

the Milliwatt



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

Sending an S.O.S at Pearson International Airport

As part of the Greater Toronto Airports Authority (GTAA) Exhibit Program, the Canada Science and Technology Museum (CSTM), in collaboration with the Royal Ontario Museum (ROM), presents Morse Code from May 6, 2006 to January 7, 2007. Anyone passing through Pearson International Airport's Malton Gallery (Terminal 1) can experience the history and essence of electrical communication in its first century and learn how for decades, skilled Morse operators maintained lifelines to tiny railway whistle stops, isolated arctic trading posts and ships navigating the stormy North Atlantic. Approximately 40 unique and fascinating artifacts selected from the CSTM's collections will demonstrate how manual and automated systems for transmitting Morse code became essential in making land, marine and air transportation systems safe and reliable. Even today, Morse survives in the three-letter code used to identify airports around the world. Visitors can view some of the earliest telegraph equipment surviving in Canada, including little known devices such as the siphon recorder and the heliograph, as well as rare examples of early radiotelegraph equipment employed on ships before the First World War. The artifacts are accompanied with bilingual text and historic photographs of telegraphers and radio operators at work, bringing to life the mysterious language of dots and dashes.

"What hath God wrought" was the first message sent in Morse code via the electric telegraph on May 24, 1844 by Samuel Finley Breese Morse. Although not the inventor of the telegraph, which was first built in 1774, Morse is credited with greatly improving the telegraph. Early machines were primitive and impractical, using 26 separate wires, each representing one letter of the alphabet. Morse was the first to create a one-wire system, in 1837. However, the ticker-tape like readings produced by the machine were often inaccurate, pressing Morse to create a better code. Finally he developed the system of dots and dashes, later used throughout the world as a primary means of communication.

Background: Launched in April 2004, the GTAA Exhibition Program offers a wide range of engaging exhibits, showcasing Canadian art and culture from museums, galleries, institutions and private collections in Ontario and Canada. Aiming to promote Canada's reputation as an important international cultural destination, GTAA creates an enhanced environment for the over 28 million visitors passing through Toronto Pearson Airport annually. Produced and designed by the ROM, the program features stories of human history and culture.

Visit www.rom.on.ca/news/releases/ or www.gtaa.com/artprogram for more details.

MARYLAND HAMFEST

AND

COMPUTER FEST

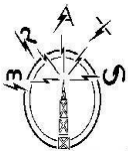
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SUNDAY, JULY 23, 2006

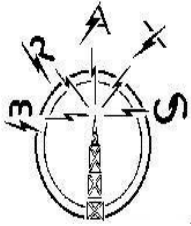
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The award-winning monthly publication of The BRATS.

Items herein may be reprinted with credit.

Mayer D. Zimmerman, W3GXX, Editor

Some Thoughts

We need you help with the hamfest! Every year at this time we ask for volunteers to help run the Hamfest, which is our major fund raising source. We have already instituted several programs to save or raise money. We now send out about 21 MILLIWATTS a month. The total cost for printing and postage is only about \$15 per month, a huge savings. There are other cost cutting measures and programs contemplated. But we need you help with this one. Call 410-461-0086 and leave a message. We will call you back and schedule you for an hour or two. Please. We need you! Thanks! 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: mail@bratsatv.org

InfoLine: 410- 461-0086

Meetings: 2nd Tuesday, 7:30 PM, Pikesville Library, 1301 Reisterstown Rd., Pikesville, MD.

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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 BRATS ATV Net

Thurs 9 pm BRATS ATV Net

Sat 1 pm Weekly News Bulletin, W3WGXX

Sat 1:20 The BRATS Answer Men:
W3WVV, N3GXH, KB3JQQ

As needed Weather/Emergency Net, Skywarn

BRATS Board of Directors

Through 12/06:

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Through 12/07:

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*Appointed by the President

REGULAR BRATS MEETINGS

Second Tuesday of each month,
7:15 pm, at the Pikesville Library
1301 Reisterstown Rd, Pikesville

Next BRATS Meeting

Note new TIME! 7:15 PM

Tuesday, June 13, Pikesville Library

NEXT BRATS HAMFEST

Sunday, July 23, 2006

Howard County Fairgrounds

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RSGB assists IARU Region 3 safeguard 24GHz

The Radio Society of Great Britain, the Spectrum Forum and the UK Microwave Group are working with the Wireless Institute of Australia in an attempt to safeguard the 24GHz band. Australian radio amateurs currently have primary access to this band but they could lose this as a result of plans to accommodate ultra wideband vehicle radar technology in the 22 to 26.5GHz band. The RSGB and the UK Microwave Group have put a lot of effort into protecting amateur's primary status in parts of the 24GHz band over the past 18 months in IARU Region 1. Now they are using the expertise and knowledge they gained during this process to help the Wireless Institute of Australia safeguard 24GHz in Region 3.

