

# the milliwatt



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

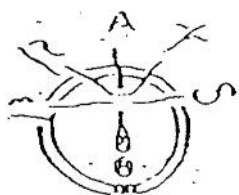
December, 2013

## FCC ANNOUNCES PLANS TO CHANGE PHONE SYSTEM

Move over, Ma Bell. About a third of Americans use iPhone or Android-based cellular phones, and another third place digital phone calls through their cable provider, Vonage or others. But that last third of Americans still rely on the century-old network of copper wires that make up the backbone of the country's communication system. And they're long overdue for an upgrade. "The public switched telephone network will be shut off some day. The question is when will that be," an FCC official told FoxNews.com. The Federal Communications Commission (FCC) on Tuesday announced plans to expedite the largest change to the nation's phone system in decades -- a move away from the aging, circuit-switched system that sends those analog signals over copper cables to a modern, digital, IP-based network that largely relies on fiber optics. Once tests prove that the new system works in localized trials, the digital phone network will be rolled out nationwide. And ultimately, the copper wires that have linked families and farm houses for over a century will be turned off. "This is what I have called the Fourth Network Revolution, and it is a good thing," FCC chairman Tom Wheeler wrote in a blog post [→](#). "The way forward is to encourage technological change while preserving the attributes of network services that customers have come to expect ... we have listened, and now it is the time to act. In this, I agree with my commission colleagues." The copper wires that make up the public switched telephone network carry POTS signals, short for *plain old telephone system*. And even cellular calls still touch and depend on all that old copper. In January, the FCC is expected to begin "a diverse set of experiments" in order to figure out how to transition to the new IP-based system, a transition certain to take years. The initial experiments will likely include regional tests of an IP-based system to ascertain reliability, scalability and so on, an FCC spokesman told FoxNews.com. The commission's technological advisory committee set a goal of 2018, which is likely too ambitious, he said. But expect localized trials as soon as 2015. The upgrade may mean introducing the age of video calling to landlines. An IP landline network, unlike current copper wires can handle much larger amounts of data that could be used to make video calls. "Our current infrastructure has served us well for almost a century but it no longer meets the needs of America's consumers," AT&T's Jim Cicconi said in a response published online. "The transition to broadband and IP services that has already begun is driven by consumers who are moving to the Internet and choosing to connect in ways not imagined just a decade ago." Companies like Verizon and AT&T currently control the existing landline phone network and are subject to strict rules by the FCC to protect consumers. It is unclear how the planned changes will affect the telephone companies as the FCC has historically been opposed to classifying broadband Internet as a telecom service. "The way forward is to encourage technological change while preserving the attributes of network services that customers have come to expect," Wheeler wrote. "History has shown that new networks catalyze innovation, investment, ideas, and ingenuity."

## BRATS HOLIDAY PARTY, ELECTIONS SCHEDULED!, Plan to join us!

The BRATS annual Holiday Party will take place on Monday, December 9 at 7 PM, at the Pikesville Library, 1301 Reisterstown Road, Pikesville, MD. Note that we start 15 minutes earlier than usual so we have enough time to eat and celebrate. Our by-laws all for elections in December, so we will do that as well. Plan to join us for a fun event....



# the milliwatt

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

Mayer D. Zimmerman, W3GXX, Editor

## Some Thoughts

We really hope you will plan to join us on  
Monday, December 9 and celebrate with us.  
Not only a celebration of the holiday season,  
but a celebration of The BRATS: The club  
and its activities, particularly the Repeater  
Improvement Program. Help us thank all  
who took part in its success. See ya!  
Happy Holidays  
73, Mayer, W3GXX

=====

The Baltimore Radio Amateur TV Society, Inc.  
.O. Box 5915 Baltimore, MD 21282-5915  
non-profit organization under section 501(c)(3)  
of the internal revenue Code and a non-profit  
corporation in the state of Maryland.  
Member of and support: The ARRL and The  
Foundation for Amateur Radio.  
Home Page: <http://www.bratsatv.org>  
email: [brats@bratsatv.org](mailto:brats@bratsatv.org)  
Meeting: 2<sup>nd</sup> Monday at 7:15 PM at the  
Pikesville Library, 1301 Reisterstown Road  
President: Kevin Sherwood, KB3PLX  
Vice Pres. Ed Rosen, N3GXXH

