



Di-Dah-Dit

Official Newsletter of the Parkersburg Radio Klub
820 23 rd. St. Vienna, WV 26104

Northwestern Ohio Response to Tornadoes

On Saturday night, June 5 and Sunday, June 6, severe weather and tornadoes ripped across an area of northwestern Ohio, laying down a large path of destruction. ARES and SKYWARN groups in Erie, Huron, Sandusky and Wood counties activated nets at 10:30 PM Saturday, and many did not stand down until 4:30 AM Sunday morning. Reports of severe weather damage, flooding, and downed power lines filled the nets for the majority of the six-hour period.

In Wood County, ARES Emergency Coordinator (EC) Bob Schumann, W8NYY, reported that the severity of the damage was becoming quickly apparent with the increasing frequency of reports coming in during the period of 11:15 and 11:30 PM, with Tony Everhardt, N8WAC, and Assistant EC Ed Brown, K8ZCS, giving on site reports of severe damage to Lake High School, located in Millbury. Everhardt reported that he was able to see the funnel cloud only when electrical transformers began exploding and lighting up the sky. Brown added that there were broken natural gas lines and downed power lines in the area as well, which required EC Schumann to recall weather spotters from the area for their own safety. Continu-

ous reports came in of telephone poles and power lines down blocking roads, and live electrical wires presenting an immediate danger.

During the early morning hours, EC Schumann was advised by Wood County Sheriff Mark Wasyslyshyn that a temporary command center was being set up across from the Lake Township Police Department building, which had been heavily damaged by the tornado. A decision was made to deploy the Wood County ARES trailer there. A supply of police band radios were kept in the trailer along with a generator and other Amateur Radio equipment if needed. Subsequently, Sheriff Wasyslyshyn reported that communications had been restored to Lake Township. Many Wood County ARES members remained on standby. EC Schumann was proud of the work that was performed by the radio amateurs of Wood County: "It's my hope that their dedication was responsible for the reports that ultimately sounded the sirens, which saved lives."

District Emergency Coordinator (DEC) George Henzler, WB8HHZ, maintained contact with Ohio Section Emergency Coordinator (SEC) Jack Sovik, KB8WPZ, during the time of the incident, as is outlined in the Ohio Section Emergency Re-

sponse Plan. Sovik said "The professionalism of the ARES members, working in conjunction with the National Weather Service and their SKYWARN program, as per the written Memorandum of Understanding, saved lives and kept the NWS and the public apprised of the situation that was developing in the immediate affected areas."

ARRL Comments in FCC Spread Spectrum Proceeding

In response to a 2006 ARRL Petition regarding spread spectrum issues, the FCC released a Notice of Proposed Rule Making (NPRM) on March 16 (WT Docket No 10-62). The Commission is looking to amend Part 97 to facilitate the use of spread spectrum communications technologies by eliminating the requirement that amateur stations use automatic power control (APC) to reduce transmitter power when the station transmits a spread spectrum (SS) emission, as well as reducing the maximum transmitter power output when transmitting a SS emission. The ARRL filed comments on this matter on June 14, 2010. Read more here.

The Doctor Is IN: D-STAR, Antennas and Amplifiers

+Tom Copley, K4YAZ, finds that he needs to use more power to consistently reach my local D-STAR repeaters in the Tampa Bay area. I live in a condo and my VHF/UHF antenna is on a second floor porch. Moving it higher or into the clear is out of the question, due to my condo association. I am using a dual band transceiver with 50 W output on high power. This is not enough to consistently reach the local repeaters.

Since I am mainly using the 70 cm band, I have purchased an amplifier that has an output of 100 W with 30 W drive on 70 cm. The amplifier also has a useful receive preamp. To obtain the full 100 W output from the linear, one must input 30 W. My 50 W radio would be over the input rating of my linear, and the approximately 15 W output from the radio on medium power will not drive the linear to the full 100 W output. Is there an easy solution to this issue, or do I have to get a different amplifier?