House Committee Okays Telecoms Bill with BPL-Interference Study Amendment

The US House Energy and Commerce Committee's version of the Communications Opportunity, Promotion and Enhancement (COPE) Act of 2006 includes an amendment requiring the FCC to study the interference potential of BPL systems. After spending two days marking up (the Ross amendment is No 25) the measure, the panel voted April 26 to send the much-talked-about "telecoms rewrite" bill to the full House for its consideration. "Outstanding news!" was the reaction of ARRL CEO David Sumner, K1ZZ. "This is a major victory for the ARRL," he exulted, noting that the amendment "received significant opposition" from utility companies. Rep Mike Ross, WD5DVR (D-AR), proposed the amendment, and, with the support of Committee Chairman Joe Barton (R-TX), the committee agreed by voice vote to include it in the bill. A year ago, Ross sponsored House Resolution 230 (H Res 230), which calls on the FCC to "reconsider and revise rules governing broadband over power line systems based on a comprehensive evaluation of the interference potential of those systems to public safety services and other licensed radio services." The non-binding resolution has six cosponsors.

"Hundreds of ARRL members who wrote their congressional representatives in support of Rep Ross's H Res 230 helped to achieve this week's success with the COPE Act amendment," Sumner observed. A more-widely reported Internet "network neutrality" amendment to the COPE Act bill was defeated. The measure will get a number next week. A statement released by Ross's office notes that his amendment, which received unanimous committee support, "would guarantee that valuable public safety communications and Amateur Radio operators are not subject to interference." One of two radio amateurs in the US House, Ross said infrastructure-free Amateur Radio, "often overlooked in favor of flashier means of communication," can maintain communication in disasters that bring more modern technology to its knees. Ham radio operators "are often the only means of communication attainable in a devastated area," Ross said. "I believe it is imperative that the interference potential [of BPL] is thoroughly examined and comprehensively evaluated to ensure that deployment of BPL, which I do support, does not cause radio interference for Amateur Radio operators and first responders who serve our communities," Ross added. The COPE Act BPL amendment adds a section (under Title V) to the proposed legislation that would require the FCC to study and report on the interference potential of BPL systems within 90 days of the bill's enactment. The Commission would have to submit its report to the House Committee on Energy and Commerce and the Senate Committee on Commerce, Science and Transportation. "This puts the House Energy and Commerce Committee on record as having concerns about BPL interference," Sumner said. "If we are vigilant in protecting it against deletion on the House floor -- assuming the bill is approved by the House -- the BPL language will be included in the legislation that goes on to the Senate."

California Public Utilities Commission Approves BPL Regulations

Saying that broadband over power line (BPL) will bring Internet access to "underserved communities," the California Public Utilities Commission (CPUC) has adopted regulatory guidelines for electric utilities and companies that wish to develop BPL projects in that state. While the Commission's BPL guidelines include a requirement to maintain the safety and reliability of the electric distribution system, the state agency has no jurisdiction over radio frequency interference, which received no mention in the PUC's news release. ARRL Laboratory Manager Ed Hare, W1RFI, points out that the utility industry still must meet another tier of federal regulations that govern permitted BPL signal levels and interference issues.

Oregon radio amateur dies in tower mishap

Well-known DXer Ron J. Spears, W7IX, of Klamath Falls, Oregon, died May 14 when an Amateur Radio tower he was working on in Northern California broke and toppled. He was 44. News accounts say Spears, an ARRL DXCC Honor Roll member (CW), was attempting to retrieve a 40-meter beam from atop a 170-foot tower near MacDoel, California, when the structure collapsed and fell to the ground with Spears still attached by his safety belt. He was pronounced dead at the scene. His father, Aubrey, was assisting on the ground and witnessed the accident. Spears had built the tower for its previous owner, Ray Balch, K6VX (SK), and used to do all of Balch's antenna work, so he had prior experience working on the structure. According to his father, Spears had first inspected the tower for safety. Spears earlier had bought the antenna from the current property owner and was attempting to bring it down in pieces. The heavy-duty support structure broke as Spears was about 10 feet from the top. Unofficial reports say that when Spears removed the antenna, it slipped and struck one of the top guy wires, starting the tower swaying until the guy broke. All but the lower 40 feet of the structure reportedly fell. In addition to his father, survivors include his mother, Oletta, N7OHO, and a sister. Spears was a member of the ARRL and of the Southern Oregon Amateur Packet Radio Association. -- News media reports; The Daily DX; Rod Ingram, WC7N

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Airbus denies report of standing-room-only for passengers

Airbus is flatly denying yesterday's report from The New York Times that the company has pitched the idea of stand-room-only seating in its A380 super-jumbo jet. A spokeswoman for the airline even went so far as to call the Times report "crap," according to an online story by CNN/Money. "Our passengers and customers want more and more comfort," says Barbara Kracht a spokeswoman for the European aircraft maker. "We're going in the direction of more comfort, not in that direction." The Times story went on to say that the standing-room-only seating could boost the capacity of the jet up to 853 passengers. Kracht confirms that capacity, but tells CNN/Money that is the maximum capacity for an all coach-class configuration for the A380 -- a configuration that includes seats for everyone. In its story, the Times cites experts that it claims have actually "seen a proposal" on the standing-room-only seating, which was described as a section where passengers would be propped against a padded backboard and held in place with a harness. So far, CNN/Money is the only publication to run a story with Airbus' denial of the plan. Stay tuned ...

