



THE FRANKFORD RADIO CLUB NEWSLETTER

PROFICIENCY THROUGH COMPETITION

CALENDAR

March 2009:

- 4 FRC West Meeting, 6:30 PM**
- 7-8 ARRL DX Test, SSB**
- 10 FRC Main Meeting, 8 PM**
- 19 T.I.T.S. Meeting, Noon**
- 21-22 Russian DX Contest
- 27 REXY Meeting B, 8 PM**
- 28-29 CQWW WPX Test, SSB

April 2009:

- 4-5 SP DX Contest
- 14 FRC Main Meeting, 8 PM**
- 16 T.I.T.S. Meeting, Noon**
- 18-19 YU DX Contest
- 25-26 Helvetia (HB9) Contest
- 25-26 Florida QSO Party
- 28 REXY Meeting B, 8 PM**

May 2009:

- 9-10 CQ-M DX Contest
- 12 FRC Main Meeting, 8 PM**
- 2 T.I.T.S. Meeting, Noon**
- 26 REXY Meeting B, 8 PM**
- 30-31 CQ WW WPX Contest, CW

CHANGES

Email Changes

K3NL—k3nl@verizon.net
KD3TB—idarack@gmail.com

New FRC Contributor

W3SQ

Deadline for April issue:
Sunday, March 29, 2009

President's Column

Greeting to you all..

The early reports on the CW end look pretty good. If you've been reading the postings on the reflector you know what I mean. There have been quite a few posts, and some of the scores are quite impressive. Thanks to all who participated and made points toward the club effort. Please don't forget to send in your scores. Your points do us no good at all if you don't send them in. **DO IT NOW!**

I hope there will be a good turn out with lots of collective time in the operating chairs during the upcoming SSB weekend. If you haven't blocked off family time yet, please do so. We're going to need everybody's help if we expect to be victorious again this year. Remember that the boys up north have far more participants than we do, so we need to make lots of noise with our lower numbers.

I hope you have visited the **FRC** Survey link and participated in the club survey. The survey will only be available for two weeks total, so it will be pretty much a done deal by the time you get this newsletter. If you have not provided your input, do it right away or you will miss your opportunity and we will miss your input.

Finally, the regular March Meeting will once again be held at REXY's. 18 members attended the February meeting, and we had a good meal and a good time. Mark your calendars for Tuesday, March 10th and plan on joining us. REXY's is **VERY** easy to get to, and there's plenty of on-site parking. I hope to see you there.

GO FRC!

73, John, W8FJ

New Main Meeting Location

REXY's, 700 Black Horse Pike Mt Ephraim, NJ 08059.
Tuesday, March 10 at 8 PM (7 PM for dinner/socializing)

Directions at http://Philadelphia.citysearch.com/profile/map/6805841/mt_ephraim_nj/rexy_s_bar_restaurant.html >

MEETINGS

Main Meeting

The next meeting will be on Tuesday, March 10 at (7 PM for dinner/socializing, 8 PM for the meeting) at Rexy's. The address is **700 Black Horse Pike Mt Ephraim, NJ 08059**. Coming from Pennsylvania, take the Route 168 South exit off the Walt Whitman Bridge. After you reach Route 168 South, Rexy's is about 3/4 mile on the right - less than 2 minutes off the bridge.



T.I.T.S. meeting—The Trexlertown International Transmitting Society meets on Thursday, March 19 at 12:00 noon. Location is the Hometown Diner on Route 222 in Trexlertown..

Rexy Meeting B—The Rexy's **FRC Meeting B** will meet about 8 PM on Tuesday, March 24.

FRC West Meeting—The next **FRC West** meeting will be on Wednesday, March 4, at 6:30 PM at the Arment's Restaurant, near the intersection of 272 and 897, about 3 miles north of the PA turnpike. Come and trade stories about the CW contest and big plans for the SSB contest



Election Notice

The present officers have offered to stand for reelection. Additional nominations may be made prior to the election at the March meeting.

