telstar



THE NEWSLETTER OF STARS (SOUTHTOWNS AMATEUR RADIO SOCIETY)

ISSUE 306

JUNE 2007

FIELD DAY 2007

STARS Field Day 2007 will be held at Glen Meadows Park in Hamburg on June 23-24. See page 5 for a map to the site.

Field Day has been a long tradition as an emergency preparedness exercise, operating equipment "in the field" using power sources other than commercial.

Set-up for Field Day will begin around 10 a.m. on Saturday morning. This can be a real learning experience as bows and arrows and slingshots can be used to fire lines over trees to haul wire antennas into the air. Generators will be set up to provide emergency power.

Then on 2 p.m. Saturday afternoon, the contesting will begin and the airwaves will come alive with stations from all over the U.S. and Canada as well as parts of Central and South America, including the Caribbean. The contesting will continue until 2p.m. Sunday after-



noon (rain or shine). We will be planning a supper around 6PM on Saturday.

STARS will be running stations on CW and SSB and may be demonstrating other modes such as RTTY, SSTV, PSK31, ATV, etc.

Everyone is invited to come and operate, log stations, or just hang out and have fun! Even if you don't have HF privileges, you can operate under the supervision of another amateur with a higher class license. This is a great chance to learn how to improve your operating skills.

So, bring your lawn chairs, your family and friends and come on out. STARS will be using the shelter which is

JUNE MEETING

This month's club meeting will begin at 7:00 PM on Thursday June 7 at the at the club's Nike Base club station (1.75 miles east of Route 20 on Lakeview Road).



John Leitten KA2RFT and Scott Barto KB2KOL will be our featured speakers. They will go over plans for STARS Field Day 2007, answer your questions and explain how you can help make the event a great success!

All interested in amateur radio are invited to a attend. Neither club membership nor an amaatteur radio license is required.

The meeting will be outdoors, so don't forget to bring lawn chairs to sit on.

In case of bad weather, monitor STARS 147.090 MHz repeater for information on the status of the meeting.

at the far end of the park. Although the park normally closes at dusk, we have been given a permit to be there all night.



STARS has been designated a Special Service Club by the ARRL.

FROM THE PRESIDENT

Hello All.

Here we are it's June already and Field Day is right around the corner. It's also a first for STARS, the first time that the Club has been represented at Dayton and had a table with informational brochures and information about the club at the Hamvention. I will be writing a short article with pictures in an upcoming telstar that will document some of our activities at the big one.

The other thing I want to remind everyone about is our field day, try to come to this months meeting as we plan for field day. We need your input and ideas to make it one of the best ever. So please try to come to our next meeting June 7, I think if you can make it, you will be glad you did (maybe some small surprises will be given out to a lucky few).

The last thing I would like to touch on is the Rochester Hamfest, if you can make it there look around for me as I will be looking for members who I don't get to see at the meetings but do see at the hamfest.

73's -Bob (KA2WYE) Koster



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A LOOK AT HIGH FREQUENCY SINGLE-WIRE ANTENNAS — Part 3

- by Don Niles - K2PMC

Last month we set up our 84' flat top and optimized it for operation on the 80 - 10 meter bands. All that remains now is to attach the feed line, bring it into the shack and have some fun making contacts. Let's take the simple approach first.

If you have an antenna tuner that will handle a balanced transmission line, and you are able to bring the balanced line into the shack, you are indeed lucky. Just run it in and you're ready to go. You should not have any problems with RF in the shack, providing you have a good earth ground for your equipment.

However, for several reasons, that may not be practical. You may have a tuner in your radio, but it will only tune an unbalanced load. Or, you may have an antenna tuner that will handle balanced lines, but you are not able to run the balanced line into your shack. So we need to insert a balun into the line to transform the balanced load to an unbalanced load.

Baluns are a topic of their own. I am not going to go into the details of baluns except to say there are 2 types, a voltage balun and a current balun. The type of balun we are going to use is a current balun. For our installation, because we are using a high impedance feedline, we will use a 4:1 balun.

Current baluns are available from various commercial outlets at varying prices, some ranging up to \$75 or more. Or, you can "roll your own" balun. The commercial outlets may make all kinds of claims regarding the "efficiency" of their balun, or the "construction" of their balun, but you can homebrew your own for considerably less than their asking price. And, it will work just as well.

