

Colorado QRP Club
The Low Down

Promoting QRP Since 1994

Club News...

CQC Garage Sale in Need

A new swapfest season is starting. Good news is that the CQC participated in 5 local swapfest and generated operating funds for the year. The bad news is the CQC Garage Sale bin is empty for 2009. If you are in the process

of organizing your shack and have useable items that you no longer use please consider a donation to the Colorado QRP Club's garage Sale bin. The Colorado QRP Club is listed as a "Not for Profit" entity with the Colorado Secretary of State and your donation might be considered

as tax deductible. Please consult your tax advisor. You can contact Vince Kumagai, KI0RB, at 303-341-5320 if you wish to make a donation.

CQ CQ CQ Net controllers

The Colorado QRP Club is in need of Net Controllers for the Monday night 2M nets. It's easy and it's fun. We provide you with the script and you can take it from there to develop your own "Net-tique". If you live on the Denver Front Range from Ft. Collins to Colorado Springs please consider a try at the mike. Contact Jim Pope - KG0PP at Ejim@aol.com



Elecraft K3 Review

In anticipation of my turning 70 last August, my wife, Metta, KE4YSK, asked me to choose a "significant" gift for her to give to me to commemorate the occasion. After much gnashing of teeth and objecting to spending money on me, I finally settled on the recently introduced Elecraft K3 transceiver. How many of us have a spouse who has to literally force us to spend money on radio equipment?

The ordering process was quite simple. The Elecraft web site has a page where one can order its products, transceivers, kits, accessories, etc. It is well laid out and easy to use. Being old fashioned, I called Elecraft to order my rig, rather than post my credit card info to the Internet. I spoke with Katie Hofstetter, who has to be the jewel of Elecraft. She took my order, and confirmed it via email, with a target shipping date of about four months, or November 17, 2008.

Both "QST" and "CQ" have reviewed the K3. CQ's second review appeared in the November, 2008, issue. Those reviews were very favorable. They went into much more depth than I ever could. Rather than try to match them, I will discuss my own first impressions of the K3.

The K3 can be purchased either as a kit, or factory built. This is a departure from earlier offerings from Elecraft, which are available only as kits. The K3 also has many options. The result is that one can purchase the K3 as a

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For more information, visit our website at www.cqc.org

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Picture credits to
Vince Kumagai - KI0RB
Jay Schwisow - KT5E
Pete Inskeep - NO2D

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Our next Regular meeting will take place Saturday, January 10, 2009 at 10:00 am
Meeting Location: Offices of Milestone Technologies
10691 East Bethany Drive,
Suite 800
Aurora, Colorado



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The Low Down

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The Low Down

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QRP Information Net: The Colorado QRP Club also meets on the air every Monday evening at 2000 local time on the 147.225 repeater serving the eastern slope of the Rockies from Cheyenne, WY, to Pueblo, CO, with linked repeaters in Boulder (145.46) and Colorado Springs (145.16). Backup frequency: 145.145. The Club's Denver metro simplex liaison frequency is 146.445. Meeting Dates: 2004 Meetings: Jan. 10, Mar. 13, May 8, July 10, Sept. 11, Nov. 13 at a location to be determined. Annual Picnic: Sat. Sept 18, 2004. Annual Banquet: To Be Announced. Changes will be announced on the Monday evening Net and posted on the WWW,CQC.ORG website, if time permits.

Informal Monthly QRP Gatherings: Members meet informally at a local restaurant -- details on the web-site. Annual Dues: \$12.00. Join via the internet at WWW.CQC.ORG. Or, send dues and requests for membership applications to: CQC, POB 17174, Golden CO 80402-6019.

Internet: WWW.CQC.ORG. Information, membership, renewals, officers, activities, CQC Swap List and CQC-List subscriptions.

Correspondence: Editor, The Low Down POB 17174. Golden CO 80402-6019.

CQC Logo mugs

Don't leave your shack without it!! Vince, our club Secretary, arm-wrestled a half dozen vendors until we got a good deal on a few dozen of these beautiful, cobalt-blue coffee mugs. Get yours while supplies last!!

