

# DELTA AMATEUR RADIO CLUB

# SPARKS

P. O. BOX 750482 MEMPHIS, TN 38175-0482 / VOL. 16 / JUNE, 2004



Welcome  
to the

**Delta Amateur Radio Club!**

Visit our home on the web at: <http://www.deltaclub.org>

**W4BS**  
**REPEATER**  
**SYSTEM**

146.82, 147.36, 224.42  
443.2 & 145.03 packet

## JUNE 2004 CLUB MEETING

**DATE:** June 8, 2004 ( 2nd Tuesday - be there )  
**PLACE:** Ellendale Church Of Christ, 7365 Highway 70,  
Memphis, Tn. ( 2 miles east of Hwy. 64-Stage Rd. )  
**TIME:** 7:00 PM  
**PROGRAM:** Field Day, Ben KU4AW

**VE TESTING:** Don't forget the monthly Volunteer Examiner testing session. Registration begins at 5:30 P.M. and testing begins promptly at 6:00 P.M. Please remember to bring two forms of identification and copies of any existing licenses or CSCE's you might have. Please be on time for registration, as you will not be allowed to enter the testing session after 6:00 p.m. This is to allow our volunteer VE team to finish in time to attend the club meeting. For more VE testing information contact...

Joan Thorne, KN4PM, VEC  
Phone: 901-737-5795  
E-mail: joant@mem.net

## PRESIDENT'S CORNER

To all of the Delta Amateur Radio Club Members:

Summer is almost here, and all those who have put off those radio projects are sure to be getting set to do them soon. The Delta Club is having the June meeting on the second Tuesday Night, as usual, June 8. The program will promote field day participation and give anyone who has any question about field day to get an answer.

Another June project, not Delta Club sponsored, is the Mid-Night Bike Ride. I have worked this event for the last several years. The Ride usually starts in Overton Sq. at mid-night and is over, for most, by about 2:30 AM on the Sunday morning that it is held on. This year's event is being coordinated by Jim Houston, KA4HOG, phone 767-8413. Should be 2<sup>nd</sup> or 3<sup>rd</sup> weekend of June.

**Please Remember: Deadline for Reports and Articles for the next issue of SPARKS is Friday, June 25th. All articles MUST be in to me by the deadline in order to be published in the next issue. Please forward all articles and items of interest to:**

[paulsonrj@bellsouth.net](mailto:paulsonrj@bellsouth.net)

We do need a Tech licensed ham to manage Delta's Field Day GOTA Station. See Ben KU4AW.

I hope you all can make this month's meeting.

73, Ned Savage, KA4BLL

**Delta Amateur Radio Club  
Board Meeting Minutes  
May 4, 2004**

Meeting called to order at 7:04 pm by Ned, KA4BLL

Tommy, KD4TJO presented two new members to the board for approval. Tom, K4TTA made a motion to accept the new members and Randy, W4RMV seconded the motion. Motion passed unanimously.

Tommy, KD4TJO read the minutes of the April board meeting. Tom, K4TTA made a motion to accept the minutes as read and Randy, W4RMV seconded. Motion passed unanimously.

Bill, KG4VAW read the treasurer's report and passed out written copies of it to all board members present. Tom, K4TTA made a motion to accept the treasurer's report and Tommy, KD4TJO seconded the motion. Motion passed unanimously.

**Old Business:**

Ned mentioned the Ray, AA4UK had emailed him along with some other board members to suggest having a T-shirt made for a fundraiser. The board discussed the idea but decided that this would have to be a silk-screened shirt and would probably require a substantial order to offset the cost of the setup charges. Presently, there are no plans for designing or ordering any T-shirts at this time.

Randy mentioned a web site that he had already signed the club up for last year but never

implemented where members can order all types of products online and the club would get a percentage of each sale. It could be linked off the club website. Randy will send the link info to the board members for them to look at.

**New Business:**

After much discussion about the electronic version of SPARKS and the mailed version of SPARKS Lite, Randy, W4RMV made a motion that no printed version of SPARKS be mailed out for two months (May & June) and then address the issue at the June membership meeting with the members in attendance for any comments regarding the SPARKS. If complaints are a significant number, the board will re-address the issue at the July board meeting. Bill, KC4SXT seconded the motion. The motion passed with 7 yes votes and 1 abstention.

Randy, W4RMV made another motion that we produce a single page informational brochure to be distributed at Memphis Amateur and Radio Shack with a monthly cost not to exceed \$30. Tom, KG4EOV seconded the motion. Motion passed unanimously.

Tommy, KD4TJO brought to the board's attention that he has discovered 4 new members that joined last year but were not given the prorated dues afforded new members. These four members have not renewed their dues for 2004 as of yet. Randy, W4RMV made the motion to extend credit to these four individuals for the rest of 2004 due to the accounting error made last year. Bill, KC4SXT seconded the motion. The motion passed unanimously. Tommy will send letters to the four individuals explaining the error and that their membership is now good through December of 2004.

Meeting adjourned at approximately 8:34pm.

Respectfully submitted:  
Tommy Thompson - 2004 Secretary

**Delta Amateur Radio Club  
Membership Meeting Minutes  
May 11, 2004**

President Ned Savage, KA4BLL called the May General Membership Meeting for the Delta Amateur Radio Club to order at approximately 7:16 pm local time with 38 members and guests present.

Bill, KG4VAW read the treasurer's report to the membership. There was no Secretary's report or reading of the minutes because he goofed and didn't bring the minutes with him.

**Old Business:**

There was no old business.

**New Business:**

Ned, KA4BLL introduced Darrell, KE4DHF as the new net manager for the club. Darrell addressed the meeting with a few ideas that he has for making the net run smoother and for new reporting forms that will help us get our check-in and traffic information together for reporting to the ARRL. He has reworked the preamble into a new two-page version that is easier to read. Darrell also made a plea for volunteers to be net controls and alternates. Friday and Saturday nights do not currently have a permanent net control.

Ned, KA4BLL called for introductions of all present.

Ben, KU4AW introduced a guest amateur that was with us tonight who is currently serving our country in the U.S. Navy.

Ned, KA4BLL recognized Austen, KG4GKE for his part in assisting with the Boy Scout Merit Badge College a couple of months ago.

Ben, KU4AW gave a brief overview of Field Day. There will be two HF stations in addition to the GOTA station. One will be for those members that

like the contesting flavor of Field Day while the other will be for a slightly more relaxed operating environment. There will also be a CW station and others to be discussed. Ben will be having a meeting for all station captains in a week or so.

