

Dear Commissioners:

I wish to offer the following comments in the matter of WT Docket No. 98-143, "1998 Biennial Regulatory Review, Amendment of Part 97 of the Commission's Amateur Service Rules."

I hold an Advanced Class amateur radio license, starting out as a Technician. I'm active with ARES and enjoy public service activities. Most of all, however, I enjoy designing , building, and experimenting with antennas and electronic devices. I am a member of the ARRL and serve as a Volunteer Examiner.

Introduction - Basic Support for the ARRL License Restructuring Plan

Last July, the American Radio Relay League communicated a series of changes to the Amateur Radio Service rules which they proposed would streamline the amateur licensing process and help to maintain the growth and vitality of the Amateur Radio Service.

I became very intrigued when I first read their proposal. I believe it promises to revitalize interest in HF communications among the most recently licensed amateurs and to further advocate their training and development in radio technology.

With only one major exception (to be discussed later), I strongly support their proposals, especially as amended in October. This support over the FCC proposals is based on several observations:

- 1) The ARRL proposal is the product of many (30) months of discussion among ARRL officers, directors, members, and active amateurs. A great deal of thought (and debate) went into the proposal. In contrast, NPRM 98-143 contains so many confusing and apparently contradictory statements that I suspect it was drafted in only an afternoon.
- 2) The ARRL plan has explored the consequences of its adoption in terms of the purposes and goals of the Amateur Radio Service. It takes a comprehensive approach. NPRM 98-143 leaves many questions unanswered and several issues unresolved.
- 3) Although it's not a consensus, the ARRL proposal represents the opinions of a large and diverse group of amateurs, and contains many compromises to accommodate that diversity.
- 4) The ARRL scheme avoids several problems, namely what to do with the Novice and Technician Plus licensees. It avoids the need to maintain the Novice band. It avoids the need for and confusion from maintaining records for passed Novice and Technician Plus exam elements.
- 5) The ARRL plan is very generous. This encourages licensees to upgrade, consistent with the goals of the Amateur Radio Service. Its best feature is that no one will suffer any reduction in currently earned privileges. In contrast, under NPRM 98-143 Technician Plus licensees will apparently lose HF privileges when they renew their licenses as Technicians.
- 6) NPRM 98-143 does not encourage the upgrade process for new and young operators. Specifically, to upgrade from a Technician license to a General

license requires a 13 WPM initial test. This is too drastic and will discourage upgrades from VHF/UHF privileges to HF privileges, especially for young licensees.

7) Finally, the ARRL proposal is more in step with the HF code requirements of other nations than both current licensing requirements and NPRM 98-143; most nations do not require 20 WPM code proficiency.

License Classes

I support the proposition to reduce in the number of license classes from 6 to 4 by phasing out the Novice and Technician Plus licenses.

It's not clear to me how current Novice Class licensees would be accommodated under NPRM 98-143. I'm encouraged by the ARRL's idea to offer them General Class privileges; it's very tempting because it promises to get an entire generation of young licensees active on the HF bands and to encourage them to initiate a personal program of technological discovery and growth.

Breaking with the ARRL on this issue and agreeing with NPRM 98-143, however, I'm not completely comfortable with an instant upgrade of Novice and Technician Plus licensees to General Class without first passing the requisite theory examinations. (Under a new license structure, Novice licensees would need to pass new Technician and new General exams; Technician Plus licensees would have to pass the new General exam.) I favor granting permanent credit for exam elements passed, including 5 WPM code, for when these amateurs upgrade or when their licenses are due to renew. This would be similar to the credit that Technicians licensed before March 21, 1987 receive for Element 3B and Technicians licensed before February 14, 1991 receive for Element 1A. (It's a problem for the VE's, but we can figure it out!)

The criticism by some who claim that the ARRL just wants to make money by publishing and selling new license study manuals and test materials is unfounded. A reduction in the number of license classes and exam elements will reduce the number of study manuals and exam elements that they (and others) publish and sell. Thus, the profit motive can be dismissed as irrelevant.

