

Testing for Dummies – A Reference for Everyone Else

By

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Yes, you can be successful in your initial licensing or upgrade of your license. All you need to do is follow a few simple guidelines and your success is almost assured.

I've been a VE now for about 15 years and, over the years, I have noticed a few pitfalls that various people make in taking licensing exams and I have also observed how successful test takers achieve their success. It's not really hard to achieve success on licensing exams. You just have to understand how to prepare and the psychology of testing.

Back in "the good old days" (and maybe they weren't so good), tests were conducted by the FCC. You had to attend a test session that was held twice a year in Portland or twice a year in Bangor *or* you had to make a trek to downtown Boston to take an exam at the FCC Field Office. If you took the exams at either Bangor or Portland, you had to sign up at least a month in advance and you had to specify what exams you were going to take. If you failed an exam, you had to wait a month before taking the exam again. If you were taking the General Class exam and, say, passed the 13 WPM code exam, but missed the written portion of the exam, you got no credit for the code or the theory and had to take both again. You took the exams before a government bureaucrat who was usually none too friendly. Study materials for licensing were based on a syllabus issued from the FCC. No, the question pool was not published!

Today is a world apart from the "FCC days". Exams are given by volunteer examiners (from the amateur community) and are given usually monthly within a short driving distance from your home. Most sessions are a walk in type exam with no prior registration required. You don't have to specify what exams you wish to take in advance. If you fail an exam, you may retest immediately, if you like by simply paying another test fee (no, you won't get the same test again. Although there are rules for exam sessions, the sessions are usually a bit more relaxed than the old FCC days. The examiners are just other hams that have been certified to serve as volunteer examiners. Study materials today are based on a published question pool. Yes, all the exam questions and answers are published and are available in most all study manuals and are available for download from the Internet. There are also various web sites that have practice exams available on-line using the exact same question pool as is used at any VE exam session and the same formula for selecting various questions in the pool.

I've been taking government style exams (and the amateur radio licensing exams are "government style" exams) for well over 30 years and they are all pretty much the same in structure. They consist of a question and four multiple choice answers. There are usually two answers that are totally wrong (these are called "distracters"). There is usually one answer that is "almost" right and there is one "right" answer. The trick is to know the right answer either by knowledge or by memorization. There are really too

many questions in a given question pool to memorize all the questions and answers, so, some knowledge of the subject is essential. Don't bank on memorizing a question and a specific answer in a specific order. The questions and answers are published, but the order of the answers may be scrambled on the actual exam. If you, say, memorize that question 1 is answer "B", you may be surprised when it's not in that exact order on the actual exam. The actual order of the questions may not be in the same order as they are in the question pool. You will find, though, that many of the questions in the question pool are actually the same, but just reworded.

In taking the exam, use a simple two step rule: **RTFQ** ("Read The Frapping Question") and **RATFAC** (Read All The Frapping Answers Completely"). Don't jump at an answer if you haven't read the question and all the answers. Next, try to eliminate the two "distracters" (the totally wrong answers). If you can narrow the answers down to two, you have a better chance. This where your knowledge comes into play. If you've studied sufficiently, you should be able to eliminate the "almost correct answer". If you have a question that requires calculation, be sure to calculate correctly. If you, say, must calculate the voltage drop of a 1k Ohm resistor in a circuit, don't read it as a 1 Ohm resistor. Your numbers will come out right, but the decimal place will be totally off (and the incorrect answer may appear to be the right answer). If you draw a complete blank on a question, use the "best guess" principle. That is read all the answers and based on your knowledge, select your first guess (which statistically is most probably correct).

Don't get rattled or panic at a test session. Remember, you are not going to be taken out and shot if you don't pass. You won't lose your job or be sent to "the big house". Amateur radio is a hobby and you can always take the exam again (sometimes immediately or at another test session after some further study). The examiners are not out to fail anyone. They just correct the exams and forward on to the Volunteer Examination Coordinator (VEC). Relax at a test session! It's not the end of the world if you are not successful on the first try.

Now on to some suggestions for proper study. First, **study!** Even if you have a background in, say, electronics it doesn't mean that you'll pass the written exam. There are questions on rules and regulations, amateur operating practices and frequency allocations that are not automatically learned as a skilled electronics technician or engineer. As a point of fact, only about a third of the amateur exams involve actual electronic theory. The remaining two thirds involve rules and regulations, operating practice and frequency allocations. Get a good study manual to study the material. Not only is it good in preparing for the exam, but is also can be used as a reference for you in the future.

In your study manual, read the first chapter and study the exam questions from the question pool that are covered by that chapter. If you are able to honestly (no peeking at the answers when you're answering the questions) answer all the questions with a 90% or above, you have a pretty good handle on the material and you should proceed to the next chapter. If you get less than a 90% or above on a chapter, go back and

review the questions you had a problem with. If you still have problems with questions, seek out a ham to “Elmer” (or assist you) through the questions. Do the same for each chapter in your study manual.

Now that you have completed the study material and been able to answer all of the suggested questions in the question pool, it’s time to do an overall review. I strongly suggest you start by honestly (again, no peeking at the answers while doing the questions) taking all the questions in the question pool. If you get less than 90% in taking all the questions, note what questions you missed and go back and restudy the material that those questions covered. Try it again and repeat the process until you are able to take the entire question pool with a 90% or better.

You’re now ready for the final review. Go on-line and take some practice exams. Although there are many web sites that have practice exams, I’m partial to the practice exams on QRZ (<http://www.qrz.com>). To properly take on-line practice and get a good view of most all of the question pool, take the on-line exams a minimum of 40 times. If you are able to score a 90% or above on all the exams you take, you’re ready for the real thing. If not, review those questions you missed and restudy the material.

Now, why do I keep mentioning the 90% or better rule? I’ve found that in test taking, there’s a 10% “panic factor”. It’s human nature to get rattled or panic at a test session. This usually accounts for about a 10% drop in your score just because you are rattled. If you are able to get a 90% or better in practice, you may drop your score by as much as 10%. You’ll be looking at passing the exam with an 80% or better. If you say are :”just passing” in practice, you can expect that your score may drop by as much as 10% at a test session (due to the “panic factor”) and it may result in a failure of the exam. Always best to have that “90% plus” edge!

One final thought. One may take as many exams at an exam session as you like as long as you are successful on each one. Many folks often like to “try” the next level to “see what it’s like”. This indeed made sense back in the old FCC days; today, it doesn’t make a lot of sense. In the old days, the question pool was not published and there were no on-line exams. At least by trying the next level one got an idea of what the next class of exam was like. Today, with the on-line exams, one can “try” the next level anytime in the comfort of your own home at no cost. One never needs to be embarrassed when a VE tells you “you didn’t quite make it”. In my experience, most folks that “try” the next exam without any study get between 35 and 45% correct and for those folks that have “glanced over the material” usually come out with between a 50 and 60% correct. A passing score on any of the exams is 74%. If you haven’t really studied the material for the next exam, you usually have two chances of passing; slim and none. It usually ends up as a study in frustration. Perhaps be happy with what you were successful in attaining, enjoying the new license class and returning to take the next level when you are really ready.

These are a few tips to ensure your success in taking the amateur radio licensing exams based on my experience as a VE over the last 15 years or so. They've worked for many in the past and I know they'll work for you.

73, Bryce, K1GAX