



JULY / AUGUST 2003

REMARCS

www.marc-radio.org

HAMFEST 2003 - SUNDAY JULY 13 - KIMBERTON, PA

What stands between MARC and a club you wouldn't recognize? The annual hamfest!

The club's present operating expenses could not be paid out of dues income alone. Even in your wrong mind you wouldn't pay more in local club dues than you pay for a subscription to a ham radio magazine or membership in the ARRL. That's why if MARC didn't have hamfest income, we would have to cut programs and services to live within our means.

Members don't do the work required to put on a hamfest because we don't have lives and have nothing else to do with our time. The income is essential for maintaining the club we have come to expect and enjoy.

Since everyone benefits from the hamfest, everyone should contribute to it. How can you do your part? (You don't look like a free-loader to me!)

First, talk up the hamfest like mad from now until the day-of. Second, come to the hamfest with a car-load of friends. Third, spend some of your time at the event helping do some of the work. For example, you could sell tickets for an hour or two so others could go inside for some shade and a bite to eat. Or you could help pick up trash when the hamfest ends. You can bring your unwanted ham and computer gear to sell at the members' table and donate some or all of the proceeds to MARC. Keep reading for more ideas about how to help make Hamfest 2003 a success.

(Continued on page 6)

Sell your stuff at the hamfest ... see page 6 for info

CLUB MEETING PROGRAMS: BATTLESHIP NEW JERSEY HAM STATION RADIO ASTRONOMY

The July 15 MARC meeting will feature a program by **Joe Cramer N2XYZ** about the ham radio station on board the Battleship New Jersey. If you have friends who served in the Navy or who are interested in the battleship, this would be a good opportunity to bring them to a MARC meeting.

(Continued on page 6)

NOMINATIONS OPEN FOR MARC BOARD

MARC's annual board of directors election will take place in September, and nominations are open now. All licensed club members are eligible to run for any board office (see page 3) except callsign trustee. The 2-year Member-At-Large position held by **AI N3EA** is not up for election this year.

It is not tacky to nominate yourself, and it doesn't matter how long you've been a ham, what your license class is, or how

(Continued on page 5)

BROADBAND OVER POWER LINES: YOU NEED TO READ THIS!

Much of the spectrum allocated to hams is not worth dirt if the noise level is 10 dB over S9 across every band from 160 to 6 meters. That get your attention?

Broadband over power line (BPL) technology poses significant interference potential to HF and low VHF spectrum use between 2 and 80 MHz.

The FCC has issued a Notice of Inquiry (NOI) on this subject. The deadline for comments is July 7, so you don't have time to mess around. Clip your toenails another day.

If you think the Morse code requirement is the life & death issue coming up on the horizon for ham radio, try again. BPL is already legal. What's up for discussion are changes in the FCC's Rules that would allow BPL to operate in ways that could just

(Continued on page 6)

60M FREQS OPEN TO HAMS PROCEED WITH CARE!

A "band" unlike any other becomes available to US hams this month. The FCC has granted us secondary access to five discrete channels in the vicinity of 5 MHz. The atypical allocation becomes available to US Amateurs at midnight (12 AM) local time on July 3, 2003. The limited spectrum and stringent operating requirements mean we must demonstrate our best behavior and operating skills if we ever hope to get an actual band segment at 60 meters.

Both technical and operational issues exist. Of course, this is all too new to be on any licensing exam yet, so we're all beginners together.

It's essential for everyone with HF privileges to become educated about the new spectrum. The place to start is the ARRL web page, where a tutorial of Frequently Asked Questions is posted. The direct URL for the tutorial is www.arrl.org/FandES/field/regulations/faq.html#sixty.

ABOUT MARC

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

MEMBERSHIP MEETINGS

3rd Tuesdays, 8 PM, Radnor Township
 Building, St. Davids. 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
 145.13 147.06 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
 Homebrewer Net, Saturday, 9 AM
 All nets on linked 145.13/R & 147.06/R
 Net Manager: Carter N3AO
 (610-993-9623, n3ao@arrl.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

Congratulations to **Leland N3LJB** and **John N3RBJ**, who upgraded to General, and to **Eric K9GUY**, who added HF privileges to his license. Welcome **John K3JUJ**, **Ted NT3J**, **Bob N9GG**, and **Gail K2BCL** to club membership. **Rich KC3EFA** is a returning member. **Paul N3UD** is ex-WE3NUD, and **Lynette W3GZZ** is ex-KB3GZZ. **Dick K3ITH** organized a ham radio demo for Girl Scouts; **Walt WA3PPW** and **Kay N3KN** were among those who worked the YL's on 2 meters. **Kay N3KN** spoke at an ARRL convention in Oregon in June and will speak at one in Utah in July; in between was the ARRL National Convention in Texas. If your whole experience of ham radio is FM repeaters, talk to **Dick KB3IIN** about how much fun he has on 6m SSB. **Leland N3LJB** will attend Valley Forge Military Academy in the fall, so you won't hear him on the air much for a while.

BOARD MEETING HIGHLIGHTS

At the May 22 meeting, the board heard a report on membership renewals, public service events, and future meeting programs. At that time, we had 139 licensed members and 5 unlicensed ones. After discussion, the board voted to enable the link between 147.06 and 145.13 all the time. Members will be encouraged to comment on how they like or don't like this practice. The board discussed the idea of changing the club's Internet domain name but decided to keep the domain name we have now. Field Day planning and hamfest planning were discussed. The treasury balance was \$10,332.10.

