



THE FRANKFORD RADIO CLUB NEWSLETTER

PROFICIENCY THROUGH COMPETITION

CALENDAR

May 2004:

- 8-9 CQ-M International DX Test
11 FRC Main Meeting, Phila
11 Remy Meeting B
20 T.I.T.S. Meeting, Noon
25 Remy Meeting B
29-30 CQ WPX Test, CW

June 2004:

- 8 Remy Meeting B**
17 T.I.T.S. Meeting, Noon
19-20 All Asia DX Test, CW
26-27 ARRL Field Day

July 2004:

- 1 RAC Canada Day Contest
10-11 IARU HF World Championship
13 Remy Meeting B
15 T.I.T.S. Meeting, Noon
24-25 Russian RTTY WW Test

CHANGES

New Members

W2SN

Edward Madison
7004 12th Avenue
Brooklyn, NY 11228
(718) 833-7120
maded@mindspring.com

Deadline for the June issue:

Monday, May 24, 2004

President's Message

The meeting on May 11th will be the last one of the Fall/Winter session held at the college until next September. Since we have only one volunteer to host a summer picnic meeting in August, there will be no June and July meetings. If anyone is still considering hosting a summer meeting, please contact me as soon as possible. Otherwise, I hope everyone has a safe and wonderful summer and do enjoy the warm weather.

The Dayton Hamvention is coming up this month and by the show of hands at the April meeting, we should have a nice turn out of club members this year. The web site is being updated and seems to be working really well. If you have not checked it out lately, there are 284 pictures including many older, original members. If any one has any ideas for the web site, please let us know.

Hope to see you at the May meeting.

73, Joe K3NM

Ch-Ch-Changes

You'll notice some design changes on the interior pages of the newsletter. I've been toying with various layouts but was never happy until one day I came up with what you see on pages 2 thru whatever. I think it's a much cleaner layout and will allow me much more flexibility for inserting boxes (see page 3) and other tools to make the newsletter a bit livelier.

Having said that, the layout of page one and the cover (last) page will remain the same. I feel it's important to retain a link to the past.

If you like the new layout, great. If you don't, I hope you'll learn to like it in time.

73, Joe KQ3F

MEETINGS

Main Meeting - The main monthly meeting of the **Frankford Radio Club** will be held on Tuesday, May 11 at 8 PM. Location is Rosenburger Hall, Room 102 at the University of the Sciences in Philadelphia.

T.I.T.S. meeting—The Trexlertown International Transmitting Society meets on Thursday, May 20 at 12:00 noon. Location is the Hometown Diner on Route 222 in Trexlertown..

Rexy Meeting B—The Rexy's **FRC Meeting B** meets after the main **FRC** meeting on the second Tuesday of each month, and at about 8 PM on the fourth Tuesday of each month.

FRC/West Jersey DX Group—There will be a joint **FRC/West Jersey DX Group** meeting on Thursday, May 20 at 7 PM. The highlight of the meeting will be Pete, **NO2R**, giving a presentation on his Cambodia trip. Our meeting site is the Somerset Fire Academy on Roycefield Road in Hillsborough, NJ. (That's just north of the railroad tracks - check Mapquest, or email me w2le@hotmail.com for directions.) We will be monitoring our repeater on 147.135, pl 151.4

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2004 FRC Fund Drive

The 2004 **FRC** Annual Fund Drive is now officially underway. This issue should contain a stamped envelope with my address on it. Please make your check payable to: **"Frankford Radio Club"**



If for some reason you don't get an envelope, or you misplace it, you can send your contribution to:

Robert L. Shohet, KQ2M
51 Scudder Road
Newtown, CT 06470

**** PLEASE BE SURE TO WRITE YOUR CALL ON YOUR CHECK. ****

As you know, these are contributions and not "dues" so there is no fixed rate. To set the scale, however, it may help you to know that the cost of operating the club last year was about \$45.00 per member

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FRCWear Inventory

Navy T's—5 Large, 3 XL, 2 XXL. Screen print, \$15
Navy Polo—1 XL. Embroidered, \$30
White T—1 XXXL. Screen print, \$15
Navy Hats—5. Embroidered, \$15

Add \$5 for shipping

In order to order new shirts or hats we will need to order a minimum of a dozen of each.