New Claimed US Record

Bob, **KQ2M**, set a claimed new US record for ARRL DX CW 20 Meter SO Unassisted!

ARRL Sweepstakes and RTTY Roundup Set New Records

The lack of good HF propagation didn't seem to affect participation in the 2008 Sweepstakes or the 2009 RTTY Roundup contests. According to ARRL Contest Manager Sean Kutzko, KX9X, both contests were record-breaking events. "We have received 3298 logs for the November SSB and CW Sweeps combined in 2008,"

Kutzko said. "That is -- at bare minimum -- a 5 year high. The 2009 RTTY Roundup in January saw 1564 entries, also a 5 year high." Kutzko said he attributes some of the increase to the hoopla surrounding the 75th running of Sweepstakes: "The excitement over the new Triple Play Award <<http://www.arrl.org/awards/#tripleplay>> was likely a large factor in the RTTY Roundup increase. Interest in contesting in general is on the rise."

Reprinted with permission from the February 4, 2009 ARRL Contest Update

The CQ WPX SSB contest <www.cqwpvx.com/> has a new searchable score database containing all log submissions from 1996 to 2008! Search selections allow you to filter the database by year, continent, country, category, and call sign. There are options to select viewing band breakdowns, club names, complete operator lists, and sort order. The database also contains all soapbox comments and these can be viewed for each contest. As the data gets older, it gets sparser, so if you note errors or omissions, contact Randy at k5zd@cqwpvx.com. (Thanks, Randy K5ZD, CQ WPX Contest Director)

Laura L. Smith of Pennsylvania has been named by the FCC to fill the vacancy created when Riley Hollingsworth, K4ZDH, retired in 2008 as Special Counsel for the Spectrum Enforcement Division of the FCC's Enforcement Bureau. Ms Smith is not currently a ham, but one can always hope that she'll join us on the air eventually.

Alpha Radio Products LLC <www.alpharadioproducts.com/> is now shipping the first production run of AP8410 amplifiers shipped. The 1.5 kW output amplifier uses the new Alpha Power brand VTX-X118 tubes, a ceramic, external-anode, indirectly heated tetrode better able to handle the grid current that might be experienced in the AP8410 than the comparable Eimac 4CX1000 tube. In what seems to be a stealthily developing trend, the amplifier features a USB control interface, as well.

How can you find a contester's email address? If they haven't posted it on a Web site like QRZ.com or on a club Web site, one good way is to enter "[call sign] 3830" into a search engine. If they've posted to 3830, you'll get several hits. I also add the year to restrict the search to recent posts.

Ever wished for your very own Jeeves to scan the bands for you while you're busy? Dick W3OA wrote a program called SkimScan <home.roadrunner.com/~w3oa/SkimScan/> to tune a CW Skimmer to different frequencies on one of four different schedules you specify, each containing up to 15 different frequencies. It runs under Windows XP and Vista. You'll never miss another DXpedition firing up on a "dead" band!

Can you send in a check log for a contest and still get a log checking report (LCR)? Sure! There is no reason to withhold a log if you were just a casual entrant or operated more than the maximum time, for example. The Cabrillo-formatted log file header should include the line CATEGORY-OPERATOR: CHECKLOG and the sponsors will take it from there. If the sponsors generate LCR's, you should be able to get a look at the same contact cross-checking results as if you'd submitted the log for inclusion in the competitive listings.

As the two signals approach the same frequency, you will hear a beat tone that represents the difference between the signals. When the signals are on the same frequency, there is "zero beat". This is important in contesting on a crowded or noisy band when the CQ-ing stations may be using very narrow filters. You may need to be within 100 Hz of the transmitted signal to be heard! Forgetting to clear the RIT setting between QSOs can be a problem, too. Setting your logging software to send the "RIT Clear" command after every QSO is one way to help out. (Thanks, Tree N6TR)

One of the first to develop antenna modeling software for amateur radio, Brian K6STI maintains a Web site with lots of technical resources <www.ham-radio.com/k6sti/>, particularly useful calculator programs. (Thanks, Tim K3LR)

It will be a while before fuel cells can power the equipment that requires the type of serious RF component <stores.ebay.com/> QRO-Stuff-Storesold by the QRO Stuff Store in its construction or use! Tim K3LR recommends the vendor as a good source of Russian-made transmitting components.



