



# the Milliwatt



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

**April, 2010**

## **FCC Denies ARRL's Request for Declaratory Ruling**

In 2005, after the State of Florida adopted statutes aimed at pirate broadcasters and making it a felony to make a radio transmission without Commission authorization or to interfere with a licensed public or commercial radio station, the ARRL -- through General Counsel Chris Imlay, W3KD -- filed a *Request for Declaratory Ruling (Request)* with the FCC, seeking a declaratory ruling on portions of that statute. The ARRL argued that the Statute was written so broadly that one could infer that Commission-licensed Amateur Radio stations in Florida would be subject to felony prosecution if their transmissions interfered with broadcast or other radio receivers. In 2006, New Jersey adopted a similar statute and the ARRL's *Request* was modified to include that state. Five years and one day after the original *Request* was filed with the Commission, the FCC denied the Request.

## **FCC Reaffirms Statement on ROS**

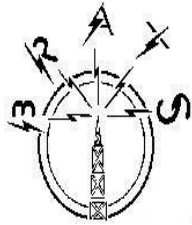
In mid-February, European amateurs first used a new, experimental digital mode known as ROS. On February 23, 2010 -- after FCC review of the original documents provided from the developer's Web site -- the FCC made the following statements on ROS:

"Section 97.305 is the rule that specifies where different emission types are allowed to be transmitted on different bands. 'ROS' is viewed as 'spread spectrum,' and the creator of the system describes it as that. We assume that he knows what he created. [Section] 97.305 authorizes spread spectrum emission types (defined in Section 97.3) to be transmitted by FCC licensed amateur stations at places we regulate communications only on 222-225 MHz and higher frequency amateur bands. European telecommunication regulatory authorities may authorize amateur stations in Europe to use SS on the HF bands, but this is of no concern to us. The Commission does not determine if a particular mode 'truly' represents spread spectrum as it is defined in the rules. The licensee of the station transmitting the emission is responsible for determining that the operation of the station complies with the rules. This would include determining the type of emission the station is transmitting and that the frequencies being used are authorized for that type of emission."

Since that initial FCC review, several Internet sites have reported a claim -- attributed to the FCC -- that the original statements made had been reconsidered and that the FCC view was now that "ROS cannot be viewed as Spread Spectrum and it would be encompassed within Section 97.309 (RTTY and data emissions codes)."

When queried about this new statement, the FCC's Consumer Assistance Office stated that "[T]he information contained on the ROS Web site was not provided by the FCC." They then reaffirmed the original statements that originated from the FCC's Wireless Bureau, which handles Amateur Radio rules for the US. Section 97.307, spread spectrum communications are only permissible in the US on frequencies above 222 MHz.

For email notifications of BRATS meetings and new issues of The Milliwatt, [join theMilliwatt Yahoo! group](#)



# the Milliwatt

The award-winning monthly publication of The BRATS.

Items herein may be reprinted with credit.

Mayer D. Zimmerman, W3GXX, Editor

### Don't Forget to:

Sign up to help out the BRATS Hamfest and help out before the hamfest as well!

Come to a BRATS Club meeting

Read the Milliwatt at: [www.bratsatv.org](http://www.bratsatv.org)

73, Mayer, W3GXX

For email notifications of BRATS meetings and new issues of The Milliwatt, [join the Milliwatt Yahoo! group](#)

### 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](mailto:brats@bratsatv.org)

InfoLine: 410- 461-1212

Meetings: Irregular dates, 7:15 PM, Pikesville Library, 1301 Reisterstown Rd., Pikesville, MD.

