

QRZ

Newsletter of the Pilot Knob Amateur Radio Club

May 2006

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From My Shack to Yours:

Hope every one is enjoying the warmer weather, looks like there won't be much of a spring. The weather has sure been up and down over the last few years. [Global Warming?]

Happening Now:

First annual "Spring Picnic"

Last Saturday was a great day for an outing, not too hot and not too cool. Westin Bend State Park is a very nice park, well kept and not a bit crowded. For those of us that attended, we had great food prepared by Chef "KE0DL". Thanks to Dave and his family for setting up the goodies and to the others who brought potato salad, baked beans, 5-cup salad, and other items. Special thanks for the desserts, always a favorite.

I would like to see us do another outing maybe in the fall. This time we will elect someone else to take charge of the food, it's a lot of work and we all need to pitch in. I hope more of the members will join us at the next outing we did have a great time.

Club Roster

Over the last couple of months we have had several new members join our club, to each and every one welcome. Remember this is your club, let us know what your interests are and any suggestions you may have.

Training Sessions

Also over the last few months Mike [K0MDS] and Gary [WB0MNA] and others have done a great job training new Amateur Radio operators. The training after licensing is also valuable bringing new operators up to speed so they can properly operate their station.

The Future:

Meeting at the EOC

Still trying to hold a monthly meeting at the new EOC or at least have tour for the members so we can all see the fine job they are doing.

Field Day

Remember that field day will be held at the River Front Park, downtown Leavenworth. Is this the first time we have held field day in town? If any one remembers let us know at the next meeting.

We should attract a lot of interest by the public since this is a popular spot on a Saturday afternoon. We need to have as many members there as possible. Even if you don't set up a station, please come and help with passing out information and answering questions.

The Bicycle Race @ Lake Perry

John [KC0VRN] with help from Mac [W0ROO] has been tirelessly worked this event. We have several volunteers, but could use more. This is a major event and amateur radio will be represented from our club and others. Thanks John!

It's time to turn off the radio.

73,

Dan > W9JXZ

ANNOUNCEMENTS

PKARC TEST DATES

Club members and others interested in taking the FCC examinations for the various license classes should know that testing sessions for the Club have been set at the American Red Cross building on Shawnee Street, Leavenworth at 7:30pm. The next testing date for 2007 is scheduled for 29 June. Please notify Martha Auchard, WBOERI, at 772-7350 of your desire to take the test, so Volunteer Examiners can be notified and all the elements you need are on hand.

If you need assistance preparing, please ask any of the Club officers. Classes will be held also throughout the year depending on the number of those interested in devoting the time.

Club Build Day Scheduled

The Pilot Knob ARC has scheduled it's Build Day on Saturday, June 2nd from 8am to 1pm, at the Red Cross Center in Leavenworth. The Build Day will focus on the Handi-Finder DF Antenna, however, if you have a different kit you would like to build during the session, feel free. More information can be found in this issue of QRZ.

Dayton Hamvention

THE premiere hamfest of the, the Dayton Hamvention is scheduled for May 18th - 20th at the Hara Arena in Dayton, Ohio. This is the Hamvention's 56th year, and this year's theme is Local Clubs: The Heart of Ham Radio, and acknowledges the support that ham clubs provide around the world. For more information, visit www.hamvention.org.

From The Kickapoo QRP ARC Operating Desk

The weather is starting to warm up here in the Midwest. That should be a sign for those ham radio operators interested in QRP operation to start checking out their portable antennas and radios.

Getting outside in the spring time is always an enjoyable activity, especially if you like to hike on trails, or travel to the local parks for a picnic and such. It's also a super time to take your portable battery operated HF radios outside and set them up on a picnic table or in some cases an old tree stump in the woods somewhere.

Weston Bend State Park offers this type of opportunity and it won't cost you any money other than the equipment you want to work with which you probably already have.

