

# EDUCATIONAL ACTIVITIES FORUM



AN IDEA EXCHANGE FOR AMATEUR RADIO INSTRUCTORS

MARCH 2000

## Restructuring: New Question Pools

The following information was contained in an e-mail message ARRL received on January 8<sup>th</sup>, 2000 from Ray Adams, W4CPA, Question Pool Committee Chairman:

*"Your Question Pool Committee is in 'band aid' mode, trying to get something usable into public domain for all three of the new written Question Pools by February 1 or very shortly thereafter. A Technician Class syllabus has already been drafted and approved.*

*"We will go back over the newly configured Question Pools refining them and updating in a methodical manner with the order to be decided by the NCVEC when next in session. We will be in about the same condition for each pool, but we must start somewhere."*

*73, Ray Adams W4CPA, Chairman  
Question Pool Committee*

On February 1, Bart Jahnke, W9JJ, manager of the ARRL VEC Department, gave an update on the new Question Pools:

"What I feel instructors should know about the new Question Pools is that the Novice and Technician Question Pools are being merged. The General Class Question Pool is being fine-tuned for consistency with the coming license changes and current study materials. The Extra Question Pool is a merger of the Advanced and Extra Question Pools, with an emphasis on the technical questions in the current Advanced Class study materials. No one will find this Question Pool or the actual tests to be a 'dumbing-down' of the Extra Class license.

"Instructors should tell students to use the current study material available because it will match the new Question Pools when they are released. I also remind hams to register with the ULS (Universal Licensing System) as soon as possible if they haven't done so already. Visit the ARRL Web site for full information."

## Restructuring: Should I Teach A Class Now?

Are you wondering whether to teach classes before the new Restructuring takes effect on April 15? Well, wonder no more. Here are some comments to clarify at least the most important issues for you.

### **1. I want to start a new Technician and/or General class before April 15. What materials should I use?**

Classes with students that will be tested before April 15 should continue to use the same materials as in the past. The current *Now You're Talking!* 3rd Edition; *Novice/Technician Instructor's Guide*, 3rd Edition; and the *Technician Video Exam Course*, cover everything needed to pass the Novice and/or Technician exams prior to April 15. The *General Class License Manual* and the *General Class Instructor's Guide* are all that are needed for an upgrade to General prior to April 15.

### **2. My class will begin before April 15, but students won't test until after April 15. How can I eliminate any surprises on their exams?**

Using the current materials, teach your class just as you have before. As soon as the new Question Pools are released, download them and ensure that you include any new items in your instruction to students.

### **3. How soon will the new study manuals and Instructor's Guides be available?**

All of the new Question Pools will be out in the next few weeks, leading to new study manuals for Technician, General, and Extra. As in the past, *Instructor's Guides* designed for use with Technician and General study manuals will follow soon thereafter. Dates these will be available depend on the final production of the study manuals.

### **4. There will be no new Novices after April 15. Will we still need to teach about Novice frequencies and HF privileges in the Technician classes?**

That's an excellent question! The answer, quite simply, is yes. This class will be the only exposure these folks have to HF modes, band plans, gear, and CW, if and when they decide to take the 5 wpm Morse code exam. Technicians who pass the 5 wpm Morse code test will automatically receive their new privileges immediately regardless of whether they pass now or after April 15.

### **5. How will I know when the new Question Pools are out?**

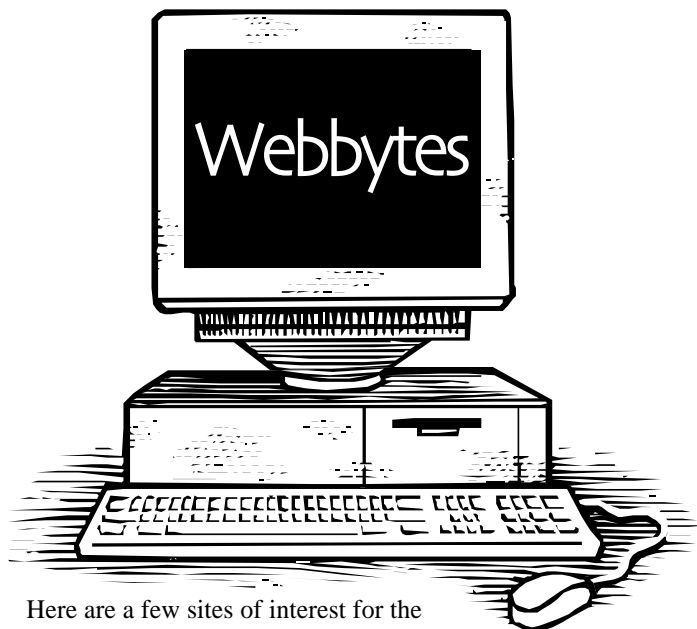
All of the new Question Pools will be posted on the ARRL Web site as soon as they are completed, and will be released to the Public Domain by the Question Pool Committee, comprised of representatives of the Volunteer

