

Warminster Amateur Radio Club Web Page www.k3dn.org

## JULY 1999

President's Message

Let me start off by saying I feel privileged to serve as President of the Warminster Amateur Radio Club. The other newly elected officers include: Mark Kempisty N3GNW, Vice-President; Ron Wenig, NY3J, Secretary; and John Logie N3ZMJ, Treasurer. We will do our best, with the help of the directors, chairpersons and general membership to keep the club going in a positive direction and meet the needs of the membership.

I'm sure you all appreciate, as I do, the excellent job done by Bill Gorodetzer K3MFI, our President for the past three years. Bill's leadership skills have been evident at the meetings, but I know Bill has devoted many behind the scene hours to keep the club running smoothly. Also leaving office is Al Folsom KY3T. Al has been keeping the books straight as Treasurer for as long as I can remember. Let's give them a personal thank you for their time and effort.

WARC will have completed one of its most busy months by the time you read this. Even though the air show was cancelled, we had several public service events and Field Day. Did you get a chance to get out and operate to keep those skills sharp?

WARC, at the present time, is a strong club with a solid membership. One of the reasons for this is that we are a general interest club and have something to offer almost any amateur. This results in a membership of people with diverse interests and talents, members who actively participate. This, and the friendliness of the members, are what attracted me to WARC. In the midst of a decline in new amateurs and members of other clubs, I wonder what we can do to maintain a strong club. Two things we need are operating capital and a growing membership.

We mainly depend on the hamfest and membership dues for revenue. What happens if the hamfest gets rained out? Maybe we should consider additional means of earning operating capital. How about new members? Are there ways we might get more younger people involved in the hobby to become future members? Just some thoughts. Let me know if you have any thoughts or suggestions.

Kit building night and classes will be on hold for the summer, but there will be plenty of other activities. The Grange Fair in August, the Club Picnic and Special Events Station in September. It's not to early to start planning! Read on for details.

By the way, have you checked out the clubs web page lately?

That's all for now, see you at the next meeting.

73 Rocky N3FKR

Other Stuff

Kit building night on hold for summer

## Programs

July: Equipment check out night

August: High Definition Television CHECK WITH MARK N3GNW!

July 1st - Equipment Checkout Night

New Club Officers Congratulations to the newly elected club officers: Rocky Pistilli, N3FKR; President Mark Kempisty, N3GNW; Vice-President Ron Wenig, NY3J; Secretary John Logie, N3ZMJ; Treasurer

Special Event Station

Perkasie, PA: The Warminster Amateur Radio Club, K3DN, will be operating a special event station commemorating the following events being celebrated at the Pearl S. Buck International Foundation: 20th anniversary of volunteer service by tour guides and gift shop personnel; 50th anniversary of the Welcome House; 35th anniversary of the Pearl S. Buck Foundation. Pearl Buck is one of America's most famous female authors. She was the first American women to receive both the Nobel Prize (1938) and Pulitzer Prize (1934) in literature.

This event will be held on Sunday, September 26, 1999, 1300-1900Z; on 7.040 7.240 14.250 21.350 28.350. For Certificate, send an SASE to the Warminster Amateur Radio Club, P.O. Box 113, Warminster, PA 18974. Use an 8 1/2" X 11" envelope if you want the certificate unfolded. Any questions, contact Bob Wilderman at dlrwild1@voicenet.com

Hi Rich, Would you find space in the next Feedback for the following:

Public service event reports:

Memorial Day parade on May 31, 1999

On Monday, May 31, 1999 Warminster township held their annual Memorial Day parade in the township. The following gave of their time in order to make the event run smoothly: Denise KB3ANO, Gail N6LUL, Doug N3RJE and Berni N3RJD, Frank N3UQP, Tom WA3TQJ, Rocky N3FKR and Tina and little Rocko, Bill N3RAF, Paul N3MXT, Doc KA3RAU, Tom KA3FQS, Randy N3LJE, Hugh N3SOQ and Elizabeth, and Fred WA3KIO. The weather was great and the parade went off without a hitch.