The park offers picnic tables in various places around the park and usually they are in good high locations with trees close by. If you like to hike in the woods, there is the option of three trails in the park to select from and all are good trails.

One trail is all asphalt and three miles long. This trail is for walking and bicycling. The other two trails are dirt. One trail goes south from the Overlook point and is called the Harpst Trail. It's a great hiking trail about two miles long and when dry will give you a fair workout. It loops back to the parking lot at the Overlook after intersecting with the asphalt trail.

The third trail is over near the west entrance to the park and is called the North Ridge Trail. Normally that entrance is closed except for park maintenance vehicles. You can drive over to that side of the park from the main entrance on Missouri 45 highway and leave your car in the parking lot. From there the trail goes north up to a ridge line overlooking the Missouri River. It's a perfect place for a few hours of portable HF operation. The trail is only about one mile long and does not loop back to the trail head. You come back along the same path you hike in on.

This trail doesn't see much traffic and I consider it a bit of a hidden trail. It's quiet and has plenty of trees to put a temporary antenna up in. You might have to put up with a few squirrels and deer, but it's their home so no big deal. Be sure to bring a lunch and maybe a few extra snacks for the wildlife too.

You can really do some serious portable HF antenna testing from along side this trail. It's nice and high at the ridgeline and well maintained plus you can get just off the trail in the woods to do your radio operating if you like real privacy for your operation.

Anyone interested in a few hours of outdoor radio fun should consider doing a Saturday or Sunday outing with their portable HF gear and go hike the North Ridge Trail. You'll get some great exercise, see a lot of beautiful scenery and possibly make some great HF contacts all in one trip. At the same time you can have a picnic in the woods and enjoy the peace and quiet if the bands happen to be dead that day. No matter how it works out, you will enjoy your day.

Maybe I'll see you in the woods sometime. You can't miss me...I'll be the person carrying a radio in my backpack and munching on a Granola bar. Who knows, you may even run into another ham doing the same thing. If that happens, it means the secret of the hidden trail is out and I'll have to find another trail to hike due to all of the RF interference.

Gary A. – WB0MNA

LEAGUE NOTES

Postings From the ARRL

ARRL Withdraws "Regulation by Bandwidth" Petition, Plans to Refile

NEWINGTON, CT, Apr 27, 2007 -- The ARRL has announced it's withdrawing its controversial November 2005 Petition for Rule Making (RM-11306) calling on the FCC to establish a regulatory regime to segment bands by necessary bandwidth rather than by emission mode. The League cited "widespread misconceptions" surrounding the petition as a primary reason for deciding to remove it from FCC consideration. The ARRL left open the option of refileing the same or a similar petition in the future, however.

"The withdrawal of the petition will permit a full discussion and consideration of options at the July 2007 meeting of the ARRL Board of Directors," said ARRL President Joel Harrison, W5ZN. "The petition then can be recast with a better explanation of its scope and the reasons for the proposed changes."

The ARRL Executive Committee recommended withdrawing the petition when it met by teleconference April 10. The ARRL Board of Directors subsequently okayed the EC's recommendation by mail vote.

The ARRL Board continues to support the concept of regulation by maximum emission bandwidth as a way to facilitate the eventual transition from analog to digital communication modes. ARRL CEO David Sumner, K1ZZ, emphasized that the League seeks a regulatory framework that's "fully compatible with both narrowband and wideband analog emission modes now in common use" on the ham bands.

Sumner expressed the hope that a refiled regulation-by-bandwidth petition would "address -- and hopefully avoid -- widespread misconceptions" about RM-11306, either in its original form or as amended earlier this year. Irrespective of the present controversy over the petition's proposals, he pointed out, the League repeatedly sought comment on its regulation-by-bandwidth concepts before filing its petition with the FCC.

The ARRL first sounded out the Amateur Radio community regarding regulation-by-bandwidth three years ago. A September 2004 "It Seems to Us . . ." QST editorial "Regulation by Bandwidth" followed, explaining the concept and its rationale. Hundreds of subsequent comments from ARRL members and others "helped to bring the issues on which the amateur community was not in agreement into focus."