*(Please see list of meeting dates on this page)*

**President:** Ed Rosen, N3GXH

**Vice Pres:** Edward Koritzer, N3DGY

**Secretary:** Mayer D. Zimmerman, W3GXX

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**Vice Chairman, Technical:** Mike Dees, N3EZD

**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+, 224.8-

#### 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

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:

Sun 8 pm MATS ATV Net

As needed Weather/Emergency Net, Skywarn

### BRATS Board of Directors

#### Through 12/11:

KA3IDB, KB3FIF, K0RYX

#### Through 12/10:

W3ZQI, KB3LJM, K2GZL

### Regular BRATS Meetings

7:15 PM at the Pikesville Library,

1301 Reisterstown Rd, Pikesville

On irregular dates as follows:

April 15, May 13, June 17

**NEXT MEETING: Thursday, April 15, 7:15 PM**

**Attention All Amateurs ....****FCC Seeks Comments for Blanket Waiver to Allow Amateur Radio in Hospital Emergency Drills**

In February 2010, the American Hospital Association (AHA) filed a request with the FCC for a blanket waiver of Section 97.113(a)(3) of the Commission's Rules "to permit hospitals seeking accreditation to use Amateur Radio operators who are hospital employees to transmit communications on behalf of the hospital as part of emergency preparedness drills." On March 3, the FCC issued a Public Notice -- WP Docket 10-54 -- seeking comments if the Commission "should grant AHA's request for a blanket waiver of Section 97.113(a)(3) to permit amateur operators who are hospital employees to participate in emergency drills that are conducted by hospitals for accreditation purposes and that are not government-sponsored." Section 97.113(a)(3) specifically prohibits amateur stations from transmitting communications "in which the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer."

**Administrative Law Judge Says Washington State Licensee Can Keep Ham License**

In January 2007, the FCC issued an *Order to Show Cause* to David L. Titus, KB7ILD, of Seattle, Washington, to justify why his General class Amateur Radio license should not be revoked and initiated a hearing process to determine whether Titus "is qualified to remain a Commission licensee" in light of a 1993 felony conviction at the age of 18 for "communicating with a minor for immoral purposes." According to the FCC order, Titus received a 25-month prison sentence for this act, and the Seattle Police Department has identified him as a registered sex offender. On March 9, Administrative Law Judge Richard L. Sippel issued his *Initial Decision* -- saying that Titus "has been a law-abiding member of his community for many years" and ordered that Titus' license should not be revoked based on the evidence presented by the defendant and witnesses on his behalf, as well as the FCC's Enforcement Bureau failure to meet the burden of proof necessary for revocation. The FCC has said that *The Communications Act of 1934, as amended* provides that the Commission may revoke any license if conditions come to its attention that would warrant a denial of the licensee's original application. In the past, the Commission has said that felony convictions, "especially those involving sexual offenses involving children," raise questions regarding a licensee's character qualifications. Sippel's *Initial Decision* shall become effective "and this proceeding shall be terminated 50 days after its release if exceptions are not filed within 30 days thereafter, unless the Commission elects to review the case on its own motion."

**FCC Releases National Broadband Plan**

This morning, the FCC held an Open Meeting to introduce its report *Connecting America: The National Broadband Plan (NBP)* that will be delivered to Congress today. Calling it "an ambitious agenda for connecting all corners of the nation while transforming the economy and society with the communications network of the future -- robust, affordable Internet," the Commission found that nearly 100 million Americans lack broadband at home today and 14 million Americans do not have access to broadband.

**FCC Proposes to Eliminate Spread Spectrum APC Requirement, Reduce Spread Spectrum Power Limit; Cleans Up Portions of Part 97**

In response to a 2006 ARRL *Petition* regarding spread spectrum issues, the FCC released a *Notice of Proposed Rule Making (NPRM)* on March 16 (WT Docket No 10-62), proposing to amend Part 97 to facilitate the use of spread spectrum communications technologies by eliminating the requirement that amateur stations use automatic power control (APC) to reduce transmitter power when the station transmits a spread spectrum (SS) emission and reducing the maximum transmitter power output when transmitting a SS emission. Through an *Order attached to the NPRM*, the Commission also made "certain non-substantive revisions" to the Amateur Service rules.

