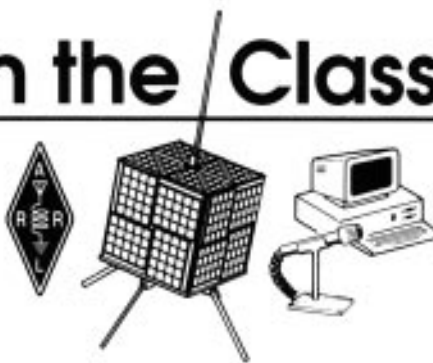




in the Classroom



OCTOBER 1998

ARRL Educator of the Year

ARRL is proud to announce that **Robert Lavin, K6BOB**, is the recipient of the 1997 ARRL Professional Educator of the Year Award. Bob teaches at the George Ellery Hale Middle School, and lives in Calabasas, CA, with his wife, KF6HPK, and stepdaughter, KE6PDH. He teaches a ham license class within the school curriculum, using practical demonstrations. Last year the class resulted in 30 new ham operators with licenses from Novice to Extra! Bob says: "The kids are really excited about it. One of the interactive activities is building a code oscillator from whatever parts can be scrounged. It made for some very interesting and original concepts." Bob supervises students making QSOs on the classroom radios — the school has its own club—George Ellery Hale Middle School, KF60DM.

Bob enjoys talking on the radio with family and friends, and DXing. He is an active member of the Los Angeles County Sheriff's Disaster Communications service. He is also co-founder of the 4-H Foursquare Radio Amateur Youth, KE6SWH, in Oxnard. He's also taught nearly 120 youth and adults through "Uncle Bob's Radio School" and weekend license classes.

It is obvious Bob is a good teacher, and there are fine Amateur Radio teachers in many communities. If you know a ham radio educator, instructor or recruiter in your town, send an email or postcard to

Jean Wolfgang, WB3IOS (jwolfgang@arrl.org or ARRL EAD, 225 Main St, Newington, CT 06111). She'll tell you how easy it is to nominate a person, and get the recognition they deserve. If you think you're a good educator, then someone else thinks so, too — ask a ham friend to nominate you! Time is running out. Nomination forms (<http://www.arrl.org/ead/award/application.html>) must be sent to your ARRL Section Manager by January 31. — *Jean Wolfgang, WB3IOS*



1997 ARRL Professional Educator of the Year, Robert Lavin, K6BOB.

Promoting Your School Club



Les' (KB2DCE) plaque promoted the Margaretville Central School Amateur Radio Club.

An idea for promoting your school club comes from Lester Bourke, WT2U, of Margaretville, NY. His son **Les, KB2DCE**, a student, established the Margaretville Central School Amateur Radio Club after winning a grant to buy a rig and antenna. Until Les left for college, he taught evening ham radio classes, and one of his teachers was a graduate! Although Les was an athlete, he felt too much emphasis was placed on athletics and their awards, to the exclusion of other students, including ham club members who deserved recognition. So he bought a plaque, and attached an ARRL diamond from the cover of an old repeater directory he'd glued onto a diamond-shaped brass plate. He added a code key to the plaque, a large brass plate stating: "In Honor and Recognition of The Achievements of The Licensed Amateur Radio Operators of The Margaretville Central School Amateur Radio Club. 73, KB2DCE" and small plates with students' names and call signs. The plaque was presented at a schoolwide general assembly near the end of the year, to the club trustee, and was permanently displayed in the school.

A less time-consuming idea for PR is to decorate a glass case (in the library or in the hallways) with items about ham radio.

ARRL Training Materials

When you call ARRL to order publications, in order to get the educator's discount, please state that you are an ARRL-registered teacher. Also, be sure to say what date you will need the books by.

