

Federal Communications Commission

FCC 98-183

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

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| In the Matter of |) | WT Docket No. 98-143 |
| |) | |
| 1998 Biennial Regulatory Review -- |) | RM-9148 |
| Amendment of Part 97 of the Commission's |) | RM-9150 |
| Amateur Service Rules. |) | RM-9196 |
| |) | |
| |) | |

NOTICE OF PROPOSED RULE MAKING

Adopted: July 29, 1998

Released: August 10, 1998

Comment Date: December 1, 1998

Reply Comment Date: January 15, 1999

By the Commission: Commissioner Furchtgott-Roth issuing a statement.

I. INTRODUCTION

1. We are initiating this proceeding as part of our 1998 biennial review of regulations pursuant to Section 11 of the Communications Act of 1934, as amended.¹ Section 11 requires us to review all our regulations applicable to providers of telecommunications service and determine whether any rule is no longer in the public interest as a result of meaningful economic competition between providers of telecommunications services, and whether such regulations should be deleted or modified. In conjunction with our biennial review of regulations required under Section 11, however, we believe it is appropriate to review all of our regulations relating to administering wireless services, not just those pertaining to providers of telecommunications services, to determine which regulations can be streamlined or eliminated.²

2. With this *Notice of Proposed Rule Making (Notice)*, we commence a proceeding to examine our rules for the Amateur Radio Service in an effort to eliminate unnecessary and duplicative rules, as well as to streamline our licensing processes. We also examine streamlining initiatives for the Amateur Radio Service in addition to those already described in our proposals concerning the Universal Licensing

¹ See Section 11 of the Communications Act of 1934, as amended, 47 U.S.C. § 161.

² See "FCC Staff Proposes 31 Proceedings as Part of 1998 Biennial Regulatory Review", *FCC News*, Report No. GN 98-1 (February 5, 1998).

System (ULS).³

II. EXECUTIVE SUMMARY

3. In this *Notice*, we propose to modify our Amateur Radio Service rules as follows:
 - o Reduce the number of license classes from 6 to 4.
 - o Provide greater opportunities to volunteer examiners (VEs) to participate in the examination process.
 - o Eliminate Radio Amateur Civil Emergency Service (RACES) licenses because the emergency communications that routinely are transmitted by RACES stations can be transmitted by primary, club or military recreation stations.
4. We seek comment on ideas for improving our enforcement processes as they relate to amateur radio.
5. We also seek comment on changes to the telegraphy requirements for the amateur radio service and to the written examinations that must be passed to qualify for an amateur radio license.
6. Finally, we dispose of various routine and repetitive petitions for rule making which concern matters on which the Commission already has acted.

III. BACKGROUND

7. Amateur radio operators engage in voluntary, noncommercial communications with other amateur operators located in the United States and in foreign countries. The Amateur Radio Service is for persons of any age who are interested in radio technique solely with a personal aim and without pecuniary interest.⁴ It presents an opportunity for self-training, intercommunication and technical investigation. Millions of amateur operators in all areas of the world communicate with each other directly or through *ad hoc* relay systems. They exchange messages by voice, teleprinting, telegraphy, digital packets, facsimile and television. All frequencies are shared. No frequency is assigned for the exclusive use of any amateur station. When normal communication systems have been overloaded, damaged or disrupted because a disaster has occurred, or is likely to occur, amateur operators repeatedly have provided essential communications links and facilitated relief actions on a purely voluntary basis.

8. There are currently six classes of amateur operator licenses. The higher the license class, the more expertise the licensee must demonstrate by examination and the greater the frequency privileges the

³ See *Notice of Proposed Rule Making*, In the Matter of Biennial Regulatory Review -- Amendment of Parts 0, 1, 13, 22, 24, 26, 27, 80, 87, 90, 95, 97, and 101 of the Commission's Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Services, WT Docket 98-20, (FCC 98-25 adopted February 19, 1998).

⁴ 47 C.F.R. §§ 97.1 and 97.3(a)(4).

amateur operator is authorized.⁵ Novice Class licensees pass a slow speed telegraphy examination and have limited frequency privileges. The Technician Class license holder may use any of seventeen frequency bands above 50 MHz. Holders of the Technician Plus Class have additional privileges in four shortwave bands, between 3-30 MHz. The General Class carries privileges in all twenty-seven amateur service bands. The privileges of an Advanced Class licensee includes 275 kHz of additional spectrum in the high frequency (HF) bands. The frequency privileges of an Amateur Extra Class includes access to an additional 175 kHz in the HF bands. The class for which each examinee is qualified is determined by the degree of skill and knowledge in operating a station that the examinee demonstrates at the examination.

9. The Amateur Radio Service rules are designed to provide emergency communications, advance radio technology, improve operator skills, enhance international goodwill, and expand the number of trained operators, technicians and electronic experts.⁶ The last major restructuring of the Amateur Radio Service rules took place in 1989.⁷ At that time, we eliminated unnecessary rules and simplified complex terminology to create a more meaningful and easy-to-use body of regulations. In view of advanced communication techniques, this is an opportune time to consider additional ways to streamline and simplify the Amateur Radio Service Rules by conforming them to contemporary technological advances in the art of radio communication.

10. Three petitions for rule making filed by The American Radio Relay League, Inc. (ARRL) are also addressed in this *Notice*. In RM-9148,⁸ ARRL proposes revision to the amateur service rules to provide more opportunities to VEs to prepare and administer examinations. In RM-9150,⁹ ARRL proposes amendment of the amateur service rules to create a private sector complaint procedure for resolving cases of malicious interference in the amateur service. In RM-9196,¹⁰ ARRL proposes amendment of the amateur service rules allowing telegraphy examination credit to examinees with a disability. The issues raised in the ARRL petitions are within the scope of this Regulatory Review and are consolidated in this proceeding.

IV. DISCUSSION

A. Number of License Classes

11. There are six classes of operator licenses in the amateur radio services.¹¹ Each time that an

⁵ See 47 C.F.R. § 97.9.

⁶ See 47 C.F.R. § 97.1.

⁷ See *Report and Order, In the Matter of Reorganization and Deregulation of Part 97 of the Rules Governing the Amateur Radio Service*, PR Docket No. 88-139, 4 FCC Rcd 4719 (1989).

⁸ See Petition for Rule Making, filed October 28, 1996.

⁹ See Petition for Rule Making, filed March 28, 1997.

¹⁰ See Petition for Rule Making, filed September 23, 1997.