The Code Requirement

I fully support the offer to trade a reduction in required code speeds for an increase in the level of technical skills on amateur radio exams.

Code is overemphasized in the current licensing requirements. Every amateur station operator must be familiar with the rules, exercise sound engineering practices, follow accepted on-the-air procedures, and demonstrate a level of technical competence consistent with his/her license class at all times regardless of frequency band or operating mode. Code proficiency is relevant only for those amateurs who are actively engaged in CW communications and for those seeking a higher license.

Because of the declining utility of code for maritime, aeronautical, military, government, and commercial services, and its decreasing reliance

as a form of emergency communications, a de-emphasis of code relative to other communication modes in the amateur service is rational.

A reduction in required code speeds will encourage more amateurs to become active, and hopefully, remain active in the HF bands.

A reduction in required code speeds will encourage new and young amateurs to pursue license upgrades. This is a highly desirable outcome since it helps to fulfill one of the primary goals of the Amateur Radio Service, namely to produce a national resource of technically trained individuals.

Personally, I like the following distribution of code speeds: 5 WPM for General, 10 WPM for Advanced, and 15 WPM for Extra. This scheme has always appealed to me for pedagogical reasons. The ARRL proposal, 5 WPM for General and 12 WPM for Advanced, is even simpler because it eliminates one test. 12 WPM is a good compromise between 10 and 15 WPM. (I can live with this.)

The ARRL code scheme is consistent with international treaty obligations for HF band access, the current HF proficiency requirements of other nations, and the current status of code as a communications mode.

Some amateurs lament the easing of testing requirements. I agree to a point, but the current code speed requirements are far out of proportion to their importance relative to other communication modes. After all, we don't have a 120 word per minute speaking requirement to use SSB or FM phone on 10 meters; we don't have to demonstrate 50 word per minute typing proficiency before using RTTY or packet; we don't have to demonstrate an ability to read a computer monitor scrolling with 1200-baud packet messages.

Antiquated code requirements, especially the current 20 WPM code exam, impede and, in some cases, even obstruct the progress of technically-minded individuals who might otherwise be very active and innovative. It hardly seem rational for someone communicating via satellite to first master high-speed code just to have access to the satellite frequencies. We need to keep the emphasis on attracting technically inclined persons to the Amateur Radio Service.

Communicating by high-speed code is a useful skill and certainly its practitioners are to be honored for their abilities, but high-speed code proficiency by itself neither produces nor guarantees a corresponding proficiency in the technical aspects of our hobby. Nor does it produce or guarantee good operating practices and courteous on-the-air conduct.

Some amateurs maintain that high-speed code requirements encourage good operating practices, on-the-air courtesy, and compliance with FCC rules. They argue that a reduction of the code requirement will cause a loss of technical skill, a flood of unregulated havoc on the phone sub-bands, and even the end of Amateur Radio. The theory that code skill equals good operator practice is nonsense. A sampling of the 75-meter "gutter" band will reveal foul, sexually-explicit, hateful, abusive, and racist language, not to mention anti-government propaganda - all of this in a sub-band designated to be exclusively for Advanced and Extra Class licensees. In contrast, I can't recall ever hearing this kind of language on the VHF and UHF "no-code" Technician bands. (For one thing, local operators in my part of the world would publicly admonish such practices, and the local repeater trustees would likely shut down their transmitters to silence these

violators.) Now I'm not claiming that the Technician bands are not without their problems; I'm just maintaining that code proficiency doesn't cure these problems.

I would very much like to see the code requirement replaced by additional testing, such as on digital technologies, more operating procedures, regulations, dealing with interference, etc.

In fact in today's world, it would be far more beneficial to require licensees to demonstrate skills such as tracking sources of power line noise and sources of malicious interference, or winding common-mode baluns to eliminate computer and appliance generated noise.

A 5 WPM code entry requirement is a good idea for General Class; at the very least, it preserves a unique tradition: Amateurs have always used code. With experience, new amateurs will become proficient with higher code speeds if they really wish to pursue this mode of communications.

