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Written Comments on the
Federal Communications Commission's (FCC)
Notice of Proposed Rule Making on
1998 Biennial Regulatory Review --
Amendment of Part 97 of the Commission's
Amateur Service Rules

(WT Docket No. 98-143)

I. INTRODUCTION

1. I am a member of the ARRL, but I am submitting these comments as a private citizen representing only myself. I am a Registered Professional Electrical Engineer in the State of Michigan, but my professional activities do not concern amateur radio. I have been licensed since June 16, 1978, and I presently hold an Amateur Extra Class license with the call sign KB8CS.

II. GENERAL COMMENTS

2. I agree that it is appropriate that the skill and knowledge requirements for obtaining licenses in the Amateur Radio Service should be reviewed periodically and modified as necessary to best serve the interests of both the Amateur Radio community and general public as a whole. However, I do not agree that pleasing the widest segment of the population should be the basis for determining the requirements for obtaining a license in this service. Any claim to spectrum rights based only on citizenship is adequately addressed by the Citizen's Radio Service (Citizen's Band). Although Amateur Radio provides entertainment value to its participants, it does not exist solely to entertain. I believe that the skill development for the individual operators, the promulgation of technical knowledge between operators and the public service provided by many operators, all benefit our society as a whole and justify the continued support of this service. While the decline in the numbers of people entering the Amateur Radio community is a problem that deserves attention, the FCC should resist the temptation to apply solutions that inflate the number of participants by sacrificing the other purposes of the Amateur Radio Service that go beyond entertainment. I believe that solutions that diminish the ability of the Amateur Radio Service to provide value beyond entertainment will inevitably lead to demise of the service based on arguments that its spectrum is too valuable to waste on frivolous activities.

3. I support the FCC's intention to simplify the licensing structure for the Amateur Radio Service, and I agree that four levels of licensing will be adequate to serve the needs of both the FCC and the Amateur Radio community.

III. SPECIFIC COMMENTS

Preservation of Morse Code Knowledge and Radio History

4. Missing from the definition of the purpose of the Amateur Radio Service is the function of historical preservation. There is a segment

of the Amateur Radio community that preserves, maintains and operates antique equipment. If the old adage that a picture is worth a thousands words is true, then witnessing a demonstration of a historic radio device should be proportionately more valuable than a mere picture of such a device. Participation in Amateur Radio is intended to be a learning experience, and that learning experience must start with the history and basics of radio to build a foundation on which modern technologies can be fully understood and appreciated. Without a basic knowledge of Morse Code, an Amateur operator is deprived of the ability to operate and experiment with the most basic equipment.

5. This country has chosen to set aside certain lands for national parks to preserve both natural and manmade history so that present and future generations can experience and learn valuable lessons first hand instead of from second hand accounts of others. The spectrum set aside for the Amateur Radio Service is not unlike the national parks and wilderness areas in that they both entertain, educate and preserve rare things from extinction. We accommodate people in our national parks who, lacking wilderness skills, depend on technologies like all-terrain motor vehicles, but we severely restrict their access such that they do not spoil the environment for those people willing to put forth the effort to develop the skills needed to enter without disturbing others. Similarly, Amateur Radio can accommodate persons of lesser skill as long as reasonable restrictions are applied. In this respect, I support the relaxation of the Morse Code requirements for General Class operators but not for Extra Class operators.

6. Because no speed requirement is specified in the international Radio Regulations (Radio Regulations) that apply to the Amateur Radio Service, I support the ARRL proposal to reduce the requirement to 5 words per minute (WPM) for General Class Operators. This speed is sufficiently slow as to pose no obstacle to candidates except for those unwilling to fulfill the service's purpose of providing a pool of trained operators. I do not support the elimination of a Morse Code knowledge requirement for General Class Operators. While Morse Code has become a less popular means of communication, it is far from obsolete in that it provides a means of communication with only the most fundamental technology. It is still a popular means for unobtrusive identification of a repeater station. In times of disaster, technological resources are likely to be severely limited, and the preservation of knowledge of Morse Code will enable the Amateur Radio Service to maintain its ability to provide communications in the times of greatest need.

7. I also recommend that General Class applicants be required to demonstrate that they can send in Morse Code by hand in a manner that can be correctly interpreted by the examiner, a pair of call signs in the format for station identification as required by the FCC regulations. Because a lack of speed, or even the use of the "error" character, does not prevent the ultimate reception of the message, no sending speed requirement should be specified. It seems reasonable and obvious that a person being granted an operating license should be required to demonstrate the ability to comply with the most fundamental regulatory requirement.

8. The lowering of the Morse Code requirement to 5 WPM for the General Class license will remove the only significant obstacle preventing Technician Plus license holders from obtaining a General Class license.

Because the additional written examination elements for a General Class license deal with important operating issues, such as boundaries of the amateur band segments, I oppose grandfathering of Technicians into the General Class in the event that the 5 WPM Morse Code requirement is adopted for the General Class. As with the issue of identification above, it seems reasonable and obvious that a person being granted an operating license should be required to demonstrate the ability to comply with the most fundamental regulatory requirement. I have no statistics to support the argument, but I believe that most if not all Novice operators who fail to upgrade their license class will not continue to participate in Amateur Radio.