(Continued on page 3)

(Continued from page 2)

The 4:1 balun will bring the impedance of our feedline closer to 50 ohms and should work with your radio's internal tuner. If you have an external tuner you should have no problem using a 4:1 balun. In either case, you should keep the coax from the balun to the tuner as short as possible. And, you should use low loss coax. Remember, the SWR on the coax from the balun to your rig will still be high, in our case as high as 23:1 on 80 meters. So, too much length will cause power to be lost in the coax. Using 20' of RG8/9913 low loss coax on our short 84' antenna on 80 meters would dissipate about 10 watts of power.

Taking into account the 10 watts lost on the 100' of open wire line and the 10 watts lost in the coax we still end up with an efficiency of 80% which is still very good for our short antenna and would not be noticeable at the receiving end.

OK, we know what kind of balun we want to use, now let's look at some construction techniques for these baluns. The first balun we will look at is the 4:1 balun, using a toroid core. If you were to disassemble the commercial baluns on the market today you would most likely see a configuration very similar to the one I will describe. I found the following information in an article written by N1HFX.

Figure 1 shows a bifilar winding on a toroid. The toroid should be type 2 (red) material and can be any of the following sizes but the number of bifilar turns should be adjusted accordingly.

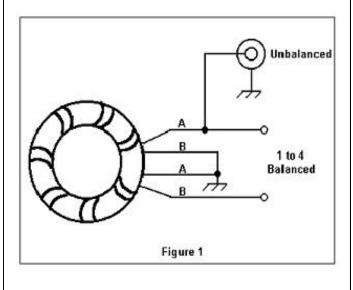


Figure 2 is a schematic representation of the 4:1 balun

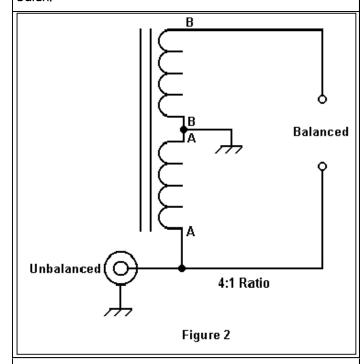


Table 1 below lists the toroid specs and turns requirements for various power levels.

TOROID	NUMBER OF TURNS	POWER RATING
T80-2	25	60 Watts
T106-2	16	100 Watts
T130-2	18	150 Watts
T157-2	16	250 Watts
T200-2	17	400 Watts
T200A-2	13	400 Watts
T400-2	14	1000 Watts

Table 1

The exact number of turns is not critical but the numbers listed in the preceding table should yield optimum results. Toroids of this type are available from Palomar Engineers, P.O. Box 462222, Escondido, CA 92046 (1-800-883-7020). The balun should be housed in a suitable metal enclosure such as those available at Radio Shack. Use an SO239 or BNC connector for the unbalanced input. Nylon binding posts such as RS 274-662 work just fine for the balanced output.

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(Continued from page 3)

Another type of 4:1 balun that is as effective as the preceding one but costs a lot less is an air wound balun. Figure 3 is an example of just such a balun.

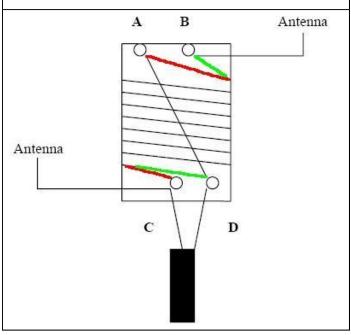


Figure 3

This air-core balun is wound using the following components:

- 2" diameter gray PVC pipe with a length of approximately 4"
- 2 end caps 2" PVC
- #12 or #14 copper wire, stranded or solid, with the insulation left on. It would be easier if you used 2 different colors.
- 8 turns bifilar wound
- 2 banana type chassis connectors
- 1 SO239 socket

Figure 4 (below) is a pictorial representation of the 4:1 air core balun.



Terminals B and C are wired to the banana chassis connectors for hooking up the feedline. The SO239 terminal center pin is wired to C and its shield to D. Make sure to connect D and A together. As can be seen in Figure 3, the wiring enters the PVC pipe and all connections are made internally. You do not need to glue the end caps to the pipe but use some little screws instead. This way the balun is easy to service should the need arise.

