THE FRANKFORD RADIO CLUB
NEWSLETTER
PROFICIENCY THROUGH COMPETITION

CALENDAR

May 2002:
14 FRC Meeting, King of Prussia 8 PM
14 FRC Meeting "B"
11-12 CQ-M DX Contest
16 T.I.T.S. Meeting, Noon
28 Meeting B at Rexy's, 8 PM
25-26 CQWW WPX CW Test

June 2002:
8 FRC Meeting, King of Prussia
15-16 All Asia CW DX Contest
23-24 ARRL Field Day

July 2002:
13-14 IARU HF World Champ.

August 2002:
10-11 European DX Test, CW

September 2002:
14-15 European DX Test, SSB

October 2002:
12-13 PA QSO Party
26-27 CQWW SSB DX Test

November 2002:
23-24 CQWW CW DX Test

February 2003:
15-16 ARRL CW DX Test

March 2003:
1-2 ARRL SSB DX Test

CHANGES

Callsign Change

KQ2O is now **N2AB**
Carl Lump

FRC Annual Fund Drive

April is the start of our new club year and the traditional month for our fund drive. **FRC** has no dues, other than your participation in the ARRL DX and CQWW DX Contests. However, we do have expenses. Our monthly newsletter, packet network, repeater and awards program require a substantial amount of money to keep going. Please do what you can. If you use most of the resources, $50 might be an appropriate donation. Our average donation over recent years has been over $25. Our voluntary contribution system gives each of us the opportunity to support the club within our means.

We are looking for contributions from out ACTIVE and INACTIVE members. Remember that inactive members must contribute to receive the newsletter. It's our only way of knowing if you are interested in keeping in touch with the club. Those who attend meetings and contribute scores get the newsletter regardless of contributions.

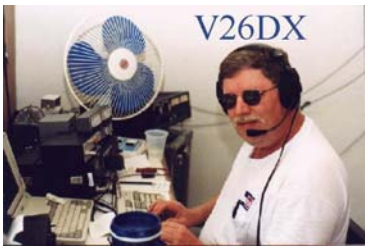
FRC Open Golf Tourney Coming in June!!

Date: Wednesday, June 26, 2002

Time: Lunch at 11:00 AM.
Tee off at 12:00 noon.

Where: Upper Perk Golf Course.

Contact: **K3OO** (rsaeger@fast.net) by June 1st if you wish to play. Tee times available for 20 **FRC** members.



President's Column

Time to Reload!

Contest season is over. The UBN reports will claim a winner. Only the individual operator can assess if he gave all he possibly could to the TEAM score. Just keep in mind that we, your fellow teammates, are counting on you to do the best you can. A rule of thumb might be if you do not expect to place in the top 5 Single Op you should consider going Multi or Assisted so that your score will be higher. The **FRC** objective is to win THE UNLIMITED CLUB category. **A minimum score objective for the four Major International DX Contests should be set and plans made with family for spending four weekends in service to FRC. FOUR WEEKENDS out of FIFTY TWO**. If you go hunting, take a rig with you and make 50 Q's a night while you are yakking around the fire. Make an excuse with the significant other to make QSO's rather than making excuses with your teammates why you didn't operate 4 weekends a year. Of course I am not talking about family illness or other personal matters but every effort should be made to make points for **FRC**. That is what we agreed to when we signed on. This is what the founding fathers EXPECTED from us. For Seventy-Five years the objective has remained the same. We are EXPECTED to give 110% in support of the TEAM effort. The contest dates for the big four are posted here in big bold print (*Ed. see page 1*). Please mark your calendar and clear your appointments. We have some butt kicking to do.

If you have not made your donation to the club please do so when you can. If you desire to donate by credit card, Dan, **K2QM** our Treasurer has procured a PayPal account and we can accept most major credit cards. John. **K3ZV** has mailed SASE's to those who do not get a newsletter hard copy

See you in Dayton!

73 Doug W3CF

News about Ed Moody, N3ED (from the FRC reflector)

"I spoke with Ed's wife. She said that Ed is now at home. He came back yesterday. He is unable to speak, but can walk and do some mechanical things. He is very frustrated and also has a bit of difficulty expressing himself, even in writing.

"The doctors said he suffered no brain damage and should recover. No time frame was given by his wife during our discussion. She said he does read and can hear, but is not accepting phone calls due to his inability to reply. Post cards/ letters would be in order.

"A bit of info on how this tragic event occurred: Ed was at home alone and was not feeling well. He vomited and tried to make a phone call to postpone some meetings he had planned for that day, 11 days ago. When he attempted to speak, he found that he could not do so. He wrote on a piece of paper the word STROKE and got into his car and drove to his daughters home. From there, 911 was called and he was rushed to the hospital. Ed sure has a great deal of will power and I am hopeful for his full recovery.

"Pass this note on to others in the Club that do not have access to the Club Reflector.

73s de Sig, N3RS

CQ Amateur Radio
THE RADIO AMATEUR'S JOURNAL

2002 WPX SSB Test – FRC Claimed Scores

Call	QSO	Pfx	Points	Class
AB2E	608	382	568,034	SOALPT/S
K3NM	1782	802	3,637,070	SOSB15HP
K3WW	1735	791	3,562,664	M/S
	Ops. K3WW, KB3HJQ			
KQ2M	3942	1090	11,700,000	SOABHP
N1RK	1069	550	1,704,450	SOABA
N2ED	1229	589	1,937,810	SO(ts)AB HP
N2VV	4792	1144	15,133,976	MM
	Ops. N2RM, N2VV, N2NC, NA2AA			
N3KR			65,475	SOLP
N3PUR	906	551	1,199,527	SOA 15M hp
NA2U	100	100	27,400	SOAABlp
W3AP	158	156	66,456	SOHP
W3BYX			48,512	SOLP
W3FVT			187,257	SOAHP

FRC Contest DXpeditions

Dan, **K2QM**, will enter the CQ WPX CW contest as **PJ4M**. He welcomes any and all QSOs with **FRC**ers.