Watt Meters

Fill ALL your Thruline® wattmeter needs at <<http://www.nm3e.com>>

Featuring new and used meters, elements, loads and more by BIRD® and Coaxial Dynamics.

73 Tim Brown NM3E 610-207-4865

Reprinted with permission from the February 18, 2009 ARRL Contest Update

When tracking down an annoying audio power-frequency noise, Jim K9YC points out that if what you hear is hum (pure 60 Hz) rather than buzz (little or no 60 Hz, but lots of 180, 360, 420, etc.) suspect a magnetic field coupling problem, such as to a power transformer or conductor carrying high currents. If what you hear is buzz, suspect power-related noises caused by current flow between pieces of equipment. Jim details solutions and presents detailed explanations in his tutorials on RFI <www.audiosystemsgroup.com/RFI-Ham.pdf> and Interfacing <www.audiosystemsgroup.com/HamInterfacing.pdf>.

Concluding the section on noise, have you ever tried noise-cancelling headphones? The Bose QC-2 have a good reputation and Tim K3LR has converted them to boom mikes <www.freewebs.com/k1dg/boseheadphonemod.htm> using the Heil microphone elements, as well. They are now the "cans of choice" at the K3LR multi-ops.

RF plate chokes are not the simple components they seem. If you are building, rebuilding, or repairing an HF amplifier this Web site by WC6W <wc6w.50webs.com/wc6wamps/index.html?fr62.html> might be a good one to visit.

Concept of Deleted Entities Reinstated

Bill Moore, NC1L, ARRL Awards Manager, reports the following: In 2000, DXCC program rules were modified substantially in an effort to create simplified and stronger rules that would help make DXCC work well in the 21st century while tightening the DXCC List Criteria. At the same time the DXCC Challenge Award/competition was created as part of the modernization effort. The Challenge is intended to allow for an energetic new pursuit in DXing that focuses on statistics based upon only current entities on the List. The Challenge has been highly successful.

Another change resulting from this rules modernization was a subtle change from "deleting entities" to "removing entities." The intent of this change was to no longer allow the addition of deleted entities to the Deleted Entity List. In the subsequent years since DXCC 2000 there have been few issues with this concept and resultant little attention given to the realities of the ideological change. Recently, however, since the rollout of Logbook of the World (LoTW) and various political changes internationally, it has become evident that the program should return the concept of deleting entities for mostly administrative reasons. "Removing" an entity from the DXCC system is non-trivial if not impossible. Also, the success of the DXCC Challenge and the DXCC Honor Roll have made a great game better by providing a playing field that isn't heavily biased by age.

It seems that the concept of a "deleted" entity -- one that is marked as deleted and not applicable to Honor Roll or Challenge but that still exists in the records -- is an elegant solution to the problem of changes in entity status. Distinguishing entities that are no longer extant makes sense as a means of leveling the playing field for younger participants in DXCC, but to wipe out someone's past accomplishments altogether just seems too drastic.

At its last meeting the ARRL Programs and Services Committee decided that administratively the concept of deleted entities should be returned to the DXCC program. Necessary changes to Section II, DXCC List Criteria have been made to the rules and part 5 is renamed Deletion Criteria. The concepts for deleting an entity do not change. If an entity is deleted it will be added to the Deleted Entities List and the statistical records for DXCC participants will be adjusted accordingly, just as they had been in the years prior to 2000. The numbers shown in the individual DXCC records lists have always included the Deleted Entities. No DXCC participant needs to take any action at all.