Photo courtesy Marshall Emm N1FN



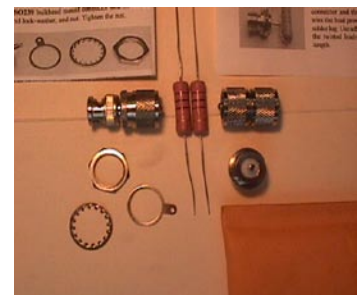
Photo courtesy Marshall Emm N1FN

\$10.00 (Pick one up at our meeting or other gathering)
\$4.00 (Shipping and handling if we mail one to you...)
Order from our web site using our PayPal secure service.

Photo courtesy Marshall Emm N1FN

CQC RFL-10 QRP Dummy Load Kit

The kit consists of 2 5W metal oxide resistors an SO239 socket and includes adaptors for connecting to either SO239 or BNC antenna sockets. Rates to 10W continuous power for at least 60 seconds, with a flat SWR across the HF spectrum.



\$9.00 - Members
(Includes Shipping and Handling!)
\$11.50 - Non Members
(Includes Shipping and Handling!)

New
CQC Logo Tee Shirts

These beautiful tees are 100% cotton with the club logo and motto. Your call sign and name call can be added for \$2 Available in sizes XXL, XL, L and M

Photo courtesy Marshall Emm N1FN



Photo courtesy Marshall Emm N1FN

\$12.00 plain or \$14.00 with Call and/or Name
\$4.00 Shipping and handling
Order from our web site or pick one up at the next meeting and please specify size.

Photo courtesy Marshall Emm N1FN
Tentative Meeting
Schedule for 2009:

- January 10 - Regular
- February 14 - Chat N' Chew
- March 14 - Regular
- April 11 - Chat N' Chew
- May 9 - Regular (Elections)
- June 13 - Chat 'N Chew
- June 27/28 - Field Day
- July 11 - Chat 'N Chew
- August 8- Regular
- September 12 Annual Picnic (Tentative)
- October 10 - Regular
- November 14 - Chat N' Chew
- December 12 - Regular

Regular Meeting Location:
Offices of Milestone Technologies
10691 East Bethany Drive,
Suite 800
Aurora, Colorado



CQC Media DVDs
Available

CQC now has available DVDs of the bi-monthly meeting presentations. For those of you unable to attend the meets in person here is a way to see what the club has been up to. Four DVDs are now available. Run length is about 1 hour.

Available Titles

Basic Equipment
Troubleshooting

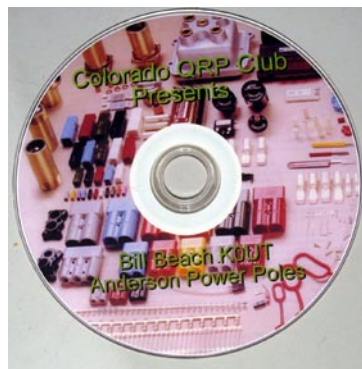
QRP Contesting

Digital Modes for the
QRP Amateur

Howland Island DXpedition

Anderson Power Poles

Price \$10 each plus shipping



basic 10 watt kit for as little as \$1,399.95. Add the 100 watt power module, the sub-receiver, auto-tuner, and a batch of filters, and the price, factory assembled, can approach \$4,000. Figure on adding \$200 and up for a factory assembled unit. The K3 kit is unique in that no soldering is required. It is similar to putting together an erector set. Lots of nuts and bolts. I chose to purchase the factory assembled model. See their web site at www.elecrafter.com for ordering information.

The K3 arrived late in the afternoon on Tuesday, November 11, 2008, just a week short of the four months predicted by Katie Hofstetter. My factory built K3 was ordered with the 100 watt power module, the 500 and 200 Hz. CW filters, and a hand microphone. The total cost was about \$2,380, including shipping. The package was double boxed, with an ample supply of bubble wrap and foam peanuts. The radio is neither large nor heavy, weighing only about 8 pounds. Upon first picking it up I wondered if I was really picking up nearly \$2,400 worth of radio. Its dimensions are about 11 inches across the front, four inches high with the bail down, and about 10 inches deep, plus the fans if the 100 watt module is selected. It is not a large radio at all, so it fits easily on my crowded desk.

The K3 comes with a 78 page spiral bound manual that explains operating features, menus, troubleshooting and some theory of operation. For the curious, the manual is available for downloading as a pdf file from www.elecrafter.com. I highly recommend downloading and reading the manual if one has an interest in ordering the K3. I was able to get the radio up and running after reading the "Quick Start Guide" at the beginning of the manual. I still have not yet read the whole manual, but I do refer to it often! Even better, I can find specific items quickly searching the pdf manual on my computer.