VP5T by **FRC**ers in 2002 CQ WW DX SSB in October.

Bud, **AA3B**, is planning to return to V2 (as **V26B**?) for CQWW CW in November.

OOPS!!

W0RSJ/3 was an operator at K3ANS in the ARRL DX SSB contest. His call is erroneously listed as W0RSD.

KB3MM's reported score in ARRL DX SSB contest was, uh, a bit high. His score should have been 1,108,932 instead of 11,108,932.

More Q Signals

by John Queen, KA0SEY & Mike Colyar, K7ITL

Thanks to Keith, N5RA

Some Q signals have never made it to the ARRL's official list. Here are some that may agree would be useful in appropriate situations. As with regular Q signals, each can be a statement or a question, depending on whether a question mark follows it.

QBA - My antenna is BIG!
QBA? - How big is your antenna?
QBO - Don't sit next to that guy in the meeting.
QBO? - Buddy, can you spare some soap?
QBS - It's getting deep in here.
QBS? - Did I tell you about the one that got away?
QCP - I am using Cat Power(From Rotary Cat Power Wheel)
QCP? - Are you using Cat Power?
QCW - I am going to whistle Morse Code on FM (or SSB)
QCW? - Why are you whistling Morse?
QDR - Damn Right the frequency is busy! (In response to QRL)
QDR? - Do you have a Receiver? (In response to QRL)
QET - Phone home.
QET? - Has anyone called me from another planet?
QFH - This frequency is MINE! - go elsewhere.
QFH? - Is this frequency hogged?
QHI - I am jumping in quick to say hi, then going QRT.
QHI? - Are you leaving after only one transmission?
QLF - I am sending with my left foot.
QLF? - Are you sending with your left foot?
QLK - I am sending with my left foot and keyboard.
QLK? - Are you sending with your left foot and keyboard?
QNO - I am sending through a non-standard orifice.
QNO? - Are you sending through a non-standard orifice?
QOK - Your last transmission was Okie Dokie.
QOK? - Was my last transmission OK?
QPM - Your signal is purr modulated.
QPM? - Is my signal purr modulated?
QRC - Warning, rag chewer on frequency.
QRC? - Are you a rag chewer?
QWC? - Who cares?
QWC - I don't care
QWC - I have to go to the bathroom
QWC? - Do you have to go to the bathroom?
QZZ - I fell asleep at the mike.
QZZ? - Is that a 60Hz hum, or are you snoring?

Let me tell you a few things about the Sun.

By Thomas Hood, NW7US

(*Editor's note: In late March, during a series of solar storms, Thomas Hood, NW7US, posted this description of solar activity on the SWL reflector. I've reprinted it here with his permission, and have only removed references to events that occurred in late March and early April. Mr. Hood writes the Propagation column for CQ Magazine.).*

The atmosphere above the Sun's surface is called the "corona," under which is the chromosphere and the photosphere. On the photosphere exist several types of features. Sunspots are the most obvious. But, using a certain type of instrument called a coronagraph, we can see the corona. The coronagraph is a man-made eclipse aboard a space vehicle (satellite), that allows us to see the pearly white crown surrounding the Sun. Features then can be seen, like coronal holes, solar flares, and popping bubbles called coronal mass ejections.

Let's first talk about coronal holes. Coronal holes are regions where the corona is dark. It is not a real "hole" as in a dip in some surface. The corona is not part of the sun's surface. The corona, again, is part of the sun's atmosphere (like our troposphere, stratosphere, and so on). These features were discovered when X-ray telescopes were first flown above the earth's atmosphere to reveal the structure of the corona across the solar disc. Coronal holes are associated with "open" magnetic field lines and are often found at the Sun's poles. A coronal hole simply means an area where a break-down in the magnetic fields in the solar corona have occurred. It is not part of the sun "burning out" or anything close to this. It is a normal part of the way the sun's corona acts. Often, high-speed solar wind is known to originate in coronal holes. This escape of solar plasma and energy streams outward away from the sun. When this outward stream, or solar wind, is directed toward Earth, we see an increase in the Solar Wind speed and intensity. More on this in a bit.

When a bubble of plasma (formed by the strong magnetic fields of the sun) originating in the break-down of the corona (the coronal hole) bursts, and spews outward away from the sun the huge cloud of plasma, we call it a "Coronal Mass Ejection." It once was thought that Coronal Mass Ejections were initiated by solar flares. Although flares accompany some CMEs, it is now known that most CMEs are not associated with flares. CMEs can occur at any time during the solar cycle, but their occurrence rate increases with increasing solar activity and peaks around solar maximum. Since the Sun completes a full rotation every 27 to 28 days, the same CMEs may recur every month. The exact processes involved in the release of CMEs are not known, but we do know a lot about how they affect the Earth.