'N.Y. Times' prints correction regarding Airbus's standing-room-only 'seats'

I told you last week about a New York Times report that said Airbus was allegedly proposing standing-room only "seats" where fliers would be strapped into a standing board, "secured" with some type of harness. Airbus subsequently denied that it had pitched such an idea -- and now it appears there may be some truth to Airbus' denial. Here's the text of a correction from Tuesday's New York Times that addresses the proposed standing-room seating section allegedly proposed by Airbus ...

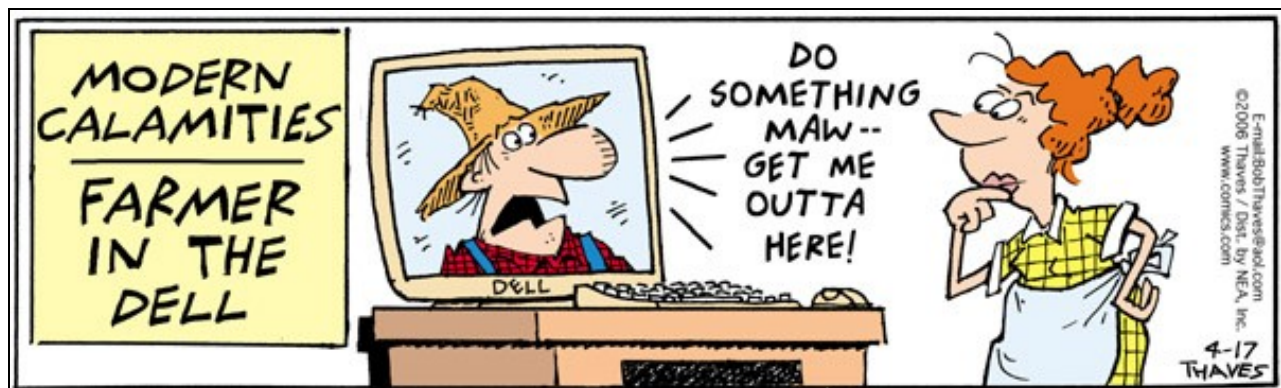
"A front-page article last Tuesday about seating options that airlines are considering to accommodate more passengers in economy class referred incorrectly to the concept of carrying passengers standing up with harnesses holding them in position. During preparation of the article, The Times's questions to one aircraft manufacturer, Airbus, were imprecise. The company now says that while it researched that idea in 2003, it has since abandoned it. The article also misstated the capacity of the Airbus A380 superjumbo jet. The airliner can accommodate 853 passengers in regular seats; standing-room positions would not be needed."

Illegally broadcast Catholic mass creates devil of a time for trans-Atlantic flights

Catholic priests in Ireland have been transmitting masses on illegal radio frequencies, potentially creating a safety risk for trans-Atlantic flights over the island nation. The priests tell local media that the broadcasts are intended to reach "housebound" parishioners, but Irish Aviation Authority (IAA) officials say they are creating frequency interference on a heavily-used route between North America and Europe. Many pilots on such routes "had been complaining for months about mysterious bursts of static on their cockpit radios as they approached Dublin airport," writes The Guardian of London. "None of the pilots actually reported hearing prayers or hymns coming over the airwaves," says Lilian Cassin of the IAA, "but what prompted our suspicion was the regular timings of the disturbances." Irish officials say they've taken measures to address the safety hazard. "The priests have received a stern lecture -- a sermon, if you will -- from the Irish communications regulator, ComReg," writes The Globe and Mail of Toronto, which adds: "Thou shalt not covet thy neighbor's airspace." Father Brendan Quinlan, a parish priest in Dublin, tells the Irish Independent (free registration): "I knew it was sort of a gray area but I didn't know that we were breaking the law, not only in transmitting mass but in having this equipment because we have no license to transmit."

Coke or Pepsi? US Airways makes a choice

There's finally an answer at US Airways, which announced Thursday that it will serve Coke products on its flights, according to The Arizona Republic. The airline had to make a choice following the merger between America West -- which served Pepsi -- and the "old" US Airways, which offered Coke. As for the soda, The Arizona Republic notes that US Airways chief "is rarely seen around the office without a can of Diet Dr Pepper." That soft drink brand, owned by Cadbury Schweppes, was carried on America West but will not be offered on US Airways. US Airways also had to pick which beer it would serve following the move. In that decision, which was previously announced, the carrier picked Bud over Miller.



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Southwest joins the blogosphere

Renowned as one of the airline industry's pioneers on the Internet, Southwest has launched its own blog, which will feature employees writing about both their jobs and the travel industry, The Associated Press reports. Southwest officials say they hope the online diary will allow the discount giant to connect with and form a better relationship with customers. "There was a growing online community having conversations about travel and Southwest," explains company spokeswoman Linda Rutherford. "We could watch that conversation, or become part of it." Southwest's blog -- called "Nuts about Southwest" -- will feature posts from about 20 employees, including a flight attendant, a pilot and a mechanic. Rutherford says Southwest will try to update the site at least three times a week. But with such a public and accessible forum, Southwest may have to be prepared to accept unflattering feedback. "The true test of Southwest's blog will be to see how they handle negative comments," says blogging expert Josh Hallett. "Some companies delete negative comments, but that comes out in the end, and it just looks like you're covering things up."