Secy: Ted Bauer, WA3AER  
Treasurer: Jim Sherwood, KB3SKN  
Chairman of the Board:  
Mayer D. Zimmerman, W3GXX

## BRATS REPEATERS

Linked Repeaters WB3DZO  
147.03+, 224.96-, 448.325-  
Stand-Alone repeaters:  
443.350+, 224.8-  
Packet Nodes:  
W3GXT-5: 145.05  
W3GXT-10: 224.52  
ATV Repeater W3WCQ  
Inputs: 426.25, 1253.25  
Outputs: 439.25, 911.25

## BRATS Weekly Nets

Monday, 9 PM — Traffic and Info  
Tues. 11:45 AM— Informal ATV  
Wednes. 9 PM — CATS ATV Net  
Thurs. 9 PM — BRATS ATV Net  
Sat., 1 PM — Weekly News Bulletin  
Sun. 8 PM BRATS ATV Net  
As Needed: Skywarn

## BRATS Board of Directors

Through December, 2013

WA3SWA, K2GZL, KORYX

Through December, 2014

K9FXY, KA3ZMN

## MONTHLY MEETINGS:

Second Monday of each month, 7:15 PM  
Pikesville Library 1301 Reisterstown Rd

## NEXT BRATS MEETING

Monday, December 9, 7 PM  
at the Pikesville Library  
1301 Reisterstown Rd  
Holiday party and elections

**BRATS**  
**MINUTES of the**  
**11 November**  
**Monthly Meeting**

Kevin, KB3PLX, chaired meeting.

There was no business meeting beyond a short report on JOTA last month. JOTA was well attended by Scouts and parents; feedback positive. Will do again next year.

**Reports**

An impromptu review of last month's expenditures lists \$1743.25 for:  
Milliwatt printing and postage

Projects: JOTA,

Hamfest, and repeater upgrade (repeater project has spent much less than originally projected)

**NEW Business** Nominations and the election of 2014 officers will be held at the December 9 meeting and Holiday Party.

**/PROGRAM**

Oryx (K0RYX), Ed (N3GXH) and Kevin (KB3PLX) made a presentation on the new 5GHz digital links at our NW, St. Joseph, and GSH sites and recent enhancements to the 030 machine.

Analog voters and 900MHz link equipment replaced by software/ digital solution, resulting in improved operation with many fewer calibration points. The links have performed very well in heavy rain. Receive sites are now on UPS.

Ted WA3AER

**AUTUMN 2013 5 MHZ NEWSLETTER NOW AVAILABLE**

The autumn 2013 edition of The 5 MHz Newsletter is now available for download at [tinyurl.com/ouaalv6](http://tinyurl.com/ouaalv6). In addition to the latest 5 MHz news, there are also features on emergency communications messaging with an international dimension, the current Radio Society of Great Britain 5 MHz discussion and much more. Also included is news of a television interview with IARU President Emeritus Larry Price, W4RA. In it Price explains the workings of World Radiocommunication Conferences and the International Telecommunications Union. (Southgate, G4MWO, via ARNewsline)

**BBC NEWS MAGAZINE HIGHLIGHTS HAM RADIO**

The British Broadcasting Corporation's on-line program News Magazine has a neat story giving a very positive view of ham radio in the United Kingdom. Titled "The Very Particular World of Amateur Radio" the three and a half minute video report talks about the recent growth in licensing in Great Britain. It also follows the operation of the Chorley and District Amateur Radio Society as it took part in the recent "Castles and Stately Homes On The Air" operating event from Astley Hall in the city of Lancashire. Both the video and the text story that accompanies it are on the web at [tinyurl.com/BBC-news-ham-radio](http://tinyurl.com/BBC-news-ham-radio). (BBC via ARNewsline)

**NEW SOUTH AFRICA ZS6TKS SIXTY METER BEACON**

A new 60 meter beacon is on the air in South Africa thanks to the Kempton Park Amateur Radio Technical Society. The ZS6KTS propagation study device transmits on 5.250 MHz at 5 minute intervals with PSK-31 as the preferred mode. This is in support of 60 Meter activity weekend. Should you hear the ZS6KTS beacon please send a signal report to beacon (at) zs6kts (dot) co (dot) za. Your assistance in capturing 5MHz propagation data is much appreciated. (Southgate)

