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Before the
Federal Communications Commission
Washington, DC 20554

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

REPLY COMMENTS OF DAVID MOISAN

Commissioners:

I'm responding to some of the comments that have been written in response to Docket 98-143, the proposed restructuring of Part 97 of the Amateur Service Rules. As I mentioned in my earlier comments on this docket, I am a college-educated amateur radio operator.

I've read many of the reply comments to Docket 98-143 and I wish to comment on amateur radio testing procedures. To summarize, I believe that the current multiple-choice tests, with some modifications, are still the fairest and most consistent way to administer tests to a wide population with varied skill levels of the examiners. Many of the suggested remedies to a perceived "dumbing-down" of ham exams, such as essay questions, and skill endorsements and demonstrations, would only encourage inequities based more on favoritism and prejudice than on any technical merits; not only would they not insure high technical standards, but would only sever any social contact remaining in what is already an unnecessarily fragmented service. I support the FCC initiative to allow hams to act as VE's for license classes at least one step below their own.

The first point I want to address is the proposal by Gordon West to establish a series of endorsements that would test for common activities and procedures in the ARS, such as operating an HF station or repairing an antenna system, when applicants apply for upgrades. He proposes that instructors be trained to administer these endorsements at local schools, in the same manner as the FAA trains its instructors and pilots. He also believes that this would foster a greater sense of community in the ARS.

It's an intriguing idea but it has several flaws:

First, it puts too much emphasis on endorsements. A hallmark of the ARS that is unequalled anywhere else in FCC regulations is the *flexibility* of the service and the many different ways that amateurs build and experiment to solve problems. In the

ARS, different disciplines combined together are commonplace— satellites and radio (AMSAT), and GPS and packet radio (APRS) are but two examples. And computers, in the hands of far-sighted individuals, are changing radio forever.

How can such an endorsement system keep up? At best, such a system would only codify existing knowledge. There would need to be an endless stream of endorsement proposals that the NCVEC would need to keep up with, in addition to the three-year revision of question pools that would still be going on. For each new mode or procedure that's endorsed, someone would have to be the authority that would collect and codify the knowledge tested for.

Secondly, there would be a social cost. Right now, many examinees are pressured to take the code and test for the Extra before they are considered "real hams". The endorsement system would become a paper chase, with examinees more concerned with doing the "right" things to be accepted by the community than they would be with learning the necessary math, regulations and procedures to operate an amateur station safely and legally. Many more of them, faced with little time to "kiss up" to hams for respect, would simply leave ham radio for other pursuits.

Already, there are hams that have had to get licenses on their own because they never had other hams nearby, or have been met with hostility from the locals. These people might never be able to get endorsements. I'm one such person: The locals, with few exceptions, were never really friendly or supportive of my getting a license, so I had to study on my own. I may have never been able to do so if endorsements were in effect.

Moreover, there is the real potential for favoritism. Mr. West seems to be an honest, fair individual who could probably make his proposal work for him and his students. In his hands, he probably could build a real community. But that's not always common in the ARS. There has always been a segment of ham radio that bitterly opposes anyone else wishing to enter ham radio.

People like them could wage a vicious battle against new modes and procedures they don't like. Spread spectrum and digital modulation come easily to mind; apart from the natural concerns people have over compatibility with existing modes, they evoke hostility amongst some hams bitter towards change. If these people were in control of an endorsement service, they could block progress and effectively kill the ARS. With the fragmentation of the amateur community into classes that we have now, this would be a very real possibility.

If endorsements on a given mode were required before a mode could be used by the examinee, things would be even worse— experimentation would be strongly discouraged as few would want to go through an exam just to operate a given mode.

And unlike the FAA, our elmers (mentors), instructors and examiners are almost all volunteers, who would not have the extensive infrastructure that the FAA uses to make its examination standards consistent across the country. The West proposal is admirable, but it puts the cart before the horse, requiring a comity and unity of purpose that does not seem present in many parts of the ARS.

Essay exams are the other popular idea on strengthening examinations that I wish to debunk: Under this system, examinees write out their answers, which are then graded. The reasoning is that examinees would have to "know" the answer and wouldn't be able to guess at it on a multiple-choice exam, and most importantly, wouldn't be able to cheat.

This last “advantage” is questionable: During my studies to earn a BSCS degree, I became acquainted with a woman who was taking an operating systems course with a professor that I had previously been taught under in the same class.

His class consisted of mostly one-sided discussions of the features and implementations of various operating systems and the points and concepts that made them different from each other. During exams, we were required to describe a certain concept, such as preemptive multitasking and explain it in our own words. I earned high marks in this course, being able to explain these concepts well.

My acquaintance also got high marks, but in a different way: She tape-recorded the professor's lectures and memorized them. When I heard this, I was disappointed in my professor for not picking up on this, for being so enamored of his own voice that he was perfectly willing to hear it parroted back to him by his student. Many with college experience could testify to similar stories.

In ham radio, it would be tempting for new examinees to follow my friend's example, especially if they face a hostile or indifferent examination team that they felt the need to "suck up" to.

College professors and other instructors have spent much time learning how to teach and grade exams; experience that very few VE's have. Many of my previous comments on endorsements and favoritism could apply equally to essay exams.

But these proposals only reinforce my main point: Hams are too obsessed with exams for their own sake.

A common sentiment among hams, especially among those of "higher" classes goes: "I had to do it so <u>you</u> have to do it too!" "Hard work and Personal responsibility!" "You have to put <u>effort</u> into it!"

Early in my college experience, I was required to use punched cards to store my 300-line COBOL program, even though I had used screen-based text editors in high school. This was in 1987, when most businesses had abandoned the punched card long before.

I had enough to do in college, studying in my field and for the other things that make good exposure to a liberal education, that I had <u>no</u> room for "tradition". I'll never know if the year I spent on punched cards could have been more productive elsewhere, but I suspect that would've been so. With the demands on time that most of us— elmers, VE's and examinees— have, there's no room to be paternalistic, to make the exam bigger than life.

As I mentioned in my earlier comments on 98-143, tradition and "the Good Old Days" aren't enough for us anymore, if they ever were. The only thing exams should serve in the ARS is to make sure that applicants know enough math, regulations and procedures to operate an amateur station safely and within regulations. Hard work for its own sake is irrelevant.

To that end, the current multiple-choice exam, with an expanded question pool, is still the fairest, simplest way to test applicants. It's been suggested that computers be used to generate the math questions randomly; this is a good idea as long as the questions are framed so that they represent <u>practical</u> experience (such as not asking an examinee to measure out 1.00005 meters when their meter sticks only measure to 10 millimeters precision.) With a very large question pool, there's also the concern of making sure an average computer-generated test has all the core elements we want to test for, but this can probably be resolved.

Coupled with the FCC's proposal to allow Advanced hams to be VE's for General class examinees— a proposal I enthusiastically support— my proposal is the best and least burdensome way to insure that applicants have the knowledge to operate safely within the law. Of course, as I mentioned in my first comment on 98-143, I also advocate the elimination, or at least the de-emphasis, of Morse code as an exam requirement.

Respectfully submitted,

David Moisan