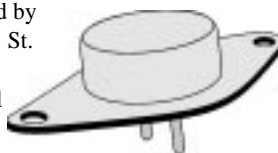
Here's the list you request of the current editions of ARRL training material. The edition number and printing number are listed in the first pages of each book—look for the copyright box. If the book is a new printing, it has minor updates. If the book is a new edition, it has gone through major revisions. Abbreviations are as follows: Now You're Talking! (NYT), ARRL's Tech Q & A (ATQA), General Class License Manual (GCLM), Advanced Class License Manual (ACLM), Extra Class License Manual (ECLM), FCC Rule Book (FRB), ARRL Novice/Technician Instructor's Guide (NTIG) and ARRL General Class Instructor's Guide (GIG).

- NYT 3rd edition: All printings (good through June 30, 2001)
- ATQA 2nd edition: (good through June 30, 2001)
- GCLM 3rd edition: (good through June 30, 2002)
- ACLM 4th edition: All printings
- ECLM 6th edition
- FRB 10th edition: All printings
- NTIG 3rd edition: Use with 3rd edition of NYT (good through June 30, 2001)
- GIG 4th edition: Use with 3rd edition of GCLM

Science Kits and Crystal Sets

If you're looking for science kits for simple electrical experiments or science fair projects, try the Edmund Scientific Web site: www.edsci.com and click on "Electronic Educational Kits" and "Science Fair Projects." If you don't have access to the Web, write for the catalog at 101 E Gloucester Pike, Barrington NJ 08007 or fax them at 609-573-6295 or call at 609-573-6250.

If you're looking for crystal sets of all types for your students, you may want to get the book, *Crystal Set Building and More*, reviewed in *QST*, July 1998, page 36. This \$16 book is published by The Xtal Set Society, PO Box 3026, St. Louis MO 63130 (telephone: 314-725-1172, fax: 314-725-7062; email xtalset@midnightscience.com; <http://www.midnightscience.com>).



A Q & A with ARRL/VEC

Teacher **David Condon, KI7YP**, of Kirkland, WA, asked these good questions about testing, and ARRL/VEC Manager Bart Jahnke, **W9JJ**, replied.

KI7YP: Is it okay to read the questions on the exam to the younger kids?

W9JJ: Yes, VEs may read the test questions to an examinee.

KI7YP: Is it okay to explain the terminology or restate the question at a language level that kids understand?

W9JJ: No, VEs may only read the question as presented in the test booklet. Any re-interpreting by instructors might be done in preparation for the test, but VEs cannot.

KI7YP: Is it okay to allow kids to look at a piece of radio gear, such as trying to find a PTT button?

W9JJ: No, only the test booklet or question pool graphics sheet released by the Question Pool Committee (QPC) can be used. The QPC is made up of representatives of four VECs, including the ARRL/VEC.

KI7YP: It was my understanding that some VECs had a kids' type exam.

W9JJ: We've never heard of them. An instructor can tailor instruction to youth, and a VE can assemble the test choosing questions from the 10 subelement topics consistent with FCC Rules. But a VE cannot change the questions or present them differently from how the pool offers them.

KI7YP: The new exams with questions on RF Safety can be difficult for the average kid.

W9JJ: The RF Safety section may be difficult for some youths, but the FCC believes all licensees must have a better understanding of factors relating to the effects of RF radiation and what constitutes safety-conscious operating. If students miss up to all five of the RF Safety questions, they still have a safety margin of 4 questions they can miss on the Novice exam, and 3 questions on the Tech exam.

KI7YP: The kids I'm teaching easily pass their 5 wpm code exam, but they have a hard time with theory because of terminology and their lack of advanced language and reading skills.

W9JJ: This has been a challenge for the QPC; we too, share the desire to bring more young people into the hobby. But there are terms used in ham radio that aren't easy to present without making some questions extremely wordy. Questions are limited to a total length of 210 characters, and answers/distractors are limited to 140. The QPC appreciates input from hams, particularly suggestions on revising questions that need attention; the QPC receives almost no input. The pools are updated on four-year cycles; the Novice/Tech pool will be reviewed February - June, 2000. Send your input to Ray Adams, W4CPA, QPC Chairman, 6702 Matterhorn Ct, Knoxville TN 37918.