¹¹ The current operator license classes are: Novice, Technician, Technician Plus, General, Advanced and Amateur Extra. See 47 C.F.R. § 97.9.

amateur operator moves to a higher class, the VEs must prepare and administer an examination, and the Commission must process a license transaction to modify the data base and issue a license document. While we continue to believe there should be a number of license classes sufficient to encourage amateur operators to advance their skills in meaningful ways,¹² six classes of operator licenses may be unnecessary. Reducing the number of classes of operator licenses would relieve the VEs from the tasks of preparing and administering unnecessary examinations. It would also ease the Commission's burden of providing oversight of the system and maintaining a data base of the current operator class for every amateur operator.¹³ We note that an ARRL committee recommended that the number of license classes be reduced from six to five by deleting the Novice Class and restructuring the Technician and Technician Plus Classes.¹⁴

12. We have reviewed the various license classes and there appears to be an unnecessary overlap between the Novice, Technician and Technician Plus license classes. The Novice Class was established in 1951, at a time when telegraphy was still a common mode of radio communication in commercial, military, and marine services and applications.¹⁵ Currently, there are very few individuals who take the examination for the Novice Class operator license. For example, in 1997, we received only 961 applications for the Novice Class. By comparison, we received 21,416 applications for the no-code Technician Class operator license.¹⁶ We believe that the no-code Technician Class operator license has replaced the Novice Class operator license as the entry-level license class of choice. Therefore, we tentatively conclude that the Novice Class operator license no longer serves a significant, useful purpose and should be phased out,¹⁷ with the current holders of Novice Class operator licenses being grandfathered. No new Novice Class licenses would be granted, but anyone currently holding licenses would be permitted to modify or renew their licenses. In addition, Novice Class operators would be eligible for examination credit for the telegraphy requirement for any license class. We seek comment on this proposal. We also seek comment on disposition of the designated Novice bands. Currently, other class licensees can operate within the Novice bands, but only at reduced power. Given the small number of new Novice licenses now being issued, if we were to discontinue licensing new Novices, would it be appropriate to delete the frequency limitations on Novices and the power limitations on other classes of operators using the Novice frequencies, so that Novices would continue to be limited to 200 watts output power but could operate using the Morse code anywhere within the 80, 40, 15 and 10 meter bands?

¹² See 47 C.F.R. § 97.1(c).

¹³ As of December 1, 1997, the data base listed 719,331 amateur operators. There were 79,965 in the Novice Class, 179,226 in the Technician Class, 147,559 in the Technician Plus Class, 124,415 in the General Class, 112,482 in the Advanced Class and 75,694 in the Amateur Extra Class.

¹⁴ QST, March 1997 at pp. 55-57.

¹⁵ See *Report and Order*, Docket 9295, 42 FCC 198 (1951).

¹⁶ The interest in the Novice Class operator license shows a steady decline while a strong interest is shown in the no-code Technician Class operator license. For example, in 1995, there were 1,391 Novice applicants as compared with 961 applicants for that license class in 1997. For the past 3 years, however, we have received more than 20,000 applications per year for the no-code Technician Class operator license.

¹⁷ On December 1, 1993, there were 100,098 Novice Class operators. The number of Novice Class operators declined to 88,192 on December 1, 1996, and to 79,965 on December 1, 1997.

13. The only difference between the Technician and Technician Plus Classes is that a Technician Plus operator has passed a five words¹⁸ per minute (wpm) telegraphy examination while a Technician Class operator has not.¹⁹ Both Technician and Technician Plus Class licensees predominantly use FM voice and digital packet technologies on the amateur VHF and UHF bands. Yet, the VEs are burdened with preparing and administering telegraphy examinations, and the Commission is burdened with processing the resulting applications and revising the data base. We therefore propose that the Technician Plus Class be phased out. Holders of an FCC-issued Technician Class operator license granted before March 21, 1987, have previously passed the written examination required to qualify for a General Class operator license.²⁰ Other Technician Plus Class operators could qualify for a General Class operator license by passing written examination Element 3(B) which consists of thirty questions on the additional privileges of a General Class operator license and the 13 or 20 wpm telegraphy examination. We seek comments on this proposal.

B. Greater Volunteer Examiner Opportunities

14. Currently, an Advanced Class operator cannot prepare or administer a telegraphy examination for an examinee for a General Class license. Only an Amateur Extra Class licensee can administer that examination.²¹ The ARRL requested in RM-9148 that the Amateur Radio Service rules be amended to permit Advanced Class operators who are VEs to prepare and administer examinations for a General Class operator license.²² The ARRL argues that this is consistent with the Communications Act²³ and will help fulfill the need for more volunteer examiners.²⁴ We agree, and therefore propose to authorize Advanced Class operators to prepare and administer examinations for the General Class operator license. In addition, on our own motion, we propose to permit General Class operator licensees to prepare and administer examinations for Technician Class operator licenses. In all cases, examiners will be administering only elements which they themselves have received credit for. These proposals will benefit potential amateur service licensees by having additional volunteer examiners available for the examinations. We seek comment on these proposals.

C. RACES Station Licenses

¹⁸ A "word" consists of five characters. A punctuation mark is considered two characters. Additionally, spaces must be used at the end of characters, words and sentences. See 47 C.F.R. § 97.507(d).

¹⁹ See 47 C.F.R. § 97.501(e).

²⁰ See *Report and Order*, In the Matter of Amendment of the Amateur Radio Service Rules to Expand the Privileges Available to Novice Class operators, PR Docket No. 86-161, 2 FCC Rcd 727 (1987). That proceeding contained a grandfathering clause, which we propose to continue here, extending examination credit for Elements 1(A), 2, 3(A) and 3(B) to any holder of a Technician Class operator license issued before March 21, 1987.

²¹ See 47 C.F.R. § 97.507(a).

²² See Petition for Rule Making, RM-9148, filed by the ARRL on October 28, 1996, at 1.

²³ See 47 U.S.C. § 154(f)(4)(A).

²⁴ ARRL Petition for Rule Making, RM-9148, at p. 5.

15. The Radio Amateur Civil Emergency Service (RACES) is a radio service using amateur stations for civil defense communications during periods of local, regional or national civil emergencies.²⁵ No new RACES station licenses have been granted since July 14, 1980.²⁶ We discontinued issuing new RACES licenses in order to conserve Commission manpower and resources. At the time of that action, there were 611 RACES licenses. Currently, there are only 249 RACES licenses.

16. We propose to phase out RACES station licenses by not renewing them. In addition, we propose to continue the *status quo* by not issuing any new RACES station licenses. By eliminating the RACES licenses, the Commission is taking a step which not only will conserve the Commission's financial resources, but will also eliminate licensing duplication. It should be emphasized that the same emergency communications that are now transmitted by RACES stations can continue to be transmitted by primary, club or military recreation stations. Our rules permit two types of stations to operate as part of RACES: (1) a licensed RACES station, and (2) any amateur station that has been properly registered with a civil defense organization.²⁷ Thus, to engage in RACES communications, it is not necessary to have a RACES license with a separate and distinct call sign. We invite comments on this proposal.

D. Privatization of Certain Enforcement Procedures

17. Pursuant to the Communications Act, the Amateur Auxiliary is composed of amateur operators who are recruited and trained by the Commission for the purpose of detecting, on a voluntary and uncompensated basis, improper radio transmissions, conveying such information to the Commission, and issuing advisory notices to persons who apparently have violated provisions of the Communications Act relating to amateur radio or who have violated any of the rules that govern the amateur radio service.²⁸ In rule making petition RM-9150, the ARRL states that amateur operators in the Amateur Auxiliary could be used to a greater advantage.²⁹ ARRL proposes rule changes to establish a private sector complaint procedure that would permit the volunteers to bring complaints of malicious interference directly to the Chief Administrative Law Judge (CALJ).³⁰ Upon receiving the complaint, the CALJ would determine whether the evidence submitted establishes a *prima facie* case of malicious interference. If no such case is made, the information submitted would be returned to the volunteer observer and no further action would be taken. If a *prima facie* case is made, the matter would be assigned to an Administrative Law Judge (ALJ) for further proceedings, after issuance of an *Order to Show Cause* by the CALJ or an ALJ.³¹ The Wireless Telecommunications Bureau (Bureau) would be made a party and have responsibility for prosecuting the case. In support of its petition, ARRL states that the procedure it advocates would improve and increase the quantity and quality of enforcement of the amateur rules and also expedite the

²⁵ See 47 C.F.R. § 97.3(a)(35).