As the K3 arrived on the first night of the Winter Fox Hunt season, I was hoping

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Al Dawkins, K0FRP, QRP Fox
on the Elecraft K2 key

Fox on the Move

Fox Hunts are one of the more difficult challenges for the QRP operator. In a Fox Hunt two stations act as foxes, “hiding” out in a designated part of a specified band. Other QRP operators, called hounds, try first to find the fox operating frequencies, and second, to exchange specific information. Success is called grabbing a “pelt.” The Colorado QRP Club is the sponsor of the Fox Hunts. Several CQC club members, including Marshall, N1FN, Roger, WB0JNR, and Al, K0FRP, play major roles in keeping the Fox Hunts going.

Normally, the Fox operates from her or his shack, using their own equipment. But, that is not always the case. On Tuesday, December 16, 2008, Al, K0FRP, was scheduled to be one of the two foxes operating on 80 meters. He discovered, however, that nearby power lines were creating havoc with his 80 meter reception. Working the fox hunt from his own shack would be impossible. So he brought his magic keyboard over to my shack, and proceeded to run a string of 53 contacts, or pelts, in the 90 minute sprint. Scott, KC0HSV, and I both sat close by, marveling at Al’s ability to pick out one call from among the pack of yapping hounds. I guess that being a fox must be as close to being rare DX as one can get without leaving the good old USA. Part way through the hunt conditions got so difficult that Al donned earphones, and we could no longer hear the pack calling him. All we could see were the grimaces on his face when he could not copy a call, or lost a contact to QSB.

If all goes well, this issue of the Low Down should include a picture of Al working my new Elecraft K3 during the hunt. Unfortunately, there was no way that I could get Al’s expressions and the K3 in the same picture. But it does give an impression of a real pro working the Fox Hunt.

If you have not yet tried to make a contact in a fox hunt, make a plan to do so soon. All the information that you need to participate can be found on the fox hunt web page, which is:

<http://www.cqc.org/fox/index.htm>

There you can find a list of the upcoming hunts, the names and calls of the foxes, and the band and frequency ranges where they will operate. The web page also includes the results of past hunts.

Let my close by just warning you that fox hunting, like any great sport, can become addicting.

Pete, no2d.

CQC Member's Corner



Jay Schwisow, KT5E
Tower servicing at 100 feet



Sounds of the fox and hounds
Jay has provided a recording of his turn at the key as the QRP
Fox
[Click here to listen](#)

Fired up the K1 on 40m to my 40m loop at about 60 ft at the apex.
Called CQ SKN using the 2003 Christmas key serial # 73
It was about 5:30 and W8AQ in TX
then K4ZMI in KY
N4PIR TX
K7ZI in UT and WA7HDI in AZ
worked these stations in about a hour and a half time.
It was fun and much activity on SKN. I was glad to hear so much activity. CW is not dead and Straight keys are still alive.
AI K0FRP

I don't know if you would want to mention this in the LowDown, but I had an interesting contact on the last day of October. I heard W9FFU calling CQ on my rockbound one watt Vectronics, replied, and he came back to me. His name is Glenn Rosenberger, lives in Oak Harbor, Washington. I sent a QSL and requested one back. It arrived in about two weeks, gave me a 449. The note said, "Tnx QSO. I miss the Rockies. Lived in Boulder for 85 years." Couldn't quite figure that out until I noticed that just above his signature he had written "Age - 93"
So ham radio is something you can stay with for the long haul.

73
Ed Comfort, KC0ZLR
Member 832

Stories and pictures for the CQC Low Down are provided by CQC Club Members. Please consider sharing your QRP experience with other members and friends. All stories are welcome and appreciated. They can be submitted to KI0RB@arrl.net

to get it running in time for the Fox Hunt. It arrived just before dinner, so I barely had time to solder connectors to the power cable and connect it to my 35 Amp Astron power supply before the Fox Hunt started. So, I worked the Fox Hunt with my Omni VI, but also listened to the foxes and hounds on the K3. During the hunt I did some A/B comparisons between the Omni VI and the K3 receivers. It seemed to be a toss up. Both have excellent weak signal receivers. Remember that at this point I knew very little about using the K3 filters, noise reduction, noise blanker, etc.