Here's what the Doctor had to say:

If you are right on the edge of the coverage area, the 3 dB increase in power may make the difference. Also consider any other losses, such as in the coax run to your antenna -- at 70 cm, coax loss can be a big factor, and if the length is more than a few feet, better coax may reduce loss by almost as much as the amplifier gain -- get every decibel you can.

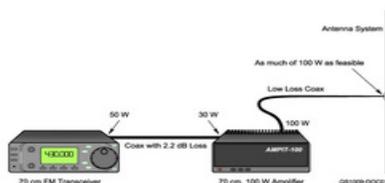
Your amplifier drive problem turns out to have an incredibly simple solution. If you have 2.2 dB loss between the radio and the amplifier, your 50 W radio output will be just 30 W at the amplifier. This only makes sense because of the preamp in the amplifier; otherwise, the loss would also reduce receiver sensitivity. With a preamp that has a reasonable gain, the noise figure and thus signal to noise ratio is determined largely by the noise figure of the preamp. On HF, making a reasonably accurate attenuator using power resistors can be easy. At UHF, component, lead and wiring inductance can make it a very difficult job -- but all is not lost!

Now for the really simple part. You need coax cable between the radio and amplifier anyway (see Figure 1). If you use coax with a loss of 2.2 dB, you're done. On 440 MHz, it takes just 16 feet of Belden 8259 RG-58 coax to get the loss -- hopefully emphasizing my earlier point! If you select a different cable, make sure you have the cable attenuation specs available. The extra coax can be neatly coiled out of the way, or better yet, move the amplifier closer to the antenna to reduce the coax length and attenuation between the amplifier and antenna. Note that this all assumes that the amplifier input is a good match to 50 ohms; if not, the coax loss will be higher. If you have a wattmeter, it will be a good idea to confirm all the power levels when you're done -- and life being what it is -- plan to do a little trimming.

ton, CT 06111 (no phone calls, please). Look for "The Doctor Is IN" every month in QST, the official journal of the ARRL.

FCC Seeks Comments on Amateur 5 MHz (60 Meters) Allocation

In May, the FCC released a Notice of Proposed Rulemaking (NPRM) -- ET Docket No 10-98 -- proposing to amend the Part 97 rules governing the Amateur Radio Service. Specifically, the Commission looks to modify the rules pertaining to the use of five channels in the 5330.6-5406.4 kHz band (60 meters) to replace one designated channel with one that is less encumbered, to authorize three additional emission designators and to increase the maximum authorized power in this band. On June 15, a summary of the NPRM was published in the Federal Register, which started the clock on the deadline for comments. Comments must be filed on or before July 15, 2010 (30 days after publication in the Federal Register); reply comments must be filed on or before July 30, 2010 (45 days after publication in the Federal Register). Instructions on how to file comments are listed beginning on page 6 of the NPRM.



Thanks Doctor! Do you have a question or a problem? Send your questions via e-mail or to "The Doctor," ARRL, 225 Main St, Newing-

**PARK MINUTES
March 8, 2010**

There were 23 members and guests present at Mary's Plane View Restaurant for the March meeting of the P A R K club.

President Connie Hamilton N8IO opened the meeting at 7:00 PM.

The minutes of the last meeting were read and approved. The treasurer's report of \$2293.20 was given by Ray Johnson KC8RUJ.

Unfinished business: A report was given on the "New Ham/Upgrade class".

New business: New members approved were Earl Hulce KB8HRG and Diane Hulce N8PYE.

Several guests from the ham class were welcomed.

Needing VE's for the testing at the conclusion of the class, it was questioned how many ARRL VE's we had. Jim Palmer K8BOT was the only one present.

Upcoming hamfests: Raleigh NC April 3, Jackson County April 2.

Ken Harris WA8LLM announced upcoming activities: Vienna Road Race April 17, Mountwood Park bicycle race May 2, Chic-fil-a race May 15. Anyone wanting to help with communications should contact Ken.

The meeting adjourned at 7:15 PM.

