



# Di-Dah-Dit

Official Newsletter of the Parkersburg Radio Klub  
1733 Gihon Rd. Parkersburg, WV 26101

## ARRL'S TECHNICAL INFORMATION SERVICE PROVIDES MEMBERS WITH ANSWERS

**H**ave you ever had a technical question that you weren't able to figure out?

Even after checking with publications such as The ARRL Handbook or the ARRL Antenna Book, you're still stumped. Have you exhausted every resource you can think of, including your Section's Technical Coordinator (TC)

<<http://www.arrl.org/FandES/field/org/tc.html>>? Just when you think you're at the end of your rope, you remember the ARRL Technical Information Service  
<<http://www.arrl.org/tis/>>.

The TIS is staffed by members of the ARRL Lab and is here to provide technical assistance at no cost to ARRL members.

Many members seem to be using the service: In a six week period (October 20-November 30, 2008), ARRL Lab staff fielded almost 1300 requests for information from the TIS. These ranged from questions on how to choose the best radio, propagation and BPL to questions concerning antennas, feed lines and towers.

ARRL TCs and Technical Specialists (TS) <<http://www.arrl.org/FandES/field/org/ts.html>> in the field and at ARRL Headquarters can answer your questions on topics ranging from A (ampere) to Z (impedance) -- and just about anything in between. Our technical staff will help you over the phone, refer you to a volunteer ARRL TS in your area or send you the needed information from a growing collection of information packages. For really difficult questions, an ARRL Lab Engineer will research the League's technical library and send you an answer by postal or electronic mail.

ARRL Lab Engineer Mike Gruber, W1MG, remembers a question that a member sent in recently via e-mail: "I have a 250 foot run of Buryflex 213 from the shack to the

switchbox at the top of the tower. I know that results in significant loss at, say, 14 and 18 MHz (I seldom work 10 or 15 and the tower antennas are only for HF), but here is the question: Is it ENOUGH of a loss (for the receiver) to warrant running hardline (it would be free) between the shack and tower switchbox with a tail of about 10 feet of 213 inside the shack, and another tail of about 10 feet at the tower end, running from the switchbox to the TA-33, considering the insertion loss of two additional connectors (to connect the hardline to the 213 on each end) and the impedance difference of the hardline compared with the 213?"

Gruber answered the ham, providing a chart he developed, showing "some losses shown for 250 feet of RG-213 vs half-inch hardline. I selected 50, 100 and 150 ohm resistive loads for this analysis. Any rate, if you consider the case with the highest loss -- 29 MHz with a 150 ohm load -- will only improve by  $3.9 - 1.544 = 2.4$  dB. If you consider that a typical S-unit is 6 dB, the most dramatic improvement in the example cases I selected is still less than half of an S-unit. It's not a home run by any stretch of the imagination. Of course, that extra 2.311 dB may be significant in some cases. If you ran 1500 W, you would only have 881 W at the antenna feed point. The rest would be lost in the feed line."

ARRL Senior Lab Engineer Zack Lau, W1VT, recalls an interesting question he received from a member: "How can I make a simple circularly polarized antenna out of linear elements?" Lau referred him to an article he wrote, "A Simple 10-Meter Satellite Turnstile Antenna," that appeared in the November/December 2001 issue of QEX.

The TIS, as one of the many services it offers, maintains a database of more than 2000 suppliers that provide goods and services of interest to radio amateurs  
<<http://www.arrl.org/tis/tisfind.html>>.

These include manufacturers, dealers, publications, clubs and museums, just to name a few. The TIS also keeps what they call an "expanding list" of technical pages that include articles from QST, QEX and The ARRL Handbook, as well as original articles on a variety of subjects including theory, tutorials and projects  
<<http://www.arrl.org/tis/tismenu.html>>.

Many pages also contain additional sources for materials and information and Web links of particular interest.

If you need a copy of the QST Product Review from May 1985 that featured the ICOM IC-271A 2 meter multimode transceiver, look no further. The TIS also keeps a list of every QST Product Review published since 1970

<http://www.arrl.org/tis/info/prodrev.html>>. ARRL members can also download any QST Product review published after 1980  
<<http://www.arrl.org/members-only/prodrev/bymfg.html>>. If you need a quick summary of any HF transceiver featured in a QST Product Review, you can also find it on the TIS Web site.

