



FIELD DAY: JUNE 24 - 25 NEW LOCATION, SAME FUN

MARC will operate Field Day at a new location this year but it's not far from the old site. When the Shannondell retirement community ate the Egypt Road property Verizon previously leased for training, the company shifted operations to a smaller field on nearby Rittenhouse Road. Verizon has once again agreed us to use the field free of charge and to provide a generator bucket truck at no cost to the club.

If you're new to ham radio, here's the story on Field Day. It's the most popular operating event in North America and is held annually on the fourth full weekend in June. The ARRL sponsors Field Day to promote emergency preparedness. For years now some hams have scorned Field Day as being irrelevant to modern emergency communications. Time to lose the attitude! The hams who did communications during

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PUBLIC SERVICE COMMUNICATIONS: SERVICE -- LEARNING -- FUN

May and June bring us two public service events to put on your calendar.

Radnor Memorial Day Parade, May 29. Gather at the Micro Center parking lot on Lancaster Avenue in St. Davids at 8 AM. There will be informal talk-in on 147.06. Bring rain gear, if necessary, because this one happens rain or shine. Also bring an earphone for your rig, because parades are noisy environments. We want a really good turnout for this event to show our respect for people in the armed services who have sacrificed in the service of freedom.

American Diabetes Association Tour de Cure Bike Race, June 10. This is a new event for us, courtesy of our neighbors in the RF Hill Amateur Radio Club who served the event when it was held up their way. This year the race is being held in Valley Forge National Park and we'll be working with the hams from RF Hill. Communicators should meet at 7 AM in the visitors' center parking lot. There will be informal talk-in on 145.13. The RF Hill folks say the sponsors provide lots of tasty food for volunteers. This event is expected to end by mid-day.

For more information and to sign up, contact **Bob N3JIZ** (610-687-4587). Please remember that public service / emergency communications is THE principal justification for Amateur Radio's existence today. You'll also find out that taking part in these events is interesting, fun, and not difficult

MAY / JUNE 2006

REMARCS

www.marc-radio.org

APPOINTMENTS MADE, PR CHAIRMAN NEEDED

Following the By-Laws change that permits them to do so, the MARC board plans to appoint **Dori W3IBH** as club secretary. She will complete the term of **Dick K3IIN** (SK).

Dick's passing also left us without a Net Manager. **Lou WX3I** volunteered to take on this responsibility, and the board voted in April to appoint him as Net Manager.

Thanks to Dori and Lou for stepping forward!

We regret to announce that **Dennis KA3QOT** had to resign as public relations chairman in March, for personal reasons. We certainly miss him on the board. This means the board needs to appoint a replacement for Dennis.

The public relations position should be filled by someone who can write good, clear, grammatical, correctly-spelled English. If you do not already know how to compose a press release, it's not brain surgery and we can quickly teach the skill to anyone who is already a competent writer. In addition to writing skills, the PR person must be on the Internet and must be very deadline-oriented. The post involves sending press releases to local media -- usually via e-mail - about club events. It also involves sending hamfest announcements to the Amateur Radio press. In both cases, if you don't find out and meet the deadlines, the notices will not be published.

(By the way, to meet deadlines, the 2006 hamfest announcements have already been e-mailed to the magazines, thanks to Dieter K3DK, who has also been taking flyers to area hamfests.)

The PR person should also be knowledgeable about ham radio in general and be able to answer questions from reporters in layman's terms that non-hams can understand.

The ARRL has resources for doing PR on behalf of Amateur Radio that we can help you get at no charge.

Are you qualified and willing to do this important job for the club, to fill out Dennis's unexpired term? Send an e-mail to President **Steve N3ORH** (smaslin@marc-radio.org).

HOUSE COMMITTEE OKAYS TELECOM 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

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ABOUT MARC

wb3joe@marc-radio.org
http://www.marc-radio.org

MEMBERSHIP MEETINGS

3rd Tuesdays, 8 PM, Tredyffrin Township
Bldg, Wayne/Berwyn. Guests welcome.
Smoke-free. Handicapped-accessible.

