



RADIO AMATEUR NEWS & VIEWS

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NEXT MEETING:

DECEMBER 14, 2010—HOLIDAY PARTY

JOIN US DECEMBER 14TH FOR AN EVENING OF FUN! The RANV Holiday Party will be Tuesday, December 14TH at the QTH of W1SJ in Essex. Arrive at any time, *after* 5:30, but no food guarantees are made if you show up very late! If you need directions, contact W1SJ at w1sj@arrl.net *before* Tuesday night.

This is a food-fest, first and foremost and we have a whole assortment of stuff planned. I'm happy to report that we have been successful in importing knishes for those who ask for it each year. We will also have cocktail franks, meatballs, egg rolls, fries, roast beef and turkey platter, drinks and munchies. We'll also have an assortment of other tasty items, depending on what everyone brings. See below for more information on this.

And this year, we will celebrate our tremendous results in Field Day 2010, where we won the category and finished in the top ten in the entire country. This is very hard to do and we will acknowledge this, celebrate and party into the night! Please bring any Field Day photos so that we can relive the event!

This ain't much of a party unless y'all come. So clear your calendar and blow off all those other boring parties on the same night (I'm already doing this). And make sure you bring family and friends—this is a family event after all. It's boring just to talk about ham radio—we already do plenty of that at meetings and festers.

It is key that you let Mitch know how many are coming. If you haven't already, please let him know the number of attendees who are likely "definite" and the number of attendees who are likely "maybe." This information is needed right away so that the proper amount of food can be ordered. If you don't say anything, there will be no food for you! If you would like to bring something, let Mitch know that, too. If it is a food dish, you should come around 5:30. If you plan to arrive later, bring a dessert item. The best way to pass this information along is by using the RANV Holiday Party Survey form, found at: www.ranv.org/partys.html.

We look forward to seeing all of you at the Party!

Upcoming, Notices, & Other Misc

- RANV: January Meeting—1/11
- HAM Breakfast—Saturday, 1/29
- HAMCON: 2/26, Hampton Inn, Colchester
- Steering Wheel: 3rd Tuesdays, 6:30-8:30—Ninety-Nine Restaurant, Taft Corners
- Dues due? Pay online at www.ranv.org/ranvpay.html
- VT Ham Radio Calendar www.vthrc.net

HAMCON

RANV Flea Table back again!

Start rounding up your stuff, radio related only (includes laptops, APRS, etc): rigs, accessories, connectors, antennas, tools, wire—you know the drill. More details coming, but pretty much as in past couple of years.

There will be a bulletin board for photos/listings of station furniture, boat anchors, things too big for the table.

Contact N1WWW@arrl.net with Qs.

CHINESE RADIOS

CARL AB1DD

IF YOU HAVE BEEN FOLLOWING the magazine ads, you probably have seen ads for Chinese hand held radios. The prices are very good, but what about the hardware? I acquired one of these to find out. Mine is a Wouxun KG-UV2D. It came from Wouxun.us, the US distributor. It is advertised as a dual band radio, 2 meters and 220 Mhz or 440 Mhz, depending on model. Mine was the 2 meter–440 Mhz model.

The HT comes with a 1300mAh Li-ion battery, battery charger, belt clip, wrist strap, and antenna. All the parts seem to be good quality. The wrist strap connects to the belt clip, so the belt clip needs to be installed to use the wrist strap.

Out of the box, the battery connected to the body, and powered up just fine. The display is easy to see, with a good backlight if needed. A feature not found in other HTs, a built in flashlight. OK, just a bright white LED on top, but it could be useful. The button layout was easy to use, with one exception. The "0" button is on the right of the other number buttons, so I did enter a lot of 8s instead of the 0.

QST did a good write-up of all the specs, and tested this HT, so I won't go into all the fine details. It is good to know that mine was within specs, at least the ones I could check, like power out and modulation. The receiver seems to be good, I could hear some repeaters with a little less noise than with my Icom W32A HT

The next step was to program this little beast. This is where things got a little different. The Chinese have a different take on logic. Programming a memory takes a lot of steps. First, you need to be in "frequency mode." You need to enter the receive frequency, tone if needed, memory channel, etc., then save it. Now enter the transmit frequency and tone, then save that. If the information isn't entered fast enough, the menu exits. There are no automatic offsets in this HT. You can set the offset frequency and + or – offset that will be used. Anyway, the manu-

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RANV: NOVEMBER MEETING SECRETARY'S REPORT

JEFF N1YD, SECRETARY

Our meeting was held at Dynapower in South Burlington, with a tour given by Peter Pollak, the company's president and CEO. He escorted us into his impressive manufacturing facility, and started out by telling us that the Vermont workforce is the best thing about having his company located here.

Dynapower builds custom high power equipment, including transformers and power supplies. One of the first devices that Peter showed us was a 3 megawatt regulator for use with battery backup. A utility ordered it as a way to meet its peak load demands. Such devices can also be used to get constant power from renewable energy sources like wind and solar.

