



THE FRANKFORD RADIO CLUB NEWSLETTER

PROFICIENCY THROUGH COMPETITION

CALENDAR

July 2007:

- 1 RAC Canada Day Contest
- 9 REXY Meeting B**
- 14-15 IARU HF World Champ.
- 15 Summer Meeting, N3RD**
- 19 T.I.T.S. Meeting, Noon**
- 23 REXY Meeting B**

August 2007:

- 4-5 No. American QSO Party, CW
- 5 Summer Meeting, K2AX**
- 11-12 Worked All Europe Test, CW
- 11-12 Maryland-DC QSO Party
- 14 REXY Meeting B**
- 18-19 No. American QSO Party, SSB
- 18-19 New Jersey QSO Party
- 15 Summer Meeting, N3RD**
- 16 T.I.T.S. Meeting, Noon**
- 25-26 YO HF DX Contest
- 28 REXY Meeting B**

September 2007:

- 1-2 All Asian DX Test, SSB
- 8-9 Worked All Europe Test, SSB
- 9 North American Sprint, CW
- 11 FRC Main Meeting, Phila**
- 11 REXY Meeting B**
- 15-16 Scandinavian Test, CW
- 16 North American Sprint, SSB
- 20 T.I.T.S. Meeting, Noon**
- 22-23 Scandinavian Test, SSB
- 25 REXY Meeting B**
- 29-30 CQWW RTTY Contest

CHANGES

Email

W2UP—w2up@arrl.net

Deadline for August issue:

Sunday, July 22, 2007

From the Editor

It's not often that I actually get to write anything in the newsletter, so I'd just like to remind everyone that any and all member submissions are more than welcome. As you can see in the following pages, some submissions involve **FRC** activities, some don't. But they're all interesting. And I get an additional side benefit from having that much less space to fill. And don't worry about it being super pretty or a Shakespearean work of literature. That's my job.

At this writing I'm not sure if I'll be able to attend the meeting at **N3RD**. If I can, I hope to see many of you there.

73, Joe KQ3F

Summer Meetings



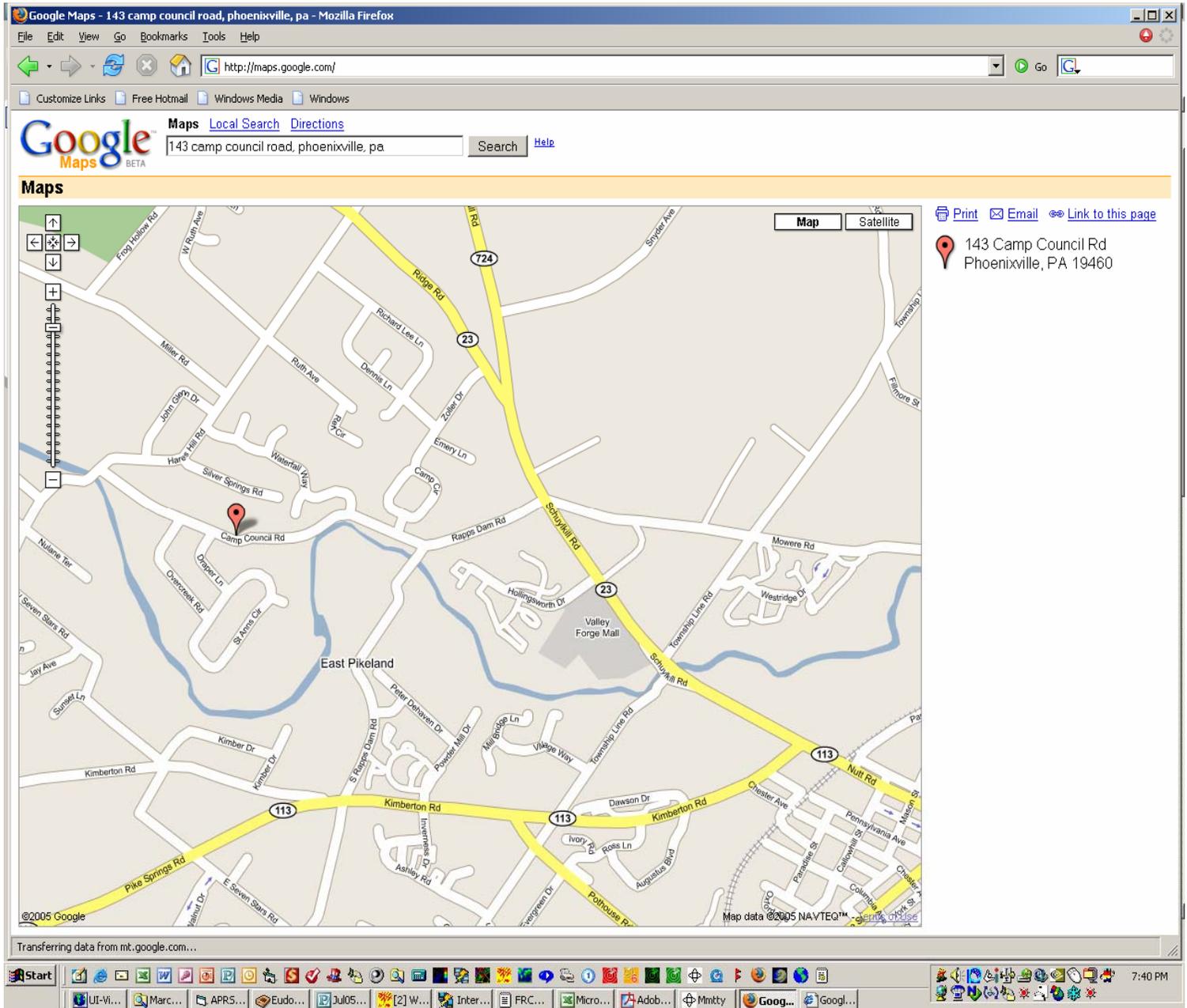
Sunday, July 15—Dave, N3RD, Sponsored by Team N3RS