Millionaire flight attendants may serve you your next drink on Southwest

The flight attendant serving you drinks on your next Southwest flight could be a millionaire. Eight flight attendants are among the 17 employees who have worked at Southwest since the discount carrier's first days of service. All are millionaires, beneficiaries of Southwest's profit-sharing program. "Ask them why they stick around and they mention frugality and pride in earning their keep. And they say they simply like to work," writes The New York Times, which ran a feature on the long-time Southwest employees. Joining the founding flight attendants are five operations workers and four executives. One of the airline's "millionaire attendants" is Sandra Force, described by the Times as a former "elementary school teacher and one-time beauty pageant winner from Memphis." She was hired "on the spot" after her summer 1971 interview. "My mother was devastated," Force tells the Times. She recalls her mother saying, "Sandra, if you were going to quit your teaching job, why didn't you go with a well-known airline like Braniff?" At the time, Southwest was considered to be the long-shot upstart while Braniff was the well-established heavyweight. The airlines competed head-to-head on many Texas routes -- though Braniff never made it out of the 80s while Southwest has gone on to become one of the airline industry's top success stories. As for Force, the single 61-year-old just completed chemotherapy for breast cancer and returned to work this month after a six-month absence. But, the Times writes, "she does not need the paycheck." Force has more than 100,000 shares of Southwest stock, a stash valued at about \$1.6 million. "I love to work," she says. "Southwest is kind of my family and my husband."

Phase 3E

Amsat's new Phase 3E amateur radio satellite looks like its headed for a 2007 launch. If all the modules function well and the satellite passes some critical vibration tests, the launch could be early next year (actual dates not set). The twin-looking satellite of OSCAR 10 or 13 is in its final building stages and tests. It may look like a twin of AO-10 or AO-13 but it has some of the latest technology onboard. Some is even being tested for the future Phase 5A Mars orbiter. That will be an adventure in the near future for everyone to enjoy and another story.

P3E satellite images available on the web

Information and pictures of the new amateur radio P3E satellite can now be downloaded from the web. P3E will be the first amateur satellite to make use of the amateur 47GHz band but, according to P3E project leader Peter Guelzow, DB2OS, its most popular feature will be its 70cm-to-2m 150kHz bandwidth linear transponder. Thanks to the satellite's highly elliptical orbit, the transponder will provide worldwide communications for many hours each day. Peter said it would make "the top end of the 2m band sound like 20m". See Amsat-dl website for further information and pictures.

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Tracking system to better pinpoint planes' locations

ENHANCING SAFETY, ADDING CAPACITY

The government is endorsing a new concept for the future of guiding planes that will eventually replace radar in tracking jets over the USA. Federal Aviation Administration boss Marion Blakey said Tuesday that the new system will improve safety and save billions of dollars for the government and airlines by streamlining how aircraft operate. Known as ADS-B (Automatic Dependent Surveillance-Broadcast), the system works by providing vastly improved information about where a plane is located and where it is heading. It also allows aircraft to receive far more detailed reports from the ground on weather and the location of other planes. Blakey said the technology is "the future of air traffic control." The FAA's Vincent Capezzuto, who manages the system, said it will revolutionize flying in the same way that the Internet changed computing. Ever since the 1950s, controllers have guided aircraft using radars, which sweep the skies with radio beams that track metal objects. But because radar is imprecise, controllers must keep planes miles apart to ensure they do not collide. Only controllers on the ground have access to radar, so pilots don't always know the location of other planes. Under ADS-B, planes use global positioning satellites to determine their exact position and then broadcast once a second where they are. Ground stations costing a small fraction of a radar can receive the radio blips and tell controllers the locations of planes. The same information can easily be transmitted to all the aircraft in the sky so pilots can follow other planes. The FAA has been testing ADS-B for years, but Tuesday's announcement was the first time the agency has said it intends to make it the backbone of the air traffic system. ADS-B has allowed air traffic controllers in Alaska to follow planes that were hundreds of miles from the nearest radar. Australia is installing it to track aircraft over stretches of the country's uninhabited interior. Blakey said the agency intends to place the system in a few spots around the country by 2010. That initial phase will cost the FAA and airlines \$600 million but will save them \$1.3 billion, she said. The new system will cover all areas currently served by radar by 2014. Cargo hauler UPS has equipped 107 of its jets with ADS-B and uses it to speed flights into and out of its Louisville hub, Director of Operations Karen Lee said. A recent experiment showed the airline could save \$2 million a year in fuel simply by using the system to take more efficient routes to land in Louisville. ADS-B has been endorsed by airlines and pilot groups, but numerous details need to be worked out. Airlines, for example, have been cautious about the high price tag they must pay. In addition, the FAA is still working out an adequate backup system for ADS-B.

