[352] Accordingly, we propose to amend Sections 97.315 and 97.317 of our

[345] *See* 47 C.F.R. § 97.523.

[346] *See* 47 C.F.R. § 97.3(a)(46).

[347] *See* 47 C.F.R. § 97.1(a).

[348] *See* 47 C.F.R. § 97.115(b)(2).

[349] *See* 47 C.F.R. § 97.115.

[350] *See* 47 C.F.R. §§ 97.315, 97.317. *See also* 47 C.F.R. §§ 2.815(b), 2.1060(c). The 12 m band is 24.89-24.99 MHz and the 10 m band is 28.0-29.7 MHz. We note that the rules do not impose a similar limitation on amateur service licensees who build, modify, purchase used, or otherwise obtain a RF power amplifier.

[351] *See* 47 C.F.R. § 97.1.

[352] *See* Letter from Charles T. Rauch, Engineering Director, MFJ Enterprises (MFJ), to FCC Laboratories, Customer Service Branch (June 18, 1998) requesting waiver of Sections 97.315(b) and 97.317 to allow MFJ to market an RF power amplifier for use in conjunction with a line of low power transceivers that it manufactures. *See also* Comer Communications, Inc., Application for Waiver of Sections 97.315(b) and (continued....)

Rules[353] to clarify and simplify the exceptions in our Rules. Specifically, to eliminate the disparate restrictions imposed on manufacturers as compared to the restrictions imposed on amateur service licensees, to allow manufacturers to market equipment in the United States that they may market overseas, and to eliminate any ambiguity in these rules, we will propose to delete the following requirements: (a) a manufacturer must design an amplifier to use a minimum of 50 watts drive power, and (b) the amplifier must not be capable of operating on any frequency between 24 MHz and 35 MHz.[354] Historically, we note that the Commission promulgated Sections 97.315 and 97.317 of our Rules at a time when the Citizens Band (CB**)** Radio Service was the primary service that individuals used to satisfy their personal communication needs.[355] The Commission adopted these Rules in 1978 to prevent commercial manufacturers from marketing to CB Radio Service users RF power amplifiers that had been approved for use at amateur stations.[356] We note, however, that Section 95.411 of our Rules already satisfies the policy objectives sought by Sections 97.315 and 97.317. Specifically, Section 95.411 of our Rules prohibits, under any circumstances, an individual from attaching an external RF power amplifier or any device capable of amplifying the signal to a CB transmitter.[357] Thus, an individual who uses an amplifier at a CB Radio Service station would violate a CB Radio Service rule and not an amateur service rule. Therefore, to eliminate redundancy and provide clarity in our rules, we propose to amend Sections 97.315 and 97.317 of our Rules. We request comment on this proposal.

86. We also propose to delete Section 97.3(a)(19) of our Rules.[358] This rule section defines an external RF power amplifier kit as a number of electronic parts which, when assembled, is an external RF power amplifier, even if additional parts are required to complete assembly.[359] Because of the broad scope of this definition, we are concerned that an amateur radio operator would find it difficult to determine if a group of electronic parts he or she purchases or possesses will be defined by the Commission as an external RF power amplifier kit. In this regard, we note that because many electronic parts used in RF power amplifiers are also used in other electronic equipment, any group of electronic parts, particularly if supplemented by additional parts, could be assembled to make a power amplifier or part of a RF power amplifier.[360] Because of the uncertainty created by this rule, we propose to eliminate Section

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97.317 (filed Feb. 13, 1995) requesting permission to market an RF power amplifier for use in conjunction with an amateur station transmitter that plugs into a personal computer.

[353] *See* 47 C.F.R. §§ 97.315, 97.317; *see also*, 47 C.F.R. §§ 2.815, 2.1060(c).

[354] *See* 47 C.F.R. § 97.317(a)(3), (b), and (c).

[355] Since 1978, other personal communications services including the Family Radio Service, the Multi-Use Radio Service, the General Mobile Radio Service, and cellular-type communications services, including some with two way radio-type capabilities, have become readily available.

[356] *See* Amendment of Part 2 of the Commission's Rules to Prohibit the Marketing of External Radio Frequency Amplifiers Capable of Operation on any Frequency from 24 to 35 MHz, *Report and Order*, 67 FCC 2d 939, 940 ¶¶ 5-10 (1978).

[357] *See* 47 C.F.R. § 95.411(a). Use of a power amplifier voids an individuals authority to operate the CB station.

[358] *See* 47 C.F.R. § 97.3(a)(19).

[359] *See id*.

[360] We note that electronic parts such as resistors, fixed and variable capacitors, diodes, integrated circuits, and microprocessors are used in RF power amplifiers and consumer electronic devices. The parts used to (continued....)

97.3(a)(19) of our Rules. We request comment on this proposal.

87. Public service communications. Currently, our Rules limit amateur station transmissions in support of relief actions to disaster situations when normal communication systems are overloaded, damaged or disrupted.[361] We propose to amend Section 97.111(a) to clarify that amateur stations may at all times and on all channels authorized to the control operator, make transmissions necessary to meet essential communication needs and to facilitate relief actions.[362] One of the fundamental purposes of the amateur service is providing emergency communications to the public.[363] Consistent with the public interest, we believe that we should not restrict these communications, which may be instrumental in saving human life and property. We also believe that amending Section 97.111(a) as proposed obviates the need for Sections 97.401(a) (concerning disaster communications) and 97.401(c) (concerning the priority given to disaster communications). Thus, we propose to delete these sections. We request comment on these proposals.

