



the Milliwatt



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

February, 2008

New Amateur Extra Class Question Pool Released

The National Conference of Volunteer Examiner Coordinators (NCVEC) has released the new pool of questions for the Amateur Extra class license. This pool will become effective for examinations given on or after July 1, 2008, and should be in service until June 30, 2012. The pool, which consists of 741 questions and 12 graphics, can be downloaded from the NCVEC Web site in Word, PDF or RTF formats. If you have any questions concerning the new Amateur Extra question pool, please contact the NCVEC's Question Pool Committee via e-mail.

RM-11392 Released for Comment

The FCC has released Public Notice report 2828-Correction establishing a new comment period for RM-11392. You may read the document at http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519008574 RM11392 asks the FCC to re-establish the narrowband nature of the RTTY/Data subbands in the 80 through 10-meter bands. Emissions have crept into the narrowband RTTY/Data subbands in the 80 through 10-meter bands that are not appropriate for the RTTY/Data subbands. Stations under automatic control have taken advantage of loopholes created by terminology in the commission's rules that is not applicable to new operating modes.

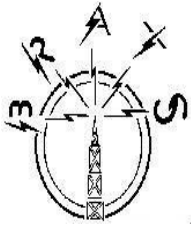
Attention All Amateurs ...

Cycle 24 Here, Experts Say

With the appearance of Sunspot 981 a high-latitude, reversed polarity sunspot on Friday, January 4, experts at NASA and the National Oceanic and Atmospheric Administration (NOAA) said that Cycle 24 is now here. This sunspot is like the first robin of spring, said solar physicist Douglas Biasecker of the Space Weather Prediction Center (SWPC), part of NOAA. In this case, it's an early omen of solar storms that will gradually increase over the next few years.

LG investigates exploding laptop

After a journalist's LG Electronics laptop reportedly exploded in flames, the company said Wednesday it was investigating. LG Electronics is collaborating with LG Chem, the battery maker, to investigate and determine the cause of the problem, as under normal usage conditions, this type of problem should not occur, LG said in a statement. South Korean media reported that a laptop belonging to a South Korean journalist burst into flames Tuesday after smoke began to emerge from it. No injuries were reported. LG said it was in possession of the equipment involved and would work with a third-party organization to provide an outside, independent assessment. Both LG and LG Chem Ltd. are members of the LG Group of companies. We rigorously test our products not only for functionality and design but safety as well, LG said in the statement. Kim Ji-hey, an LG Electronics spokeswoman, said the company was not yet releasing details on what model laptop was involved.



the Milliwatt

The award-winning monthly publication of The BRATS.

Items herein may be reprinted with credit.

Mayer D. Zimmerman, W3GXX, Editor

Some Thoughts

This month we add another name, W3RMD, to the all-too-long list of Silent Keys. Last month we noted the obituary for our own W3DID in the BARC Modulator. Thanks, Doug, we appreciate that. We also note the article and picture of Russ, NY3I, fellow BRATS member. It is very interesting, you might want to take a look at it on the [BARC home page](#). We also noted, a Statement of Philosophy: the Modulator does not print stories you can get elsewhere. We [The Milliwatt] do print stories that you can get elsewhere, so you can get all of your information Contests, DXpeditions, Satellite News, Hamfests, Meetings, etc. in one place, right here. Enjoy.

73, Mayer, W3GXX

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

Vice Pres: Edward Koritzer, N3DGY

Secretary: Mayer D. Zimmerman, W3GXX

Treasurer: Les McClure, W3GXT

Webmaster: Laura F, KB3LJM

Chairman of the Board: Heru Walmsley, W3WVV

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+

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, February 19, 7:15 PM

at the Pikesville Library

1301 Reisterstown Road, Pikesville

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. Areas outside of the security zones, including the ticketing and baggage areas will be online in the near future. Travelers can purchase either a day pass or a monthly plan for their internet access services.

Hitachi selling 500 GB laptop drives

Notebook computers can be as powerful as desktops these days, especially as hard-disk makers like Hitachi Ltd. grab industry bragging rights by unveiling a 500-gigabyte drive for laptops. The 500 GB drive is the beefiest one yet for laptops — enough to hold up to 500 hours of digital video, 178 standard-definition, feature-length movies, 250 games or 125,000 four-minute songs, Hitachi said. Currently, the largest laptop drive on the market is a 320 GB model by Western Digital Corp. Hitachi said Thursday that its 500 GB drive would be available to computer manufacturers in February. Asustek Computer, based in Taiwan, said it would use two of the drives to create the world's first laptops with a monster capacity of 1 terabyte. It was just last year when desktop PCs or external storage devices began to feature 1 TB drives. The Asus M50 and M70 laptops will be available in February and March, respectively. Prices were not immediately available.