73, Doug W3CF

Contest Station Available

The V26B site is available for the 2005 ARRL SSB DX Test. This station has the finest antenna compliment in the Caribbean, just ask **AA3B** and **N2ED**.

Contact Sam, **WT3Q**
<wt3q@frontiernet.net> if you are interested.

FRC Contributions Support the ARRL BPL/Spectrum Defense Fund

On April 21, 2004, the consolidated contributions by **FRC** members **TOTALED \$1,030.00**. The checks have been forwarded to Mary Hobart, K1MMH, who handles the BPL/Spectrum Defense Fund contributions for the League. These contributions are in addition to those sent direct to the ARRL by many of our members.

Well done! BUT ... the job isn't over. We must be constantly vigilant in the protection of OUR Ham Bands. There are many hungry bureaucrats and big business types who would rip us off in a second. Watch 'em! Continue to support the ARRL effort with contributions ... perhaps consider an annual contribution. This is one that directly benefits us - the users.

Contributors to thank are: **W3BEN, K2SB, K3PH, N3KN, N2VW, KG2MY, W3FV, N3BNA, K3YD, KQ2M, W3RV, N3NR, N3RS, W2OX,NO2R**. Your support is appreciated.

A number of other **FRC**ers have contributed directly to the ARRL BPL/Spectrum Defense Fund before the **FRC** group effort started. As of March 28, 2004, the following members have reported direct contributions:

N2NC, NO2R, AA1K, N3AD, K3MD, W2GD, N3RS, K3NL, N1RK, K3WW, N3RD, K2UT

Don't be bashful. If you have sent a contribution direct to the ARRL, let us know. In addition, several **FRC**ers who've already sent direct contributions are sending another via **FRC**! That is fantastic!

Thanks to all for their generosity in defending our Ham Bands against encroachment.

73, Jack N2VW

FRC Repeater Control Op Named

I would like to thank Sig **N3RS** for volunteering to be a control operator for the **FRC** 147.270 repeater. Sig joins Steve **K2SB**, Doug **W3CF**, and myself **K3NL** as control op's for the **FRC** repeater.

Anyone who has time and would like to volunteer as a control operator, please contact me at 610-449-8910 or via e-mail at leiold@dvol.com

73 Nick K3NL

**2004 CQ WPX SSB Test
FRC Claimed Scores**

Call	QSO	Pfx	Score	Class
W3BGN	564	331	571,637	SOH75
KQ2M	2,991	1,040	7,778,160	SOH
NO2R	1,035	600	1,612,800	SOA
W2YC	531	350	471,450	SOA
W2RE	2,519	935	6,064,410	SOA
N2ED	388	280	271,040	SOH
AA3B	110	100	39,700	SOH
K3WW	556	333	471,195	SOQ
AA3E	635	365	408,070	SOL15
<i>Op. W3CF</i>				
NT1E	498	336	461,348	SOL40
<i>Op. K3BU</i>				
KN5H	2,081	675	2,756,700	M/2
<i>Ops. KN5H, N3DXX</i>				

CONTESTING — TIPS, TECHNIQUES, RESOURCES

Reprinted with permission from the April 21, 2004 ARRL Contest Rate Sheet

As we start our annual antenna and tower work, it's easy to get a little careless, particularly with solvents and chemicals. A special thanks to Tom WA2BPE, a research lab veteran for the following information: "Some paint strippers contain methylene chloride (Dichloromethane) which is a carcinogen. It is easily absorbed through the skin and by inhalation. It is not miscible with water, has a high vapor pressure, and is not flammable. If you try it, do it out-of-doors and keep it off your hands. Do not use it in any plastic (Teflon is the only exception) or rubber-based containers; use glass or metal. Rubber gloves are no guarantee of safety either." Just because it's sold at the hardware store doesn't mean there are no hazards involved. Tom also contributes the following sources of good information about methylene chloride and other hazardous chemicals:

- o <http://msds.ehs.cornell.edu/msdssrch.asp>
- o <http://hazard.com/msds>
- o <http://www.ilpi.com/msds/#General> <http://www.ilpi.com/msds/>

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The World Contest Station Database maintained by Pete N4ZR has been completely updated and is back in service, including all the specialized searches. A search has been added for amplifiers, along with radios and logging software. Each of the specialized searches now reports the number of hits, depending on your search criteria, so you can see (within limits) how many listings there are for different types of radios, or who uses which logging program. Try them out at <http://www.pvrc.org/wcsd>. If you have suggestions for other kinds of searches, please let N4ZR know at n4zr@contesting.com.