BOARD MEETINGS

4th Thursdays, 7:30 PM, Paoli Hospital.
Members may attend as observers.

SYSTEMS

145.13/R, 147.06/R, 224.42/R, 445.675/R
145.13 & 147.06 linked, CTCSS 131.8 Hz
Webmaster: Steve N3ORH (610-327-8666,
smaslin@marc-radio.org)

NETS

Club Net, Sunday, 8:30 PM
Traffic net, M/W/F, 8:30 PM
All nets on linked 145.13/R & 147.06/R
Net Manager: Lou Ruh WX3I
(610-630-9146, lou@wx3i.net)

DUES

\$15 Full (licensed Amateurs)
\$5 Associate (unlicensed persons)
Family rate \$5 per ham after first
member pays full dues.

NEWSLETTER

REMARCS is published in the odd
months, edited by Kay N3KN
(610-993-9623, n3kn@arrl.net)

BRING A FRIEND
TO A MARC MEETING!

VOX

Congrats to **Bill KN3EUF** on his upgrade to General class. **Mike W2YYY** is also a General now. Welcome new members **Mike KB3NDC**, **Ray KB3NFE**, **Rich WA3FPK**, and **Emmanuel KB3GBW**. **Kay N3KN** will be on a panel at Dayton discussing disaster response and will represent the ARRL at an international conference on Amateur Radio emergency communications in Finland in June. If you go to Dayton, be sure to send us info about cool things you see and hear so we can publish it in future newsletters. **Carter N3AO** enjoyed his 50th high school reunion in Virginia. (*Remember, trying to act as young as you feel can make you feel even older than you are!*).

Bob WA3PZO and **Kay N3KN** attended the 50th anniversary party for our neighbor club the Mount Airy VHF RC, a.k.a. "The Pack Rats." **Lou WX3I** is fitting out a new storm-chaser van. If you haven't seen Lou's van, packed with all sorts of high-tech stuff, you have a major gadget-junkie's treat awaiting. **Dennis K3DS** published a book in January titled *Digital Communication Systems Using SystemVue*.

Bob W3SA is living at Shannondell these days. If you'd like information on how to pay him a visit, please contact **Carter N3AO**. **Carter**, **Kay N3KN**, **Ron W3ZV**, and **Bart K4BF** met with a Verizon representative on May 3 to talk about antenna placements for Field Day.

MEMBERS APPROVE BY-LAWS CHANGES ALLOWING APPOINTMENTS TO FILL BOARD VACANCIES

The 20 club members who voted in the By-Laws change referendum approved the proposed changes almost unanimously. Everyone voted in favor of the proposals to permit the board to appoint people to complete unexpired terms and to make it explicit that the VP becomes president if the presidency becomes vacant. The proposal to change Article III, Section III, to conform with the authority given the board to appoint fill-ins was approved 19 to 1.

The revised By-Laws will be made available to members via the MARC web site on upon request to **Kay N3KN**.

MAY & JUNE PROGRAMS

The May 16 meeting program will be on GPS and Geocaching, presented by **Bart K4BF** and **Carter N3AO**. The Global Positioning System (GPS) is used for practical navigation by outdoors enthusiasts and road-trippers. It can be combined with the ham radio Automatic Position Reporting System (APRS) for tracking purposes during emergency communications events. The availability of modestly-priced hand-held GPS units gave rise to a combination of hiking and high-tech treasure-hunting called "geocaching." It's a great family hobby. To learn more before the meeting, go to www.geocaching.com.

The June 20 meeting program will be presented by **Ted NT3J** on the subject of how electric power plants work. He works for Exelon, so he knows! This would be a good program for our friends and family members who are not hams yet since the topic is of general as well as technical interest.

In the absence of a program chairman, the board is handling program arrangements. Your suggestions for topics and speakers are needed. What ham radio and high-tech subjects would you like to have programs about during the rest of 2006? Contact Member-at-Large **Ted NT3J** with your suggestions.