Examiner Coordinators. Watch *The ARRL Letter* and the ARRL Members-Only Web Extra postings for more details.

### **6. Some of my students wish to study for the Technician license on their own and don't know when they will be ready to take the exam. Which book should they use?**

*Now You're Talking!* 3rd edition will be a great starting point. (Practice exams can be found on the Internet at [www.qrz.com](http://www.qrz.com) and also at [www.hamtest.com](http://www.hamtest.com).) Have them stay in touch with you for updates to the Question Pool and current happenings that may affect their examinations.

If you have any other questions, please refer to the ARRL FAQ (<http://www.arrl.org/news/restructuring/faq.html>). For more specific details, contact the department most closely related to your concerns (page 10 of any *QST*).



Here are a few sites of interest for the active instructor:

To help prospective hams with disabilities:

<http://www.mtn.org/handham/>

To find ham radio technical topics and how-tos:

<http://www.arrrl.org/tis/bibs/>

Downloadable band plan chart you can use:

<http://www.arrrl.org/field/regulations/band.htm>

## 1999 Teacher Survey-Analysis

A survey was commenced in late 1999 of a small group of ARRL's most committed instructors and teachers by ARRL Educational Activities Correspondent Dan Miller, K3UFG. The purpose of the survey was to determine the response of students to instructional techniques, and to review sample lesson plans submitted by our respondents. Specific questions included student grade levels/ages, Amateur Radio operating activities, and the effect of computer activities on Amateur Radio learning. Respondents also supplied ad hoc comments about their class experiences.

Instructors and teachers who replied to the survey were selected for their generally high-level of school classroom activity and innovative teaching methods. Successful pass rates for students were common among all respondents'

classes, and their non-successful efforts were also noted. Respondents also commented on their willingness to try different instructional approaches, and about what competed for students' time and attention:

\* "Students appreciate the fact that, when competing with non-hams for employment, an Amateur Radio license gives them a definite edge."

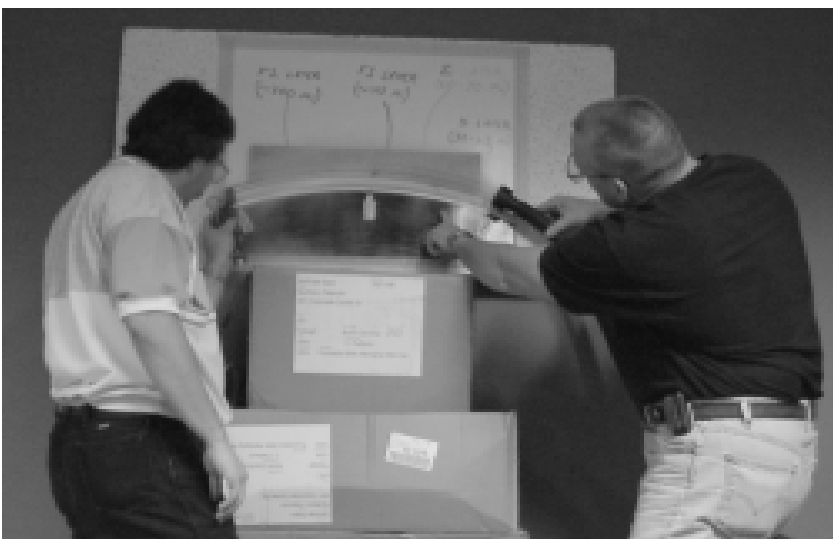
\* "Computer literacy helps students with packet and logging programs, plus they take exams online."