Peter showed us a partially completed transformer. Its windings were thick copper with a teflon coating and jumpers to maximize efficiency. According to Peter, no one winds a transformer at Dynapower without at least a year of experience and training. The transformer looked big enough to be used in a substation.

The most remarkable device of the the tour had to be the 6 megawatt AC to DC converter being built for the copper industry. After mining, copper ore is dissolved into a copper sulfate solution. Applying DC power to the solution causes metallic copper to plate out onto the electrodes. Dynapower's converter outputs enough DC to make 100 tons of copper per hour. The rectification is done with silicon gate devices as big as a man's fist. We did not get the details, but controlling a 6 megawatt power supply must take some really clever design.

There is very little paper at Dynapower, and not even a lot of ordinary engineering drawings. Most of the design work is done using electrical modelling software and 3D CAD programs. A special test area makes it possible to test devices at over 100 kilovolts and still survive.

Electrical cables made at Dynapower have a really unique kind of crimp connection. Using a 150 ton press and custom dies, a connector and stranded copper wire is squeezed to the point that it "cold flows." The connector and the compressed strands of wire fuse into a solid piece, which is ideal both electrically and mechanically.

PREZ SEZ

BOB KB1FRW

ANOTHER ELECTION IS OVER AND THE LINE UP IS THE SAME, this of course saves a lot of money not making new badges for HAMCON. Thank you all for voting and hopefully we will all be able to meet your high expectations in the following year. I look forward to the upcoming events like HAMCON and Field Day.

BTW, how are we going to top this last performance? Number one in the 2A category and 10th place overall, just fantastic! Way to go, team!! RANV's consistent performance with Field Day is something to be pretty proud of, six number 1 finishes in 2A and many in the top 10 since 1986! This is a pretty impressive record for a club way up here in the northeast of the USA, I wonder what it would be like if we were in the Midwest? How about running a 10Alpha Station? Just kidding.

As we approach the holiday party don't forget to tell Mitch how many are coming and what you might be bringing and I'll see you there with bells on and we can all slap each other on the back in congratulations over Field Day and check out Mitch's station, maybe I'll bring the K-3 along and plug it in.

The Ham Breakfast (January 29) and HAMCON (February 26—only 12 weeks to go, we are still looking for forum ideas and presenters) approach rapidly. If you have any HAMCON ideas make sure you let us know as soon as possible so we can make arrangements early. We do a good job with this event but of course it takes quite a bit of effort on everyone's part and the more people we have help out the easier it is, so sign up early and often.

Did you get on the repeater this last month? The repeater contest got people going for the first couple of weeks, but then it sort of fizzled out. Hopefully it raised some awareness that if you don't use them, how will you know what is going on locally or even who is around? Use it or lose it!

Final note: the soldering class has been morphed into a meeting, so we will be doing this in the spring of 2010, any ideas or suggestions are welcome, sent them to KB1FRW@arrl.net.

See you all at the Holiday Party and good DX!

73, Bob KB1FRW

Peter explained that almost everything made at Dynapower is a custom design and that "We like the challenge." He has a lot to be proud of.

After the tour, we met in Dynapower's break area, played a little ping pong, and voted to spend up to \$150 on the holiday party which will be 5:30PM on Tuesday December 14TH (at the home of W1SJ, presumably).

Election results: Running unopposed, Bob Allen KB1FRW was re-elected president, Carl Dow AB1DD was re-elected as treasurer, and I was re-elected as secretary.

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US Mail: POB 9392
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Web: www.RANV.org

Reflector:
groups.yahoo.com/group/RANV

Meetings: 2ND Tuesdays • 7:00 PM
113 Patchen Road
South Burlington
The O'Brien Civic Center

Repeater: 145.150, PL100; **WB1GQR**

New Hams, Mentoring:
RANVMentor@gmail.com

WHERE HAVE ALL THE HAMS GONE? PART II

MITCH W1SJ

THE RADIO IN THE CAR DOES NO GOOD UNLESS YOU TURN IT ON! I follow this routine when in the car: I start up the car, turn on the radio and after I get going, give a call on the repeater. Hopefully somebody comes back (often this isn't the case, but this is what we are trying to change). If no one comes back, I listen the entire time I am driving, often putting out another call 5–10 minutes later.

Before going on to the second step, first an aside about holding a conversation. The art of conversation is something few hams know much about it! First, you must be as good a listener as a speaker. I often get into a QSO where the other guy doesn't pay attention and keeps asking me to repeat my name and call sign. This is rude and is very boring and is not fun. I end such QSO's in a heartbeat. Make sure your radio works well and you listen! Then, to have a good conversation, there needs to be a topic of discussion interesting to both parties. Do NOT dwell on trivialities like the weather and traffic. Again, boring! And for God's sake do not interrupt a QSO in the car with a cell phone call, unless you are on call from work, or it is a \$10,000 deal pending or an emergency. When you drop a QSO to take a call, it is like saying to the other ham, "You are not important!"

