

Before the
Federal Communications Commission
Washington, D.C.

In the Matter of) RM-10870
Petition For Rule Making)
Amendment of Part 97 of FCC Amateur Service)
Rules to Eliminate Morse Code Testing)

Comments of James P. Miccolis, N2EY

Introduction

I am submitting these comments in response to RM-10870, the restructuring proposal submitted by NCVEC, to oppose the proposal. The ARRL proposal, RM-10867, while not perfect, is far superior in all respects.

I am an electrical engineer with BSEE and MSEE degrees from the University of Pennsylvania and Drexel University, respectively, and am employed full time in the design of control systems for the transportation industry. I am coinventor of US Patent 5,358,202. I am also an amateur radio operator, first licensed by the Commission in 1967, and currently hold an Amateur Extra class license. My interest in amateur radio at an early age led me to pursue a career in electrical engineering.

I have separated the NCVEC proposal into “Good Ideas” which I support and “Bad Ideas” which I oppose.

Good Ideas

Entry Level License Class - A revised entry-level license class is the best idea proposed by RM-10870. By offering an easy entry into the Amateur Radio Service and a balanced set of privileges, it is better suited to the purpose than the current Technician class. However, the implementation suggested by NCVEC is extremely flawed and should not be enacted.

Bad Ideas

Free Upgrades – RM-10870 proposes that all existing Technician and Technician Plus licenses receive a free upgrade to General, and that all Advanced licenses receive a free upgrade to Amateur Extra. The Commission has maintained such license classes for the past four years with no apparent difficulty. All that is required to maintain these classes is one field in the license database and a few operating privilege regulations. Similar free upgrades were proposed by ARRL in 1998, and the Commission was correct to decline

them. The current upgrade requirements and test procedures are not so difficult as to impede anyone holding a “legacy” license class from upgrading.

“Communicator” Class of License Test and Special Provisions – RM-10870 proposes that the revised entry-level license test not include much testing in regulations or theory. Instead, it is proposed that “Communicators” be required to certify that they have a copy of Part 97. Yet it is obvious that if there is any subject area that must be tested for an Amateur Radio license, it is the area of FCC regulations. In similar manner, the proposal includes requirements that Communicators use only manufactured or approved kit equipment, rather than include appropriate test questions on theory. Given the number of amateurs of all ages, education and walks of life who have passed the old Novice license, it is difficult to imagine that such extreme simplification serves any purpose. Indeed, the technical nature of the Amateur Radio Service demands that adequate theory questions be included in the testing. Also, since experimentation and home-construction is a major component of the basis and purpose of the Amateur Radio Service, entry level licensees should be encouraged, not banned, from participating in them.

RM-10870 cites the technical history of the Amateur Radio Service and the need to preserve and improve the technical level of the service, yet contradicts itself by proposing to remove such subjects from the entry-level testing.

Perhaps the most absurd and unnecessary proposal is the condition that “Communicators” be required to use only transmitting equipment that uses voltages of 30 or less. Such a requirement is not only unenforceable but unnecessary restrictive and illogical. For example, under the proposed rule, “Communicators” could use power supplies energized by 115 or 230 volt house current, but could not use a manufactured transmitter with 50 volts on its final amplifier. In a similar fashion, vacuum tube receiving, audio and test equipment using high voltage requires no license at all, but amateur transmitters using such voltages would require at least a General class license under the proposed rules.

Another unnecessary special provision of RM-10870 is the proposed assignment of callsigns from a single block to “Communicator” class licensees. This provision serves no real purpose other than to force a callsign change upon upgrading, and to add to the Commission’s administrative burden. While such distinctive callsigns would enable immediate identification of Communicator class licensees, such identification is not really necessary given the easy access to the Amateur Radio license database.

Widening of Voice/Image Subbands – RM-10870 proposes that several of the voice/image subbands be widened to a degree that far exceeds previous proposals. Such widening serves as a disincentive to use spectrum-efficient modes in favor of voice modes.

Elimination of Morse Code Test – RM-10870 proposes that Morse Code testing be eliminated for all license classes. Such elimination is not in the best interest of the Amateur Radio Service. Morse Code is the second most popular mode used by amateurs on the bands below 30 MHz, second only to single sideband voice communication. While

the use of Morse Code has essentially disappeared in other radio services, the mode is widely used by radio amateurs for a variety of purposes, particularly on the HF and MF amateur bands. Since an amateur radio license authorizes its holder to operate only in the amateur radio bands, it is only logical that amateur license requirements be based primarily on what modes and technologies amateurs actually use on the air, and only secondarily on what modes and technologies other services use. Therefore, the argument that the decline of Morse code use by other services should result in elimination of any Morse code testing for an amateur radio license is faulty.

The Amateur service is different from other radio services in several ways, such as its noncommercial nature. Its most unique feature, however, is that amateur radio is about radio for its own sake, rather than as a means to an end. Unlike other services, operating skill and technical know-how are fundamental qualities of the radio amateur. Other radio services have long focused on eliminating the need for operator skill and technical competence because those services, unlike amateur radio, are not fundamentally concerned with radio as an end in itself.

The proposal claims that the Morse Code test acts as a “barrier” to keep “otherwise qualified persons” out of the Amateur Radio service. The Morse Code test is cited as a cause of reduced growth, and filtering out technically qualified persons.

The past 23 years of US amateur radio history tell a different story, however. Growth in US amateur radio from 1980 to 1990 was virtually identical to that from 1990 to 2000, even though in the former period of time all US amateur licenses required a code test, and there were no medical waivers. The 1990-2000 period saw a surge of growth when the rules were changed, then regression to about the same level of growth that existed before the changes.

In a similar manner, the reduction of both written and code license test requirements in 2000 resulted in a surge of upgrades, which has tapered down to levels not much different than before the changes. The total number of US amateurs has only grown by about 8000 in the 4 years since those rules changes took effect, and most of that growth took place soon after the rules changes. Upgrades of existing amateur licenses have displayed a similar pattern. It is only logical to conclude that if the code tests were a genuine impediment, growth in both total licenses and upgrades would have demonstrated a sustained, dramatic increase. But such sustained increases have not occurred.

In similar manner, the removal of the Morse Code test from the Technician class license has not resulted in a technical revolution in amateur radio from newly-licensed “technically qualified” amateurs. Instead, the continued progress in amateur technical efforts continues to be mostly the result of work done by experienced amateurs, even though the Technician class license has not had a code test for more than 13 years.

RM-10870 seeks to recreate the enthusiasm and success of the old Novice license. Overlooked is the fact that all Novices passed a 5 wpm Morse code test, and many if not most used Morse Code exclusively during their time as Novices.

Skill in Morse Code, even at a very basic level, permits amateurs to use radio equipment ranging from very simple to highly advanced designs, and technologies of almost any vintage. Morse Code skill encourages amateurs to actually build their own radio equipment by offering an easy first step, and a growth path that leads to almost any usable technology. It must be remembered that most radio amateurs are self-trained and do not have access to professional level resources. Few amateurs today would consider a single-sideband transceiver as a first project, but the home construction of Morse Code equipment is possible for almost all amateurs. Yet RM-10870 seeks to eliminate both Morse Code testing and the ability of newcomers to home-construct amateur radio equipment. The proposal mentions how many engineers started out in amateur radio, but then proposes to disconnect newcomers from the very path that so many have followed by home construction and experimentation.

Conclusion

RM-10870 proposes nothing of benefit to the Amateur Radio Service. None of its proposals should be enacted by the Commission.

Respectfully submitted,

James P. Miccolis