The overall tone of all respondents to the survey was positive. If you would like to forward your ideas and experiences about instructional hits and misses, send your comments to Dan Miller, K3UFG, ([dmiller@arrrl.org](mailto:dmiller@arrrl.org)). Dan is also seeking lesson plans at this time.—Mary E. Lau, N7IAL, F&ES Project Supervisor

## Demo Ideas

Gary Pearce, KN4AQ, sent an e-mail to us about the Raleigh (NC) Amateur Radio Society licensing classes, which are held twice a year. Instructor Mike Murphy, WA4BPK, put together a home-made capacitor to use for class demos — he estimates the value at about .5 microfarad. During class, he asks students to squeeze the plates together while the capacitor is in a circuit that fires a neon light at various speeds depending on the value of the capacitor. As the capacitor is squeezed, the firing rate of the light speeds up.

Propagation instructor, Jeff Wittich, AC4ZO, built a contraption to demonstrate the nature of skip as reflected off the various layers of the ionosphere. Jeff wields a laser light, held at the surface of the earth (a globe) at the transmitting location. The light bounces off a curved piece of wood, representing the ionosphere, and returns to earth at the appropriate distance. Ron supplies fog from a cake of dry ice in order to make the light more visible to students. Ron's demonstration package is to scale for the curvature of the earth, the height of the ionospheric layers, and the distance the signal travels across the earth



---

## WHO ARE YOU?

### The 2000 ARRL-Registered Instructor Questionnaire

Congratulations! As an experienced ARRL-Registered Volunteer Instructor, you are a "Guiding Light" for newcomers to Amateur Radio. We expect more interest in licensing activity from many non-hams in the next few months than ever before. Are you ready? We can help. Answer the questions below and return it via email, US mail, or FAX. Our addresses are located at the bottom of this newsletter. Thank you.

In 1999, you produced another batch of new licensees to be proud of. The first 10 instructors to report on their new hams and return this survey before May 1, 2000, will receive a free item, useful either to an instructor or to give to a student. Respond quickly!

Name & Call Sign \_\_\_\_\_

Address \_\_\_\_\_

City/State/ZIP \_\_\_\_\_

Send EAF to this email address \_\_\_\_\_ Day Phone \_\_\_\_\_

1. In the Fall 1999 thru Spring 2000 academic year, I will have taught (#) \_\_\_\_\_ classes.
2. During the same time, I had a total of (#) \_\_\_\_\_ students begin my classes, and \_\_\_\_\_ of them graduated.
3. My graduates totaled: Novice \_\_\_\_\_ Tech \_\_\_\_\_ Tech+ \_\_\_\_\_ General \_\_\_\_\_  
Advanced \_\_\_\_\_ Extra \_\_\_\_\_
4. My students use: Now You're Talking \_\_\_ Yes \_\_\_ No  
ARRL Tech Q&A \_\_\_ Yes \_\_\_ No  
ARRL Tech Video Exam Course \_\_\_ Yes \_\_\_ No  
General Class License Manual \_\_\_ Yes \_\_\_ No  
Graduation Kits \_\_\_ Yes \_\_\_ No  
Other \_\_\_\_\_
5. My classes take \_\_\_\_\_ weeks, with \_\_\_\_\_ hours per session.
6. Problems with books include: \_\_\_\_\_  
\_\_\_\_\_

7. If there were an ARRL Extra Class Instructor's Guide, I would purchase it. \_\_\_ Yes \_\_\_ No

8. I want to continue receiving this newsletter. \_\_\_ Yes \_\_\_ No

9. I am an ARRL member. \_\_\_ Yes \_\_\_ No  
(I'm not a member, but I'd like to receive your Membership Free Book Offer. \_\_\_ Yes)