Because of the personal challenge and tradition, I believe we will always have a sizable group of active CW practitioners; code will live forever. (And because of this I favor maintaining the current CW sub-bands, approximately 31% of the amateur spectrum.) But I do not feel this one mode warrants it's current requirement status.

This is just a hobby. Access to Amateur Radio isn't supposed to be so difficult that it excludes the average American. And the fact that children can study and earn a license is a feature in which we can all take pride.

Code Exams

On code exams, I favor testing for 1 minute of solid copy and using "complete the blank" questions; I do not favor the use of multiple choice questions. I do not think it is necessary to test an applicant's ability to send code. Receiving is the real skill; almost everyone can send code faster than they can copy it.

I think VE's already have too much discretion here, and there is some abuse. I've heard of some VE's who give multiple choice exams to their friends but issue complete the blank exams to others.

Disability Waivers

I do not support the use of disability waivers for 5 WPM; VE's have numerous creative accommodative methods to test an applicant's code proficiency, and if a physical disability were severe enough, even the code speed could be overlooked.

I support the proposed policy requiring applicants to attempt an accommodative code test before a waiver is even considered (RM-9196). This will become less of a heated issue if code speed is de-emphasized.

Regarding the idea that an applicant must provide medical proof of disability (RM-9196) to receive exam credit, as a VE, I'm uncomfortable being in the position of evaluating an applicant's medical condition and

reviewing his medical records. I do not want to be involved with an applicant's confidential information. Unfortunately, I do not have a specific recommendation to eliminate abuse of the waiver policy; many doctors will sign the waiver without understanding it or even reading it. I can suggest that the FCC might cross-reference an applicant's waived license application with an established public record of disability, such as being a recipient of Social Security disability benefits. Perhaps the FCC can appoint a physician to confidentially review medical records supplied by the applicant's physician. This is a touchy area, and it's hard to be fair without being insensitive. Again, de-emphasizing the code speed requirement in exchange for more technically demanding theory exams will alleviate this problem.

Written Exam Content

I look forward to seeing the written exam elements redesigned to more closely correspond to the license privileges as mandated in both the ARRL proposal and NPRM 98-143, for example, VHF/UHF theory for Technician, HF theory for General, advanced electronics for Advanced, and high-tech modes and administrative rules for Extra.

I do not think there should be any significant deviation from the current 97.503 rules establishing exam content (topics and number of questions). Giving VE's too much discretion opens the door to abuse and fraud, especially in cases where a VE tests the graduates of his own license study class, emphasizing material he'll put on the exam. I believe the specific exam questions should be selected randomly within each topic from the available pool of questions.

I propose an Element 0 exam, revised and updated annually, and administered once within a revision cycle whenever an amateur upgrades his license class. This short exam, say 10 questions from a pool of 100, would emphasize current and recent regulations, practices and procedures, and the most basic electronic and radio theory deemed essential for all amateurs. The exam would be easy because it would contain mostly basic material, but it would help to insure that amateurs are up to date with the most recent regulations, practices, and technologies. Since it would be annually updated, the exam could be very responsive to current enforcement problems and practices which need emphasis. This exam would also free up some room on the other exam elements for more technical questions.

I would also propose that the FCC take this opportunity to renumber the exam elements. The current numbering scheme, 1(A), 1(B), 1(C), 2, 3(A), 3(B), 4(A), and 4(B), is the legacy of several decades of modification to the amateur licensing system. With license restructuring imminent, now would be an excellent time to clean up the exam numbers.

I propose Element 1 for the new Technician Class written exam, Element 2 for the new General Class written exam, Element 3 for the new Advanced Class written exam, and Element 4 for the new Extra Class written exam.

For the code exams, I propose Element 2C for a General Class code exam, Element 3C for an Advanced Class code exam (if any), and Element 4C for an Extra Class code exam (if any). Of course, the speed required on each of these elements is an issue for debate in this comment.