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Dave N2NL reports that for freeing up frozen hardware, "PbBlaster kicks WD-40's butt any day of the week, any time. As someone who works all day on old, outdated, antique, and rusty USCG engines, I know. Most hardware stores in the southeast carry it. If you have tarnished silver-plated coils or other hardware, Dick W7WKR contributes this simple process that uses only baking soda and aluminum foil.

- o Get a large bowl/plastic bucket that can totally contain the object to be de-oxidized
- o Form pieces of aluminum foil over the outside of the bowl/bucket
- o Remove the formed foil, and place the bowl-shaped foil inside the bowl
- o Heat to boiling sufficient water to fill the bowl and cover the objects to be de-oxidized
- o Add several tablespoons of baking soda per quart of water to the bowl and pour in the boiling water.
- o Immerse the oxidized silver object ensuring there is a mechanical connection between the aluminum foil and the silver object.
- o There should be some visible bubbling activity taking place on the silver object and the aluminum foil should begin to turn black.
- o Thoroughly rinse the silver object after the cleaning process to remove any baking soda residue.

Others have also suggested just placing the hardware in the dishwasher for starters (assuming that it doesn't have any components that would melt during the drying cycle). You will have to re-lubricate any moving parts after either of these procedures.

Ham Radio, Contesting and the Scientific Method

By Bob Shoheit, KQ2M

It is always insightful and amusing (and sometimes annoying) to read new posts on old topics. I have always been a believer in the "scientific method", that is, when an assumption is made, it should be tested to see if it is valid. I think it was XXXX who talked about "throwing money at towers and equipment", the implication being that this was enough to improve the station and contest scores. Rather than simply reject this notion out of hand as silly, I decided to be objective and fair and use my training (B.S. in Nutritional Biochemistry from Cornell University) as a scientist, to test this theory.

Experiment 1:

Method: I walked out to the base of my 130' tower, opened my wallet, took out all the paper money, \$187, and threw it at the base of the tower.

Result: No change in the station, except the tower base now had wet money. No change in signal strength. Operator felt wet and somewhat relieved**.

Experiment 2:

Method: I picked up the wet money and proceeded inside my house. I used a paper towel to dry off the money and then proceeded into the basement where the shack is located. I took the same \$187 (now dry) and threw it on the operating desk, on top of the computer keyboard.

Result: No change in the station or signal strength. Again, you can imagine my relief!*** My curious 4 1/2 year old daughter who was watching this process, asked "Daddy, why did you throw that (money) there?" I replied that I was doing a scientific test. She then asked me "Daddy what is a scientific test?".

Conclusion: Based on my experiments, which in the interests of advancing scientific theory and practice should be repeated in large numbers by contesters all over the world, and THEN subject to confidence testing using the accepted Chi 2 (Chi Squared) method, I have concluded that throwing money at towers and equipment does NOTHING to improve the station or signal strength, or operator ability. You can just imagine my GREAT RELIEF** that there was more to being a good operator and making good contest scores than just throwing money at these things.

As additional proof of my conclusion, I offer the following:

Several years ago I decided that it would be in my best interest to build in automatic band switching since I make many HUNDREDS of QSO's every contest on the second radio. It is terribly fatiguing and time-wasting to have to switch everything MANUALLY. So I spent the money and bought the appropriate equipment from Top-Ten devices. But I never hooked it up, and still haven't as of April 3, 2004, so I STILL have to switch everything manually. UGH!

Now, if XXXX's theory was correct, then just the fact that I purchased this equipment should have improved my station, but of course we know that this is NOT true, since equipment that is not plugged in and not hooked up, can't possibly be used to increase one's score.