There was no program for this month.

Ben inquired how much money was budgeted for Field Day. Ned looked at the budget and advised Ben that it was \$150.

Meeting adjourned at approximately 7:40 pm.

Respectfully submitted:

Tommy, KD4TJO  
Secretary

**VEC REPORT**

Tuesday 5/11/2004

Congratulations to the following:

Payne Kipp - KI4FNZ - Technician  
Charles Martin - KE5BLA - Technician  
Glenn Phillips - KI4FNY - Technician  
Marcus Reese - KE5BLB - General  
Marvin Woods, Jr. - KI4FOA - General

We had 7 people take 11 elements. Two persons started with no license (though one had a license that he had let expire and had to take all the elements over again \_ OUCH!). Our testers came from Bartlett, Tn - Oakland, Tn - Memphis, Tn - Saulsbury, Tn - Vaison, Ms - and the winner of distance from home - AUSTIN, TEXAS.

Thank you to the following VE's: Richard AI4BN, Arlene AA5GX, Ray N4ARH, Richard KE4NTI, Ned KA4BLL, Francis WA4ZYN and Bill KC4SXT. You all made this such a wonderful experience for all those that were testing. Now if we could only get the heat under control we would have the perfect setting. 90 degrees and summer is not

even here yet! I'll try opening some windows next month temperature and humidity permitting.  
Joan KN4PM, ARRL VE Liaison

### FROM THE ARRL WEBPAGE

#### NTIA TIPS HAND ON ITS ADDITIONAL BPL FINDINGS

National Telecommunications and Information Administration (NTIA) Acting Administrator Michael Gallagher says his agency's complete Phase 2 broadband over power line (BPL) study is targeted for release later this year. In remarks May 17 at the United Telecom Council's "Telecom 2004," Gallagher hinted at some findings in the Phase 2 study, which NTIA says will provide "additional guidance" on contending with BPL interference. The NTIA advised against putting the present FCC rule making proceeding on hold until release of its full Phase 2 report, however.

"Key Phase 2 technical analyses have been completed," Gallagher told the UTC gathering, "and the findings are appended to NTIA's comments on proposed rules." The NTIA has posted its Phase 1 BPL study on the proceeding, ET Docket 04-37, and has indicated to the FCC that it will file its comments on or about May 28.

Responsible for developing telecommunications policy for a White House that's promoting BPL, as well as for administering federal government radio spectrum that could be affected by the technology, the NTIA finds itself with a stake in both sides of the BPL controversy.

The principal concern, Gallagher acknowledged, is that BPL systems might interfere with federal government and other radio services. The NTIA's Phase 1 study showed that interference risks already are high under existing Part 15 rules. Among its recommendations for reducing interference were frequency shifting and notching as well as "refined

compliance measurement procedures."

Gallagher says the NTIA's Phase 2 study has determined that BPL aggregation (ie, total emissions from multiple BPL systems) and ionospheric propagation "is not a potential near-term problem." The agency predicts that millions of BPL devices can be deployed under the rules the FCC is expected to adopt--probably later this year--before ionospheric propagation and aggregate BPL emissions become an interference issue.

ARRL CEO David Sumner, K1ZZ, says he's curious to hear the NTIA rationalize its "near-term" assertion. "Does this mean it's okay to go ahead with a bad idea if the problems it causes are sufficiently far in the future?" he asked.

The Phase 2 study also will evaluate the effectiveness of proposed Part 15 measurement techniques and recommend a "height-correction factor" of 5 dB to BPL measurements made at a height of 1 meter, Gallagher said. The NTIA acknowledges that peak field strength is as much as 20 dB higher--a factor of 100--than the peak measured at a height of 1 meter under current Part 15 rules. Because the peak does not occur consistently at a particular distance from a BPL device along the power line, the NTIA will advise requiring a peak field strength measurement search along the entire power line at a distance of 10 meters and at a height of 1 meter.

The agency has determined that a moderate-to-high probability of interference exists to a fixed station from BPL power lines at a distance of 450 meters--approximately 1480 feet--and to a mobile station at a distance of 55 meters--approximately 180 feet.

To "fulfill special protection requirements," Gallagher said, the NTIA will suggest "minimal" coordination areas--where a specified authority would coordinate all planned BPL deployment--plus excluded bands and exclusion zones. The NTIA recommends "voluntary coordination" with respect

to other radio operations plus "mandatory Access BPL power control, frequency agility and shut-off capabilities" to reduce interference risks and to expedite interference mitigation.

The NTIA further proposes that BPL rules provide for "prompt response to complaints of suspected interference," recasting the FCC's Part 15 shutdown requirement as "a last resort."

"Our BPL study of more than 10 million signal samples shows that solutions exist to all identified BPL technical issues," Gallagher concluded.

That's true, Sumner said, "but only if you include shutting a BPL system off and keeping it off as a 'solution.'"

During a White House meeting May 20, ARRL officials asked the Bush administration to heed its own NTIA experts and back away from its support of BPL. The League also has called on the FCC to put its BPL proceeding on hold to allow more thorough research of its interference potential.

For additional information, visit the "Broadband Over Power Line (BPL) and Amateur Radio" <<http://www.arrl.org/bpl>> page on the ARRL Web site.

#### FCC EXTENDS REPLY COMMENT DEADLINE IN BPL PROCEEDING

The FCC has extended to June 22 the deadline to file reply comments (comments on filed comments) in its broadband over power line (BPL) Notice of Proposed Rule Making (NPRM), ET Docket 04-37. The FCC acted this week on a request from the National Antenna Consortium and the Amherst Alliance

(NAC/Amherst) for a much longer filing deadline extension. The organizations said the June 1 reply comment deadline would not allow stakeholders adequate time to prepare comments that address the full two-part National Telecommunications and Information Administration (NTIA) BPL study. The

FCC said the NTIA has indicated it soon will submit comments and a technical appendix that will include key findings of the Phase 2 report, which is due for release later this year.

"We believe that three weeks should provide ample time for review and analysis of this information, and accordingly grant the extension for that period," said FCC Office of Engineering and Technology Chief Edmond J. Thomas, who signed the May 26 Order Granting Extension of Time. NAC/Amherst had sought to have the FCC postpone the filing comment deadline until either September 1 or two months after the public release of the NTIA's Phase 2 study-- whichever came later.