Next BRATS Meeting: Thursday, April 15 at  
7:15 PM, Pikesville Library,

### **iPhone ham radio applications ("apps")**

From *Surfin': The Cooling of Ham Radio* by Stan Horzepa, WA1LOU

The iTunes store has a diverse selection of ham radio applications ("apps") for the coolest gadget in the world. Visiting the iTunes store, I was surprised how many ham radio apps there are -- and about a quarter of them are free! Among the free apps are a [satellite tracker](#), an [EchoLink app](#), [ham utilities](#), an [APRS app](#), a [Maidenhead converter](#), a [direction finder](#), a [HF beacon app](#), a [VHF/UHF/SHF contest rover logger](#) and a bunch of ham radio exam preparation apps, including [some in partnership with the ARRL](#). If you are willing to part with a buck or two, there are a slew of "unfree" ham radio apps, too.

If you visit the iTunes store to search for ham radio apps, be sure to search on both "ham radio" and "Amateur Radio," since the search results are slightly different -- some apps only show up in one or the other search results. There are also some pertinent apps that turn up when you search on "radio," but that search also turns up a lot of apps not related to ham radio that you will have to wade through.

By the way, I offer no URL for the iTunes Store. If you have iTunes installed on your computer, you click on the "iTunes Store" button in iTunes and iTunes proceeds to access the store via the Internet. In other words, iTunes acts as your Web browser, but its browsing is limited to the iTunes Store. If you don't have iTunes installed on your computer, you can [download it for free](#).

Man --- I got to get cool and get an iPhone real soon now .

Thank you, Gerry Jurrens, N2GJ, for alerting me to the EchoLink app.

Until next time, keep on surfen'!

### **Sony to start selling 3-D TVs in June**

Sony Corp. said Tuesday it will start selling 3-D televisions in June, joining a competitive industrywide push to convince consumers to embrace the technology for their living rooms. The Japanese electronics giant, known for its PlayStation 3 game consoles and Bravia flat-screen TVs, will offer its fully capable 3-D TV model in four sizes this summer. The 40-inch and 46-inch versions will go on sale on June 10 in Japan, while the 52- and 60-inch TVs will be available starting July 16. Although the company did not release a global launch date, Sony Senior Vice President Yoshihisa Ishida said the new TVs will hit stores in the U.S. and other countries around the same time. The 40-inch 3-D will cost about 290,000 yen (\$3,200), and the biggest 60-inch will retail at 580,000 yen (\$6,400). Included are two pairs of Sony's 3-D glasses, as well as a camera sensor on each unit that will adjust sound and picture quality based on viewers' positions. A remote control button enables the switch from a regular 2-D image to 3-D. Sony hopes that 10% of the 25 million TVs it aims to sell next fiscal year will be 3-D units.

### **FCC Issues Notice of Proposed Rule Making on Government Disaster Drills and Amateur Radio**

On March 24, the FCC released a *Notice of Proposed Rule Making (NPRM)* proposing to amend the Commission's Amateur Radio Service rules "with respect to Amateur Radio operations during government-sponsored emergency preparedness and disaster readiness drills and tests." While current rules provide for Amateur Radio use during emergencies, the rules prohibit communications where the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer. In October 2009, the [FCC released a Public Notice clarifying the Commission's rules](#) relating to the use of Amateur Radio by licensed amateurs participating in drills and exercises on behalf of their employers. To date, the FCC has granted several dozen waivers under this new policy.

### **New Zealand Amateurs Gain Access to 600m Band**

The New Zealand government has granted New Zealand amateurs temporary access to a slice of the 600m spectrum. The new allocation, 505 to 515kHz, was previously used for Morse code communications with ships. There are a few restrictions to the use of these frequencies. If these frequencies are allocated to other services, amateurs must not cause interference to these services but must accept any interference from them. Radiated power must not exceed 25 watts EIRP and the bandwidth of transmissions must not exceed 200Hz. It is hoped that this allocation will, eventually, be made permanent. [RSGB]