AUCTION YIELDS BIG PROCEEDS

The 2006 auction netted \$333.50, possibly the largest amount ever produced by this annual event. One member requested that proceeds of his sales -- \$29 -- should go to the Nick Fund. That left \$304.50 as the event's contribution to the general treasury.

Forty-eight items were offered for sale, of which our talented auctioneer **Bart K4BF** was able to sell 42. The gross receipts were \$518, and members took home \$184.50. The reason that so much money went into the Nick Fund and club treasury is that many members donated all their proceeds rather than putting it in their pockets. This is not an expectation and no arms are ever twisted, but the club sincerely appreciates the generosity of those who are able to donate their proceeds.

Assisting Bart at the auction were treasurer **Carter N3AO**, who took in and paid out the money, and **Kay N3KN**, who kept a spreadsheet of the proceedings so we had some idea of what was owed to whom.

FROM THE EDITOR'S JUNK BOX

Opinions, they say, are like armpits -- everybody's got some. (*Well, that's not really what they say, but this is a family newsletter.*) Barging ahead with that metaphor, if opinions were armpits, most hams would be octopi or squids, and I know a few who'd be centipedes. Two hams arguing about one subject will produce at least half a dozen opinions.

Some hams spend so much time bashing each other on Internet message boards and listservers it's impossible to imagine they ever actually get on the air. Which is fine with me. The fewer loons on my lake, the better I like the water.

After all, ham radio is supposed to be fun. Every so often I meet a ham who scowls when someone calls ham radio a "hobby" and who acts as if "fun" were a word unsuitable to use in the presence of children and the clergy. Well, ham radio is fun fun fun -- to quote the Beach Boys -- and I wouldn't have it any other way. When I run into a ham who uses Amateur Radio as a vent for his or her melodramatic psychiatric effluents, I head for the exit.

What have we done lately that's ham radio fun at our house? **Carter N3AO** has a 1x1 callsign, **N3S**, for two weeks this month as part of the tenth anniversary of the Adventure Radio Society's Spartan Sprints QRP contests. We've been getting the hang of APRS, the automatic position reporting system. I worked the Alabama and Georgia QSO Party contests; the Georgia contest is special fun for me because I come from that state.

In my book there is no conflict between ham radio as fun and ham radio as service. We can perform great service for the community and the world without taking ourselves so seriously that we're like a casserole of prunes and sour pickles. Fun gives me the energy for service. Service is how I pay the tab for my fun. Where's the conflict?

If you have not become involved in the service side of Amateur Radio, there's no time like the present. Don't know how? Ask me and I'll point you in the right direction. Along the way you'll discover new things about ham radio that will stimulate your mind and your imagination. For instance, Carter and I started fooling with APRS because of its application to emergency communications. Emergency comm also led us to learn about the Winlink 2000 radio e-mail network and ICOM's 1.2 GHz D-Star protocol system. This is cool stuff to learn about, and we enjoy seeing what it will do.

We're heading out to Dayton this month, where all manners and conditions of hams come together. If you're going, too, be sure to drop by the ARRL EXPO area and say hello. --**73 Kay N3KN**

BOARD MEETING HIGHLIGHTS

There was no March board meeting owing to lack of a quorum. At the April 27 meeting, the board discussed recent and upcoming public service events, the technical state of the repeaters, ways to recruit hamfest volunteers, and Field Day. The board voted to name **Lou WX3I** as Net Manager but postponed appointment of a new Secretary. The board accepted donation of an HT from the estate of **Harry W1JZW** (SK) for public service events. The board discussed voting by means other than paper ballots and the pro's and con's of allowing members to pay their dues through PayPal. No action was taken on these matters. An e-mail distribution list will be set up for the club's group of net controls so the Net Manager can communicate with them more easily. A letter was received from Special Olympics thanking the club for our donation in memory of **Dick K3IIN** (SK). The treasury balance was \$12,595.29.