General class question pool undergoing review

The National Conference of Volunteer Examiner Coordinators (NCVEC) Question Pool Committee (QPC) is now reviewing the General class (Element 3) Amateur Radio examination question pool. A revised Element 3 question pool is scheduled for release in December 2006 and will become effective for all examinations given on or after July 1, 2007. The current General class question pool remains valid until then. The NCVEC Question Pool Committee (QPC) welcomes comments and suggestions for new questions or changes to topic areas for any of the Amateur Radio examination question pools. When submitting new question material or suggesting changes to existing questions, indicate the sub-element reference number and topic and the existing question number, if any, with your submission. Indicate in the subject line of your message which pool you are addressing. All current Amateur Radio examination question pools are available on the ARRL Web site.

SuitSat spotted!

More than three months after it was launched from the International Space Station, and SuitSat -- an old Cosmonaut space suit converted into an amateur radio transmitter -- has been spotted orbiting the earth by Canadian skywatcher Kevin Fetter. A video he took of SuitSat crossing the sky can be downloaded here.

<http://science.nasa.gov/spaceweather/swpod2006/27Apr06/fetter.wmv>

FCC chairman nominated for new term

President George W. Bush has tapped FCC Chairman Kevin J. Martin of North Carolina for a second, five-year term on the Commission starting July 1. The White House submitted Martin's name to the US Senate this week for confirmation. Martin says he's honored to be nominated for a second term as a commissioner and as FCC chairman. "This is an exciting time of growth and innovation in the communications sector," Martin said in a statement. "I look forward to working with the Administration, Congress, my fellow commissioners and the talented staff at the FCC to provide all Americans with the services and opportunities offered by the best communications system in the world today."

FCC WRC-03 Amateur Rule Changes Now in Effect

Several FCC Part 97 Amateur Radio rule revisions to implement changes agreed to at the international level during World Radiocommunication Conference 2003 (WRC-03) now are in effect. The FCC Order, released in January, affects §97.111, Authorized transmissions; §97.113, Prohibited transmissions; §97.115, Third party communications, and §97.117, International communications. The Federal Register published the changes May 3.

West Mountain Radio to be Principal Awards Sponsor for ARRL RTTY Roundup

West Mountain Radio, which manufactures the popular RIGblaster digital modes radio-to-sound card interfaces, has generously agreed to be Principal Awards Sponsor for the 2006 and 2007 runnings of the ARRL RTTY Round-Up. During the annual event, which takes place the first full weekend in January, radio amateurs around the globe contact and exchange QSO information using Baudot RTTY, PSK31, ASCII, AMTOR and attended packet operation. ARRL COO Harold Kramer, WJ1B, said West Mountain Radio's participation will provide the events' top scorers with plaques that might not otherwise be available.

Matsushita plans waterproof laptop

The new laptop from Matsushita Electric, famous for its Panasonic brand, is unlikely to break even if water is spilled onto its keyboard, the Japanese electronics maker said Monday. The new Let's Note CF-Y5 features a waterproof sheet and special drainage system that protects the hard drive and circuit board from light water damage, Matsushita said in a statement. The CF-Y5 can withstand a force equivalent to a maximum 220 pounds -- offering extra protection in packed commuter trains -- the Osaka-based maker said. The laptop is expected to hit Japanese stores on May 19 with a price tag of around 265,000 yen (US\$2,300; euro1,860.09). Matsushita Electric Industrial is among the many Japanese electronics makers that have struggled in recent years amid tough competition from rivals in South Korea, China and Taiwan. But the company posted a rise in profits and raised its earnings projections earlier this year, thanks to robust sales in flat panel TVs, digital cameras, personal computers, computer chips and batteries.

Intel brands new desktop, laptop chips

Intel Sunday christened its new chips for laptop and desktop computers "Core 2 Duo," hoping to reignite interest in its products amid tough competition from rival Advanced Micro Devices Inc. Formerly known as Conroe and Merom, the microchips boast two processing cores, meaning they are better at handling several tasks at once, such as crunching a spreadsheet while playing video. The world's biggest maker of computer chips also said it will launch a new premium processor, dubbed "Core 2 Extreme," for high-performance enthusiasts. Intel says the chips are faster yet use less energy than previous processors, such as its flagship Pentium 4. Intel's microprocessors are used in more than 80% of personal computers, but the company has been losing market share to AMD and has seen shrinking profitability for several quarters in a row.

New 'Parlez Vous QSO' site

Ever wondered what lingo foreign hams use? Well, now you can find out, thanks to a new website. The newly-launched [Parlez Vous QSO](#) website features more than 100 common English QSO phrases translated into German, Spanish, French, Italian, Czech, Dutch and Polish. The site also provides information on etiquette, special characters, links to on-line dictionaries and more. Site author Steve, M0ECS, said: "This really is a work of mutual co-operation in the true spirit of amateur radio. Over a dozen amateurs from eight countries worked together to produce the language files."