Ok, back to reality....

It is VERY wet in Connecticut since it has been raining for the last five days. There are some who would claim that bad weather could affect the results of my tests. They may be right. It certainly affected the texture of the money and the interest of vendors in receiving it. "Hey what is this stuff you handed me?!". Oops, that was Long Island, NOT Connecticut. :-) There may even be some doubters out there of the validity of my scientific tests. I can just hear it now....

You dummy, don't you know that throwing money at towers and equipment only works on SUNNY days? Or, Hey nut-job, your location is already so good (Eastern half of the US) that the enhancement is valid only from WEST of the Mississippi. Or, Hey lid, don't you know that INCREASING contest scores is a function of IMPROVING YOUR SKILL AND STRATEGY, and/or IMPROVING the design and efficiency of your equipment and antennas and/or MOVING to a better station location, or some combination of ALL OF THESE THINGS?

Hmmm.... That last one implies lots of work and effort! I suspect that it MIGHT be true but I just don't know. Guess I will have to do ANOTHER scientific test. Any suggestions?

Fixing the Serial Port Windows Boot Problem

by Floyd Sense, K8AC (Reprinted with permission)

For as long as I can remember, I've lived with the problem of Windows "diddling" the COM ports on my PC at boot time. My homebrew interface box for RTTY, PSK and PC-generated-CW includes a "disable" switch to prevent that activity from activating the rig's PTT and CW keying lines. Recently, I picked up a RIGblaster Plus to use with my K2 and ran into a more serious effect: Every now and then, when Win XP boots, the system "hangs" in the middle of this scanning of the serial ports. The CW and PTT lines remain activated and you either have a carrier on the air (if the rig is in CW mode) or the rig is in transmit with the mic live (if in SSB mode). The RIGblaster Plus offers no way to disable the serial interface other than to remove power (no on/off switch) or disconnect the cables (*Ed. note: The RIGblaster Pro does have an on/off switch*). After some experimentation, I was able to prove that powering off the RIGblaster prevented the hangs at boot time.

I decided to research the problem to see just why Windows was working with the serial ports at boot time and if anything could be done to prevent it. Windows scans the serial ports at boot time looking for new devices that might have been added. That's how it identifies a device like a new modem and therefore knows which drivers to load. (Windows documentation refers to the activity as: Serial Device Enumeration). When devices are discovered, Windows makes entries in the Registry containing information relating to the ports and discovered devices. If you have serial ports dedicated to radio-related interfaces that don't require special drivers, there's really no benefit to this activity at all.

While searching for a solution, I discovered an item on the Microsoft website titled: "Serenum: Serial Device Enumeration in Windows". This item, dated May 22, 2002, explains the Serenum driver (used for serial ports) for both Windows 2000 and Windows XP and details a way to disable the scanning of individual serial ports. The technique involves locating the appropriate Registry entries for the ports and adding a REG_DWORD value name, "SkipEnumerations", in the Device Parameters key. The instructions on finding the right Registry entries were a bit vague to me (not a Windows expert!), but I finally located the right entries by searching the Registry for the Com port number (Com2 in my case). The full path to the entry on my system for my Com2 port is:

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Enum\Root\*PNP0501\1_0_17_1_0_0\ Device Parameters
```

The two path element names just before "Device Parameters" will undoubtedly be different on your system. Remember you have to make this change for each serial port that you want to prevent the scanning for. After the change, when the system is rebooted, the scanning of the ports that you added the parameter for will not occur. The boot process will complete a bit faster and you won't have to turn off your radio or interface to prevent problems.

If you're not comfortable editing the Windows Registry, this is probably not the place to start! Find a friend who can help out. It would have been nice if Microsoft had just given us a nice checkbox somewhere to control the scanning function, but at least this solution works. If you want to give it a try, search for "Serenum: Serial Device Enumeration" at www.microsoft.com <<http://www.microsoft.com/>> for complete instructions.

FCC Proposes Wide-Ranging Changes to Amateur Service Rules

The FCC has released an "omnibus" Notice of Proposed Rule Making (NPRM) that seeks comments on a wide range of proposed Amateur Service (Part 97) rule changes. The FCC also denied several petitions for rule making aimed at altering portions of the Amateur Radio regulatory landscape and ordered minor changes in Part 97. The NPRM is a result of a dozen petitions for rule making, some filed more than a year ago and a few dating back as far as 2001. Comments on the proposals put forth in WT Docket 04-140 are due by Tuesday, June 15, with reply comments by Wednesday, June 30. Among other changes, the FCC has recommended adopting the ARRL's "Novice refarming" plan <<[<http://www.arrl.org/announce/regulatory/refarm/>](http://www.arrl.org/announce/regulatory/refarm/)>. "Because the ARRL petition addresses the operating privileges of all classes of licensees on these Amateur Service bands, we believe that the ARRL petition provides a basis for a comprehensive restructuring of operating privileges," the FCC said in its NPRM. "We note that, as proposed, no licensees would lose any spectrum privileges and that General, Advanced, and Amateur Extra Class licensees would gain spectrum for phone emissions, one of the most popular operating modes on the HF bands."

The FCC also has proposed essentially eliminating its rules prohibiting manufacture or marketing of Amateur Radio Service power amplifiers capable of operating between 24 and 35 MHz. Originally put on the books in 1978 to keep high-powered amateur amplifiers out of the hands of CBers, the rules now "impose unnecessary restrictions on manufacturers of Amateur Radio equipment and are inconsistent with the experimental nature of the Amateur Service," the FCC said.

The FCC additionally proposed a rule change that would make Kenwood's Sky Command system legal for operation within the US. The proposed amendment to §97.201(b) of the rules would permit auxiliary operation on 2 meters above 144.5 MHz--with the exception of the satellite subband 145.8 to 146.0 MHz--in addition to frequency segments already authorized. The Sky Command system permits the user to operate certain Kenwood equipment remotely via a VHF/UHF handheld transceiver.

In response to an ARRL petition, the FCC proposed extending the bands available for spread spectrum experimentation and use to include 222-225 MHz. On its own initiative, it also recommended including 6 and 2 meters as well. Current rules limit SS emissions to frequencies above 420 MHz.

Among other changes, the FCC also proposed to prohibit acceptance of more than one application per applicant per vanity call sign; permit retransmission of communications between a manned spacecraft and its associated Earth stations, including the International Space Station; allow current amateurs to designate a specific Amateur Radio club to acquire their call sign in memoriam; eliminate §97.509(a) of the rules, which requires a public announcement of volunteer examiner test locations and times; and add to §97.505(a) to provide Element 1 (5 WPM Morse) credit to any applicant holding a Technician license granted after February 14, 1991, and who can document having passed a telegraphy examination element.

