Warminster Amateur Radio Club Web Page www.k3dn.org

September 1999

I hope you had the opportunity to attend the August meeting. Mark, N3GNW, our Vice-President, arranged for a guest speaker, Perry Dunn, Senior Member of Technical Staff of Panasonic. Perry gave a very informative presentation on the fundamentals of High Definition Television. These new TVs will have up to four times the resolution of current TVs. They'll be a bit expensive at first, so I think I'll wait for the prices to come down!

We've had a hot, dry summer. My dirty car reflects the drought restrictions, but at least it cut down on lawn mowing time. Al, WI3Z, posted the restrictions on our web page so we all would be in compliance. We've had some good band openings and I hope the extra time gave you the opportunity to take advantage of them.

Our main event for August is our booth at the Middletown Grange Fair. This provides the club with an excellent opportunity to expose the public to Amateur Radio and WARC. Frank, N3UQP, did a nice job pulling it all together. It is a difficult time to get members to volunteer (peak vacation time), and more so now that the Fair runs for five days. Several people have been introduced or re-introduced to the hobby at the Grange Fair. It also provides an opportunity to pass traffic. This is a valued skill, a lot of fun, and helps expose even more people to Amateur Radio. Did you have a chance to pass some traffic? If you have an interest in traffic handling and the National Traffic System (NTS), you can find more information at http://www.arrl.org or "The ARRL Operating Manual." I would like to thank everyone who came out to the Grange and helped to make the effort a success.

Thanks to our "Procurement Director," Burt, N3YVH, we now have a new (to the club!) computer for the club station. We should now be able to run Packet Radio as well as APRS and have Internet access. Don't forget the club station is HF capable and is open to club members on non-meeting Thursday nights. George, N3HBT, will be there to help you out and he is an Extra so you'll be able to work all the frequencies. Get in there and work some DX.

Hugh, N3SOQ, has been working hard on the Adopt-a-Highway program. He informed me our adoption of a section of Jacksonville Road has been approved. This is a nice way to help out the community and gain some public recognition for the Warminster Amateur Radio Club. Thanks Hugh.

Mark your calendars, we have a few fun activities coming up in September. Mark, N3GNW, is organizing our club picnic on Sunday, September 19th, and Bob, K3SRO, is working on the Pearl S. Buck Special Event Station for Sunday, September 26th. Read on for details. Also, George, N3HBT, is working on several public service events coming up in October. Stay tuned for details.

See you at the meeting.

Rocky, N3FKR

Communications with MIR.

In keeping with Mike's, W3MJP, fine Earth and Space Science articles I would like to talk about

contacting the MIR space station. As Mike said it is exciting to watch the satellites. As amateur radio operators we can also communicate via the satellites. I subscribe to the APRS listserve from www.tapr.org. Bob Bruninga, the creator of APRS, sent a message describing how to access the MIR space station. This procedure is designed primarily for low power setups with a small antenna such as the new Kenwood TH-D7A. This HT is a dual band radio with a built in 1200/9600 tnc. It is primarily used for portable APRS. I used my APRS tracker setup.

The APRS program for Windows is set up in space mode. This mode sends out a minimal transmission with a grid square instead of longitude and latitude. APRS is excellent mode for satellite work because it uses unacknowledged packets for communications. This is more efficient than standard packets because it does not use acknowledgments to check if packets have been received. For ground APRS you would use the call sign of a digipeater that is close to you. For MIR you use the call sign R0MIR. This call sign is entered in the via position of APRS setup. Make sure that position report rate is zero so that you do not tie up the frequency. You also turn off status reports.

Now when you see MIR approaching with your satellite tracking program or you hear packet activity on 145.985 you get ready for some excitement. Press F2 which sends out a position report. You will see your packet go out with an asterisk next to your callsign. If you are successful you will see the same packet with an asterisk next to R0MIR which means that MIR heard you and is digipeating your position. All stations copying MIR will also see your digipeated packet and if they are running APRS will have a plot on your station. Even if they are hundreds of miles away!

Here is a sample of my history file:

NY3J*>R0MIR>FN29MC (the * means I heard myself. notice the grid square)

NY3J>R0MIR*>FN29MC (the * means I heard MIR)

Here's the message I received:

WB4APR>R0MIR*>APRX41::NY3J :Hi ya! (I didn't hear WB4APR but did hear MIR digipeat Bob's message to me. Here is my reply:

NY3J*>R0MIR>APW230::WB4APR :hi bob NY3J>R0MIR*>APW230::WB4APR :hi bob

You can send messages like this on the message screen as long as MIR is still in range. This is very exciting to see the satellite on your computer with your tracking program, hearing the satellite on your radio, and finally communicating through the satellite. All this with a minimal amount of equipment. Possibilities: There is a push in the APRS community to launch a satellite with APRS capabilities. If this is a non-geosynchronous satellite and sends out a position beacon you will be able to track the orbit via APRS. You will see the ICON virtually move across the map. When the satellite's footprint is in your area you will be able to use it as a digipeater. This will help in remote areas which does not have ground coverage of relay stations. If you are in a remote area and need help you can send a distress message via your D7A HT through the satellite. Other APRS stations will see your message and also see your position. There is also a possibility of having a backbone network using satellites on another frequency, and a higher speed. This could also be linked to the Internet.