BOARD OF DIRECTORS, 2005

PRESIDENT

Steve Maslin N3ORH 610-327-8666
smaslin@marc-radio.org

VICE PRESIDENT

Bart Feroe K4BF 610-367-4288
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SECRETARY

Dori Lawson W3IBH 610-610-910-4063
w3ibh@arrl.net

TREASURER

Carter Craigie N3AO 610-993-9623
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MEMBERSHIP SERVICES

Kay Craigie N3KN 610-993-9623
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PROGRAMS

(open)

PUBLIC RELATIONS

(open)

PUBLIC SERVICE

Bob Palin N3JIZ 610-687-4587

TECHNICAL

Dennis Silage K3DS 610-353-4829
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MEMBERS-AT-LARGE

To 9/30/2006:

Bob Haase W3SA

To 9/30/2007:

Ted Jennings NT3J

610-793-1979, tedddyjsr@aol.com

CALLSIGN TRUSTEES

WB3JOE:

Carter Craigie N3AO
610-993-9623, n3ao@arrl.net

W3NWA:

Kay Craigie N3KN
610-993-9623, n3kn@arrl.net

MARC MEMBER APPOINTED TO ARRL POST

Al Rabenau W3AHR is now the ARRL Section Emergency Coordinator for Eastern PA. The appointment was announced by Section Manager **Eric Olena WB3FPL** in early April. Al is active with Chester County ARES/RACES and has been ARES District Emergency Coordinator for the counties in the Philadelphia area. He was one of several good candidates considered for the highly-responsible position. Congratulations, Al!

Al is the second MARC member to hold the SEC position. **Bob WA3PZO** was SEC for nearly a decade starting in the late 1970's around the time of Three Mile Island. MARC seems to be fertile soil for the production of ARRL officials -- we've been the home club of two Section Traffic Managers, two Section Emergency Coordinators, and a Section Manager who keeps getting kicked upstairs.

NEAT STUFF ON THE INTERNET

Dieter K3DK passes along this link for people in search of equipment manuals and schematics on line:

www.cqham.ru/sch_eng.html. You can make sense of this site even if you don't read Russian all that well.

Users of the Firefox browser who are on APRS will be interested to know that there's a search engine plug-in for the findu.com web site. Go to <http://mycroft.mozdev.org/index.html>, type findu.com in the box labeled "Site Name," and click the Search button.

There is also a Firefox plug-in for HF propagation information at www.n0hr.com/Propfire.htm. It puts the latest Solar Flux, A index, and K index numbers on the browser status bar. You can click on this information to bring up a full propagation report.

Another neat plug-in for hams is "FoxClocks," which lets you display other time zones of your choice, including UTC, in the browser status bar. To find it, go to <https://addons.mozilla.org/firefox/> and type "FoxClocks" in the Search box.

I've had no problems with Firefox plug-ins, but of course you travel the web at your own risk. The Firefox browser is free of charge (see www.mozilla.com/firefox/) as are the add-on features. Unlike a lot of free software, Firefox is actually worth more than you paid for it. Versions are available for Windows, MAC OS X, and Linux.

LOGBOOK OF THE WORLD UPDATE

A Logbook of the World user from North Carolina has earned DXCC on 8 bands using just the electronic confirmation system. Worked All States can now be earned using LoTW or via a combination of paper QSL cards and LoTW confirmations.

ARRL NOW OFFERS VANITY CALLSIGN RENEWAL SERVICE

For hams who are not comfortable renewing their vanity callsigns on the FCC's ULS web site and who find the FCC's Form 605 too long and complicated, there's now another way to renew. The ARRL has announced a vanity callsign renewal service available to both League members and non-members for a fee.

League members will pay \$26.90 -- the FCC's regulatory fee of \$21.90 plus a \$5 ARRL/VEC processing fee. Non-members pay \$35.90 -- the FCC's fee of \$21.90 plus a \$14 ARRL/VEC processing fee.

ARRL members should go to the following URL for instructions: www.arrl.org/fcc/memberlicenseinstructions.html

Non-member should go to this different URL for instructions: www.arrl.org/fcc/licenseinstructions.html

Applications for new vanity callsigns must be done directly with the FCC on-line or by mail.