The Commission ordered some changes in Part 97 without requesting comment. It ordered, among others, the revision of the definition of an "amateur operator" in §97.3(a)(1) to reflect that entry in the FCC Universal Licensing System (ULS), not a license document, determines whether a person is an Amateur Radio operator.

The FCC also adopted a technical change--in line with a recent amendment to the international Radio Regulations--to specify that the mean power of any spurious emission from a new amateur station transmitter or amplifier operating below 30 MHz be at least 43 dB below the mean power of the fundamental emission, 3 dB greater than the current requirement.

The FCC turned down a petition would have established distinct CW and phone segments in the 160-meter band. Although a majority of commenters supported the proposal, the Commission said the current voluntary band plan "adequately accommodates the operating interests of all licensees who use the 160-meter band because it was based on input from those who use this spectrum."

Among several others, the FCC turned down petitions that would have imposed restrictions on the time, length or transmission frequencies of bulletins or informational transmissions directed at the amateur

FEMA Appears to Backpedal in BPL "Clarification" Letter

After expressing "grave concerns" to the FCC last fall about the interference potential of Broadband over Power Line (BPL) systems, the Federal Emergency Management Agency (FEMA) now appears to be backing away from that strong stance. Now a part of the Department of Homeland Security, FEMA filed comments December 4 in response to the FCC's April 2003 Notice of Inquiry in ET Docket 03-104. Many have cited those remarks in their own comments opposing BPL deployment. In a January 8 letter that's now part of the BPL Notice of Proposed Rule Making (NPRM) in ET Docket 04-37, Michael D. Brown, the US Department of Homeland Security's under secretary for emergency preparedness and response, told FCC Chairman Michael K. Powell that FEMA wanted to "clarify the record" to ensure that its filing was not "misunderstood or misconstrued."

"We have become aware that certain distinct approaches to BPL may have the potential to cause interference to FEMA's high frequency radio communications system," Brown said in his January letter. "However, we continue to study the BPL proceeding and have not concluded that there is a material interference problem or that all of the distinct technological approaches to BPL pose a risk of interference."

The FEMA official said his agency expects that there may be ways to provide BPL's benefits "without compromising the emergency communications capabilities available to FEMA."

The January letter stands in stark contrast to FEMA's predictions last December that "the introduction of unwanted interference from the implementation of BPL technology into the high frequency radio spectrum will result in significant detriment to the operation of FEMA radio systems." Saying such interference could "directly impair the safety of life and property," the agency also had recommended the FCC beef up its Part 15 rules to ensure no increase in interference levels to existing FCC or NTIA-licensed communication systems.

"The purported benefits of BPL in terms of expanded services in certain communications sectors do not appear to outweigh the benefit to the overall public of HF radio capability as presently used by government, broadcasting and public safety users," FEMA asserted last December in comments filed on the agency's behalf by Chief Information Officer Barry C. West.

BPL also could render such "essential communications services" as the Radio Amateur Civil Emergency Service (RACES), the Military Affiliate Radio System (MARS) and the Civil Air Patrol (CAP) useless, FEMA said. FEMA and ARRL are signatories to a Memorandum of Understanding that focuses on how Amateur Radio personnel may coordinate with the agency to support emergency communications functions. FEMA's December comments also referenced ARRL's "Interference to PLC systems from Amateur Radio Operation."