<http://www.lz1jz.com>



ARRL Executive Committee Issues Mobile Amateur Radio Operation Policy Statement

On January 30, at the instruction of the Board of Directors at its January 2009 meeting, the ARRL Executive Committee adopted a policy statement on mobile Amateur Radio operations. The statement addresses the growing number of proposed state and local laws and ordinances regulating the use of cellular telephone and text messaging, inadvertently affecting Amateur Radio mobile communications.

In its statement, the Executive Committee urges state and municipal legislators to limit the scope of their proposals, limiting them to devices such as full duplex wireless telephones and related hand-held or portable equipment. Alternately, it suggests that licensed Amateur Radio operation be listed specifically as an exclusion to the proposed regulations.

"At the start of each new session, you see a flurry of this type of proposal in state legislatures across the country," said ARRL Regulatory Information Manager Dan Henderson, N1ND.

As of February 1, 2009, Henderson said that the ARRL is aware of proposals in 11 states: Georgia, Hawaii Idaho, Illinois, Iowa, Maine, Montana, Texas, Utah, Virginia and Wyoming, as well as several local city or town proposals.

"These proposals are usually intended to regulate cellular telephone and text messaging by drivers as a matter of safety but, when they are written in very broad terms, can include Amateur Radio mobile operations in the 'net' they cast," Henderson continued. "The Executive Committee's policy statement gives a good, concise background of the role the Amateur Service plays in public safety and service communications. It also highlights the differences between communications conducted by cellular telephone and those using Amateur Radio. Finally, the statement offers some suggested statutory language for state motor vehicle codes which would protect Amateur Radio mobile operation."

The ARRL recognizes that driver inattention is a leading cause of automobile accidents. The policy statement raises the fact that cell phones utilize full duplex communications -- where the user is talking and listening simultaneously. The Executive Committee statement says "Two-way radio use is dissimilar from full-duplex cellular telephone communications because the operator spends little time actually transmitting; the time spent listening is more similar to, and arguably less distracting than listening to a broadcast radio, CD or MP3 player. There are no distinctions to be made between or among Amateur Radio, public safety land mobile, private land mobile or citizen's radio in terms of driver distraction. All are distinguishable from mobile cellular telephone communications in this respect."

The ARRL Policy Statement also recognizes the responsibility of the amateur community to conduct its activities in a manner that does not create unsafe operation of their motor vehicle. "Safety has to be a top concern at all times," Henderson concluded.

The ARRL Policy Statement can be found on the web at, <http://www.arrl.org/govrelations/MobileAmateurRadioPolicyStatement.pdf>.

W1AW to QSY on 160 Meters

Starting Monday, March 9, Maxim Memorial Station W1AW will be using a new 160-meter frequency for its CW transmissions. To accommodate increasing activity near the current bulletin frequency of 1817.5 kHz, W1AW will move to 1802.5 kHz to reduce the possibility of interference.

BSA Updates Radio Merit Badge Requirements

The new BSA Radio Merit Badge Pamphlet includes color pictures and updated charts and text. The Boy Scouts of America (BSA) has updated the requirements needed to earn the Radio merit badge. The new requirements became effective with the publication of Boy Scout Requirements 2009. While no new content has been added to the program, the new merit badge pamphlet features lots of new information -- including color pictures and updated charts and text -- that reflects the changes in the Amateur Radio Service since the last pamphlet update in 2002. Approximately 4000 Radio merit badges are earned each year.

According to ARRL ad hoc Scouting Committee member Larry Wolfgang, WR1B, the new Radio Merit Badge pamphlet had been in the works for some time. "BSA has been replacing all merit badge pamphlets with new booklets using color graphics and more modern presentations," he said. "With attractive color photos and clear text explanations of the requirements, the new merit badge pamphlet is a pleasure for the Scouts to read. The new text is due in large part to the efforts of longtime Radio Merit Badge Counselor and K2BSA National Jamboree Staff member Mike Brown, WB2JWD. I am looking forward to using the new pamphlet to teach Radio merit badge at our Council's Merit-Badge-O-Ree this spring, and to having a supply of the new books available for Scouts during the 2009 summer camp season."