The TIS also maintains the ARRL Periodicals Archive and Search

<<http://www.arrl.org/members-only/qqnsearch.html>>. This feature provides ARRL members with PDF copies of all QST articles from December 1915 through December 2005, enabling members to view and print their favorite article, project and more. The ARRL Periodicals Archive and Search lists every article for QST from 1915 to the present, QEX from 1981

to the present, Ham Radio Magazine from 1968 to 1990 and NCJ from 1973 to the present (please note that beginning in 1998, each issue of QEX covers two months).

"Having access to every issue of QST through 2005 is absolutely incredible!" said ARRL Lab Manager Ed Hare, W1RFL. "The best of the best of QST from every era is now at the fingertips of every ARRL member with a keyboard and an Internet connection. Members can research articles on any subject that interests them, or just browse the past issues. This valuable content will help radio amateurs who use QST as a technical resource -- for projects, equipment 'hints and kinks' -- and for other research contributing to the advancement of the radio art."

For those needing a higher quality reprint, a reprint from QEX or NCJ, or for hams who are not members of the ARRL, the TIS also provides photocopies of articles for a nominal fee <<http://www.arrl.org/members-only/artcopies.html>>. You can reach the TIS via e-mail <<mailto:tis@arrl.org>> or by phone at 860-594-0214.

The TIS is just one of the many benefits available to ARRL members. To learn about all the benefits of ARRL membership, including QST, e-mail forwarding service, the outgoing QSL service and more, please visit the ARRL Membership Web page <<http://www.arrl.org/join>>.

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WV ARES BULLETIN NR 09.14

TO: ALL WEST VIRGINIA ARES MEMBERS (OFFICIAL) ALL ARES AND NON-ARES AMATEURS ANYWHERE (INFORMATION)

FROM: KEN HARRIS WA8LLM, WV SECTION EMERGENCY COORDINATOR, WOOD COUNTY EMERGENCY COMMUNICATIONS INCORPORATED  
DATE: April 5, 2009

SUBJECT: AUTOMATIC DIAL TELEPHONES

Do you have a telephone that has the ability to dial pre-stored telephone numbers so that you only have to press one button to make a telephone call?

Is that telephone placed in a location that is secure and can't be accidentally activated by a pet, such as a dog or cat?

It might be a little embarrassing to let someone outside of your home listen to private conversations that might be going on in your home.

If your telephone is like a lot of other telephones, it also has the ability to dial the emergency number, 911. This can also be embarrassing to have a visit from your local Fire, Police, and Ambulance Squads. It's a normal protocol when the 911 Center gets an emergency telephone call on 911, and there's no conversation on the line. They automatically dispatch emergency responders to the telephone caller's location.

So if you have an automatic number dialing telephone, and any pets, be sure to keep the telephone in a place that it can't be accidentally knocked off hook and any buttons pressed as the pet walks over the phone, otherwise you may let the whole world know what is going on inside your home, or have an unwanted visit from your local emergency responders. (Inspired by an hour and ten minute silent telephone call).

See how easy it is to come up with an idea for a bulletin. If you ever have an idea for a bulletin, let me know.

Ken Harris WA8LLM, Wood County, WV  
ARRL WV ARES Section Emergency Coordinator  
WV ARES District 3 Emergency Coordinator

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### NWS AWARDS ARKANSAS HAM TOP HONOR

In late March, officials at the National Weather Service (NWS) office in Little Rock, Arkansas, awarded Brother Anselm Allen, WB5JLD, the prestigious Thomas Jefferson Award for his service as a Cooperative Weather Observer <<http://www.nws.noaa.gov/om/coop/>>. Named for the third President of the United States -- who kept an almost unbroken series of weather records from 1776 to 1816 -- the award is the highest and most prestigious award bestowed on Cooperative Weather Observers; only

five Jefferson Awards are conferred each year. Cooperative observers are trained by the NWS to provide temperature (air and soil), precipitation and river data on a daily basis.

In addition to Allen's outstanding support of the National Weather Service, he is also an Amateur Radio operator and is active on local nets. Allen is only the second observer to receive the Jefferson Award in the Little Rock County Warning Area

<<http://www.srh.noaa.gov/lzk/html/imgviewer1.php?pic=x73>>.

The NWS has trained more than 11,000 people to take weather observations on farms, in urban and suburban areas, National Parks, seashores and mountaintops, giving the NWS a true weather picture representative of where people live, work and play. Formally created in 1890 under the Organic Act, the Cooperative Observer program has a twofold mission: To provide observational meteorological data, usually consisting of daily maximum and minimum temperatures, snowfall, and 24-hour precipitation totals, required to define the climate of the United States and to help measure long-term climate changes; and to provide observational meteorological data in near real-time to support forecast, warning and other public service programs of the NWS.