ARRL/VEC still processes non-vanity callsigns renewals and changes free of charge for League members and for \$14 for non-members.

HELLO!

ARRL'S NEW CAMPAIGN PUTS OUT THE WELCOME MAT FOR AMATEUR RADIO

For people with a beginning interest in ham radio, most of the sites on the web are just too much information. Recognizing this problem, and marking the 100th anniversary of the first voice communication over radio, the ARRL has started the "Hello!" campaign. The campaign makes it easier for prospective hams to get the picture in terms they can understand.

This is being done via a special website at www.hello-radio.org. People can get to the web site by clicking on an icon on the main ARRL web site (www.arrl.org) or by going directly to the Hello! Site address.

Now, when friends or co-workers ask what this ham radio thing is all about, give them the www.hello-radio.org address and offer to talk with them again after they've visited the site.

But wait, there's more! You can buy bumper stickers with the Hello! logo and web address for your car, cubicle, spacecraft, or other suitable smooth flat surface. The price is \$2 from the ARRL web site store and shipping is free. I have a small supply of them to share that I purchased on my own.



PUBLIC SERVICE: THE REVOLUTIONARY RUN

The April 23 Revolutionary Run at Valley Forge National Park was a new event for us this year. MARC worked cooperatively with Montgomery County ARES/RACES to do safety communications. Communicators at the event who are MARC members were **Lou WX3I**, **Bob N3JIZ**, **Steve N3LJZ**, **Dieter K3DK**, **Ned WQ3Z**, **Susan K3SUE**, and **Ron W3ZV**. Several of these people are also MontCo ARES/RACES members.

A great deal of good will was earned with the park rangers and the township police through the good efforts of the ham radio communicators.

MARC HAMFEST
JULY 16 -- KIMBERTON
FIRE COMPANY FAIRGROUNDS
This is our principal
annual fundraiser.
Put it on your calendar NOW!

FIELD DAY

Continued from page 1

last year's Gulf coast disasters will tell you that was much like Field Day -- except it was not fun.

At some clubs' Field Day operations, they don't want you unless you are a contester. MARC is not like that. Every club member is welcome to participate. If you are new to HF or new to ham radio, experienced ops will help you get the hang of it.

If MARC doesn't do Field Day to beat other clubs' scores, what are we doing it for? Fun, good fellowship, and skill-building. Many friendships started at Field Day. The skills we learn and practice at Field Day are relevant to emergency communications and also to your daily life as a ham. If you haven't been on HF, for example, going to Field Day will show you what's involved in setting up and using a simple HF station. You can ask questions about equipment, operating, and setting up antennas.

For example, one of the challenges at this new field is that it is only 1/3 the size of the old field. Planners hope they've allowed sufficient physical separation between antennas so the stations will not interfere with each other too much.