## **Ham Radio Not Permitted....**

Under a new set of new FAA guidelines passengers on domestic U.S. flights will be permitted to read, work and listen to music from gate to gate. But they still will not be permitted to talk on their cell phones, directly browse the Internet or use any form of two-way radio through the flight. Internet connectivity will only be permitted on aircraft equipped to provide such a service, usually at a fee. For ham radio operators it means the ban on the use of hand-helds or other gear operating on any band will continue just as the rules are now. Currently airline passengers are required to turn off their Smart phones, laptops, and other devices once a plane's door closes. They're not supposed to use them again until the planes reach 10,000 feet and the captain gives the go-ahead. Passengers are then supposed to turn their devices off again as the plane descends through 10,000 feet to land and not restart them until it is on the ground or at the arrival gate.

Under the new guidelines, airlines whose planes are properly shielded from electronic interference may allow passengers to use the devices during takeoffs, landings and taxiing. The FAA says that most new airliners and other planes that have been modified so that passengers can use airline supplied WiFi at higher altitudes are expected to meet the criteria. However to use electronics that normally radiate an RF signal, that feature must be disabled unless instructed otherwise on aircraft with airline supplied WiFi connectivity.

The bottom line is that while most passengers with certain devices will be able to enjoy some relaxation in the rules regarding their use, ham radio operators and users of any other two way radio gear will continue to face a complete ban from operating such devices from boarding a flight to disembarking from it. (Published news Reports, via ARNewsline))

## **SSTV FROM THE ISS**

UB4UAD reports that the Slow Scan Television experiment on the International Space Station was active on 145.8 MHz FM on October 28th and 29th. He also says that on October 31<sup>st</sup> that SSTV images were to be transmitted from the ISS showing photographs of the life and work of the first Russian Cosmonaut Yuri Gagarin. SSTV pictures received by Pete Sipple, M0PSX can be seen at [tinyurl.com/iss-oct-2013-sstv](http://tinyurl.com/iss-oct-2013-sstv) (UB4AUD, Southgate via ARNewsline)

## **Rare, Brief 6 Meter F2 Opening Makes for Plentiful DX**

Six meter operators were treated November 9 to an F2 opening from approximately 1500 until 1630 UTC. "These have been very rare in solar cycle 24," said QST "The World Above 50 MHz" Editor Jon Jones, NØJK. He described the opening as "mostly single-hop F2" from the East Coast, Midwest, Gulf Coast, and to the West Coast to Central America, Northern South America and Caribbean. Jones said the geomagnetic field was active, with a K of 4, due to what Spaceweather.com called "a gusty stream of solar wind buffeting Earth's magnetic field, sparking auroras around both of our planet's poles." Jones said he was "late to the show" because he'd worked the night before. He didn't get into the fray until 1550 UTC after he saw all the 6 meter spots showing up. "I turned on the radio, and FM5AN, P43A, PJ4NX, etc were all blasting in loud here in eastern Kansas," he said. "I worked FM5AN and P43A from home using a M2 loop in the attic. Jean, P43A said I was S-9. Nothing new or rare, but any F2 on 6 meters in solar cycle 24 is a treat." (ARRL)

## **INDIA LAUNCHES ITS FIRST MARS PROBE**

India's first-ever mission to Mars launched into space on Tuesday, November 5th. India's Mars Orbiter Mission rocketed into space at 09:08 GMT from the Indian Space Research Organization's Space Centre. If all goes as planned it will arrive at the red planet on September 24, 2014, making India the fourth country to successfully deliver a spacecraft to orbit Mars. (Space via AR Newsline)

## ARRL DX Bulletin

**TRISTAN da CUNHA and GOUGH ISLAND, ZD9.** Bani, ZS1BM is QRV as ZD9G from Gough Island, IOTA AF-030, as a member of the 59th Winter Team and is here until August 2014. QSL via ZS1HF.

