



The KEY

The Newsletter of the Contoocook Valley Radio Club

Volume 10, Number 5

October, 1998

Programs

October is homebrew month! Everyone is asked to come to the October 13 meeting with a project you've built. Items may be as simple as a ground plane antenna or as complex as a microwave transverter. It doesn't have to be something you've built recently—Anything you'd like to share is welcome.

At the **November** 10 meeting we will hold elections for the 1999 slate of CVRC officers. Be sure to be present to cast your ballot. The program for this meeting has not been finalized yet. Check the CVRC website (<http://www.qsl.net/k1bke>) for an up-to-date program listing in November.

Note: Both the October and November meetings will be held at the Hopkinton Town Library. See the August/September 1998 issue of *The Key* or the CVRC website for directions.

CVRC meetings are held on the second Tuesday of the month in Contoocook, NH. Members and nonmembers alike are welcomed. Talk-in is on the K1BKE 146.895-600 kHz (100 Hz PL) repeater.



The KEY is published every other month at the beginning of the even numbered months. The deadline for articles and submissions is the fourth Tuesday (coinciding with the usual business meeting schedule) of the preceding month.

Tour at the Cushcraft Factory

Cliff Eisner, N1GJF

Sept. 15, 1998, sixteen (16) CVRC members meet at the Cushcraft factory in Manchester for a grand tour. Starting in the engineering lab, Paul Randazzo, NW1U our host for the tour gave a brief history of the Cushcraft Company. While in the engineering lab, Paul explained how the process works from concept to testing new designs, both Amateur Radio and commercial antenna's. The tour then continued into the factory through many work cell areas where the antenna's are made from start to finish. The machine shop sup-

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1998 Christmas Party

Plans for the 1998 CVRC Christmas party are already well under way. Mark, N1VRT, has researched area banquet facilities and the steering committee has narrowed the choices down to two. The final selection will be made by the members present at our October 13 meeting. The options are as follows:

OPTION 1 - Eagle's Nest restaurant - Across from the statehouse on Main St. in Concord. Your choice of Teriyaki Steak, Chicken Parmesan, or Vegetable Lasagna for entree. Each meal also includes Caesar Salad, Tomato Bisque, and Carrot Cake. The per person cost of \$22.00 includes tax,

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What The Heck is a NESMC?

Compiled with permission by K1JY from the NESMC web site.

The New England Spectrum Management Council is the support organization for the frequency coordinators who provide the frequency coordination for repeater and fixed frequency operation on 6 meters and up in New Hampshire, Massachusetts, Maine, and Rhode Island. NESMC provides a mechanism for communication between the coordinators and the amateur public.

There is a common misperception in the amateur community that frequency coordinators are "in charge of" the amateur bands. This simply is not true. The frequency coordinator serves two distinct functions:

1. When an individual or group wants to install a new repeater, control link, auxiliary link, or other large user operation on a relevant amateur band, the frequency coordinator carefully researches the request, based on the groups specified power levels, location, and other factors relative to current users on the band. Then suggests, based on the re-



search, a frequency of operation which will not interfere with other existing or proposed installations. The recommendation of the coordinator always comes with a caveat: a new coordination is always in a "test" period for six months. This allows for any unanticipated circumstances which end up causing interference.

When this occurs, the coordinator can withdraw or modify the original suggested coordination.

2. The frequency coordinator also maintains a database of existing installations. This database is much more than the simple "repeater directory" listings which most amateurs are familiar with. The coordinator's database contains thousands of entries including control links, auxiliary links, digital mode operations, and other users on the band. For those

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Cushcraft - Continued from page 1

plied the different work area's with many tooling, fixture and jigs to manufacture their antenna components. Cushcraft has a large raw material storage area to supply the many work cells to make many sizes and types of antenna's. The last stop was in the finish product area showing a large amount of antenna's waiting for shipment.

Drawing for door prize was won by Cal, WA1WOK (6 element dual band beam).

Many thanks to Nancy, N1IMB and Cal, WA1WOK for making the arrangements for the tour.

Special thanks to Paul Randazzo, NW1U for taking time away from his family and dart game to give us the tour. A great time was had by all.