88. Alaska Emergency Frequency. Section 97.401(d) of our Rules[364] authorizes an amateur station in Alaska, or within 92.6 km of Alaska, to transmit communications during emergencies on 5.1675 MHz (the Alaska Emergency Frequency).[365] However, this authorization does not include communication for training drills and tests. In contrast, we authorize other amateur stations to transmit communications for training drills and tests on channels they would use in the event of an emergency.[366] We believe that authorizing an amateur station in or near Alaska to transmit communications for training drills and testing purpose, in addition to communications during emergencies, would enhance emergency communication capabilities, thus serving the public interest. For this reason, we propose to amend Section 97.401(d) of our Rules to authorize an amateur station in, or within 92.6 km of Alaska to transmit communications during tests and drills on 5.1675 MHz. We request comment on this proposal.

89. Radio Amateur Civil Emergency Service (RACES). The RACES was established in 1952.[367] It authorizes specific frequency bands for amateur service stations to use for providing

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build an antenna tuner or power supply, for example, could be defined as an external RF power amplifier kit because, with additional parts, those parts used in an antenna tuner or a power supply may also be used in an external RF power amplifier.

[361] *See* 47 C.F.R. § 97.401(a).

[362] *See* 47 C.F.R. § 97.111(a).

[363] *See* 47 C.F.R. § 97.1(a).

[364] *See* 47 C.F.R. § 97.401(d).

[365] *See* PR Docket No. 83-464, Amendment of Parts 2, 81, 83, 87, 90, and 97 of the Commission's Rules and Regulations to Implement Changes in the Alaska Fixed Service, *Report and Order*, 49 Fed. Reg. 32194 (1984). *See also* Amendment of the Rules Governing the Maritime Radio Services, *Report and Order*, PR Docket No. 85-145, 51 Fed. Reg. 31213 (1986) (Alaska Fixed Service incorporated into the Maritime Radio Services).

[366] *See* 47 C.F.R. § 97.111(a) (an amateur station may transmit communications in tests and drills on channels it is authorized to use for emergency communication); *see also* 47 C.F.R. § 97.407(e)(4) (a station authorized in the Radio Amateur Civil Emergency Service (RACES) may also transmit these communications.

[367] *See* Providing a Radio Amateur Civil Emergency Service, Docket No. 10102, *Memorandum Opinion and Order,* 1 Rad. Reg. Part Three (P&F) 91:1141 (1952). Frequency segments for this service were established (continued....)

civil defense communications in the event that amateur service use of the radio spectrum is suspended due to war or other national emergency.[368] Presently, procedures for the use and coordination of the radio spectrum during such emergencies are specified, among other places, in Parts 201 and 214 of our Rules.[369] These procedures specify that during certain periods of wartime emergency[370] the Director of the Office of Science and Technology Policy (OSTP) will serve as the central authority over the Nation's telecommunications facilities, systems, and services,[371] and will authorize, modify, or revoke the continuance of all frequency authorizations issued by the Commission.[372] Additionally, these procedures authorize the Director, OSTP, to issue policy guidance, rules, regulations, procedures, and directives to assure effective frequency usage during wartime emergency conditions.[373]

90. Section 97.407(b) of our Rules authorize RACES stations and amateur stations participating in RACES to transmit on certain specified frequency segments during periods of wartime emergency.[374] Section 97.407(b) does not indicate, however, that such authorization is subject to other rules that are in place for the use and coordination of the radio spectrum during such emergencies. We believe that specifying frequency segments that RACES stations and amateur stations participating in RACES may transmit on is unnecessary in light of these rules. In this regard, we note that the Director, OSTP, has the authority to specify which, if any, frequency segments RACES stations and other amateur stations may transmit on. We also believe that Section 97.407(b) should be consistent with current emergency use and coordination procedures. For this reason, we propose to amend Section 97.407(b) of our Rules to delete the frequency bands and segments specified therein and to clarify that during certain emergencies the frequency segments available to RACES stations and amateur stations participating in RACES would be authorized pursuant to Part 214 of our Rules. We request comment on this proposal.

91. Qualifying examination system rules. We propose to amend certain amateur radio test administration rules to conform to current practices.[375] Specifically, we propose to eliminate Section 97.509(a) of our Rules,[376] which requires a public announcement of test locations and times, because test locations and times are given adequate coverage on club and Volunteer-

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in cooperation with the Civil Defense Administration and the military. *See Public Notice* "Frequencies Available For Amateur Participation In Civil Defense Communication" FCC 51-35, Mimeo No. 58278 (released Jan. 17, 1951) (RACES *Public Notice*). RACES, an organization of amateur radio operators who volunteer to provide essential communications and warning links to supplement State and local government assets during emergencies, currently is sponsored by the Federal Emergency Management Agency. *See* http://www.fema.gov/library/civilpg.shtm.

[368] *See* RACES *Public Notice* at 1. *See also* 47 C.F.R. § 97.407(b).

[369] *See* 47 C.F.R. Parts 201, 214.

[370] *See* 47 U.S.C. § 606.

[371] *See* 47 C.F.R. § 201.3 (g).

[372] *See* 47 C.F.R. § 214.4 (a), (b)(1).

[373] *See* 47 C.F.R. § 214.5 (a), (b).

[374] *See* 47 C.F.R. § 97.407(b).

[375] *See* 47 C.F.R. § 97 Subpart F.

[376] *See* 47 C.F.R. § 97.509(a).

examiner Coordinator (VEC) websites,[377] in newsletters,[378] and in other media. We also note that requiring these public announcements serves no useful purpose when the examination location is not accessible to the general public (*e.g.,* the location is a corporate office or military facility) or the test is being administered to one examinee as an accommodation for a disability or as a special examination procedure.[379] In addition, we believe this rule may cause some VEs to question whether our Rules prohibit them from conducting quickly-arranged examination sessions. We request comment on this proposal.