Noting that its Part 15 rules already permit Access BPL systems and that its February BPL NPRM places additional requirements on BPL systems over and above current Part 15 requirements, the FCC asserted that any further delay would diminish the Commission's ability to protect licensed users now occupying the HF spectrum. A further extension, the FCC added, also would "needlessly increase regulatory uncertainty" about BPL.

The FCC turned down a request that it reissue in substantially greater detail the provisions of its proposed BPL rules concerning interference prevention and mitigation and the enforcement of standards.

The FCC does not routinely grant such time extensions, and it denied earlier petitions, including filings from the ARRL and NAC/Amherst, to extend the initial May 3 comment filing deadline. The League and others had said commenters needed more time to digest the NTIA's Part 1 BPL study, released April 27.

#### ARISS SCHOOL GROUP CONTACT A FIRST FOR ASTRONAUT, EXPEDITION 9

NASA Expedition 9 International Space Station Science Officer and Flight Engineer Mike Fincke,

KE5AIT, logged what's believed to be his first-ever Amateur Radio contact May 25 from the spacecraft's NA1SS. The QSO also marked the first Amateur Radio on the International Space Station (ARISS) school group contact for the Expedition 9 crew. The US astronaut and Russian cosmonaut and Expedition 9 Commander Gennady Padalka, RN3DT, arrived aboard the ISS in late April. Fincke advised a dozen youngsters gathered at Erie Planetarium <<http://www.eriecountyhistory.org/planetarium.htm>> in Pennsylvania, that the crew must take a space walk in the next few weeks to replace a failed remote power controller module for one of the four ISS control moment gyroscopes, or CMGs.

"I'm really looking forward to it," Fincke told the youngsters, who attend several schools in the Erie area. In addition to the CMG repair EVA, the Expedition 9 crew will carry out two other space walks during their six-month tour.

Responding to another question, Fincke said he's really enjoying the weightlessness of space, although he noted, some caution is in order. "I love being weightless," he said. "I can fly around like Superman and pick up very big things." He cautioned, however, that crew members need to "take it nice and easy" in weightlessness to avoid banging into things and injuring themselves.

For fun and recreation, Fincke said, the crew has laptop computers and can watch DVDs--although there's no television aboard. "The whole space station is a little bit fun to play in and do fun things," he said, "but just being aboard the International Space Station is like a dream come true, so it's all fun--every minute of every day is really fun."

In all, the youngsters asked 18 questions of Fincke before the ISS went over the horizon from the telebridge station of Tony Hutchison, VK5ZAI, in South Australia. MCI donated a teleconferencing link to handle the two-way audio between VK5ZAI and the planetarium. Fincke has twice before visited the Erie Planetarium, run by the Erie County Historical

Society.

ARISS <<http://www.rac.ca/ariss>> is an international educational outreach program with US participation by ARRL, NASA and AMSAT.

#### AMATEURS AID AS TORNADOS DEVASTATE NEBRASKA COMMUNITIES

From storm spotting through recovery support, Amateur Radio operators were on duty this week, aiding tornado-stricken communities in Nebraska and elsewhere in the Midwest. A May 22 tornado virtually destroyed most structures and was blamed for one death in Hallam, a town of approximately 300 some 20 miles south of Lincoln. ARRL Nebraska Section Emergency Coordinator Reynolds Davis, K0GND, said Lancaster County ARES/SKYWARN spotters activated the evening of May 22 in response to a report of an approaching front. Within a half-hour, W0NWS at the National Weather Service office in Valley already was receiving tornado damage reports via the Lincoln Amateur Radio Club K0KKV repeater.

"When the system moved into Lancaster County shortly after 8:30 PM, it destroyed almost every structure in the town of Hallam," Davis said, leaving the residents homeless. The NWS rated the tornado that struck Hallam as an F-4 on the five-point Fujita Scale--207 to 260 MPH.

The storm also severely damaged the high school in Norris and plucked the tower supporting the KORPT repeater's south receiver from the ground. The tower remains missing. The tornado went on to destroy additional homes to the northeast, and its path of destruction finally ended south of Bennet, he said.

More than 50 amateurs participated in the SKYWARN net, said Davis, who also serves as Lancaster County Emergency Coordinator. The National Weather Service Omaha office logged dozens of weather and storm-damage reports from

radio amateurs in several Nebraska counties on May 22.

Once the SKYWARN Nets closed, the K0RPT VHF repeater was put into service to support Red Cross communications among the tornado scene, the chapter house and a shelter set up in a Lincoln high school for residents displaced by the storm. Two ARES nets activated May 23 to coordinate damage survey and assessment, and reports logged via K0EOC at the Lancaster County Emergency Operations Center.

Davis said that by the time both damage survey nets shut down, 41 operators had driven nearly 2200 miles and surveyed 100 square miles. Gov Mike Johanns declared a state of emergency after more than a dozen tornados swept several southern Nebraska counties.

In Missouri, Grundy County EC Glen Briggs, KB0RPI, reports that Amateur Radio groups in the northern part of the state relayed severe weather reports to the National Weather Service and to local emergency management and law enforcement officials May 22. Hardest hit areas were near Chillicothe and Brookfield. After one repeater was knocked off the air, amateurs switched to backup repeaters and simplex. Some 18 operators in nine Missouri counties participated, he said.

#### EXPERIENCED HAMS MUST NURTURE NEWCOMERS, HAYNIE TELLS FORUM

It's up to today's Amateur Radio veterans to cultivate the younger generation, ARRL President Jim Haynie, W5JBP, told the ARRL Forum at Dayton Hamvention 2004 May 15. Calling the statistic "shocking," Haynie cited ARRL survey data showing that more than one-fifth of new amateur licensees never get on the air. He suggested that too few experienced amateurs take new licensees under their wing to help them get started.

"One of the things that we need to do is open up our hearts and open up our minds a little bit about the new generation coming along," he said. The addition of another half-dozen ARRL Education and Technology Program (ETP) <<http://www.arrl.org/FandES/tbp/>> pilot schools has raised the total to 81, Haynie pointed out. While its primary goal is using Amateur Radio to educate youngsters about wireless technology, the ETP has resulted in thousands of new hams--teenagers and younger.

"What makes these programs successful, of course, is the local hams, the local clubs getting behind the program and teaching these kids the kinds of things we all know," Haynie said, adding that nothing is too basic or simple. "I didn't know how to put on a PL-259 when I got my General," Haynie admitted, recalling that he'd more than once forgotten to slip the connector's shell over the end of the cable before soldering the plug.