**WA7BNM Contest Calendar**

- April 2  
SARL 80m QSO Party
- April 4  
LZ Open 40m Sprint
- April 4-5  
Montana QSO Party  
SP DX Contest  
EA RTTY Contest
- April 5  
Missouri QSO Party  
QCWA Spring QSO Party
- April 6  
RSGB 80m Championship
- April 11-12  
JIDX CW Contest  
Radio Maritime day  
Yuri Gagarin Int'l DX Contest
- April 12  
UBA Spring Contest, SSB
- April 15  
RSGB 80m Championship, SSB
- April 18  
Holyland DX Contest  
TARA Skirmish Digital prefix Con.  
EU Spring Sprint, SSB
- April 18-19  
Michigan QSO Party  
EA QRP CW Contest  
Ontario QSO Party  
YU DX Contest
- April 23  
RSB 80m Champion, Data
- April 25-26  
SP DX Contest, RTTY  
Helvetia Contest  
Florida QSO Party  
Nebraska QSO Party
- May 2-3  
10-10 Int'l Spring Contest, CW  
10-10 Int'l Spring Con., Digital

(Thanks, Bruce, WA7BNM)

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Silent Key  
Richard Merriken, KB3AQV  
February 20, 2010

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**ARRL DX Bulletin****THE GAMBIA, C5.**

Niels, OZ8KR is QRV as C56KR from Bakuto. Activity is holiday style on 80 to 10 meters using SSB. QSL direct to home call.

**LEBANON, OD.**

Fred, DL6SN is QRV as OD5/DL6SN until the end of 2010. Activity is on 40 to 10 meters using mainly CW. QSL via DO8LA.

**FRANZ JOSEF LAND, R1FJ.**

Victor is QRV as R1FJM and has been active on 15 meters using CW around 0630z. QSL via RX3MM.

**OPERATIONS APPROVED FOR DXCC CREDIT.**

The following operations are approved for DXCC Credit: Tunisia, 3V3S, 2009 operation; Angola, D2CQ, current operation.

**CHAD, TT.**

Elke, TT8ET is active on 20 meters using SSB around 0730 to 0800z. QSL direct.

**SERBIA, YU.**

Members of Radio Club Marica- Zemun are QRV as YU140Z until May 31 to celebrate the 140th anniversary of the Voluntary Fire Brigade in the city of Zemun. QSL via YU1AVQ.

**RODRIGUES ISLAND, 3B9.**

John, 3B9WR has been active on 40 meters around 0230 to 0330z. QSL via G3LZQ.

**BAHRAIN, A9.**

David, A92IO has been active on 40 meters around 0100Z. QSL direct.

**Bolsover Amateur Radio Society has an introduction to 6m**

Bolsover Amateur Radio Society has an introduction to six meters by Don, G4KXW on their website, [www.g4rsb.org.uk](http://www.g4rsb.org.uk). They are encouraging amateurs to visit the site and have a go at 50MHz.

**TAPR President Emeritus Dr David Toth, VE3GYQ (SK)**

Dr David Toth, VE3GYQ -- President Emeritus of Tucson Amateur Packet Radio (TAPR) -- passed away Friday, February 26 after a long battle with cancer. He was 55. A resident of Spencerville, Ohio, Toth served as a Director and Executive Vice President of TAPR in the 1980s and was elected President of the organization in September 2005. With his advancing illness, he decided not to stand for re-election last October and was instead named President Emeritus with Steve Bible, N7HPR, taking the reins as TAPR President.

## Hamfests

**Sat. April 10** - Spring Grove PA  
York Hamfest Found. Porter Community Fire Co., 1199  
Porters Rd., Spring Grove, PA Tabitha, N3TOH,  
717-632-6719 ; [tazier@embarqmail.com](mailto:tazier@embarqmail.com); 147.33/R( PL  
123.0)

**Sat. April 17** - Georgetown, DE  
Delmarva AR & Electronics Expo , Sussex Tech. HS,  
17099 County Seat Hwy ( Rte.,9) Georgetown, Dela.; Jack  
Poore, K3JP, 302-462-1696; [k3jp@arrl.net](mailto:k3jp@arrl.net)