This concludes my discussion of High Frequency Single Wire Antennas. I hope it has been informative and interesting and I would appreciate any feedback you may have. If the shortened antenna system described looks appealing to you and you decide to give it a try I would really like to know how it works out for you.

73, Don - K2PMC

AMATEUR RADIO EXAMINATIONS

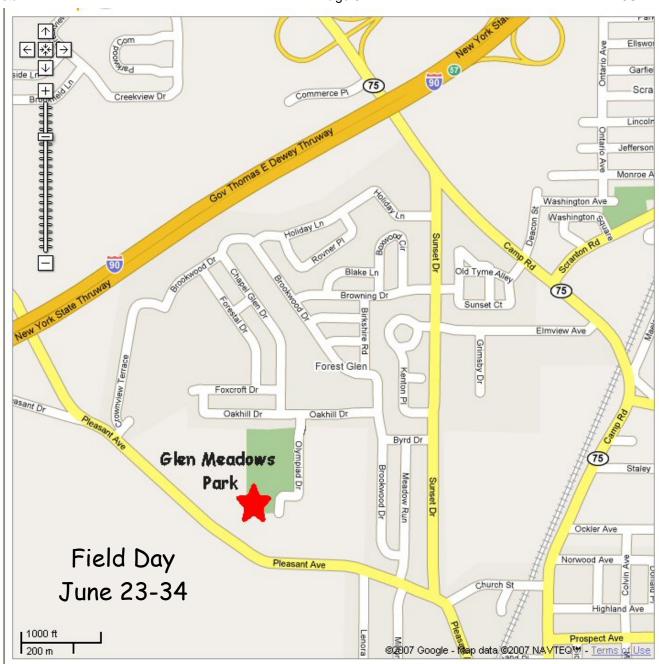
STARS will be holding test sessions during 2007. Test dates are set for July 14, Sept 8, and Nov 10. For information or to pre-register for STARS tests, contact John Crawford KB2VWC at 649-5933.

Lancaster ARC will be holding test sessions on a quarterly basis. For information on or to pre-register for Lancaster exams, call Hal Cameron NH7R at 832-0031. Pre-registration is required.



ARATS will be hold test sessions on the first Saturday of the month (except when falling on a holiday weekend, when they will be on the second Saturday) starting promptly at 10AM at the North Tonawanda Fire Headquarters at 495 Zimmerman Street. Walkins accepted, pre-registration is highly recommended. For information on or to pre-register for ARATS exams, call Vic Godzik K2YW at 694-9738 or email k2yw@hotmail.com.

PROS holds test sessions as needed at 585 North Star Road, East Aurora. For information, contact Pat Murray NW2I at 652-8178.





Club Nets

STARS club nets are open to all to exchange information on local amateur radio activities.



STARS WB2EZU Memorial HF net meets at 10AM local time on Saturdays on 3.925 MHz +/- QRM. Bob Lehning WA2YSJ is usually the net controller.

STARS co-sponsors, along with WB2JPQ, the Sunday morning Rag-Chew Net at 9:30AM on 28,380 Mhz.

AMATEURS SERVE THOSE DISPLACED BY TORNADOES

A tornado with a magnitude of EF5 swept through southwestern Kansas almost completely wiping out the town of Greensburg. The town, population 1500, lost its hospital, schools, churches and all of its business and infrastructure, according to Greensburg Town Administrator Steve Hewitt. Hewitt lost his home in the storm. A National Weather Service meteorologist called the tornado "...one of the most destructive tornadoes in the last 10 years."

EF5 is the highest level of a tornado on the Enhanced Fujita Scale, a classification system used by the National Weather Service. An EF5 tornado has wind speeds over 200mph. The Enhanced F-scale is a set of wind estimates (not measurements) based on damage. The tornado's damage path at its widest point was about 1.7 miles, and it tracked for 22 miles, moving at an average speed of about 20mph; it took about 15 to 20 minutes to wipe out the town.

A team of hams entered the area the morning after the tornado and began setting up communications, according to District 6 EC Godfrey Flax, KCOAUH. District 5 EC Robert Hanke, WGOQ, activated ARES in Pratt, Stafford, Reno and Barton Counties.