So, what is a sunspot? Sunspots are magnetic regions on the Sun with magnetic field strengths thousands of times stronger than the Earth's magnetic field. Remember, plasma flows in the magnetic field lines of the sun. Sunspots appear as dark spots on the surface of the Sun. Temperatures in the dark centers of sunspots drop to about 3700 K (compared to 5700 K for the surrounding photosphere). This difference in temperatures makes the spots appear darker than elsewhere. Sunspots typically last for several days, although very large ones may live for several weeks. They are seen to rotate around the sun, since they are on the surface, and the sun rotates fully every 27.5 days.

Sunspots usually come in groups with two sets of spots. One set will have positive or north magnetic field while the other set will have negative or south magnetic field. The field is strongest in the darker parts of the sunspots (called the "umbra"). The field is weaker and more horizontal in the lighter part (the "penumbra").

Galilea Galileo made the first European observations of Sunspots in 1610. The Chinese and many other early civilizations have record of sunspots. Daily observations were started at the Zurich Observatory in 1749. By 1849 continuous observations were obtained.

The sunspot number is calculated by first counting the number of sunspot groups and then the number of individual sunspots. The "sunspot number" is then given by the sum of the number of individual sunspots and ten times the number of groups. Since most sunspot groups have, on average, about ten spots, this formula for counting sunspots gives reliable numbers even when the observing conditions are less than ideal and small spots are hard to see. Monthly averages (updated monthly) of the sunspot numbers show that the number of sunspots visible on the sun waxes and wanes with an approximate 11-year cycle.

And, what is a solar flare? Solar flares occur near sunspots, usually along the dividing line (neutral line) between the two sets of spots, or areas of oppositely directed magnetic fields. These flares, tremendous explosions, heat material to many millions of degrees and release as much energy as a billion megatons of TNT and release many forms of en-

ergy. Electro-magnetic energy (Gamma rays and X-rays) are what affect ionospheric conditions within moments of a flare, and energetic particles (protons and electrons) ride the solar wind, to impact our magnetoshere. Flares are characterized by their brightness in X-rays (X-Ray flux). The biggest flares are X-Class flares. M-Class flares have a tenth the energy and C-Class flares have a tenth of the X-ray flux seen in M-Class flares.

Solar Wind. Space is not a vacuum. At least not in our solar system. The sun's atmosphere actually extends very far out from the sun. Space in our system is filled with plasma. The temperature of the corona is so high that the Sun's gravity cannot hold on to it. The solar wind streams off of the Sun in all directions at speeds of about 400 km/s (about 1 million miles per hour). (So when you see the solar wind speed around 400 km/s, you know that things are "normal" and our solar/geophysical "weather" should be normal, for the most part). The solar wind changes speed and carries with it magnetic clouds, interacting regions where high speed wind catches up with slow speed wind. The solar wind speed is high (800 km/s) over coronal holes and low (300 km/s) over streamers. These high and low speed streams interact with each other and alternately pass by the Earth as the Sun rotates. These wind speed variations buffet the Earth's magnetic field and can produce storms in the Earth's magnetosphere. Many Coronal Mass Ejections combine with the solar wind and cause shock waves which, if directed to the Earth, can ignite the Aurora and major ionospheric / geomagnetic storms.

The Earth's magnetosphere - put up the force fields, Captain! The Earth has a magnetic field with north and south poles which is enclosed in a region surrounding the Earth called the magnetosphere. As the Earth rotates, its hot core generates strong electric currents that produce the magnetic field which reaches 36,000 miles into space. The magnetosphere prevents most of the particles from the sun, carried in solar wind, from impacting the Earth. The solar wind distorts the shape of the magnetosphere by compressing it at the front and causing a long tail to form on the side away from the Sun. This long tail is called the magnetotail.

What does this all mean to me? Radio wave propagation is directly tied to the Ionosphere. The more ionization occurring in the F-layers, the higher the frequencies which refract back toward the Earth. The highest frequency that will refract back from the Ionosphere over a selected point-to-point path is known as the Maximum Usable Frequency, or MUF. The other layers of the Ionosphere can block our transmissions, and the earth's geomagnetic field has an impact, as well. The Lowest Usable Frequency, or LUF, is the lowest frequency that can propagate via the Ionosphere over a particular point-to-point path. When the LUF increases to or above the MUF, then communications are next to impossible over the given path.

The Sunspots give us a general correlation to the sun's activity - the overall energy that radiates out from the sun and causes the ionization of the Ionosphere. But, we have found that sunspot numbers are not that accurate of a way to gauge this influence. We have adopted the measurement of the 10.7cm Wavelength Flux. But, even this does not always capture the direct impact of the solar energy on the Ionosphere.

With an increase of solar sunspot counts during the Solar Cycle Maximum, an increase in solar flares, and coronal holes also happens. When those X-rays from these increased number of Flares pass by Earth, they, in part, increase the ionization of the D Layer. When this happens, we experience degradation of radio signal strength. The D Layer begins to absorb the radio waves, causing Radio Blackouts, as the LUF is raised to the MUF.

Let's look at the relationship between coronal material and magnetic fields. The Corona is so hot that the gases in it loose some of their electrons in the powerful collisions between atoms. This plasma is a mixture of positively-charged ions and negatively-charged electrons. Take a look at a Neon light. You are looking at plasma. Because plasmas are electrically conductive, they can steer magnetic fields. And they are steered by magnetic fields. CMEs drag a piece of the Sun's magnetic field with it. These loops of magnetic force are stretched and dragged into interplanetary space by the inertia of the expanding plasma. When these magnetic forces impact the Earth they are either diverted by or combined with Earth's magnetic field.