VE Rules and VEC Policies

I support the idea of Advanced Class VE's administering the General Class exam (RM-9148). This greatly simplifies the exam eligibility rules for VE's; they can administer any exam element for a license class below their own license (except for Extra's, who can do it all).

I suggest a modification to Rule 97.509(d), expanding the list of examinees to whom a VE may not administer an exam, to include close, non-family members such as roommates, boyfriends, girlfriends, common-law spouses, live-in companions, etc. This rule is already ridiculously overcautious, so including contemporary relationships seems appropriate.

I strongly support the current ARRL VEC policy that no VE will administer a license exam for which he/she has been waived. I believe this policy should become a rule for all VEC's.

I would also comment on the mysterious process by which the exam question pools are written; presently, the question pools are maintained by a Question Pool Committee (QPC) to which the VEC's send representatives. The selection of these representatives and their accountability to the amateur community is unclear. Some openness in the creation of questions and the establishment of a more democratic tradition would benefit everyone. At the very least, a "peer review" process for the selection and wording of exam questions might improve the accuracy, quality, and relevance of the questions.

The Novice Bands

Retention of current Novice and Technician Plus CW privileges on the 10, 15, 40, and 80 meter bands will be confusing without paperwork and documentation. This will generate more work for the licensing staff, and contrary to your expressed goal to streamline the process, it represents a step in the wrong direction. Simple expansion of Novice and Technician Plus privileges to those of General Class, a feature of the ARRL's proposal, is preferable to a reduction in privileges. It will also encourage these licensees to use their privileges and remain active.

The ARRL proposes to return the Novice Bands to unrestricted General and Advanced Class service; I'm in favor of this request; however, I'd suggest maintaining the current 200 watt power restrictions for Novice and Technician Plus licensees until such time as they take and pass a mandatory Element 3B exam before their current licenses expire.

With the Novice Bands absorbed into general service, power restrictions would be unnecessary for General, Advanced, and Extra Class licensees transmitting in the former Novice Bands.

Band Plans

Aside from the eventual reallocation of the Novice Bands, I favor no changes in the way phone and CW privileges are allocated within each band.

The current band plan allocations are very generous for CW operators; it

represents a dedication to CW as an operating mode and is an incentive to use CW. This does not mean however that code should be the primary licensing criteria over all other possible modes of communication.

Repeater Rules

I wish to propose the following rule change: If the ARRL plan is adopted and the maximum code speed is reduced to 12 WPM, then Rule 97.119(b)(1) specifying the maximum CW speed for repeater identification should be correspondingly reduced. In fact, I recommend the repeater ID be reduced to 13 WPM regardless of any other FCC rulings. It has always struck as somewhat foolish to permit repeaters in the "no-code VHF bands" to identify at 20 WPM, a speed which the majority of amateurs cannot copy.

Enforcement

Finally, I'll comment on the issue of enforcement. The Amateur Auxiliary and the Official Observers can do only so much reporting and evidence collection. Eventually, it's the FCC's responsibility to enforce it's own rules. A desire by some to involve state and local law enforcement not only usurps the FCC's role but creates too many potentially unfair and non-uniform policies. State and local officials generally lack sufficient training and expertise in the specialized field of communications law. (Witness the problems we have with antenna restrictions.) Only the FCC can prosecute violators; this is something you must do. Perhaps you could deputize well-trained and supervised Auxiliary members, giving them a more proactive enforcement role. But ultimately, each case must be expedited by FCC personnel. You need to simplify and streamline your own enforcement processes so that each case doesn't become a federal issue. You just have get out more often and pound on some doors, serving papers, of course. It would greatly sadden me to see Amateur Radio go the way of Citizen's Band radio, which is completely out of control, where one can routinely hear swearing, foul language, questionably legal activities (spotting state police speed traps), and even definitely illegal activities (gambling, prostitution, and drug sales).

Thank you for taking the time to read these lengthy comments. I appreciate the task you've undertaken. My fellow amateurs and I eagerly await your decisions on these issues.

Eric Hilbert, KE3TJ