

the Milliwatt



The award-winning monthly publication of
The Baltimore Radio Amateur Television Society
P.O.Box 5915 Baltimore, MD 21282-5915

July, 2008

MARYLAND HAMFEST AND COMPUTER FEST

SPONSORED BY
THE BALTIMORE RADIO AMATEUR TELEVISION SOCIETY

SUNDAY, JULY 20, 2008

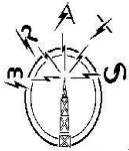
HOWARD COUNTY FAIRGROUNDS, OFF I-70 at RT. 32

Grounds open for Tailgating at 6:00am

ACCESSIBLE TO THE HANDICAPPED
KIDS UNDER 12 FREE

FREE VE EXAMS at 9:00 AM ONLY, CHECK IN at 8:30 AM
PRE-REGISTRATION REQUIRED

To register call 301-572-5124 between 6 PM and 9 PM, or email crewb3gwx@aol.com



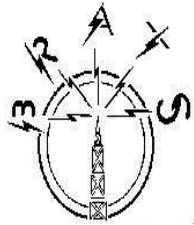
For information contact:

BRATS / PO Box 5915 / Baltimore, MD 21282 -- 410-461-1212 voice or fax
<http://www.bratsatv.org> -- email brats@bratsatv.org

Chinese Officials Give Kudos to Amateur Radio Operators As disaster recovery efforts continue following the earthquake in the Wenchuan area of China's Sichuan province on May 12, China's Information Office of the State Council reports that the death toll has reached 67,183 persons as of May 27. Communications in some of the surrounding areas were cut off, and communications in some other areas experienced network congestion due to drastically increased traffic. According to the Chinese Radio Sports Association (CRSA) -- the Chinese IARU Member-Society -- Chinese government officials and the news media have recognized that when communications failed after the earthquake, Amateur Radio operators stepped in to provide vital links. [ARRL]

Be Careful on 10 Meters

With recent band openings beginning on 10 meters, ARRL has received word that a number of amateurs have been heard using SSB below 28.300. "We urge everyone to remember that 28.000 to 28.300 MHz is reserved for RTTY and data, including CW," said ARRL Field and Regulatory Correspondent Chuck Skolaut, K0BOG. "Phone is permitted from 28.300 to 28.500 for Novice and Technician class licensees with a maximum power of 200 W. Phone and image are allowed from 28.300 up to 29.700 for General, Advanced and Extra class license holders." Skolaut, who manages the Official Observer and Intruder Watch programs, said that people have called and e-mailed ARRL HQ inquiring about hearing IDs repeated in code on various 10 meter frequencies. "What they are hearing are beacons," Skolaut said; he suggests checking out some Web sites for more information on beacons you might hear on 10 meters and other bands.



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The award-winning monthly publication of The BRATS.
Items herein may be reprinted with credit.

Mayer D. Zimmerman, W3GXX, Editor

HELP WITH THE BRATS HAMFEST! Sunday, July 20, 2008 Howard County Fairgrounds

Call: 410-461-1212, leave a message; or visit our website:
<http://www.bratsatv.org> We need your help NOW, on the day of the hamfest, the day before and the day after .
Thanks!

The Baltimore Radio Amateur TV Society, Inc. P.O. Box 5915 Baltimore, MD 21282-5915

a non-profit organization under section 501(c)(3) of the Internal Revenue Code and a non-profit corporation in the State of Maryland. We belong to and support the Foundation for Amateur Radio (FAR) and the American Radio Relay League (ARRL).

home page: <http://www.bratsatv.org>

e-mail: brats@bratsatv.org

InfoLine: 410- 461-1212

Meetings: 3rd Tuesday, 7:15 PM, Pikesville Library, 1301 Reisterstown Rd., Pikesville, MD.

President: Ed Rosen, N3GXH

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Vice Chairman, Operations: Ian Millet, N3CVA

BRATS Repeaters

BRATS Linked Repeater System:

WB3DZO: 147.03+, 224.96-, 448.325-

BRATS Stand-alone repeaters:

443.350+

BRATS Packet Network Nodes

W3GXT-5 145.05

W3GXT-10 224.52

BRATS ATV Repeater System:

W3WCQ: inputs: 426.25, 1253.25

outputs: 439.25, 911.25

BRATS Weekly Nets

Mon 9 pm Traffic and Info Net, W3GXX

Tues 11:45 Informal ATV Net, W3WVV

Tues 9 pm BRATS Horsetraders Net, Grant, KA3CEA

Wed 9 pm CATS ATV Net

Thurs 9 pm BRATS ATV Net

Sat 1 pm Weekly News Bulletin, W3GXX

Sat 1:20 The BRATS Answer Men: KB3JQQ

Sun 8 pm MATS ATV Net

As needed Weather/Emergency Net, Skywarn

BRATS Board of Directors

Through 12/09:

KA3IDB, KB3FIF, K0RYX

Through 12/08:

W3ZQI, KB3LJM, K2GZY

Regular BRATS Meetings

3rd Tuesday of each month, 7:15 PM

Pikesville Library, 1301 Reisterstown Rd

Next BRATS Meeting

Tuesday, July 15, Pikesville Library

1301 Reisterstown Road, Pikesville

Stolen Kenwood TM-D700A

The ham radio was stolen out of my van last night (30 May)! If you happen across a really great deal in a pawn shop on a used Kenwood TM-D700A, let me know, we've already filed a police report. The radio has my callsign programmed in it (KB3LJM). 73, Laura, KB3LJM kb3ljm@gmail.com

Firedrake Jammer on the Loose Again in Asia:

Amateur Radio operators throughout the United States have reported hearing an intruder signal -- dubbed Firedrake -- on 20 meters. ARRL Field and Regulatory Correspondent Chuck Skolaut, K0BOG, said he has received reports from Intruder Watch monitors in Texas, Montana, West Virginia, Massachusetts, Colorado, Washington, Nevada and Pennsylvania hearing the jammer on 14.010 and 14.070 MHz. Hams in IARU Region 1 have heard the jammer on 14.000, 14.005, 14.010, 14.030, 14.050, 14.050 and 14.090; Uli Bihlmayer, DJ9KR, Assistant Monitoring Coordinator for Region 1 (IARUMS) <http://www.iarums-r1.org/> said he has had reports of hearing the jammer on three frequencies at the same time. Skolaut said he heard it on 14.070 at 1500 EDT on June 6 from ARRL HQ, but has not confirmed Firedrake on any other frequencies. "We have reported the jammer to the FCC's High Frequency Direction Finding (HFDF) facility in Columbia, Maryland. They have also heard the jammer and have sent a harmful interference report to the Chinese government," Skolaut said. The FCC has no authority to make intruder stations outside the US stop transmitting on Amateur Radio frequencies; such situations typically are dealt with through diplomatic channels. "All three IARU regions are coordinating efforts to collect observations and forward them to the proper authorities to follow up on this," Skolaut said. "As you probably remember, this jamming occurred almost two years ago <http://www.arrl.org/news/stories/2006/08/17/2/> and was primarily heard on 14.260 and 18.160 MHz." According to Bihlmayer, the jammer (whom Region 1 monitors have dubbed Firedrake) plays oriental-type music (click here to hear what Firedrake sounds like - <http://www.arrl.org/news/files/firedrake.mp3>) and originates from the Chinese government in an attempt to block out the Sound of Hope short wave broadcasts <http://sohnews.com/shortwave-broadcasts/>. The Sound of Hope refers to itself as "a Chinese language media network providing an alternative to China's state controlled media with news and cultural programming. Radio Free China (RFC) is Sound of Hope's project to reach listeners in Mainland China with programming beyond the control of China's omnipresent blockade of free information." Information on the Intruder Watch program can be found in the June 2007 issue of QST.

RADIO BUSINESS: KENWOOD AND JVC TO MERGE BY OCTOBER

Kenwood and JVC say that their proposed merger will be completed by this fall. Will this lead to a new high frequency radio from the labs at Kenwood Communications? Jeff Clark, K8JAC tries to provide an answer: While nobody will say for sure, at least one reason that Kenwood has not introduced a new, high end high frequency transceiver to rival offerings from Icom, Yeasu and newcomer Heiberling could have to do with aspects of the companies business that have nothing directly to do with ham radio. Rather some are speculating that it might have been the merger of Kenwood with the Victor Corporation of Japan that may have at least temporarily sidelined any major high frequency Kenwood product introductions this year. According to a joint news release the two Japanese electronics giants will combine to form JVC Kenwood Holdings. The new corporation will have its headquarters in the city of Yokohama. The new model business will focus on car electronics, home electronics, and professional wireless systems, and will also explore new product segments. In an earlier statement by Kenwood it was stated that the merger would have no impact on the company's continuing support of the amateur radio marketplace. The two companies appear to be combining to reduce operating costs while scaling distribution in the already crowded world-wide consumer electronics market. (News.com, Southgate via ARNS0)

Paperless boarding goes to Jersey

Continental Airlines has expanded its paperless boarding service to Newark Liberty International. A pilot program conducted with the Transportation Security Administration, it lets fliers use electronic boarding passes that are sent via e-mail to their cellphones or other handheld devices such as BlackBerrys. An encrypted bar code in the message containing passenger and travel information is scanned by TSA screeners at security checkpoints. Travelers also must show valid identification. The program began last year at Houston's Intercontinental and is also available at Reagan Washington National and Boston Logan. It will run until June 30, 2009.