The second step is to set up a good FM transceiver in your house. This should be a base unit or mobile unit on a power supply to an outside antenna. You can use an HT, but ONLY if you have the base set-up to back it up. Make a habit to turn on the radio and monitor the local repeater for a set time every day. It used to be that I had the radio on all the time I was home. Sadly, I do not do this anymore, but I know I should. There is knack for positioning the radio and setting the volume so that you can hear that there is activity, but it doesn't interrupt other things you are doing around the house. This is very tricky when there are other inhabitants who don't particularly like to hear ham radio conversations – a sticky problem in my Western White House location.

A way around this is to use an HT to monitor the repeater. That way you can carry it with you and cause minimal impact on other residents. The HT is fine for quick calls, but if you are going to talk for any length of time, use the big radio. No one likes to listen to a noisy signal. You will drive everyone away and that is counter to what we are trying to do.

You may be asking, "How will all this bring back amateur radio activity. If people are calling on the repeater and are listening, then QSO's will result. The problem we have today is that few are listening and fewer are calling. And you don't need to respond to every call on the repeater. But if everyone responds to just a few calls, the activity will mushroom.

The naysayer's will point out that this is two meter CB and no good conversations will result. I'll tell

you that in 40+ years, the most interesting conversations I've ever had were on 2 meter FM, and this opinion is coming from someone who is first and foremost an HF operator. Again, to have these conversations, you have to get through the basics like turning the radio on, transmitting and the willingness to talk about things beyond mundane topics. And if you don't care for 2 meters, then set up a 20 meter station and operate there.

I teach a lot of boaters about ham radio and the first thing I teach them is to use ham radio each and every day on the boat. It is the skill and expertise you develop over time which makes it a powerful medium. Or to put it bluntly, when the mast is broken and you're taking on water is no time to get out the instruction manual to figure out how the radio works!

Radios cont.

al programming can be a challenge. The best way around this is to get the programming cable for under \$20.00. It is the same as a Kenwood cable, so if you have one, it should work. The software is free.

The menus are only 1 deep, with 30 different ones to choose from. They can be accessed with the keypad, the up/down buttons or the knob on top. It is not too hard to follow the menu choices without a cheat sheet, one is available. The menus have all the setup that is needed. CTCSS tones, DTS tones, offsets, etc. are straight forward. There are a few features that make this little ht easy to use. It will talk to you in Chinese or English. Selecting memory locations and some menus are announced. When you switch from frequency mode to channel mode, the mode and channel are announced. Of course this can be turned off. There is a programmable function key on the side that can be set for scan, lamp, FM radio and SOS. Yes, it has an FM radio built in! Auto scan and 1–9 memory locations. Although frequency entry isn't possible, scanning and using the memories works.

The SOS function is strange. When activated, the lamp on top flashes, and a whoop-whoop siren is TRANSMITTED on the

frequency the HT is on. Why, I don't know.

Now for the dual band function. This radio is not a real dual band radio. Only one receiver and transmitter. In the dual channel mode, 2 frequencies are monitored. If one becomes active, the other mutes. There is a small icon that indicates receive on the sub channel. In the scan mode, the sub channel is muted. Not a real problem if you understand what is going on. A big drawback here is the only way to skip channels while scanning is with software. This is a problem. You will need to know what repeaters to scan ahead of time, or scan everything. The scan speed is a little slow for lots of channels, but OK for a few, like 5 or 10.

In field use, there were no problems. I never told anyone that I had a small Chinese ht, and no one knew the difference. I did ask for a report once and a while, no complaints. Once set up, the actual operation is easy. Select the memory and talk. Even entering a frequency on the fly isn't hard once you have done it a couple of times. One trick I use is placing the repeaters in specific memory locations, like the 145.150 in memory 15. Then when I scroll through the memories, it says "1 5" when the Bolton repeater is selected. Easy to do in the dark and you can't see the display. By the way, it *does* do alpha-numerics.

There are other functions this radio will do. I would suggest reading over the manual to see all that can be done. Would I recommend one? Sure. You need to remember that this isn't a fancy "Icomkenu" radio with all the bells and whistles. It has its quirks, but they are all work-aroundable. The big draw... the price is only \$107.00 from the US distributor. They have a good warranty, and are good to work with. I talked to the company owner, and he was very helpful. I ordered the ht on a Thursday and got it Saturday. I would recommend purchasing one from the US distributor in case there is a problem. There have been one or two reports of DOA radios, and if ordered from China, there could be a long wait to get it replaced, not to mention the difficulty communicating with them.

See www.wouxun.us for ordering.

Update: It seems that other US companies are starting to carry these. Powerworx now has one on their web site, and others probably will follow. Theirs is a KG-UV3D, the same radio with a different case and slightly different firmware,



RANV

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www.RANV.org

NEXT MEETING

Tuesday • December 14 • 5:30⁺pm

QTH W1SJ
ESSEX

Holiday Party