Wolfgang said that the requirements for the badge have been shifted around: "The old Part 4 of Requirement 7(b) Broadcast Radio was pulled out and placed in the main body of the requirements as Requirement 8. In addition, the old Requirement 8 (to visit a radio installation and discuss what types of equipment, how it was used, what types of licenses are required to operate and maintain the equipment, and the purpose of the station) was moved up to Requirement 7, so that now the three options appear as Requirement 9. The main result is one additional full requirement."

ARRL Rocky Mountain Division Director and Chairman of the League's ad hoc Scouting Committee Brian Mileschosky, N5ZGT, called the Radio Merit Badge "a perfect avenue to introduce Scouts and Scouters to the wonderful world of ham radio. Ham clubs across the nation should locate a local Boy Scout Troop, secure permission from their Scoutmaster and/or committee to teach the merit badge and deliver an exceptional Radio merit badge class. What the boys -- and their leaders and parents -- will learn in the process is a fair amount of what is part of the Technician license exam, so the next logical step after a merit badge class is an all-out recruiting effort to get that Troop involved in Amateur Radio. They'll meet new friends and have a great way of communicating while in transit to and from the field, as well as additional peace of mind through an effective means of emergency communications while in the backcountry."

Additional information -- which includes the new 2009 requirements -- can be found on the web at, <http://www.arrl.org/news/stories/2009/02/24/10667/?nc=1>



Contest Season is Here!!!

Work Wanted:

Experienced tower climber immediately available to perform antenna and tower maintenance.

Install/repair/remove antennas, replace feedlines and cabling, rotator servicing, guy wire renewal, new tower installations (guyed and self-supporting), and tower removal.

Reasonable hourly rates and scheduling that meets your needs.

Contact: John Crovelli W2GD

w2gd@hotmail.com

Phone: 908 391 5611 (Mobile)

John Kanzius, K3TUP (SK)

John Kanzius, K3TUP, of Erie, Pennsylvania, passed away February 18 in Florida from pneumonia. He was 64. Kanzius was best known for his research into finding a cure for cancer using radio waves, specifically 13.56 MHz.

In 1966 at age 22, Kanzius came to Erie, Pennsylvania to work for JET Broadcasting. After 24 years as a broadcast engineer, he was appointed vice president and general manager of the company in 1980. After retiring, Kanzius was diagnosed with leukemia in 2002. He summarized his chemotherapy in a February 2008 article in QST as "Hoping we kill the cancer before we kill the person" <<http://p1k.arrl.org/cgi-bin/topdf.cgi?id=109317&pub=qst>>. In October 2003 - thinking there had to be a better treatment -- Kanzius had the idea to kill the cancer cell with radio waves, not a new idea. But Kanzius went a bit further: Instead of using needles, as was currently used, why not "trick" the cancer cells into absorbing a metal target -- sent by RF -- into the inside of the cancer cells, leaving the healthy cells alone?

In 2005, Kanzius teamed up with cancer researchers at M. D. Anderson (part of the University of Texas health system in Houston) and Rice University (also in Houston). Using nanoparticles -- metallic objects measured in billionths of an inch -- heated by RF using a machine that Kanzius invented, the researchers were impressed: "The research scientists at Rice were stunned to see that my device could heat nanoparticles at the 13.56 MHz frequency," Kanzius said.

Kanzius credited his father for his inspiration: "Trying to build an array that would heat particles one billionth of a meter in length was challenging. But building equipment all of my life was inspired by my dad, W3NRE, who was licensed in 1934."

Kanzius told ARRL Media and Public Relations Manager Allen Pitts, W1AGP, that if it were not for his Amateur Radio background, "and all the days of experimentation to improve my station, this new procedure for treating cancer, which continues to show such promising results, would probably not be on the cutting edge at the largest cancer center in the world [M. D. Anderson]."