The end of the paper airline ticket

"If you have a paper ticket, it's time to donate it to a museum," said IATA CEO and Director General Giovanni Bisignani prior to the opening of the association's annual meeting. As of June 1, IATA will no longer supply paper ticket stock to 60,000 travel agencies in 125 countries around the world as it has done for decades. Many American travelers may think that paper airline tickets are already extinct, as most U.S. airlines stopped issuing paper tickets for domestic flights some years ago. But in other parts of the world, and particularly for international itineraries involving multiple airlines, paper tickets are more common and it's taken 13 years from the time the first electronic ticket was issued in 1994 to the eradication of paper ticket stock issued by IATA. When IATA began its push for electronic ticketing in 2004 only 18% of airline tickets issued by IATA airlines worldwide were electronic.

Free wireless Internet takes off

Mineta San Jose International launched free wireless Internet service last week. It's available in Terminals A and C. The airport says the service will also be available in the new North Concourse and Terminal B once they're completed later this year and in 2010, respectively. Commercial Wi-Fi service currently provided by T-Mobile and Wayport will remain available to their subscribers at the airport.



10 airports install body scanners

BALTIMORE Body-scanning machines that show images of people underneath their clothing are being installed in 10 of the nation's busiest airports in one of the biggest public uses of security devices that reveal intimate body parts. The Transportation Security Administration recently started using body scans on randomly chosen airline passengers in Los Angeles, Baltimore, Denver, Albuquerque and New York's Kennedy airport. Airports in Dallas, Detroit, Las Vegas and Miami will be added this month. Reagan National Airport near Washington starts using a body scanner Friday. A total of 38 machines will be in use within weeks. "It's the wave of the future," said James Schear, the TSA security director at Baltimore-Washington International Airport, where two body scanners are in use at one checkpoint. Schear said the scanners could eventually replace metal detectors at the nation's 2,000 airport checkpoints and the pat-downs done on passengers who need extra screening. "We're just scratching the surface of

what we can do with whole-body imaging," Schear said.

HELP! We need you to sign up NOW to help with the Hamfest! Call 410-461-1212

New Russian Satellite in Orbit

A Russian rocket launched from Plesetsk on May 23 carried a number of payloads to orbit, including a new Amateur Radio satellite named Yubileiny -- Russian for jubilee -- since christened Radio Sputnik 30 (RS-30). Operational details are vague at this time. Amateurs throughout the world report receiving signals at 435.315 and 435.215 MHz; some report reception of CW telemetry while others report what appear to be image transmissions from the satellite. RS-30 is orbiting at a maximum altitude of 1500 km, creating a substantial communications footprint below. The satellite will broadcast audio and video about the history of the Soviet and Russian space programs, as well as signals imitating those broadcast by Sputnik in 1957. According to the satellite's launch team, "The motive for development of the Yubileiny small spacecraft was the 50th anniversary of the first space satellite. With the help of that satellite, the new space systems and equipment are expected to get flight qualification, and radio-amateurs all over the world will be able to receive information on the history of space development and domestic cosmonautics achievements."

Satellite Shorts From All Over

- Congratulations are in order for 10 year old Piyumi, VE4WPL in Winnipeg, Manitoba, Canada for making her first satellite contact on AO-51. She used an Icom IC-W32A handheld at 5 watts with an Arrow antenna to make the contact. Patrick WD9EWK/VA7EWK represented AMSAT at the Yavapai Amateur Radio Club (YARC) and Verde Valley Amateur Radio Club (VVARA) joint hamfest on Saturday, 31 May 2008. He set up an AMSAT table at the hamfest and provided on-air demonstrations using the AO-51 satellite.
- Allen, N5AFV was also active in promoting amateur radio satellite activity on the weekend of May 31 - June 1. On May 31 Allen operated via satellite from the second highest point in Texas at the top of Enchanted Rock. June 1 gave Allen the opportunity to operate using the Ten Ten International club call sign, W6OI from 20th Annual Ten Ten Hill Country Picnic. QSL information for both operations is to N5AFV with an SASE. Martian weather data from the Canadian Space Agency's weather station aboard the Mars Phoenix lander can be viewed on your computer using tool available from <http://phoenix.lpl.arizona.edu/> Mac OSX 10.4.3 (or higher), or Vista is required. (Via UniverseToday.com).
- Word has been received from VU2POP that AMSAT-India has completed construction of the Hamsat-2 transponder built by one of their student members. They are now working on flight plans for an orbit similar to VO-52 and hopefully higher if possible.