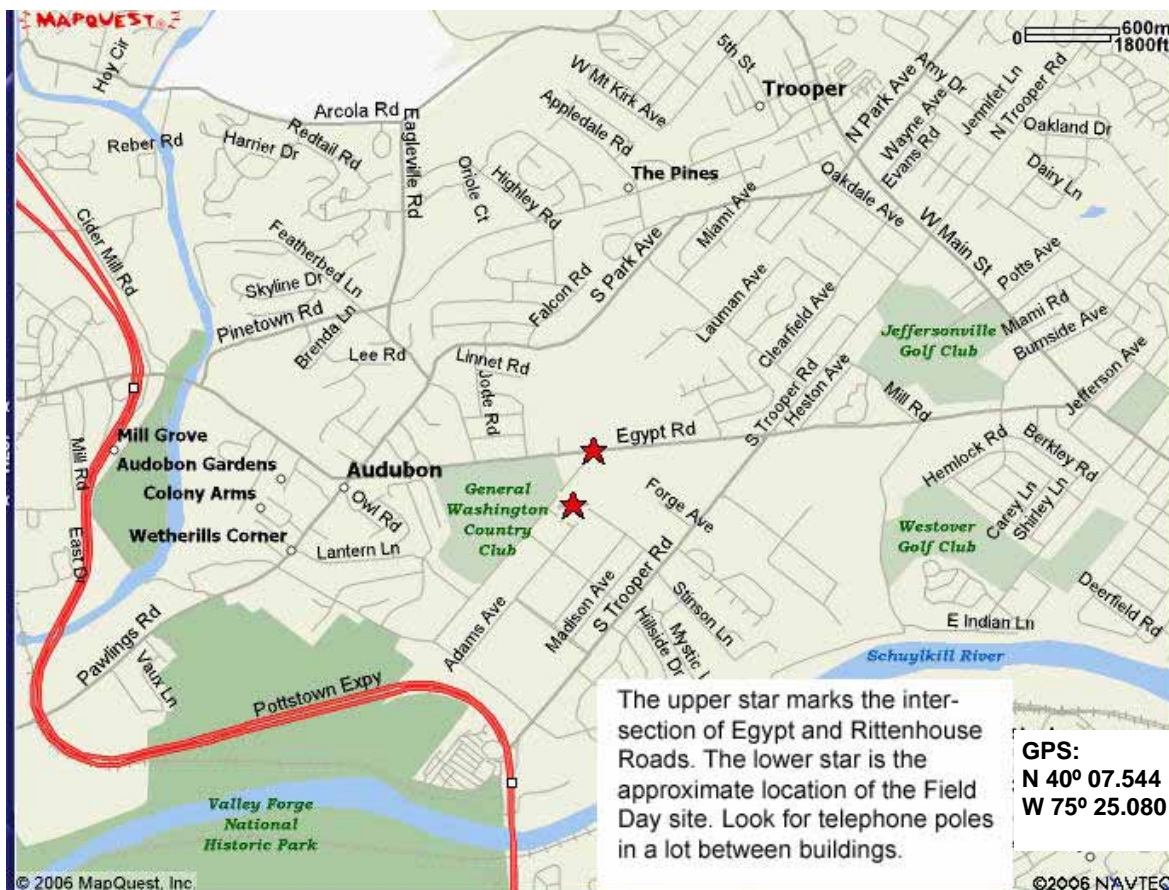
Please do not just show up unannounced with your station equipment in a box and expect to set up and operate. Field Day is an *organized* event. To be part of the fun, be part of the plan.

Field Day goes on around the clock and rain or shine, so bring appropriate gear for the time of day and the weather. We stop operating in case of thunderstorms, but otherwise it's day and night. There are no shade trees at this site, so wear a hat and sunscreen. Food and drink will be available, but you're welcome to bring your own favorite non-alcoholic beverage.

Non-ham visitors are welcome. Children must be supervised at all times for their safety. Because this is a family-friendly event, please watch the vocabulary or don't hit your thumb with the mallet in the first place. Toilet facilities are to be arranged because there's no way to do the behind-a-tree thing at the new field. There are no trees.

If you have a van or pickup truck, you could really help out for set-up and tear-down. Set-up will begin at xx AM on Saturday, June 24. The event ends at X PM on Sunday, June 25. Please, please, do not just vanish on Sunday, dumping all the tear-down and clean-up work on two or three people. That's extremely unfair. It burns out Field Day leaders and jeopardizes the future of the event.

A map showing the new Field Day site is shown below. In June we'll put out a special Field Day edition of the newsletter giving more information on where to park, and so on.



LICENSE TEST SESSION REPORT

Although the two candidates for new ham licenses at the May 6 test session were not successful, the MARC Volunteer Examiners were pleased to send the third test-taker home with an upgrade to General class.

Examiners at this session were **Bob W3ZQN**, **Bob KA3NIQ**, **Carter N3AO**, and **Kay N3KN**. The session was held at the Education Building of the Bryn Mawr Presbyterian Church on Montgomery Avenue.

The next club-sponsored test session will be on Saturday, August 5.

If someone you know is planning to take the Technician class exam on or after July 1, be sure the person studies the NEW question pool and not the one currently in use. They are quite different. Study materials for the new exams are available now. See the related story at right on this page.

If your friend will be taking the test any time through the end of June, he or she must study the current questions, not the new ones.