Loose lithium batteries banned from checked luggage

To help reduce the risk of fires, air travelers will no longer be able to pack loose lithium batteries in checked luggage beginning Jan. 1, the Transportation Department said Friday. Passengers can still check baggage with lithium batteries if they are installed in electronic devices, such as cameras, cellphones and laptop computers. If packed in plastic bags, batteries may be in carryon baggage. The limit is two batteries per passenger. The ban affects shipments of non-rechargeable lithium batteries, such as those made by Energizer Holdings Inc. and Procter & Gamble Co.'s Duracell brand. Doing something as simple as keeping a spare battery in its original retail packaging or a plastic zip-lock bag will prevent unintentional short-circuiting and fires, Krista Edwards, deputy administrator of the Pipeline and Hazardous Materials Safety Administration, said in a release. The Federal Aviation Administration has found that fire-protection systems in the cargo hold of passenger planes can't put out fires sparked in lithium batteries. The National Transportation Safety Board earlier this month said it could not rule out lithium batteries as the source of a cargo plane fire at Philadelphia International Airport last year.

United touts iPod option

From Flightglobal.com: Star Alliance member United Airlines has become the first airline to publicly tout its ability to let premium passengers play music and video content from their own Apple iPod personal electronic devices (PEDs) over the carrier's Panasonic Avionics-made in-flight entertainment (IFE) systems. The U.S. major is in the process of equipping the premium cabins of its entire international widebody fleet with fully lie-flat beds, as part of a \$165 million, multi-tiered program to revamp its business travel offering, which includes new Panasonic IFE systems.

Air France latest to test in-flight Wi-Fi

From USA TODAY: Air France is conducting a limited test in which passengers will be allowed to send e-mail and talk on cellphones during flights. Using just a single Airbus A318 that flies between European cities for a six-month test, Air France plans to provide in-flight connectivity to passengers by a satellite-based system that transmits data and voice to the ground networks. The service is free for passengers in the test, which Air France announced Thursday but started Monday. Air France is one of several airlines, including JetBlue and American, that are moving toward in-flight broadband Internet access.

Weirdest Travel Stories of 2007 ...

2007 was not kind to travelers. Flights were packed and delays legion. Gas prices soared. The dollar tanked. But at least travel news offered some levity. USA TODAY's Jayne Clark reviews stories that made us shudder or laugh. And laugh we did, because if we didn't have a sense of humor about travel's vagaries, we would have just stayed home.

Crowded flights sparked tempers, igniting nastiness more often associated with barrooms than aircraft cabins. Among this year's low blows:

- A fracas involving 20 passengers erupted in June on a flight from Lagos, Nigeria, to London. It was touched off when a passenger took exception to the reclining seat in front of him. Fliers duked it out with fists, bottles and belts, causing the captain to make an emergency landing.
- In July, a flight from St. Petersburg, Russia, to Turkey turned back after the crew was unable to break up a fight involving three inebriated men. It started, said the Russian News and Information Agency, when one of the men was given the cold shoulder by a woman he was chatting up and hit her in the face.
- A British couple pleaded guilty last summer to charges stemming from disruptive behavior on a 2005 flight from London to Jamaica, which included pursuit of a mile-high club membership. After reportedly having sex in an aircraft bathroom, the couple, who had been drinking, caused additional disturbances in the cabin, and wound up handcuffed as the flight was diverted to Bermuda.

Passengers weren't the only ones guilty of bad behavior in 2007. In April, a Northwest Airlines pilot locked himself in an airline restroom, where he had a loud, obscenity-laced conversation on his cellphone as passengers boarded his flight in Las Vegas. When confronted by a passenger, the pilot cussed at him. The flight was canceled as a result of inappropriate language by a crewmember, the airline said.

In other flight crew missteps:

- A British Airways flight from New Delhi to London was delayed 13 hours after the pilot refused to fly, saying he'd had a lousy night's sleep in a noisy hotel room and needed to catch up on his rest.
- SkyWest airlines apologized to a passenger who said he was forced to urinate in an airsickness bag during a short flight in March because the only restroom was closed due to a malfunctioning light. The man told the Salt Lake Tribune he'd had two really big beers. It was like I had no choice. The pilot called police upon landing in Salt Lake, but the airline later gave the passenger a travel voucher in addition to the apology.