The speed of a CME ranges from less than 50 to about 2000 kilometers per second. As the CME moves outward from the Sun, it generates a shock wave that can accelerate particles in interplanetary space to high energies. When a CME or its shock wave passes the Earth, geomagnetic storms are triggered. The majority of large and major geomagnetic storms are generated by the encounter with both the interplanetary shock and the CME that drives it. Their ability to disturb the Earth's magnetosphere is a function of their speed, the strength of their magnetic field, and the presence of a strong southward magnetic field component.

The Earth's magnetosphere is formed from two essential ingredients, the Earth's magnetic field (which has much the same form as that of a bar magnet, and is from pole-to-pole), and the solar wind. When the CME combines with the Earth's magnetic field, it alters the shape and

intensity of this shield around the Earth. The Ionosphere is affected by these changes, either by an increase of ionization, or a decrease or even a depletion of ionization. Depressions in ionospheric density cause major communications problems because radio frequencies that previously had been refracting off the ionosphere now punch through. The MUF can be decreased by a factor of two during an ionospheric storm event. Storm effects are more pronounced at high latitudes.

When a CME is directed toward Earth and arrives after the two- to three-day journey, the interaction between the CME, solar wind, and the magnetosphere and ionosphere causes Aurora. Propagation off of Aurora is an exciting activity. At the same time, we bemoan the loss of communication caused by the degraded ionization of the Ionosphere. But hang in there! While CMEs affect us year-round, they are not as common as solar flares and solar wind.

SUMMARY: We are in a high-speed solar wind storm. This solar wind is coming out of a coronal hole (not a real hole and not a burned out part of the sun that need reigniting), and is causing the magnetosphere to compress, which is setting off a bit of a geomagnetic storm. Kp readings are therefore high. Conditions on HF are degraded.

I have a lot of resources at http://hfradio.org/propagation.html - if you are interested.

73 de Tomas, NW7US // AAR0JA

Last Call for Awards.

If you qualify for any of the first time point awards Meg (SO or SOA), Tri-Meg (M/S), or Penta-Meg (M/S) please contact Norm, W3IZ. w3iz@comcast.net

FRC Main Meeting Minutes

The monthly meeting of the **Frankford Radio Club** was held Tuesday, April 9th. The meeting was called to order at 8:00 by **W3CF**. There were 12 members present.

The application of Michael Thompson, **N3PUR**, was considered for membership. Michael was sponsored by **K3ANS** and **W2OX**. **K3ANS** spoke on the positive contributions that Michael has made to the club scores in the past few contests. Michael was voted into the club as a member. **WELCOME MICHAEL!!**

A discussion was had about the budget for this year. **W3CF** reported that it takes approximately $50.00 per member per year to run the club. Other highlights of the budget are:

Repeater Upgrades & Maintenance: $1700
Packet Upgrades & Maintenance: $1000
Newsletter Printing & Mailing $2500

Since a quorum of the club was not present, no vote was taken on the budget. The vote will be taken at the May meeting which will be at the college.

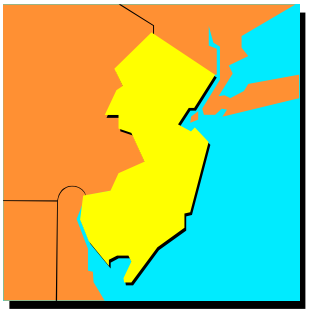
Summer meetings were discussed. A meeting is planed for the second Sunday in June (June 8th) at the King of Prussia Fire House. This will be similar to last June with food, awards, and presentations from various club members. **W2OX** will coordinate the meeting agenda which we hope to have out in the May newsletter and on FRCC. Also, all awards that have not been claimed will be available at the June meeting. All awards not claimed at the June Meeting will be mailed. If you would like to do a presentation, please contact **W2OX**.

W3CF showed a video of the 2001 PV0F WPX CW operation.

W3CF only has 9 orders for **FRC** Duds. This is below the minimum required. If you want **FRC** shirts, hats, jackets, etc. please contact **W3CF** with your order.

The meeting was adjourned at 9:15.
73s - John - K3ZV

REXY'S MEETING MINUTES



Had a great meeting of the South Jersey group at Rexy's on March 28.

There were ten (10) in attendance:
N2SS, KD2P, N2VW, W9FFC, W2OF, K2BU, K2OWE, WA2VYA, K2SB and **KB2ERL**

The meeting was attended by some who felt they needed to make the last one of this year to meet the current season's requirements so their ARRL scores would count for **FRC**. THAT is dedication.

A couple were inactive **FRC**ers (**W2OF** and **W9FFC**) who want to get back into things. The South Jersey guys will be working with them to get them contest oriented for the 2002 - 2003 season. Also let them know that they'll have to make one or more meetings during the coming season to meet the new eligibility rules for and by ARRL.

Much discussion about new rigs, Dayton, **FRC** shirts and station improvements for the coming Contest year. Ducie Island, VP6DI and the XQ0X operation inspired many comments and DX "War stories". Some discussion about the team composition of the 2002 CQ WW DX SSB for VP5T. The operation is on and reservation confirmed.

We had a great session and closed up the place!

73, Jack N2VW GROW FRC!

FROM THE ARRL

Comments are due by May 16 on two Amateur Radio-related Petitions for Rule Making put on public notice this week by the FCC. The ARRL petition, designated RM-10413, would eliminate the 80, 40 and 15-meter Novice/Technician Plus CW subbands and reuse the spectrum in part to expand the 80 and 40-meter phone allocations. Another Petition for Rule Making filed by Nick Leggett, N3NL, designated RM-10412, would require most commercially manufactured Amateur Radio transmitters and transceivers to be field-repairable "in some manner."