MORE BPL TROUBLES IN MANASSAS, VA *ARRL Has More Questions for the FCC*

Another Manassas, Virginia, radio amateur has joined the growing list of those filing formal complaints about disruptive interference from the city's broadband over power line (BPL) system. The May 4 letter from **Arthur R. Whittum W1CRO** went to the FCC's Spectrum Enforcement Division just one day before the ARRL again prevailed upon the same office to act on several earlier and similar complaints of BPL interference. Whittum reported that BPL interference to his mobile station on April 25 and May 3 made 40-meter SSB operation impossible "during a transit of streets in Manassas" covering about two miles.

"The digital hash from BPL obliterated even strong signals on 7255 kHz to the point of unintelligibility," Whittum wrote the FCC. "Since I couldn't identify who was transmitting or who was net control, I couldn't check into the nets and couldn't even identify whether or not there was any radio message traffic destined for this area."

Whittum said his latest complaint is the third he's attempted to submit. "The first two seem to have gone astray, even though they were introduced in advance by e-mail," he told Spectrum Enforcement Division Chief **Joseph Casey**. "I hope this one finds its way to you."

On May 5, the ARRL wrote Casey to ask when the FCC planned to respond to longstanding interference complaints from four other Manassas radio amateurs. The League said it also wants to know when it can expect the FCC to require BPL system operator COMTek, equipment maker Main.net and the City of Manassas "to comply with the Commission's rules governing radiated emissions and the non-interference requirement of §15.5 of those rules."

NEW STUDY GUIDES FOR THE TECHNICIAN LICENSE

The ARRL has produced *The ARRL Ham Radio License Manual* -- a brand-new publication that includes all the information a prospective ham needs to get licensed, including the significantly revised Technician class (Element 2) question pool going into effect at mid-year. Also just out: the fourth edition of ARRL's *Tech Q & A*.

These new publications will supplant the popular and familiar *Now You're Talking!* (5th edition) and ARRL's *Tech Q & A* (3rd edition) for those not planning to sit for the Technician examination any sooner than July 1.

Both of the new books were penned by **Ward Silver N0AX**, a well-known contributing editor and columnist for *QST*.

Designed either for self-study or for classroom use, *The ARRL Ham Radio License Manual* sports a friendly, easy-to-read two-color print format that makes for even more creative ways to emphasize key learning concepts as well as easy-to-understand bite-sized sections. These include Welcome to Amateur Radio, Radio and Electronics Fundamentals, Operating Station Equipment, Communicating with Other Hams, Licensing Regulations, Operating Regulations and Radio Safety.

The new ARRL *Tech Q & A* also includes the Technician Amateur Radio license examination (Element 2) question pool that goes into effect July 1 plus an answer key and brief, clear explanations for all questions. Those studying for their first Amateur Radio license will find it a convenient tool to review what they've learned prior to taking the test.

Anyone aiming to take the Technician class (Element 2) Amateur Radio examination before July 1 of this year should study *Now You're Talking!* (5th edition) or ARRL's *Tech Q & A* (3rd edition), which remain available.

This summer, the League will introduce a new online class, "The ARRL Ham Radio License Course." This class will replace the current Technician License Course (EC-010).

Students taking the new course will be able to complete all of their Technician class license training online. Along with a 100-percent risk-free guarantee, registration will include a copy of the new ARRL *Ham Radio License Manual*, a one-year ARRL membership and post-graduate support.

AMSAT CALLS FOR PAPERS

AMSAT-NA has issued a first call for papers and presentations for its 2006 Space Symposium October 6-8 near San Francisco, California. Speakers are invited to submit and present papers dealing with the science of Amateur Radio satellites and associated technologies.

Complete information on the 2006 Symposium is available on the AMSAT Web site.



HOMEBREW SHOW & TELL NIGHT

Homebrew Show & Tell Night at the April MARC meeting brought out projects from vintage gear to the cutting edge. The stories told were as much fun as the gear.

