

Within the hobby, I have been elected to membership in the First Class CW Operator's Club (FOC) and the ARRL A-1 Operator's Club.

In my professional life I am a urologic cancer surgeon with an academic practice limited to urologic oncology and male infertility. Presently I am Professor of Urology, and Professor of Clinical Obstetrics and Gynecology at Eastern Virginia School of Medicine, Norfolk, Virginia. In this capacity, I have been an educator of medical students and surgical residents for my entire career. In both my profession and my radio hobby, I am familiar with and concerned about quality education and standards for certification and licensure.

II. Number of Amateur Service License Classes.

I concur with the most recent proposal of the American Radio Relay League (ARRL) suggesting four (4) classes of license - Technician, General, Advanced, and Extra. Such a system would maintain the benefits of the incentive licensing program while streamlining licensure and reducing the redundancy and confusion in the system currently in force.

As noted in a recent article by Frederick O. Maia, W5YI, in CQ Magazine, "...Amateur radio is a hobby the cornerstone of which is advancing the radio art." To this end, the incentive licensing system proposed by the ARRL in the 60s and implemented by the FCC in 1967 has served the hobby well, requiring demonstration of increasing technical, regulatory, and operating proficiency with each level of license. In 1969, just under 2 per cent of licensed US amateurs held an Amateur Extra class license, and about 4 per cent held Advanced licenses. In 1997, some 9 per cent of U.S. radio amateurs held Amateur Extra class licenses, and 22 per cent held Advanced licenses. Even given that the ham population has grown massively since 1991 with the infusion of no-code Technicians, about one third of all current licensees have been motivated by the inducement of expanded operating privileges to obtain higher class licenses. The graduated system granting increased privileges with increasing license class has functioned well, and incentives should remain a feature of any new licensing structure.

Under the incentive licensing structure, amateurs who demonstrate their increased knowledge by examination are granted expanded frequency operating privileges by the FCC. This has had the additional beneficial effect of providing a significant degree of order to the amateur bands worldwide. Because the United States has the largest population of radio amateurs in the world (with the possible exception of Japan), any activity facilitating orderliness in operating activity by American hams serves to benefit the ham community worldwide.

III. The Novice License

A marked decrease in new applications for the Novice license indicates that this class no longer serves as the entry-level license as originally intended. The present "No-Code" Technician license now accounts for the majority of new amateur radio licensees. In making the Technician license renewable, though, the Commission has inadvertently created a subcommunity of amateurs, somewhat removed from the mainstream of more broadly experienced amateur operators, and has created something of a dead-end for new amateurs, who often focus their activities on VHF

phone alone, and do not get exposure to other aspects of the hobby.

In my opinion, the limited term license with no renewal feature - as with the original Novice license - promoted upgrading and increased self-education. A limited license term for the Technician license of 3-5 years would encourage licensees to upgrade, and should promote broader education about the hobby, regulations, and operating practices as interests, involvement, and activities expand. I would favor an entry-level technician license with a limited term which would be non-renewable.

IV. "Re-Farming of the Novice Subbands

The decreased interest in the Novice class license has resulted in underutilization of the novice subbands. Reorganizing the subbands to provide additional space for phone operation in the current Novice subbands, and removing present power restrictions would make the bands more compatible with current amateur interests, activities, and needs.

V. RACES Licenses

The RACES licensing program has been inactive for many years, and the license serves no real advantage over the standard ham license, but does impose an additional administrative burden. Accordingly, elimination of this program would appear to facilitate administrative streamlining, and benefit the Commission and the amateur radio community.

VI. Morse Code Proficiency

Proficiency in morse code should be a feature of higher class (General class and above) licensing. I support a system using 5-words per minute (wpm) for entry-level high frequency (HF - below 30-Mhz) privileges - i.e., for General Class, with 12-wpm for Advanced licensure, and 20-wpm for Extra class. The decrease in code speed requirements to 5 wpm for the General class would appease critics and opponents of morse code testing, while meeting international treaty requirements. Morse testing should require successful completion of a fill-in-the-blanks exam or one full minute of solid copy.

While there has been a decrease in commercial, military, and marine use of international morse code in recent years, the CW mode still remains a major feature of amateur radio activities. A review of contesting, DXing, and general operating activities over the past decade clearly demonstrates that CW is still a very important mode for radio amateurs. In contests and DX activities where all modes are utilized, CW contacts almost always outnumber phone contacts and contacts using other modes. CW is central to weak-signal, moonbounce, and satellite communications. Consequently, CW activity is still a major component of the ham radio hobby, and CW competence should remain a part of the amateur examination process for HF privileges and higher class licensure.

Morse code communication has been a traditional mode of radio communication for radio amateurs since the inception of the hobby. It is an aspect of the hobby which the American amateur shares with his counterparts in other countries. While there are those who make light of tradition, it is our traditions which bind our communities and our cultures together and give them meaning. Such traditions should not be abandoned lightly.