The front panel knobs and buttons have a nice feel to them. The buttons are soft rubber. As the K3 has a small footprint, and a relatively small front panel, the buttons, and knobs, are small. Press the power button and a relay clicks, some LEDs light, and then the front panel display comes up. There are controls to adjust brightness and contrast. Some of the display wording is small, but I generally do not have trouble reading it because of its clarity. AF and RF knobs are prominent, and on the left side of the front panel. Smaller knobs under the display perform multiple functions. In the CW mode they control bandwidth, band shift, keyer speed, and power output. The functions change in the SSB mode. The main tuning dial is smooth, with adjustable drag. It is not heavily weighted. Tuning rates include both variable coarse and fine tuning.

A smaller sub-receiver/split VFO tuning knob and an RIT/XIT tuning knob to the right of the main VFO complete the front panel complement of knobs. I count 35 different buttons on the front panel. Almost all of them have multiple functions. A simple touch performs each button's primary function, while pressing and holding for a second or so performs the alternate function. Each button face is labeled with the primary function, while the secondary function is labeled below the button. The buttons are close together. More than once my stubby fingers have accidentally pushed the wrong button. Sometimes that takes me into uncharted territory, leaving me wishing that there were an "undo" button somewhere.

The front panel display is black lettering on a yellow background. It is prominent, easily readable, and includes menu adjustments for brightness and contrast. The main frequency, in VFO A, is larger, with heavy print. A bar-graph S-meter performs multiple functions. Below that is a visual graphic showing the current bandwidth, IF shift, and, high and low frequency cutoffs. The filter envelope can be tailored to improve reception under difficult conditions. Changes are immediately visible on the graphic. At the lower right corner of the display is a memo area which offers a multitude of functions. Initially, it shows the frequency of VFO B, but tapping the DISP button convert it to a memo field to show time as well as much more information. While perhaps not as fancy as some of the newer rigs, the display does the job.

The bandwidth knob allows me to select the 500 or 200 Hz. filters that I ordered automatically. The K3 will accept up to five filters in the main receiver, and five additional filters in the sub-receiver, which I did not order. But bandwidth is more flexible than just the choice of the two filters. As the bandwidth knob is rotated in CW mode, bandwidth decreases from 2.8 KHz. to as little as .05 KHz. Above 500 Hz. the filter action is via DSP. When the bandwidth decreases to 500 Hz, the 500 Hz filter automatically engages. When the bandwidth decreases to 200 Hz., the 200 Hz. filter automatically engages. DSP filtering is active throughout. So, bandwidth is a combination of crystal filters and DSP bandwidth reduction. Very effective. The bandwidth is also shown graphically on the display, as well as in KHz. via the multi-function display in the lower right corner of the main display. Another knob controls the IF shift, which is also shown graphically on the display. So far I have found both controls to be effective and easy to use. The true test of their effectiveness can only be determined during a large scale contest where there are lots of loud signals across the band. In casual listening they are a pleasure to use, and seem to introduce less noise than CW filters in my other rigs.

The automatic "spotting" feature is something I really appreciate. While not tone deaf, I do have difficulty tuning spot on to an incoming CW signal, and have to "zero-beat" the incoming CW signal to my rig's sidetone frequency. The

Continued on next page

K3 spotting feature, when engaged, uses the right side of the S-Meter area to show where the incoming signal is relative to where the K3 is tuned. Simply tune until the two bars are vertically aligned. Even neater, press the SPOT button and the K3 will automatically change its frequency to line up with a fairly loud CW signal. Tapping the SPOT button also provides the more traditional sidetone against which to zero-beat an incoming signal. Neat!

The K3 QSK is impressive, and at least equal to that of legendary Ten-Tec transceivers. It is smooth, with no click or sharpness at either the rise or fall, either at the speaker or with earphones. Semi-break-in is equally smooth, with an adjustable delay. The built in keyer speed is adjustable from 8 to 50 WPM. Power output is adjustable 0.1 to 12.0 watts in increments of one tenth of a watt, and in 1 watt increments from 12 to 120 watts. Iambic keying includes the traditional "A" and "B" options. I prefer "B," with its self-completing final dot or dash. The K3 was definitely designed with the QRP operator in mind.