Brown's January letter conveys a much milder, conciliatory tone. "We know that the FCC shares our appreciation for the importance of reliable communications in the context of disaster recovery and are confident that the Office of Engineering and Technology's technical assessment, as well as the Commission's regulations implementing BPL, will be sensitive to this issue," he concluded. "FEMA stands ready to assist in any way the Commission might find helpful."

The deadline to file comments in response to the FCC BPL NPRM is Monday, May 3. Reply comments are due Tuesday, June 1. Interested individuals and organizations may file comments via the Internet using the FCC's Electronic Comment Filing System (ECFS) <<<http://www.fcc.gov/cgb/ecfs/>>>. The FCC asks that anyone filing comments do so "only in the newly established ET Docket No 04-37."



<http://www.qsl.net/lz1jz>

BPL Specter Lends Additional Significance to Spectrum Protection Act

ARRL President Jim Haynie, W5JBP, says the specter of interference to Amateur Radio bands from Broadband over Power Line (BPL) systems--if and when they are widely deployed--serves as a reminder of the importance of the Amateur Radio Spectrum Protection Act of 2003. While the legislation would not grant added protection from BPL beyond what present and proposed FCC regulations would provide, Haynie said the challenge of BPL underscores the value of Amateur Radio's spectrum allocations and the degree to which amateur access deserves protection. Identical House and Senate versions of the measure, an ARRL initiative, are on their third try in Congress. The cosponsor count on the House bill, HR 713, this week rose to 94--more than double the number six months ago. The Senate version, S 537, has eight cosponsors.

"With BPL on the horizon, it becomes even more important that we all get behind these bills and get them enacted," Haynie said this week. He reiterated his call for more League members to take the effort to write, call or e-mail their representatives and senators to explain the bills' importance and encourage them to consider cosponsoring the measures. "They cover all of our spectrum, not just a little," he added.

The Spectrum Protection Act bills would require the FCC to provide "equivalent replacement spectrum" to Amateur Radio if the Commission were to reallocate primary amateur frequencies, reduce any secondary amateur allocations, or make additional allocations within such bands that would substantially reduce their utility to amateurs.

The two bills do not directly address BPL interference. FCC rules already provide regulatory mechanisms in Part 15 and in proposed amendments to Part 15 that are specifically aimed at BPL "interference mitigation."

Among the latest House cosponsors to sign aboard HR 713 are Representatives John Conyers (D-MI), Shelley Berkley (D-NV), Susan Davis (R-CA), Charlie Norwood (R-GA), Norm Dicks (D-WA), Gene Taylor (D-MS), Tim Holden (D-PA), Danny Davis (D-IL), Gene Green (D-TX) and Jeff Miller (R-FL).

Haynie says letters from constituents are a crucial factor in getting the spectrum bills through Congress. "We can't get them into law without membership support," he said.

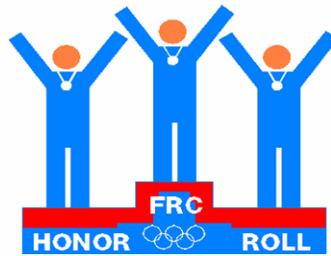
He urged members to contact their senators and representatives through their Washington or district offices. A sample letter on ARRL's The Amateur Radio Spectrum Protection Act of 2003 Web page <<<http://www.arrl.org/govrelations/arspa.html>>> cites Amateur Radio's role in public service activities, but Haynie invites members to personalize their own correspondence as they see fit.

The Amateur Radio Spectrum Protection Act of 2003 Web page also contains information on how to identify and contact individual members of Congress as well as links to the Thomas Web site <<<http://thomas.loc.gov/>>>. Among other things, the Thomas Web site includes links to the bills' text and a list of cosponsors. Those writing their lawmakers on behalf of the Spectrum Protection Act are asked to copy their correspondence to the League via e-mail <specbill03@arrl.org>.

BPL Handout Available From ARRL