European Hams Hear Signals from the Edge of Space

Hams in Germany received signals from American spacecraft Voyager 1 March 31 using a 20 meter parabolic antenna of a radio telescope on a frequency of 8.4 GHz. Voyager 1 transmits on 8415 MHz nominal. A team of hams at AMSAT-DL/IUZ Bochum (The Institute for Environmental and Future Research at Bochum Observatory) using Doppler shift and sky positioning, received the signal from a distance of 8.82 billion miles (14.7 billion km). That's roughly 98 AUs, or 98 times the distance from the Sun to Earth. This is the first recorded reception of signals from Voyager 1 by radio amateurs. Members of the AMSAT-DL /IUZ team include Freddy de Guchteneire, ON6UG, James Miller, G3RUH, Hartmut Paesler, DL1YDD, and Achim Vollhardt, DH2VA/HB9DUN. Also helping out were Theo Elsner, DJ5YM (IUZ Bochum), and Roger Ludwig of the Jet Propulsion Laboratory, as well as the Deep Space Network Tracking Station in Madrid, Spain. Voyager 1 was launched in September 1977 to conduct close-up studies of Jupiter and Saturn, Saturn's rings and the larger moons of the two planets. Originally built to last only five years, the probe will continue to send back astronomical information to NASA and the JPL until at least 2020.

German experimental stations on 440 kHz

Geri Holger, DK8KW/W1KW, in Peine near Hannover, reports that German telecommunication authorities have issued him an experimental license to operate on the "medium wave" frequency of 440 kHz using the call sign DI2BO. He joins Walter Staubach, DJ2LF, in Dormitz near Nuernberg, who's been operating experimental station DI2AG on 440 kHz. Tests have been under way on that frequency since January 2005, Holger says, "to study the special propagation conditions on medium wave." Holger says CW beacon transmissions (which include call sign and grid square) will be sent on 440 kHz (+/- 100 Hz) , maximum 200 Hz bandwidth at a maximum power of 9 W ERP. "Both beacon transmissions will be coordinated in a way so that they can be observed simultaneously to study the propagation from both locations at the same time," Holger explained. "Also, two-way contacts between both experimental stations are planned." DI2BO is using a marine radio transmitter running about 130 W output into a top-loaded 18-meter umbrella antenna. He calculates the ERP is around 5 W. Further information is on the DK8KW Longwave Information Web site.

Canadian Team Tries Again to Contact New Zealand on 2200 Meters

Earlier this month, Scott Tilley, VE7TIL, and I led a team of Canadian hams in trying to make the first two-way contact between North America and New Zealand on 2200 meters. Using the call VA7LF (in honor of our mission using low frequency), we attempted the contact from South Pender Island, British Columbia, Canada between April 3 and 5. Assisting in this project were Martin McGregor, VE7MM, and John Gibbs, VE7BDQ. Using an aluminum tower 40 feet high, we added two 20-foot aluminum sections to the top of the tower, as well as a large 150-foot two wire top hat spaced 10 feet across. Another 25 feet of wire was extended from the base of the antenna over the cliffside, ending just above the beach, where it was matched and fed with 50 ohm coax, for a total of 105 feet. The entire antenna system was brought into resonance on 137 kHz; the big vertical required 1.9 mH of inductance to bring it down to 2200 meters. Murphy's Law of propagation was evident all three nights of the test, as the A and K indices were highly elevated. In addition, there were strong geomagnetic storms and aurora displays so intense they could be seen in the central USA. Even with the poor propagation, VA7LF and ZM2E (Quartz Hill, New Zealand) managed to exchange signals on 2200 meters. Using slow speed DFCW90 and DFCW60 (this is frequency shift keyed Morse: a "dot" is sent by having the transmitter send on frequency_1 and a dash by having the transmitter send on frequency_2; the difference between frequency_1 and frequency_2 is typically 0.1 Hz to 0.5 Hz), signals from both ends were copied on all three nights. The third morning had the best results: ZM2E's signal suddenly elevated 25 dB over the noise and acknowledged our call as a perfect copy of the beacon signal. This was an invitation to begin a formal contact sequence, but as the sun was starting to rise on South Pender Island, the darkness disappeared before full calls could be exchanged. On the third night just prior to sunset, VA7LF took advantage of the strong groundwave signal and made a number of crossband contacts, using 160-2200 meters, to Washington, Oregon and British Columbia. VA7LF has attempted to make this contact since 2004. Although not reaching the goal of a valid contact, we will try again. -- Steve McDonald, VE7SL

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WA7BNM Contest Calendar

- May 20-21
 US Counties QSO Party, SSB
 His Majesty King of Spain, CW
 EU PSK DX Contest
 Manchester Mineira CW
 Baltic Contest
- May 20
 Portuguese Navy Day, PSK 31
- May 21
 Portuguese Navy Day, SSB/CW
- May 27
 VK/TransTas.80m Contest, CW
- May 27-28
 CQ WW WPX Contest, CW
- May 28
 ARCI Hoot Owl Sprint
- May 28-29
 MI QRP Memorial Day Sprint
- Jun 3-4
 RSGB National Field Day
 IARU Region I Field Day, CW
- Jun 5
 RSGB 80 M Club Champ., Data
- Jun 10-11
 ANARTS WW RTTY Contest
 GACW WWSA CW DX Contest
 REF DDFM 6 Meter Contest
- Jun 10
 Asia Pacific Sprint, CW
 Portugal Day Contest
- Jun 10-12
 < font > ARRL June VHF QSO Party
- Jun 14
 < font> RSGB 80m Club Champ., CW
- Jun 16
 SARL Youth Day
- Jun 17-18
 All Asian DX Contest, CW
 SMIRK Contest
 WV QSO Party
 AGCW VHF/UHF Contest
 Quebec QSO Party
- Jun 17
 Kids day Contest
- Jun 22
 RSGB Club Champ. 80m, SSB

ARRL DX Bulletin

UNITED ARAB EMIRATES, A6.