Space is a fascinating subject and communicating via satellites is exciting. As you can see you don't need a lot of expensive equipment. If you need to know what kind of APRS setup I have talk with me on the 147.09 repeater or send me an email, ny3j@home.com. If you need help with satellites check with Joe, N3EMA, our satellite special interest group leader. Thanks to Mike, W3MJP, for the inspiration. Keep those Earth and Space Science articles coming. As James T. Kirk would say, "Space, the final frontier".

Ron ny3j@home.com

Warminster Amateur Radio Club General Meeting Minutes Aug 5,1999

- 1. Meeting called to order at 2100
- a. 41 people in attendance
- b. 2 visitors
- (1) Darren, Wendell from the Suburban Cyclist Unlimited Bicycle Club. Culley, N3HTZ and Perry Dunn our speaker
- 2. N3GNW introduced the speaker for tonight.

- a. Perry Dunn, Senior Member of Technical Staff of Panasonic company, AVC American Lab Division.
- b. Perry gave a presentation on High Definition TV
- 3. Officer Reports
- a. President (Rocky N3FKR)
- (1)WARC as mentioned in the June CQ VHF about our involvement in the Turkey Trot Run with APRS and Tom WA3TQJ's article about our Air Show operation.
- (2)WARC was presented with a donation from the American Legion of \$100 for our participation in the Warminster Memorial Day Parade on May 31.
- (3) August events
- (a) Gloucester County Hamfest
- (b)1999 Maryland/DC QSO Party
- (4) Thank you to Vahan KB3DHU and George N3HBT for installation of brass mail slot at the Senior Center.
- (5) Thank you to Burt N3YVH for acquisition of new computer and monitor for club station.
- (6)Congratulations to Tina, Membership Co-Chair, for passing the no code Tech exam., her call is KB3ECW.
- (7)John N3ZMJ to offer percentage of Shaklee product sales to club members to the club.
- b. Vice President (Mark N3GNW)
- (1)Suggestions for speakers
- (a)Talk about GPS systems
- (b) Tower installation and safety.
- c. Committee reports
- (1)Membership (Burt N3YVH)
- (a)New member Bill KB3ECK
- (b)129 active members 12 lapsed memberships
- (2)Classes (George KA3WXV)
- (a) No code tech class Sept 14 at Senior Center
- 7:30 to 9:00 pm for 11 nights
- (b)Possible CW class looking for students
- (c)George has been running classes since 1994
- (3)Club Picnic (Mark N3GNW)
- (a) Needs one more person to help
- (b)One covered dish per family
- (4) Grange Fair (Frank N3UQP)
- (a)Traffic handling instructions given out
- (b)Only 2 day captains volunteered so far
- (c) Need more people to help with setup and packup
- (5) Public Service
- (a)George (N3HBT) 5k run at Craven Hall Oct 16.
- (b) Wendell from the Suburban Cyclist Unlimited Bicycle Club needs volunteers to provide communications for a bike ride.
- (6)Old Business
- (a)K3DN Special Event Station Pearl S. Buck House September 26, Bob (K3SRO) Announcements sent to Ham Magazines
- (b)PA Adopt a Highway Program Hugh (N3SOQ) waiting for word from Harrisburg
- (7)New Business
- (a)Al (KY3T) has free terminals
- (8)Good and Welfare
- (a)Rocky (N3FKR) announced the passing of former club member Ray Fitzgerald K3VLT. Bob
- (N3NKE) broke his hip there will be more information on the club web page.
- (9) Meeting adjourned 2129 hours.

Respectfully submitted by Ron Wenig (NY3J)

Public Service Events

On Monday, October 11th; Columbus Day, I will need at least 10 operators to provide communications for the Warminster Parks and Recreation Department "Hole in one" golf outing. This event will run from 7:00 am to 1:00 p.m. . Lunch will be supplied to the operators.

The Craven Hall 5K run is on Saturday, October 16th from 9:00 am to 1:00 p.m. . I will need 12 operators for this event.

Volunteers should contact: George, N3HBT; Ph: 215-443-5656 or e-mail george-n3hbt@juno.com

Solar Update

Solar flux and sunspot numbers were down again this week. Average sunspot numbers were down almost 55 points, and average solar flux was off by more than 17 points, when compared to the previous week.

Geomagnetic conditions have been quite stormy over the past few days, with an A index of almost 30 over several days this week. Conditions should settle down over the next few days, with planetary A indices of 20, 15 and 10 August 20-22.