Ford V-8 Car Show

On Sunday June 13, 1999 the following supplied communications and Security for the Antique Ford V-8 car show held at the former NADC base in Warminster: Jim WA4YWM, George KA3WXV, Frank N3UQP, Rocky N3FKR, Roy K3TEN, Don KA3N, Tom WA3TQJ, Gail N6LUL, Tom KA3FQS, Randy, N3LJE, Bill N3RAF, Paul M3MXT, and Hugh N3SOQ and Elizabeth. Despite a late rain shower and a club member getting locked out of his car, the event was a success and the organizers were very pleased with the participation of the club. I would like to express my grateful thanks for all the members who helped make the two public service events go so smoothly. With cooperation like this, it is a pleasure to run such events. 73 George

## N3HBT

Earth and Space Science

Satellite Watching 101

Hello all! Welcome to the start of a new column in FEEDBACK. Each issue I (or perhaps some other aspiring journalist) hope to provide you with interesting information on an exciting topic in the area of Earth and space science. The topic for this issue- satellite watching.

Ever wonder what those noiseless, glowing dots moving across the night sky are. Well, if it is a slow moving point of light and not a plane, it is a satellite. Satellite watching is the ideal hobby- it requires no equipment, no patience, and no money(unlike hamradio). All you need is a dark, clear night sky and perhaps someone to share it with. There are more than 6,000 satellites presently orbiting the Earth, and during the first few hours of darkness each night- the best time to view them- one will appear every minute or two. However, to make satellite watching a success, you need to be aware of some simple points. Here is a checklist that you can use.

First, does it zigzag or move in a straight line? Satellites travel in laser-straight paths when seen from below. The weaving motion commonly encountered by a person when staring at an object in the sky is the result of imperceptible eye-muscle movements. All satellites know that the shortest distance between two points is a straight line.

Second, how fast is it moving? A satellite's speed depends upon its height aloft. The higher the orbit, the slower it appears to move and vice-versa. In general, a satellite will usually appear to cross the sky slightly faster than a high-altitude commercial jet. If the object streaks across the sky in just a few seconds, it was probably a meteor (or a UFO).

Third, in what direction is it traveling? Satellites are launched in an eastward direction to take advantage of the earth's 1,000 mph rotation. This gives them an initial push, kind-of-like if Curt Schilling would throw his fastball from a car speeding towards home plate. As a result, a satellite travels from west-to-east. Some satellites circle the earth in a polar orbit. In this case, the heading will be either south-to-north or vice-versa. This is a favored military trajectory because it allows the whole Earth to be scrutinized each day. Reconnaissance satellites tend to inhabit low orbits, so when you see a satellite which appears to be moving at high speed and occupying a polar orbit, it is probably a spy satellite so don't forget to wave. Basically, if the object is traveling east-to-west, it is not a satellite.

Fourth, is its light steady or erratic? Satellites do not have headlights or taillights, they merely shine as a result of reflected sunlight. These days, most orbiting satellites are designed with complex shapes rather than the old spherically-shaped objects of yesteryear. The spherical satellites reflected light uniformly so their reflections were steady. While most functioning satellites moving steadily in their orbit will appear to be of uniform brightness, a nonfunctional satellite(or even space debris) which is tumbling out-of-control may appear to change in brightness or "flicker" as it moves across the sky.

Fifth, when are they best viewed? Satellite visibility depends upon the changing sunlight that reaches them. Remember, the sun is shining in space even when it is nighttime in our location. Nocturnal sunlight varies not only with the time of night but also with the season of the year. During the months of May through August, the Earth's shadow, i.e. the sunless zone we know as nighttime, slants southward and takes longer to splay straight up. During these warmer months, then, while the heavens may appear fully dark, the sun continues to shine 100 miles overhead. So the best time to view a satellite is about two hours after sunset and about two hours prior to sunrise.