²⁶ *Third Report and Order*, Docket No. 21135, 81 FCC 2d. 277 (1980).

²⁷ See 47 C.F.R. § 97.407.

²⁸ See 47 U.S.C. § 154(f)(4)(B).

²⁹ See Petition for Rule Making, RM-9150, filed by ARRL on March 27, 1998, at 25.

³⁰ *Id.* at 19.

³¹ *Id.* at 20.

handling of malicious interference cases.³²

18. We applaud the ARRL for its creative thinking about ways to improve the Commission's enforcement processes. Its specific proposal, however, appears to be inconsistent with the statutory provisions governing the role of administrative law judges. Specifically, the assignment of duties to ALJs must be consistent with their duties and responsibilities as they relate to conducting formal hearing proceedings.³³ Accordingly, while we do not seek comment on ARRL's specific proposal, we do seek comment, consistent with the ARRL's underlying concerns, on other ideas for improving our enforcement processes as they relate to amateur radio. One possibility, for example, would be to encourage or require persons bringing complaints of interference to the Commission to include a draft order to show cause to initiate a revocation or cease and desist hearing proceeding. We also request additional comments and suggestions on how we could better utilize the services of the Amateur Auxiliary, consistent with its statutory basis.

E. Telegraphy Examination Requirements

19. Currently, three telegraphy examination elements are prepared and administered by a team of three VEs³⁴ to examinees intending to obtain from the Commission an amateur operator license.³⁵ The elements an examinee passes determines the class of operator license granted. In a telegraphy examination, the VEs determine the examinee's level of skill in sending and receiving text in the international Morse code. Our rules delineate three levels of skill in telegraphy, based upon the rate at which an examinee correctly receives a telegraphy message: five, thirteen and twenty words-per-minute (wpm).³⁶

20. In the early days of amateur radio, radiotelegraphy was the primary communication mode of all radio operators, including amateurs. Testing for knowledge of Morse code telegraphy was necessary to ensure that amateurs could recognize and stay away from Government and commercial stations as well as stay clear of maritime distress messages. Today, radiotelegraphy is just one facet of many diverse modes of radiocommunication that require a technologically literate licensee.³⁷ In 1990, in response to the sentiment of the amateur community, we established a codeless Technician Class operator

³² *Id.* at 25.

³³ See 5 U.S.C. § 3105 (prohibiting assignments to ALJs inconsistent with their duties and responsibilities); 5 U.S.C. § 556 (duties of ALJs). See also 47 C.F.R. § 0.151 (duties of FCC ALJs limited to hearing functions).

³⁴ At their most recent Conference in July, 1997, the Volunteer-Examiner Coordinators ("VECs") estimated there are approximately 35,000 VEs.

³⁵ See 47 C.F.R. § 97.501.

³⁶ See 47 C.F.R. § 97.503.

³⁷ See *Report and Order*, In the Matter of Amendment of Part 97 of the Commission's Rules Concerning the Establishment of a Codeless Class of Amateur Operator License, PR Docket No. 90-55, 5 FCC Rcd 7631 (1990).

license.³⁸ In so doing, we stated that the amateur service should attract technically inclined persons.³⁹ We also stated that we believed that telegraphers would be in less demand than electronics and communications experts.⁴⁰ Therefore, we provided an entry level opportunity to otherwise qualified persons who found that telegraphy was a barrier to pursuing the purposes of the amateur service.⁴¹ Those purposes include encouragement and improvement of the amateur service by providing opportunities for advancing both communication and technical skills, and the expansion of the existing reservoir within the amateur radio service of trained operators, technicians and electronics experts.⁴²

21. The decreasing role of telegraphy as a communications mode also is demonstrated in our implementation of the Global Maritime Distress and Safety System (GMDSS).⁴³ In permitting GMDSS to replace the mandatory Morse code equipment and operator, we recognized industry movement to newer and better technology for distress situations. The GMDSS relies on satellite and automated terrestrial communications systems for distress and safety communications. The Commission noted that by incorporating these advanced communications techniques into the safety system, GMDSS would significantly improve safety of life and property at sea throughout the world.⁴⁴

22. The international *Radio Regulations (Radio Regulations)* that apply to the Amateur Radio Service require that all amateurs licensed to operate below 30 MHz demonstrate their ability "to send correctly by hand and to receive correctly by ear, texts in Morse code signals." The *Radio Regulations* do not specify any particular speed. We note that the 1995 World Radiocommunications Conference (WRC-95) resolved that Article S25, which includes the international amateur code requirement, be considered at the 1999 WRC. Subsequently, this consideration was delayed to the WRC scheduled to be held in 2001.⁴⁵

23. In preparation for consideration of the code requirement at a future WRC, the ARRL surveyed amateur licensees, both members and non-members, to determine their attitudes on the Morse code requirement. Some 63 percent of ARRL members agreed that "[f]or the foreseeable future, it is important to retain the Morse code requirement in the international regulations," while 30 percent agreed that "[t]he Morse code requirement for amateur radio licensing is no longer relevant, in the international regulations." Among all amateurs, members and non-members, 57 percent favored retaining the Morse code requirement, while 35 percent regarded it as not relevant. Among ARRL members that addressed

³⁸ *Id.* at 7633.

³⁹ *Id.* at 7632.

⁴⁰ *Id.* at 7632.

⁴¹ *Id.* at 7631.

⁴² *See* 47 C.F.R. § 97.1.

⁴³ *See Report and Order, In the Matter of Amendment of Parts 13 and 80 of the Commission's Rules to Implement the Global Maritime Distress and Safety System (GMDSS) to Improve the Safety of Life at Sea, PR Docket No. 90-480, 7 FCC Rcd 951 (1992).*

⁴⁴ *Id.* at 951.

⁴⁵ *See* Resolution 722 (WRC-97), Preliminary Agenda item 2.2.

what the code speed requirement should be for full amateur privileges (Amateur Extra Class), 41 percent favored a requirement in the 10-13 wpm range, versus a minority of 32 percent who favored the current 20 wpm requirement.⁴⁶ Based in part on these survey results, an ARRL committee proposed to reduce the General Class code speed requirement from 13 to 10 wpm, and for all code examinations to specify one out of five minutes of copy.⁴⁷

24. In view of changes in the technologies that amateurs use to communicate generally, and views with regard to the Morse code requirement specifically, we seek comment on all aspects of the Morse code standards used in our examinations. Do the three levels of 5, 13, and 20 wpm remain relevant to today's communications practices? Should we continue to have three different levels, or should these be reduced to one or two -- and, if so, what should be the required speeds? Were we to reduce the required Morse code elements, should we add elements to the written examination to ensure a working knowledge of the newer digital technologies which, in part, are replacing the Morse code? Or, should we consider specifying the method of examining for Morse code proficiency, such as requiring fill-in-the-blank or copying one out of five minutes sent, instead of allowing VEs to determine how to test for code speed? We request comment on these and any other issues related to our code speed requirements.

