



FEEDBACK



Warminster Amateur Radio Club Web Page www.k3dn.org

October 1999

President's Message

It's been an interesting past month. Going from record drought to record rain fall. I hope you all survived Floyd with minimal damage. It's comforting to know, as Amateurs, we have an alternate means of communication if the power or phones go out of service. Several members of W.A.R.C. are also members of R.A.C.E.S. and had the opportunity to participate in the Simulated Emergency Test. This year the SET was combined with an emergency drill of the Limerick nuclear generating station. Amateurs play a vital communications role in the exercises. In Montgomery County R.A.C.E.S. operators are the PRIMARY means of communication between the Emergency Operations Center and each municipality. Bucks County R.A.C.E.S. was called into service during Floyd to assist with shelter communications when people needed to evacuate from their homes. Our commitment to emergency communications justifies our broad frequency privileges in the Amateur Radio Service. Speak to Bob (KA3VKU) or Stu (K2QBU) for more information on R.A.C.E.S.

It was great to see everyone at the club picnic out at Core Creek State Park. We could not have asked for a nicer day. Mark (N3GNW) must know someone in high places! He again did great job organizing the event. Burt (N3YVH) made sure the burgers and dogs were cooked just right. Good weather, good food, good people, a winning combination. If you couldn't make it, don't miss it next year!

If you missed the last meeting you missed an interesting presentation by Scott Black of Spyware in Warminster. Scott demonstrated various miniature cameras, transmitters and other "spy" gear. I especially liked the night vision monocular. This month I'll be looking forward to hearing club member Bill Strunk (K3ZMA) talk about the GPS system and how receivers can use satellites to find position.

We also ran a special event station on September 26 commemorating Pearl S. Buck. The station (K3DN of course) was set up at the home of Pearl S. Buck located in Bucks County. Bob (K3SRO) organized the event and Al (WI3Z) created very nice look certificates to send out to our contacts. Thanks to all who participated in making the event a success.

Don't forget to look for signs along Jacksonville Road. Thanks to Hugh (N3SOQ) our Adopt-a-Highway program is well underway. Our first cleanup is planned for October 24, so plan to join in the fun. We'll be viewing a short video at the next meeting so we all know the preferred way of picking up trash!!

We have several public service events coming up. contact George (N3HBT) if you can help out. That's all for now.

See you at the meeting!

Rocky N3FKR

October Meeting Topic: An Introduction to the Global Position System

Bill Strunk K3ZMA will be our speaker at the October Warminster Amateur Radio Club meeting. He will be detailing how the Global Positioning System (GPS) operates to locate your position anywhere on the face of the Earth to within a few feet with an inexpensive receiver. Considering that the GPS transmitters are multi-million dollar satellites with their own highly accurate atomic clocks, this is truly an amazing feat. Bill has done quite a bit of work with the development and implementation of the system. The availability of GPS has given rise to numerous civilian uses including amateur radio's Automatic Position Reporting System (APRS) which has been gaining in popularity. Please join us for what promises to be another informative and exciting presentation.

Mark - N3GNW

Repeater update

The WARC 2 meter repeater was worked on by Brian N3EXA and Ron NY3J on Saturday September 11. The audio level and CW ID tones were turned up a little. Also the pre-amp was replaced with a new Gas fet unit. We now can hear New York much clearer. The 911 emergency auto patch is temporarily turned off until we can reprogram the controller with the new phone area codes needed to get into the Bucks county radio dispatch room.

Club station update

Thanks to Burt N3YVH and Ron NY3J, the club station now has a working APRS packet station and computer. We still need an internal 56K PCI modem, but the computer is operational and is working as a packet APRS station on 144.390. There is also a direct club station E mail address of: k3dn@juno.com.