One class of satellites that the viewer will not be able to see are those which have geosynchronous or

geostationary orbits, i.e. GPS and TV satellites. Since these objects orbit at the same rate as Earth's rotation, they are essentially stationary against the background of the night sky and thus indistinguishable from the thousands of stars visible to the naked eye.

If you are interested in science or astronomical topics, you may want to check in to the Penn Wireless Association's Science Discussion Net on Wednesday evenings at 20:00 hours on their 2-meter repeater 145.250 (- 0.6, 131.8 pl).

Keep Looking Up! Mike (W3MJP) w3mjp@amsat.org

Solar Update

Solar wonk Tad Cook, K7VVV, Seattle, Washington, reports: Average sunspot numbers were up 10 points this week, and average solar flux was down by just two points. A peek at http://www.wm7d.net/hamradio/solar shows how the two indices have diverged a bit, with sunspot numbers climbing faster than solar flux.

Solar flux is expected to bottom out at 150 on June 18, then rise over the weekend to 152 and 154. Planetary A index is expected to be 8, 12 and 10 over the same three days. Solar flux should be back to 160 by June 27, and stay around 165 June 28 through July 10. This is based on the previous solar rotation, so we can always hope for new activity to push the numbers higher. But as we approach the summer solstice, even higher solar flux won't make much difference on 10 meters until the fall. Geomagnetic indices look stable over the next few weeks, with unsettled conditions around July 5. Sunspot numbers for June 10 through 16 were 214, 211, 233, 211, 210, 240, and 201, with a mean of 217.1. The 10.7-cm flux was 161.1, 164.7, 168, 167.7, 168.2, 158.5, and 152.7, with a mean of 163. The estimated planetary A indices were 7, 6, 7, 6, 4, 8, and 7, with a mean of 6.4.

Courtesy The ARRL Newsletter

## MOBILE AMATEUR RADIO MUSEUM MAKING THE ROUNDS

Like the traveling circus, John Dilks, K2TQN, has taken his show on the road. Ever since he started collecting vintage radio gear back in the 1950s, Dilks, 57, says it's been his desire and goal to have a radio museum. His wife "wasn't too keen" on the idea of his setting up the museum in their New Jersey home, however.

So after a bit of creative thinking, Dilks' decided to house his dream museum in a recreational vehicleitself a bit of an antique--and his inaugural tour included a stop at ARRL Headquarters June 16.

"There's too many good collections that don't see the light of day," Dilks says. "I believe in sharing it." Dilks says it's also an opportunity to show newer hams the homebrewing techniques of the earlier generations.

Among the more unusual pieces aboard are two early receivers, a Patterson and a Sergeant Model 44 from the late 1930s. "Having the more unusual ones gives visitors a chance to see something they would not normally see," he said. K2TQN's Old Radio Museum contains a few of the old chestnuts as well, including units by Hallicrafters and National SW-3. Also in the lineup are well-preserved homebrew transmitters, including several breadboard-style units. The museum also includes a smattering of vintage tubes and keys, plus two spark transmitters and even crystal sets.

Swaying on two bamboo poles above the R/V's roof is a vintage-style multiwire antenna of the sort that an amateur of the 1920s or 1930s might have used.

But the highlight of the museum-on-wheels is an authentic 1933-style Amateur Radio station. Dilks assembled the station with equipment from several sources. It includes a 1932 Hammarlund Comet Pro receiver, coil box, speaker and QSL card once owned by Dare Aucott, W3CRY, and a homebrew 300-W transmitter built by Joe Hoffman, W2DST, of New York. The table and the 1933 station log book, license, lamp, and chair once were in the shack of Earl Abbott, W2FTT, of Manahawkin, New Jersey. QSL cards of that era line the wall above the station.

A curious historical footnote to the W2DST transmitter: Dilks says Hoffman, who had emigrated to the US from Germany, put away his Amateur Radio gear as World War II was breaking out-lest he be thought a German spy. It remained in an attic for decades. Dilks obtained the transmitter when the house was sold.

Dilks says he hopes to have the station operational from the R/V by next year and plans to have a vintage station on the air next spring from the Dayton Hamvention flea market.