25. Additionally, in RM-9196, the ARRL requests amendment of the amateur rules which allow telegraphy examination credit for the higher telegraphy speeds to examinees with a disability.⁴⁸ Specifically, the ARRL requests that the examinee be required to attempt the higher-speed telegraphy examination before examination credit is given pursuant to a doctor's certification. In addition, the ARRL requests that volunteer-examiner coordinators (VECs) be authorized to request medical information from the certifying physician pertaining to the examinee's disability. It should be noted that these issues only remain relevant if we retain the higher telegraphy speeds requirement, since if the requirement were eliminated, a person with a disability would not have to apply for examination credit. We tentatively conclude that, if we do maintain the requirement, neither of these proposals is an appropriate means to address potential abuses of the physician certification requirement. We believe that these proposals place an unfair burden on examinees with disabilities, and raise serious privacy and confidentiality concerns. We seek comment on ARRL's proposal and our tentative conclusion.

F. Written Examinations

26. In addition, a written examination is prepared and administered to each applicant for an amateur operator license in order to demonstrate to the Commission that the examinee possesses the operational and technical qualifications required to perform properly the duties of an amateur service operator licensee.⁴⁹ The written examination for each license class currently specifies ten general topics⁵⁰

⁴⁶ As reported in QST, February, 1997, at pp. 55-57.

⁴⁷ QST, March 1997 at pp. 55-57.

⁴⁸ See Petition for Rule Making, RM-9196, filed by ARRL on September 23, 1997.

⁴⁹ See generally 47 C.F.R. § 97.503.

⁵⁰ The ten topics are: (1) FCC rules for the amateur radio services; (2) Amateur station operating procedures; (3) Radio wave propagation characteristics of amateur service frequency bands; (4) Amateur radio practices; (5) Electrical principles as applied to amateur station equipment; (6) Amateur station equipment circuit components; (7) Practical circuits employed in amateur station equipment; (8) Signals and emissions transmitted

and the number of questions for each topic that must be asked in an examination. A uniform national database of multiple-choice questions and answers is approved by the National Conference of VECs and is periodically updated on a regular basis so that all publishers and applicants have access to current materials. This is accomplished on a purely voluntary basis, without formal Commission involvement.

Determining the components of written examinations was carried over into the VE system from those components used when the Commission previously prepared and administered the examinations.⁵¹ In light of the fact that written examinations now have been prepared and administered under the VE system for over a decade, we seek comment on whether the written examination requirements should be modified to provide VEs and VECs additional flexibility in determining the specific contents of written examinations, on the specifics of what such flexibility should entail, and on the advantages and disadvantages to providing such flexibility.

27. Specifically, we ask commenters to address whether the general topics set forth in Section 97.503 of the Commission's Rules adequately cover the significant categories of information relevant to determining whether an applicant has the requisite operational and technical qualifications to become an amateur licensee. For example, does the current list of topics adequately cover current technology and contemporary amateur operating practices? For those commenters who suggest addition or deletion of general topics, we ask them to include the rationale underlying such proposals. In addition, we ask commenters to discuss whether the required number of questions from each general topic should continue to be established by rule. For those commenters who suggest altering the number of questions, we ask that they discuss alternative numbers or percentages and the reasons therefor. We are particularly interested in comments from VEs and VECs regarding any changes they would recommend, either individually or collectively, in the written examination requirements on the amateur community generally, as well as on the amateur examination process specifically, including how, if at all, they will affect the integrity of the examination and licensing process. For instance, we seek specific comment from VEs and VECs regarding how modifications to the written examination requirements would affect their ability to conduct examinations in an effective, efficient and expeditious manner.

G. Disposition of Rule Making Petitions

28. We have also received petitions for rule making filed by various individuals, summarized below, requesting changes to the amateur rules. The petitions concern matters on which the Commission has already taken action. In the interest of administrative efficiency, we have included such petitions in this proceeding because in all cases they do not warrant the issuance of a *Notice of Proposed Rule Making* and the commencement of a separate proceeding. Therefore, no rule making (RM) numbers will be assigned to these petitions. The petitioners in these cases have not presented sufficient evidence to justify altering the current operator privileges, requirements or structure of the Amateur Radio Service.

29. Mr. Spencer Ritchie petitioned for a change in frequency privileges in the 75 and 80 meter

by amateur stations; (9) Amateur station antennas and feed lines; and (10) Radiofrequency environmental safety practices at an amateur station.

⁵¹ See *Use of Volunteers to Prepare and Administer Operator Examinations in the Amateur Radio Service*, PR Docket No. 83-27, *Report and Order*, 54 Rad. Reg. (P&F) 2d 1068 (1983). See also *Use of Volunteers to Prepare and Administer Operator Examinations in the Amateur Radio Service*, PR Docket No. 83-27, *Memorandum Opinion and Order*, 49 Fed. Reg. 30313 (July 30, 1984); *Permitting Volunteer-Examiner Coordinators to Maintain Pools of Questions for Amateur Operator Examinations*, *Report and Order*, 51 Fed. Reg. 30645 (Aug. 28, 1986).

sub-bands for Amateur Extra Class licensees.⁵² In his petition, Mr. Howard Kraus requested that Q-signal suffixes, such as QRP and QST, be made available to amateur stations.⁵³ His particular interest was to use a Q-signal that indicated a decrease in transmitter power so as to publicize the fact that a certain radio club promoted low-power operation. A petition filed by Mr. Henry Ruh requested that the current examination system for an amateur radio license be changed from one that is based on memorization of questions and answers to one that is based on experiential operation of an actual amateur station.⁵⁴

30. A petition for rule change, filed by Mr. William Houlne, called for the creation of sub-bands in the 160 meter band between 1.9 MHz and 2.0 MHz, and in the 80 meter band between 3.6 MHz and 3.7 MHz for use by holders of Technician Plus licenses.⁵⁵ A petition filed by Mr. Rod Wheeler requested that the rules be amended to include new standards that repeaters would be required to meet and that these standards be used by frequency coordinators.⁵⁶

31. All of the petitions discussed in the foregoing paragraphs concern licensing requirements, operator frequency privileges or seek a restructuring of the amateur license classes. The current operator frequency privileges, structure of the license classes and the requirements for obtaining an amateur license were developed in accordance with the expressed desires of the amateur community to provide motivation for amateur operators to advance their communication and technical skills. We do not believe that sufficient evidence has been presented to justify altering the current requirements which are in accordance with the basis and purpose of the Amateur Radio Service in the United States. Therefore, we will dismiss these repetitive petitions.

V. CONCLUSION

32. In view of the foregoing, we propose: (1) to phase out the Novice Class operator license (current licensees grandfathered) and the Technician Plus operator license; (2) to authorize Advanced Class operators to prepare and administer examinations for the General Class operator license; and (3) to sunset RACES station licenses by not issuing any license renewals. We invite comments of the amateur community with respect to improving our enforcement processes as they relate to amateur radio. We also invite comments regarding the specific telegraphy speed requirements for the various license classes, and on ways to streamline and improve the operator examinations. The views of interested parties on these proposals are invited. The proposed rules which are appended hereto are intended to simplify and streamline the regulations that govern the Amateur Radio Service.⁵⁷

⁵² Petition for Rule Making filed August 6, 1996.