But Kanzius did more than just try to find a cure for cancer. In 1991, he was Top of Honor Roll in the ARRL DXCC program; at his death, he had 347 countries confirmed. In the March/April 1987 issue of NCJ, Tim Duffy, K3LR, described K3TUP as "a relatively new contest call," but said Kanzius had been DXing for many years: "As he has caught the contest bug, John has taken a station which was designed for busting DX pileups and converted it over to have the flexibility and brute force required to compete in Multi-Single contesting." Duffy described the station as sitting "situated on a high ridge that overlooks Lake Erie. The station is well secluded from city-type radio noise and the rural setting allows John to run several temporary beverages for low band receiving." Both Duffy and Randy Thompson, K5ZD, have operated from Kanzius's station.

Pitts recalled that in 2007, he received an e-mail from a ham, asking if he was aware of the research Kanzius was attempting: "I looked at the attached video clip and I was skeptical. But I became more curious about this kitchen table tinkerer-ham and investigated the claims. I learned two major things: First, this was not a harebrained scheme -- it really worked (!), and -- even more important for me -- John Kanzius was a true gentleman. Bright, polite and enthusiastic without being overbearing, I liked him. Over the next months as I wrote the QST article about his work, I came to know him and his true desire to help other cancer victims. Since then, we stayed in touch by phone and e-mail. I enjoyed his delight as each step in the process of bringing his machine and concept to human use was proven by M. D. Anderson and other cancer research facilities. Some people just make your world better by being there. John was one of those people. Though I never met him in person, it was always good to hear from him and I enjoyed the friendship. Losing him makes the world a little colder. I will miss him."

Memorial contributions may be made to the John Kanzius Research Fund <<http://www.kanziuscancerresearch.org/>>, Palace Business Center, 915 State St, Erie, PA 16501.

Notes From Your Editor

Amazing! This is the first year that the housecleaning of the FRC Honor Roll's inactive participants resulted in an increase to the number of listings! Great to see participation up.

K5D DXpedition Kudos

Congratulations to the group on an incredible 100,000 plus QSO accomplishment. Personally, I was able to work them on every band from 160 through 15. Unfortunately, I just never had propagation on 12 and 10.

OFFICIAL ARRL DXCC STATS

Active Count.....	338
Deleted Count	58
Last Addition.....	FJ
Last Deletion.....	STØ

7Q7 MALAWI

Allan, GØIAS planned to be active for one month starting February 23rd as **7Q7AH** with a special concentration on Top Band. QSLs to GØIAS direct only.

RYØF FERNANDO DE NORONHA

W9VA and K9PPY will be active as **PSØF** from March 3rd to 19th. Have a special request? Email them at psøf@aol.com. They will be checking for emails before and during their stay. W9VA has the QSL duties.

V8 BRUNEI

Now through March 10th look for special event station **V88NBD25** celebrating Brunei's 25th anniversary of independence. Operation will be on 80 through 10 meters (no WARC) and operating modes will be CW

(quite a 'mouthful' on CW!), SSB and RTTY. QSL via the Brunei Darussalam ARA.

VK9C COCOS KEELING

VK2IA will be signing as **VK9AA** on CW and SSB operating 160 through 10 meters. Dates are March 14th to 27th and DL8YR will be handling the QSLs.

VK9L LORD HOWE

A large group of seasoned DXers will be firing up from Lord Howe on 160 through 6 meters from March 23rd to April 3rd. They plan to have 7 stations up and running on CW, SSB and RTTY signing as **VK9LA**. Latest info can be found at: <http://www.odxg.org/vk9la.htm> QSL chores will be handled by VK4FW



VK9M MELLISH REEF

Received the following email from AA7JV: **VK9GMW** will be operating from Mellish Reef (VK9M) between March 22 and April 6, 2009. This will be another low-key, simple DXpedition by AA7JV and HA7RY. Please note that the dates are approximate and may change due to weather. The operation will have a strong low-band focus, although VK9GMW will operate on all HF bands. For further information please go to www.vk9gmw.com. For donations please access <http://vk9gmw.com/support.html>.