Dilks had to cut short his visit to ARRL HQ after his R/V--a 1973 Dodge-powered unit--developed water pump problems. Once vehicle repairs are complete, Dilks planned to head off to Maryland for Radioactivity '99 in Burtonsville, followed by a stopover for the Rooster Net 3990 picnic at Valley Forge, Pennsylvania. After a break, Dilks' museum will make stops in Pennsylvania and New Jersey before heading off to the big Antique Wireless Association national meet September 1-3 in Rochester, New York.

Dilks remains on the lookout for early amateur gear. "The goal is to change the display once every two years," he said, to keep things fresh for repeat visitors.

For more information, visit the New Jersey Antique Radio Club site, http://www.eht.com/oldradio. Contact Dilks via e-mail at oldradio@worldnet.att.net.

Courtesy The ARRL Newsletter

Warminster Amateur Radio Club General Meeting June 3, 1999

Meeting called to order at 7:33 PM by Bill K3MFI.

Round of introductions by those present. Introduction of visitors.

President's Report - Bill K3MFI Bill requested a round of applause for Tony N3YNH and Roy K3TEN for organizing the 1999 Hamfest. The June VHF contest starts Saturday, June 12, 1999 at 1400. The PackRats have invited us to visit their operation on Camelback Mountain (Big Pocono State Park). Thank-you from Bill to the club for supporting him through his tenure as president.

Vice-President's Report - Rocky N3FKR Tonight - Antenna construction night. July 1 - Equipment check-out night. August 5 - Digital television.

Treasure's Report - Bill K3MFI for Al KY3T The club's treasury was healthy. Exact numbers were not available.

Secretary's Report - Mark N3GNW Correction to May general meeting minutes as published in June's Feedback. N3SRO should be

K3SRO. Motion to approve May general meeting minutes as published and corrected in June Feedback.

Motion to approve May general meeting minutes as published and corrected in June Feedback. Seconded. No discussion. Passed unanimously.

Membership - Don KA3N 127 members This is Don's last meeting as Membership Chairman. Our new co-chairman take office at the June Board meeting. Classes - George KA3WXV Several successful graduates of the spring program. Looking for interest in fall classes covering the General license class and CW. Due to a lack of interest, no summer classes will be offered. Discussion ensued on license restructuring.

Repeater - George N3HBT The township is looking at replacing the tower at the township building with at 120 foot AT&T communications tower. The club would have top spot but we would need to supply antenna, hard-line and mounting hardware. AT&T would install the antenna and hard-line. Field Day - Stu K2QBU June 26 & 27. There is no air show this year to compete for the club's attention. Looking for volunteers to help with various tasks. Still looking for band captains, particularly for CW. Set-up is Friday June 25 (you may camp over night) and tear-down is Sunday June 27.

Grange - Frank N3UQP August 18-22. Usual club participation including demonstrations, traffic handling and public relations.

Picnic - Mark N3GNW The 1999 club picnic will be on Sunday, September 19, 1999 at Core Creek Park. Volunteers will be needed to pick up some of the picnic supplies.

Public Service

Warminster Memorial Day Parade. George N3HBT, Operations went well and we received thanks from the parade organizers..

Central Bucks East Youth Track & Field, George N3HBT. Cancelled,

Vintage Car Show. George N3HBT, June 13, 1999. 8:00 AM to 3:30PM at the old Naval Air Development Center in Warminster.

Special Event Station - Bob K3SRO September 26, 1999 Pearl S. Buck House 9:00 AM to 3:00 PM to celebrate several anniversaries related to the foundation.

Hamwear - Bob K3SRO Discounts on merchandise are available to the club for orders of 12 and 36 items.

Pennsylvania Adopt-A-Highway - Hugh N3SOQ We have been approved for Jacksonville between County Line and Kirk. The first clean-up date will be organized shortly.

Batteries - Stu K2QBU Let Stu know if you want one of the high capacity green battery bags. We need a large order to make it worthwhile.

Respectfully submitted, Mark Kempisty - N3GNW