The rear panel of the K3 provides a number of connection options. The 100 watt power module includes two very quiet fans located in the middle of the back panel. I have only operated above 5 watts a few times. At one point I believe that I did hear the fans start to run. The K3 keyer jacks are 1/4 inch phono connectors on the rear panel. My keys and paddles are all of the 3.5 mm. variety. I searched my junk box and found 1/4" stereo adapters. Only then was I able to hook my paddle up to the K3 and make CW contacts. My first contact was with Hawaii. My second was with a station on the East Coast. Both were made at 5.0 watts output. My reaction after making these two contacts was, "Eureka! It works!"

At first my operating was quite tentative, as many of the controls were unfamiliar to me. I spent a lot more time listening than I did transmitting. As I gained confidence, that gradually changed. The more I used the K3, the more I wanted to use it. There definitely is a "learning curve" involved in operating the K3. To this day, I continually discover new features. For example, I decided to operate in the Sweepstakes Phone contest recently. Darned if I could figure out how to "turn" the mike on. Press the mike button, but no output. Eventually I found in the menu system a control that turned on "bias." This had to be on to enable SSB output. That was not initially clear to me, and not adequately covered in the instruction sheet that came packaged with the Elecraft hand mike. It is covered in the owners manual. While the menu system is not complicated, it is extensive. Plan on referring to the menu tables in the manual on a regular basis, at least initially.

At one point I decided to switch from QSK to semi break-in. Unwittingly, I had previously held the band change button in too long when changing bands. This shut off the VOX, but I did not notice that. The next time I went to key the K3, nothing happened. It took some research in the manual to find out that VOX must be enabled in order to send in CW mode. This is all part of the learning curve involved with any sophisticated radio. One will get one's money's worth in clever features with the K3.

Perhaps the most dramatic surprise that I have found thus far with the K3 is the clarity of its SSB "voice." I seldom listen to or operate SSB. To me, on most of my rigs, SSB sounds like an old Disney Donald Duck cartoon. I can understand it but it is not pleasant to listen to. Not so with the K3. SSB bandwidth can be adjusted via the same bandwidth knob from 4.0 Khz. down to .15 Khz. The clarity of the SSB signal on the K3 is nothing short of amazing to me. Metta, sitting across the room, also commented on the clarity of what she heard. I enjoyed tuning around the band during Sweepstakes, and could quite easily focus in on one station and bring it clearly forward among the din. I almost actually enjoyed working SSB. No matter that most stations calling CQ Sweepstakes could not hear my 5 watt signal. I did manage to snag a few stations from California, Washington, New Jersey, and Virginia before I shut down to watch the Broncos game. Later I learned that ERP on SSB is much lower than the CW power setting on a transmitter. I was running 5.0 watts, so my ERP was most likely no more than 2.5 watts. I could have set the power to 10.0 watts and still be within the generally accepted definition of operating QRP. My lack of success in the Sweepstakes contest aside, the K3 definitely is a rig that will delight the serious QRP sideband operator.

On Tuesday, Nov. 18, I joined in on the Fox Hunt on 80 meters. I have had fair success on 80 meter Fox Hunts in the past. On this night I had bagged pelts from both KT5E and NR5A within 13 minutes of the start of the hunt. Albeit KT5E is working off a 100 foot tower only 13 miles from my QTH. NR5A was in South Dakota, a "good" distance for 80 meters two hours after nightfall. Both Foxes had clear signals, although not loud, and they were easy to locate. I thought

Continued on next page

that the K3 worked about as well as any rig that one might want to use for a Fox Hunt. Distinctive features of the K3 included the clarity of received signals and the low background noise, even without using the available digital noise reduction features, which I did not seem to need that evening.

During my first K3 Fox Hunt I had some difficulty figuring out how to transmit “up 1” so I would be transmitting where the fox was listening, rather than on his transmitting frequency. With other transceivers I often just used XIT to offset my transmitting frequency up one KHz., more or less. In the heat of battle I did not understand at first how to use XIT or RIT, so I operated split, using VFO B to transmit. That worked fine, but I admit to being confused at first. This was one occasion where I should have studied the manual and practiced to get it right before the start of the hunt.

I dabbled in the LZ CW contest recently. I had no trouble picking out signals near strong stateside stations calling CQ Test. When the band was open, I was able to copy European stations, and even to talk with some of them at 5 watts. There is no question that the K3 has a “hot” receiver with a wide variety of “crud” fighting features. Over time I will perform more A/B tests with my venerable old Omni VI, out of curiosity more than anything else. One thing to remember, however, is that when the band fades out, the best of receivers is not going to hear what is not there, as in the 40 meter Fox Hunts!