Haynie suggested that today's older hams also need to consider that technology is changing, and the questions appearing on the ham radio examinations of tomorrow will be ones "that haven't been thought of yet." In 1972 when he took his General, he said, his test included questions on Hartley and Colpitts oscillators. In contrast, today's examinations cover topics such as phase-locked loops, satellite operation and digital technology.

The ARRL president asserted that many Amateur Extra class licensees couldn't pass today's Element 4 examination if they had to do. Haynie said that if and when the FCC changes Amateur Radio licensing requirements in response to various petitions for rule making--including one from the League--it will not be a matter of "dumbing down" Amateur Radio. "It's not that Amateur Radio is dumbed down," he said. "People like me have failed to keep up, and if you look in your heart, you're going to say the same thing."

"Amateur Radio is what you make of it once you get your license," Haynie continued. Getting a ham ticket doesn't make anyone more intelligent, and learning the ropes usually begins after someone already has a license in hand.

"You learn by doing," he said. Haynie said the ARRL Board did not take lightly its latest restructuring proposal, and he acknowledged that the League's petition has not won universal praise. "It was not an overnight decision," he said, adding that the Board wanted to take a fair and evenhanded approach to restructuring.

How the FCC will act on the Morse code requirement and restructuring "is anyone's guess," Haynie said, but he predicted that the Commission will never reinstate higher code speed requirements as some have requested. "The FCC is not going to go back to 13 and 20 words per minute, and you can take that to the bank," he predicted. "It's not going to happen."

"Whatever you enjoy about Amateur Radio, it's not going to change" as a result of any restructuring Haynie said. While the FCC might take "the path of least resistance," he believes it's more likely to take bits and pieces of the various petitions to come up with something that's would be workable and "give Amateur Radio a shot in the arm."

"We need that," Haynie concluded.

#### FCC CHAIRMAN RESPONDS TO REQUEST TO SUPPORT ARRL RESTRUCTURING PLAN

FCC Chairman Michael K. Powell has assured US representatives Greg Walden, W7EQI (R-OR), and Mike Ross, WD5DVR (D-AR), that the Commission will act "as expeditiously as possible" on Amateur Radio restructuring. Walden and Ross wrote Powell a month ago to urge adoption of the ARRL's restructuring Petition for Rule Making (RM-10867) "in its entirety" along with rules changes needed to put it into place. Powell said the League's petition was one of many.

"At this time, the Commission staff is reviewing and analyzing carefully all of the petitions, comments and proposed rule changes in this area," Powell responded May 21. "Because this matter is of great importance to you and the almost 700,000 amateur radio operators nationwide, the staff is working diligently to create a comprehensive solution to address the proposals the petitioners have submitted." The next step in the process, he said, will be to prepare a notice of proposed rule making for the Commission's consideration.

In addition to the League's filing, Powell pointed out, the Commission received 17 other petitions for rule making that address examination requirements and operating privileges for Amateur Service licensees. The various proposals attracted more than 5000 comments, he noted--more than 800 of them on the ARRL's petition alone.

In their letter to Powell, Walden and Ross expressed their belief that the ARRL's plan "will encourage the development, refinement and use of new technologies; increase the number of young people involved in Amateur Radio; and provide incentives for Amateur Radio licensees to pursue technical self-training and opportunities for volunteerism in the best traditions of our country."

Other restructuring plans were filed by the Radio Amateur Foundation, RM-10868, and by the National Conference of Volunteer Examiner Coordinators, RM-10870.

Fifteen other petitions for rule making came down on one side or the other of retaining the Amateur Radio Morse code examination requirement to operate on HF. Judging from Powell's letter to Walden and Ross, the FCC plans to address all 18 petitions within the framework of a single rule making proceeding.



PACKET UPDATE

Amateurs are always looking for new and innovative radios. When running voice or any digital mode in a portable environment it is power consumption that is always a problem. Icom has come out with a new all mode radio to address this problem that covers 160 to 10 meter or a model for 160 to 6 meter. It is called the Icom 703. The radio looks like the popular 706 100 watt model but has a lower power of 10 watts. The rig will work down to 9.6 volts at a reduced power output. The rig is designed for the QRP community and has a low current draw of only 300 ma in receive mode. This allows the radio to go a long time on battery power. The unit has a DSP and memory keyer built in. Another nice feature is the built in antenna tuner with latching relays for low current draw of the tuner. The unit has adjustable output power and all the bells and whistles you expect from a new digital rig. If you are looking for one of the ultimate low power rigs for portable use check out this one from Icom.

James Butler  
KB4LJV

AMATEUR HARDWARE UPDATE .....

Many times we look for a secure place to mount our HTs. N4GMT, Lance found a really nice holder for cups that is adjustable at Sam's Wholesale Club. The unit is called the Spillmaster Euro Junior. As it turns out this unit also makes a nice holder for HTs. I wanted a holder that I could move around and would stay put. I modified the holder by drilling a hole in the base and attaching flat magnetic antenna base magnet. The magnet is very strong and lets me mount it any metal surface and not worry about it falling off or moving. It was an easy mod and works great as a portable HT holder. Outside, I can just set it on the car roof and drop the HT in to monitor while I am doing other things. The unit has come in handy and works well. The mount can also be mounted with included Velcro strips or a wood screw for the operating desk.

I will have the MAGNETIC HT MOUNT at the meeting to show and answer questions on for those who want to build up their own unit.

SEE YOU AT THE MEETING .....  
James Butler, KB4LJV



# JUNE

2004

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
		<b>1</b> Charlotte, KD4SDH	<b>2</b>	<b>3</b> <b>MARA Club Meeting</b> <b>7:00 PM</b>	<b>4</b>	<b>5</b>
<b>6</b>	<b>7</b>	<b>8</b> <b>Delta Club Meeting</b> <b>7:00 PM</b>	<b>9</b>	<b>10</b> Kenneth, KB0ZTX	<b>11</b>	<b>12</b> Boyd, N4SSF Rebecca, KC4MTN
<b>13</b>	<b>14</b>	<b>15</b> Kenneth, KI4AOH	<b>16</b> Melissa, W5MDV Kathy, KE4UYU	<b>17</b>	<b>18</b>	<b>19</b> Bobby, K5CN
<b>20</b>	<b>21</b>	<b>22</b> Margo, KD4DWI	<b>23</b> Mike, KR4IT	<b>24</b>	<b>25</b> Leanne Braddock Edward, K3ORS	<b>26</b>
<b>27</b> Harry, KI5UK Steve, NX3W	<b>28</b>	<b>29</b>	<b>30</b> Marc, KB5ZMU Susan Pace			