Christmas Party - Continued from page 1

tip, and non-alcoholic beverages.

OPTION 2 - Cat -N- Fiddle restaurant - Manchester St. Concord. Your choice of Roast Prime Rib of Beef, Chicken Cordon Bleu, or Baked Stuffed Filet of Sole. Each meal includes chilled juice or fruit cup, tossed salad, potato and vegetable, and Dutch apple crisp with vanilla ice cream. The per person cost (including tax, tip, and non-alcoholic beverage) is \$19.00.

Please note that reservations and entree selections have to be made at least a week before the party. Mark will be collecting this information once we have decided on a location. Which ever location we choose, the meal will be followed by our traditional Yankee swap.

6 Meter Notes

Bob Sanborn, W1BDC (ex W3AMO)

First of all let me tell you why I'm not on the air. Several months ago came the big flood which dumped 5 inches of rainwater in my basement, lousing up the furnace, railroad equipment and papers plus some rigs and coax plus AC wires and ground wires leaving a green substance on walls and woodwork. That brings my sad tale up to date. Since I am allergic to bleach I cannot do this job. Lucky for me the 6 and ten meter logs were not damaged.

For the new comers and old 6 meter hams I take you back to 1950 where I first listened to my Hallicrafters S-40A receiver on 75 meter phone. We listened to two Americans discussing a pencil — What it was made of. Sam, K3CCR (now a silent key) was totally blind from birth.

In 1950 I had the S-40A receiver and a Hallicrafters SX-71 broadband receiver tuning from 160 meters down to six meters. The band spread on six was about 5/8" so you tuned very carefully to receive on six meters. I fed six with an old (then new) Cushcraft A 50-5 12' boom and it worked out fine on receiving. I still had no transmitter. That came later in 1955 when my wife, Dot, bought me a Gonset Communicator I with place for one crystal. Off went the 6 meter antenna from the SX71 and on to the GCI, Boy it worked fine. I contacted many 6 meter hams and got in touch with W3FQI, president of the *Mobile Sixers Club*, and joined the club at my first meeting. Remember I'm W3AMO in Pennsylvania. Them days there were only W's and K's nationwide, not the mess of call letters we hear today.

To be continued...

An observation by N1OAI

What are amateurs and cats both often seen doing?
Looking up. Cats at high places to climb, amateurs at antennas in high places.

modes for which coordination is provided, each entry is marked as to whether it is a coordinated operation, in the test period, or uncoordinated. In some cases, this data is sent to other parties to help resolve coordination disputes. It is this database that is used by the ARRL in the publication of their annual repeater directory.

It is not the function of the frequency coordinator to arbitrate frequency use disputes. Though the coordinator might assist in the resolution of a problem, it is up to the two parties having the dispute to resolve the issue on their own, or seek an arbitrator such as an official observer (OO) or, as a last resort, the FCC to resolve the problem.

Membership in NESMC is open to all licensed amateurs. Board meetings are held three times per year and a general membership meeting for the election of officers and directors is held annually. Visit the NESMC Web site at www.nesmc.org for more information, and an up-to-date listing of the coordinated repeaters on some bands.

FCC Announces Shift in Amateur Radio Enforcement Functions

The Federal Communications Commission announced today a change in the handling of enforcement actions concerning the Amateur Radio Service. By internal arrangement between the FCC's Compliance and Information Bureau (CIB) and the FCC's Wireless Telecommunications Bureau (WTB), as of September 1, 1998, all investigation, evaluation and processing of radio amateur related enforcement matters have been transferred to the CIB. Adopted: September 25, 1998. News Media Contact: David Fiske (202) 418-0500. CIB Contact: Meribeth McCarrick at (202) 418-0654, Compliance and Information Bureau contact: Riley Hollingsworth at (717) 338-2502.

FCC Asks Hams to Write Their Own Tickets

Gordon West, WB6NOA

(Reprinted by permission of Amateur Radio Trader)

Amateur radio operators have until December 1 the opportunity to streamline and restructure the licensing laws for their service. Now is the time that many Part 97 licensing rules may be substantially changed, eliminated altogether, or modified to reshape what it takes to earn a specific amateur radio ticket.