Abdullah, A61Q has been active on 17 meters around 1730z and 15 meters around 1430z. QSL via EA7FTR.

PAKISTAN, AP.

Hassan, AP2HAH has been active using PSK31 most days on 20 meters around 1300 and 1500z.

IRELAND, EI.

Members of the Limerick ARC are QRV as EI60LRC until the end of the year to mark 60 years of the club. Activity is on 80to 10 meters. QSL via EI8EM.

FALKLAND ISLANDS, VP8.

Richard is QRV as VP8DIZ and has been active on 15 meters between 1500 and 1630z. QSL via G7KMZ.

MACEDONIA, Z3.

Zoran, Z36A has been QRV on 30 meters around 1000and 1500z. QSL via DJ0LZ.

CYPRUS, 5B.

George, 5B4AGC has been active on 17 and 15 meters around 1440z most days. QSL via G3LNS.

SUDAN, ST.

ST0RM has been QRV on 17 meters around 1500 and 1900zand 20 meters around 0000z. QSL via T93Y.

TURKEY, TA.

Berkin, TA3J is QRV using special callsign YM125ATA until November 10 to mark the 125th birthday of Mustafa KemalAtaturk. Activity is on 160 to 10 meters. QSL via TA3YJ.

TUNISIA, 3V.

3V8BB is usually QRV on 20 or 17 meters using SSB around 1000z.

CHINA, BY.

Yasuo, JA6UBY is QRV as BY4CSS from Shanghai. Activity is mostly on 20 and 15 meters using CW and SSB. QSL direct to home call.

THE GAMBIA, C5.

Noz, C5DXC is usually QRV on 15 meters using SSB between 1900 and 2100z.

THAILAND, HS.

Fred, K3ZO is QRV as HS0ZAR and has been active on 20meters using CW before 1500z and then before 1900z. QSL to homecall.

WA7BNM Contest Calendar

Jun 24-25

His Maj. King of Spain, SSB

Ukrainian Digi DX Contest

ARRL FIELD DAY

July 1

RAC Canada Day Contest

Look for EI60LRC to be aired on 10-80m until the end of the year to celebrate the 60th anniversary of the Limerick Radio Club. QSL via EI8EM.

ARRL DX Bulletin

PAPUA NEW GUINEA, P2.

Jerry, P29ZAD is usually QRV using digital modes on 20 or 15 meters around 1000 to 1400z.

ST. KITTS AND NEVIS, V4.

Ken, V44KJ has been QRV using RTTY on 20 meters from around 2100 to 2300z.

MICRONESIA, V6.

V63SC is generally QRV on 15 meters after 0500z. QSL via JM1LBO.

NORFOLK ISLAND, VK9N.

Jim, VK9NS has been QRV using RTTY on 20meters around 0430z. QSL direct.

MACAO, XX9.

Savio is QRV as XX9BB and has been active on 20 and 15meters using RTTY.

RODRIGUES ISLAND, 3B9.

Jose is QRV as 3B9/ON4LAC and has been active using PSK on 15 meters around 1000z and then 20 meters just after 1700z. QSL to home call.

SRI LANKA, 4S.

Bob, ZL1RS is QRV as 4S7CCG until November.

PAKISTAN, AP.

Khalid, AP2KD has been active on 20 meters SSB around1340z.

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Hamfests

Saturday, May 27 - Georgetown, DE STAR
Hamfest at Sussex Tech HS, Route 9, Free VE Exams at Noon. Walk-ins welcome. Admission FREE. (147.05/R) Justin, N3JVT 302-934-5008

Sunday, May 28 - West Friendship, MD MD FM
Assoc. Hamfest, Howard County Fairgrounds. <http://www.marylandfm.org> 301-641-5313 (146.76/R)

Fri-Sun, June 2-4: Rochester New York Rochester Hamfest , Atlantic Division Convention; Monroe Co. Fairgrounds <http://www.rochesterhamfest.org> 585-424-7184

Sunday, June 18 - Frederick, MD. Fathers Day Hamfest, Frederick County Fairgrounds, E.Patrick St just off I-70. (147.06/R) Carolyn, N3VOK 301-831-5060

Sunday, July 23 - West Friendship, MD The Famous BRATS Maryland Hamfest And Computer Fest. Howard County Fairgrounds. 410-461-0086 (24 hours); 147.03/R <http://www.bratsatv.org>

Sunday, August 6 - Berryville, VA Shenandoah Valley ARC Winchester Hamfest, Clarke Co. Ruritan Fairgrounds Bus. Rte. 7, Berryville, VA (146.82/R) Tom, AF2D, 540-869-7067, af2d@arrl.net

Sunday, August 13 - Westminster, MD Carroll County Tailgate Fest , Carroll Co. Agricultural Center, Westminster, MD. (145.410/R) 301-829-8791

Sat./Sun. Sept. 9-10 - Gaithersburg, MD FARFEST , Montgomery Co. Fairgrounds Gaithersburg, MD. (146.955/R) ; 301-3345-7381 ; <http://www.farfest.org>

If You Received a Renewal Letter, Send us a Check Today! DO IT NOW! Thanks!