ARRL has posted a two-page document <<<http://www.arrl.org/tis/info/HTML/plc/BPL-leave-behind.pdf>>> that discusses Broadband over Power Line (BPL) in lay terms. "Broadband over Power Line: Why Amateur Radio is Concerned about its Deployment" is available for reprinting and use as a handout when, for example, dealing with members of Congress, municipal officials, power utilities and the news media.

While emphasizing that hams do not oppose broadband services per se and tend to be "early adopters" of new technology, the information sheet outlines Amateur Radio's concern about BPL's potential to create interference. Other broadband delivery methods "do not pollute the radio spectrum as BPL does," the paper states.



APRIL

CONDUCTED BY N2SS

2004

WARC BANDS

<u>30 Meters</u>	<u>17 Meters</u>	<u>12 Meters</u>
K2FL.. 329	K2FL...334	K2FL...326
N2TK324	N2TK 333	N2TK ..326
N2LT309	N2LT 329	N2LT 316
W3BGN ...304	W3CF 329	W3BGN ... 309
K2RW290	W3BGN ... 322	N2SS 299
W8FJ286	K2RW 320	K2RW 296
W2YC283	N2SS 318	W3CF 282
N2SS278	K2PS 294	W2YC 270
K2PS275	WA2VYA . 292	K2PS 265
WA2VYA ..267	W2YC 292	W3SOH ... 265
W3SOH ...223	W8FJ 290	WA2VYA. 261
K3II222	W2UP269	WT3W 258
W2UP222	W3SOH266	W2UP 235
W2LE205	WT3W 264	KS3F 232
N3RD194	N1RK 253	N1RK 230
KS3F178	KQ3F 240	W8FJ 226
K2BU175	K3II 234	KQ3F 213
AA2WN...164	W3OV 234	K3II 200
WT3W162	KS3F 215	W2YR 186
KQ3F161	NZ3O 214	N3KN 176
NZ3O150	W2LE 196	NZ3O 167
W3OV150	W2YR 194	K2NJ 162
W2YR130	K2JF 168	W2LE 161
AB2E118	NA2U 162	W3OV 160
K2JF112	N3KN 147	NA2U 154
NA2U105	K2NJ 145	K2JF 135
K2NJ97	K3ND 110	AB2E 92
N1RK86	AA2WN ... 102	K3PP 53
N3KN85	AB2E 94	K3GYS 30
N2VW71	K3GYS 85	N2VW 27
K3PP68	N2VW 65	AA2WN 19
W3CF55	K3PP 60	K2WJ 17
K2WJ28	K2WJ 40	KB3FEE 3
K3GYS8		
KB3FEE1		

Once again looking for the undisputed
KING OF WARC

Rules for FRC Honor Roll Listings.

Provide me with your total IOTAs worked, or countries (including deleted) worked for: WARC Bands, 160 Meters, Digital modes, Mobile, 6 Meters or your total for 80,40,20, 15 and 10 for 1.5K Club. Countries do not count until HQ Awards Committee takes action and announces a start date for a new country.

160 Meters

W3BGN290	KS3F 129
AA1K284	WT3W 127
K2BU260	K2PS 102
WT3Q250	K2RW 92
N2LT239	W2YR 80
N2TK239	N2SS 78
K3NW228	N2VW 77
K3SX223	W3CF 77
W8FJ195	K3NL 70
NO2R184	K2NJ 59
W2UP183	K3PP 59
K3JG181	KQ3F 47
NA2U175	N1RK 43
K3NZ171	KB3FEE 38
W3OV163	K2JF 34
W2YC161	W2LE 27
K3NM156	AA2WN 25
N3RS156	NZ3O 13
K3II148	K3GYS 12
WA2VYA144	W3SOH 12
K2FL140	K2WJ 3
K3ND133	

W3BGN continues as the undisputed
Top of Top Band

DIGITAL

W2UP335	W2YR 122
N2LT326	K2JF 113
K2PS275	W2LE 81
W3SB268	N2SS 51
K2RW231	WA2VYA 50
K2NJ221	N1RK 42
W2YC221	N2MR 28
N3KN165	KQ3F 26
AA2WN162	K3GYS 15
WT3W155	K2WJ 12
K3PP123	W8FJ 12



MOBILE DX

W2YC276	AA2WN 131
AA1K264	WT3Q 107
N2SS234	KB3FEE 48
N2MR196	K3PP 46
K2JF150	W2YR 21
K3GYS143	



1.5K Club

K2FL 1706	WT3W1395
W3BGN 1694	K2NJ1383
N2TK 1685	W3SOH1378
N2LT 1658	K2JF1350
W2UP 1656	NA2U1335
K2RW 1591	AA2WN1295
W8FJ 1588	N1RK1280
N3RS 1575	N2VW1258
K2BU 1550	K3CT1177
W2YC 1522	WT3Q1162
N2SS 1511	K2WJ1161
K2PS 1509	W2YR1138
NO2R 1504	W3SB1132
K3ND 1488	W2LE1115
N3RD 1486	K3PP1110
WA2VYA ..1435	K3NM1107
KQ3F 1429	NZ3O1069
KS3F 1407	N3KN1065
W3CF 1403	KB3FEE231



Islands On The Air

K2FL 971	N2VW259
N2SS 781	W3CF253
W3SOH 762	W2YR230
W8FJ 573	K2WJ223
W2YC 565	WT3W218
N1RK 534	K3GYS193
KS3F 319	KB3FEE23
NZ3O 259	



6 METER DXCC

N2LT 102	K3OO60
AA1K 97	N1RK57
K2NJ 95	N2SS55
K2JF 94	W2YR41
K2PS 81	K3PP30
WA2VYA 75	K2RW36
WT3W 65	W2YC16
N3KN 61	



THE FRANKFORD RADIO CLUB NEWSLETTER

P. O. Box 431 Albury, PA 18011-0431



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Repeater - 2 meters, 147.27/147.87 Output PL tone, 114.8

Home Page - www.gofrc.org

Meetings

Meetings are held on the 2nd Tuesday of each month (Sep through May) at 8 PM at the University of the Sciences, Philadelphia. Summer meetings are held at member homes (one Saturday/ Sunday per month).

Packet Cluster Contest/DX System

144.930 W3FRC
145.010 N3ED
145.650 K2TD
145.530 K3WW
145.530 AA1K
145.570 WT3Q
145.570 K2TW
145.590 N2NT
144.950 K3GYS
145.730 N2BIM
147.495 W3MM
145.670 W3PP
TBA W2JT

Telnet DX Cluster

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