VK9N NORFOLK ISLAND

Willy, ON5AX and his wife Magda, ON3AX will be active as **VK9N/ON5AX** from March 15th to 22nd. QSL via ON5AX. With the indefatigable Jim Smith, VK9NS, now having joined the fraternity of silent keys, it's probably a good idea to fill in those band countries by working any dxpeditions that now show up.



ZL7 CHATHAM ISLAND

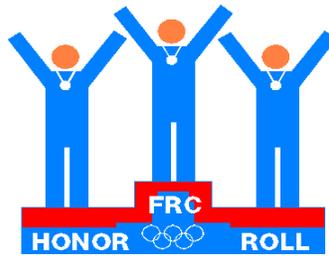
Now this looks like my idea of a dxpedition! ZL1ALZ, ZL1BYZ, ZL2AAA, ZL2AL, ZL2CC, ZL2LE, ZL2RVW, ZL2WG and ZL3AB will be signing as **ZL7T** from March 5th to 10th. They plan to have 4 stations on air operating CW, SSB, RTTY and PSK on all bands 160 through 10 meters. Check their web site at: <http://www.zl7t.com/index.html> for the latest information and for log checking. Note that the log check function will not be available until after the dxpedition concludes. QSL direct to ZL2AL or via the ZL bureau. Later in the year logs will also be uploaded to LOTW.

N2 Special salute

"S"pecial "S"alute this month to AA7JV. Have you made your contribution yet? Contribute to your Newsletter and get the "S" "S".
©

73, Tony N2SS

You can reach me as follows:
H:856-227-4896 C:609-221-4899
n2ss@n2ss.com



MARCH

conducted by N2SS

2009

WARC BANDS

30 Meters	17 Meters	12 Meters
K2FL .. 337	K2FL...340	N2TK ..331
N2TK335	N2TK 339	K2FL.....327
N2LT326	N2LT 337	N2LT.....323
W3BGN324	W3BGN ... 333	W3BGN...317
W2YC314	N2SS 326	WØMHK ..313
W8FJ302	WØMHK.. 323	N2SS.....303
N2SS299	W2UP..... 322	W2YC.....282
W2UP295	W2YC 319	K2PS.....270
K2PS292	K2PS 312	W2UP268
WØMHK ..288	N2MM..... 300	W8FJ.....235
N3RD284	W8FJ 299	KQ3F.....219
N2MM260	W2IRT..... 270	N1RK.....218
W2IRT244	KQ3F..... 269	K3II.....203
K3II.....234	N1RK..... 261	W2LE202
W2LE.....223	W2LE..... 261	N2MM194
KQ3F215	K3II..... 256	W2YR.....187
N2VW182	K2AX 236	W2IRT137
K2QPN179	W2YR 213	W2IRT105
AB2E156	N2VW 133	AB2E92
W2YR144	K2QPN..... 133	K2AX86
N1RK134	AB2E..... 127	N2VW43
K3ND91	K3ND..... 127	K2QPN22
K2AX81	K3GYS..... 85	K3GYS30
W2CG38	W2CG 17	W2CG2
K3GYS17	K2GN 6	
K2GN.....4		

Still no **KING OF WARC**



Islands On The Air

K2FL 1029	K2AX 298
N2SS 859	N2VW 282
W2YC 694	W2YR 271
W8FJ 623	W2IRT 232
N1RK 555	K3GYS 232
WA3RHW ... 313	AB2E 205
WØMHK 381	K2QPN 200



MOBILE DX

AA1K 278	K3GYS 143
W2YC 276	W2YR 28
N2SS 234	

Jon continues as our B ig W heel.

160 Meters

W3BGN306	K3ND..... 137
AA1K301	W2IRT 122
WT3Q.....277	N2VW 121
N2LT264	K2PS 116
N2TK.....261	W2CG 116
NO2R.....258	K2AX..... 106
K3SX251	AB2E 100
W8FJ235	K2GN..... 98
K3JIG230	W2YR..... 92
W2UP221	KQ3F 87
W2YC.....217	N2SS 81
N2MM195	W2LE..... 71
K3II160	K3NL 70
WØMHK158	N1RK 56
N3RS156	K2QPN 28
K2FL154	K3GYS 12

W3BGN, our ultimate 160 Meter DXer, continues at the Top of Top Band!