The big test for the K3 will come on November 22 and 23, during the CQ WW DX CW contest. During CQ WW the 20 meter band is jammed wall to wall with high power US stations running DX. It is very difficult for a little pistol station to find a clear frequency at which to operate. Further, the loud stateside signals obliterate many of the DX stations. Squeezing in between the big guns to garner a DX contact, especially at 5 watts to a dipole, will be a challenge. I will be looking to see how well the superior measured dynamic range of the K3 enables me to work in close to the big guns, to nab DX. I will also be looking to see how well the K3 handles the powerful signals of big gun stations located near my QTH. One excellent contest operator lives just over the hill from me, while three or four others live within just a few miles of me. Will we both be able to work the same band without interfering with each other? We will find out soon.

What is my overall impression of the K3? I really like it. All modern rigs have complex menus that require a learning curve. Some, I am told, one cannot be operated without studying the owners manual in great detail. That has not been the case with the K3. Once I soldered up the power cord and found a suitable adapter for my keyer, basic operation on CW was simple and intuitive. I needed only to find the page in the manual that explained that VOX must be turned on to use the paddle. To really play the K3 like a fiddle, though, one must be willing to devote practice time with the manual in one hand.

CW and SSB are both a joy to copy. Tuning is precise. With the 200 and 500 Hz. filters, I have very effective CW crud fighters. Further, while I have not felt the need to use it very often, noise reduction (NR), is effective at further reducing background noise, and is adjustable. QSK works nicely. At 20 WPM I can hear a station sending between my dots and dashes. At 25 WPM that ability is diminished, but recovery is very fast. Semi break-in is also very smooth.

The internal speaker is top firing. With the bail extended, the bottom front of the K3 is over 2 inches above the table surface. That means the speaker is firing its sound back away from the user. I am now using a high fidelity external speaker. This produces very nice (to me) sound aimed right at my face. The K3 has plenty of power to drive the speaker. As I listen to sideband, operators seem to be sitting right next to me in my shack.

There is nothing about the K3 that I have yet found that I dislike. There are some things, however, which one must consider when contemplating this radio. Most of the control knobs and buttons are small. My stubby fingers have more than once hit the wrong button, but I am getting better at it. Print on the front panel is also quite small, but no more so than on my other rigs. There are two menus, one basic, and the second, more detailed and comprehensive. There are no sub-menus that I have found, though, so one can just run through the menu sequence to find an item. Some newer rigs have some sort of band scope, graphically showing activity on the current band. Some have multi-

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A Possible Solution to Interference on the CW Portion of the Ham Bands

It is no secret that the CW portion of the ham bands is continually being “shrunk.” This has happened by FCC rule making, as in the case of the 80 meter band. It has also happened as other modes, such as RTTY and digital, have moved down in frequency, such as on the 40 meter band. Of course we all know that CW is permitted on just about all of every ham band, except 60 meters. Realistically, though, one does not often operate CW, or find other CW operators, in the portions of bands that are allocated to other modes, such as AM and SSB.

When the FCC eliminated the need to copy Morse Code as a requirement for any license class, they opened up opportunities for many hams, and would be hams, to upgrade, or obtain their first license. Many of those who upgraded, or who became first licensed, had no intention of ever learning Morse Code, or of operating in that mode. Hence, one reason for “opening up” some traditionally CW segments to other modes.

A major incentive for becoming an Extra Class Amateur has been the ability to operate in exclusive portions of the bands where lower class licensees are prohibited from operating. The bottom 25 Khz. of the 80, 40, 20 and 15 meter bands come to mind. While not limited exclusively to CW, these Extra Class only band segments have “traditionally” been used for CW transmissions. Extra Class licensees also gain valuable exclusive privileges in the band segments where other modes are permitted, such as the bottom ends of the SSB segments of several bands.

With fewer and fewer new Extra Class licensees being capable of sending or receiving code, the exclusivity of the Extra Class only portions of the CW segments becomes less and less important to Extra Class licensees, as a group.