⁵³ Petition for Rule Making filed November 27, 1995.

⁵⁴ Petition for Rule Making filed November 4, 1996.

⁵⁵ Petition for Rule Making filed November 10, 1997.

⁵⁶ Petition for Rule Making filed September 30, 1996.

⁵⁷ We propose to clarify, in the table in Section 97.13(c)(1), that power means Peak Envelope Power (PEP) input to the antenna. We also propose to clarify, in Section 97.17(e)(4), that the amateur operator/primary station license referred to is issued by the Commission.

VI. PROCEDURAL MATTERS

Ex Parte Rules - Permit-But-Disclose Proceeding

33. This is a permit-but-disclose notice and comment rule making 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, and 1.1206(a).

Regulatory Flexibility Act

34. We certify that the Regulatory Flexibility Act⁵⁸ does not apply to this rule making proceeding because, if the proposed rule amendments are promulgated, there will not be a significant economic impact on a substantial number of small business entities, as defined in Section 601(3) of the Regulatory Flexibility Act. The amateur stations that are the subject of this proceeding would not be authorized to transmit any communications where the station licensee or control operator has a pecuniary interest.

Comment Date

35. 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 **December 1, 1998** and reply comments on or before **January 15, 1999**. **Comments may be filed using the Commission's Electronic Filing System (ECFS) or by filing paper copies.** *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24, 121 (1998).

36. **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, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. 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.

37. Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 1919 M St., N. W., Room 222, Washington, D. C. 20554.

38. Parties who choose to file by paper should also submit their comments on diskette. These diskettes should be submitted to: MJDePont, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, Room 8332, 2025 M Street, N. W., Washington, D. C. 20554. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible format using WordPerfect 5.1 for Windows or compatible software. The diskette should be accompanied by a cover letter and

⁵⁸ *See* the Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996), which amended the Regulatory Flexibility Act.

should be submitted in "read only" mode. The diskette should be clearly labelled with the commenter's name, proceeding (including the lead docket number in this case, WT Docket No. 98-143), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file. In addition, commenters must send diskette copies to the Commission's copy contractor, International Transcription Services, Inc., 1231 20th Street, N. W., Washington, D. C. 20037.

39. Alternative formats (computer diskette, large print, audio cassette and Braille) are available to persons with disabilities by contacting Martha Contee at (202) 418-0260, TTY (202) 418-2555, or at mcontee@fcc.gov. This *Notice* can also be downloaded at: <http://www.fcc.gov/dtf/>

VII. ORDERING CLAUSES

40. Accordingly, IT IS ORDERED that, pursuant to Sections 4(i) and (j), 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i) and (j), 303(r) and 403, notice is hereby given of the proposed amendments to Part 97 of the Commission's Rules, 47 C.F.R. Part 97, set forth in the Appendix hereto, in accordance with the proposals, discussions, and statement of issues in this *Notice of Proposed Rule Making*. Comments are sought on these proposals.

41. IT IS FURTHER ORDERED, that, in accordance with the reasons given herein, rule making petitions RM-9148 and RM-9150 ARE GRANTED to the extent indicated herein.

42. IT IS FURTHER ORDERED, that, in accordance with the reasons set forth above, the rule making petitions filed by Spencer Ritchie, Howard Krause, Henry Ruh, William Houlne, and Rod Wheeler ARE HEREBY DISMISSED

43. IT IS FURTHER ORDERED that the Commission's Office of Public Affairs, Reference Operations Division, SHALL SEND a copy of this *Notice of Proposed Rule Making*, including the Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the Small Business Administration.

Further Information

44. For further information, contact Maurice J. DePont, mdepont@fcc.gov, Policy and Rules Branch, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, (202) 418-0690, or call (202) 418-7233 TTY.

FEDERAL COMMUNICATIONS COMMISSION



Magalie Roman Salas
Secretary

Attachment: Appendix

APPENDIX

Part 97 of Chapter I of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

Part 97 - Amateur Radio Service

1. The authority citation for Part 97 continues to read as follows:

Authority citation: 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.

2. Section 97.9 is revised to read as follows:

§ 97.9 Operator license.

(a) The classes of amateur operator licenses are: Novice, Technician, General, Advanced and Amateur Extra. A person who has been granted an operator license is authorized to be the control operator of an amateur station with the privileges of the operator class specified on the license.

(b) A person who has been granted an operator license of Novice, Technician, General or Advanced Class and who has properly submitted to the administering VEs an application document, FCC Form 610, for an operator license of a higher class, and who holds a CSCE indicating that the person has completed the necessary examinations within the previous 365 days, is authorized to exercise the rights and privileges of the higher operator class until final disposition of the application or until 365 days following the passing of the examination, whichever comes first.

3. Section 97.13 is revised to read as follows:

§ 97.13 Restrictions on station location.

(a) Before placing an amateur station on land of environmental importance or that is significant in American history, architecture or culture, the licensee may be required to take certain actions prescribed by §§ 1.1301-1.1319 of the FCC Rules.

(b) A station within 1600 m (1 mile) of an FCC monitoring facility must protect that facility from harmful interference. Failure to do so could result in imposition of operating restrictions upon the amateur station by an EIC pursuant to § 97.121 of this Part. Geographical coordinates of the facilities that require protection are listed in § 0.121(c) of the FCC Rules.

(c) Before causing or allowing an amateur station to transmit from any place where the operation of the station could cause human exposure to RF electromagnetic field levels in excess of those allowed under § 1.1310 of this chapter, the licensee is required to take certain actions.

(1) The licensee must perform the routine RF environmental evaluation prescribed by § 1.1307(b) of this chapter, if the power of the licensee's station exceeds the limits given in the following table:

| Wavelength Band | Evaluation Required if Power* (watts) Exceeds: |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MF | |
| 160 m | 500 |
| HF | |
| 80 m | 500 |
| 75 m | 500 |
| 40 m | 500 |
| 30 m | 425 |
| 20 m | 225 |
| 17 m | 125 |
| 15 m | 100 |
| 12 m | 75 |
| 10 m | 50 |
| VHF (all bands) | 50 |
| UHF | |
| 70 cm | 70 |
| 33 cm | 150 |
| 23 cm | 200 |
| 13 cm | 250 |
| SHF (all bands) | 250 |
| EHF (all bands) | 250 |
| Repeater stations (all bands) | <u>non-building-mounted antennas</u> : height above ground level to lowest point of antenna < 10 m <u>and</u> power > 500 W ERP <u>building-mounted antennas</u> : power > 500 W ERP |

* Power = PEP input to antenna except, for repeater stations only, power exclusion is based on ERP (effective radiated power).

(2) If the routine environmental evaluation indicates that the RF electromagnetic fields could exceed the limits contained in § 1.1310 of this chapter in accessible areas, the licensee must take action

to prevent human exposure to such RF electromagnetic fields. Further information on evaluating compliance with these limits can be found in the FCC's OET Bulletin Number 65, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields."