Starts at 1 PM. Map and directions on page 2

Sunday, August 5—Mark, K2AX.

Starts at 1 PM. Map and directions in the August newsletter

Summer Meeting at N3RD—Sunday, July 15



Dave, N3RD, is graciously hosting an FRC meeting on Sunday, July 15 at 1 PM. He asks that you bring a chair for your seating comfort. Dave's address is **143 Camp Council Rd, Phoenixville, PA.**

From the East: Take your favorite route (Schuylkill Expressway or PA Turnpike) to Valley Forge, and then proceed on Rt. 23 West toward Phoenixville. Stay on Rt. 23, all the way through Phoenixville, making sure that you stay right and continue straight at the spot where Rt. 113 veers off to the left. After Rt. 113 veers off, turn left at the third traffic light. This will be just after a Burger King on the right. This road is Rapps Dam Road, and in about a third mile, turn right onto Camp Council Road. The driveway is about half a mile on the right, just after a stone retaining wall on the right. Parking will be on the lawn in the back of the house.

RESULTS, 2007 FRC OPEN

The 2007 **FRC** Open was held on Tuesday, June 26th at Southmoore Golf Club in Bath, PA. This was the 23rd consecutive **FRC** Open. We had great (but hot) weather, as always, for the Open. **FRC** golfers this year included: **W3MA, W2RD, K2TW, K3JG, K3OO, W2VQ, N2TK, N2NC, W3BGN, W3FV, K2PS, N2NT, WQ2N, K2DM, WB3FIZ, W2CG, W2NO.**

This year's **FRC** Open Champion was Andy **N2NT**. Second was John, **N2NC**. Third place was Rick **K3OO**. **W3BGN** was the big winner in the special awards. Steve was closest to the pin on hole #3 and hole #12. Steve was also the long drive winner on hole #12. **N2NT** Andy was closest to the pin on Hole #16.

The gathering at the finishing 18th hole can only be defined by total bedlam. As the groups came into the finishing hole the gallery grew as well as the cat calls.

After the open the group gathered for a great dinner at a nearby restaurant. It was truly a great time with all the golf and radio war stories. After dinner a group went back to the **K300000** QTH for a tour and drinks.. The night ended with a small horseshoe tourney until dark(**W3FV** & **K3OO**).

Thanks to all who attended this years open..Special thanks to the newest **FRC** Members Gary **W2VQ** and his 17 year old son Paul, **WQ2N**. **WELCOME TO THE FRC!** If you missed this years event please consider joining us next year..

73 & Fooore, Rick **K3OO**, **FRC** Open Activity Director. **FRC OPEN** is not a registered trademark. Yet...