**PARK MINUTES
April 12, 2010**

There were 22 members and guests present at Mary's Plane View Restaurant for the April meeting of the P A R K club.

President Connie Hamilton N8IO opened the meeting at 7 PM. Introduc-

tions were made and the 50/50 drawing of \$13.50 was won by Laura Deems KC8DJI.

The minutes of the March meeting were read and approved. The treasurer's report was given by Ray Johnson KC8RUJ.

Unfinished business: ARRL testing will be on May 24 7 PM at the Baptist Temple. Jerry Wharton KA8NJW may still be a VE.

John Miller KJ8M needs to send QSL envelopes to the bureau.

For field day, Blaine WA8IOE, Jep K8BOT, Jerry KA8NJW, Dan WV8X and Vern K8VRN will be operators. Blaine will call to reserve Fort Boreman Park. Field day rules are in the May issue of QST on page 79.

Ken Harris WA8LLM has ARES cards to pass out to those that have not received them yet. He is also registering operators for the half marathon in August.

Georgia Milhoan is undergoing chemo treatment and a get well card was sent.

A need was noted for an activities manager to arrange some activities at our monthly meetings.

The Athens hamfest is April 25. Jep K8BOT moved and Jerry KA8NJW seconded to adjourn at 7:30 PM.

**PARK MINUTES
June 14, 2010**

There were 26 members and guests present at Mary's Plane View Restaurant for the June meeting of the Parkersburg Amateur Radio Klub.

President Connie Hamilton N8IO opened the meeting at 7 PM.

Curt K8UC's birthday was recognized.

The minutes of the last meeting were read and approved. There was no treasurer's report and no 50/50 drawing.

Connie gave a report on the recent school and testing. Connie Hamilton N8IO, Jefferson Slattery N8SUZ, Larry Deems N8TGI, Carl Long K8OWL, Larry Dale KF8NW and Paul Jett N8PJ were the participating VE's. Sean Brady KD8ODS and Ronald Stover KD8ODT passed the Technician test. David Miller KD8MJB upgraded to General. Three others were not successful. Randy Watkins KD8ODT later passed the Technician test at the Dayton Hamvention. \$30 was turned in to the club for the VE's expenses. Carl Long K8OWL was thanked for instructing the class.

Unfinished business: More discussion on the field day plans. Jerry KA8NJW called a planning meeting for next Monday, the 21st at 6 PM at Fort Boreman Park. The club will furnish beverages, rolls, meat and some plates for the Saturday evening field day picnic.

There were 7 at the last mowing party at the 146.97 repeater site. The next mowing will be after field day.

Jim K8BOT reported that work needs to be done on the 147.39 repeater tower, pouring concrete, adding guy wires and adding a top tower section.

Dan WV8X moved Connie's dipole for tree trimming.

Jim K8BOT moved and Jerry KA8NJW seconded to adjourn at 7:31 PM.

Minutes recorded by Ray N8TWV, secretary

Present were: Emily Bodie KB8YPB, Dave Wright N8NWV, Luke Sigmon, Donna Sigmon, Mark Sigmon, Jerry Wharton KA8NJW, Lynn Palmer N8IIM, Jim Palmer K8BOT, Irene Fouse N8KYP, Curt Fouse K8UC, Fred Nulter KB8CCP, Martha Nulter, Al Worstell KE8UN, Blaine Auville WA8IOE, Libby Auville KA8FUA, Jerry Yancey KB8PZR, Ann Yancey, Connie Hamilton N8IO, Sean Brady KD8ODS, Mark Leatham KR5N, Dan Betts WV8X, Robin Betts, David Miller KD8MJB, Carl Long K8OWL, Vern Snell K8VRN, Ray Bodie N8TWV.