According to ARRL Kansas Section Manager Ron Cowan, KBODTI, there are repeaters on the air, but they are some distance from the affected area. He and other hams were monitoring 3.920 MHz in case there was radio activity.

The Salvation Army is conducting logistics nets at 9 AM, 3 PM and 9 PM each day on 3.920 MHz, and HF and 2 meter operations have been established in Haviland. Kansas and Western Missouri SATERN Coordinator June Jeffers, KBOWEQ, says SATERN members will be utilized in Kiowa County to support Salvation Army canteens and the Service Center in Haviland.

Twelve people were killed in the twister, 10 from Greensburg. The town is located at the junction of Routes 54 and 183, about 45 miles east of Dodge City. It is the county seat for Kiowa County. An 11th person died in nearby Pratt County and a 12th in a separate tornado in Ottawa County.



The Red Cross said about 90 percent of Greensburg was destroyed or heavily damaged. The storm stripped trees of most of their branches and destroyed all the town's churches, the AP reported. Gov Kathleen Sebelius told the AP on Sunday that Kansas' response to the disaster will likely be hindered because equipment such as tents, trucks and semitrailers are now in Iraq, saying Kansas lacks about half the large equipment it could use for recovery efforts and debris removal, including dump trucks and front loaders. More than 20 percent of the state's Humvees and 15 of 19 helicopters were sent to Iraq, according to officials with the Kansas National Guard. Nearly 70 Kansas National Guard troops arrived in Greensburg on Monday to supplement about 40 troops already on the ground.

The entire town was evacuated. Greensburg residents were slowly allowed to return to what's remaining of their homes. Searchers spent the weekend sifting through the debris and are still hoping to account for residents who fled as the storm approached.

The Federal Emergency Management Agency (FEMA) is on site with two mini Emergency Operations Vehicles (EOV), and two mobile Disaster Recovery Centers (DRC) with satellite communications.

President Bush declared Kiowa County, Kansas, a major disaster area, making federal aid available to people and communities affected by the storm. "Our hearts are heavy for the loss of life in Greensburg, Kansas," Bush said. "I declared a major disaster for that community, and I hope that helps. It's going to take a long time for the community to recover."

MAY SPECIAL EVENTS

Jun 2, 1600Z-2300Z, San Diego, CA. USS Midway CV-41 CO-MEDTRA, NI6IW. **65**th anniversary of the Battle of Midway, June 4-7, 1942. 18.142 14.242 7.242. QSL. USS Midway Museum CV-41, 910 Harbor Dr, San Diego, CA 92101.

Jun 2-Jun 3, 1300Z-2200Z, Little Rock, AR. United States Power Squadrons Amateur Radio Net, N5R. National Safe Boating Week from the Sub USS Razorback at the Arkansas Inland Marime Museum. 28.367 21.367 14.267 7.267. Certificate. Donald R. Stark, N3HOW, 65 Stark Spur, Eighty Four, PA 15330-2547. stark84@earthlink.net

Jun 2-Jun 3, 1300Z-0700Z, San Diego, CA. Sponsored by KI6FDN and W6NWG, W6P. Hale Telescope on Palomar Mountain dedication anniversary. 14.260 7.260. QSL. Michelle Thompson, W5NYV, 5379 Carmel Knolls Dr, San Diego, CA 92130. www.palomararc.org/special-event.htm

Jun 2-Jun 10, 0000Z-2359Z, La Grange Park, IL. Six Meter Club of Chicago, W6M. 50th Anniversary Six Meter Club of Chicago. 146.970 21.350 14.250 7.250. QSL. Karl Weisshappel, 802 Barnsdale Road, La Grange Park, IL 60526. WA9FIH@arrl.net

Jun 2-Jun 10, 1300Z-2000Z, Baltimore, MD. Historical Electronics Museum Amateur Radio Club, W2W. **The use of electronics in D-Day**. 14.241 14.041 7.241 7.041. Certificate. HEMARC W2W D-Day Event, PO Box 746, Mail Stop 4015, Baltimore, MD 21203. www.hemarc.us

Jun 8-Jun 9, 2300Z-2300Z, Bloomfield, MO. Bootheel ARC and SEMo ARC, WOS. Commemorating 146 years of the Stars & Stripes newspaper. 3.950 7.260 14.260. Certificate. Stars and Stripes, P.O. Box 98, Jackson, MO 63755.