Volunteer weather observers provide data that are invaluable in learning more about the floods, droughts, heat and cold waves. The data are also used in agricultural planning and assessment, engineering, environmental-impact assessment, utilities planning and litigation. Information gathered by Cooperative Observers plays a critical role in efforts to recognize and evaluate the extent of human impacts on climate from local to global scales. -- Information provided by the National Weather Service, Little Rock

## **PARK Minutes February 9, 2009**

There were 15 members and guests present at Mary's Plane View Restaurant for the February meeting of the PARK club.

Vice President Connie Hamilton N8IO opened the meeting at 7 PM.

The 50/50 drawing of \$8.00 was won by Dave Wright N8NWV.

The minutes of the last meeting were read and approved and the treasurer's report was given by Carol Johnson KC8TUD. She reported a balance of \$2,595.44.

Mark KR5N is thinking about putting the club site on QTH.com or QSL.com. They should be free.

Connie N8IO reported that the license of Larry Hunt KC8LTI is about to expire.

The autopatch on the 147.39 repeater may not work after this month due to the addition of another area code and the requirement to dial 10 numbers. No action was taken, and it was tabled until next month to see if it still works.

Connie N8IO announced that the Marietta club will be holding an auction tomorrow at their regular meeting, to auction off used and surplus equipment.

The meeting adjourned at 7:13 PM after which Roy Maull N8YYS gave a talk on Air Force MARS. He stated that that membership is free and there is a 2 to 3 week training period where you learn how to check into the nets and to pass traffic. It requires a Technician or higher license and requires 6 hours operating each quarter. They operate just outside the Amateur bands. There are several modes used. You can usually get some equipment for free.

minutes recorded by Ray N8TWV,  
secretary

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## **PARK Minutes March 9, 2009**

There were 16 members and guests present at Mary's Plane View Restaurant for the March meeting of the PARK club.

Vice President Connie Hamilton N8IO called the meeting to order at 7 PM.

The 50/50 drawing of \$6 was won by Lynn Palmer N8IIM.

The minutes of the February meeting were read and approved. The treasurer's report of \$2634.84 was given by Carol Johnson KC8TUD.

The auction at the Marietta Amateur Radio Club was announced in error last month and it will be held tomorrow night, March 10.

Mark KR5N has a Century 21 CW rig for sale. Curt K8UC bought it.

Any action on the 147.39 auto patch was tabled until next month.

Mark KR5N has had no response from QSL.net and is still looking for a site for the club web site.

Herb Whitlatch KC8JHM submitted an application for club membership. Bill Arnott W8WHA moved and Fred Nulter KB8CCP seconded that he be accepted. Motion passed.

Jep K8BOT gave a report on the Orlando hamfest. There was a huge flea market and many dealers were there. He also checked out many mobile antennas in the parking lot. One pickup in particular had an array mounted with and electric motor that enabled it to fold down automatically so it could be driven into a garage.

Jep K8BOT moved and Bill W8WHA seconded to adjourn at 7:15 PM.

minutes recorded by Ray N8TWV,  
secretary

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## **PARK Minutes April 13, 2009**

There were 18 members and guests present at Mary's Plane View Restaurant for the April meeting of the PARK club.

Vice president Jim Palmer K8BOT called the meeting to order at 7 PM.

The 50/50 drawing of \$13 was won by Carroll Ayers K8BXW.

The minutes were read and approved and the treasurer's report of \$2688.84 was given by Ray Johnson KC8RUJ, treasurer.

Under old business, the autopatch discussion on the 147.39 repeater was tabled until next month.

A get well card was signed for Connie N8IO.

A basic Skywarn class was conducted by Jason Franklin from the National Weather Service in Charleston. Those completing the information form should receive a certificate. Ham radio operators are important in reporting weather conditions that fall under the radar. Some things to be reported are winds in excess of 58 mph and 3/4" or larger hail. Phone numbers are 800-401-9535 and an automated line at 877-633-6772.

Ray KC8RUJ moved and Dave N8NWV seconded to adjourn the meeting.