4. Section 97.17 is amended by adding a new paragraph (c) and redesignating paragraphs (c) (d) (e) (f) and (g) as paragraphs (d) (e) (f) (g) and (h).

§ 97.17 Application for new license or *reciprocal permit for alien amateur licensee*.

- (a) Any qualified person is eligible to apply for an amateur service license.
- (b) Each application for a new amateur service license must be made on the proper document:
 - (1) FCC Form 610 for a new Technician, General, Advanced or Amateur Extra Class operator/primary station license;
 - (2) FCC Form 610-A for a *reciprocal permit for alien amateur licensee*; and
 - (3) FCC Form 610-B for a new amateur service club or military recreation station license.
- (c) No application for a new Novice or Technician Plus Class operator/primary station license will be accepted for filing.
- (d) Each application for a new operator/primary station license must be submitted to the VEs administering the qualifying examination.
- (e) Any eligible person may apply for a *reciprocal permit for alien amateur licensee*. The application document, FCC Form 610-A, must be submitted to the FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245.
 - (1) The person must be a citizen of a country with which the United States has arrangements to grant reciprocal operating permits to visiting alien amateur operators and be eligible to apply for a *reciprocal permit for alien amateur licensee*.
 - (2) The person must be a citizen of the same country that issued the amateur service license.
 - (3) A United States citizen, regardless of any other citizenship also held, is not eligible to apply for a *reciprocal permit for alien amateur licensee*.
 - (4) No person who has been granted by the FCC an amateur operator/primary station license is eligible for a *reciprocal permit for alien amateur licensee*.
- (f) No person shall obtain or attempt to obtain, or assist another person to obtain or attempt to obtain, an amateur service license or *reciprocal permit for alien amateur licensee* by fraudulent means.
- (g) One unique call sign will be shown on the license of each new primary, club, and military recreation station. The call sign will be selected by the sequential call sign system.
- (h) Each application for a new club or military recreation station license must be submitted to the FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245. No new license for a RACES station will

be issued.

5. Section 97.21 is revised to read as follows:

§ 97.21 Application for a modified or renewed license.

(a) A person who has been granted an amateur station license that has not expired:

(1) Must apply for a modification of the license as necessary to show the correct mailing address, licensee name, club name, license trustee name, or license custodian name. The application document must be submitted to: FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245. For an operator/primary station license, the application must be made on FCC Form 610. For a club or military recreation station license, the application must be made on FCC Form 610-B.

(2) May apply for a modification of the license to show a higher operator class. The application must be made on FCC Form 610 and must be submitted to the VEs administering the qualifying examination.

(3) May apply for renewal of the license for a new term. Application for renewal of a Technician Plus Class operator/primary station license will be processed as an application for renewal of a Technician Class operator/primary station license.

(i) When the license does not show a call sign selected by the vanity call sign system, the application must be made on FCC Form 610. For a club or military recreation station license, the application may be made on FCC Form 610-B. The application may be submitted no more than 90 days before its expiration to: FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245. When the application for renewal of the license has been received by the FCC at 1270 Fairfield Road, Gettysburg, PA 17325-7245 on or before the license expiration date, the license operating authority is continued until the final disposition of the application. No application for renewal of a RACES station license will be granted.

(ii) When the license shows a call sign selected by the vanity call sign system, the application must be filed as specified in Section 97.19(b). When the application has been received at the proper address specified in the Wireless Telecommunications Bureau Fee Filing Guide on or before the license expiration date, the license operating authority is continued until final disposition of the application.

(4) May apply for a modification of the license to show a different call sign selected by the sequential call sign system. The application document must be submitted to: FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245. The application must be made on FCC Form 610. This modification is not available to club, military recreation or RACES stations.

(b) A person who had been granted an amateur primary, club or military recreation station license, but the license has expired, may apply for renewal of the license for another term during a 2 year filing grace period. The application document must be received by the FCC at 1270 Fairfield Road, Gettysburg, PA 17325-7245 prior to the end of the grace period. For an operator/primary station license, the application must be made on FCC Form 610. For a club or military recreation station license, the application must be made on FCC Form 610-B. Unless and until the license is renewed, no privileges in this Part are conferred.

(c) Each application for a modified or renewed amateur service license must be accompanied by a photocopy (or the original) of the license document unless an application for renewal using FCC Form

610-R is being made, or unless the original document has been lost, mutilated or destroyed.

(d) Unless the holder of a station license requests a change in call sign, the same call sign will be assigned to the station upon renewal or modification of the station license.

(e) A reciprocal permit for alien amateur licensee cannot be renewed. A new reciprocal permit for alien amateur licensee may be issued upon proper application.

6. Section 97.301 is revised to read as follows:

§ 97.301 Authorized frequency bands.

The following transmitting frequency bands are available to an amateur station located within 50 km of the Earth's surface, within the specified ITU Region and outside any area where the amateur service is regulated by authority other than the FCC.

(a) For a station having a control operator who has been granted an operator license of Technician, General, Advanced or Amateur Extra Class:

| Wavelength band | ITU | | | Sharing requirements See § 97.303, Paragraph: |
|-----------------|---------------|---------------|---------------|-----------------------------------------------------|
| | Region 1 | Region 2 | Region 3 | |
| <u>VHF</u> | <u>MHz</u> | <u>MHz</u> | <u>MHz</u> | |
| 6 m | --- | 50-54 | 50-54 | (a) |
| 2 m | 144-146 | 144-148 | 144-148 | (a) |
| 1.25 m | --- | 219-220 | --- | (a), (e) |
| -Do- | --- | 222-225 | --- | (a) |
| <u>UHF</u> | <u>MHz</u> | <u>MHz</u> | <u>MHz</u> | |
| 70 cm | 430-440 | 420-450 | 420-450 | (a), (b), (f) |
| 33 cm | --- | 902-928 | --- | (a), (b), (g) |
| 23 cm | 1240-1300 | 1240-1300 | 1240-1300 | (j) |
| 13 cm | 2300-2310 | 2300-2310 | 2300-2310 | (a), (b), (j) |
| -Do- | 2390-2450 | 2390-2450 | 2390-2450 | (a), (b), (j) |
| <u>SHF</u> | <u>GHz</u> | <u>GHz</u> | <u>GHz</u> | |
| 9 cm | --- | 3.3-3.5 | 3.3-3.5 | (a), (b), (k), (l) |
| 5 cm | 5.650-5.850 | 5.650-5.925 | 5.650-5.850 | (a), (b), (m) |
| 3 cm | 10.00-10.50 | 10.00-10.50 | 10.00-10.50 | (b), (c), (i), (n) |
| 1.2 cm | 24.00-24.25 | 24.00-24.25 | 24.00-24.25 | (a), (b), (i), (o) |
| <u>EHF</u> | <u>GHz</u> | <u>GHz</u> | <u>GHz</u> | |
| 6 mm | 47.0-47.2 | 47.0-47.2 | 47.0-47.2 | |
| 4 mm | 75.5-81.0 | 75.5-81.0 | 75.5-81.0 | (b), (c), (h) |
| 2.5 mm | 119.98-120.02 | 119.98-120.02 | 119.98-120.02 | (k), (p) |
| 2 mm | 142-149 | 142-149 | 142-149 | (b), (c), (h), (k) |
| 1 mm | 241-250 | 241-250 | 241-250 | (b), (c), (h), (q) |
| --- | above 300 | above 300 | above 300 | (k) |