George Brechmann
george-n3hbt@juno.com

Warminster Amateur Radio Club General Meeting Minutes Sept 2, 1999

1. Meeting called to order by N3FKR at 19:41.
 - a. 52 people in attendance.
 - b. 3 visitors
 - c. Tina KB3ECW recently licensed was presented a QSL card by N3HBT.
 - d. Motion to approve last months meeting was approved.
2. Officer Reports
 - a. President (Rocky N3FKR)
 - (1) WARC booth at Middletown Grange Fair a success.
 - b. Vice President (Mark N3GNW)
 - (1) Presentation tonight is Surveillance Technology and Equipment by Scott Black of Spyware Spy Shops.
 - (2) Future meetings
 - (a) Oct - GPS or Tower Installation
 - (b) Nov - ARRL Night guest Kay Craigy
 - (c) Dec - Holiday Party
 - c. Treasurer (John N3ZMJ)
 - (1) \$9402 in treasury - \$135 to petty cash
 - d. Secretary (Ron NY3J)
 - (1) No report
 - d. Committee Reports
 - (1) Membership (Burt N3YVH)
 - (a) 130 members
 - (b) 11 memberships lapsed

- (c) 30 inactive
- (2) Classes (George KA3WXV)
 - (a) No code tech class Sept 14 at Senior Center - be sure to hand out flyers
 - (b) CW class - instructors needed
 - (c) Suggestion sheet handed out for class topics.
- (3) Repeater (Brian N3EXA)
 - (a) Programming for 215 does not work so the 911 function is not working. When 911 is accessed the repeater actually dials directly to the center using the area code and phone number. N3EXA will correct.
 - (b) A different filter is being tried on the 440 machine. It seems to be working better.
- (3) Repeater (George N3HBT)
 - (a) Township meeting Thurs about new tower proposal by SMS Towers at Township Building
 - (b) Looking at 2nd site
- (4) Picnic '99 (Mark N3GNW)
 - (a) Sept 19 at Core Creek Park - Duchess Lane Section
 - (b) 11:30 setup and 12:30 Food
- (5) Grange Fair (Frank N3UQP)
 - (a) Thanks to all who helped
- (6) PA QSO Party (Marty NR3Z)
 - (a) Oct 9th and 10th
 - (b) Packets to be handed out next month
- (7) RACES Liaison (Bob KA3VKU)
 - (a) Limerick Drill - Sept 14, Tuesday, 6pm to 9pm.
 - (b) Hams needed for communications and to be victims.
 - (c) Held in Bensalem - Neshaminy Mall and Snyder Middle School
- (8) Public Service Events (George N3HBT)
 - (a) October 11 - 5 ponds Golf Outing - 8 ops needed 7am to 1pm buffet lunch served.
 - (b) October 16 - Craven Hall 5k Run - 9am to 1pm
- (9) Other Public Service Events
 - (a) SCU Bicycle Club all day bike ride starting 8am to 5pm -Starts at Horsham High School
 - (b) MCCC Community Day (Rocky N3FKR) - 11am to 4pm - Activities for families - need 6 to 10 operators for communications
- (10) Old business
 - (a) K3DN Special Event Station (Bob K3SRO)
 - (1) Pearl S. Buck House Sept 26 - 9am to 3pm - 7am setup
 - (2) Bob to check site on Saturday
 - (3) Certificate designed by Al - WI3Z
 - (b) Adopt a Highway (Hugh N3SOQ)
 - (1) Sign to be put up
 - (2) Show of hands approved first cleanup date for Oct 24 - 8am start
 - (3) Safety film to be shown at next meeting
 - (c) Shaklee Products (John N3ZMJ)
 - (1) 20% of sales from club members will be donated to WARC.
 - (2) Catalog to be distributed at a club meeting.
- (11) New Business
 - (a) Planetarium Visit (Mike W3MJP)
 - (1) At McDonald Elementary School - Oct 20, Wed night
 - (2) Seats 60 - cost \$50 for the group - show of hands about 20 people interested
 - (b) Tower Take Down (N3HBT)
 - (1) In Perkasio Area late October early November
 - (c) Mark WA3QVU - to set up public address system for Pack Rats Hamfest. Pack Rats offered a table for the WARC club - no interest at this time
 - (d) MS 100 needs more volunteers
 - (e) Township

(f) Holiday Party (Doug N3RJE)

(1) Should menu be changed - Membership voted to keep menu. Menu will be in next month's feedback

(g) Awards Manger (Vince KD3TC)

(1) Vince is certified by ARRL to check WAS

(2) Remember various WARC awards

(3) People have contacted Vince by email. He directs them to club meeting with an offer to join the club

(h) Plaque for March of Dimes Walkathon presented to the club by Steve Ka3ZLY with an invitation to participate next year.