John Cornwell, KB8YVL, excites 6th graders about ham radio.

Special Event at Mills School

The sixth grade at Mills School in Sandusky, OH, was divided into teams representing the different continents. During class, they discussed the cultures of the continents with outside speakers who told about their homelands, showed off native customs and cooked customary food. A special lesson was set up by guidance counselor **John Cornwell, KB8YVL**. He coordinated the set up of a ham radio station, and students talked to hams (and later got QSLs) from the countries they represented. Each team of students visited the packet and HF set-up, and learned how hams transmit signals. Call signs were explained, along with proper operating procedures. After making their first QSOs, the students liked the idea of a class after school. Hopefully when school is out in June, the class will have 6 to 12 new hams.

School Reports

The following is an annual update sent by **Allan Cameron, N7UJJ**, of Carl Hayden Community High School Amateur Radio Club, in Phoenix, AZ.

Several club members have been hired to work in the Arizona Science Center's Center for Amateur Radio Learning. Students set up demo HF stations in local elementary schools, and helped classes make and send QSL cards. They practiced emergency communications procedures using generators and batteries. They installed an APRS packet station and now students may operate daily on VHF and HF, including satellites and ATV. They have 15 HTs to lend to licensed students; they participate in Field Day, Sweepstakes and School Club Roundup. They're planning a "Send a Ham to School Program" where they match teachers who would like a ham demo with willing club members. They have a ham radio page on their school Web site (www.hayden.edu/~ham).

September 1998

FOR FURTHER INFORMATION CONTACT:

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FOR IMMEDIATE RELEASE
E-mail: jwolfgang@arrl.org

PROCEEDINGS OF THE 1998 ARRL NATIONAL EDUCATIONAL WORKSHOP

Now available from the ARRL is the 1998 *Proceedings of the ARRL National Educational Workshop*. This publication is full of ideas and experiences that volunteer instructors, school teachers and recruiters will gain valuable input for their own Amateur Radio classes and recruiting events. Examples of interest include: "A Parallel Resistance Demonstration," by Alan Mills, KA7GKH; "Summary of Science Lecture Program to Middle Schools," by Fred Schnittker, WONDQ; and author Steve Auyer, N2TKX, who wrote about having students hold HTs and stand at opposing ends of the room to demonstrate radio wave propagation. Other students wrapped a blanket, and then waxed paper around one student with the HT, to see when a QSO could be carried on. Next they tried aluminum foil, and the QSO was "foiled." Steve says, "Corny? Sure, but it got students active and participating in the learning process. Students won't forget that kind of lesson when they take their test or when they put their knowledge into practice as a ham." Teacher Joe Tokarz, KB9EZZ, says of his copy of *Proceedings*: "Tons of good info! One article that hit me like a ton of bricks is one on ham radio action demos for teacher in-service programs. My principal has agreed to give me time to do this. I'm going to show 2-meter simplex and packet, and the benefits of a disaster communication station at school."

Proceedings retails for \$12.00 plus \$4 shipping. Checks can be mailed to ARRL, 225 Main St, Newington, CT 06111, or order with a credit card by calling 800-32-NEW HAM (800-326-3942). Take advantage of our special "3 for 1" offer, and receive three back issues, 1989 through 1996, for \$12.00 plus \$4 shipping. An author receives a complimentary copy. If you'd like to submit an article for next year, contact Jean Wolfgang, WB3IOS, for an author's guide.

In Search Of...

high-tech
workers —
Educom,
an email
educational



newsletter, reports:
"More than 75% of US software executives say they expect to hire more workers this year, according to the Software Business Practice Survey, sponsored by Price Waterhouse, Silicon Valley East and the Massachusetts Software Council. The big question is, where will those workers come from? Recruitment worries have risen from No. 14 on a list of important items compiled in 1996, to a tie for No.1 this year."