(b) For a station having a control operator who has been granted an operator license of Amateur

Extra Class:

| Wavelength band | ITU | ITU | ITU | Sharing requirements See § 97.303, Paragraph: |
|--------------------|-----|---------------|---------------|-----------------------------------------------------|
| | | Region 1 | Region 2 | |
| <u>MF</u> | | <u>kHz</u> | <u>kHz</u> | <u>kHz</u> |
| 160 m | | 1810-1850 | 1800-2000 | 1800-2000 (a), (b), (c) |
| <u>HF</u> | | <u>MHz</u> | <u>MHz</u> | <u>MHz</u> |
| 80 m | | 3.50-3.75 | 3.50-3.75 | 3.50-3.75 (a) |
| 75 m | | 3.75-3.80 | 3.75-4.00 | 3.75-3.90 (a) |
| 40 m | | 7.0-7.1 | 7.0-7.3 | 7.0-7.1 (a) |
| 30 m | | 10.10-10.15 | 10.10-10.15 | 10.10-10.15 (d) |
| 20 m | | 14.00-14.35 | 14.00-14.35 | 14.00-14.35 |
| 17 m | | 18.068-18.168 | 18.068-18.168 | 18.068-18.168 |
| 15 m | | 21.00-21.45 | 21.00-21.45 | 21.00-21.45 |
| 12 m | | 24.89-24.99 | 24.89-24.99 | 24.89-24.99 |
| 10 m | | 28.0-29.7 | 28.0-29.7 | 28.0-29.7 |

(c) For a station having a control operator who has been granted an operator license of Advanced Class:

| Wavelength band | ITU | ITU | ITU | Sharing requirements See § 97.303, Paragraph: |
|--------------------|-----|---------------|---------------|-----------------------------------------------------|
| | | Region 1 | Region 2 | |
| <u>MF</u> | | <u>kHz</u> | <u>kHz</u> | <u>kHz</u> |
| 160 m | | 1810-1850 | 1800-2000 | 1800-2000 (a), (b), (c) |
| <u>HF</u> | | <u>MHz</u> | <u>MHz</u> | <u>MHz</u> |
| 80 m | | 3.525-3.750 | 3.525-3.750 | 3.525-3.750 (a) |
| 75 m | | 3.775-3.800 | 3.775-4.000 | 3.775-3.900 (a) |
| 40 m | | 7.025-7.100 | 7.025-7.300 | 7.025-7.100 (a) |
| 30 m | | 10.10-10.15 | 10.10-10.15 | 10.10-10.15 (d) |
| 20 m | | 14.025-14.150 | 14.025-14.150 | 14.025-14.150 |
| -Do- | | 14.175-14.350 | 14.175-14.350 | 14.175-14.350 |
| 17 m | | 18.068-18.168 | 18.068-18.168 | 18.068-18.168 |
| 15 m | | 21.025-21.200 | 21.025-21.200 | 21.025-21.200 |
| -Do- | | 21.225-21.450 | 21.025-21.450 | 21.025-21.450 |
| 12 m | | 24.89-24.99 | 24.89-24.99 | 24.89-24.99 |
| 10 m | | 28.0-29.7 | 28.0-29.7 | 28.0-29.7 |

(d) For a station having a control operator who has been granted an operator license of General Class:

| Wavelength band | ITU Region 1 | ITU | ITU | Sharing requirements See § 97.303, Paragraph: |
|--------------------|-----------------|------------|------------|-----------------------------------------------------|
| | | Region 2 | Region 3 | |
| <u>MF</u> | | <u>kHz</u> | <u>kHz</u> | <u>kHz</u> |
| 160 m | | 1810-1850 | 1800-2000 | 1800-2000 (a), (b), (c) |

| <u>HF</u> | <u>MHz</u> | <u>MHz</u> | <u>MHz</u> | |
|-----------|---------------|---------------|---------------|-----|
| 80 m | 3.525-3.750 | 3.525-3.750 | 3.525-3.750 | (a) |
| 75 m | --- | 3.85-4.00 | 3.85-3.90 | (a) |
| 40 m | 7.025-7.100 | 7.025-7.150 | 7.025-7.100 | (a) |
| -Do- | --- | 7.225-7.300 | --- | (a) |
| 30 m | 10.10-10.15 | 10.10-10.15 | 10.10-10.15 | (d) |
| 20 m | 14.025-14.150 | 14.025-14.150 | 14.025-14.150 | |
| -Do- | 14.225-14.350 | 14.225-14.350 | 14.225-14.350 | |
| 17 m | 18.068-18.168 | 18.068-18.168 | 18.068-18.168 | |
| 15 m | 21.025-21.200 | 21.025-21.200 | 21.025-21.200 | |
| -Do- | 21.30-21.45 | 21.30-21.45 | 21.30-21.45 | |
| 12 m | 24.89-24.99 | 24.89-24.99 | 24.89-24.99 | |
| 10 m | 28.0-29.7 | 28.0-29.7 | 28.0-29.7 | |

(e) For a station having a control operator who has been granted an operator license of Novice Class or Technician Class and who has received credit for proficiency in telegraphy in accordance with the international requirements:

| Wavelength band | ITU | Sharing requirements | | |
|-----------------|-------------|----------------------|-------------|-----------------------------------|
| | | Region 1 | Region 2 | Region 3 See § 97.303, Paragraph: |
| <u>HF</u> | <u>MHz</u> | <u>MHz</u> | <u>MHz</u> | <u>MHz</u> |
| 80 m | 3.675-3.725 | 3.675-3.725 | 3.675-3.725 | (a) |
| 40 m | 7.050-7.075 | 7.10-7.15 | 7.050-7.075 | (a) |
| 15 m | 21.10-21.20 | 21.10-21.20 | 21.10-21.20 | |
| 10 m | 28.10-28.50 | 28.10-28.50 | 28.10-28.50 | |
| <u>VHF</u> | <u>MHz</u> | <u>MHz</u> | <u>MHz</u> | |
| 1.25 m | --- | 222-225 | --- | (a) |
| <u>UHF</u> | <u>MHz</u> | <u>MHz</u> | <u>MHz</u> | |
| 23 cm | 1270-1295 | 1270-1295 | 1270-1295 | (h) (i) |

7. Section 97.305 is revised to read as follows:

§ 97.305 Authorized emission types.

(a) An amateur station may transmit a CW emission on any frequency authorized to the control operator.

(b) A station may transmit a test emission on any frequency authorized to the control operator for brief periods for experimental purposes, except that no pulse modulation emission may be transmitted on any frequency where pulse is not specifically authorized.