(12) Good and Welfare (Joan N3CJH)

(a) Bob N3HKE - home walking - improving

(12) Motion to adjourn 20:38

Respectfully submitted by Ron Wenig (NY3J)

Getting Started With PSK31

Hams use amateur radio to talk and receive and send CW. We can also use several digital modes to communicate. Among the digital modes there is RTTY, Amtor, Pactor and yes we also can include CW as one of the digital modes. After all CW uses a on/off keying much like a computer uses ones and zeroes to create letters. The digital modes that I enjoy is packet and I guess you can say the replacement of packet radio these days, APRS. Packet and APRS are mostly used on the UHF/VHF bands. They are both easy to set up and use.

Now there is a mode just as easy to set up and use for the HF bands. It is called PSK31. PSK31 uses Phase Shift Keying to send and receive text. I should also say it is very inexpensive to use because it utilizes the DSP technology of the sound card found in most of the modern personal computers that more and more hams have in their shack. It's an easy mode to use because of the software that's out there. After you install the software you just follow some simple steps to configure the sound card and the volume settings in Windows. PSK31 is similar to CW because it uses an alphabet to translate the codes it is sending. We have been told that CW can get through high noise with little power. Well PSK31 is even better than CW for low power and high signal to noise ratio. I have copied signals which I couldn't hear with my speaker.

The program uses a procedure that is similar to a spectrum analyzer. It appears as a waterfall with a line that represents the other PSK31 signal. When you adjust the frequency so that the line falls on the cross hair pattern of the waterfall display the other station will be tuned in. There is also an automatic frequency control, AFC, for both receive and transmit. The AFC will adjust the receive signal filtering for the station that is close to the hair line gauge on the waterfall display. And if the other station drifts it will also adjust the send frequency so that both stations do not have to constantly tune the other in. There is a key to send a CQ out. This will send your call sign and will end the CQ call with a CW identifier. There is also a way to send a file such as a brag file with your station information.

I won't go into any more detail about PSK31. There is an Internet web page dedicated to PSK31. There you can get the software and read more documentation about it. There is also a list serve where you can subscribe to the special interest group for PSK31. Here there are operating hints and you can ask questions about PSK 31. For Win95 and 98 users I would start with downloading the file P31SBW107.ZIP. This is a zipped file which you can use WINZIP to unpack and install the program. After you get used to this simple program you can try the program called LOGGER. This has a logging program as well as a more advanced application of PSK31. The website url is: <http://aintel.bi.edu.es/psk31.html>. If you don't have access to the Internet let me know and I will get you a copy. Also there is a good article about PSK31 in the May 1999 issue of QST. If you don't have that issue I can make you a copy of the article.

I would like to make a proposal for a club project. If enough people are interested in PSK31 maybe we can get together at one of the special interest group, SIG, meetings at the WARC club. There is a circuit that needs to be built if you use the mic input of your hf rig. Maybe we can build this at one of the club's kit building nights. This just may lead up to a PSK31 net during the week, say after the 2 meter club net. Let's talk about it on the repeater or send me some email about it. My address is ny3j@home.com. Catch you on the digital part of the hf bands.

73, Ron NY3J

Solar Update

Solar soothsayer Tad Cook, K7VVV, Seattle, Washington, reports: This week was a big disappointment for HF radio enthusiasts. Last week's bulletin, ARLP038, stated that on Thursday, September 23, the solar flux should be around 220. This was the date of the autumnal equinox, generally a peak time for HF propagation. Unfortunately the sunspots never materialized, and the solar flux for the day was more than 80 points lower than predicted.

Not only have solar flux and sunspot numbers been lower than expected, but geomagnetic disturbances were prevalent as well. Wednesday, September 22, was the most active period, when the planetary A index was 37.

What's next? Currently the flux is around 137 as this is being written on September 23, and the predicted values for the weekend of September 24-26 are 135, 135 and 130. Predicted planetary A index is 15, 12 and 10.

Beyond the weekend the best guess is for solar flux to go below 130 after September 27 and bottom out around 110 on October 5. Flux values are not expected to rise above the current level until October 11, and peak around 160 by mid-month.