# JULY

2004

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
				<b>1</b> MARA Club Meeting 7:00 PM	<b>2</b>	<b>3</b>
<b>4</b>	<b>5</b> Betsy, KD4KOM	<b>6</b>	<b>7</b> Amanda Burmm	<b>8</b>	<b>9</b>	<b>10</b> Pat, KC4SJD
<b>11</b> Kay, KA4AEG	<b>12</b> Randy, W4RMV Harry, AF4RH	<b>13</b> Delta Club Meeting 7:00 PM	<b>14</b>	<b>15</b> Nora, W4ZOR Harold, KE4GVB	<b>16</b>	<b>17</b> Jerry, K4CMZ
<b>18</b> Ray, AA4UK	<b>19</b> Dean, N2LAZ	<b>20</b> Richard, KU4NZ Marie, K4GMT Austen, KG4GKE Joe, WA4OVO	<b>21</b> Bill, WA4MJM	<b>22</b>	<b>23</b>	<b>24</b>
<b>25</b> Bill, W4NZP	<b>26</b> Don, KA4EBU Bill, N4GCF	<b>27</b> Buddy, WY5AR	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>



**CONTEST CALENDAR**

Here are some of the contests and special events coming up in the next few weeks...

The following information may be found at <http://www.arrl.org/contests/months/june.html>.

**QRP TAC Contest--CW, SSB and PSK31--**sponsored by EPA

QRP Club from 1800 to 2359Z Jun 5. Frequencies: 80-10 meters. For more information: <http://www.n3epa.org/>.

**World Wide Major Six Club Contest--CW/SSB--**sponsored by the Six Meter World Wide DX Club, from 2300Z Jun 4-0300Z Jun 7. Frequencies: 50 MHz only. For more information: <http://6mt.com/contest.htm>.

**IARU Region 1 Field Day--**sponsored by IARU Societies from

1500Z, Jun 5 to 1459Z, Jun 6 (SSB-Sep 4-5). Frequencies: 160-10 meters. See web sites for more information.

**ANARTS WW RTTY / Digital Contest--**sponsored by Australian National Amateur Radio Teleprinter Society (ANARTS) from 0000Z Jun 12-2400Z Jun 13. Frequencies: 80-10 meters. For more information: <http://www.users.bigpond.com/ctdavies>.

**Asia-Pacific Sprint--SSB--**1100Z to 1300Z Jun 12. Frequencies: 20 and 15 meters only (see Feb *QST*, p 103, or <http://jsfc.org/apsprint/aprule.txt>).

**ARRL June VHF QSO Party--**1800Z Jun 12-0300Z Jun 14 (see May *QST*, p 107, or <http://www.arrl.org/contests/rules/2004/june-vhf.html>).

**Portugal Day Contest--SSB--**sponsored by Rede dos Emissores Portugueses (REP) from 0000Z-2400Z Jun 12. Frequencies: 80-10 meters. For more information: [http://www.rep.pt/dia\\_de\\_portugal.htm](http://www.rep.pt/dia_de_portugal.htm).

**WW South America CW Contest--**sponsored by the Confederaçao Brasileira de Radioamadorismo (LABRE) from 0000Z Jun 12-1600Z Jun 13. Frequencies: 80-10 meters. For more information: <http://www.labre.org/>.

**Kid's Day Operating Event--**from 1800 to 2400Z Jun 19 (see <http://www.arrl.org/FandES/ead/kd-rules.html>).

**The W4BS Elmer Shack**

Please feel free to contact any of our ELMERS to help you enhance your amateur skills. Anyone wishing to be added to the Elmer list please contact Ned at [ka4bll@arrl.net](mailto:ka4bll@arrl.net) or 363-9607.

Codes:

1. Antennas
2. APRS
3. Contesting
4. CW Operating
5. Direction Finding (fox hunting)
6. DXing
7. Experimenting/Circuits/etc.
8. HF Phone
9. Packet
10. Repeater Operation
11. QRP
12. Satellite
13. RTTY
14. VHF
15. PSK31
16. Computer logging

K4TTA (Extra) Tom Richardson 386-6268 [ka4tta@arrl.net](mailto:ka4tta@arrl.net) (1, 3, 4, 6, 8, 9, 13, 14, 15)

KA4BLL (Extra) Ned Savage 363-9607 [ka4bll@arrl.net](mailto:ka4bll@arrl.net) (1, 5, 8, 14, MARS, ARES/RACES, net control, traffic handling, emergency service)

KB4LJV (Extra) James Butler 294-2540 [jbutler@bigriver.net](mailto:jbutler@bigriver.net) (2, 7, 9, 11, 13, 14)

KD4NOQ (Adv) David Campbell 388-6166 [kd4noq@bellsouth.net](mailto:kd4noq@bellsouth.net) (1,2,3,5,9,10,14, slow scan TV, ATV minor)

KU4AW (Extra) Ben Troughton 372-8031 [bktrough@mem.quik.net](mailto:bktrough@mem.quik.net) (2, 4, 8, 15)

N9ACQ (Extra) Bill Kuechler 368-0532 [wkuechl1@midsouth.rr.com](mailto:wkuechl1@midsouth.rr.com) (1, 8, 13)

WA2IQC (Gen) Gary Blinckmann 794-5289 [garyblin@midsouth.rr.com](mailto:garyblin@midsouth.rr.com) (1, 7, 10, 14)

WA4MJM (Extra) Bill Hancock 853-7192 [billwa4mjm@aol.com](mailto:billwa4mjm@aol.com) (1, 2, 8, emergency communications, ARES,MARS)

K4DIT (Extra) Ken Gregg 853-7384 [kgregg@c-a-c.com](mailto:kgregg@c-a-c.com) (4, 6, 8, 11, 15)

W4GMM (Extra) Ham Hilliard 372-2337 [hamh@bellsouth.net](mailto:hamh@bellsouth.net) (All categories)

**West Virginia QSO Party**--CW/SSB--sponsored by the West Virginia State Amateur Radio Council from 1600Z Jun 19-0200Z Jun 20. Frequencies: 80-10 meters, CW--35 kHz from band edge, Phone--35 kHz from General Class band edge and Novice/Tech 10-meter segment. For more information: <http://www.qsl.net/wvarrl>.