If part of our charter as amateur radio operators is that we should be prepared to provide emergency communications, then some basic level of proficiency in morse should be a part of the licensure process. CW operation will get a message through in bad radio conditions, and will do so when other modes of communication cannot. CW equipment is the simplest and least expensive to build and operate. Additionally, CW operation easily transcends language barriers whereas phone and digital/keyboard communications are heavily language dependent.

There is incentive and merit in maintaining levels of 12-wpm for Advanced and 20-wpm for Extra class. CW mastery is the one aspect of the licensing process that cannot be learned by rote memorization, and mastery of the code even at 5-wpm demonstrates a more-than-casual level of commitment to the hobby. One does not truly learn morse until a speed of about 12-wpm is achieved, and true facility comes at around 20-wpm. Since the licensing examinations are now administered by volunteer examiners, the administrative burden on the Commission of maintaining the higher level CW testing should not be substantial.

VII. Advanced Class Volunteer Examiners to Provide General Class Examinations

I concur with the ARRL's recommendation that VE testing of General class license applicants by Advanced class VEs be permitted. This will facilitate training and examination of license candidates.

VIII. Medical Exemptions for CW Testing

Medical exemptions for CW testing have clearly been abused, although the extent of such abuse is not certain. A discussion of this problem is beyond the scope of this reply, as the problem is complex and bears heavily on issues of privacy and privileged doctor-patient communication.

As a physician, I can assure the Commission that few of my non-amateur physician peers recommending CW waivers have any inkling of what they are recommending. There are clearly some individuals with significant vision, hearing, or motor abnormalities who deserve such a waiver. There are many other individuals whose disabilities are completely unrelated to their ability to copy code, who nonetheless attempt to manipulate the waiver process to avoid demonstrating the required morse competency. This subverts the licensing process and needs to be dealt with.

There are many physician-amateur operators who, knowledgeable of the requirements for licensure and the nature of most common disabilities, would happily volunteer to evaluate applications for waivers. A licensed physician is ethically and legally bound to maintain confidentiality. A physician not professionally or personally associated with an applicant is more likely to be objective and fair about the facts for which a waiver is being sought.

Eliminating higher CW speed proficiency requirements as a means of eliminating CW waivers would be somewhat akin to eliminating speed limits to eliminate speeders.

IX. Examination Procedures

The present system of VE-administered testing is not as stringent as the FCC-administered system which preceded it. Since licensing testing is now conducted by amateur radio operator volunteers under the aegis of one of the VECs, the FCC is relieved of much of the burden of administering, grading, and processing the tests. We certainly cannot afford to "dumb down" the licensing process - the examinations must test for competence sufficient to assure both proper operation of radio equipment, safety, acceptable operating technique, and knowledge of FCC regulations.

Code Testing: With the reduced emphasis on morse code as a communications mode, a simple receiving test of either one minute solid copy or 70 per cent on a fill-in-the-blanks test would, in my opinion, be a satisfactory test of morse code competence.

Written Examination: Written examinations should be not less than fifty multiple-choice questions for each class. For the Technician and General class exams, emphasis should be predominantly on regulations and operating procedures, with some basic theory, RF safety, and technical topics. For Advanced and Extra class testing, emphasis should be technical, to include questions about newer digital and satellite communications, RF safety, and other technical topics.

X. Conclusions

- Amateur licensing should be streamlined, but the quality of those licensed and the incentive features of the present system must be maintained in adopting a new system. A four class system as suggested by the ARRL achieves this. As a secondary feature, and incentive-based system helps promote order on the amateur bands for the very large U.S. amateur population.

- While there is a diminished role for morse code in non-amateur applications, the mode continues to be popular and widely used on the amateur bands. Despite advances in other communications modes, the simplicity, reliability, and universality of CW communication make it a useful skill for amateurs to maintain competence in. The three speed levels - 5, 12, and 20-wpm - have served the service well and should be retained.

- Medical waivers are problematic and the matter requires further study.

- All testing for amateur radio licensure should be made broader in scope and more stringent, with a minimum of 50 multiple choice questions for each class of license. For Technician and General licenses, emphasis should be on regulations, safety, and proper operating procedures, with increased technical emphasis for the higher grade license exams.

Respectfully submitted,

Donald F. Lynch, Jr., MD
1517 West Little Neck Road
Virginia Beach, Virginia 23452
(e-mail:

dlynch@picard.evms.edu)

26 November 1998

.....I'""^`D^`
• `G `ç
`ð
`••`6`α`İ``,`=•`ç`¼`•`-•`a\$`±\$`|`%`£%`m+`{w{w
{w{w{w{w{w{wrw{w{w`(`•`~`•`~`••m+`Š+`È-`Õ-
`Æ.`Ú.`ç0`³0`N6`{wrwrw{w`
.....
.....(•`~`•`~`••.....

1 G I \ u ™ ¼ ß ö ø
" 0 2 C Å ø • •
voooooooooooooooooooooooooooo • ä • ö • • F a
ø