That led to a second editorial, "Narrowing the Bandwidth Issues," in April 2005 QST, soliciting additional comments on the plan's most contentious points. That drew hundreds more constructive and critical comments, and the ARRL took all input into account in

developing a draft petition for the Board's consideration. The ARRL filed the petition in November 2005, and the FCC put it on public notice in January 2006.

In all, the amateur community has posted upward of 1000 comments on RM-11306. While some comments appropriately reflected concerns about the proposed substantial shift in regulatory philosophy, others tended to reflect a lack of understanding of existing rules, of the ARRL's proposals, or both. Some expressed the view that the League was attempting to promote or legitimize particular data modes, such as Winlink.

"The petition, in fact, had nothing specifically to do with Winlink or any other particular data mode," Sumner maintains. "It was, rather, a means of facilitating data experimentation, which is somewhat stifled under the current rules" that apply almost exclusively to analog modes.

A major distraction in the public debate related to automatically controlled data stations, and assertions that adopting the League's petition would permit such facilities to run roughshod over CW and other traditional modes. Sumner says automatic control is not even an essential component of the League's regulation-by-bandwidth proposals, which would leave in place restrictions on automatically controlled stations.

Revisions to RM-11306 the ARRL filed earlier this year to accommodate changes in Part 97 that occurred since November 2005 only seemed to generate additional controversy and lead to further confusion, Sumner concedes. Those revisions would have largely confined regulation by bandwidth to the VHF and UHF bands.

One misunderstanding resulting from an unintentional editorial error in the League's revisions gave rise to concerns that the ARRL's proposed 3 kHz bandwidth limitation for data emissions represented an expansion of the currently permitted maximum bandwidth. Quite the contrary, Sumner explains.

"In fact, 3 kHz bandwidth would have been a new limitation, because the present baud rate limit applies to individual carriers," he said. "Therefore, for emissions such as OFDM [orthogonal frequency-division multiplexing], which use multiple carriers, there is no effective bandwidth limit in the HF bands now." Sumner notes that under current rules, a single OFDM signal could conceivably -- and legally -- occupy an entire HF band.

Harrison assured that the League intends to offer a "far better explanation" of the consequences of regulation by bandwidth before filing a new petition proposing that regulatory concept, "so that the misunderstandings that occurred with respect to RM-11306 do not happen again."

Club Build Day, June 2, 2007

PKARC will host another club build day in June. We will meet on Saturday, June 2, from 8:00 am -1 pm at the Red Cross building in Leavenworth. We will assemble our kits and test them at the session.

What will we be building? At a previous meeting, we decided to build the Handi-Finder DF Antenna for the Club Build Day project. Gary, WB0MNA, and Glenn, KC0TIE, built versions of this DF antenna for the March 2006 Fox Hunt. Gary built his from on-hand parts, while Glenn used the kit form to assemble his antenna.

If you want to build your kit at this session, you need to pre-order the kit, get materials for the antenna elements, and find a suitable handle. Glenn suggests stainless steel TIG rod (19" length).

A kit, minus the antenna elements and handle, is \$27.95 plus \$ 6.00 S&H. You may order a kit from Rick Wells, K8SCI.

Rick Wells
P.O. Box 271
Brunswick, OH 44212-0271
Phone: (330) 225-7373

<http://www.noard.com/noardhdf.htm>

Additional info on the underlying concept is at the following site: <http://www.handi-finder.com/>

What You Need. You provide your kit, parts for the antenna element, connectors, and the handle. Bring your own soldering iron and solder if you have either. Bring the radio you intend to use plus the appropriate connectors or adapters (BNC or SMA most likely). PKARC will have coffee and soldering irons for those who need one.

Field Testing. After the kits are built, we'll field test our new toys, which in all likelihood will end at some place that serves grub. This gives everyone an opportunity to get used to the equipment before the next fox goes into hiding sometime in the future.