Solar flux has actually been rising this week, and over the weekend it should rise to 140, 145 and 150. Expect continued rising solar flux to hit 180 around August 24, peaking around 190, August 26-29. Predicted unsettled geomagnetic days are August 26-28, September 2-5, and September 11-13. Sunspot numbers for August 12 through 18 were 100, 82, 79, 87, 71, 67 and 69, with a mean of 79.3. The 10.7-cm flux was 123.1, 126.5, 128.1, 131.1, 131.1, 141 and 130.7, with a mean of 130.2. The estimated planetary A indices were 10, 11, 5, 15, 29, 27 and 26, with a mean of 17.6

Courtesy The ARRL Newsletter

ULS FOR HAMS ENDURES FIRST-WEEK JITTERS

The FCC's Universal Licensing System is up and running for the Amateur Service, although it didn't happen without a few wrinkles and some frustration on the part of hams trying to register or use the system. At one point on August 16--the first day the ULS was available to hams--no one could access the system, even for registration. But the downtime lasted less than an hour, according to an FCC spokesperson. "The system itself has been running smoothly," he said. The system also was down briefly on Wednesday and Thursday.

Some hams reported slow response times in accessing the ULS to register or search the existing database information. Others found themselves confounded by the new system.

ARRL New England Director Tom Frenaye, K1KI, used the ULS this week to renew his license. "It wasn't a pleasant experience," he remarked, citing the complexity of configuring the dial-up connection required. "It's nice to renew on-line, but I'm glad I won't have to do it for another ten years." A Midwest ham equipped with a cable modem at first had decided he'd rather file a paper application than to take a step backward in technology. But he managed the dial-up connection and gave the ULS a tentative thumbs up. "It's certainly a snap once you've done it once, but I'm afraid the dial-up aspect will scare off most folks," he said.

The FCC has disabled the former on-line vanity Form 610V and renewal Form 900 applications and redirected all amateur applicants to the ULS page.

Even though all amateurs already are in the FCC database as licensees, ULS registration is a must-before filing an application, renewing or modifying a license, or applying for a vanity call sign. Applications filed through a VEC automatically register the applicant in ULS, as do paper applications mailed to FCC that include the applicant's Social Security Number. Applications filed on-line by anyone not registered in the ULS will be dismissed. Registration requires first providing your Social Security Number or other Taxpayer Identification Number, then registering your call sign.

To register electronically, visit http://www.fcc.gov/wtb/uls/ and click on "TIN/Call Sign Registration." A paper Form 606 (TIN Registration Form) that can be mailed to the FCC is available at http://www.fcc.gov/formpage.html or from the FCC's Forms Distribution Center, 800-418-FORM (3676). Paper forms may be faxed (717-338-2693) or mailed to the FCC, 1270 Fairfield Rd, Gettysburg, PA 17325-7245.

While amateurs can use a Web network connection to register or to search the ULS for individual call signs or application status, applicants must use a toll-free telephone connection to the FCC's Wide Area Network in order to actually file an application on the new ULS Form 605. Complete connection instructions are on the FCC's ULS home page, http://www.fcc.gov/wtb/, under "Connecting to ULS." Connecting to the ULS requires Netscape 4.5 or higher.

The ULS phase-in has created a backlog of new amateur applications at Volunteer Examiner Coordinators. ARRL-VEC Manager Bart Jahnke, W9JJ, said that while the FCC has begun accepting some data from VECs, the quantity allowed to be submitted has been very low--10-20 applications per VEC were accepted the first three days after ULS went into effect for hams. Not all VECs are set up to file under the new system yet. "To date, only Monday's data appears to have been successfully processed," Jahnke said at week's end. "The ARRL-VEC is ready to transmit nearly 70 test sessions containing more than 150 successful applications, once the FCC gives us the green light." As a result, applicants for new amateur licenses will have to wait a few more days--perhaps several days--longer before their new call signs are issued by the FCC. In addition, no vanity call sign applications were processed during the ULS phase-in period last week. Once the ULS is working as planned, automated processing of electronically filed applications is supposed to occur nightly each business day, but there will be no weekend processing under the ULS.

The FCC said it expects to tackle the VEC application backlog very soon. It also said it hoped to have the ZIP file available daily for Web call sign servers and others to access.

At this time, the ULS is not accepting any club station applications. Trustees and custodians of club, military recreation, and RACES licenses should continue to use the old Form 610B to file applications for those stations and should not use their personal Social Security Number as the TIN for these licenses. Club station trustees and applicants should contact ULS Technical Support at 202-414-1250 to obtain an Assigned Taxpayer ID Number for each club license and provide it on the Form 610B. The FCC says that anyone who fails to register in the ULS will be unable to receive services from the FCC. This means the FCC will not process future license grants, upgrades, modifications or renewals for any applicant not registered in the ULS. The FCC recommends that all amateurs register now, even if they have no immediate need to transact business with the FCC.

Amateurs having ULS problems or questions should contact the FCC's ULS Technical Support staff at 202-414-1250.

Courtesy The ARRL Newsletter