Jun 9, 1300Z-1900Z, Bloomfield, NY. Rochester DX Association, W2RDX/60. Rochester DX Association's 60th anniversary from the Antique Wireless Museum. All HF bands SSB CW AM on 3.885. QSL. Via bureau, LoTW or direct Irwin J. Goodman, AF2K, 515 Drumm Rd, Webster, NY 14580-1579. www.rdxa.com

Jun 9-Jun 10, 0000Z-2359Z, Honolulu, HI. Battleship Missouri Amateur Radio Club, KH6BB. **Museum Ships Weekend** Operations will be on *OPENIRLP* & HF. 28.463 21.363 18.163 14.263. QSL. Battleship Missouri Amateur Radio Club, 98-1547 Akaaka St, Aiea, HI 96701. www.kh6bb.org/ & users.tellurian.com/freddie/nj2bb/ship-event.html

Jun 9-Jun 10, 0100Z-2359Z, Camden, NJ. Battleship New Jersey Amateur Radio Station, NJ2BB. **Museum Ships Weekend** Event Work. 18.150 14.270 14.040 7.250. QSL. Margaret Burgess, KB2BRR, 150 Schooner Ave, Barnegat, NJ 08005. *Special certificate for working 15 ships.* www.nj2bb.org

Jun 9-Jun 10, 1400Z-2200Z, Manitowoc, WI. USS Cobia Radio Club/ManCoRad Radio Club, N9BQV. **WWII Sub USS** Cobia Museum Ships Afloat Weekend. 14.260 14.070 7.250 3.900. QSL. Fred Neuenfeldt, W6BSF, 4932 5 10th St, Manitowoc, WI 54220-9121. www.w9dk.com

Jun 11-Jun 26, 0400Z-0359Z, Atkinson, NH. Atkinson Amateur Radio, K1D. W1DAD & K1MOM Kids Day and Amateur Radio Field Day Awareness. 21.273 14.273. QSL. Peter Schipelliti, 7 Dearborn Ridge Rd, Atkinson, NH 03811. w1dad@arrl.net

Jun 13-Jun 21, 1200Z-0400Z, Salt Lake City, UT. Rotarians of Amateur Radio, W7R. Rotary International Convention held in Salt Lake City. 21.310 14.293 7.280 3.955. QSL. Brett Sutherland, 860 W 1500 S, Woods Cross, UT 84087. roar.mainlink.net.au

Jun 15-Jun 18, 1500Z-0300Z, Indianapolis, IN. Indianapolis Motor Speedway Amateur Radio Club, W9IMS. United States Grand Prix. 21.340 14.240 7.240 3.840. QSL. Indianapolis Motor Speedway Amateur Radio Club, PO Box 18495, Indianapolis, IN 46218-0495. Certificate and QSL available; see Web site. www.w9ims.com

Jun 21-Jun 24, 1806Z-1806Z, Merchantville, NJ, WORLD-WIDE. Amateur Radio Lighthouse Society, KC2HOU. Lighthouse Summer Solstice SweepStakes. 28.370 21.370 14.270 7.270 3.970. Certificate. Amateur Radio Lighthouse Society, 114 Woodbine Ave, Merchantville, NJ 08109. This is not a contest. See Web site for complete information. arlhs.com/SSSS-2007-quidelines.html

Jun 23-Jun 24, 1900Z-1700Z, Woodland, CA. Yolo Amateur Radio Society, W6Y. Boy Scout Radio Daze at Field Day. Skeds via K6KN@arrl.net. 14.290 7.190 IRLP 5750 EL 107315. QSL. Bill Ragsdale, K6KN, PO Box 1500, Woodland, CA 95776. yolobsa.editme.com/W6Y

Jun 30, 1800Z-2200Z, Los Alamos, NM. Los Alamos Amateur Radio Club, W5PDO. The Earthwatch Institute's Student Challenge Awards Program, from Fenton Hill Observatory. 28.450 21.350 14.250. Certificate. Don Casperson, AA5PA, 1423 43rd St, Los Alamos, NM 87544. www.laa.lanl.gov/earthwatch

ROCHESTER HAMFEST

June 1-3, 2007.