9. Morse Code is still commonly used for repeater station identification because of its ease of implementation and because it is more easily distinguished from and interferes less with any ongoing transmissions. It seems reasonable that a repeater station control operator should be able to discern whether or not the repeater identification is operating correctly. For these reasons, I recommend that repeater station control operators be required to hold a license class that includes knowledge of Morse Code.

10. I have no objections to the ARRL proposal for the Advanced Class license with one small exception. The current prerequisite of a 13 WPM Morse Code test that carries over from the General Class license, is widely believed to be based on a barrier speed above which the mental tabulation of dots and dashes is replaced by the recognition of each character as whole from its distinctive rhythmic pattern. In this respect, I see no basis for the ARRL token proposal before the FCC to reduce the speed to 12 WPM. Passing the 13 WPM examination actually requires a combination of two skills; one, the characters must be recognized without counting as previously mentioned, and two, the characters must be recorded on the examination paper. Some applicants fail the exam due to a lack of writing skills as much as from trying futilely to count dot and dashes. In this respect, I would support allowing an increase in character spacing only to an effective rate of 10 WPM with the character speed at a minimum of 13 WPM for all able bodied applicants. This would open opportunities for both younger and older applicants who may lack the manual writing skills.

11. The Amateur Extra Class licensee, as the title clearly indicates, has been recognized for his or her extra accomplishments in radio skills and knowledge. Just as the bow and arrow hunters often receive some exclusive access privileges beyond those granted to hunters with firearms, and just as campers in tents have less restrictions than those in vehicles, Amateur Extra Class operators have been granted recognizable call signs and very small segments of reserved spectrum. (Some would say that the Extra band allocations are so small as to be mostly symbolic). In both cases, we recognize the value in preserving basic skills that are part of our heritage. There are plenty of examples of predicaments a person can be in where basic skill are highly valuable, such as being stranded in a wilderness or as in the case of war prisoners using Morse Code to communicate through prison walls. In the interest of continuing to preserve the art of Morse Code, as opposed to mere knowledge of the Mores Code, I strongly oppose any reduction in the Morse Code requirements for the Extra Class license. The rapid depletion of the special call signs reserved for the Extra Class operators is ample evidence that the standards are not unreasonably

restrictive. Because of the value of peer pressure in inspiring people to strive toward higher goals, and because recognition for the achievement is a significant part of the Extra Class designation, I oppose the renaming of the licenses as proposed to the FCC by the ARRL. The needs of the general population can be served by the General Class license without abandoning the challenging goals of the Extra Class license.

Power Limitations

12. I do not support the removal of power limitations for holders of an entry level license. These power limitations serve a useful purpose of teaching by rote experience that success can come from skill as well as by brute force. Were it not for the enforcement burden, I would have proposed an apprenticeship period requiring some minimum measure of operating experience before granting full privileges. I see no reason to limit the power for higher class operators in the same segment of the band. Transmitter power differences are most often secondary in significance the differences in distance, antenna performance and radio signal propagation. With the simplified license structure, limiting power by band segment would require revoking some existing privileges from higher class operators. As difficult as power limits are to enforce, I think that the level of voluntary compliance by the Amateur Radio community is sufficient for such regulations to serve a useful purpose.

Waivers

13. I do not support general waivers of Morse Code tests for handicapped individuals. I believe that sufficient partial accommodations can be made in the testing process for handicapped individuals commensurate with their ability to operate an amateur radio station. At the proposed speed for a General Class license of 5 WPM, a hearing impaired applicant should be able to copy Morse Code by observing a flashing light. Applicants unable to write could be allowed to verbally respond to each individual word, or in severe cases, each letter. By recognizing the comprehension by the applicant of the characters, is a separate issue from the mechanics of producing written verification of his or her correct comprehension, the volunteer Examiners could be empowered to devise alternative means of testing handicapped individuals. Because it would constitute an unfair additional burden, I would not require persons unable to write to memorize significant length of Morse Code messages. Such efforts could even lead to advancements in technologies that benefit handicapped people.

14. As to the privacy issues and other complications in making a determination that an applicant is entitled to special consideration in taking an amateur radio licensing examination, I believe that only a licensed physician has the qualifications to make the determination in a manner that would withstand legal challenges. I recommend that the physician's letter be required to name the condition and describe what limitations it places on the applicant's ability to perform the examination requirements. These details are requisite to the development of an alternate means of testing as proposed above. The examiners should be prohibited from disclosing such letters except to the FCC to justify any special procedures used in administering the exam

and as necessary for the administration of the examination. Should this suggestion be adopted, I recommend that the authority to approved special testing methods be delegated to the VEC.

15. There is no demonstrable individual necessity for having an Amateur Radio operator's license. The examination process is designed to verify that the applicant possesses the knowledge and skills required for proper operation of an Amateur Radio station. Therefore, arguments for waivers and arguments for privacy in granting relief should be rejected where they impose a significant burden on the licensing process. Because adequate local routes exist, we do not grant waivers of driver's license examinations for people unable to decipher the traffic signs and control their vehicle at the minimum speed limits on our freeways. With even weaker arguments of necessity, we should not grant licenses for the operation amateur radio equipment to persons who have not demonstrated the requisite skills to operate that equipment safely and without unnecessary interference with other spectrum users both within and, even more so, outside of the amateur radio bands.