Back row L-R: **W3MA, W2RD, K2TW, K3JG, K3OO, W2VQ, N2TK, N2NC.**

Front row L-R: **W3BGN, W3FV, K2PS, N2NT, WQ2N, K2DM, WB3FIZ.**

Missing from picture **W2CG, W2NO.**

MEETINGS

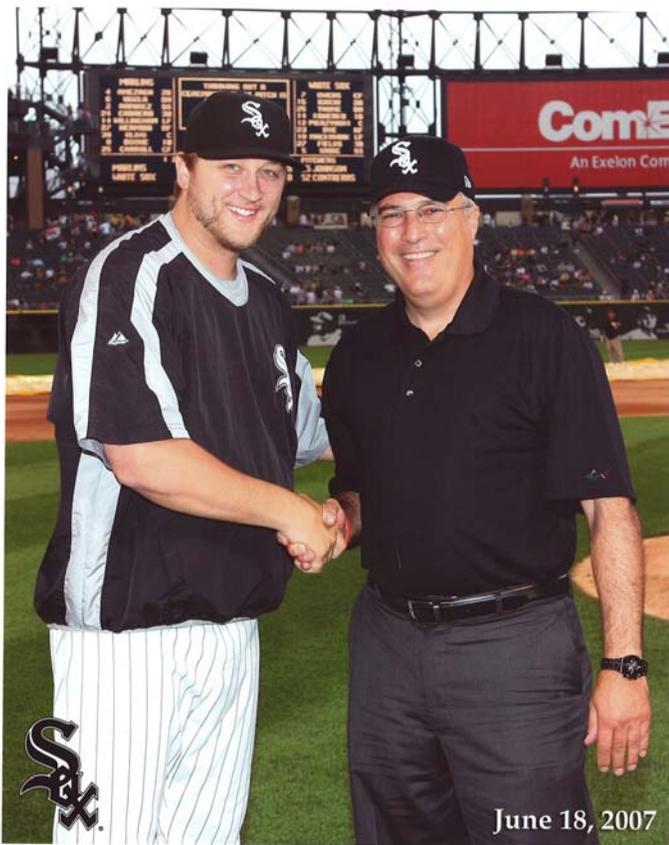
T.I.T.S. meeting—The Trexlertown International Transmitting Society meets on Thursday, July 19 at 12:00 noon. Location is the Hometown Diner on Route 222 in Trexlertown..

Rexy Meeting B—The Rexy's **FRC Meeting B** meets about 8 PM on the second and fourth Tuesdays of each month.

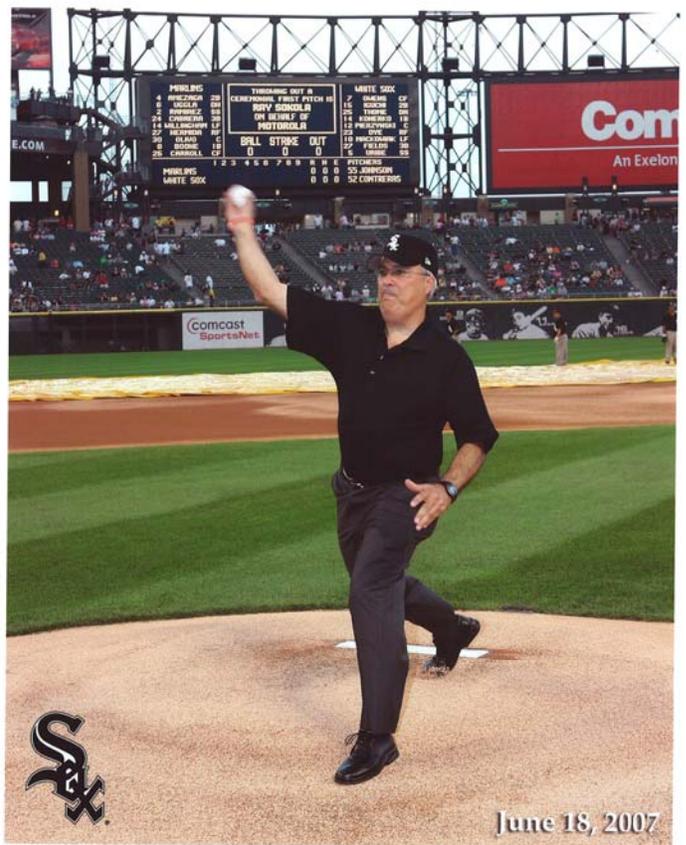
Play Ball!!!