Amateurs may view and comment on these proposals via the FCC's Electronic Comment Filing System (ECFS), http://www.fcc.gov/e-file/ecfs.html. (Click on "Search for Filed Comments." In the "Proceeding" field enter the rule-making number, with "RM" in upper-case and the hyphen included.)

The ARRL's petition, filed in March, asks the FCC to eliminate the Novice and Technician-Plus CW bands and reapportion these "inefficiently deployed segments" to alleviate overcrowding elsewhere. If the FCC goes along, current Novice and Technician Plus (ie, Technician with Element 1 credit) licensees would be permitted to operate on the 80, 40, 15 and 10-meter General-class CW allocations at up to 200-W output. For General and higher class operators, the ARRL plan would implement changes in the 80, 40 and 15-meter phone bands, expanding phone segments for many amateurs.

The League's petition also seeks FCC permission to use spread spectrum on 222-225 MHz; to expand the pool of special event call signs beyond the 1x1 format to include identifiers for US territories and possessions that do not provide for mailing addresses; to clarify rules to indicate that modulated CW (MCW) is permitted for repeater station identification; and to incorporate into the rules a 1990 FCC waiver authorizing amateurs in certain areas of Colorado and Wyoming to operate on certain segments of the 33-cm band.

The Leggett petition was filed in February. "Field repair is important to the Amateur Radio Service because it enhances emergency communications preparedness and the growth of technical knowledge in the Amateur Radio Service," Leggett said in his petition.

Leggett suggests that the FCC consider mandating easily replaceable modules or circuit boards, minimum component spacings on circuit boards, removable integrated circuits mounted in sockets and other requirements for commercially made amateur transmitters and transceivers. He would exempt ham radio receivers.

Leggett concedes that some manufacturers may drop out of the amateur market if the FCC were to adopt his recommendations, but he suggests that they would be replaced by other manufacturers, such as those making QRP equipment.

N2SS

FRC DX NEWS

Editor

MAY 18TH YEAR 2002

Notes From Your Editor

May means Dayton! This is the month you can talk to your DX in person as opposed to battling your way through a pile-up. If you haven't been to Dayton yet, make the trip. It always amazes me to see the number of foreign Dxers that you get to meet in person in the Miami Room and the other hospitality suites, such as NJDXA's suite. The other thing about Dayton is that if you're in the market for a new radio, this is the place to buy. The big manufacturers always have Dayton specials and $ off coupons. That in combination with all the major dealers slugging it out with one another, makes Dayton shopping unbeatable. On top of that this year there are two other factors that are sure to come in to play: sales have been off due to the economy and the value of the Japanese Yen is the weakest it has been in a number of years. So, I expect there will be lots wheeling and dealing going on. Not to mention those great steaks at the Barnsider and the good time at the Hampton's annual Friday night barbecue. Anyway, hope to see you out there later this month.

Speaking of Dayton, which falls the weekend of May 17th to 19th, Armed Forces Day this year is on May 18th. So as not conflict with the Dayton event and for those of you who like to pursue those military crossband contacts, that part of the Armed Forces Day activity will be actually be held on the prior Saturday, May 11th.

POSTAL RATE INCREASE

There is a postage increase taking effect June 30th. If you are sending out SASE's to Stateside managers don't forget to now put 37 cents return postage on the envelope. I'm sure the managers will appreciate you remembering to do that. For full details on the rate increase visit: http://www.usps.gov/ratecase/

CURRENT OFFICIAL ARRL DXCC STATISTICS

Active Count	335
Deleted Count	58
Last Addition	VP6/D
Last Deletion	STØ

7X2 – ALGERIA

7X2RO, 7X2SA, 7X2YL, 7X2ZL, DL7FER, OM2DX, OM3CGN, and OM3JW will be active as **7W4HI** from a new Algerian IOTA, the Habibas Islands. They will be operating May 14th to 18th and plan to have two stations on the air.

8Q – MALDIVES

From May 10th to 15th look for JA2AAU signing as **8Q7NK**, JR2FOR signing as **8Q7FO**, JA2AZX signing as **8Q7HS**, JA2AIC signing as **8Q7IC**, JA2ALN signing as **8Q7JA**, JJ2KYT signing as **8Q7MI** and JA2ATE signing as **8Q7TE**. They will be active on 80 through 10 Meters CW, SSB, RTTY, PSK31 and SSTV.

AH8 – AMERICAN SAMOA

AH6HY plans to operate from May 18th to 24th as **AH6HY/AH8** from Manua Is. Operation will be limited to 20, 15 and 10 Meters, SSB only. QSL via his home call.

C5 – GAMBIA

Ron, G3NKO will be active as **C56RF** through May 20th.

FR/T – TROMELIN

Jacques, FR5ZU, will be active as **FR5ZU/T** on all bands on SSB and RTTY from June 5th to July 5th. Operating times will be limited to 0200-0400Z, 0900-1000Z and 1300-1500Z. QSL to FR5ZU at:

Jacques Quillet
1 cite Meteorologique
Le Chaudron
97490 Sainte Clotilde
FRANCE

JT – MONGOLIA

IØSNY and I8KGZ plan to be signing as **JT1Y** from May 21st to Jun 4th.