**All-Asian DX Contest**--CW--sponsored by the Japan Amateur Radio League from 0000Z Jun 19 to 2400Z Jun 20. (SSB--Sep 4-5). Frequencies: 160-10 meters (160 is CW only), incl 10-min. band change rule. For more information and Asian station QSO points--[http://www.jarl.or.jp/English/4\\_Library/A-4-3\\_Contests/2004AA\\_Rule.htm](http://www.jarl.or.jp/English/4_Library/A-4-3_Contests/2004AA_Rule.htm).

**SMIRK QSO Party**--sponsored by the Six Meter International Radio Klub, 0000Z Jun 19-2400Z Jun 20. Frequencies: phone QSOs within the lower 48 states and Canada above 50.150 MHz; only DX QSOs between 50.100 and 50.150 MHz. For more information: <http://www.smirk.org/>.

**Quebec QSO Party**--CW/Digital/Voice--sponsored by the Radio Amateurs du Quebec from 1700Z Jun 19-0300Z Jun 20. Frequencies: 80-2 meters, no repeater contacts. For more information: <http://www.raqi.ca/qqp>.

**ARRL Field Day**--1800Z Jun 26 to 2100Z Jun 27 (see May *QST*, p 107 or <http://www.arrl.org/contests/rules/2004/rules-fd-2004.html>).

**His Majesty King of Spain Contest**--SSB--1800Z Jun 26-1800Z Jun 27 (see May *QST*, p 99).

**QRP ARCI Milliwatt Field Day**--1800Z Jun 26-2100Z Jun 27. Follows ARRL Field Day rules, see <http://2hams.net/ARCI/mwfd.htm> for more information.

**Marconi Memorial HF Contest**--CW--sponsored by ARI from 1400Z Jun 26-1400Z Jun 27. For more information: <http://www.qsl.net/ik6ptj/marconi.htm>.

**UK DX Contest**--SSB, sponsored by the Scottish

Russian ARS from 1200Z Jun 26-1200Z Jun 27. Frequencies: 160-10-meters. For more information: <http://www.srars.org/ukdxcruleseng.pdf>.

**Canada Day Contest**--CW/Phone--sponsored by the Radio Amateurs of Canada (RAC) from 0000Z-2359Z Jul 1. Frequencies: 160-10, 6 and 2 meters. For more information: [www.rac.ca/opsinfo/infocont.htm](http://www.rac.ca/opsinfo/infocont.htm).

**MI QRP Jul 4th CW Sprint**--2300Z Jul 2-0300Z Jul 3 (see Jan *QST*, p 98, or [www.qsl.net/miqrpclub](http://www.qsl.net/miqrpclub)).

**Bahia Independence Contest**--SSB/CW--sponsored by LABRE from 2100Z Jul 2-2100Z Jul 3 (SSB) and from 2100Z Jul 3-2100Z Jul 4 (CW). Frequencies: 160-10 meters. For more information: [www.labre-ba.org.br](http://www.labre-ba.org.br).

**Venezuelan Independence Day Contest**--CW/SSB--sponsored by the Radio Club Venezolano from 0000Z Jul 3-2400Z Jul 4. Frequencies: 160-10 meters. For more information: <http://radioclubvenezolano.org/concurso.htm>.

**DL-DX-RTTY-Contest**--RTTY/PSK--sponsored by the DL DX RTTY Contest Group (DRCG) from 1100Z Jul 3 -1059Z Jul 4. Frequencies: 80-10 meters. For more information: [www.dl-dx.de](http://www.dl-dx.de).

**DARC 10-Meter Digital "Corona"**--RTTY/AMTOR/PACTOR/PSK31/Clover--sponsored by Deutscher Amateur Radio Club from 1100Z-1700Z Jul 4 (see Nov *QST*, p 110, or [www.darc.de/referate/dx/](http://www.darc.de/referate/dx/)).

#### SPECIAL EVENTS

**Sainte Marie du Mont, France:** Réseau des Emetteurs Francais, TM6JUN. **May 31-Jun 13.** 60th anniversary of Allied disembarkment at Utah Beach. SSB and CW 80, 40, 20, 17, 15, 12 and 10 meter bands. QSL. Denis Villemion, F5RJM, Le Flaquet, 50470 Tollevast, France.

**Ponca City, OK:** Kay County Amateur Radio Club, K5P. 2100Z **Jun 4**-2000Z **Jun 5**. Ponca City Oklahoma's Annual Jumpin in June celebration. 28.360 21.360 14.260 7.260. QSL or certificate. Joseph Widner, 3644 Ashbury Rd, Ponca City, OK 74604.

**Willow Run, MI:** Yankee Air Museum, W8YAF/AM. 1300-1600Z **Jun 4** and 2100-000Z **Jun 6**. Celebrating the restoration of WWII B-25D Mitchell bomber *Yankee Warrior*-aeronautical-mobile enroute to and from Reading, PA, Airshow. 146.55.. Yankee Air Museum, Mr Sevim Ablay, PO Box 590, Belleville, MI 48112-0590. [www.yankeearmuseum.org/YAFFly.html](http://www.yankeearmuseum.org/YAFFly.html).

**Boston Harbor area, MA:** USS *LST-325* Amateur Radio Club, W2T. **Jun 4**-**Jun 14**. USS *LST-325* 46-day, 4119 mile trip up the east coast of the United States. All amateur bands. QSL. Robert Wilder, AF2HD, 6032 Idlemoore Ct, Theodore, AL 36582-4036. Trip begins May 24; WW2LST/MM will also be used.

**Badin, NC:** Montgomery Amateur Radio Society, NC4MC. 1400Z-2100Z **Jun 5**. 60th Anniversary US Navy B-25 lost in Badin Lake, NC. 28.480 21.360 14.260 7.235. Certificate. Jim Aderholt, KI4DH, 128 Northwood Ln, Robbins, NC 27325.

**Cobb Island, MD:** Charles County Amateur Radio Club, K3SMD. 1200Z-2100Z **Jun 5**. Celebration of Cobb Island Day 2004. 28.345 21.345 14.245 7.245. QSL. CCARC, PO Box 73, Accokeek, MD 20607.

**Tylertown, MS:** Southwest Mississippi Amateur Radio Club, KD5QNC. 1500Z-2200Z **Jun 5**. Walthall County Dairy Festival. 14.270 7.270. QSL. Southwest Mississippi ARC/KD5QNC, 1545 Friendship Ln NW, Brookhaven, MS 39601. <http://www.swmarc.cjb.net/>.

**Union, IL:** Illinois Railway Museum, W9T. 1400Z-2100Z **Jun 5**. 51st Anniversary of the Museum. 145.390 28.350 21.350 14.250. Certificate. Larry Zacharias, 1031 Pershing Dr, Wauconda, IL 60084.