## ARRL COMMENTS ON BROADBAND PROVISIONS IN RECOVERY ACT

On March 24, 2009, the FCC invited comments from interested parties concerning the Commission's consultative role in the broadband provisions of the American Recovery and Reinvestment Act of 2009 (Recovery Act) <[http://www.fcc.gov/Daily\\_Releases/Daily\\_Business/2009/db0324/DA-09-668A1.pdf](http://www.fcc.gov/Daily_Releases/Daily_Business/2009/db0324/DA-09-668A1.pdf)>. In the Recovery Act, Congress assigned grant and loan making responsibilities to the Department of Commerce's National Telecommunications and Information Administration (NTIA) and the Department of Agriculture's Rural Utilities Service (RUS). On April 13, the ARRL, through General Counsel Chris Imlay, W3KD, submitted comments <<http://www.arrl.org/news/files/BroadbandDefinitionDocket09-40.pdf>> that expressed concern as "the threshold for what constitutes 'broadband' is a critical determination that will inevitably determine the success or failure of the [Broadband Technologies Opportunities Program] BTOP <<http://www.ntia.doc.gov/broadbandgrants/>> program going forward."

In the League's comments to the FCC, the ARRL asked the Commission to adopt as the definition of broadband "those technologies capable of the minimum threshold bidirectional speeds [as recommended in the ARRL's comments], without variation among the type of broadband technology under consideration, as a minimum threshold in order to be considered for grants or loans of public funds."

While the FCC has no funds under the Recovery Act for grant or loan making, it does, however, have what the Commission describes as "an important role to play in providing expert, technical advice to the NTIA" as it establishes the BTOP, "and the Commission may also provide expert, technical advice to RUS as it proceeds with its own programs."

Imlay pointed out to the Commission that the ARRL actively participates in the Committee for Communications Policy of the Institute of Electrical and Electronics Engineers-USA (IEEE-USA CCP), "which has engaged in considerable discussion of universal access to high-speed broadband networks, and in particular, broadband definitions and target goals for broadband deployment" <<http://www.ieeeusa.org/volunteers/committees/ccp/>>.

He told the Commission that the ARRL "wholeheartedly concurs" with that organization's views on broadband technologies, as detailed in its position statement, 'Nationwide High Speed Broadband Data Services,' that says "The most important short-term goal is broadening ubiquitous availability [of broadband]. Data rates should be sufficient to provide the equivalent of several channels of bidirectional, high resolution video, achievable by expanding the capabilities of current technologies" <<http://www.ieeeusa.org/policy/positions/broadband.pdf>>.

The IEEE also says that it "initially advocates" the achieve-

ment of at least 20 Mb/s bidirectional speed with 90 percent availability throughout the nation within five years. "The wide penetration of such speeds will achieve most of the expected benefits and accommodate numerous simultaneous applications per household or small business. Of course, greater speeds can be had by those with greater needs. We further advocate the achievement of at least 100 Mb/s bidirectional speed with availability to all businesses and households within 10 years. The technology necessary to meet this goal is scalable to almost any future need at inexpensive upgrade costs."

Imlay said that IEEE-USA's position statement concludes that there are "two overarching goals for nationwide high-speed broadband networks: widespread availability and high performance." In providing public funds to achieve widespread availability, Imlay stated that the FCC, NTIA and the RUS should ensure that high performance should not be set aside to achieve that goal. "This," he told the Commission, "to ARRL, means the establishment of a floor for throughput of at least 20 Mb/s bidirectional speed for funding of broadband systems to be developed between now and 2014, and 100 Mb/s bidirectional speed for those systems to be implemented between 2014 and 2019. Expenditure of public funds should be limited to the technologies that can meet these goals."

The IEEE-USA statement also notes, Imlay explained to the Commission, that the FCC's re-

cently adopted definition of broadband speed "is a series of tiers, starting as low as 768 kb/s. As noted in the statement, this is woefully inadequate to perform even current computing applications." Imlay called for an elimination of tiers "at least for purposes of determining what broadband technologies should be funded with public funds."

Imlay, in his comments, said that the "most urgent" of the FCC's "consultative issues with the NTIA" involve defining just what broadband is. "The Commission is obligated pursuant to the Recovery Act to consult with NTIA on the establishment of a national broadband service deployment and expansion program, and the NTIA is obligated, through the BTOP program, to provide access to broadband service to consumers residing in unserved areas," he said. "It is not useful in the expenditure of large sums of Recovery Act funds to promote broadband technologies that do not include the capabilities needed by individuals and businesses located in rural or underserved areas. Therefore, the threshold for what constitutes 'broadband' is a critical determination that will inevitably determine the success or failure of the BTOP program going forward."