Rude and annoying people weren't the only elements that made unpleasant flights downright ugly. Consider these:

- Toilets overflowed on an Amsterdam-Newark flight on Continental Airlines in June, causing passenger Collin Brock to tell a Seattle television station King 5 News, "I was forced to sit next to human excrement for seven hours." (Full story: [Continental Airlines apologizes for sewage overflow](#))
- A passenger in first class on a British Airways Delhi-London flight in March awoke to discover that a corpse, upgraded from coach, had been propped in a seat in his row.
- She kept slipping under the seat belt and moving about with the motion of the plane, Paul Trinder told Britain's Sunday Times. When I asked what was going on, I was shocked to hear she was dead.

Meanwhile, airport security personnel continued their anti-terrorist vigilance, causing the following to happen:

- A 64-year-old man was hospitalized earlier this month after chugging a liter of vodka rather than surrendering it at a checkpoint in Germany's Nuremberg airport. (Full story: [Man chugs vodka in airport line](#))
- In the Philippines in February, a German tourist displayed his annoyance among other things when he dropped his pants after being asked to go through a metal detector a second time. Unamused officials summoned police.
- An exasperated mother dumped the contents of her toddler's sippy cup on the floor at Washington's Reagan National Airport in June after officials told her she'd have to empty it if she wanted to keep the cup. She claimed mistreatment by the Transportation Security Administration and said she'd accidentally spilled the water. The TSA later posted a video of the incident on its website to bolster its version of the situation. (Full story: [TSA releases video to counter sippy cup accusation](#))
- Not even Vatican-backed Mistral Air was willing to appeal to a higher power when authorities confiscated holy water from pilgrims returning from the Roman Catholic shrine at Lourdes, France. The airline's president cited rules that ban carry-on containers holding more than 3 ounces of liquid, telling the Associated Press, "These (regulations) have to be respected." (Full story: [Holy water seized from fliers at Lourdes airport](#))

However, keen-eyed security officers occasionally missed a trick: Ginger the cat, for one, who climbed unnoticed into a suitcase in May while her owner was packing for a flight from St. John, New Brunswick, to Toronto. Screeners didn't spot the cat, though they did ask the woman if she was carrying a turkey. I was adamant: Look, I have no turkey, she told the Canadian Broadcasting Corp. Almost 900 miles later, the cat was let out of the bag. Alive!

ARP Radio-Club de Paris Special Events Start January 1

ARP Radio-Club de Paris will be operating five special event call signs to celebrate the 40th anniversary of the Ville de Paris department, created January 1, 1968.

The five special event call signs are TM8P, TM4A, TM1R, TM2I and TM7S. Together, the suffixes spell PARIS. Dates and frequencies are listed below.

TM8P from 1 Jan to 15 Jan 2008

TM4A from 26 Jan to 9 Feb 2008

TM1R from 16 Feb to 2 Mar 2008

TM2I from 29 Mar to 12 Apr 2008

TM7S from 24 May to 7 Jun 2008

Time: 0000Z-2359Z.

Frequencies: 14.275, 10.110, 7.075, 3.775

A QSL card is available to all who make contact. QSL information should be sent to: Association des Radioamateurs de Paris, ARP Radio-Club de Paris, 66 Avenue de la Republique, Paris 75011, France. (Remember: US postage is not valid for replies.)

Satellite Shorts from All Over [AMSAT]

- A Powerpoint Presentation (in PDF format), *Satellites for Beginners* can be downloaded from: <http://www.amsatsa.org.za/Satellites%20for%20Beginners.pdf>
- Jay, AA4FL made an AO7 Mode B contact with PY4AJ in grid GH70un. He is on the fringes of the footprint with a few other stations in the south of Brasil/Northern Argentina and will be looking for more contact opportunities. Jay invites e-mail at: drjay@gatoridental.com to set up schedules.
- Jim G3WGM, Hon Sec AMSAT-UK announced the dates for the next AMSAT-UK Colloquium are 25/26/27 July 2008. Location and general arrangements will be similar to last year's event. More details later. Please note the date in your diaries now.
- Gould, WA4SXM says the parts list and other documentation for the LVB Tracker are now available at <http://www.LVBTracker.com>. This website will carry the latest information available for this project.