KH1 – BAKER AND HOWLAND

BAKER ISLAND

YT1AD and company active now through May 9th as **K1B** from Baker Island. Activity will be on 160 through 6 Meters, including some on CW, SSB, RTTY, SSTV, FM, PSK31 and Satellite modes. If you haven't already done so by the time you are reading this, be sure to adjust your logging program to recognize K1B as KH1, otherwise it will think it a Stateside callout and you might miss it as a DX callout. QSL SSB contacts only to RZ3AA; while cards for all other modes go via YT1AD.

KH9 – WAKE ISLAND

Terry, K7ASU is scheduled to be active as **K7ASU/KH9** through

May 25th. Better be prepared to set your alarm, though. His most likely operating times will be 0700-0900Z. QSL to his home call.

OJØ – MARKET REEF

Look for **OJØVR** by OH1VR on 80 through 6 Meters CW and SSB on May 8th and 9th. QSL direct to OH1VR

OX – GREENLAND

Now through May 8th look for Per, OZ1EQC as **OX/OZ1EQC** on Greenland's Coastal Islands Groups, IOTA NA-134 and IOTA NA-220. Activity is on 80 to 10 Meters, including 30 Meters, using CW, SSB, RTTY, SSTV and PSK31. QSL to:

Kurt Jensen
Thuroevej 27 Starup
Haderslev DENMARK

OY – FAROE ISLANDS

Look for **DL2RTK/OY** and **DL2VFR/OY** who plan to be active from May 20th to 22nd from Stremoy Island in the Faroes on 160 through 6 Meters. Plans are to operate CW, SSB, RTTY and PSK.

T2 – TUVALU

Dave, KW4DA, from Tuvalu (OC-015) on CW, RTTY, PSK, SSB and SSTV as **T2DA** from May 11-16. QSL via KW4DA:

Dave Anderson
712 Baneberry Court
Asheville NC 28803 USA

TF – ICELAND

DL2RTK and DL2VFR will be operating from various locations in Iceland from May 23rd to 30th. They plan to activate 2 rare IOTA's while there. Operation will be on 160 through 6 Meters on CW, SSB, RTTY and PSK.

May 23rd and 24th they will be operating as **TF7/DL2RTK** and **TF7/DL2VFR** from Vestmanneyjar Island (EU-071).

May 25th through 28th they will sign as **TF1/DL2RTK** and **TF1/DL2VFR** from the main island (EU-021).

May 29th and 30th will find them signing as **DL2RTK/TF5** and **TF5/DL2VFR** from Grimsey Island (EU-168).

V7 – MARSHALL IS

W4CK will be on Kwajelein signing as **V73BL** from May 14th to 24th.

XW – LAOS

IN3ZNR is active from Vientiane as **XW3ZNR** until May 10th.

YK – SYRIA

Now through May 11th look for Saad, N5FF, active as **YK1BA** from Damascus. Operating frequencies will be 14195 kHz on SSB and 14045 kHz on CW, listening up 5. He will be listening for North America from 0200-0300Z. QSL to his home QTH.

DX ALERT LEGEND

- 160 Meter Alert
- IOTA Alert
- Prefix Collector Alert
- RTTY Alert
- WARC Band Alert

QSL DEPT.

5I3A ..... via A47RS
8Q7CG ..... via I5JHW
A35OY ..... via KF8OY
A47RS ..... P. O. Box 981
..... Muscat 113
..... OMAN
C98RF ..... via DL6DQW
CN2PM ..... Peter McKay
..... MINURSO
..... P. O. Box 80000
..... Laayoune
..... Western Sahara
..... MOROCCO
EZ8BD ..... P. O. Box 15
..... Ashgabat 744017
..... TURKMENISTAN
E20KIR ..... P. O. Box 14
..... Bankokairport 10212
..... THAILAND
FH5CY ..... BP 555
..... Maoudzou, F-97600
..... Mayotte via FRANCE
FO/HG9B/p . via HA8IB
S21BR ..... BaZlur Rahman
..... House 9/4 Road
..... 2 Shamoli
..... Dhaka-1207
..... BANGLADESH
SV2ASP/A ... Monk Apollo
..... Monastery Dochiariou
..... GR-63037 Mt. Athos
..... GREECE
T2T ..... via JN1HOW
T30XU ..... via PA3AXU
VU2KFR ..... via IZ8CCW
VU2RDJ/p ... P. O. Box 16
..... Manipal-576119
..... INDIA
XP1AB ..... via OZ1ACB
ZL2BTP/ZL7 ..... ZL2BTP
ZK1USA ..... Victor Rivera
..... POB 618 Rarotonga
..... COOK ISLANDS via
..... NEW ZEALAND

WHAT'S WHAT

AY .....same as .....LU
L5 .....same as .....LU
L6 .....same as .....LU

SOFTWARE/COMPUTERS DEPT

Here's one to tuck away for when you need it. K4XL's "BAMA web site. BAMA stands for "Boat Anchor Manual Archive". Here you'll find free for downloading an absolutely amazing number of manuals for long forgotten radios and gear. I saw manuals on everything from DX Engineering processors (remember those from your S-Line days?) to Gonset 'gooney boxes' to Alpha amplifiers. The url is: http://bama.sbc.edu/

FROM THE DXCC DESK

ARRL NEWS RELEASE
DXCC Accepting P5/4L4FN Contacts

Since early November 2001, Mr. Edisher (Ed) Giorgadze, 4L4FN, a Georgian citizen employed by the United Nations World Food

Program, has been active as P5/4L4FN in Pyongyang, DPRK.