For more information, contact Gary, WBØMNA. Be sure to listen in on upcoming nets for further information.

Technical Presentation.

In addition to the build day activities, there will also be a brief presentation on Multimeter functions and proper use. This presentation will be approximately 30 minutes long and cover Analog, Digital and VTVM type meters.

What You Need. You can bring your favorite meter and we will answer some of your questions concerning that meter and what to expect from it. Please hold your questions to a minimum as we need to spend the majority of the morning's activities on building the Handi-Finder Antennas.

Second Op

Doug Thomas - KC5VKG

Well, yet another month has come and gone, and more issues with the QRZ (no pun intended). As if missed deadlines, faulty mailings and printing issues throughout the current year weren't enough, now your humble editor has to deal with a complete system's wipeout. As you can see, this month's issue isn't quite the flashy, image populated copy you might be used to seeing. And yes, it's late (although those of you that receive it via snail-mail may not notice hihi). I'm still in the process of re-installing some of the more basic programs that I use to produce the Zed, but it's been slow going. Should all go well and time permitting, The June issue should be back to what you are used to seeing. I also want to thank those of you for your positive comments about the product I assemble each month. It's not an easy job, but fun and rewarding when I know there are those who enjoy it.

June is coming, and that's when an amateur radio operator's fancy turns to....FIELD DAY!!!! This year's Field Day runs June 23rd and 24th, and will be held at the Leavenworth Landing Park, downtown Leavenworth. We look forward to this new location, as we hope it will provide a better opportunity for the public to view the possibilities of what amateur radio has to offer. It is also hoped that this year's location will offer those of you who have not participated in a Field Day operations the chance to get out, help out, and get involved. Or at least come for a visit. We are still looking for operators for this event, as well as individuals to assist with public information. For more information, and to volunteer to help, contact Ric Nelson, KA3LOC, and look for full information in the June issue of QRZ. Hope to see you there.

73 and have a good work week.

NOTICE OF PURPOSED DISCUSSION AND CLUB VOTE

The following gives notice to all club members of purposed discussion and club vote on items regarding club business.

During the Pilot Knob Amateur Radio Club (the Club) picnic in April, an official inventory of items purchased from the estate of James Barnett, AA0TG, SK, by the Club was taken by Club Equipment Custodian Dave Phillips - KE0DL, and Club President Dan Borneman - W9JXZ. All equipment and manuals were accounted for and documented. A list of items may be obtained from Dave, or Club Secretary John Bennet - KC0VRN.

The inventory of items includes a Dentron DTR 1200L Amplifier, S/N 168 (the amplifier). Recent unofficial discussion between club individuals regarding the need for an amplifier for a club station (the reason for purchasing the equipment) and the possible

selling of the amplifier, has brought about the need for a purposed discussion and possible vote regarding this matter.

The following will be discussed at the next meeting of the Pilot Knob Amateur Radio Club on June 7, 2007, meeting beginning at 7:30pm at the Red Cross Center in Leavenworth, Kansas:

- Will the Club require the use of an amplifier such as this for the Club station in the future
- Should it be determined by a majority of Club consensus, that if the amplifier should not be needed, should the Club be allowed to see the amplifier to help recoup some of the cost of the purchase, and
- Should the Club offer the amplifier for sale to it's individual members first before offering it to the general public, or go public with the sale at the start.

Following the discussion, a vote will be held, with the majority vote deciding.

The amplifier was tested by Kevin Schavee - K0CWR, and the results of his testing is given below:

"With TS-830S with 100 watts drive or so this amp puts out to antennas on CW about 600-700watts or so on 80,40,20 and 15 meters. Pretty good!

2200 volts plate voltage.

My non-warc amp will tune WARC 12 and 17m by using 15 and 10m tune positions.

This amp didn't seem to care to tune 17 meters in the 15m tune position. I failed to try the 20 meter band selection (after thought). No 10 meters this amp.