### OPERATIONS APPROVED FOR DXCC CREDIT

The following operations are approved for DXCC Credit: Yemen, 7O2A, 2013 operation; Afghanistan, T6SM, Operations beginning August 14, 2012 to current.

**TOGO, 5V.** Wim, ON6DX will be QRV as 5V7TH beginning November 18. Activity will be on 40 to 6 meters using CW, SSB and RTTY. His length of stay is unknown. QSL to home call.

**CUBA, CO.** Rey, CO6RD is QRV as CO0SS from Sancti Spiritus until the end of the year. Activity is on the HF bands. QSL direct via EA5GL.

**ANTARCTICA.** Gerry, G3WIP is QRV as VK0GB from Casey Base Station until February 2014. Activity is on 40, 20, 17 and 15 meters using SSB between 1730 and 0930z. QSL to home call.

## WA7BNM Contest Calendar

Dec 6-8	ARRL 160 Meter Contest
Dec 7	TARA RTTY Melee
Dec 7-8	TOPS Activity Contest
	EPC Ukraine DX Contest
Dec 8	10-Meter RTTY Contest
Dec 14-15	ARRL 10-Meter Contests
Dec 21	OK DX RTTY Contest
Dec 26	DARC Christmas Contest
Dec 28	RAC Winter Contest
January 1	SARL Digital Contest

## ZS8C and ZS8Z Operations Approved for DXCC Credit

The ARRL DXCC Desk has approved the 2013 through May 2014 operations of ZS8C and ZS8Z — Prince Edward and Marion Islands — for DX Century Club credit. If a request for DXCC credit for these operations has been rejected in a prior application, contact ARRL Awards Branch Manager **Bill Moore**, NC1L, to be placed on the list for an update to your record. Please note the submission date and/or reference number of your application in order to expedite the search for any rejected contacts. (ARRL)

## CLOSING OF CHANNEL 1 TV BRINGS 6 METERS TO ALL NEW ZEALAND HAMs

With the imminent departure of television transmission from New Zealand TV channel 1, hams throughout that nation will have access to the lower Megahertz of 6 meters. The last Channel 1 Television transmitter in New Zealand is due to close down at the end of November. And now telecommunications regulator Radio Spectrum Management has announced that as of December 6th that hams throughout the nation will have access from 50 to 51 MHz without needing to apply for a permit. The actual allocation which is called a management right under which the channel 1 television transmitters operated does not expire until August 2015. Therefore 50 to 51 MHz can not appear on the Amateur General User Radio License until after this date. To get around this, Radio Spectrum Management is putting in place a footnote called license No 4122. It simply says that those who hold a New Zealand General Amateur Operators Certificate of Competency and a call sign issued pursuant to the Radiocommunications Regulations of 2001 may operate an amateur radio station under this new grant. The power limit will be 1 kilowatt to bring it into line with the power on the nation's General User Radio License for Amateur Operators. When the actual Management Right expires on August 30th of 2015, 50 to 51 MHz will be added to the New Zealand General User Radio License for Amateur Operators. (AR Newsline)

## Hamfests

**Sunday, January 26:** Odenton, MD  
2014 Post-holiday Hamfest.  
Odenton Volunteer Fire Company  
1425 Annapolis Rd. 146.805/205  
Bruce: AB3AC 410-456-2500

**Saturday, February 1:** Richmond, VA  
Richmond Frostfest. Richmond  
Raceway Complex; 600 E. Laburnum Ave.  
<http://www.frostfest.com>; 146.88/R  
Mike, AC5PT, 804-657-7038

**Saturday, April 5** – Timonium MD  
The Greater Baltimore Hamboree  
MD State Fair Grounds, Timonium  
ONE DAY ONLY!! Free VE Exams aa  
at 9 AM; BARC. 443-590-1444

---

### SILENT KEY

Theodore M. Provenza  
W3OWN  
October, 2013

---

## VE EXAMS

LARC. 364 Main St Laurel, 3<sup>rd</sup> Sat., 9 AM  
John, WB3GXW, 301-572-5124

Historical Electronics Museum, Linthicum  
4<sup>th</sup> Tuesday at 6 PM, Harold, WB4OGP  
410-757-0493(h); 410-712-6829 (w)