Astronomers Monitor Asteroid to Pass Near Mars

Astronomers funded by NASA are monitoring the trajectory of an asteroid estimated to be 164-foot wide that is expected to cross Mars' orbital path early this year. [AMSAT]

Oregon Governor Allocates \$250,000 for Digital Communications Network

The State of Oregon's Office of Emergency Management (OEM) received \$250,000 from Governor Ted Kulongoski's Strategic Reserve Fund to further develop and enhance a statewide Amateur Radio digital communications network, announced ARRL Oregon Section Manager Bonnie Altus, AB7ZQ.

Six Amateur Radio satellites to launch in March

It looks like Delfi-C3 and five other other Amateur Radio cubesats will launch on March 7th.

The new Mission status page at www.delfic3.nl/missionstatus/ gives a launch date of March 7th at 09:20 local time (04:50 UT)

The Delfi-C3 launch team are scheduled to leave for India on February 14th.

Details of the other Cubesats on the launch can be found at

http://www.southgatearc.org/news/january2008/cubesat_launch_postponed.htm

Delfi-C3 Mission Status

<http://www.delfic3.nl/missionstatus/>

NASA Awards Tracking and Data Relay Satellite Contract

NASA has awarded a contract to Boeing Satellite Systems, Inc. for two satellites that will replenish the NASA communication relay network that provides telecommunications links between low Earth orbiting spacecraft and the ground. [AMSAT]

Online help to identify data modes

There are a bewildering number of digital modes on the air these days. While decoders are readily available, it can take a practiced ear to work out what mode is in use. Recognising this issue, the British Amateur Radio Teledata Group has put downloadable samples of around two dozen modes on its web site. The idea is that by listening to the samples you can more easily identify modes you hear on the bands. You can get the files from www.bartg.org.uk by following the Datacom link on the site. [RSGB]

The 2007 ARRL Periodicals on CD-ROM Now Shipping

The 2007 ARRL Periodicals on CD-ROM includes all 2007 issues of QST, NCJ and QEX -- every word and photo published throughout the year is included. Search the full text of every article by entering titles, call signs, names or any word. See every word, photo (most in color), drawing and table in technical and general-interest features, columns and product reviews, plus all advertisements. Print what you see, or copy it into other applications. The CD also includes Section News and ARRL Contest Results, including individual scores and Contest Soapbox. System Requirements: Microsoft Windows and Macintosh systems, using Adobe Acrobat Reader (included).

New EMCOMM Software for Windows Now Available for Beta Testing

The NarrowBand Emergency Messaging System (**NBEMS**) development team announced earlier this week that a *Windows* NBEMS software suite for beta testing is now available. NBEMS for *Windows* is a suite of software programs designed for point-to-point, error-free emergency messaging up to or over 100 miles distant. According to developers Skip Teller, KH6TY and Dave Freese, W1HKJ, the NBEMS system is designed primarily for use on VHF and up, or on HF with Near Vertical Incidence Skywave (**NVIS**) antennas. The system uses the computer soundcard as the modem. Other than a simple interface connection between the computer and transceiver, no additional hardware is needed. Composing and sending emergency messages on NBEMS is no more difficult than sending e-mail via the Internet. All forwarding is done by stations manned by live operators on both ends who can confirm that a frequency is clear locally, or negotiate a frequency change to avoid causing interference. The NBEMS software can also be used for daily casual communications on **PSK31**, **PSK63**, **RTTY** or **MFSK16** and is capable of sending flawless, high resolution, passport photo-sized color images in less than 10 minutes over any path that can sustain PSK250 without excessive repeats. Radio amateurs are invited to participate in the beta test of the NBEMS. The NBEMS suite can be downloaded for beta testing from the [NBEMS Web site](#). Send comments and bug reports via [e-mail](#).

Motorola Completes Tender Offer for Yaesu's Parent Company

On Wednesday, January 16, Motorola, Inc announced that its subsidiary, MI, Inc, has successfully completed its tender offer to acquire a controlling interest in Vertex Standard, parent company of Yaesu. The tender offer period expired on January 15 with approximately 5.4 million shares tendered and accepted. On November 5, 2007, Motorola launched the tender offer, in cooperation with Tokogiken (a privately held Japanese company controlled by Vertex Standard's president and CEO Jun Hasegawa) with the intention of forming a joint venture to develop and sell Vertex Standard products and develop select Motorola products. All regulatory clearances required for the completion of the transaction have been obtained.

Hiram Percy Maxim II, Silent Key, 1935-2008

He was a grandson of Hiram Percy Maxim, Hartford-based inventor and founder of the American Radio Relay League, and a great-grandson of Sir Hiram Stevens Maxim, inventor of the Maxim machine gun.