92. Section 97.505(a)(9) of our Rules[380] currently requires that VEs give examination credit for the telegraphy examination element to an examinee who holds an expired Technician Class license document granted before February 14, 1991. An examinee who holds an expired Technician Class license document granted after February 14, 1991, and who also has received credit for passing the telegraphy examination element, however, would not receive examination credit for the telegraphy examination element because Section 97.505(a)(9) does not allow the VEs to give telegraphy examination element credit to an examinee holding an expired Technician Class license document granted after February 14, 1991. We believe that an examinee who holds an expired Technician Class license and who has passed the telegraphy examination element should receive examination credit for this element regardless of when their Technician Class license was first granted. Therefore, we propose to add Section 97.505(a)(10) to our rules so that an examinee who holds a Technician Class license document granted after February 14, 1991, and who has documentation showing they have passed a telegraphy examination element, will receive examination credit for this element. We seek comment on this proposal.

93. We also propose to amend Sections 97.509(m) and 97.519(b) of our Rules to eliminate from both rules the mandated ten-day time during which VEs and VECs must submit or forward applications.[381] This limitation is not required by statute, but rather the Commission adopted it in 1984 to ensure the timely filing of examinee's paper applications with the Commission.[382] Technological changes that have occurred since 1984, however, have allowed the VECs to file applications electronically with the Commission and the rules require that they do so.[383] Therefore, we believe that a rule mandating a ten-day submission time is unnecessary in light of the current rules and actual practices in the VEC system. Accordingly, we invite comment on this proposal. We also request comment regarding whether there are other

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[377] *See e.g., http://www.arrl.org/arrlvec/examsearch.phtml, http://www.w5yi.org/vol-exam.htm,* and http://www.washarc.org/.

[378] *See e.g., Squelch Tale* (Chicago FM Club newsletter, Evanston, IL), *WASHRAG* (Wireless Association of South Hills newsletter, Pittsburgh, PA), *The Ham Arundel News* (Anne Arundel Radio Club newsletter, Annapolis, MD).

[379] *See* 47 C.F.R. § 97.509(k).

[380] *See* 47 C.F.R. § 97.505(a)(9).

[381] *See* 47 C.F.R. §§ 97.509(m), 97.519(b).

[382] *See* Amendment of Parts 0, 1, and 97 of the Commission's Rules to Allow the Use of Volunteers to Prepare and Administer Operator Examinations in the Amateur Radio Service, *Report and Order*, PR Docket No. 83-27, 48 Fed. Reg. 45652 (1983).

[383] *See* Amendment of the Amateur Service Rules to Change Procedures for Filing an Amateur Service License Application and to Make Other Procedural Changes, *Order*, 9 FCC Rcd 6111 (1994). The requirement that VECs file applications electronically with the Commission is codified at 47 C.F.R. § 97.519(b)(3).

unnecessary rules applicable to the amateur service qualifying examination system that we should eliminate, and whether there are other rules we should amend to conform with actual practices in the examination system.

94. Order. We are making minor amendments to various rule sections to clarify or eliminate duplicative language, or conform them with other rule sections. First, we will revise Section 0.131(n) of our Rules[384] to remove the phrases "commercial radio operator program (part 13 of this chapter) and" and "the program for construction, marking and lighting of antenna structures (part 17 of this chapter) and." Section 0.131 states the functions of the Wireless Telecommunications Bureau. These phrases also are contained in Section 0.131(j) of our Rules.[385] Consequently, Section 0.131 states that the Wireless Telecommunications Bureau administers the commercial radio operator program and the antenna structure registration program in two separate provisions. This redundancy serves no useful purpose.

95. Second, we will revise the definition of an "amateur operator" in Section 97.3(a)(1) of our Rules[386] to reflect that it is not the possession of a license document, but rather an entry on our Universal Licensing System (ULS) that determines whether a person is an amateur radio operator.[387] In 1994, the Private Radio Bureau made non-substantive rule changes to decrease the delay between license grant and actual operation by amateur radio operators.[388] Accordingly, an applicant may begin operating as soon as the ULS database reflects the license grant. The applicant does not have to wait for the printing, mailing, and receipt of the license document before operating. This change conforms our Rules to past changes and permits licensees to benefit from technological enhancements the Commission has embraced.

96. Third, we will replace the term "Engineer-In-Charge" with "District Director" in Section 97.109(d).[389] We will make this change because the Enforcement Bureau (EB) no longer uses the term "Engineer-in-Charge" (EIC) and because the EIC function is now performed by a District Director in EB.[390] Additionally, we will delete the definition of EIC from Section 97.3(a).[391]

97. Fourth, we also note that the rules applicable to repeater stations are found in Sections 97.203(h) and 97.205 of our Rules.[392] We will consolidate these rules in Section 97.205 by redesignating Section 97.203(h),[393] a notification requirement applicable to a repeater within 16 km of the Arecibo Observatory, as Section 97.205(h). We believe that consolidating the rules in one section will simplify their use for licensees.

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[384] *See* 47 C.F.R. § 0.131(n).

[385] *See* 47 C.F.R. § 0.131(j).

[386] *See* 47 C.F.R. § 97.3(a)(1).

[387] *See* Amendment of the Amateur Service Rules to Change Procedures for Filing an Amateur Service License Application and to Make Other Procedural Changes, *Order* 9 FCC Rcd 6111 (1994).

[388] *See id.* ¶ 4.

[389] *See* 47 C.F.R.§ 97.109(d).

[390] *See* 47 C.F.R. § 0.314.

[391] *See* 47 C.F.R. § 97.3(a)(17).

[392] *See* 47 C.F.R. §§ 97.203(h), 97.205.

[393] *See* 47 C.F.R. § 97.203(h).

98. Fifth, the international *Radio Regulations* have been amended to require that, as of January 1, 2003, the mean power of any spurious emission from a new amateur station transmitter or amplifier transmitting on a frequency below 30 MHz to be at least 43 dB below the mean power of the fundamental emission.[394] Our current rule that implements this *Radio Regulation*, Section 97.307(d), is inconsistent with the *Radio Regulations* because it permits the mean power of any spurious emission from a new transmitter or amplifier to be only 40 dB below the mean power of the fundamental emission.[395] Because Section 97.307(d) of our Rules is inconsistent with the *Radio Regulations*, we will amend it to implement the current *Radio Regulations* requirement.