A Spark to the Past

Favorite author
Cindy Wall,
KA7ITT, has a new
book out, *A Spark to
the Past*. Just as
with her other
books, this one has
young hams, Kim
and Marc, on a wild
adventure that your
students will love.
The book is avail-
able from ARRL for
\$6 plus \$3 shipping.

New Faces

You remember Jean Wolfgang, WB3IOS, who previously sent you support materials. In April, she took the EAD job that deals with Scouts, SAREX, EAD's Instructor of the Year awards and editing *Proceedings of the ARRL National Educational Workshop*. (Glenn Swanson did these before he joined the West Hartford Public Schools.)

EAD has a new person to fulfill your educational materials requests



Your EAD Staff (l to r): Mary Robertson, N7IAL; Jean Wolfgang, WB3IOS; Margie Bourgoïn, KB1DCO; Dan Miller, K3UFG; and Rosalie White, WA1STO.

— Margie Bourgoïn has taken Jean's former job in the department. After a few weeks, Margie learned a lot about ham radio and decided to take her test. She joined a weekend class sponsored by EAD's Dan Miller, K3UFG, and is now KB1DCO.

Margie says: "My job responsibilities include mailing and inventorying exhibit materials and videos. I also update our teacher and instructor databases. I tally the questionnaire responses, and keep tabs on your interests and comments. If you wish to reach me, my email address is: mbourgoïn@arrl.org or you can call me at 860-594-0267. I enjoy hearing from everyone, so drop me a line; and if you're ever in the area, drop in and say hello. I thoroughly enjoy my job. It is nice to talk to so many people who enthusiastically share their hobby. It is because of this that I decided to pursue my license!"

Being Published

ARRL-registered teacher **Anton Ninno, N2RUD**, of Syracuse, NY, was honored by having his article published in the April issue of *Technology Connection*. His wonderfully written article, which can give you good ideas, covered ham radio, shortwave and scanner listening in schools; check it out! For a look at a lesson plan by Anton on listening skills using radios, check <http://ericir.syr.edu/Virtual/Lessons/Interdisciplinary/INT00093.html>



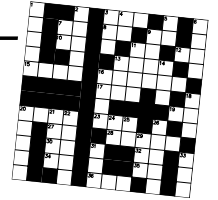
Steve Ayer, N2TKX, got beautiful spectrum charts for his class from Motorola — check Motorola's Web site (www.mot.com/SPS/) or call them at 1-800-441-2447.

ARRL's EXAMWIN

Mark Spencer, WA8SME, of Coleville, CA, writes to say that he found the ARRL's *ExamWin* practice software for educators to be very effective, because it took the edge off the students' tension at exam time. You can get your copy of *ExamWin* for the \$5 shipping and handling cost.

Crossword Education

If you didn't see it, check out the crossword puzzle on page 61 of July *QST*. The puzzle would be fun for students to do in teams. The puzzle's answers are basic ham radio terms.



New Fund-Raiser

Mark Ferguson, KB0ZRZ, of Aurora, CO, faculty advisor at Kent Denver School Amateur Radio Club, had a new fund-raising idea — a contest for club members where the object is to make the maximum number of HF QSOs over a four-hour stretch. Members would give pledge sheets (similar to those from walkathons) to classmates/teachers/parents to pledge a nickel/dime/quarter per QSO. Money would be used for radio equipment. The contest could be publicized at school, which would be good PR for the club. Mark asked our ARRL Regulatory Information Branch (RIB) if the FCC would be concerned with this fund-raiser. RIB's response was: "The FCC is concerned with communications transmitted on behalf of one's employer. Under FCC rules, it wouldn't be a problem as long as no mention was made over-the-air that it is a fund-raising effort, and if all publicity about the fund-raiser is done off the air."

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