[Thanks, AMSAT]

More Satellite Shorts

- Technical papers are solicited for presentation at the 27th Annual ARRL and TAPR Digital Communications Conference to be held September 26-28, 2008 in Chicago, Illinois. The submission deadline is July 31, 2008. Please send papers to: Maty Weinberg, ARRL, 225 Main Street, Newington, CT 06111.
- Stefan, VE4NSA says his 1:1 scale model kit of the Delfi-C3 satellite is in the prototype stage. A photo of the Project can be found at <http://www.wincube.ca/Delfi.html>. This model will be available as pdf files for you to print (and cut and glue) in the next few weeks from the Delfi-C3 website. Stefan invites radio amateurs to also see his released AO-51 scale model at <http://www.msig.ca/AO-51.html>.
- Yuta Araki, JQ1YGV wrote from Nihon University to inform you of the update of the analysis software for the SEEDS cubesat. The new version of the analysis software is "Downlink Code for Distribution Ver.2.0.3" at: http://cubesat.aero.cst.nihon-u.ac.jp/english/download_e.html.

[AMSAT]

CUTE-1.7 + APD-II Satellite Camera Activated

Earth photos taken by the CUTE-1.7 + APD-II camera were successfully received at the ground station. See: http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/080601_Picture_180degRotated.jpg JA1GDE created a diagram showing the area captured in the photograph: http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/080601_Picture_JA1GDE.jpg Additional photos from the satellite camera can be seen at: <http://www.ne.jp/asahi/hamradio/je9pel/cut17apd.htm#bottom> [ANS thanks Mineo, JE9PEL for the above information] [AMSAT]

Is Beijing preparing to launch an Amateur Radio satellite ?

There is speculation that Beijing may launch an Amateur Radio satellite prior to the 2008 Olympics. A report on the www.73club.com website indicates plans for an Amateur Radio satellite carrying a 145 to 435 MHz FM transponder to be launched in time for the Olympic games. [RAC]

Send your name into solar orbit ...

Kepler is NASA's first mission capable of detecting Earth-size and smaller planets in the habitable zone of solar-like stars. Planned to be launched from Kennedy Space Center in February 2009, the spacecraft will be launched into orbit around the Sun. When you submit your name, you may also chose to provide a message of 500 words or less of why you think the mission is important. Your name will be stored on a DVD and rocketed into space on board the Kepler spacecraft. The link to sign up is at: <http://namesinspace.seti.org/> The deadline to submit your name for the Kepler Mission is November 1, 2008.

United plugs iPods into in-flight entertainment

Passengers on some United flights will be able to plug their iPods into the plane's entertainment system, the airline said today. iPod-equipped passengers can watch their own videos on the screen in the seat back ahead of them. And they can charge their iPods while they fly. Don't get too excited, though -- the perk will mainly be available only on international flights. The first is United #936, which departs Washington D.C. at 5:40 p.m., headed for Zurich. Got a Sansa, Zune, or other music player? You're out of luck. The system supports only the iPod's annoying proprietary 30-pin connector.

No more \$8 gas for car renters at BWI

BALTIMORE: Starting July 4, travelers at Baltimore/Washington International who are returning rental cars with a partially filled gas tank will get a price break. Following an investigation by the attorney general's office in Maryland, rental car companies operating in the state agreed to cut their refueling costs which can be as much as \$8 a gallon by up to 40%. Maryland's investigation began six months ago, and found that "some of the rental car companies had increased their refueling charges drastically in recent months, far in excess of gas prices found in the Baltimore/Washington/Philadelphia area," the attorney general's office said, in a statement. The rental car companies agreed to lower their charges within Maryland to about 135% to 142% of current retail prices, or about \$5.85 per gallon as of last week. "Maryland will have among the lowest, if not the lowest, rental vehicle refueling charges in the nation," the statement said. Enterprise and its affiliated companies Alamo and National were not part of the negotiation because they had lower refueling fees prior to the investigation. Enterprise spokeswoman Christy Conrad says its companies never charge more than 33% beyond the local market rates. Shortly before the settlement was announced, Hertz said it will start a new refueling pricing policy nationwide. Customers returning cars with a partially filled tank will be charged local retail prices, plus a one-time refueling fee of \$6.99. They can also choose to buy a tank of gas at the outset and receive a 15-cents-per-gallon discount.

ARRL Files Comments in Two Matters Before FCC

On Tuesday, May 27, ARRL filed electronic comments concerning two matters that the FCC has under consideration. The first set of comments concern a company that filed a request for a waiver of Part 90 of the FCC rules; ReconRobotics, an electronics manufacturer, wishes to sell and for its public safety customers to use a robotic device that operates in the 430-448 MHz band. The primary allocation in that portion of the spectrum is United States government radiolocation (military radars). The Amateur Service has an allocation on a secondary basis. The second matter deals with GE Healthcare and their request for allocation of spectrum (as a secondary user) in the 2300 MHz band; the Amateur Radio Service has a primary allocation in a portion of the requested band. FULL STORY

ARRL Welcomes Yaesu as Principal Sponsor of Logbook of The World Web Site

The ARRL welcomes Yaesu as the principal sponsor of the Logbook of The World (LoTW) Web site. LoTW is a repository of log records submitted by users from around the world; when both participants in a QSO submit matching QSO records to LoTW, the result is a QSL that can be used for ARRL award credit. With almost 21,000 amateurs registered on LoTW, more than 170 million QSL records have been entered into the five year old system, resulting in more than 13.4 million QSL records.