Everyone was waiting for the expected Federal Communications Commission (FCC) Notice of Proposed Rulemaking WT Docket 98-143, issued on Tuesday morning, August 10. Most amateur operators expected the proposed rulemaking to be similar to the American Radio Relay League's (ARRL) proposal one month earlier to simplify amateur radio license structure and reduce General class CW test speeds from the present 13 words per minute (wpm) down to 5 wpm.

Surprise. The FCC proposed NO particular CW test speeds, other than the proposed elimination of the entry-level 5 wpm CW test. But what the FCC DID make clear was they are WIDE OPEN to allow an amateur radio majority vote on what the General class and Extra class CW test speeds SHOULD be to encourage beginners to learn the code, and seasoned hams to continue with their higher speed testing and protected band privileges. "And we are delighted to see the issue of examination procedures come up for public comments," said Tom Corso, K6TC, a volunteer examiner for the Kern River Valley Amateur Radio Club.

"But if we are going to see any changes in the future when it comes to ham tests and testing of the handicapped, we need every concerned volunteer examiner in the country to write the Commission with their comments," said Pat Corso, KD6YNX, president of the Kern River Valley Amateur Radio Club.

FCC PROPOSALS AND QUANDARIES

In the FCC Notice of Proposed Rulemaking, amateur operators could easily see their mind is pretty well made up on certain issues to streamline the licensing structure. Yet in other matters of licensing, such as code test speeds, the FCC will probably go with the majority vote of amateur operators who will take the time to post their comments. And I will tell you how to electronically or with pen and paper make your comments count.

So let's take a look at some of the items that will most affect our amateur radio licensing structure, and the band privileges that we might obtain if code and theory testing regulations are modified or voted for a change. The last major restructuring of amateur radio service took place ten years ago.

The FCC proposes to reduce the number of license classes from six to four. They will probably phase out the Novice license as well as the 5 wpm Technician-plus class. The entry-level license would then be a simple no-code Technician permit, giving beginners all privileges from 50 MHz and up. Now don't panic if you already hold a Technician-plus license - you would still get credit for the license you hold when you next plan to upgrade to General class or higher.

But one aspect of the FCC's proposal to eliminate Novice and Tech-plus licensing is the fact that they will eliminate the 5 wpm code test as an intermediate way of getting limited high-frequency worldwide privileges. Eliminating these two entry-level licenses means the only way to get on the worldwide bands is to go all the way to General class. Again, don't panic - they are open for comments on how General class testing might be changed and code speeds reduced to promote more hams going for General class as part of their original new-licensing process.

The FCC agrees with the ARRL when it comes to Advanced class operators being able to administer the General class code and theory exams. "In all cases, examiners will be administering only elements

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which they themselves have received credit for," writes the Commission, seeking ham comments on this proposal.

The FCC will probably eliminate RACES licensing, but this will NOT affect day- to-day operation of RACES stations. "To engage in RACES communications, it is not necessary to have a RACES license with a separate and distinct call sign - and we invite all hams to comment on our proposal...," writes the FCC.

The FCC is also looking for comments on how they can privatize certain enforcement procedures. The FCC wants hams to consider an enforcement process of requiring persons bringing complaints of interference to the Commission to include a draft order to show cause to initiate a revocation or cease-and-desist hearing proceeding. Probably the ARRL legal counsel can jump on some of the opportunities presented by the Commission to put some teeth into ham enforcement where we now have nothing but sore gums. With enough comments, we can encourage the FCC to come up with a better enforcement policy than the non-existent one they appear to have at this time.

THE BIG ONE - CW TEST SPEEDS

"Do the three levels of 5 wpm, 13 wpm and 20 wpm remain relevant in today's communications practices...or should these three code tests be reduced to one or two - and, if so, what should be the required speeds?" writes the FCC. The FCC encourages comments about reducing the required Morse Code elements, possibly changing to lower code speeds, but adding written examination elements to insure a working knowledge of newer digital technologies which, in part, are replacing the Morse Code.