Suppose the FCC declared the bottom 25 Khz. of the 80, 40, 20, and 15 meter bands to be exclusively for Continuous Wave operation, and prohibited all other modes in those small segments? Supposed also that they lifted the restriction of those segments to Extra Class only, and made them available to all license class holders? No other portions of any bands would be affected. The only Amateur group that would be affected would be Extra Class licensees. All that they would lose is exclusivity. They would lose no privileges. They would only have to welcome additional operators in those band segments. All amateurs could look forward to being able to practice the art of CW in those band segments.

The trade off is that CW operators would have a place that they could call “home.” It could be a place where, for example, many of the exclusively CW activities could take place and avoid interference from other modes in the CW bands, such as digital and RTTY. Fox Hunts, SKCC, NAQCC, and many other activities could then take place in this lower portion of the bands, without interference from, or interference to, the other modes.

Yes, in some ways it is like backing CW operators into a corner. On the other hand, CW operators are already being backed into ever smaller portions of the CW band segments as it is. Yes, it may bruise the egos of some Extra Class operators, some of whom have held their Extra privileges dearly, and who learned code at 20 wpm in order to pass their Extra exam. This would not happen without a lot of soul searching and intervention by the FCC. But, in view of what has been happening to the art of CW lately, it may be the one way to keep CW alive and help it to thrive. Non-CW operators would lose nothing whatsoever.

Before you all gang up on me, I must tell you that I do hold the Extra Class license, and I did have to pass the 20 wpm test, and I did it at FCC headquarters in Boston. One might therefore think that I am biased against opening the exclusive CW portions of the bands, but I am not. I want CW to survive and thrive, and I want more people to feel that they can have a place to operate CW, where they won't become second class citizens to other modes of operation. I am eager to hear your comment and brick bats about the above proposal.

Pete Inskeep, NO2D.

K2

color displays. Many of the “big three” rigs are large, heavy and laden with buttons, options, features, etc., that make them very impressive to look at, and perhaps to operate. The K3 does not have all the glitz that some want, but it has a solid receiver and lots of features.

What do I really like about it? The SSB clarity strikes me the most. That was most unexpected. Listening to CW is a charm, which I did expect. Weak signal copy is very good. Crud fighting features, including variable bandwidth, band shift, hi-cut and lo-cut, Noise Reduction and Noise Blanker (which I have not yet used), enable one to dig a signal out under conditions that another receiver might not be able to handle. Precise control over transmit power, with a digital power level display, makes QRP operation a cinch. Transmit power can be dialed down to one tenth of a watt, or zero, to make the K3 an expensive code practice oscillator. The K3 also operates on 6 meters, although I have yet to go there. Elecraft is continuously upgrading the firmware. While I have not yet dared to do it, new firmware can be downloaded to a windows computer and installed via a serial connection.

Altogether, the K3 is a compact package that will fit on virtually any operating table. It has a handle on one side, and rubber feet on the other, so it will be easy to transport. It does require about .8 amp in receive, so don't think of it as a backpacking rig. Our Competitive Field Day site used KT5E's K3 during Field Day this past June. I did not hear of any problems with it using excessive juice from the batteries. Their first place finish speaks to operator skill, but I am sure that the K3 also played a part in their success.

A QRP operator who wants top of the line performance at a relatively good price can order the K3 as a 10 watt kit without the 100 watt module. A microphone and any desired filters would be extra. By the way, the K3 will take up to 5 filters in its main receiver, and another 5 filters in the available second sub-receiver. Almost all additional features, including filters, the 100 watt module, and the sub-receiver, can be added later as the owner wishes. Prospective purchasers should check carefully with Elecraft to ensure that future options they desire can be added later. The commercial reviews that I have read consider the K3 receiver to be among the best available at any price. That is somewhat subjective, but there is no doubt that the K3 is one of the most desirable rigs available to hams. I have heard that the waiting time for delivery of a new K3 has been reduced to less than 3 months, as Elecraft has ramped up production. I heartily recommend the K3.

Pete Inskeep, no2d.

Elecraft K3 - Addendum

During the weekend of Nov. 29 and 30, I had an opportunity to put my new K3 through its paces during the CQ World Wide DX CW contest. In this, one of the biggest contests of the year, stations literally are packed across the bands. This is especially true on 20 meters. Since it is a DX contest, contacts with US stations do not count. The main challenge in this contest is to find, and work, the weaker DX stations among all the “big gun” stateside stations calling “CQ Test.” One of my questions at the outset of the contest was how well the K3 could handle these demanding conditions.