The ARRL recognizes that the FCC has struggled with this definition for some time, Imlay wrote: "Indeed, in the Notice of Inquiry in Docket 09-51, FCC 09-31, released April 8, 2009 (at ¶15-16), the Commission stated that 'Broadband can be defined in myriad ways. In order to ensure

that all people of the United States have access to broadband capability, we must make sure that the Commission appropriately identifies goals and benchmarks in this regard...In addition, to the extent that broadband is defined by 'speed,' should the Commission consider raising the speeds that define broadband? Should we distinguish among the various broadband technologies?" <[http://www.fcc.gov/Daily\\_Releases/Daily\\_Business/2009/db0408/FCC-09-31A1.pdf](http://www.fcc.gov/Daily_Releases/Daily_Business/2009/db0408/FCC-09-31A1.pdf)>

Imlay said that it is the ARRL's position that the definition of "broadband" should include an "absolute lower threshold, minimum bidirectional speed. It should not be a variable concept determined by technology. To do otherwise is to provide grants and loans of public funds to technologies whose benefits are, in the medium term, inadequate and which might, for example, render businesses in rural areas less competitive than those located in urban areas. It is, in other words, not useful to fund the creation of infrastructure that will be obsolete in the near term or less useful than other technologies which provide greater speeds. That simply perpetuates the status quo, where there will still, going forward, be adequately served and underserved areas. The status quo is quite obviously unacceptable to Congress, and it should be.

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## FCC, INDIANAPOLIS POLICE DEPARTMENT ADDRESS UNLICENSED OPERATIONS

In response to an investigation by the FCC, the Indianapolis Metropolitan Police Department (IMPD) has taken action to prevent further use of Amateur Radio frequencies by unlicensed officers. Any Amateur Radio equipment in the cruisers of unlicensed officers was removed by order of IMPD Chief of Police Michael T. Spears.

According to the FCC, some IMPD officers were using the radios to supplement their normal communications channels, including using amateur frequencies for tactical communications during drug surveillance. As part of its inquiry, the FCC reminded the IMPD of the large number of tactical channels available on a secondary basis to police departments from the public safety pool of frequency allocations.

"We are pleased that IMPD has put a stop to this unlicensed activity," said ARRL Regulatory Information Manager Dan Henderson, N1ND.

"The investigation by the FCC, coupled with the expedient cooperation and correction of the problem by the IMPD, eliminates a situation that had raised serious concerns in the amateur community."

The FCC stated they would monitor the situation and follow-up appropriately if needed.

## Radio-A-Day Give Away and HAMFEST

Wood County Emergency Communications Inc. (WCEC) is holding a Radio-A-Day Give Away raffle based on the September WV Daily Pick-3 Lottery. The drawing will be held during the Wood County Hamfest in Parkersburg , WV on October 10, 2009.

WCEC is selling 1000 tickets numbered 000 through 999 which will be sealed in envelopes. There is a radio prize for every day (except Sundays) in the month of September, 2009 for the ticket matching the WV Daily Pick-3 number for that day. In addition, purchasers of tickets numbered 000, 111, 222, 333, 444, 555, 666, 777, 888, and 999 will be instant winners of \$200.

All radios are new and in the box. Radios that will be given away are: 2-Icom IC-706 MKIIG, 2-Yaesu-FT450, 1-Icom IC-718, 2-Kenwood TM-V71A, 2-Alinco DR-635T, 2-Yaesu FT-8800R, 2-Icom IC-208H, 1-Alinco DR-06T, 1-Yaesu FT-7800R, 1-Yaesu VX-6R, 1-Alinco DJ-V5TH, 1-Alinco DJ-596T MKII, 2-Icom IC-V8000, 1-Yaesu FT-60R, 1-Alinco DX-70H, 3-Alinco DR-135T MKIII, and 1-Icom IC-2200H.

The finalization and awarding of ALL prizes, and winnings, will be at the Wood County Hamfest, 2501 Dudley Ave. , Parkersburg , WV on October 10, 2009 at 11:00AM. You DO NOT have to be present to win; prizes, ad winnings, will be shipped at no cost to the winners. This Raffle is NOT limited to residents of WV, anyone can enter.

Tickets are \$20.00 each and may be purchased from any WCEC member, or by going to the website: <http://www.wc8ec.com> For additional information check the WCEC website or contact Ken Harris WA8LLM, ARRL WVSEC at: [wa8llm@yahoo.com](mailto:wa8llm@yahoo.com) or (304) 679-3470.

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