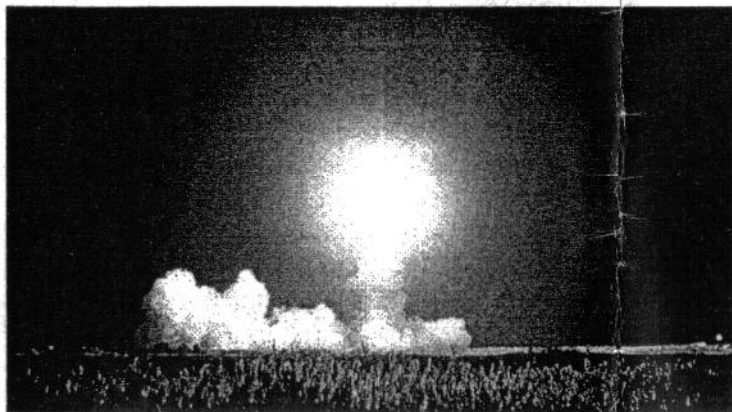
Aero ARC: White Marsh Library 1 PM,  
walk-ins welcome  
Nov. 23. ARRL VEC \$15 testing fee.  
Pat. AC3F, 410-687-7209; [ac3f@juno.c](mailto:ac3f@juno.c)

## BARC VE EXAMS

12360 Owings Mills Blvd,  
Register at 1:30; exams at 2.

2013: December 7,  
2014:

Jan. 5, Feb 1, March 1  
No session in April  
May 3, June 7, July 13,  
August 2, Sept. 6, Oct. 5,  
Nov 8, Dec 6...  
January, July and October  
are Sunday sessions.  
(Thanks, N3YI)



## Minotaur-1 deploys Ham Radio cubesats

A large number of CubeSats carrying amateur radio payloads were launched from NASA's Wallops Flight Facility in Wallops Island, Va., on Nov. 19, 2013 at 0115 UT. In total 29 satellites were on the rocket of which 12 operate in Amateur Satellite Service frequencies. (Southgate)

## Milliwatt Swap Shop

Ads are free and get results!

Mail your ad to: BRATS, Box 5915

Baltimore, MD 21282-5915 or

email to [w3gxxk@verizon.net](mailto:w3gxxk@verizon.net)

FOR SALE: Hustler G7-144\$125. You pick up- HRO discount price \$199. Took down to put up dual band antenna. N3BHE 410-299-5931.

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

SPECIAL OFFER! ICOM BC-110 battery charger, 12vDC, 200 ma, for ICOM T8A or equivalent, almost new, cost \$46, make me a reasonable offer. Also, WANTED: Battery for ICOM T8A. Mayer, W3GXX, [w3gxxk@verizon.net](mailto:w3gxxk@verizon.net)

FOR SALE: ICOM 745, 200 watt HF scvr, PIEXX IC EX 243 physical electric keyer, PROM memory board, standard mike, 13v. power cord. No power supply. Will consider trade, currency or both. KB3RLD@arrl.net

METAL LATHE: For the person who said he always wanted a metal lathe but could not afford it, I have one for you. Call Heru, W3WVV at 410-766-3545

## JADE COMPUTERS

1009 Ingleside Ave, Baltimore 21228

443-667-4187. [joe@jadecomputers.us](mailto:joe@jadecomputers.us)

web page design, hosting, order PC on-line,

<http://www.jadecomputers.us>.

## VTs Video Taping Service

Video, DVD duplications, video tape

transferred to DVD, standards, conversions,

1-877-891-1002. BRATS member Bob Shapiro

K2MYS. <http://www.videotaping-service.com>

## Antique radio repair, Restoration

Eric, WA3TAD, audio visual service, retro

radio. 3401 Chestnut Ave. Baltimore 21211

410-467-3620. [Wa3tad@comcast.net](mailto:Wa3tad@comcast.net)

WANTED: AT 930 for TS 930S. Jerry

[jerrymcf@sbcglobal.net](mailto:jerrymcf@sbcglobal.net)