99. Sixth, we will revise Section 97.505(a)(9) to refer to only expired Technician Class license documents granted before February 14, 1991. Section 97.505(a)(9) currently refers to both expired and unexpired Technician Class Operator license documents granted before February 14, 1991. Because the term of an amateur service license grant is normally ten years, there are no more unexpired Technician Class Operator license documents that the Commission granted before February 14, 1991. This change eliminates an unnecessary requirement of the VEs.

100. Lastly, we will revise Section 97.507(a)(2) of our Rules[396] so that it conforms with Section 4 of the Communications Act of 1934, as amended.[397] Section 4(f)(4)(A) of the Act requires the preparation of an amateur radio operator examination by an amateur radio operator who holds a higher class of operator license than the class of license for which the examination is being prepared. Thus, we will amend Section 97.507(a)(2) to remove authority for a Technician Class amateur radio operator to prepare a Technician Class operator license examination. We conclude that these non-substantive changes to the amateur service rules are not subject to notice and comment under the Administrative Procedure Act.[398] Specifically, we find that notice and comment on these rule changes is unnecessary because amendment of Section 0.131(n) reflects rules of agency practice and organization, and amendment of Sections 97.3(a)(1), 97.3(a)(17), 97.109(d), and 97.203(h) reflect agency organization or procedure. We also find good cause to adopt amendments to Sections 97.307(d) and 97.507(a)(2) without notice and comment. We request comment, however, as to whether other rule sections in Part 97 may be clarified, revised to eliminate duplicative language, or conformed with other sections of our Rules.

101. In summary, we believe that the public interest will be served by revising the amateur service rules as indicated above. We believe that these proposed rule changes will allow amateur service licensees to better fulfill the purpose of the amateur service and will enhance the usefulness of the amateur service to its licensees. We also seek comment on other rule changes that should be considered at this time.

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[394] *See Final Acts of the WRC-97*, Article S3 and Appendix S3, Tables I and II. *See also* Mr. Peter Chadwick, April 9, 2001 e-mail "ITU-R Recommendation SM.329" (Chadwick Request). We note that these spurious emission limits became applicable to all amateur stations after January 1, 2012.

[395] *See* 47 C.F.R. § 97.307(d).

[396] *See* 47 C.F.R. § 97.507(a)(2).

[397] *See* 47 U.S.C. § 154 (f).

[398] *See* 5 U.S.C. § 553 (b)(3).

IV. PROCEDURAL MATTERS

102. *Initial Regulatory Flexibility Certification.* The Regulatory Flexibility Act of 1980, as amended (RFA),[399] requires an initial regulatory flexibility analysis to be prepared for notice and comment rulemaking proceedings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities."[400] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[401] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[402] A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[403]

103. *In* this *Notice*, we propose to amend the rules that apply to how an individual who has qualified for an amateur service operator license and is the control operator of an amateur radio station can use an amateur radio station to pursue the basis and purpose of the amateur service.[404] The proposed rules apply exclusively to individuals who are licensees in the amateur radio service and to individuals who are control operators of amateur radio stations. Such amendments would be in the public interest because they would allow more flexibility in the way an amateur radio station can be used by a licensee, would allow the control operator of an amateur radio station additional flexibility in the operation of the station, and would take advantage of technological developments in equipment and communication techniques that have occurred since the Commission last considered operating privileges in the amateur radio service.

104. In addition, the rules proposed in this *Notice*, potentially could affect manufactures of amateur radio equipment. Based on requests from manufactures for certification of amateur radio transmitters and receivers, we believe that there are between five and ten manufactures of amateur radio equipment and that none of these manufactures are small entities. The proposed rule changes, if adopted, would apply to the control operator of an amateur radio station and would not result in a mandatory change in manufactured amateur radio equipment. Therefore, we certify that the proposals in this *Notice*, if adopted, will not have a significant economic impact on a substantial number of small entities. The Commission will send a copy of the *Notice*, including a copy of this Initial Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the SBA.[405] This initial certification will also be published in the

[399] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601– 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[400] *See* 5 U.S.C. § 605(b).

[401] *See* 5 U.S.C. § 601(6).

[402] *See* 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

[403] *See* 15 U.S.C. § 632.

[404] *See* 47 C.F.R. § 97.1

[405] *See* 5 U.S.C. § 605(b).

Federal Register.[406]

105. *Paperwork Reduction Analysis*. This *Notice* does not contain either a proposed or modified information collection requirement.

106. *Ex Parte Rules Presentations.* This is a permit-but-disclose notice and comment rulemaking proceeding. Ex parte presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission's Rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, 1.1206(a).

107. *Alternative formats.* Alternative formats (computer diskette, large print, audiocassette, and Braille) are available from Brian Millin at (202) 418-7426, TTY (202) 418-7365, or at <bmillin@fcc.gov>. This *Notice* can also be downloaded from the Commission's web site at <http://www.fcc.gov/>.

108. *Comment Dates.* Pursuant to Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before June 15, 2004, and reply comments on or before June 30, 2004. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.[407]

109. Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to <ecfs@fcc.gov>, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply.

110. Parties who chose to file by paper must file an original and four copies of each filing. The docket number appearing in the caption of this proceeding must appear in each comment or filing. All filings must be sent to the Commission's Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, 445 12th Street, SW, Room TW-A325, Washington, D.C. 20554.

111. For further information, contact William T. Cross, Public Safety and Critical Infrastructure Division, Wireless Telecommunications Bureau, (202) 418-0680, or TTY (202) 418-7233.

V. ORDERING CLAUSES

112. IT IS ORDERED that, pursuant to Sections 4(i), 4(j), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), and 303(r), NOTICE IS HEREBY GIVEN of the proposed amendment to Parts 0, 2 and 97 of the Commission's Rules, 47 C.F.R. Parts 0, 2 and 97, as described above, and that COMMENT IS SOUGHT on these proposals.