(c) A station may transmit the following emission types on the frequencies indicated, as authorized to the control operator, subject to the standards specified in § 97.307(f) of this Part.

| Wavelength band | Frequencies | Emission types authorized | See § 97.307(f), Paragraph: |
|-----------------|-------------|---------------------------|-----------------------------|
| | | | |

| <u>MF</u> | | | |
|-----------|-------------------|--------------|---------------------|
| 160 m | Entire band | Phone, image | (1) (2) |
| -Do- | -Do- | RTTY, data | (3) (9) |
| <u>HF</u> | | | |
| 80 m | Entire band | RTTY, data | (3), (9) |
| 75 m | Entire band | Phone, image | (1), (2) |
| 40 m | 7.000-7.100 MHz | RTTY, data | (3), (9) |
| -Do- | 7.075-7.100 MHz | Phone, image | (1), (2), (9), (11) |
| -Do- | 7.100-7.150 MHz | RTTY, data | (3) (9) |
| -Do- | 7.150-7.300 MHz | Phone, image | (1), (2) |
| 30 m | Entire band | RTTY, data | (3), (9) |
| 20 m | 14.025-14.150 MHz | RTTY, data | (3), (9) |
| -Do- | 14.175-14.350 MHz | Phone, image | (1), (2) |
| 17 m | 18.068-18.110 MHz | RTTY, data | (3), (9) |
| -Do- | 18.110-18.168 MHz | Phone, image | (1), (2) |
| 15 m | 21.025-21.200 MHz | RTTY, data | (3), (9) |
| -Do- | 21.225-21.450 MHz | Phone, image | (1), (2) |
| 12 m | 24.89-24.93 MHz | RTTY, image | (3), (9) |
| -Do- | 24.93-24.99 MHz | Phone, image | (1), (2) |
| 10 m | 28.0-28.3 MHz | RTTY, data | (4), (9) |
| -Do- | 28.3-28.5 MHz | Phone, image | (1), (2), (10) |
| -Do- | 28.5-29.0 MHz | Phone, image | (1), (2) |
| -Do- | 29.0-29.7 MHz | Phone, image | (2), (14) |

| <u>VHF</u> | | | |
|------------|------------------|---------------------------------------------------|----------------|
| 6 m | 50.1-51.0 MHz | RTTY, data MCW, phone, image | (2), (5) |
| -Do- | 51.0-54.0 MHz | RTTY, data, test MCW, phone, image | (2), |
| 2 m | 144.1-148.0 MHz | RTTY, data, test MCW, phone, image | (2), (5), (8) |
| 1.25 m | 219-220 MHz | Data | (2) |
| -Do- | 222-225 MHz | RTTY, data, test MCW, phone, image | (2), (6), (8) |
| <u>UHF</u> | | | |
| 70 cm | Entire band | MCW, phone, image, RTTY, data, SS, test | (6), (8) |
| 33 cm | Entire band | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |
| 23 cm | Entire band | MCW, phone, image, RTTY, data, SS, test | (7), (8), (12) |
| 13 cm | Entire band | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |
| <u>SHF</u> | | | |
| 9 cm | Entire band | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |
| 5 cm | Entire band | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |
| 3 cm | Entire band | MCW, phone, image, RTTY, data, SS, test | (7), (8), (12) |
| 1.2 cm | Entire band | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |
| <u>EHF</u> | | | |
| 6 mm | Entire band | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |
| 4 mm | Entire band | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |
| 2.5 mm | Entire band | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |
| 2 mm | Entire band | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |
| 1 mm | Entire band | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |
| --- | Above 300 GHZ | MCW, phone, image, RTTY, data, SS, test, pulse | (7), (8), (12) |

8. Section 97.307 (f)(9) and (10) are revised to read as follows:

§ 97.307 Emission standards.

* * * * *

(f) * * *

(9) A station having a control operator holding a Novice Class operator license may transmit only messages sent by hand using emission type CW.

(10) A station having a control operator holding a Novice Class operator license may only transmit emission type CW using the international Morse code or phone emissions J3E and R3E.

* * * * *

9. Section 97.311(d) (1) is revised to read as follows:

§ 97.311 SS emission types.

* * * * *

(d) * * *

(1) Only the following sets of connections may be used:

| Number of stages in shift register | Taps used in feedback |
|-----------------------------------------------|----------------------------------|
| 7 | 7, 1 |
| 13 | 13, 4, 3, 1 |
| 19 | 19, 5, 2, 1 |

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10. Section 97.313 is revised to read as follows:

§ 97.313 Transmitter power standards.

(a) An amateur station must use the minimum transmitter power necessary to carry out the desired communications.

(b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.

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

(1) The 30 meter band;

(2) On the 160 through 10 meter bands when the control operator is a Novice operator; or

(3) The 7.050-7.075 MHz segment when the station is within ITU Regions 1 or 3.

(d) No station may transmit with a transmitter power exceeding 25 W PEP on the VHF 1.25 m band when the control operator holds a Novice Class operator license.

(e) No station may transmit with a transmitter power exceeding 5 W PEP on the UHF 23 cm band when the control operator holds a Novice Class operator license.

(f) No station may transmit with a transmitter power exceeding 50 W PEP on the UHF 70 cm band from an area specified in footnote US7 to § 2.106 of this Part, unless expressly authorized by the FCC after mutual agreement, on a case-by-case basis, between the EIC of the applicable field facility and the military area frequency coordinator at the applicable military base. An Earth station or telecommand station, however, may transmit on the 435-438 MHz segment with a maximum of 611 W effective radiated power (1 kW equivalent isotropically radiated power) without the authorization otherwise required. The transmitting antenna elevation angle between the lower half-power (-3 dB relative to the peak or antenna bore sight) point and the horizon must always be greater than 100.

(g) No station may transmit with a transmitter power exceeding 50 W PEP on the 33 cm band from within 241 km of the boundaries of the White Sands Missile Range. Its boundaries are those portions of Texas and New Mexico bounded on the south by latitude 31° 41' North, on the east by longitude 104° 11' West, on the north by latitude 34° 30' North, and on the west by longitude 107° 30' West.

(h) No station may transmit with a transmitter power exceeding 50 W PEP on the 219-220 MHz segment of the 1.25 m band.

11. Section 97.407(b) is revised to read as follows:

§ 97.407 Radio Amateur Civil Emergency Service.

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(b) The frequency bands and 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 following frequency segments:

| Wavelength band | Frequency segment |
|-----------------|-------------------|
| <u>MF</u> | |
| 160 m | 1800-1825 kHz |
| -Do- | 1975-2000 kHz |
| <u>HF</u> | |
| 80 m | 3.50-3.55 MHz |
| 75 m | 3.93-3.98 MHz |
| -Do- | 3.984-4.000 MHz |
| 40 m | 7.079-7.125 MHz |
| -Do- | 7.245-7.255 MHz |
| 30 m | 10.10-10.15 MHz |
| 20 m | 14.047-14.053 MHz |
| -Do- | 14.22-14.23 MHz |
| -Do- | 14.331-14.350 MHz |
| 15 m | 21.047-21.053 MHz |
| -Do- | 21.228-21.267 MHz |
| 10 m | 28.55-28.75 MHz |
| -Do- | 29.237-29.273 MHz |
| -Do- | 29.45-29.65 MHz |
| <u>VHF</u> | |
| 6 m | 50.35-50.75 MHz |
| -Do- | 52-54 MHz |
| 2 m | 144.50-145.71 MHz |
| -Do- | 146-148 MHz |
| 13 cm | 2390-2450 MHz |
| 1.25 m | entire band |
| <u>UHF</u> | |
| 70 cm | entire band |
| 23 cm | entire band |