WANTED: AC Gilbert erector sets: old, new

large, small, need not be complete. CASH

PAID. Lewis, 410-296-4874

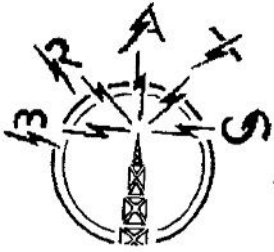
WANTED: Manual for MFJ 1452. Greg

WB2LOO. [gjm313@verizon.net](mailto:gjm313@verizon.net)

**Come and Get 'em!** Two five-foot satellite dishes. Call Les, W3GXT, 410-833-8667

## ARRL files 'Symbol Rate' petition with FCC

The ARRL has asked the FCC to delete the symbol rate limit in §97.307(f) of its Amateur Service rules, replacing it with a maximum bandwidth for data emissions of 2.8 kHz on amateur frequencies below 29.7 MHz. The ARRL Board of Directors adopted the policy underlying the petition initiative at its July 2013 meeting. The petition was filed November 15. The changes proposed would, in the aggregate, relieve the Amateur Service of outdated, 1980s-era restrictions that presently hamper or preclude Amateur Radio experimentation with modern high frequency (HF) and other data transmission protocols," the League's petition asserted. "The proposed rule changes would also permit greater flexibility in the choice of data emissions." Symbol rate represents the number of times per second that a change of state occurs, not to be confused with data (or bit) rate. (Southgate)



# the milliwatt



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

## CURE FOR PROBLEM DOWN-LOADING NEWSLINE WITH ITUNES

This note to those of you who listen to these newscasts via podcast. According to Kevin Trotman, N5PRE, if you were having issues with iTunes not downloading the newest podcasts of Amateur Radio Newsline the past few weeks, it may be due to a glitch that was discovered by one of our listeners and confirmed at ARNewsline. Thanks to Ed Durant, VK2JI, we were made aware of the problem affecting some users. It seems that the newest version of iTunes released last week has fixed the issue. If you are having this problem, please update your iTunes installation and the problem will more than likely be resolved. (N5PRE via ARNewsline)

## AO-27 RESCUE EFFORTS CONTINUE

Attempts to recover the 20 year-old AO-27 ham radio satellite are continuing and now signals have been received on 436.795 MHz Reid Bristor, is W4UPD, in Melbourne, Florida. He reports over the AMSAT Bulletin Board that he heard AO-27 a couple of times on November 10th and 11th. W4UPD says that the telemetry he monitored was good and strong. For the latest information please tale your web browser to [tinyurl.com/ao27-rescue-update](http://tinyurl.com/ao27-rescue-update). (AMSAT-BB, Southgate)

**Get well wishes to Skip, N3DGY**

## NEXT BRATS MEETING

Monday, December 9, 7 PM  
at the Pikesville Library  
1301 Reisterstown Rd  
Holiday party and elections

## OTHER CLUB MEETINGS:

QCWA: Monday at Noon, Cactus Willie  
7315 Ritchie Hwy, Glen Burnie  
3<sup>rd</sup> Thursday, 1 PM, Old Country  
Buffet, Joppa at Satyr Hill  
Last Wednesday, 1 PM, Denny's  
Bel Air Road at Putty Hill

AARC: 1<sup>st</sup> and 3<sup>rd</sup> Thursday, 7:30 PM  
Davidson Family Rec. Center  
Queen Anne Bridge Road

AMRAD: 2<sup>nd</sup> Thursday, 7:30 PM  
Dolley Madison Library  
14 Oak Ridge Ave., McLean, VA

BARC: 1<sup>st</sup> and 3<sup>rd</sup> Wednesday,  
7:30 PM, 12360 Owings Mills Blvd.  
Owings Mills, MD

CARA: 4<sup>th</sup> Tuesday, 7:30 PM  
Gateway Center, Room 401  
6751 Gateway Dr., Columbia, MD

BRATS MEMBERSHIP FORM: Regular, \$15; Retired/Disabled/Student: \$10; Family: \$20

NAME \_\_\_\_\_ CALL \_\_\_\_\_ BRATS No. \_\_\_\_\_  
Street \_\_\_\_\_ City \_\_\_\_\_ State/Zip \_\_\_\_\_  
e-mail \_\_\_\_\_  
il to: BRATS, Box 5915, Baltimore, MD 21282-5915