The Rochester Hamfest, Computer and Hobby Show will be held June 1 through 3, 2007 at the Monroe County Fairgrounds, Route 15A, Rochester, NY. This is the largest hamfest in our area and is attended by many Buffalo area hams.

HAMFEST TIMETABLE

Friday, June 1

6:00 a.m. - 7:00 p.m.

12:00 noon - 5:30 p.m.

Outdoor Flea Market Open

Dome Exhibit Hall Open

Annual Awards Dinner RIT Inn

Saturday, June 2

6:00 a.m. -- 7:00 p.m. Outdoor Flea Market Open 8:30 a.m. -- 5:30 p.m. Dome Exhibit Hall Open

9:00 a.m. -- 5:00 p.m. Programs

Sunday, June 3

6:00 a.m. -- 1:30 p.m. Outdoor Flea Market Open 8:30 a.m. - 1:30 p.m. Dome Exhibit Hall Open 11:30 a.m. GRAND AWARD

SCHEDULED EXHIBITORS:

A-1 Rechargers

ARRL

AMSAT - NA

Atlas Business Systems

Batteries America

CQ Communications

Ding Dong School

Dragan Studio

Everdry Waterproofing

The Ham Station

Kanga US

National Communications

National Weather Service

Navy MARS

Quarter Century Wireless Assn.

Radioware and Radio Bookstore

Satellite Headquarters

Simcona Electronics

Tower Electronics

Tuner Service of Rochester

Army MARS

Vintage Entertainment

VIS Amateur Supply

Webster Associates

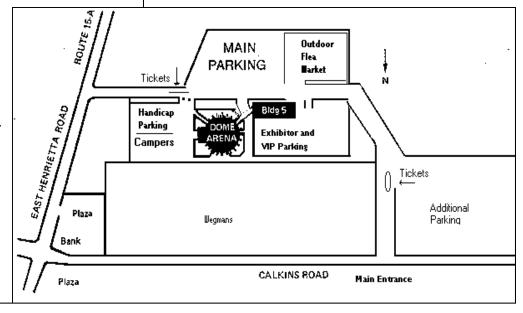
STARS & ARRL Memberships

Membership in STARS is open to anyone with an interest in amateur radio. A license is not required. Membership applications may be downloaded from the club website or obtained by sending a SASE to Judy Levan N2TEZ, 120 University Blvd., Depew, NY 14043.

Annual dues are payable on January 1 and are \$21 for a single membership, \$27 for family memberships and \$8 for a student membership (through grade 12). The dues are pro-rated on a monthly basis for new members plus there is an initiation fee of \$5 when first applying to the club. For example, a new member joining in July would pay \$15.50 (6 months X \$1.75 per month plus the \$5 initiation fee).

Applications should be returned to Judy N2TEZ along with the appropriate dues. The applications will be reviewed and approved by the Board of Directors and then voted on by the general membership at the next regular club meeting.

Members who are joining ARRL for the first time or who are renewing their membership should send their ARRL membership forms to Jack Cullum KB2ESM, 6871 Webster Road, Orchard Park, NY 14127 along with a check made out to STARS. No extra cost to you and STARS benefits!



MAY CONTESTS

Digital Pentathlon -- sponsored by Digital QSO Club (D-QSO-C). 1800Z-2200Z. PSK Jun 1; MFSK Jun 8; Olivia Jun 15; Hellschreiber Jun 22; Throb Jun 29. Frequencies: 80-10 meters, work stations once per band/mode. For more information: dgso.net/start.html.

2007 Alabama QSO Party -- SSB/CW, sponsored by the Alabama Contest Group from 1600Z Jun 2-0400Z Jun 3. Frequencies: 160-10 meters. Categories: SO, MS, MM, Mobile, QRP/LP (<150 W) /HP all categories. For more information: www.AlabamaQSOParty.org.