The FCC wants comments from amateur operators about the General class 13 wpm code test speed and contents. Should they adopt the ARRL proposal and reduce the General class code test speed to 5 wpm? By international radio regulations that apply to the amateur radio service to all hams operating below 30 MHz, they cannot eliminate the General class worldwide license code test speeds at this time. They can't do that until after 2001 and World Radio Conference resolution of Article S25. But if the FCC receives the MAJORITY of comments saying to reduce the General class code speed from 13 wpm to a lower level, they will consider this for future rulemaking.

Keeping in mind that the General class worldwide band code test will be the FIRST CW entry level to get onto worldwide bands, should it stay at 13 wpm as a first test for beginners, or should it drop to 5 wpm, which the ARRL proposes? If it goes to 5 wpm, currently licensed Technician no-code operators would only need to learn the code at 5 wpm and take a written General exam for worldwide privileges. The currently licensed Technician-plus operators would only need to take one additional General theory test, and could be grandfathered for their previously passed 5 wpm exam!

If you are a Technician class operator reading this, now is your time to write the FCC with your comments and literally write your own "ticket" to the worldwide bands. And if you already hold a General class license, having already passed the 13 wpm code test, what are YOUR comments about the idea of reducing the Extra class 20 wpm exam down to 13 wpm? This is another ARRL proposal; if adopted, a simple written test or two would give presently licensed General class operators freedom to move into higher class protected band segments. This would give them more elbow room when the General class bands begin to swell with 5 wpm code passing operators.

The FCC also requests hams to tell them how they might like to see their code test administered. Should everyone adopt fill-in-the-blank question tests on the written code copy? Should multiple-choice code tests be administered instead? Or should applicants copy code for five minutes, and have one minute PERFECT copy? Or how about five minutes of code copy, with one minute of "understandable" copy? When I see our students take a code test here at Radio School, it's more than apparent who has understand able copy, which more reflects the real world of sending and receiving

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code over the air, and which students have NO code copy. Isn't the whole idea sending and receiving Morse Code the exchange of information? If we need absolutely perfect copy, maybe we need to switch to digital modes with error correction.

The FCC also wants comments regarding proctor's certification of examinees with a disability. The ARRL suggests that the disabled examinee be required to ATTEMPT the higher-speed CW exam before there is action on their doctor's exam credit sheet. Should volunteer examiner coordinators (VECs) be authorized to request medical information from the certifying physician pertaining to the examinee's disability? Can they legally do that? The FCC wants some opinions.

And what about those written examinations you will be taking for Technician no-code, General, Advanced and Extra class? Should the number of questions on the tests be increased or decreased? Should the total pool of test questions be reduced? What do you think about an essay written examination? Or what about written examinations based on specific operating procedures of interest to the applicant? Should the exam have require questions, but elements of elective questions that an applicant may wish to pursue when choosing a specific mode of radio operation?

And what about requiring the examinee to demonstrate specific on-air practices to the examiners? Or maybe bring in a log book filled with a certain number of QSOs? Or present a "signed off" certificate of radio operating by ham instructors and ham experts? In other words, do you feel the present exam question pool best reflects the challenge to demonstrate that you are prepared for an upgrade? Keep in mind the limited time that volunteer examiners may have at the examination site to spend great amounts of time with individual applicants checking over their paperwork and proficiency on the new type of proposed exam. Most volunteer examiners have their hands full already ! But if you have an idea on what we can do to make the examinations for the proposed four classes of license more meaningful, all comments to the Commission are encouraged!

FCC'S SUMMARY CONCLUSION

"...We propose: (1) To phase out the Novice class operator license, with current licensees grandfathered, and to phase out the Technician-plus operator license, with current licensees grandfathered; (2) To authorize Advanced class operators to prepare and administer exams for the General class operator license; and (3) to sunset RACES station licensees by not issuing any license renewals."

The FCC also seeks comments about some of the MOST important items to the amateur community: "We invite comments...with respect to improving our enforcement processes as they relate to amateur radio. We invite comments regarding the specific telegraphy speed requirements for the various license classes, and we invite comments or ways to streamline and improve the operator written examinations." The FCC finally states that the proposed rules in Docket 98-143 are intended to simplify and streamline the regulations that govern the amateur radio service.

WHAT DO YOU THINK?