Ray, **K9RS**, throwing out the first ball at a Chicago White Sox Game. He may be the first **FRCer** to ever do so!

K9RS with Chicago White Sox pitcher Mark Buehrle



K9RS throws the first pitch



2006 FRC Fund Drive



The 2006 **FRC** Annual Fund Drive is now officially underway. This issue should contain a stamped envelope for your contribution.

Here a few reminders when getting ready to make your annual contribution to help keep our club running...

- 1) **PLEASE** make **ALL** checks payable to **FRANKFORD RADIO CLUB, and NOT KQ2M.**
- 2) **PLEASE** write your return address and callsign on the envelope.
- 3) **PLEASE** write your callsign/callsigns on the check.
- 4) **PLEASE** seal the envelope.

Each year quite a few people forget to do at least one of the above and we lose some contribution checks. Also, some people make a much-needed contribution but then do not receive credit for making it. Clearly no one wants that, so **PLEASE** take a few extra seconds to make sure that you follow #1 - 4 before you mail the envelope.

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

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

List of FRC Contributors as of June 2, 2007

AA2WN	K300/K3000	W3GNQ/W3LRS	W3MM/W3RAT
AA3B	K3GYS	N2VW	W2UDT
AB2IO	K3II	N3KR	W2YC
K2DM	K3PH	N3ZA	W3AP
K2FL	K3WW	N8NA	W3BGN
K2JF	KD2RE	NW3Y	W3CC
K2NG	KQ2M	W2CG	W3FV
K2PS	N2BA	W2LE	W3KV
K2UT	N2CQ	W2OF	W3MF
K3ATO	N2LT	W2RD	W3SOH
K3FMQ			

CONTESTING — TIPS, TECHNIQUES, RESOURCES

Reprinted with permission from the June 13, 2007 Contest Rate Sheet

Lightning poses a definite hazard in many areas of the USA this time of year. Getting advance warning of potential (no pun intended) lightning in the area is a valuable safety improvement. There are numerous lightning detectors, but not so many portable ones that we can take with us to the top of the tower or to the campsite. Thomas KN4LF recommends the Strike Alert portable lightning detector (<http://www.strikealert.com/>) from Ambient Weather (<http://www.ambientweather.com/>) and other vendors.

Here's an interesting report (http://www.nema.org/gov/ehs/committees/drybat/upload/Sound_Environmental_Management_10_01.DOC http://www.nema.org/gov/ehs/committees/drybat/upload/Sound_Environmental_Management_10_01.DOC) on the environmental consequences of battery recycling and disposal. Hams do tend to use a lot of batteries and knowing which require special attention and which don't can save time and money. (Thanks, Jim KR1S)

Need a replacement copy of your paper license? http://wireless.fcc.gov/services/index.htm?job=cft&id=amateur&page=cft_replace_amateur (Thanks, John K1AR)

URL of the Week - If you were wondering where you could watch Riley Hollingsworth K4ZDH's FCC presentation at the 2007 Dayton Hamvention, it has been archived in a pair of 10-minute segments at <http://www.therainreport.com/rainreport.shtml> for downloading. It's a great video of an engaging speaker! (Thanks, John K1AR)

Icom has just made available a long video on contesting at K3LR. There are lots of action sequences and Tim gives a tour of the antenna farm, too. (http://icomamerica.com/amateur/video/Icom_Radio_News_V5.asp) It's 48 Mbytes, but worth the wait.

What would your station look like after getting a lightning strike like this one (<http://tinyurl.com/2hbtyx>) on New York City's Empire State Building? (Thanks, Mark AA6DX)

The surface of the sun is a busy, dynamic place as can be seen in this movie (<http://antwrp.gsfc.nasa.gov/apod/ap070522.html>) of the surface around a sunspot.

Steve W4DTA/YV5DTA has published a large number of Dayton 2007 photos (<http://picasaweb.google.com/eromagni/Dayton2007>) showing the contest suites and activities.