Flash Drive Available

AMSAT Store Manager, Bruce, KK5DO, suggests you check out the new 2GB USB Flash Drive in an aluminum finish with the AMSAT logo in the store. Bruce says, "This has to be one of the best items we have carried. It's something that all of us can use."

Mark Your Calendar! Save the Date!
BRATS MARYLAND HAMFEST AND COMPUTER FEST
Sunday, July 20th, 2008 at the Howard County Fairgrounds!

FAA worries on-board Net opens jets to cyberattack

The government is enacting rules to stop a new kind of cyberthreat: a computer attack that could compromise the safety of the much-anticipated Boeing 787 Dreamliner. The Dreamliner, scheduled to go into service by the end of the year, is built with unprecedented on-board networks and Internet access that could tempt a hacker to tamper with the jet, according to the Federal Aviation Administration. The agency wrote little-noticed rules last week that require a design preventing hacker access. Dreamliner will be pre-wired for passenger Internet connections. Computers will also control the jet's flight controls and monitor the aircraft's health, sending streams of data back to airline ground stations. Such computerization may result in security vulnerabilities from intentional or unintentional corruption of data and systems critical to the safety and maintenance of the airplane, the FAA wrote. How much control a hacker could gain is unclear. Computers operating a jet's functions, such as steering, are made with layers of redundancy designed to make them impossible to tamper with. Boeing has been aware of the need for special protections on the 787 for more than a decade and has already built in extra security, said Chuck Royalty, who heads the firm's computer security for the jet. Royalty said Boeing is installing firewalls and other protections. It's a very structured approach to ensure that we don't leave any gaps, Royalty said. Avivah Litan, an Internet security analyst with Gartner Inc., said hackers are relentless. Boeing needs to put up a big firewall or there will be a lot of leakage, Litan said. The first 787 jets will not have Internet access, said Boeing spokeswoman Lori Gunter. The service will begin in 2009 or 2010, she said.

ARRL QSL Bureau Sees Rise in Number of Cards Sent

Despite the fact that sunspots have been virtually non-existent, the ARRL Outgoing QSL Service is doing a brisk business. We are seeing bigger numbers this year as compared to last year, says ARRL Outgoing QSL Service Manager Sharon Taratula. It's amazing, considering where we are in the sunspot cycle. In 2007, the Outgoing QSL Service sent out 1,035,225 QSL cards, she says, compared with 1,000,475 cards sent during 2006—a difference of 34,750 QSLs. The volume of outgoing QSL cards reflects the trend, although not all cards received—especially those destined for rarer DXCC entities—go out right away in the monthly mailings to foreign bureaus. In 2005, the Bureau sent out 1,137,550 cards. Now that the new solar cycle is here, we should see even more cards, Taratula said. In the last solar cycle (Cycle 23), the number of cards shipped via the ARRL Outgoing QSL Service topped 1.9 million cards in the 2001-2002 period. The Outgoing QSL Service sorts and forwards QSLs received from US radio amateurs to bureaus in more than 220 countries.

Radio ham claims record-breaking QSO score

A Macedonian radio amateur has claimed the largest number of QSOs as a single operator in the 21st century. Vladimir Kovaceski, Z35M has submitted a proposal to Guinness World Records to add a new category of Largest number of contacts for 5 years in a row. He claims 140,000 QSOs in the period 2001 to 2005. His all-time total since 1984 is a massive 320,000 contacts. His best year was 2001, when he made 43,300 QSOs, a European single year record. [RSGB via QRZ]

Willis Island DXpedition

After the successful DXpedition to Norfolk in February 2007 where VK9DNX logged more than 60,000 QSOs the next activity is planned from Willis Island (OC-007) in October 2008. The same experienced team, comprised of DJ7EO, DJ9RR, DL1MGB, DL3DXX, DL5LYM, DL6FBL, DL8OH and DL8WPX will be QRV with four high power stations in CW/SSB/RTTY on 160m-10m for about 17 days. More information can be found at: <http://willis2008.dl1mgb.com> [DXNL via Southgate ARC]

**Swan Islands
DXpedition**

HQ8R QRV from
March 15-23, 2008.
Iota NA-35, Grid
EK87.. [E-Ham]

**New BRATS Phone
Number**

BRATS InfoLine
number has been
changed to
410-461-1212

New Prefix for Bosnia-Herzegovina Officially Announced

In response to a request from the Ministry of Communications and Transport of Bosnia and Herzegovina in August, the International Telecommunication Union (ITU) withdrew the call sign prefix allocation T9A-T9Z for Bosnia and Herzegovina and made a new allocation, E7A-E7Z. The change was made initially on a provisional basis under authority of the ITU Secretary-General and was confirmed by the 2007 World Radiocommunication Conference to be effective November 17, 2007.