We began with **John W3WOM**, who got started in ham radio on a shoestring in the 1950's when he was about 20 years old. Short of cash like so many young fellows with families in those days, John learned to be resourceful and improvise. He showed a converter for 40 meters that let him hear the ham band on his car radio -- voice was AM in those days, not single-sideband. He showed us a power supply, a rig, a microphone tweaked up with a telephone component, and a Gonset converter.

Andy K3JSE showed a crystal set on a project board he put together for his child's Scout meeting. He also brought in a soundcard-based oscilloscope (Linux software) that's simple to build and hooks up to a laptop computer. He showed us a terminal node controller (TNC) built from a kit marketed by **John Hansen W2FS** that he had modified. He also had a handy 34 amp-hour battery in a box, fitted out with Anderson powerpole connectors, Molex connectors, and binding post connectors. These and other interesting creations showed Andy's creativity with the workbench and junk box.

Bob W3ZQN brought a power supply for voltages lower than 13.8 volts. He built it from an old QST article. As you'd expect from a W3ZQN project, it had meters! Bob also showed a CW set-up that started when he built a cover for his Bencher paddles. Next, he decided he wanted a keyer for the paddles, so he built a little keyer in a small box that sits on the paddles' cover. Very compact, and nice workmanship, too.

Bob W3LIA took us back to the days when he worked in the Bell of Pennsylvania electronics shop nearly 50 years ago. For repair out-calls, he built a test unit for himself. Test equipment just was

not as easily available then as it is today. Bob also described his antenna-launcher, which will shoot a 3-ounce weight over a 100-foot tree. The line pays off a fishing reel.

Jack KB3GDC decided to make an SWR meter to bring for the program. It has four major functional components. The challenge Jack set for himself was to build a meter that could be used from 1 to 100 watts and from 160 meters to 70 centimeters. That's a tall order. The project wasn't quite finished by the club meeting date, so we hope Jack will give us an update about its success. His craftsmanship is superb.

Dennis K3DS brought in a keyer he built from a kit. It's micro-processor-based, and he used to operate it with the Kenwood 180 rig that he has sold. The keyer kit is installed in a box from Radio Shack.

Carter N3AO showed his portable digital communications station. At the meeting he used the station's laptop to demonstrate the Automatic Position Reporting System (APRS). He had built an APRS tracker in a box. It includes a VX5-R handheld transceiver, a TinyTrak 3 terminal node controller, and a Global Positioning System board along with a 5 volt regulator. Emergency communicators are turning to APRS when the location of a moving vehicle must be accounted for. Carter also brought in a project that flopped. It's a tiny rig, about the dimensions of a pack of cigarettes, built with surface-mount technology. If it ever works, it will go into an Altoids tin. Everyone groaned at the microscopic size of the components.

Jim W3DCL capped off the evening with great anecdotes about the legendary thriftiness of Radio Amateurs.

Thanks to everyone who contributed their stuff and their stories to the annual MARC show & tell night.

BPL INTERFERENCE STUDY ATTACHED TO TELECOM BILL

Continued from page 1

marking up (the Ross amendment is No. 25) the measure, the panel voted April 26 to send the much-talked-about 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, the committee agreed by voice vote to include it in the bill.

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 vulnerable technology to its knees. Ham radio operators "are often the only means of communication attainable in a devastated area," Ross said.

"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."

All MARC members are urged to visit the ARRL web site often for updates about the legislation. At the time this was written, the bill had not been assigned a number yet. As soon as that happens, we must all write to our representatives in the House to urge them to keep the Ross amendment in the bill. If you already wrote about H.Res. 230, you should write again.

ARRL members logging onto the Members-Only portion of the ARRL Web site will see contact information for their Member of Congress. Alternatively, visit <http://www.house.gov/>.

When you write to your Senator or member of Congress about an Amateur Radio subject, please send a copy of the letter to ARRL's Government Relations firm: Chwat & Company Inc, ATTN: Eric Heis KI4NFC, 625 Slaters Lane -- Suite 103, Alexandria, VA 22314; Fax 703-684-7594; e-mail eric.heis@chwatco.com.