Antenna 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

New Reach Number: 908 391 5611 (Mobile)

CONTESTING — TIPS, TECHNIQUES, RESOURCES

Reprinted with permission from the June 13, 2007 Contest Rate Sheet

If you are wondering about what changes have been made to the new 21st edition of the ARRL Antenna Book, you can review the presentation on the subject (<http://www.kkn.net/dayton2007/n6bv-dayton-2007.pdf>) made at Dayton by its editor, Dean N6BV. (Thanks, Tim K3LR)

Sherwood Engineering's 2007 Dayton presentation (<http://www.sherweng.com/documents/Dayton2007w.pdf>) on DSP-based receivers makes for some interesting reading. (Thanks, John N5TEN)

There was an excellent discussion on the TowerTalk reflector on the ins and outs of buried conduit. There's far too much detail to summarize here, but to read the original go the searchable archives at <http://lists.contesting.com/archives/html/Towertalk/> and enter "buried conduit" into the search window and read the June 2007 entries. Enjoy!

David K3KY has updated his Web page (<http://www.angelfire.com/md/k3ky/page37.html>) of links to articles and other sites with information on low-band Flag and Pennant articles. This topic has become broad and deep with new contributions continually being added over the past nine years.

Lee K7TJR reports using F connectors exclusively for RG-6 on his receive antenna arrays in Oregon. "I use the outdoor type that requires a compression tool for installation. One array uses 22 of these connectors and has been put up and taken down for 3 years in a row now without problems. I keep a supply of old-fashioned wooden pencils with erasers for cleaning the copper center pin at each installation. Just push the eraser right into the connector and twist a few times. Bright and shiny ready for DX."

Well, what IS the difference between pipe and tubing, anyway? After a long discussion on the TowerTalk reflector, the consensus is that the specified diameter is the ID for pipe and the OD for tubing. Pipe is intended to carry pressure from the inside while tubing is a structural element and made to withstand a variety of loads. If you are concerned about the strength of mast material, it's best to purchase tubing with a specified yield strength.

Bill W6WRT has discovered a handy rope control device that will be of interest to tower climbers. It's called a "Ropeman", made by Wild Country of England and available at <http://tinyurl.com/2oqda7> - look at the bottom of the page. It allows adjustment of rope length with one hand - particularly useful for positioning lanyards. The MK1 version accepts rope from 8-11 mm and can be opened up like a snatch block to be installed in the middle of a rope.

Looking through a parts catalog can lead to a lot of confusion, particularly for capacitors. Trimmer caps variations can be extremely obscure. Unless one has access to good articles like "Evaluating Trimmer Capacitor Choices" (<http://www.mwrf.com/Articles/ArticleID/15568/15568.html>) in the May issue of "Microwaves & RF". The article focuses on small caps you're likely to encounter in VHF+ and upper HF circuits, but the descriptions of materials and construction is of broad interest.

Everybody should have a copy of Frank W3LPL's "Antenna and Tower Inspection Checklist" (http://www.kkn.net/dayton2006/w3lpl_dayton_2006.pdf) and then USE IT this summer! As part of a hair-raising story about getting part-way down a tower, Kirk K4RO reminds climbers to (a) be sure you're fully hydrated and nourished before a climb and (b) stay in shape to climb in the first place. Omitting either is a good way to attract trouble, which on a tower is almost always serious. Doing inspections are a great way to get or stay in shape, too.

<http://www.lz1jz.com>



CONTESTING — TIPS, TECHNIQUES, RESOURCES

Reprinted with permission from the June 27, 2007 Contest Rate Sheet

If you're getting into RTTY contesting and wonder about strategy, Ed W0YK has made his Dayton 2007 presentation (<http://www.w0yk.com/pdf/Dayton%202007,%20v2.pdf>) available for you. Even though Ed isn't there with the explanation, you'll learn a bunch just from the slides. Lothar K5LEH points out, as well, that the Tigertronics Signalink USB interface may ease your first steps into digital contesting, as well.

If the band has turned to a mush of interference, splatter, and spurious signals, make sure your preamp and noise blanker are OFF. These circuits make the receiver highly susceptible to overload and distortion by strong signals. Further, reduce RF gain and add attenuation to clean up the band even more. Remember to maximize signal-to-noise ratio instead of absolute signal volume. If you can hear the stations you want to work, that's all the gain you need!

Tomas NW7US explores the question of whether HF propagation is reciprocal in a recent CQ Magazine "Propagation" column. The important parts of the text have been posted at <http://hfradio.org/ace-hf/ace-hf-reciprocal.html>. A similar column covering basic HF propagation concepts can be found at <http://hfradio.org/ace-hf/ace-hf-demystified.html> - a good resource for someone new to HF operation.