SEANET Contest -- CW/SSB/Digital, sponsored by the SEANET Convention, 1200Z Jun 2-1200Z Jun 3. Frequencies (MHz): CW -- 160 meters, 3.525, 7.025, 14.025, 21.025, 28.025; SSB -- 7.090, 14.320, 21.320, 28.320. Categories: SO, MS, AB, SB; Mixed and Single Mode all categories. For more information and list of SEANET countries: www.sabah.net.my/seanet/contest_rules.htm.

Look Around in the Field Contest -- CW/SSB, managed by NJ2OM from 1600Z-2200Z Jun 2. Frequencies: 160-10 meters. Categories: Home QRP, Home QRO, Field QRP, Field QRO. For more information:

mysite.verizon.net/vze7v384/nj2om/index.html.

ARRL June VHF QSO Party -- from 1800Z Jun 90300Z Jun 11 (see May QST, p 102 or www.arrl.org/
contests).

ANARTS WW RTTY/Digital Contest -- sponsored by Australian National Amateur Radio Teleprinter Society (ANARTS), from 0000Z Jun 9-2400Z Jun 10. Frequencies: 80-10 meters. Categories: SO, MS and SWL; SO and SWL only operate 30 hours. For more information: anarts.com.au/rules2007.htm.

Asia-Pacific Sprint -- SSB, from 1100Z-1300Z Jun 10. Frequencies: 20 and 15 meters only (see Feb QST, p 100, or jsfc.org/apsprint/aprule.txt).

Portugal Day Contest -- SSB, sponsored by Rede dos Emissores Portugueses (REP), from 0000Z-2400Z Jun 9. Frequencies: 80-10 meters. Categories: SOAB only. For more information: www.rep.pt/pdf/contest_portugalday.pdf.

GACW WWSA CW DX Contest -- sponsored by Grupo Argentino de Radiotelegrafia (GACW), from 1500Z Jun 9-1500Z Jun 10. Frequencies: 80-10 meters. Categories: SOAB and SOSB (QRP, LP, HP), MS, MM. For more information: gacw.no-ip.org.

Bill Windle QSO Party -- CW, sponsored by First Class Operator's Club (FOC), from 0000Z-2359Z Jun 9 (also on Oct 13). Frequencies: 160-10 meters, 6 and 2 meters.

Call CQ BW from 15 to 45 kHz above band edge. Open to all hams, not just FOC members. For more information: www.firstclasscw.org.uk.

Kids Day Operating Event -- 1800Z-2400Z Jun 16 (see www.arrl.org/FandES/ead/kd-rules.html).

West Virginia QSO Party -- CW/SSB, sponsored by the West Virginia State Amateur Radio Council from 1600Z Jun 16-0200Z Jun 17. Frequencies: 80-10 meters; CW -- 35 kHz up from band edge, Phone -- General class segment and Novice/Tech 10 meter segment. Categories: SO, MS, MM and Mobile (keep separate log each county), HP/LP/QRP and Phone/CW/Mixed all categories. County line stations count as 2 QSOs and 2 multipliers. For more information: www.gsl.net/wvsarc.

All-Asian DX Contest -- CW, sponsored by the Japan Amateur Radio League from 0000Z Jun 16-2400Z Jun 17 (SSB -- Sep 1-2). Frequencies: 160-10 meters (160 CW only), includes 10 minute band change rule. Categories: SOAB, SOSB, MO, Low Power (Asian stations only), Junior (JA stations <20 years), Senior (JA stations >70 years). For more information and Asian station QSO points: www.jarl.or.jp/English.

SMIRK QSO Party -- CW/Phone, sponsored by the Six Meter International Radio Klub, 0000Z Jun 16-2400Z Jun 17. Frequencies: 6 meters. SO category only. No repeater QSOs. For more information: www.smirk.org.

Quebec QSO Party -- CW/Digital/Voice, sponsored by the Radio Amateurs du Quebec from 1700Z Jun 16-0300Z Jun 17. Frequencies: 80-2 meters, no repeater contacts. Categories: SOAB (150 W max), MO, QRP, VHF (QRP and VHF for VE2 and NA stations only). For more information: www.raqi.ca/qqp.

Summer Meteor Scatter Contest -- FSK441, sponsored by Radio Club "Golubinci," YT7GOL, from 2000Z Jun 15-2000Z Jun 17. Frequencies: 144 MHz. Categories: SO and MO. For more information and changes for US station rules: solair.eunet.yu/~s.ilic/summer_msc.htm.