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[406] *See id.*

[407] *See* Electronic Filing of Documents in Rulemaking Proceedings, *Memorandum Opinion and Order*, 13 FCC Rcd 11322 (1998).

113. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10313, submitted by Kenwood Communications Corporation, Inc., on May 1, 2001, IS GRANTED to the extent indicated herein.

114. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10352, submitted by Mr. Jeffery T. Briggs and Mr. William R. Tippett II on September 10, 2001, IS DENIED.

115. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10353, submitted by The Quarter Century Wireless Association, Inc., on December 17, 2001, IS GRANTED to the extent indicated herein.

116. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10354, submitted by Mr. John S. Rippey on December 27, 2001, IS DENIED.

117. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10355, submitted by NASA John H. Glenn Research Center Amateur Radio Club on December 27, 2001, IS GRANTED to the extent indicated herein.

118. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10412, submitted by Mr. Nickolaus E. Leggett on February 11, 2002, IS DENIED.

119. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10413, submitted by ARRL, Inc., on March 22, 2002, IS GRANTED to the extent indicated herein.

120. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10492, submitted by Mr. Robert H. Birdsey on March 19, 2002, IS DENIED.

121. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10521, submitted by Dr. Michael C. Trahos on January 2, 2002, IS DENIED.

122. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10582, submitted by Messrs. Marvin W. Edwards, Frank A. Lynch, and C. Norman Young, Jr., on September 10, 2002, IS GRANTED to the extent indicated herein.

123. IT IS FURTHER ORDERED that the Petition for Rule Change, RM-10620, submitted by Mr. Dale E. Reich on November 14, 2002, IS DENIED.

124. IT IS FURTHER ORDERED that the Petition for Rulemaking, RM-10621, submitted by The Radio Amateur Satellite Corp. on December 2, 2002, IS GRANTED to the extend indicated herein.

125. IT IS FURTHER ORDERED that the Request for Rule Amendment submitted by Mr. Peter Chadwick on April 9, 2001, IS GRANTED to the extent indicated herein.

126. IT IS FURTHER ORDERED that the Petition for Rulemaking submitted by Mr. John J. Elengo on April 11, 2002, IS DENIED.

127. IT IS FURTHER ORDERED that the Petition for Rule Change submitted by Mr. Dale E. Reich on December 4, 2002, IS DENIED.

128. IT IS FURTHER ORDERED that the Petition for Rule Change submitted by Mr. Dale E. Reich on December 10, 2002, IS DENIED.

129. IT IS FURTHER ORDERED that the Petition for Rulemaking submitted by Mr. Johnathan S. Gunn on January 22, 2003, IS DENIED.

130. IT IS FURTHER ORDERED that the request for a Notice of Inquiry submitted by Mr. Bob Sherin on January 30, 2003, IS DENIED.

131. IT IS FURTHER ORDERED that the Petition for Rulemaking submitted by Mr. Phillip E. Galasso on February 12, 2003, IS DENIED.

132. IT IS FURTHER ORDERED that the Petition for Rulemaking submitted by Mr. Mark Miller on February 25, 2003, IS GRANTED to the extend indicated herein.

133. IT IS FURTHER ORDERED that, pursuant to Sections 4(i), 303(f), 303(r), and 332 of the Communications Act of 1934, as amended, 47 U.S.C. § § 154 (i), 303(f), 303(r) and 332, this *Order* IS ADOPTED.

134. IT IS FURTHER ORDERED that Part 97 of the Commission's Rules IS AMENDED as specified in Appendix C, effective June 1, 2004.

135. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this NOTICE OF PROPOSED RULEMAKING AND ORDER, including the Initial Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A
PROPOSED RULE CHANGES

Chapter 1 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 1 – Application Requirements and Procedures

The authority citation for part 1 continues to read as follows:

AUTHORITY: 47 U.S.C. 151, 154(i), 154(j), 155, 225, 303(r), 309, and 325(e).

1. Section 1.934 is amended by redesignating paragraph (d)(3) as (d)(4), and adding a new paragraph (d)(3) to read as follows:

§ 1.934 Defective applications and dismissal.

* * * * *

(d) * * *

(3) It includes a list of amateur station vanity call signs in order of preference and requests, as the first preferred call sign, the same call sign requested on another application filed on the same day by the same applicant.

* * * * *

Part 2 – Frequency Allocations And Radio Treaty Matters; General Rules And Regulations

The authority citation for part 2 continues to read as follows:

AUTHORITY: 47 U.S.C 154, 302a, 303, and 336, unless otherwise noted.

1. Section 2.106 is amended by revising United States footnote US267 to read as follows:

§ 2.106 Table of Frequency Allocation.

* * * * *

US267 In the band 902-928 MHz, amateur radio stations shall transmit on the frequency segments 902.0-902.4, 902.6-904.3, 904.7-925.3, 925.7-927.3, and 927.7-928.0 MHz within the States of Colorado and Wyoming, bounded by the area of latitude 39 deg. N. to 42 deg. N. and longitude 103 deg. W. to 108 deg. W.

* * * * *

2. Section 2.815 is amended by removing paragraphs (d) and (e), and revising paragraphs (b) and (c) to read as follows:

§ 2.815 External radio frequency power amplifiers.

* * * * *

(b) After April 27, 1978, no person shall manufacture, sell or lease, offer for sale or lease (including advertising for sale or lease), or import, ship, or distribute for the purpose of selling or leasing or offering for sale or lease, any external radio frequency power amplifier unless the amplifier has been approved in accordance with subpart J of this part and other relevant parts of this chapter. This proscription shall not apply to the marketing to an amateur radio operator of an external radio frequency power amplifier provided the amplifier is for use at an amateur radio station and the requirements of Sections 97.315 and 97.317 of this chapter are met.