In perfect cables, there is no way for energy on the outside of a coax shield to transfer to the center conductor. However, all shields have a transfer impedance, where the current on one side of the shield causes a voltage drop over some length of the cable and that voltage drop is seen on the other side of the shield. Here is a link to Belden's paper on transfer impedance. (<http://www.belden.com/pdfs/TechInfo/TechTransfer.htm>) Note the charts at the bottom of the page comparing different amounts of shielding and frequency. (Thanks, Gary K4FMX)

Bob N6TV's one-tower, city lot antenna farm recently received a makeover. Take a look at <http://tinyurl.com/2orqo3> to see how the work was done within the confines of the available space.

Wherefore goest thou, watts? This powerful device (<http://tinyurl.com/2etaqp>) lets you keep an eye on power consumption. Compare your radio's use to that of an equivalent amount of time spent watching the big-screen TV! (Thanks, Dennis N6KI)

Tower building is a popular summer pastime and grounding is quite important. Here are some pictures (<http://groups.msn.com/hamtech/shoebox.msnw?albumlist=2>) of a cell site ground system under construction near N6IJ. Cadweld techniques are used for conductor bonding and are reviewed at these sites:

<http://www.k2ut.org/cadweld.htm>

http://www.rogerhalstead.com/ham_files/ground.htm

<http://tinyurl.com/22sgz8.HTM>

(Thanks, Pat AA6EG)

Jeff K8ND notes that he uses the European lightning strike Web site mentioned in the previous issue from *this* side of the Atlantic during contests (especially 160m contests). In this way, he can see how much difficulty can be expected in getting European QSOs into the log, and so modify his listening pattern. The Web site <http://www.k8nd.com/Radio/Planning/Propagation.htm> has more information.

New General class books are good to go!:

According to ARRL Sales and Marketing Manager Bob Inderbitzen, NQ1R, the new ARRL General Class License Manual is ready for shipping. As of July 1, 2007, a new General Class license exam pool will take effect; the old pool will no longer be valid. The new ARRL General Class License Manual has everything you need to pass the General Class exam. Also available is the ARRL General Q&A. This book makes upgrading to General Class quick and easy, allowing you to review from the entire question pool with brief explanations following each question. You can order the new manuals, plus manuals for Technician and Amateur Extra from www.arrl.org/catalog/lm/ <<http://www.arrl.org/catalog/lm/>>.

WAS Award gets a new look:

Radio operators applying for the ARRL Worked All States (WAS) award will now receive a handsome, newly-designed certificate, sure to be a nice attraction to the ham who enjoys chasing awards and displaying prizes in the shack. The WAS Award is available to all amateurs worldwide who submit proof with written confirmation of having contacted each of the 50 states of the United States of America. The WAS Awards program includes 10 different awards and endorsements. Complete details, rules and applications for WAS can be found on the ARRL Web site. Those who already hold a WAS award can get the new style certificate issued for \$10. Contact ARRL Awards Manager, Eileen Sapko at esapko@arrl.org or 860-594-0288

US Islands revamps awards program:

There have been some significant changes to the US Islands Awards Program. The US Protectorate Islands were recently added to the program; formerly, only those islands governed by individual states were included. As such, there are several new islands added to the mix, including the US Virgin Islands, American Samoa, Guam, Puerto Rico and others. New awards have also been added to the program, and an additional award is the works for protectorate islands. USI stresses that the earlier award series is still ongoing and hasn't changed. "These new awards series marks the first expansion to the program in many years," said Page Pyne, WA3EOP, USI's Program Coordinator. For more information, please see www.usislands.org <<http://www.usislands.org>>.

Upcoming Hamfests (Thanks to Glenn, K3SWZ)

July 15	Kimberton, PA
July 22	Howard County, MD
August 5	Berryville, VA
August 12	Matamoras, PA
August 19	Westminster, MD
August 19	Pleasant Hill, PA
September 8	Stroudsburg, PA
September 16	Gloucester County, NJ
Contact: aa2wn@arrl.net	
September 30	Wrightstown, PA
October 6	Brownstown, PA
October 7	Howard County, MD
October 21	Sellersville, PA
October 28	Westminster, MD



Notes From Your Editor

Looking for an early October warm-up prior to CQ World Wide SSB at the end of the month? I received an email from Mark, K6UFO, who sent me the below information on the California QSO party and asked for it to be put in the newsletter. I am amazed at times at how widespread our newsletter readership is. Anyway, mark your calendar if you're interested:

California QSO Party -- CW/SSB, sponsored by the Northern California Contest Club, 1600Z Oct 6 - 2159Z Oct 7. Frequencies: 160-2 meters.