**April 24-25** Trenton Computer Festival  
ARRL NJ State Convention; College of NJ Sat-Sun  
Windows 7; Sun. Apple Mac Day directions and info:  
[www.tcf-nj.org](http://www.tcf-nj.org)

**Sat. April 24, 10 Am to 3 PM** : Robot Fest  
National Electronics Museum 1745 W. Nursery Road,  
Linthicum, MD 410-419-8247; [info@robotfest.com](mailto:info@robotfest.com)

**Saturday, May 1** - Hagerstown, MD  
The Great Hagerstown Hamfest, Washington County Agri.  
Center, Herman, K2AVA, 301-791-5841 147.09/R,  
146.94/R back-up

**Sunday, May 30** - W. Friendship, MD  
MDFMA Memorial Day Hamfest, at Howard County  
Fairgrounds; John, WA3MNN, 301-641-5313; 146.76/R,  
444.0/R (PL 107.2)

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### NEXT BRATS HAMFEST

Sunday, July 18, 2010  
Howard County Fairgrounds

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## 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+

**Thursday, 9 PM**  
BRATS Net Rotating Net Control, Audio on  
147.03/R

**Saturday- 8 PM**  
MATS Net - KB3LNN (BRATS ATV and linked  
FM Repeaters)

## VE EXAMS

**BARC VE EXAMS for 2010**  
at BARC Clubhouse 12360 Owings Mills Blvd. Owings Mills  
Register: 1 PM, Exams begin 2 PM. Free (Laurel VEC)  
[n3wke@arrl.net](mailto:n3wke@arrl.net) (Thanks, N3YI)

Sunday, Apr 12; Saturday, May 1; Saturday, Jun 5; Sunday, Jul 11;  
Saturday, Aug 7; Saturday, Sep 4; Sunday, Oct 3; Saturday, Nov 6;  
Saturday, Dec 4

### 2010 AERO VE EXAMS

Registration at 1 PM, Exams at 1:30.  
Fee \$14 ( ARRL VEC); All exams at White Marsh Library, 8133  
Sandpiper Circle;

*TBD*

Pat Stone, AC3F, [ac3f@juno.com](mailto: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)

### Complimentary Wi-Fi Service

now available at all Barnes & Noble stores. No fees. No  
charges. Just log on.

### LOCAL Slow-Speed CW Net

Looking to start a local slow-speed ragchew CW Net.  
Tuesdays at 2000 hours local time on 7050 kHz. This  
frequency is just above the W1AW code practice  
frequency of 7045.5 kHz. Contact Joe, N3IQA:  
[cottonj@gmail.com](mailto:cottonj@gmail.com)

### NEXT BRATS MEETING

Thursday, April 15, 7:15 PM  
at the Pikesville Library.

## 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](mailto:w3gzk@verizon.net)

**FOR SALE:** ICOM 745, 200 Watt HF transceiver, PIEXX IC-EX243 px physical electrical keyer, Also a PROM Memory Board. The standard mic, and 13v power cord is included, no power supply. I will consider trades, currency, or both. E-Mail offers to: [KB3RLD@arrl.net](mailto:KB3RLD@arrl.net)

**FOR SALE:** Linksys Wireless-G Notebook Adapter WPC54g with installation CD in like-new condition. \$30. Contact KB3AP, Jerry, at 41-358-2701

**WANTED:** SMA to BNC adapter for VX-150. Call Jerry, KB3AP, at 410-358-2701.

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

**FOR SALE:** ICOM T2H 2 mtr HT with charger, belt clip, rubber ducky, manual, asking \$80. K3BCD, 410-866-5441 or [ywm@comcast.net](mailto:ywm@comcast.net)

**FOR SALE:** Yaesu FT 5200 2-mtr/440 w/ mic, \$50; Lots of meters. \$10 each; Dipole with insulators, and nylon line, \$10; Kenwood: IF 232 interface, \$20, Mod KR V7030, \$25, MC 52 DTMF mic \$15, Optimus 2-deck player recorder, \$20. Antique autoharp, mint condx, \$150. Homebrew VSWR bridge 2mtrs/440, \$10; Panoramic adaptor BC 1031C, \$40; Millen antenna matching pre-amp with 27-32 MHz plug-in, \$5; Casio men's watch CK33-R1, new in box \$150. Call Ted, W3OWN, 410-668-5580, leave message, I will call back.