**Camden, NJ:** Battleship *New Jersey* Amateur Radio Station, NJ2BB. 1200Z **Jun 5**-2359Z **Jun 6** 50th anniversary of the four Iowa Class battleships sailing together. 14.250 14.050 7.250 7.050. Certificate. Margaret Burgess, KB2BRR, 150 Schooner Ave, Barnegat, NJ 08055.

**Green River, WY:** Sweetwater Amateur Radio Club, WY7U. 1800Z **Jun 5**-1800Z **Jun 6**. Butch Cassidy and the Wild Bunch UPRR train robberies. 21.365 14.265 7.265 3.915. QSL. Sweetwater Amateur Radio Club, 1000 South Dakota, Green River, WY 82935. [www.qsl.net/wy7u](http://www.qsl.net/wy7u) -- special certificate for working both Jun and Aug events.

**Linthicum, MD:** Historical Electronics Museum ARC, W3HEM. 1300Z **Jun 5**-2200Z **Jun 6**. The contributions of electronics to D-Day invasion. 14.244 7.244 14.044 7.044. Certificate. HEMARC, PO Box 746 MS4015, Baltimore, MD 21203. <http://www.qsl.net/w3gr>.

**Streetsville, ON:** Mississauga Amateur Radio Club, VE3MIS. 1400-2000Z daily **Jun 5** and **Jun 6** Annual Streetsville Bread & Honey Festival. 28.480 21.315 14.240 7.227. Certificate. MARC, c/o Michael Brickell, 2801 Bucklepost Cres, Mississauga, ON, Canada L5L 1M6. Include \$1 US, 2 IRCs or 2 green stamps for postage. <http://www.marc.on.ca/>.

**Windsor, Ontario:** Amherstburg Radio Club, VE3TMG. 1600Z **Jun 5**-2359Z **Jun 6** Commemorating CKLW radio station on the air since 1932. 28.460 14.260 7.260. Certificate. Terry Greenwood, 2210 Janette Ave, Windsor, ON, Canada N8X 1Z8. Include \$1 US for postage.

**Birmingham, AL:** D&G Amateur Radio Association, W4V. 1500Z **Jun 5**-2400Z **Jun 13**. Celebrating the restoration of the Vulcan statue. 14.260. QSL. W4DAI, PO Box 51, Alton, AL 35015-0051. <http://www.valcanpark.org/>.

**Atkinson, NH:** Atkinson Amateur Radio Club, K1D. 0401Z **Jun 5**-0400Z **Jun 20**. Celebrating Kid's Day and Amateur Radio Awareness. 28.370 21.370

14.270 7.230. Certificate. Peter Schipelliti, 7 Dearborn Ridge Rd, Atkinson, NH 03811. [kc7key.org](http://kc7key.org).

**New Orleans, LA:** Jefferson Amateur Radio Club, W5D. 1400Z-2200Z **Jun 6**. 60th anniversary of D-Day from New Orleans. 14.250. Certificate. W5GAD, PO Box 73665, Metairie, LA 70033. <http://www.qsl.net/w5gad/>.

**West Chester (Cincinnati area), OH:** West Chester Amateur Radio Association, WC8VOA. 1200Z **Jun 6**-0500Z **Jun 7**. 60th Anniversary of the Normandy Invasion. 28.305 21.305 14.275 7.275 CW up 35 kHz 10 15 20 40 m. QSL. WC8VOA, PO Box 913, West Chester, OH 45071. [www.wc8voa.org](http://www.wc8voa.org).

**Various, England,** Royal Signals Amateur Radio Society, GB6OL. 0700Z **Jun 6**-2359Z **July 3**. 60th Anniversary of Operation Overlord 1944. 21.070 21.056 14.070 14.056. QSL. Mike Humphrey, GØSWY/KF4OFR, 4 Bluebell Rd, Bassett Southampton, Hampshire, England SO16 3LQ. [www.rsars.org.uk](http://www.rsars.org.uk).

**Fond du Lac, WI:** Fond du Lac Amateur Radio Club, Inc, W9W. 1800Z **Jun 11**-1800Z **Jun 13**. Walleye Weekend Festival. 28.350 21.350 14.250 7.250. QSL. Dave Witt, WD9W, 1160 S Park Ave, Fond du Lac, WI 54935.

**Clearfield, PA:** Quad County Amateur Radio Club, N3QC. 1400Z-2000Z **Jun 12**. Clearfield County Bicentennial. 444.625 146.865 14.230 7.225. Certificate. QCARA, Jeffrey Rowles, 3319 Allport Cutoff, Morrisdale, PA 16858. [www.qcarc.com](http://www.qcarc.com).

**Weatherly, PA:** Anthracite Repeater Association, KB3AGZ. 1300Z-2000Z **Jun 12**. Weatherly Hill Climb. 7.280. Certificate. Jack Provizzi, PO Box 356, Beaver Meadows, PA 18216.

**Maple Valley, WA:** Maple Valley Amateur Radio Club, KC7KEY. 1600Z **Jun 12**-0400Z **Jun 13**. Tenth Anniversary of Maple Valley club founding. 28.455 21.347 14.267 3.965. Certificate. Tom Patterson, PO Box 488, Maple Valley, WA 98038. [www.kc7key.org](http://www.kc7key.org).

**Warsaw, IN:** Hoosier Lakes Radio Club, W9W. 1500Z-2300Z **Jun 19**. Celebrating the Sesquicentennial of Warsaw, IN. 14.240 14.040 7.240 7.040. Certificate. Joe Sanburn, WA9PSV, 1095 W 200 S, Warsaw, IN 46580. [www.maplenet.net/~lmelton/](http://www.maplenet.net/~lmelton/).

**Lake Angelus, MI:** McMath Hulbert Solar Observatory, K8MHO. 1600Z **Jun 19**-2000Z **Jun 20**. 70th anniversary of the first movies of surface of the sun. 21.350 14.250 7.250 3.850. Certificate. McMath Hulbert Astronomical Society, 895 N Lake Angelus Rd, Lake Angelus, MI 48326. [www.mcmathhulbert.org](http://www.mcmathhulbert.org).

**Fayetteville, AR:** Amateur Radio Klub of the Arkansas Northwest, W5F. 1400-0000 **Jun 19-20** and 1400-000 **Jun 20-21**. Airfest 2004. Bottom portion of General band 20m 15 m SSB. QSL. ARKAN, PO Box 9701, Fayetteville, AR 72702. [www.arkan.us](http://www.arkan.us).