Located add for same amp(google Dentron DTR 1200L search): 600\$ ebay.
<http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=9713874671>

\$400

<http://www.w8df.com/oct06fb/page3.html>

Surprisingly not many adds for this amp?

Indicator lamps, meters seem to work fine. "

Members wishing to add comments regarding this discussion are encouraged to attend the June 7th meeting.

TECH CORNER

Mike Stewart - K0MDS

Last month we talked about the origin and generation of Dual Tone Multi-Frequency signals. Now it's time to put that knowledge to practice with your radio.

Review

If the theory and history were a bit complex, the actual generation of DTMF tones using an amateur radio is very simple. Recall that DTMF uses 16 tones, and the standard DTMF keypad is arranged in a four-by-four configuration.

Figure 1. The DTMF Standard Frequency Matrix.

To see if your radio has DTMF capability, you can check the operator's manual for a section on DTMF use. You can also tell by looking at the radio's faceplate. If you have a keypad with numbers and the letters A-D like Figure 2 shows, your radio probably has DTMF.

Dialing

For most radios, manual DTMF use is a three-step process. Step 1 is to put the radio into transmit mode. The second step is to send the tones. The last step is to cease transmitting.

When you press the push-to-talk button (PTT), the radio begins to transmit on the specified frequency. While holding the PTT button down, key in the numbers and symbols you want to send using the keypad. Then release the PTT button to cease transmitting. It's that simple.

The most common mistake operators make when using DTMF is forgetting to push the PTT button WHILE sending the codes. It's like talking on the radio; you can chat with the microphone all day, but until you press the PTT, no one else will hear you. In many cases, pressing the PTT is what tells the radio to send DTMF tones rather than execute some other keypad function.

Remember This

Even low-end HTs with DTMF will likely have the ability to store DTMF strings in memory. If you use an autopatch, you can store frequently called numbers. The steps to save and access the codes once they're stored varies by radio, but it's worth programming common DTMF strings or phone numbers into the DTMF memory.

Uses

Hams use DTMF most commonly to dial an autopatch. Dave's article in the April 2007 QRZ tells the specific steps needed to use autopatch on the local repeater. Other uses include remote control of station equipment, DTMF paging, EchoLink, and internet radio linking project (IRLP) connections. A growing number of metro area repeaters have these capabilities.

Today's radios offer many features that aren't always understood or used by their owners. Take time to experiment with DTMF. DTMF opens up a whole host of new capabilities you can use on the bands.

QRZ is a monthly publication of the Pilot Knob Amateur Radio Club and may be quoted in other publications provided a credit line is included and the author (if known) is given acknowledgment. Items related to amateur radio will be advertised free of charge. Articles for publication in QRZ are always welcome and willingly accepted in any form. We reserve the right to edit material as necessary. Please let the Editor know if you experience problems getting your issues of QRZ, or if it is received in a difficult to read state. Members are encouraged to receive their QRZ via E-mail, rather than paper copy. Requests to receive the hard copy version will be honored. Your effort to reduce club expenses will be appreciated. Comments or suggestions regarding the QRZ format are welcome and appreciated.

The purpose of the Pilot Knob Amateur Radio Club is to further the exchange of information and cooperation among members, to promote radio knowledge, fraternalism and individual efficiency, to provide assistance to the best advantage in the event of emergency, and to conduct club programs and activities to advance the general interest and welfare of amateur radio.

Anyone interested in the activities of this organization will be eligible for membership. Members must comply with FCC rules and regulations, as well as rules established by the club. Dues are \$20 per year (no extra cost for spouse or minor children who are amateurs).

The Pilot Knob Amateur Radio Club conducts 2 nets every week, with a 2 meter net every Wednesday evening at 7:30 on the 147.00+ (PL 151.4) repeater, and a 70cm net every Sunday evening at 7:15 on the 444.80+ repeater. All amateurs are welcome to join.

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