ATTY DIGITAL

W2UP.....342	W2YR..... 132
N2LT339	K2QPN 123
W3KB314	W2CG 91
K2PS303	N2SS 67
W2YC300	W3BGN 44
W2IRT206	N1RK 39
KQ3F199	K2GN 15
W2LE171	K3GYS 15
N2TK140	W8FJ 12

Rules for FRC Honor Roll Listings.

DXCC Challenge is CONFIRMED total ACTIVE (no deleted) on 160-6 excl 60 Meters per ARRL rules. For all others provide me with your total IOTA's 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.



1.5K Club

K2FL..... 1726	W2CG1504
W3BGN 1712	WØMHK1499
N2TK..... 1703	KQ3F.....1498
N2LT..... 1703	K3II1449
W2UP 1685	N2VW1334
N3RS..... 1638	N1RK.....1309
W8FJ 1619	W2LE1225
W2YC 1611	AB2E1185
N3RD..... 1578	W2YR.....1170
N2MM 1559	W2IRT1163
NO2R..... 1556	K2AX1101
N2SS 1545	K2GN1064
K2PS 1555	K2QPN768
K3ND 1508	



ARRL DXCC Challenge

N2LT..... 2964	W2LE1864
N2TK..... 2925	W2YR.....1747
W2YC 2776	N2VW1664
WØMHK... 2629	K2AX1631
K2PS 2394	W2CG.....1187
KQ3F..... 2196	AB2E1104
N2SS 1952	W3KB.....871
N1RK 1908	K2GN798
W2IRT..... 1870	K2QPN767

Lew continues in the lead.



6 METER DXCC

N2LT..... 110	W2YC.....48
K2PS 109	W2LE46
WØMHK..... 108	N2TK.....29
AA1K 100	K2AX21
K3OO 93	N2MM21
K3SX 75	K2GN12
N1RK 57	K3GYS10
N2SS 55	K2QPN9
W2YR 50	W3BGN9
WT3Q..... 50	W2CG.....5

N2LT is right back at the top of 6 Meters!



THE FRANKFORD RADIO CLUB NEWSLETTER

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



Affiliated Club

The Frankford Radio Club

Club Officers

President, W8FJ , John Schrader.....610-279-6097	Email: w8fj@aol.com
Vice Pres, K2UT , Bob Applegate.....609-714-9359	Email: bob@applegate.org
Secretary, N3ZA , Moe Mosheim, Jr.....215-256-4004	Email: n3za@comcast.net
Treasurer, K2QM , Bob Shohet.....203-270-8456	Email: kq2m@earthlink.net

Committee Chairman

Repeater, **K3NL**, Nick Leipold 610-449-8910
 Packet, **N3RD**, Dave Hawes 610-935-2684
 Activities, **N3AD**, Alan Donziger610-581-7032
 Awards, **K2QM**, Dan Marlow 609-683-5633
 Membership

Newsletter & Roster

Editor, KQ3F , Joe Stepansky 717-657-9792	Email: kq3f@comcast.net
Printing, N3ZA , Moe Mosheim, Jr... ..215-256-4004	Email: n3za@comcast.net

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

Home Page - www.gofrc.org

Meetings

Meetings are held on the 2nd Wednesday of each month (Sep through May) at 8 PM at REXY'S, 700 Black Horse Pike, Mt. Ephraim, NJ. Summer meetings are held at member homes (one Saturday/ Sunday per month).

Packet Cluster Contest/DX System

144.950 K3ZV
 145.050 W3TUA
 145.530 AA1K
 145.530 K3WW
 145.570 WT3Q
 145.670 W3PP

Telnet DX Cluster

k2ut.gofrc.org
k3ww.gofrc.org 7300
tuacluster.no-ip.org:23