New Extra Class License Manual Now Shipping

The ARRL Extra Class License Manual and ARRL's Extra Q&A are your tickets to every privilege granted to US Amateur Radio operators. Expert instruction leads you through all of the knowledge you need to pass the exam, including rules, specific operating skills and more advanced electronics theory. Everything you need to know to pass the 50 question Extra Class exam is right at your fingertips -- both books contain the latest Extra Class question pool and answer key. Study the ARRL Extra Class License Manual to understand the theory and applications needed to upgrade your license. With more than 700 questions included in the question pool -- valid from July 1, 2008 to June 30, 2012 -- reading the ARRL's Extra Q&A is the best way to review for the exam with confidence. The Extra Class license is the highest of all three US Amateur Radio licenses. To upgrade to Extra Class you must already hold a General Class license (or have recently passed all of the exams required for a General Class license). Upgrading to an Extra license only requires passing a written examination. As an Extra Class licensee, you will have full privileges on all frequencies authorized by the FCC for Amateur Radio.

PreSat and NanoSail-D CubeSats launch on June 23

Santa Clara University students invite amateur radio operators worldwide to participate with them by receiving beacon signals from PreSat and NanoSail-D, two pioneering cubesat missions that will launch from the Reagan Test Site (Omelek Island, Kwajalein Atoll, Republic of Marshall Islands) on June 23, 2008 at about 7:00 pm PDT.

Both spacecraft will go into Low Earth Orbit as secondary payloads aboard a SpaceX Falcon-1 launch vehicle into a 685x330 km, 9 degree inclination orbit.

PreSat is a 10 x 10 x 30 cm. spacecraft, operating at 437.318 MHz FM, will send an AX.25 packet every 5 seconds. The mission will evaluate the performance of a generic biofluidic sample management and handling system for future advanced in situ spaceborne biology experiments.

NanoSail-D is a 10 x 10x 30 cm. spacecraft, operating at 437.269 MHz FM, sending an AX.25 packet every 10 seconds, will deploy a solar sail that also will be used as a drag sail to demonstrate orbital debris mitigation technology.

Amateur radio operators are encouraged to submit received beacon packets through the mission websites in order to receive a web-based QSL card:

PreSat - <http://www.presat.org>

NanoSail-D - <http://www.nanosaild.org>

Morse Code Returning to MARS Toolbox

After more than a dozen years, Morse code will soon be returning to Military Affiliate Radio System (MARS) nets. In the mid-1990s, the Department of Defense (DoD) did away with CW operation across the board -- including MARS nets -- as automatic systems such as the Internet, SATCOM, cell phones and e-mail became available and the payroll cost of manual operators escalated.

More Information on Inverter Generators Available

The June issue of *QST* features a technical article by former *QST* Editor Kirk A. Kleinschmidt, NT0Z, on different ac generator options. As noted in that article, the *inverter generator* type power system currently provides the most suitable power for running radio gear at an ARRL Field Day or other remote operation. As promised in the article, [more details](#) on inverter generators are provided on the ARRL Web. Click [here](#) for the whole story.

International Lighthouse and Lightship Weekend

Registrations for the International Lighthouse and Lightship Weekend are now being made at <http://illw.net>. The event is being held on 16 and 17 August starting at 00:01UTC on Saturday and running through 23:59UTC on Sunday. There are some interesting video clips on YouTube that give an idea of the history of the event and what it's like to operate from a lighthouse: The Yamba Lighthouse at www.youtube.com/watch?v=Dp1-bqxsAus and Point Perpendicular at www.youtube.com/watch?v=eiGA7F09ZM8 [GB2RS News]

100 DXCC Countries on 70cm

Jan, DL9KR has managed to work 100 DXCC s on 70cm. He has been active on 70cm for many years and is the first to get the magic 100 DXCC on the band,. A fantastic achievement. (GB2RS News)

Portugal grants access to European 70MHz band

Portugal has granted its amateurs limited access to the European 70MHz band. The two sub bands from 70.167 to 70.2125MHz and 70.237.5 to 70.287.5MHz are available for a limited time at 100 watts effective radiated power. It is on a secondary, non-interference basis with other services and they are not guaranteed protection against interference from other licensed stations operating on the band. [GB2RS News]