KiwiSAT Status Update From New Zealand [AMSAT]

This week Terry, ZL3QL, President AMSAT-ZL, provided AMSAT members with a summary of the New Zealand KiwiSAT project. KiwiSAT is a Microsat scheduled for launch into a LEO, will carry FM and Linear transponders with inputs on 70 cm & 23 cm - outputting on 2 meters. A unique feature will be the on-board Small Satellite Attitude Control scientific experiment. It will also carry a special environmental global warming scientific unit. Over the years AMSAT-ZL has contributed some \$10,000 to Phase 3 and UoSAT programs. Now they are getting on with completing KiwiSAT for your amateur radio enjoyment. (See <http://www.kiwisat.org>).

New US 500 KHz Licence Issued [WIA]

Richard Dillman from the Maritime Radio Historical Society (MRHS) reports a new US class 1A common carrier Morse code coast station has been licensed by the FCC! Richard said Those in the US interested in preserving 500KHz for commercial operation should apply for a commercial coast station license - just as the MRHS did for KSM. Two people made applications. One of these has been granted today 24th Sept. Station KDR has been licensed to James A. Dalke in Bellevue, WA. OM. Dalke is a broadcast engineer who just happens to have a 5kW MF transmitter in the garage so I suspect we will be hearing the signal of KDR before too long. Jim says he as many interesting plans for the station. KDR is licensed for operation on 500KHz and 482KHz at 5kW. See all information on the FCC Web site at: <http://wireless2.fcc.gov/UlsApp/ApplicationSearch/applMain.jsp?applID=4055493>

Israeli scientists fit Bible on pinhead

Israeli scientists have inscribed the entire Hebrew text of the Jewish Bible onto a space less than half the size of grain of sugar. The nanotechnology experts at the Technion institute in Haifa say the text measures less than 0.5 square millimeter (0.01 square inch) surface. They chose the Jewish Bible to highlight how vast quantities of information can be stored in minimum amounts of space. It took us about an hour to etch the 300,000 words of the Bible onto a tiny silicon surface, Ohad Zohar, the university's scientific adviser for educational programs, told the Associated Press. The Technion's microscopic bible was created by blasting tiny particles called gallium ions at an object that then rebounded, causing an etching affect. When a particle beam is directed toward a point on the surface, the gold atoms bounce off and expose the silicon layer underneath just like a hammer and chisel, Zohar said. Zohar said the technology will in the future be used as a way to store vast amounts of data on bio-molecules and DNA. The tiny Bible appears to be the world's smallest. The previous smallest known copy of the Bible measured 2.8 x 3.4 x 1 centimeters (1.1 x 1.3 x 0.4 inches), weighing 11.75 grams (0.4 ounces) and containing 1,514 pages, according to Guinness World Records spokeswoman Amarilis Espinoza. The tiny text, obtained by an Indian professor in November 2001, is believed to have originated in Australia.

FAR Scholarships

FAR is now accepting applications for 55 academic year 2008-2009 scholarships. The deadline to apply is March 30. Application form may be requested by letter or QSL card to: FAR Scholarships, P.O. Box 831, Riverdale, MD, 20738. Details on [Page 1 of the January Milliwatt ...](#)

WA7BNM Contest Calendar

Jan 26- 27

CQ 160 Meter Contest
REF Contest, CW
BARTG RTTY Sprint
UBA DX Contest, SSB

Feb 2-3

Vermont QSO Party
10-10 Int 1 Winter Contest, SSB
Mexico RTTY International

Feb 2

Minnesota QSO Party
AGCW Straight Key party

Feb 4

Delaware QSO Party

Feb 3

North American Sprint, CW

Feb 9-10

CQ WW RTTY WPX Contest
SARL Field Day Contest
Dutch PACC Contest

Feb 9

Asia-Pacific Spring Sprint, CW
FISTS Winter Sprint

Feb 10

North American Sprint., SSB

Feb 16-17

ARRL Int 1 DX Contest, CW

Feb 23-24

CQ 160-Meter Contest, SSB
REF Contest, SSB
UBA DX Contest, CW
North American QSO Party, RTTY

(Thanks, WA7BNM)

ARRL DX Bulletin**CROATIA, 9A.**

Special event call 9A35RKP is active until the end of 2008 in celebration of the 35th anniversary of the Pazin Radio Club. QSL via 9A7P.