BARC VE EXAMS for 2006

BARC Clubhouse, 12360 Owings Mills Blvd, Owings Mills. Info: Rusty, N3WKE, 410-247-0578 Exams at 2 PM, walk-ins allowed.

Saturdays: June 3, August 5, September 2, November 4, December 2

Sundays: July 2, October 1

AERO VE EXAMS

\$14 Fee, (ARRL VEC)

Sept 30, Nov 18: White Marsh Library, 8133 Sandpiper Circle, White Marsh.

Register at 1 PM, exams begin at 1:30 PM
Frank, AC3P, Pat, AC3F, 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)

AERO/BRATS Field Day

June 24-25, Camp Genyara, I-83 to Exit 36, 439 East to Bond Rd www.bratsatv.org

OPERATIONS APPROVED FOR DXCC

The following operations are approved for DXCC credit: Iraq, YI9AQ, current operation effective September 21, 2004; Comoros, D6/WB4MBU, operation from May 24, 2001 to October 27, 2001; Comoros, D68JC, operation from October 23, 2001 to November 8, 2001; and Timor-Leste, 4W2AQ, operation from June 18, 2003 to December 17, 2003.

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FOR SALE: Special!!! Rohn 48-foot free standing tower, TET 4-element tribander, tail twister rotor, You take down. No reasonable offer refused. Also, Alinco 110 2 mtr. Xcvr, can be used base or mobile, \$100. ACI AC20, linear for 2 meters, \$20. Heath HM 102 power meter with attached antenna selector, \$40. All in good working order. Call Jerry, KB3AP, 443-618-0618.

FOR SALE: Yaesu FT50R dual band (2mtr./440) H/T. Scans from 76 to 999 MHz (less cellular). Extra Battery, CA15 charger, ear/throat mike, Shoulder harness. Regularly \$330. Sell for \$225. Contact Russ, N3YI at n3yi@yahoo.com

FOR SALE: ICOM 746, HF/144 MHz full size desk top xcvr. w/manual; variable 5w-100 watts power out, 101 memory channels . ICOM IC-T90A hand held dual band xcvr, 144/440 MHz, wide band rcvr, manual charger, headset and HM 54 spkr mike, 500 memory channels; Kenwood dual band mobile TM 431A 144/440 MHz, manual RC10 multi- function remote controller w/ remote mike, 30 memory channels, mag mounted remote speaker, 5/50W on 2 meters, 5/35 W out on 440. Contact me for features on all of the above. All in current use, excellent condition and ready to go. Call Don, W3QYL, 410-356-9004, or w3qyl@arrl.net

FOR SALE: Heathkit Security Sentinel GD-3810, \$20. Kenwood MC520DM hand mike, back lite, numbers, \$20. New 3-ton Olympia chain hoist, \$75. WWII hi-power antenna tuner, VAC variables, roller inductor, \$120. Azden DM headphones, new in box, \$15. Telex C1320, \$15. Bush Clevite, \$15. Panasonic adapter BC1031C, \$45. W2IHY 8-band Audio equalizer, noise gate, \$175. Call Ted, W3OWN, 410-668-5580. Please leave message if you get answering machine.

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

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>

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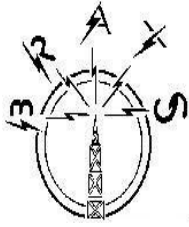
Antique Radio Repair, Restoration Eric, WA3TAD, Audio-Visual Service / Retro Radio, 3401 Chestnut Avenue, Baltimore, MD 21211. 410-467-3620; wa3tad@comcast.net

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

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FOR SALE: Special! ICOM BC-110A battery charger, output DC 12V 200mA, for ICOM T8A or similar, used only twice. Misplaced it and ordered a new one. Found it after new one came. Cost \$46 + shipping. Make offer. Call Mayer, W3GXX, 410-786-6839 or email w3gkx@verizon.net

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P.O.Box 5915 Baltimore, MD 21282-5915

June 2006

Next BRATS Meeting
Tuesday, June 13
7:15 PM, Pikesville Library

**To join The BRATS or to renew,
please use the form below! Thanks!**

UTAH ATV

Lots of projects and links:

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

(Thanks, Scott, KB3JQQ)

ATV NETS

Brats Nets:

Wednesday and Thursday, 9 PM:

Rotating Net Control

Friday at 11:45 AM, W3WVV

BRATS Public Service

June 10-11 -- MS 150 Bike Tour Salisbury, MD.

For more info, or to participate contact Ian, N3CVA, 410-303-1412, N3CVA@hotmail.com or Ed, N3GXH at 410-965-8498

September 16-17: 4th Annual Chesapeake Challenge Walk, starts in Annapolis Saturday, concludes in Downtown Baltimore Sunday.

Dave, KB3CJT, kb3cjt@arrl.net or drollhauser@comcast.net

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		
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