The 14th World ARDF Championships

The 14th World ARDF Championships takes place from 2-7 September near Seoul in Korea. If your team wants to participate in the Championships and you have not sent the letter of intent yet, please send it as soon as possible to the organisers. You should fill the category, name, callsign, date of birth and passport number of participants in the application and send it back via e-mail no later than 30 July. Full details can be found at www.2008ardf.org. [RSGB]

Bulgarian National Radio begins trial DRM digital broadcasts

Bulgarian National Radio has begun six months of trial DRM digital broadcasts for listeners in Central and Western Europe. According to the DRM Consortium, the trial will run for six months. The schedule is 0600 to 1200 Friday to Sunday on 11900kHz; 0900 - 1200 Monday to Thursday on 11900kHz and 1300 to 1600 Monday to Thursday on 9700kHz. All transmissions are beamed 306 degrees, with 20kW power. [RSGB]

WA7BNM Contest Calendar

June 28-29

ARRL FIELD DAY
 Ukrainian DX Digi Contest
 His Maj. King of Spain Contest
 Marconi Memorial HF Contest
 ARCI Milliwatt Field Day

July 1

RAC Canada Day Contest

July 4-5

MI QRP CW July 4th Sprint

July 5-6

Venezuelan Day Contest
 DL DX RTTY Contest
 Original QRP Contest

July 6

DARC 10 Mtr. Digital Contest

July 12

FISTS Summer Sprint

July 12-13

IARU HF World Championship

July 19-20

CQ WW VHF Contest
 DMC RTTY Contest

July 27

RSGB IOTA Contest

August 2

European HF Championship

Aug 2-3

ARRL UHF Contest
 10-10 Int. Summer Contest, SSB
 North American QSO Party, CW

August 3

SARL HF Phone Contest

(Thanks, Bruce, WA7BNM)

ARLP025 Propagation de K7RA

Sunspot 998 emerged this week, another old Cycle 23 sunspot near the equator. Daily sunspot numbers for June 10-12 were 14, 11 and 13. Last Sunday, June 8 had the lowest 10.7 cm solar flux value I've ever seen, 64.9 at the observatory in Penticton. The noon reading is the official daily sunspot number, and the value observed that morning at 1700z was actually a tiny bit lower at 64.8. The only value this low I have in my records was almost a dozen years ago near the last solar minimum, July 19, 1996. 10.7 cm solar flux is a measurement of energy at 2.8 GHz, gathered by an antenna in British Columbia. The facility is the Dominion Radio Astrophysical Observatory, which sits 168 miles northeast of my Seattle location at approximately 49.322 degrees North latitude, 119.621 degrees West longitude. The solar flux value is a general indicator of solar activity, but not as useful as sunspot numbers for predicting propagation. You can see all three daily flux readings at http://lynx.drao.nrc.ca/pub/solar/FLUX_DATA/fluxtablerolling.text

ARRL DX Bulletin

JAN MAYEN, JX.

Svein, LA9JKA is QRV as JX9JKA and is here until October 8. He has been active on 17 meters around 1240 to 1400z and 15 meters from 1215 to 1230z. QSL to home call.

BANGLADESH, S2.

Tutul, S21RC has been active on 20 meters using SSB between 1500 and 1700z. QSL direct.

DEMOCRATIC REPUBLIC OF CONGO, 9Q.

Phil, 9Q1TB is QRV from Kinshasa. He is generally active on 20 meters between 0530 and 0630z. QSL via SM5DJZ.

BOSNIA-HERZEGOVINA, E7.

Dejan, E74DX has been active on 40 meters around 2330z. QSL via K2PF.

SOUTH AFRICA, ZS.

Phillip, ZS6PVT has been active on 40 meters around 2000z. QSL to home call.

BWI is Wi-Fi Accessible

The high-speed Wi-Fi network at BWI is now Operational in all secure areas, Concourses A/B, C, D, and E of the airport as well as the Observation Gallery. Travelers can purchase either a daily or monthly plan from Boingo Wireless for their internet Access services.

Hein Hvatum, N4FWA (SK)

Hein Hvatum, N4FWA, who in the 1970s and 80s supervised construction of one of the world's most powerful radio observatories, died of cancer May 22 at his home in Charlottesville, Virginia. He was 85. In 1974, Hvatum assumed responsibility for construction of the National Radio Astronomy Observatory's Very Large Array (VLA), an arrangement of radio telescopes near Socorro, New Mexico. The observatory is perhaps best known to the general public for its appearance in the 1997 movie Contact with Jodie Foster; it has also appeared in Carl Sagan's documentary Cosmos, in the movie Independence Day, in a Bon Jovi music video and on the cover of a Dire Straits album. The VLA was completed in 1982.