A second challenge for me was to be able to work along side some local “big gun” stations sporting large antenna towers and running high power. With my previous radios I often had to work the opposite end of a band, or move to another band, to avoid having my receiver “decensed” by their strong signals. How would the K3 react to the local big guns?

Stories and pictures for the CQC Low Down are provided by CQC Club Members. Please consider sharing your QRP experience with other members and friends. All stories are welcome and appreciated. They can be submitted to KI0RB@arrl.net

The K3 was a joy to work in the contest. With the use of my 500 and 200 hz. cw filters, I seldom had difficulty picking out a DX station, regardless of how close I was to one of the big guns. They did not decense my receiver, nor did they splatter into my passband. I was amazed at how well I could tune up and down the band, even on 20 meters, and pick out good DX stations among the din. I found the fine tuning feature, with its very slow tuning rate, to be a real advantage. Using fine tuning, and watching the visual CW tuning feature, I could put myself spot on to a DX station. That gave me the best chance of being on his frequency when I responded to his CQ. In this contest the DX stations seldom, if ever, work up one or two, as do normal DXpeditions or Foxes in the Fox Hunts. Being right on frequency is often key to making a contact. The K3 made it very easy to do this. The lack of adjacent station splatter made it very easy to copy the DX stations.

Two of the local big guns were also working the contest. I only heard them at all when we were both trying to work the same DX station. They did not decense my receiver, nor was I even aware that they were on unless we ran across each other. The ability to operate in the presence of strong close in stations is one of the main reasons that I wanted to purchase the K3. I was not disappointed, but very delighted, in its performance in this regard.

It can be difficult to determine whether a radio plays well because it is good, or because band conditions are optimum. I can only report that I heard DX stations, solid copy, from every continent except Antarctica. My approach to the CQ WW this year was to log as many different zones and countries as I could, knowing that I could not devote enough time to the contest to rack up any kind of a score. I managed to contact 20 of the 40 CQ zones, and logged 25 different countries. Considering that I made only 57 contacts in the contest, I thought that I managed to get a pretty good cross section. Tanzania, Guinea and Senegal all made it into my logbook. 9Q1EK, in the Congo, was heard, but I was not able to work it, despite trying for some time. Hawaii, Japan, Australia and New Zealand were "easy" contacts on Sunday afternoon. Europe and South America accounted for numerous entries in the log. I also spent some time calling KG6DX, on Guam, to no avail. Overall I heard many DX stations, albeit not being able to work them all, on 80 meters right up to 15 meters.

I can only summarize my experience with the K3 as "fantastic." I am finally learning how to operate it. The variable bandwidth control is great when working "search and pounce." Keep the bandwidth open while searching, and then narrow it down as much as necessary when the DX station is located. Seldom did I feel it necessary to go as narrow as the 200 hz. filter. Often, just the DSP bandwidth control worked well enough. Sometimes I would narrow it down enough so that the 500 hz. filter kicked in. Then I could easily hear the sharp filter skirts drop the crud off one side or the other of the filter, making the DX sound as if it were the only station on the band, along with the hordes calling him. At times I used the noise reduction, but seldom did I feel the need to dial in more than one or two steps of noise reduction. Occasionally I also used the noise blanker to drop out the rasping that sometimes comes on frequency, at least at my QTH.

For most of the contest I worked stations using my key, and then logged in CT, the old fashioned, but still good, contest logging program. Sunday afternoon I decided to hook the K3 up to my computer so I could send code via the keyboard. That takes only a connection from the printer output on the computer, to a keying converter, and then into the straight key input on the K3. F1 sends NO2D and F2 sends the exchange. Incidentally, the internal keyer on the K3 is very precise, and can be adjusted in one WPM increments.

Since the Low Down is the newsletter of the Colorado QRP Club, I must make a confession. I wanted to learn how to operate my K3, so I decided at the outset that I would run the contest QRO, and not QRP. I really have enjoyed running the K3 QRP, as in the Fox Hunts, but this time I wanted to enhance my ability to get a good count of zones and countries, as a means of testing the K3's capabilities. I have no doubt, however, that the K3 would easily hold its own at QRP levels in a contest. I am most encouraged for the future, because we are still very near the bottom of the sunspot cycle. If I can do this well now, I can only imagine and anticipate what boundless DX opportunities will exist at the sunspot peak in a few years.

Pete, no2d.