Legislative: HR 2160 Now Counts 40 House Sponsors

Last month, another Congressional Representative -- Mike McIntyre (D-NC-7) -- pledged his support for HR 2160, The Amateur Radio Emergency Communications Enhancement Act of 2009, bringing the total number of cosponsors to 40, including original sponsor Sheila Jackson-Lee (D-TX-18). HR 2160 is also sponsored by W. Todd Akin (R-MO-2), Michael Arcuri (D-NY-24), Roscoe Bartlett (R-MD-6), Jo Bonner, (R-AL-1), John Boozman (R-AR-3), Madeleine Bordallo (D-Guam), Andr © Carson (D-IN-7), Geoff Davis (R-KY-4), Bob Filner (D-CA-51), Jeff Fortenberry, (R-NE-1), Scott Garrett (R-NJ-5), Bart Gordon (D-TN-6), Brett Guthrie (R-KY-02), Maurice Hinchey (D-NY-22), Michael Honda (D-CA-15), Mary Jo Kilroy (D-OH-15), Ron Klein, (D-FL-22), Tom Latham (R-IA-4), Zoe Lofgren (D-CA-16), Blaine Luetkemeyer (R-MO-9), Thaddeus McCotter (R-MI-11), Michael E. McMahon, (D-NY-13), Cathy McMorris Rodgers, (R-WA-5), Charlie Melancon (D-LA-3), Candice Miller (R-MI-10), Dennis Moore (D-KS-3), John Olver (D-MA-1), Bill Posey (R-FL-15), Denny Rehberg, (R-MT), Dana Rohrabacher (R-CA-46), Aaron Schock, (R-IL-18), Bennie Thompson (D-MS-2), Michael Turner (R-OH-3), Greg Walden, W7EQI (R-OR-2), Peter Welch (D-VT), David Wu (D-OR-1), C.W. Bill Young (R-FL-10) and Don Young (R-AK). On the Senate side of Capitol Hill, S 1755 -- also called The Amateur Radio Emergency Communications Enhancement Act of 2009 -- cleared the Senate by unanimous consent in December 2009 and now sits in

the House Committee on Energy and Commerce. Click here for information on how to encourage your Congressional representative to sponsor HR 2160.

Public Service: WX4NHC and Amateur Radio Featured on NHC's New Hurricane Preparedness Web Site

In April, the National Hurricane Center (NHC) debuted a new Web site dedicated to hurricane preparedness. The site explains that a lack of hurricane awareness and preparation are common threads among all major hurricane disasters, and that by knowing your vulnerability and what actions you should take, you can reduce the effects of a hurricane disaster. One of the tools that the NHC mentions on its Web site is WX4NHC, the Amateur Radio station located at NHC Headquarters in Miami, Florida. In speaking about the WX4NHC volunteer ham radio operators, the NHC notes that "formal Amateur Radio activity at the National Hurricane Center was initiated in 1980 and has been an important source of real-time weather observations before, during and after hurricane landfalls. Dedicated ham radio volunteers work at NHC during storm events to help provide NHC meteorologists with very important data that is used in the hurricane warning process. Please visit www.wx4nhc.org for a more detailed history of the WX4NHC ham radio service." WX4NHC Assistant Coordinator Julio Ripoll, WD4R, said he hopes that this updated NHC Web page "will help promote public awareness about

Amateur Radio and more activity from the Amateur Radio community during this hurricane season."

ARRL Field Day: It's a Wrap!

W1AW Station Manager Joe Carcia, NJ1Q, operates 6 meters on Sunday morning during Field Day. [Pete Gloistein, KC2PJH, Photo]

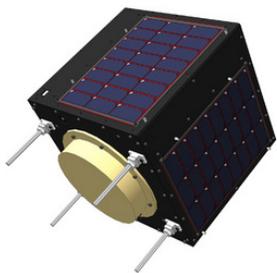
With more than 500 Field Day logs already received -- and more coming in every day -- it's safe to say that this year's ARRL Field Day was a smashing success! Conditions, at least on the East Coast, were quite good. Operators at W1AW, the Hiram Percy Maxim Memorial Station, worked almost 3000 stations during Field Day, including a few California stations on 6 and 10 meters, as well as North Dakota on 10 meters on Saturday. Don't forget to send in your Field Day logs. Logs for 2010 ARRL Field Day must be postmarked, e-mailed to the ARRL, posted to the Field Day Web Submission Applet site or submitted by 2059 UTC Tuesday, July 27, 2010. Late entries cannot be accepted. You can also post your Field Day stories and photos on the Field Day Soapbox. The 2011 ARRL Field Day will be June 25-26.