(c) No person shall manufacture, sell or lease, offer for sale or lease (including advertising for sale or lease) or import, ship or distribute for the purpose of selling or leasing or offering for sale or lease, any external radio frequency power amplifier unless the amplifier has received a grant of certification in accordance with subpart J of this part and other relevant parts of this chapter. No more than 10 external radio frequency power amplifiers may be constructed for evaluation purposes in preparation for the submission of an application for a grant of certification. This proscription shall not apply to the marketing to a licensed amateur radio operator of an external radio frequency power amplifier provided the amplifier is for use at an amateur radio station and the requirements of Sections 97.315 and 97.317 of this chapter are met.

3. Section 2.1060 is amended by removing paragraph (c), redesignating paragraph (d) as paragraph (c) and revising paragraph (c) to read as follows:

§ 2.1060 Equipment for use in the amateur radio service.

* * * * *

(c) Certification of external radio frequency power amplifiers may be denied when denial would prevent the use of these amplifiers in services other than the Amateur Radio Service.

Part 97 - Amateur Radio Service

The authority citation for part 97 continues to read as follows:

AUTHORITY: 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-155, 301-609, unless otherwise noted.

1. Section 97.3 is amended by removing and reserving paragraph (a)(19) and revising paragraph (c)(2) to read as follows:

§ 97.3 Definitions.

* * * * *

(c) ***

(2) Data. Telemetry, telecommand and computer communications emissions having designators with A, C, D, F, G, H, J or R as the first symbol; 1 as the second symbol; D as the third symbol; emissions A1C and F2C having an occupied bandwidth of 500 Hz or less, and J2D. Only a digital code of a type specifically authorized in this part may be transmitted.

* * * * *

2. Section 97.19 is amended by revising paragraphs (c)(3) and (d)(1) to read as follows:

§ 97.19 Application for a vanity call sign.

* * * * *

(c) * * *

(3) Except for an applicant who is the spouse, child, grandchild, stepchild, parent, grandparent, step-parent, brother, sister, stepbrother, stepsister, aunt, uncle, niece, nephew, or in-law, and except for an applicant who is a club station license trustee acting with a statement of consent signed by the person *ante mortem* or the written consent of at least one relative, as listed above, of a person now deceased, the call sign shown on the license of a person now deceased is not available to the vanity call sign system for 2 years following the person's death, or for 2 years following the expiration of the license grant, whichever is sooner.

(d) ***

(1) The applicant must request that the call sign shown on the license grant be vacated and provide a list of up to 25 call signs in order of preference. In the event that an applicant requests the same call sign as their first preferred call sign in more that one application on the same receipt day, only the first processable application received by the Commission will be considered.

* * * * *

3. Section 97.111 is amended by redesignating paragraphs (a)(2) through (a)(4) as (a)(3) through (a)(5), respectively, and adding a new paragraph (a)(2) to read as follows:

§ 97.111 Authorized transmissions.

(a) * * *

(2) Transmissions necessary to meet essential communication needs and to facilitate relief actions.

* * * * *

4. Section 97.113 is amended by revising paragraph (e) to read as follows:

§ 97.113 Prohibited transmissions.

* * * * *

(e) No station shall retransmit programs or signals emanating from any type of radio station other than an amateur station, except propagation and weather forecast information intended for use by the general public and originated from United States Government stations, and communications, including incidental music, originating on United States Government frequencies between a manned spacecraft and its associated Earth stations. Prior approval for manned spacecraft communications retransmissions must be obtained from the National Aeronautics and Space

Administration. Such retransmissions must be for the exclusive use of amateur radio operators. Propagation, weather forecasts, and manned spacecraft communications retransmissions may not be conducted on a regular basis, but only occasionally, as an incident of normal amateur radio communications.

* * * * *

5. Section 97.115 is amended by revising paragraph (b)(2), redesignating paragraph (c) as paragraph (d), and adding a new paragraph (c), to read as follows:

§ 97.115 Third party communications.

* * * * *

(b) * * *

(2) The third party is not a prior amateur service licensee whose license was revoked or not renewed after hearing and re-licensing has not taken place; suspended for less than the balance of the license term and the suspension is still in effect; suspended for the balance of the license term and re-licensing has not taken place; or surrendered for cancellation following notice of revocation, suspension or monetary forfeiture proceedings. The third party may not be the subject of a cease and desist order which relates to amateur service operation and which is still in effect.

(c) No station may transmit third party communications while being automatically controlled except a station transmitting a RTTY or data emission.

* * * * *

6. Section 97.201 is amended by revising paragraph (b) to read as follows:

§ 97.201 Auxiliary station.

* * * * *

(b) An auxiliary station may transmit only on the 2 m and shorter wavelength bands, except the 144.0-144.5 MHz, 145.8-146.0 MHz, 219-220 MHz, 222.00-222.15 MHz, 431-433 MHz, and 435-438 MHz segments.

* * * * *

7. Section 97.207 is amended by revising paragraph (g) and removing paragraphs (h) and (i) to read as follows:

§ 97.207 Space station.

* * * * *

(g) The license grantee of each space station must file the following notification with the International Bureau, FCC, Washington, DC 20554.

(1) A pre-space notification within 30 days after launch vehicle determination, but no later than 90 days before integration of the space station into the launch vehicle. This notification shall include an electronic file containing the information required by Appendix 4 of the ITU Radio Regulations in the format consistent with ITU requirements. With that notification, the license grantee of the space station shall include a description of the design and operational strategies the space station will use to mitigate orbital debris, including a casualty risk assessment if planned post-mission disposal involves atmospheric re-entry of the spacecraft. The description must include an analysis demonstrating that debris generation will not result from the conversion of chemical, pressure, or kinetic energy sources on board the spacecraft into energy that fragments the spacecraft. This demonstration should address whether stored energy will be removed at the spacecraft's end-of-life, by depleting residual fuel and leaving all fuel line valves open, venting any pressurized system, leaving all batteries in a permanent discharge state, and removing any remaining source of stored energy, or through other equivalent procedures. If any material item described in the notification changes before launch, a replacement pre-space notification shall be filed with the International Bureau. The replacement notification shall be filed no later than 90 days before integration of the space station into the launch vehicle.