**Rock Island, IL:** Green River Valley Amateur Radio Society, K9G. 1800Z **Jun 23**-1800Z **Jul 4**. Grand Excursion 2004--150th anniversary of America's first railroad connection to the Mississippi River. 14.270 21.305 7.260. QSL. Peter Beedlow, NN9K, 741 Greenway Ave, Colona, IL 61241. [www.grandexcursion.com](http://www.grandexcursion.com).

**Boston Harbor area, MA:** USS *LST-325* Amateur Radio Club, W2T. **Jun 26-Jul 1**. USS *LST-325* 46-day, 4119 mile trip up the east coast of the United States. All amateur bands. QSL. Robert Wilder, AF2HD, 6032 Idlemoore Ct, Theodore, AL 36582-4036. Trip begins May 24; WW2LST/MM will also be used.

**Landrus, PA:** Nessmuk Amateur Radio Association, W3BGK. 1500Z-2100Z **Jun 26**. 1890 coal mine ghost town of Landrus, first electric coal mine in area. 14.240 7.240. Certificate. Nessmuk ARA, W3BGK, PO Box 101, Wellsboro, PA 16901.

**Los Alamos, NM:** Los Alamos Amateur Radio Club, W5PDO. 1500Z-1800Z **Jun 26**. Earthwatch

Institute's Student Challenge Awards Program from Fenton Hill Observatory. 28.450 21.350 14.250. Certificate. Don Casperson, AA5PA, 984 Nambe Loop, Los Alamos, NM 87544. <http://laastro.lanl.gov/earthwatch>.

**Rocky Mount, NC:** Castalia Island DX Association, K4UP. 1800Z **Jun 26**-1800Z **Jun 27**. Annual emergency communications readiness demonstration. 14.225. QSL. K4UP, PO Box 3, Castalia, NC 27816. [www.qsl.net/w4rmt/fieldday.shtml](http://www.qsl.net/w4rmt/fieldday.shtml).

**Green Bay, WI:** Green Bay Mike and Key Club, K9EAM. 0100Z **Jun 19**-1800Z **Jul 2**. In celebration of Green Bay's Sesquicentennial. 21.245 14.245 7.245 3.845. QSL. Green Bay Mike and Key Club, PO Box 13351, Green Bay, WI 54307.

**La Crosse, WI:** Riverland Amateur Radio Club, W9L. 1500Z-2200Z **Jul 2**. The Grand Excursion recreating the 1854 steamboat expo. 21.280 14.280 7.280. Certificate. Roger Reader, KA9BKK, 526 13th Ave N, Onalaska, WI 54650.

**Ashland, OH:** Ashland Area Amateur Radio Club, W8O. 1400Z **Jul 2**-2200Z **Jul 3**. Ashland Balloon-Fest 2004. 7.275 7.235 3.975 3.935. Certificate. W8RPS, 834 CR 30A, Ashland, OH 44805.

**Brookings, SD:** Brookings Amateur Radio Research Club, W0BXO. 1400Z **Jul 2**-0001Z **Jul 3**. The 125th Anniversary of the City of Brookings, SD. 28.450 21.350 14,260 7.260. QSL. W0XO, 307 Third Ave, Brookings, SD 57006. [www.qsl.net/brrc/](http://www.qsl.net/brrc/).

**Leavenworth, KS:** Pilot Knob Amateur Radio Club, KS0LV. 1700Z **Jul 2**-2400Z **Jul 11**. Lewis & Clark/Leavenworth, KS, Sesquicentennial Celebration. 21.370 14.240 7.262 3.902. QSL. The Pilot Knob Amateur Radio Club Inc, PO Box 632, Leavenworth, KS 66048.

**Hannibal, MO:** Hannibal Amateur Radio Club, W0MTL. 1400Z-2300Z **Jul 3**. National Tom Sawyer Days. 21.350 14.250 7.250. Certificate. Robert G.

Mitchell, 816 Long Dr, Quincy, IL 62305.

**Smithville, TN:** DeKalb County Amateur Radio Club, KC4GUG. 1400Z-2200Z **Jul 3**. 33rd Annual Smithville Fiddlers Jamboree & Crafts Festival. 28.425 21.325 14.280 7.275. QSL. Wm Freddy Curtis, 288 Dogwood Cir, Smithville, TN 37166. [www.geocities.com/kg4bto1/dekalb\\_club.html](http://www.geocities.com/kg4bto1/dekalb_club.html).

**Kingsville, TX:** Wild Horse Desert Hams ARC, K5WHD. 0000Z **Jul 3**-0000Z **Jul 4**. 100th anniversary of the founding of Kingsville, TX. 28.350 21.350 14.250 7.250. QSL. Pat Allison, KD5TXD, 295 E FM 1118, Kingsville, TX 78363.

**Lake Kiowa, TX:** Lake Kiowa ARC, K5L. 0001Z **Jul 3**-2359Z **Jul 4**. Lake Kiowa July 4th Celebration. 21.250 14.250 14.170 7.072. Certificate. Jim Innis, K5SP, 1005 Kent Dr, Gainesville, TX 76240.

**Fort Missoula, MT:** Hellgate Amateur Radio Club, W7PX. 1500Z **Jul 3**-0000Z **Jul 5**. Lewis and Clark Expedition and Independence Day. 28.365 21.365 14.265 7.265. QSL and Certificate. HARC, POB 3811, Missoula, MT 59806-3811. <http://pweb.amerion.com/k7vk>.

**Beecher, IL:** Hams of Beecher, W9B. 1600Z-2300Z **Jul 4**. 4th anniversary Welcome Home Beecher Train Depot. 28.340 14.270 14.040 7.270 146.49. Certificate. Gene Backlin, 26811 Greenbriar Dr, Monee, IL 60449.

**Thompson, OH:** Lake County Amateur Radio Association, N8GB. 1400Z **Jul 4**-0200Z **Jul 5**. Heritage of Our Country--Happy Birthday America. 2.1320 7.248. Certificate. George R. Bair, 386 Cedarbrook Dr, Painesville, OH 44077.

**Van Wert, OH:** Van Wert Amateur Radio Club, W8FY. 1400Z-2000Z **Jul 5**. Holiday at Home--Van Wert County Historical Museum. 14.250 7.250 7.050. Certificate. Van Wert Amateur Radio Club, PO Box 602, Van Wert, OH 45891.