PARK Field Day 2010
Thx N9NWV for PIX.

Amateur Radio in Space: Amateur Community Need- ed to Assist Japanese Ama- teur Interplanetary Satellite

An informal network of ham radio experimenters, scientists and CW enthusiasts called FlyVenusCom -- a nonprofit, cross-cultural effort -- has been created to support communication efforts by Japanese scientists with its CubeSat Venus probe, UNITEC-1. This CubeSat was developed by 20 universities of the University Space Engineering Consortium (UNISEC), the Japanese community developing nanosatellites. The Japanese UNITEC-1 team has called for ham radio assistance worldwide in improving and testing two areas of the CubeSat's mission. What makes this mission of particular interest to amateurs is the fact that the UNITEC engineers have added a 5 GHz Amateur Radio beacon to the spacecraft and they are encouraging hams to attempt to receive it. On May 21, Japanese ground stations reported receiving the CW and FSK beacons (call sign JQ1ZUN) at a distance of about 30,000 km. They measured the beacon frequency at 5839.91 MHz. Even though the latest reports say that the signal has been lost, the UNITEC team is trying to re-establish contact with the satellite. Read more here.



An artist's rendition of the UNITEC-1 CubeSat.



FCC News: In FCC Rule Making Proceeding, ARRL Supports Employee Participation in Drills

In March 2010, the FCC released a Notice of Proposed Rule Making (NPRM) (WT Docket No 10-72) that proposed to amend the Part 97 rules -- specifically 97.113(a)(3) -- governing the Amateur Radio Service. The new rules would provide that, under certain limited conditions, Amateur Radio operators may transmit communications on behalf of their employers during government-sponsored emergency and disaster preparedness drills. While current rules provide for Amateur Radio use during emergencies, the rules prohibit communications where the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer, except for government-sponsored drills for which a waiver has been granted. The NPRM asked for comments from interested parties. As such, on May 24, the ARRL filed its initial comments and on June 7, filed its reply comments. The ARRL's filings reflect the position adopted by the Board of Directors at its January 2010 meeting. Read more here.

TO: ALL WEST VIRGINIA ARES® MEMBERS (OFFICIAL)

ALL ARES AND NON-ARES® AMATEURS ANYWHERE (INFORMATION)
FROM: KEN HARRIS, WA8LLM, WV SEC-

TION EMERGENCY COORDINATOR

WOOD COUNTY EMERGENCY COMMUNICATIONS INCORPORATED

WV ARES® BULLETIN
NR 10.23 DATE: June 6, 2010

SUBJECT: NOTHING IS FOOL PROOF

When trying to protect yourself during severe weather, such as Lightning Storms, there's not sure way of being safe.

Even though you may reduce the chances of taking a lightning hit by disconnecting your outside antennas, and using a smaller antenna in your attic, or other parts of your house, as suggested in WV ARES Bulletin NR 10.19, they too can be hit.

Lightning is looking for a path to ground, and if you, or your antenna, is in it's way, you can still take a hit. Lightning doesn't always take the path of least resistance as you may have heard. I've seen lightning go straight to the ground, and miss hitting a 50 foot tower by ten feet. Lightning has a mind of it's own, and you can't predict where, or what's it's going to hit.

The best thing you can do is be sure you have everything grounded with a good ground and ground connections. The better the grounding system that you have, the better the chances you have of staying safe, and protecting you, and your equipment. Make sure that if lightning is going to strike, that it has a good path to ground, and that it doesn't go looking elsewhere for a better ground.

There's no fool proof way of staying safe during a Lightning Storm. (idea for this bulletin from Dirk Burnside, WD8PAD)

Ken Harris, WA8LLM, Wood County WV WV ARES® Section Emergency Coordinator