DXCC Rule 7 states "Any Amateur Radio operation should take place only with the complete approval and understanding of appropriate administration officials." The rule continues, "In any case, credit will be given for contacts where adequate evidence of authorization by appropriate authorities exists." The ARRL has now received adequate evidence that the operation by Mr. Giorgadze is being conducted with the knowledge and approval of telecommunications officials in Pyongyang. At the present time, this approval is limited to SSB operation.

The ARRL Awards Committee has met and concurred that the operation should be accredited. As a result, we are pleased to announce that effective immediately, the DXCC Branch will accept SSB contacts with P5/4L4FN for DXCC credit. Contacts with P5/4L4FN dating back to early November, 2001 will count for this Entity.

OPERATIONS ACCEPTED RELEASES

*Documentation for **EP3UN** (Iran) has been received and approved. QSLs from EP3UN are now being accepted for DXCC credit. 73 Bill Moore NC1L*

*Cards for **3DAØFR**, **3DAØDF** and **3DAØFOC** have been inadvertently rejected for "No documentation Rec." This error has been corrected. If you have had one or more of these cards rejected contact DXCC for correction at:*
e-mail: dxcc@arrl.org
Fax: (860)594-0259
Voice: (860)594-0234
Bill Moore NC1L
DXCC Manager

***ZK1QMA** for North Cook Island has been on hold awaiting supporting documentation. This has been received and upon review it is now being accepted for DXCC credit. Anyone who had this rejected during a recent submission can contact DXCC at: dxcc@arrl.org for an update to their record. Or, it can be sent with the next submission for credit. 73 Bill Moore NC1L*
DXCC Manager

For tracking purposes the top IOTA numbers currently are as follows (Note: no additions this month)

Africa AF-091
Antarctica..... AN-018
Asia AS-162
Europe.....EU-188
North America NA-221
Oceania OC-248
South America SA-091
Total IOTA's 1019

Information

AS-135 Jiangsu DX Club operators BA4RC/4, BA4TA/4, BA4RD/4, BA4RF/4, BA4TB/4, BD4RS/4, BD4XF/4, BD6BW/4 and BD5RV/4 were active Dongxilian Island. All QSLs via BA4RD at:

Ken Wang
P. O. Box 538
Nanjing 210005 CHINA

Log check at www.jsdxc.org
Didn't have room last time for the next two. They are the most recent additions and should be added to your lists.
***AS-161** Kerala State group was activated for the first time. Prefix is VU.
***AS-162** 3W, South China Sea Coast North group was activated for the first time and is the newest addition to the list.

Upcoming

AS-036 JN3ATJ/6 will be active from Tsushima until May 7th.
AS-036 Look for JI1PLF/1, 7N1GMK/1 and 7L4PVR/1 from Hachijo Island June 7th to 10th. QSL via their home calls.
AS-036 JO1EPY/6 will on from Kuchinoshima, Tokara Archipelago June 8th to 10th. QSL via home call.
EU-016 EJØA will be activated from the Aran Islands May 24th to 26th. QSL via W2ORA
EU-020 SM0DTK/1 will be active from Gotland Island May 4th to 12th.
EU-016 9A/F5TLN and 9A/F5LPY plan to operate from Korcula Island in early May.
EU-036 J48ALO will be the call used by SV2CCA, SV2DGH and SV2FPU from Alonissos Island June 2nd to 16th. QSL via SV2DGH. Log check at www.qsl.net/sv2dgh
EU-057 DH8WLA, DL1APR, DL1APW, DL2AXA, DL5AOJ, DL9NDS and DM3BJ will be active from Ummanz Island May 9th to 13th. QSL to their home calls.
EU-136 IK3JLS will be active as 9A/IK3JLS from Krk Island during the first week of May. QSL to his home call.

*** Keep the lists I supplied recently with the Newsletter up to date by adding asterisked IOTA's to the appropriate sections.)**

"$"pecial "$"alute

Have you made your contribution yet? Contribute to your Newsletter and get the "$" "$".
©

73, Tony N2SS

You can reach me as follows:
H:856-227-4896 W:856-227-1298
n2ss@n2ss.com
argargano@comcast.net

FRC HONOR ROLL

MAY — conducted by N2SS — 2002

WARC BANDS

30 Meters		17 Meters		12 Meters	
N2TK	**324**	**K2FL**	**333**	**K2FL**	**324**
K2FL	319	N2TK	330	N2TK	323
N2LT	308	K2JLA	328	N2LT	314
K2RW	284	N2LT	327	W3BGN	299
W8FJ	284	W3CF	323	K2RW	290
W3BGN	278	K2RW	318	N2SS	286
W2YC	258	W3BGN	313	K2JLA	284
WA2VYA	256	N2SS	306	W3SOH	261
K2PS	251	W8FJ	284	WA2VYA	248
N2SS	251	WA2VYA	281	WT3W	246
K2JLA	237	W2YC	274	W2YC	245
K3II	222	K2PS	266	K2PS	240
W3SOH	213	W3SOH	262	W8FJ	221
W2LE	205	WT3W	259	KS3F	217
KS3F	166	W3OV	234	N1RK	195
AA2WN	164	K3II	233	K3II	195
WT3W	151	N1RK	224	W3CF	192
W3OV	150	KQ3F	217	KQ3F	172
W2YR	120	KS3F	206	W2YR	171
K2JF	111	W2LE	196	W2LE	161
NA2U	103	W2YR	188	W3OV	160
AB2E	99	K2JF	168	NA2U	138
KQ3F	96	NA2U	155	K2JF	135
K2NJ	76	K3ND	110	AB2E	63
N2VW	67	AA2WN	102	K2NJ	37
K2BU	65	K2NJ	80	N2VW	25
K2WJ	28	K3GYS	76	K3GYS	26
W3CF	27	AB2E	67	AA2WN	19
N2MT	15	N2VW	63	K2WJ	17
K3GYS	8	K2WJ	40	N2MT	6
N1RK	3	N2MT	26	KB3FEE	3
KB3FEE	1				

Still looking for that 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 or your total for 80,40,20, 15 and 10 for 1.5K Club. Countries do not count until HQ Awards Committee takes official action and announces a start date for a new country.