Spanish Islands Contest -- CW/SSB/RTTY, sponsored

by the Diploma Islas Españolas (DIE), from 0600Z-1200Z Jun 17. Frequencies: 80-10 meters. For more information: www.ea5ol.net/die.

<u>ARRL Field Day</u> -- 1800Z Jun 23-2100Z Jun 24 (see May *QST*, page 98 or www.arrl.org/contests)

His Majesty King of Spain Contest -- SSB, 1200Z Jun 23-1200Z Jun 24 (see May QST, page 97).

QRP ARCI Milliwatt Field Day -- 1800Z Jun 23-2100Z Jun 24. Follows ARRL Field Day rules. See www.grparci.org for more information.

HAM RADIO TRIVIA

Test your knowledge with these questions taken trom the QRZ. COM trivia website.

- 1. The equivalent value of inductance for three 10 microHenry coils connected in parallel is:
 - a. 14.14 µHenrys
- c. 30 µHenrys
- b. 1000 µHenrys
- d. 3.33 µHenrys
- 2. What does the term "twisted pair" mean in Amateur Radio
- a. Wire that is twisted to reduce hum pickup in speaker circuits
- **b**. Describes a problem in open wire feedlines
- c. Describes a term used for a phone call
- d. When a CW ops fingers are tired from using the straight key
- 3. What is the grace period during which the FCC will renew an expired license?
 - a. 2 years
- c. 10 years
- **b**. 5 years
- d. There is no grace period
- 4. Approximately how many times can a Nickel Cadmium (NiCad) battery be recharged?
 - **a**. 500 times
- c. 250 times
- **b**. 1000 times
- **d**. 750 times

- 5. Unijunction transistors (UJTs) are often used in simple oscillator circuits. What characteristic of a transistor defines it as "unijunction"?
 - a. You need only to connect two leads for it to operate
 - **b**. Its internal structure has only one actual junction
- c. Only one such transistor is required to build an oscilla-
- d. Only one type of such a transistor was ever made
- 6. What is the term for a repeater that transmits on the same frequency it receives on?
 - a. Cross-band repeater
- c. Duplex repeater
- b. Simplex repeater
- d. It is not a repeater
- 7. How far does a radio signal travel in 1 nanosecond?
 - a. 3 miles
- **c**. 0.1 meter
- **b**. 0.3 meters
- d. 3.0 meters
- 8. When was the first Amateur Radio Advanced Class license first offered?
 - a. shortly after WWI c. shortly after WWII
 - **b**. just before WWII
- d. April 15, 2000
- 9. What is a smith chart?
 - a. A chart for calculating the reactance of an inductor
 - b. A chart for finding the temperature of red-hot iron
 - c. A diagram with circles and AGC levels on it
 - d. A chart for studying transmission line behavior

CLUB REPEATERS

The club repeater (WB2ELW/R) is located near Colden, NY (147.09/.69 output/input) with a PL of 107.2 Hz). Use a PL of 141.3 for the Nike Base remote receiver. STARS honorary southern repeater (KE2VW/R) is in Arkwright, NY (146.67/.07 output/input with a PL of 107.2 Hz). The club UHF repeater is location near Colden, NY (442.325 MHz with a PL of 107.2 Hz).

CLUB MEETINGS

Club meetings are held on the first Thursday of the month at the Hamburg Youth Center (Prospect and Hawkins Avenues) at 7:00PM. Everyone is welcome. Board meetings are held on the fourth Thursday of the month at the Nike Base Club Station at 7:30PM and are open to all club members.

CLUB HF STATION

The club Nike Base HF station is located on Lakeview Road 1.75 miles east of Route 20 next to the Hamburg Town Arena.

COMING EVENTS

BATAVIA HAMFEST 21 Jul 2007

Alexander Firemens Recreation Center 10708 Rte. 98 Alexander NY

Sponsored by the Genesee Radio Amateurs

Talk-In: 147.285+600

Contact: Rob McLean, KC2MHH Email: kc2mhh@verizon.net

Answers to Trivia Quiz:

1-d; 2-c; 3-a; 4-a; 5-b; 6-b; 7-b; 8-c; 9-d.