10. Approximately \_\_\_\_\_% of my graduates join the ARRL.

11. My best teaching technique to share with others is: \_\_\_\_\_  
\_\_\_\_\_

---



**Big graphics keep students' eyes on the instructor, Trent Hays, WBØHZL.**  
(Photo by Vicky Hays)

## Instructor Success

*I know I'm successful, just look at my class!*

*Some were old, some were young, but everyone passed.*

*Amps, ohms and volts, RF Safety, too.*

*MPE, FCC, ARRL and IARU.*

*They learned what was needed to ace their exams.*

*Kids, astronauts, farmers – now they're all hams!*

*And just to be sure I did it all right,*

*My next class is starting tomorrow night.—Anonymous Instructor*

## Discounts on Study Manuals and Free Items For Your Classes, Compliments of Your ARRL

ARRL Volunteer Instructors can receive various items of support from ARRL for their classes and students. If you have Web access, you can easily learn about the many items ARRL helps you with. If you do not have Web access, you can send an e-mail message or a postcard requesting information from Dan, K3UFG, in ARRL Field & Educational Services (at 225 Main Street, Newington CT 06111 or at k3ufg@arrl.org). One of the most popular items of support is the discount that ARRL Volunteer Instructors receive when they purchase ARRL publications. The Web site for information on these discounts is at <http://www.arrl.org/ead/discount/>. Again, if you don't have Web access, send a postcard or an e-mail message to us, asking for the details on publications discounts to instructors. Dan can also send information to ARRL Volunteer Instructors about a successful building project that was enjoyed by people of all ages in a Massachusetts class -- a regenerative receiver. Details can be found at <http://www.chelmsford.com/bars/regenproj.htm>

ARRL Field & Educational Services also publishes a helpful quarterly newsletter for instructors. ARRL Volunteer Instructors can receive paper versions or they can get very quick delivery through our e-mail service. If you prefer to receive the rapid delivery of the newsletter in electronic format, send an e-mail message requesting this service to Margie, KB1DCO, at kb1dco@arrl.org or mail a postcard to her, in care of 225 Main Street, Newington, CT 06111. Back issues of this useful newsletter can be found on the ARRL Web pages at <http://www.arrl.org/ead/instructor/>.

If ARRL Volunteer Instructors want to learn how to award Continuing Education Units to graduates of their licensing classes, all of the instructions can be found at <http://www.arrl.org/ead/instructor/eaf/continuing.html>. Or, instructors can send a postcard or e-mail message to Jean, WB3IOS, at ARRL Field & Educational Services (wb3ios@arrl.org) to request the details. Jean also can send information about our instructor software that allows you to print out practice exams. ARRL only charges instructors the shipping and handling charge (\$5.00) to send this software to you. Details about the software can be found at <http://www.arrl.org/ead/software/>. If ARRL Volunteer Instructors need Graduation Certificates or First QSO Certificates for their licensing class graduates, they can request quantities of each certificate from Margie, KB1DCO, (see e-mail address above) or they download these off of the ARRL Web at <http://www.arrl.org/ead/award/certificate/> And if you'd like to ask one of your students or colleagues to nominate you for one of ARRL's annual awards for educators and recruiters, ask Jean, WB3IOS, how to get an application, or check out this ARRL Web site: <http://www.arrl.org/ead/award/>.

ARRL members and ARRL Headquarters appreciate your hard work as an instructor, and certainly hope you enjoy teaching -- after all, that's what it's all about. ARRL wants to help you, and supports its instructors with things they ask for. If you think of something that wasn't mentioned in this article, you can drop us a note, or you can check for further support materials at <http://www.arrl.org/ead/instructor/>.

### Update from Dan Miller, K3UFG, ARRL F&ES Correspondent

"Discussions I've had with instructors about Restructuring have been for the most part favorable. There's a sense that people who have waited in the wings to become hams are now moving quickly. Also, those that gave up a ticket long ago are asking about getting back into the hobby. I personally feel there's a resurgence of interest in hamming across all the license class levels.

"I also feel instructors will find the new *Instructor Guides* to fall in line more closely with how classes are being taught today. The guides will definitely be new and improved, with an emphasis on shorter, more intensive learning modules. With the realities of time-constraints these days, we felt this would provide better retention on the part of the students, and more lively class participation. We hope to have the new guides out by May or the ARRL 2000 National Convention at Dayton."

### Educational Activities Forum

published by the  
American Radio Relay League

225 Main Street  
Newington, CT 06111 USA

telephone: (860) 594-0301

Jim Haynie, W5JBP  
President

David Sumner, K1ZZ  
Executive Vice President

Rosalie White, WA1STO  
Editor

Mary Lau, N7IAL; Dan Miller, K3UFG  
Assistant Editors



Educational Activities Forum is an idea exchange and information newsletter for Amateur Radio instructors. Please contribute photos, stories and instructional ideas by sending them to Field and Educational Services in care of the address above.