BOLIVIA, CP.

Claus, CP4BT has been active on 30 meters around 0130 and 0300z. QSL via EA5KB.

ANTARCTICA.

Felix, DL5XL and Mirko, DG9BHQ are QRV as DP0GVN from the German Antarctic Base Neumayer II, IOTA AN-016. Activity is on the HF bands using SSB and PSK31. QSL via DL5EBE.

LIBERIA, EL.

Jim, EL2DX has been QRV on 160 meters around 2300 to 0700z. QSL direct.

ARRL DX Bulletin**SRI LANKA, 4S.**

Ivan is QRV as 4S7DXG and has been active on 20 meters SSB just before 1500z and then on 30 meters around 1630z. QSL via UR9IDX.

ETHIOPIA, ET.

Joe is QRV as ET3JA and has been active on 17 meters SSB just before 1500. He has also been active on 20 meters SSB from around 1530 to 1800z. He is here for about one year. QSL via OK3AA.

SOUTH ORKNEY ISLANDS.

Paul is QRV as LU1ZA from the Orcadas base on Laurie Island, IOTA AN-008. He is often active on the Antarctic DX Net from 2300 to 0200z. QSL via LU4DXU.

WESTERN SAHARA. SO.

Fernando, EA1BT is QRV as S05A and has been active on 40 and 20 meters using SSB. His length of stay is unknown. QSL to home call.

CYPRUS, 5B.

Special event station C4EURO will be QRV during 2008 to commemorate the Euro as the new currency of Cyprus. Activity will be on all HF and VHF bands using CW, SSB and various digital modes. QSL via 5B4AGC.

SOUTH SHETLAND ISLANDS.

Marek, SP3GVX will soon be QRV as HF0POL from the Polish Henryk Arctowski Antarctic Station. He is here for all of 2008. QSL via SP3WVL.

BULGARIA, LZ.

In commemoration of the 130th anniversary of the liberation of Bulgaria from the Ottoman empire, special event call LZ130LO will be QRV from January 1 to March 31. QSL via operators instructions.

TRISTAN DA CUNHA and GOUGH ISLANDS, ZD9.

Andy, ZD9BV has been active on 20 meters from around 0730 to 0800z. QSL direct to home call.

ANTARCTICA.

Felix, DL5XL is QRV as DP0GVN from Neumayer 2 Base for the next three months while working on setting up Neumayer 3 Base. QSL via DL5EBE.

JERSEY, GJ.

Sylvain, F4EGD is QRV as MJ/F4EGD and has been active using RTTY on 40 meters around 2230 and 0000z. QSL to home call.

DJIBOUTI, J2.

Mala, F4FMI is QRV as J20MB until the end of March. Activity is on 20, 17 and 15 meters using SSB. QSL to home call.

AMERICAN SAMOA, KH8.

Larry, AH8LG has been active on 6 meters between 2200 to 0200z. QSL direct.

MARSHALL ISLANDS, V7.

Randy, V73RY is QRV from Kwajalein, IOTAOC-028, until May. QSL via N7RO.

ST. BARTHELEMY, FJ.

Yuichi, JR2KDN and Paul, F6EXV are QRV as TO5FJ. Activity is on 160 to 10 meters using SSB, with some CW and RTTY. QSL via F6EXV.

THAILAND, HS.

Simon, G6JFY is QRV as HS0ZIB from Phuket Island, IOTA AS-053. Activity is on the HF bands. QSL via operator s instructions.

ANTARCTICA.

Helmuth, W6KDX is QRV as KC4AAA from the Amundsen-Scott South Pole Antarctica Base. He is usually active on 20 meters using SSB around 1700 to 0400z. QSL via K1IED.

NAMIBIA, V5.

Station V55SRT is QRV until September . Activity is on the HF bands using SSB, RTTY and PSK. QSL via IZ8EDJ.

Hamfests and Events

Saturday, February 2: Richmond Frostfest Richmond Raceway Complex, 600 East Laburnum Ave. 146.88/R (PL 74.4), Lee Ann Horton, W4QCO, <http://www.frostfest.com> e-mail: chair@frostfest.com
NOTE NEW DATE, DAY and PLACE!!!