(2) An in-space station notification no later than 7 days following initiation of space station transmissions. This notification must update the information contained in the pre-space notification.

(3) A post-space station notification no later than 3 months after termination of the space station transmissions. When termination of transmissions is ordered by the FCC, the notification is required no later than 24 hours after termination of transmissions.

8. Section 97.301 is amended by revising paragraphs (b), (c), (d), and (e) to read as follows:

§ 97.301 Authorized frequency bands.

* * * * *

(b) * * *

Wavelength band	ITU Region 1	ITU Region 2	ITU Region 3	Sharing requirements See § 97.303, Paragraph:
* * * * * * *				
HF	MHz	MHz	MHz	
80 m	3.50-3.725	3.50-3.725	3.50-3.725	(a)
75 m	3.725-3.800	3.725-4.000	3.725-3.900	(a)

* * * * * * *

(c) * * *

Wavelength band	ITU Region 1	ITU Region 2	ITU Region 3	Sharing requirements See § 97.303, Paragraph:
* * * * * * *				
HF	MHz	MHz	MHz	
80 m	3.525-3.725	3.525-3.725	3.525-3.725	(a)
75 m	3.750-3.800	3.750-4.000	3.750-3.900	(a)
* * * * * * *				
15 m	21.025-21.200	21.025-21.200	21.025-21.200	
-Do-	21.225-21.450	21.225-21.450	21.225-21.450	
* * * * * * *				

(d) * * *

Wavelength band	ITU Region 1	ITU Region 2	ITU Region 3	Sharing requirements See § 97.303, Paragraph:
* * * * * * *				
HF	MHz	MHz	MHz	
80 m	3.525-3.725	3.525-3.725	3.525-3.725	(a)
75 m	---	3.800-4.000	3.800-3.900	(a)
40 m	7.025-7.125	7.025-7.125	7.025-7.125	(a)
-Do-	---	7.175-7.300	---	(a)
* * * * * * *				
15 m	21.025-21.200	21.025-21.200	21.025-21.200	
-Do-	21.275-21.45	21.275-21.45	21.275-21.45	
* * * * * * *				

(e) * * *

Wavelength band	ITU Region 1	ITU Region 2	ITU Region 3	Sharing requirements See § 97.303, Paragraph:
HF	MHz	MHz	MHz	
80 m	3.525-3.725	3.525-3.725	3.525-3.725	(a)
40 m	7.025-7.075	7.025-7.125	7.025-7.075	(a)
15 m	21.025-21.200	21.025-21.200	21.025-21.200	
10m	28.0-28.5	28.0-28.5	28.0-28.5	
* * * * * *				

9. Section 97.303 is amended by revising paragraph (g)(1) to read as follows:

§ 97.303 Frequency sharing requirements.

* * * * *

(g) * * *

(1) In the States of Colorado and Wyoming, bounded by the area of latitude 39 deg. N. to 42 deg. N. and longitude 103 deg. W. to 108 deg. W., an amateur station may transmit on the frequency segments 902.0-902.4, 902.6-904.3, 904.7-925.3, 925.7-927.3, and 927.7-928.0 MHz. This band is allocated on a secondary basis to the amateur service subject to not causing harmful interference to, and not receiving any interference protection from, the operation of industrial, scientific and medical devices, automatic vehicle monitoring systems, or Government stations authorized in this band.

* * * * *

10. Section 97.305 is amended by revising paragraph (c) to read as follows:

§ 97.305 Authorized emission types.

* * * * *

(c) * * *

Wavelength band	Frequencies	Emission types authorized	Standards See § 97.307(f), Paragraph:
* * * * * * *			
HF			
* * * * * * *			
40 m	7.000-7.075 MHz	RTTY, data	(3), (9)
-Do-	7.075-7.100 MHz	Phone, image	(1), (2), (9), (11)
-Do-	7.100-7.125 MHz	RTTY, data	(1), (9)
-Do-	7.125-7.300 MHz	Phone, image	(1), (2)
* * * * * * *			
VHF			
* * * * * * *			
1.25 m	219-220 MHz	Data	(13)
-Do-	222-225 MHz	RTTY, data, test MCW, phone, SS, image.....	(2), (6), (8)
* * * * * * *			

11. Section 97.313 is amended by revising paragraph (c) to read as follows:

§ 97.313 Transmitter power standards.

* * * * *

(c) No station may transmit with a transmitter power exceeding 200 W PEP:

(1) On the 10.10-10.15 MHz segment;

(2) When the control operator is a Novice Class operator or a Technician Class operator who has received credit for proficiency in telegraphy in accordance with the international requirements; or

* * * * *

12. Section 97.315 is amended by revising paragraphs (a), (b) introductory text, (b)(1) through (b)(3), and (c) to read as follows:

§ 97.315 Certification of external RF power amplifiers.

(a) Any external RF power amplifier (see Section 2.815 of the FCC Rules) manufactured or imported for use at an amateur radio station must be certificated for use in the amateur service in accordance with Subpart J of Part 2 of the FCC Rules. No amplifier capable of operation below 144 MHz may be constructed or modified by a non-amateur service licensee without a grant of certification from the FCC.

(b) The requirement of paragraph (a) does not apply if one or more of the following conditions are met:

(1) The amplifier is constructed or modified by an amateur radio operator for use at an amateur station.

(2) The amplifier was manufactured before April 28, 1978, and has been issued a marketing waiver by the FCC, or the amplifier was purchased before April 28, 1978, by an amateur radio operator for use at that operator's station.

(3) The amplifier is sold to an amateur radio operator or to a dealer, the amplifier is purchased in used condition by a dealer, or the amplifier is sold to an amateur radio operator for use at that operator's station.