If ever the amateur community and radio operators thinking of joining our service had a golden opportunity to help shape our licensing structure, NOW is the time to contact the FCC and the ARRL with your comments. Whether you are a member of the ARRL, or licensed or not as a ham, ALL comments to the FCC will be considered.

And here is the painless process for getting your word into the FCC in an official way that MUST be considered when it comes time to see who has the majority vote:

STEP 1. First read the Notice of Proposed Rulemaking in detail. The easiest way to download it is from the Amateur Radio Trader web page: <http://www.amradiotrader.com> under the "What's New" icon.

Do it now. If you wait to read about it in the slick-cover ham magazines, the comment period will probably be over. You have until December 1 to get your comments into the FCC. Print out the restructuring docket and read over items 1 through 44.

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STEP 2. You may file your comments through the FCC's electronic filing system. This you can do on the Internet as well: <http://www.fcc.gov/e-file/ecfs.html>

STEP 3. You may choose to file your comments on paper. You send an original -and six (6) copies. Be sure to put at the beginning of your filing the words "In the matter of 1998 biennial Regulatory Review--Amendment of Part 97 of the Commission's Amateur Service Rules, FCC WT Docket 98-143."

When you send in your original and six copies, you send them to the FCC SECRETARY, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 1919 "M" Street N.W., Room 222, Washington, D.C. 20554.

If you don't have the capabilities to use a typewriter or word processor, WRITE LEGIBLY on white paper, and don't forget to put the WT Docket 98-143 at the top of your paper. Your handwritten comments will carry the same weight as if you had written them on a \$1,000 computer.

STEP 4. If you have a disability that prevents you from writing your comments, contact Martha Contee at (202) 418-0260, or TTY (202) 418-2555.

STEP 5. You should also contact the ARRL and let them know what your opinion is of this proposal, as well as make comments about THEIR proposal. You will find all of the ARRL information and addresses on page 10 of your issue of QST if you are a member. I suggest you write your local division director. If you are not a member of the ARRL, you may write them at 225 Main Street, Newington, CT 06111-1494.

And if you think that absolutely no Morse Code exam should be administered for the new General class license, you may wish to read the proposal by No Code International. For a copy, write Fred Maia, WSYI, PO Box 565101, Dallas, TX 75356 5101. The proposal is reprinted in the WSYI Report, Volume 20, Issue #6. Include a couple of bucks for the entire WSYI Report.

FINALLY, make your comments heard loud and clear at the FCC. If you think the whole idea sounds swell, especially lowering the General class code speed from 13 to 5 wpm, don't just sit there on your hands thinking that everyone else will probably agree with you and will send in their comments

which will cover your hidden feelings. If everybody waits for someone else to comment, you may lose your voice in the majority vote for keeping or reducing CW speeds. For every long-time Extra class ham who may say keep the present code speeds, or even increase them, your own comments about reducing the code speeds will counteract the one vote that THEY cast.

If ever Technician class operators wanted an easy path to General class, a reduction of the code speed down to 5 wpm will be seriously considered by the FCC. And if you're tired of the "no teeth" enforcement policies now in place (ha), now's the time to put in a few sentences about how we can make our rules MORE enforceable. And if you think written questions on day-to-day ham radio operating are more important than code speed, give them your comments !

What are you waiting for? Get those comments into the FCC NOW!

Important Service Tip ***Ron Herman, K1PDY***

Sending radio equipment away for service? I recently had to send my Alinco 610T in to have the 2 meter finals replaced. I called the factory on the West coast and was told that there is a service center in New York state. I thought, ah ha, it's closer to home so the UPS charges will be less... right? Well not quite. I got the radio back and there was a tax of about 7% added to the bill. I called the service shop and explained how opposed to taxes we are here in New Hampshire. I was told that the tax is not a sales tax but a tax on the service which New York state feels they can levy against anyone. So, if you are contemplating sending a radio for service in New York, beware that there will be a tax added to the bill. Guess I didn't save anything on the repair. The service shop by the way was at Ham Central in Poughkeepsie. I guess they did a decent job. The technician explained why I had to do the final replacement a second time in two years. The last guy neglected to put heat sink goop between the heat sink and final amplifier module!