Hamfests and Events

FIELD DAY 2008

Saturday/Sunday, June 28-29

BRATS with AERO ARC at Camp Genyara

Contact WA3SWA at WA3SWA@cavtel.net

Sunday, July 20 - West Friendship, MD

The Famous BRATS Maryland Hamfest and Computer Fest

Howard County Fairgrounds **ONE WEEK EARLIER**

THAN USUAL! 410-461-1212; www.bratsatv.org

147.03/R, 224.96/R, 448.325/R

Friday-Sunday August 1-3: Hanover, PA

3.905 CCN Annual Eyeball by 3.905 Century Club, Pleasant Hill Vol. Fire Company, Hanover, PA. Bill Dobson, N3WD, 443-465-6583 n3wd@arrl.net Talk-in: 146.895

Sunday, August 3, Berryville (Winchester) VA

58th Annual Berryville Hamfest ; Shenandoah Valley ARC; Clarke Co., Ruritan Fairgrounds, Bus. Rte. 7, Berryville 540-533-2626; hamfest@svarc.org (146.82/R)

August 9, 10: Winnipeg, Manitoba, Canada

Winnipeg Amateur Radio Club Hamfest Hilton Suites Hotel, Winnipeg Airport Hamfest 2008@mts.net; 146.61/R, 147.39/R <http://www.mts.net/~warc/hamfest/contact.html> (great site to learn how to put on a hamfest and get people to attend ...)

Sunday, August 17, Westminster, MD

Carroll County ARC Tailgate Fest. Carroll Co. Agr. Center, off Rte. 32, Westminster, MD. . (145.41/R) Bill, N3WM, 410-861-9366

Sat./Sun. Sept. 20-21 - Virginia Beach, VA

Va. Beach Hamfest ; VA Wesleyan College. 1584 Wesleyan Dr. VA Beach. (146.97/R) Lynn, W9DJQ, 757-479-1597 hamfest@exis.net

VE EXAMS

BARC VE EXAMS for 2008

12360 Owings Mills Blvd. Owings Mills Register: 1:30 PM, Exams begin 2 PM. No one admitted after exams begin

Saturdays: Aug. 2, Sept. 6, Nov 2, Dec 1.

Sundays: July 6, Oct. 5. n3wke@arrl.net (Thanks, N3YI)

2008 AERO VE EXAMS

Registration at 1 PM, Exams at 1:30.

Fee \$14 (ARRL VEC); All exams at White Marsh Library, 8133

Sandpiper Circle; Sept. 27, Nov. 22. Pat Stone, AC3F,

ac3f@juno.com, 410-687-7209

Other Club Exams

2nd Saturday, 1 PM, Davidsonville, by AARC. Register 12 noon. Bob, AA3RR, 410-437-8193

3rd Saturday, 9 AM, Laurel, by LARC, 384 Main St. John Creel, WB3GXW, 301-572-5124.

4th Tuesday, 6 PM, Linthicum. At Historical Electronics Museum. Harold, WB4OGP, 410-757-0493(h); 410-712-6829(w)

W3ZQI Famous Author

Don't forget to read a fascinating article about Logbook of the Air in June QST, Page 63. by famous BRATS Author Neil Gustafson, W3ZQI. The article also includes his picture!

NEW FAST SCAN ATV STREAMING SITE

The British Amateur Television Club has announced a new amateur television streaming video Web Site. It is designed to bring streamed fast scan ATV to the internet and allow cross repeater operation while working from its multi screen display. The site, located at www.batc.tv will also carry a library of ATV programs and will act as a port for other ATV events to be streamed from around the world. (RSGB via ARNS)

THANKS!

Thanks to Jim, WI3N for an excellent presentation on ATV and Emergency Communications at our June 17th BRATS meeting!

milliwatt swap shop

ads are free and get results!

Send ad to: BRATS, P.O. Box 5915
Baltimore, MD 21282-5915, or email
to w3gzk@verizon.net

ATTENTION: if you do NOT want your ad to run again,
please send me an email to that effect.

Thanks! w3gzk@verizon.net

FOR SALE: Heathkit SB 1000 linear amplifier, \$750 + shipping; 1200 watt transmitter, 3-1000 tube requires 100 watt for 1K output, companion power supply 120V, only 744 hours use, both built by electrical power engineer and in 100% working order, \$2000 plus shipping; HyGain HDR 300A rotator, 25 sq ft wind load and control box \$ 950 + shipping. Kenwood TS-930S xcvr., \$300 + shipping. Contact Joel, W3YZI, at 410-913-9863.