Active geomagnetic conditions could reappear around October 4 and again around October 9 and 10. Despite the disappointing numbers, the author of this bulletin has had fun this week on HF mobile. Abandoning the usual 17 meter operation, 10 and 15 meters were tried, and consistent contacts with loud signals from Japan during the afternoon commute were made after 2300 UTC above 21.3 MHz SSB.

Sunspot numbers for September 16 through 22 were 153, 144, 152, 113, 78, 82 and 103 with a mean of 117.9. The 10.7-cm flux was 158.2, 157.5, 151.6, 149.3, 145, 146.8 and 140.4, with a mean of 149.8. The estimated planetary A indices were 32, 15, 16, 10, 10, 10 and 37, with a mean of 18.6.

Courtesy The ARRL Newsletter

HARVARD'S W1AF: 90 YEARS OLD AND STILL GOING STRONG

The Harvard Wireless Club celebrates its claimed status as the oldest Amateur Radio club in the US with a special event operation on the weekend of October 2-3. During the club's 90th anniversary observance, members will attempt to work as many stations as possible around the world.

The Harvard Wireless Club--an ARRL-affiliated club--dates its origin to early 1909, when it was founded by Prof George W. Pierce. First known as the Radio Society of the Institute for Geographic Exploration at Harvard, the club assumed its current name the following year. The W1AF call sign dates back to the early 1920s. Frank Wright, N3OQB, is the current club president.

This year's 90th anniversary special event October 2 and 3 will include operation from three HF positions and one VHF position. W1AF will be on the air each day from 1200 to 0000 UTC--24 hours in all. HF SSB frequencies include 3890, 7270, 14,270, 21,370 and 28,390 kHz. HF CW will be 35 kHz up from the lower band edges. On VHF, look for W1AF on 50.150, 144.200 and 432.150 MHz SSB.

A special 90th anniversary QSL card will be available for stations working W1AF during the special event. QSL to Harvard Wireless Club, W1AF, Harvard University, 6 Linden St, Cambridge, MA 02138. For more information, contact the club at w1af@harvard.edu. The club's Web site is at <http://www.hcs.harvard.edu/~w1af/>.

Courtesy The ARRL Newsletter

ARES/RACES CONTINUE FLOOD RESPONSE

The FCC's new Universal Licensing System has moved a bit closer to resuming full-scale amateur vanity call sign processing.

Several lucky applicants who had submitted call sign requests in the pre-ULS era benefited in recent days from some "live" testing of the ULS vanity processing system. A few not-so-lucky applicants learned this week, however, that the FCC had to rescind some of those vanity grants it cranked out--and should not have--during those "test runs."

Until last week, no vanity call signs had been granted since August 4. The ULS has been accepting vanity applications since it inaugurated the ULS for the Amateur Service August 16, however. Some 30 vanity call sign applications dating from July were processed September 16. The FCC ran a batch of another 50 or so vanity applications September 21. "We're taking it slow," a ULS spokesperson said.

But while reviewing the vanity applications processed, FCC personnel found some that should not have been granted in the first place, because the applicants made various fatal errors in the application process. The FCC says those call signs will be cancelled and the applications dismissed.

"And there will be plenty more, I'm sure," the spokesperson said, anticipating additional dismissals down the road. The FCC has the option of rescinding any grant within 30 days.

Barring any unforeseen major problems, the FCC anticipates additional "live test" runs before resuming full-scale vanity processing, possibly by month's end. Once that happens, vanity call sign processing will occur every day for eligible applications based on date of receipt. Gone under ULS are weekly processing runs and the dreaded work-in-process--or WIPs--stack of applications that were kicked out of the former automated system and designated for manual processing. Under the ULS, applications that would have gotten an additional manual review in the past now will be automatically dismissed and returned to the applicant for correction and refileing.

Vanity applications not accompanied by payments within the 10-day deadline will be dismissed automatically. The ULS now permits applicants to make credit card payments on-line. The fee for a vanity call sign application increased to \$14 on September 14.

In the wake of comments and criticisms about the difficulty of having to configure a dial-up connection with a particular browser (Netscape version 4.5 or higher, and version 4.61 preferred) to file an application, the ULS Task Force says it's planning to convert to electronic filing via the Internet. But a spokesperson says that is not likely to happen for another six to nine months. In the meantime, some have opted to file a paper Form 605 instead.

Courtesy The ARRL Newsletter