**SPECIAL DEAL:** ICOM BC-110 battery charger, 12vDC, 200 mA, for ICOM T8A or similar misplaced it, ordered a new one, then found it. Almost new, cost \$46, make me a reasonable offer. Mayer, W3GXX [w3gzk@verizon.net](mailto:w3gzk@verizon.net)

**WANTED:** AT-930 for a TS930S. Please send condition and price. Jerry. [jerrymcf@sbcglobal.net](mailto:jerrymcf@sbcglobal.net)

**Next BRATS Meeting:** Thursday, April 15th, 7:15 PM, Pikesville Library

### JADE COMPUTERS

1009 Ingleside Ave., Baltimore, MD 21228  
443-677-4187; [joe@jadecomputers.us](mailto:joe@jadecomputers.us) webpage design, hosting, order PC on-line <http://www.jadecomputers.us>

### VTS - Videotaping Service

Video, DVD duplications, video tape transferred to DVD; standards, conversions, call VTS toll free: 1-877-891-1002. BRATS member Bob Shapiro, K2MYS. <http://www.videotapingservice.com>

### Antique Radio Repair, Restoration!

Eric, WA3TAD, audio-visual service, retro radio, 3401 Chestnut Ave. Balto. 21211. 410-467-3620;  
[wa3tad@comcast.net](mailto:wa3tad@comcast.net)

### Overlea Hobbies; Radio Consignments

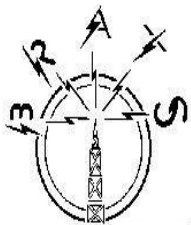
8411 Harford Rd. Parkville; 410-665-3622 fine trains, model kits, x-acto, cars, planes, ships, many radios: Yaesu FT-101ZD, Kenwood TS 820S, 930S, Heath SB-102, National NC 183, more. Dick, N3JWN, 410-488-2806

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

**WANTED to BORROW:** Shipping container for Kenwood TS-850S. Will pick up, or ship it to me. Will return it after I get my rig back from Kenwood. 410-668-5580. If not there, leave a message. Ted, W3OWN

<p><b>ATTENTION:</b> if you do NOT want your ad to run again, please send me an email and let me know. Thanks! <a href="mailto:w3gzk@verizon.net">w3gzk@verizon.net</a></p>
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**WANTED:** Your ad for this space. Send copy to [w3gzk@verizon.net](mailto:w3gzk@verizon.net)



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## April 2010

### NEXT BRATS MEETING: Thursday, April 15, 7:15 PM, Pikesville Library

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More 2010 BRATS meetings on the following dates: Thursday, May 14; Thursday, June 17;

### Other Radio Club Meetings

#### AMRAD

2nd Thursday, 7:30 PM,  
Dolley Madison Library; 1244 Oak Ridge  
Ave. McLean, VA (147.21/R)

#### 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

#### BARC

1st and 3rd Wednesday, 7:30 PM  
12360 Owings Mills Blvd (near warehouse)  
Owings Mills, MD (146.67R)

#### AARC

1st and 3rd Thursdays, 7:30 PM  
Davidsonville Family Rec. Center, Queen Anne  
Bridge Rd, Wayson Rd (147.105R)

#### CARA

4th Tuesday,  
Gateway Center, Rm 401, 6751 Gateway Dr.  
Columbia South off Rt 175 (147.135/R)

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

Name \_\_\_\_\_

Call Sign \_\_\_\_\_

BRATS No \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

MAIL TO: BRATS, P.O.Box 5915, Baltimore, MD 21282-5915