Sunday, February 24: Annandale, VA Vienna Wireless Society's Winterfest, at Northern VA. Community College (NOVA) 8333 Little River Turnpike. 146.91/R. Jim, W4TJP, 703-392-0150. ICOM D-Star digital radio demonstration! <http://www.viennawireless.org>

Friday/Saturday, March 7-8: Kulpsville, PA Winter SWL Fest. <http://www.swlfest.com/>

Tuesday, March 11, 7 PM - Towson, MD SKYWARN Class - Basics I

Baltimore County Public Safety Bldg. 700 East Joppa Rd. Terri Brush, tbrush@baltimorecountymd.gov Thanks, Scott, (KB3JQQ)

Sunday, March 15 - AMSAT- DC Meeting 11 AM ; At Pioneer Hall , Historical Electronics Museum, 1745 W. Nursery Rd. Linthicum MD. Talk-in 146/76/R (PL 107.2) Talks, demos, tutorials, socializing

Sat./Sun, March 29-30 - Timonium, MD Greater Baltimore Hamboree and Computerfest MD State Fairgrounds, 2200 York Rd. 146.67/R, 449.625/R (PL 107.2) N3VEJ 443-590-1444 Info2008@gbhc.org

Saturday, April 19 - Dover, PA

York Hamfest. Brookside Park 4054 Fox Run Rd. Dover, PA. 147.33/R (PL 123.0); Ray, W3AXC, 717-292-3529; w3axc@arrl.net

Sunday, May 4 - Boonsboro, MD

Antietam Radio Assn Hamfest Washington Co. Ag. Ctr, 7313 Sharpsburg Pike, Boonsboro (Hagerstown), MD. Karin, KB3GFV, 301-432-2358 (147.09/R)

Sat./Sun. May 30-31: Henrietta, NY

Rochester Hamfest, Atlantic Division Convention, Fair and Expo Center, 2695 E. Henrietta Rd. (146.88/R PL 110.9) <http://www.rochesterhamfest.org> Harold, K2HC, 585-424-5260

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

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: Feb 2, March 1, May 3, Jun 7, Aug. 2, Sept. 6, Nov 2, Dec 1.
Sundays: Jan 6, April 6, 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; March 15, May 31, 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)

ARRL DX Bulletin

IRAN, EP.

Pooyan, EP3PK has been QRV on 20 meters using SSB or PSK between 1130 and 1400z. QSL via IK2DUW.

MOUNT ATHOS, SV/A.

Monk Apollo, SV2ASP/A has been active on 20 and 17 meters around 0910 to 1010z and then 1340 to 1400z.

NIUE, ZK2.

Phil, VK3APM is QRV as ZK2PM and is here for about a year. QSL to home call.

AMERICAN SAMOA, KH8.

Larry, AH8LG has been active on 6 meters between 2200 to 0200z. QSL direct.

MARSHALL ISLANDS, V7.

Randy, V73RY is QRV from Kwajalein, IOTAOC-028, until May. QSL via N7RO.

OPERATIONS APPROVED FOR DXCC CREDIT.

The following operations are approved for DXCC credit: Liberia, 5L2MS, 2007 operation; Angola, D2NX, 2007 operation; and Seychelles, S79UU and S79AB, 2007 operation.

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

Silent Keys

Carroll C. Charlie Tiemeyer, W3RMD
January 1, 2008
(Husband of Bettye, K3VRZ, SK)

Alan M. Chedester, N3AC
January 13, 2008

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

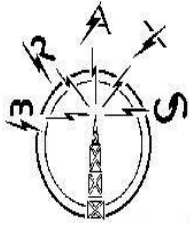
8411 Harford Road, Parkville, 410-665-3622. Home of fine trains, model kits, x-acto, cars, planes, ships, many radios. Yaesu FT101ZD, Kenwood TS 820S, 930S, Heathkit SB-102, National NC-183, more ... Dick, N3JWN, 410-488-2806

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

We Get Mail ... re: KA3TCC

You can tell everyone in the club that I am home from the hospital after a back operation . Will be recovering for about the next 6 weeks. I have my Apple Powerbook downstairs so you can send me e-mail. (ka3tcc (at) verizon.net) You can call me at home any time. I will only have the scanner to listen to since all my other radios are upstairs. Tom, KA3TCC

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

February 2008

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 145.43/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, February 19, 7:15 PM
Pikesville Library, 1301 Reisterstown Rd
Please plan to join us!

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

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)

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