Categories: SOAB (HP >200 W, LP, QRP), MS, MM, CA County Expedition, Mobile, Club, School.

SO work 24 hours only. CW QSOs in CW subbands, except 160/6/2 meters.

Stations on a county line count as a single contact for QSO points, but both counties may be claimed as multipliers.

Exchange: serial number and state/province (DX send DX) or CA county.

QSO points: CW -3 pts, Phone -- 2 pts. Score: QSO points x CA counties (max 58) or CA stations multiply by states and VE call areas (max 58).

For more information see www.cqp.org or email to info@cqp.org. Logs due by Nov 15 via form on logs.cqp.org (preferred), email to logs@cqp.org, or paper to NCCC c/o Kevin Rowett K6TD 21906 Monte Ct Cupertino, CA 95014-1144

IOTA CONTEST

Speaking of contests, how about one for this month? The IOTA Contest is held each year during the last full weekend in July and this year's contest runs from 1200Z July 28th to 1200Z July 29th. The full contest rules can be found at:

<http://www.contesting.co.uk/hfcc/rules/riota.shtml>

If you are an IOTA chaser you should visit: www.rsgbiota.org to check on the latest revisions to the IOTA award submittal process. Soon to be ready is a brand new on-line process for participating in the awards program.

Lastly on IOTA, while you're there at the RSGB's dedicated IOTA web site, be sure to download the *IOTA Directory for Google Earth*. This is an outstanding coupling of amateur radio and internet technology - really cool!

CURRENT OFFICIAL ARRL DXCC STATISTICS

Active Count.....	337
Deleted Count	58
Last Addition.....	KH8/S
Last Deletion.....	STØ

   **40 - MONTENEGRO**

Look for OK6DJ to be active as **4O6DJ** from Jul 7th to 14th. Activity will be on HF and the WARC bands plus 6 Meters. QSL via OK6DJ.

JD - OGASAWARA

The Japanese Geographical Survey Institute has announced the renaming of the island of Iwo Jima to its original, prewar name of Iwo To.

The literal translation of both "Jima" and "To" is "island". Iwo To will continue to count for Ogasawara for DXCC purposes and for of the Volcano Islands (AS-030) for IOTA.

  **YJ - VANUATA**

WØCZE plans to be active as **YJØCZE** from July 14th to 21st. Operation will be on 10 thru 80 Meters on the following frequencies: SSB on 28495, 24950, 21295, 18150, 14190 & 14250, 7082 and 3795 kHz and CW on 28020, 24895, 21025, 18075, 14020, 10105, 7010 and 3505 kHz. QSL via WØFF

DX ALERT LEGEND

-  **160 METER ALERT**
-  **IOTA ALERT**
-  **RTTY ALERT**
-  **WARC BAND ALERT**

WRAPUP

It's summertime and things are a bit light in the wonderful world of DX. Going to enjoy my brand new grandson - just two weeks old - and celebrate my 65th birthday next week. So, no column next month. Back in September. Hope to see you at a summer meeting.

"S"pecial "S"alute

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



THE FRANKFORD RADIO CLUB NEWSLETTER

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



Affiliated Club

The Frankford Radio Club

Club Officers

President, **N3DXX**, Art Hitchens... 302-764-8061
Vice Pres, **W8FJ**, John Schrader 610-279-6097
Secretary, **K3ZV**, John Lindmeier..... 856-768-5348
Treasurer, **K2QM**, Bob Shohet.....203-270-8456

Email: art19703@yahoo.com
Email: w8fj@aol.com
Email: k3zv@hotmail.com
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
Printing, **K3ZV**, John Lindmeier..... 856-768-5348

Email: kq3f@comcast.net
Email: k3zv@hotmail.com

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

144.950 K3ZV
145.530 AA1K
145.530 K3WW
145.570 WT3Q
145.670 W3PP

Telnet DX Cluster

k2ut.gofrc.org
k3ww.gofrc.org 7300
kf3b-2.gofrc.org 7300