FOR SALE: Special! ICOM BC-110A battery charger , 12vDC 200mA, for ICOM T8A or similar. Used only twice, misplaced, bought a new one. Found it after new one arrived. Cost \$46, make me an offer. Mayer, W3GXX, 410-786-6839 or w3gzk@verizon.net

FOR SALE: Alinco 110 2-mtr. xcvr. \$100. ACI linear for 2 meters, \$20. Heath HM102 power meter w/ antenna selector \$40. Call Jerry, KB3AP, 443-618-0618

FREE! You remove! TV grade 30-35 foot tower in New Market, MD (off I-70). Dennis 410-842-3336.
dennis.kinsel@ngc.com

How To Protect Your House and Its Contents From Lightning

IEEE Guide for Surge Protection of Equipment Connected to AC Power and Communication Circuits
http://www.lightningsafety.com/nlsi_lhm/IEEE_Guide.pdf

VTS - VIDEOTAPING SERVICE

Video/DVD duplications, video tape transferred to DVD. One source up to 2 hours, \$30. Standards, conversions. Call VTS toll free at 1-877-891-1002. BRATS member Bob Shapiro, K2MYS <http://www.videotapingservice.com>

JADE COMPUTERS, LLC

1009 Ingleside Ave, Baltimore, MD 21228. Phone 410-719-1246 ; Fax 410-719-9494. Your answer to custom built PC, office and home networking. Reseller for Net Integrity server, cable modem, DSL, webpage design and hosting POS and networking. We do CPR to your CPU. Kid tested, mother approved. Order PC on line: <http://www.jadecomputers.us> email: joed@jadecomputers.us

Antique Radio Repair, Restoration

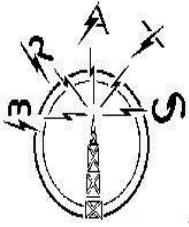
Eric, WA3TAD, Audio-Visual Service / Retro Radio, 3401 Chestnut Avenue, Baltimore, MD 21211. 410-467-3620; wa3tad@comcast.net

Radio Consignment Shop at Overlea Hobbies

8411 Harford Road, Parkville, 410-665-3622. Home of fine trains, model kits, x-acto, cars, planes, ships, many radios. Yaesu FT101ZD, Kenwood TS 820S, 930S, Heathkit SB-102, National NC-183, more ... Dick, N3JWN, 410-488-2806

WANTED: AC Gilbert erector sets; old, new, large, small, need not be complete. CASH paid. Lewis, 410-296-4874

WANTED: Your ad for this space. Send copy to w3gzk@verizon.net



the Milliwatt



The award-winning monthly publication of
The Baltimore Radio Amateur Television Society
P.O.Box 5915 Baltimore, MD 21282-5915

July 2008

BRATS PUBLIC SERVICE

Friday, July 4

Towson 4th of July Parade

For more information or to volunteer, email
publicservice@bratsatv.org

LOCAL ATV NETS

Tuesday, 11:45 AM

Informal Net, W3WVV (Audio on 147.03/R)

Wednesday, 9 PM

CATS Net, rotating Net Control (Audio on
147.345+/R)

Thursday, 9 PM

BRATS Net, Rotating Net Control (Audio on
147.03/R)

Sunday, 8 PM

MATS Net, KB3LNN Net Control (BRATS ATV
and Linked FM Repeaters)

UTAH ATV

Lots of projects and links:

http://www.ussc.com/~uarc/utah_atv/utah_atv.html

(Thanks, Scott, KB3JQQ)

Next BRATS Meeting

Tuesday, July 15, 7:15 PM

Pikesville Library

Please plan to join us!

Other Radio Club Meetings

QCWA

Monday at Noon, Cactus Willie 7315
Ritchie Hwy, Glen Burnie

3rd Thursday, 1 PM: Old Country Buffet,
Joppa Road at Satyr Hill

Last Wednesday, 1 PM: Denny's Bel Air Rd
at Putty Hill

AARC

1st and 3rd Thursdays, 7:30 PM

Davidsonville Family Rec. Center, Queen
Anne Bridge Rd, Wayson Rd (147.105R)

AMRAD

2nd Thursday, 7:30 PM,

Dolley Madison Library; 1244 Oak Ridge
Ave. McLean, VA (147.21/R)

BARC

1st and 3rd Wednesday, 7:30 PM

12360 Owings Mills Blvd (near warehouse)
Owings Mills, MD (146.67R)

CARA

4th Tuesday,

Gateway Center, Rm 401, 6751 Gateway Dr.
Columbia South off Rt 175 (147.135/R)

How Do I Join The BRATS?

I want to become a member, what do I do? Just print out
the form below and mail it with your check (Member,
\$15; Retired/Disabled/Student, \$10; Family, \$20) to:
BRATS, PO Box 5915, Baltimore, MD 21282

BRATS Membership Renewal: Regular=\$15; Retired/Disabled/Student \$10; Family \$20

Name _____	Call Sign _____	BRATS No _____
Address _____	City/State/Zip _____	
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MAIL TO: BRATS, P.O.Box 5915, Baltimore, MD 21282-5915