(c) Any external RF power amplifier appearing in the Commission's database as certificated for use in the amateur service may be marketed for use in the amateur service.

13. Section 97.317 is amended by revising paragraph (a) introductory text, paragraphs (a)(1), (a)(2), and paragraph (b) to read as follows:

§ 97.317 Standards for certification of external RF power amplifiers.

(a) To receive a grant of certification, the amplifier must:

(1) Satisfy the spurious emission standards of Sec. 97.307(d) or (e) of this part, as applicable, when the amplifier is operated at the lesser of 1.5 kW PEP or its full output power and when the amplifier is placed in the "standby" or "off" positions while connected to the transmitter.

(2) Not be capable of amplifying the input RF power (driving signal) by more than 15 dB gain. Gain is defined as the ratio of the input RF power to the output RF power of the amplifier where both power measurements are expressed in peak envelope power or mean power.

(b) Certification may be denied when the Commission determines the amplifier can be used in services other than the Amateur Radio Service.

14. Section 97.401 is amended by removing and reserving paragraph (a), removing paragraph (b), redesignating paragraph (c) as paragraph (a), and revising paragraph (a) to read as follows:

§ 97.401 Operation during a disaster.

(a) A station in, or within 92.6 km of, Alaska may transmit emissions J3E and R3E on the channel at 5.1675 MHz for emergency communications. The channel must be shared with stations licensed in the Alaska private fixed service. The transmitter power must not exceed 150 W. A station in, or within 92.6 km of, Alaska may transmit communications for tests and training drills necessary to ensure the establishment, operation, and maintenance of emergency communication systems.

* * * * *

15. Section 97.407 is amended by revising paragraph (b) to read as follows:

§ 97.407 Radio amateur civil emergency service.

(a) ***

(b) The frequency bands, segments, and emissions authorized to the control operator are available to stations transmitting communications in RACES on a shared basis with the amateur service. In the event of an emergency which necessitates the invoking of the President's War Emergency Powers under the provisions of Section 706 of the Communications Act of 1934, as amended, 47 U.S.C. 606, RACES stations and amateur stations participating in RACES may only transmit on the frequency segments authorized pursuant to part 214 of this chapter.

* * * * *

16. Section 97.505 is amended by adding paragraph (a)(10) to read as follows:

§ 97.505 Element credit.

(a) * * *

(10) An expired FCC-issued Technician Class license document and a CSCE indicating the examinee has passed a telegraphy examination:

Element 1.

* * * * *

17. Section 97.509 is amended by revising paragraphs (a) and (m) to read as follows:

§ 97.509 Administering VE requirements.

(a) Each examination for an amateur operator license must be administered by a team of at least 3 VEs at an examination session coordinated by a VEC. The number of examinees at the session may be limited.

* * * * *

(m) After the administration of a successful examination for an amateur service operator license, the administering VEs or the VE session manager must submit the application document to the coordinating VEC according to the coordinating VEC's instructions.

18. Section 97.519 is amended by revising paragraph (b) to read as follows:

§ 97.519 Coordinating examination sessions.

* * * * *

(b) At the completion of each examination session, the coordinating VEC must collect applicant information and test results from the administering VEs. The coordinating VEC must:

* * * * *

APPENDIX B
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RM-10313

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RM-10413

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APPENDIX C
RULE CHANGES

Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 0 – Commission Organization

The authority citation for part 0 continues to read as follows:

AUTHORITY: Sec. 5, 48 Stat. 1068, as amended; 47 U.S.C. 155, 225, unless otherwise noted.

1. Section 0.131 is amended by revising paragraph (n) to read as follows:

§ 0.131 Functions of the Bureau.

* * * * *

(n) Administers the Commission's amateur radio programs (part 97 of this chapter) and the issuing of maritime mobile service identities (MMSIs).

* * * * *

Part 97 - Amateur Radio Service

The authority citation for part 97 continues to read as follows:

AUTHORITY: 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-155, 301-609, unless otherwise noted.

1. Section 97.3 is amended by revising paragraph (a)(1) and by removing and reserving paragraph (a)(17) to read as follows:

§ 97.3 Definitions.

(a) * * *

(1) Amateur operator. A person named in an amateur operator/primary license station grant on the ULS consolidated licensee database to be the control operator of an amateur station.

* * * *

2. Section 97.109 is amended by revising paragraph (d) and removing paragraph (e) to read as follows:

§ 97.109 Station control.

* * * * *

(d) When a station is being automatically controlled, the control operator need not be at the control point. Only stations specifically designated elsewhere in this part may be automatically controlled. Automatic control must cease upon notification by a District Director that the station is transmitting improperly or causing harmful interference to other stations. Automatic control must not be resumed without prior approval of the District Director.

* * * *

3. Section 97.203(h) is redesignated as Section 97.205(h).

4. Section 97.307 is amended by revising paragraph (d) to read as follows:

§ 97.307 Emission standards.

* * * * *

(d) For transmitters installed after January 1, 2003, the mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency below 30 MHz must be at least 43 dB below the mean power of the fundamental emission. For transmitters installed on or before January 1, 2003, the mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency below 30 MHz must not exceed 50 mW and must be at least 40 dB below the mean power of the fundamental emission. For a transmitter of mean power less than 5 W installed on or before January 1, 2003, the attenuation must be at least 30 dB. A transmitter built before April 15, 1977, or first marketed before January 1, 1978, is exempt from this requirement.

* * * * *

5. Section 97.505 is amended by revising paragraph (a)(9) to read as follows:

§ 97.505 Element credit.

(a) * * *

(9) An expired FCC-issued Technician Class operator license document granted before February 14, 1991: Element 1.

* * * * *

6. Section 97.507 is amended by revising paragraph (a)(2) to read as follows:

§ 97.507 Preparing an examination.

(a) * * *

(2) Elements 1 and 2: Advanced or General Class operators.

* * * * *