160 Meters

W3BGN	**288**	KS3F	124
AA1K	279	K2PS	97
K2BU	256	K2RW	89
WT3Q	245	W2YR	80
N2TK	235	N2VW	74
N2LT	232	NA2U	73
K3NW	228	W3CF	69
K3SX	210	N2SS	67
W8FJ	185	K3NL	62
K3NZ	167	K2NJ	49
K3JJG	165	K2JLA	35
W3OV	163	KB3FEE	38
N3RS	156	N1RK	36
K3II	149	KQ3F	34
NO2R	144	W2LE	27
WA2VYA	144	AA2WN	25
W2YC	140	K2JF	20
K3NM	140	N2MT	14
K2FL	135	K3GYS	12
K3ND	133	W3SOH	10
WT3W	125	K2WJ	3

W3BGN continues as the undisputed
Top of Top Band

RTTY Digital

W2UP	**332**	W2LE	81
N2LT	325	K2JF	57
W3SB	245	WA2VYA	50
K2PS	240	N1RK	43
K2RW	231	N2SS	42
K2NJ	196	N2MR	28
AA2WN	162	KQ3F	23
W2YC	157	K3GYS	15
WT3W	151	K2WJ	12
W2YR	121	W8FJ	12
W3CF	100	N2VW	7

1.5K Club

K2FL	**1703**	KS3F	1375
W3BGN	**1685**	WT3W	1361
N2TK	**1675**	W3SOH	1352
N2LT	**1658**	K2JF	1350
W2UP	**1626**	K2NJ	1345
K2RW	**1581**	AA2WN	1295
W8FJ	**1574**	NA2U	1295
K2BU	**1550**	N1RK	1240
N2SS	1497	N2VW	1240
N3RS	1493	WT3Q	1162
K3ND	1488	K2WJ	1161
K2PS	1468	W2LE	1115
W2YC	1461	W2YR	1110
NO2R	1429	K3NM	1107
K2JLA	1428	W3CF	1077
WA2VYA	1415	N2MT	719
KQ3F	1384	KB3FEE	231
N3RD	1382		

MOBILE DX

W2YC	**265**	K3GYS	138
AA1K	234	AA2WN	131
N2SS	232	WT3Q	107
N2MR	180	KB3FEE	48
K2JF	150	W2YR	21

W2YC is safely ensconced **MOBILE #1**

Islands On The Air

K2FL	**922**	KS3F	263
K2JLA	854	N2VW	250
W3SOH	746	K2WJ	223
N2SS	688	W2YR	216
W8FJ	530	WT3W	203
W2YC	466	W3CF	200
N1RK	464	K3GYS	114
W2YC	456	KB3FEE	23

THE FRANKFORD RADIO CLUB

NEWSLETTER

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

Affiliated Club

In This Issue

CALL FOR DONATIONS

FRC OPEN INFO

CONTEST SCORES

NEW Q SIGNALS

TALKING SOLAR

MEETING MINUTES

AND MUCH MORE!

Deadline for June issue: Sunday, May 26

The Frankford Radio Club

Club Officers

President, **W3CF**, Doug Priest…..…..... 215-361-9989
Vice Pres, **N3BNA**, Dale Long ..…..……..… 717-626-8794
Secretary, **K3ZV**, John Lindmeier ….....…..……215-632-2919
Treasurer, **K2QM**, Dan Marlow .....…..…..…609-683-5633

Committee Chairman

Repeater, **K3NL**, Nick Leipold 610-449-8910
Packet, **N3RD**, Dave Hawes .....…… 610-935-2684
Activities, **W2OX**, Alex Aimette ....…..... 215-721-1453
Awards, **W3IZ**, Norm Fusaro …..... 215-795-0390
Membership, **K3ANS**, Bill Goodman ....…..... 610-258-5063

Newsletter & Roster

Editor, **KQ3F**, Joe Stepansky 717-657-9792
Email: joe@microserve.net
Printing, **K3ZV**, John Lindmeier ....…..…..….....215-632-2919

Repeater

2 meters, 147.27/147.87
Output PL tone, 114.8

Home Page

www.frc-contest.org

Meetings

Meetings are held on the 2nd Tuesday of each month (Sep through May) at 8 PM at the Philadelphia College of Pharmacy and Science, 43rd and Kingsessing Street, Philadelphia. Summer meetings are held at member homes (one Saturday/ Sunday per month).

Packet Cluster Contest/DX System

144.910 N2MT
144.930 W3FRC
145.650 K2TD
144.950 KD3CN
145.530 K3WW
145.530 AA1K
145.530 K2SG
145.570 WT3Q
145.570 K2TW
145.590 N2NT
144.950 K3GYS
145.710 W3EA
145.730 N2BIM
147.495 W3MM
145.670 W3PP
441.050 W3MM
445.525 K3GYS
445.525 W3EA
445.850 N3BNA
..TBA N3ED