At the June 26 meeting, the board received reports on hamfest planning and discussed last-minute Field Day details. PR press releases have been distributed for both events. No more public service events are scheduled until the fall season. Future programs were discussed. A nominations chairman was designated. **AI N3EA** identified the problem with the club's two Kenwood 520 rigs and was able to put them back in working order. Because the club recently purchased a Kenwood 440S HF rig, the board discussed whether or not we should keep the older 520's. The board voted to place the two 520's up for sale on the Internet to recover part of the cost of the 440S. The treasury balance was \$10,088.76.

RADNOR MEMORIAL DAY PARADE

MARC communicated for the Radnor Township Memorial Day parade on Monday, May 26. For the first time since we've been doing this event, the weather was just plain terrible.

Despite the cold, rainy day, the following hardy MARC members came out to serve the community and honor the memory of service men and women who gave their lives for our country: **Bob N3JIZ**, **Ned WQ3Z**, **Bob KB3FSQ**, **Dick KB3IIN**, **Bob W3ZQN**, **Steve KD0VA**, **Rick N3AGS**, **Rich KC2EFA**, **Beth KA3GKI**, and **Ray KB3IGL**. **Carter N3AO** drove his car in the parade, decked out with American flags and banners about the Mid-Atlantic Amateur Radio Club.

If you are aware of community events in our membership area that might benefit from Amateur Radio communications, please contact **Bob N3JIZ** (see page 3 for phone/e-mail).



Club members may attend board meetings as observers. For directions to the board meeting location, contact **Bob W3SA**, our directions expert.

LICENSE TEST SESSION REPORT

Next Tests Are August 2

At the May 3 license test session, 7 candidates took exams. Ten exam elements were passed and 2 were failed, but all candidates passed at least one element. The session resulted in 2 new Technicians, one upgrade to Tech + HF, and 4 upgrades to General.

The examiners on duty were **Bob W3ZQN**, **Bob W3SA**, **Ned WQ3Z**, **Susan K3SUE**, **Steve KD0VA**, **Paul NX3Q**, **Bob KA3NIQ**, and **Dennis K3DS**.

The next MARC test session will be held on Saturday, August 2, at the Bryn Mawr Presbyterian Church on Montgomery Avenue in Bryn Mawr. Applicants should arrive by 9:15 AM to do the paperwork. Pre-registration is important, because if no one pre-registers, the session will be cancelled to avoid wasting the examiners' Saturday morning. For pre-registration, directions, and other information about the MARC exams, contact **Bob W3ZQN** (rjlees@aol.com, 610-265-6032).

MARC members are entitled to participate in one club-sponsored license test session free of charge every year.

FROM THE EDITOR'S JUNK BOX

"The Internet is destroying ham radio."

If I had a nickel for every time I've heard that cliché, you and I could pop over to Striped Bass and chow down like there's neither a tomorrow nor a limit on my VISA.

I believe that statement about the Internet and ham radio is not true. I'll give you one good example why.

One day, **Carter N3AO**'s Elecraft K2 transceiver with the 100w add-on began announcing on power-up that it was too hot. From the outside, nothing looked or smelled wrong. With the 100w add-on disconnected, the error message went away. Ah hah. Carter took a hard look inside the add-on, found a few suspicious bits, fixed them, and that should have been that.

Except it wasn't. The "I'm-too-hot problem" continued. So Carter posted an e-mail to the Elecraft e-mail reflector asking for help. A reflector or re-mailer is an on-line special-interest group which has its own e-mail address. When one group member sends an e-mail to this address, the message is automatically re-mailed (a.k.a. reflected) to all group members.

In a few hours, an e-mail responding to Carter's call for help arrived via the reflector. There's a little-known menu setting on the K2 which is used to define room temperature, so the rig can decide if it has a heat problem. For reasons unknown, this setting had changed itself to be way too low, so the rig always thought it was overheating on power-up. Reprogram that to a realistic room temperature, and all is peachy.

The reason it took several hours to get a response, instead of the usual 20 minutes or half an hour that's typical on this reflector, is that the man with the plan lives in Whangarei, New Zealand, and was no doubt asleep when Carter's message went out during our local daytime. Carter and **Ron ZL1TW** eventually had a nice long rag-chew on 20m CW, QRP, and we have a new friend on the opposite side of the globe.

Several other Elecraft aficionados reported they had the same mysterious over-heating situation, so ZL1TW's message helped them as well as Carter. This on-line community of hams all over the world exchanges technical information, helps one another solve problems, and offers suggestions to Elecraft for interesting future products / projects. If that is harmful to ham radio, I'd like to know how!

I'm aware, too well aware, that there are other Internet reflectors and message boards which circulate rumors, distortions, half-truths, whole lies, ignorant nonsense, and deliberate character assassination. Okay, this is America, and God bless the First Amendment. Just make sure to engage your b.s. filter before you go on-line, and you'll be fine.

We've never had so powerful or so inexpensive a means of publicizing ham radio and exchanging information about ham radio as we do today. Ham radio has always had to compete for attention with other technological communications and entertainment whizz-bangs. Finally we have a whizz-bang we can use to our benefit, if we can stop repeating clichés long enough to take full advantage of it! -- **73, Kay N3KN**

FIELD DAY 2003

As we go to press, the Field Day report isn't available yet. We'll tell you all about it in the next issue. For now, THANK YOU to everyone who took part in MARC Field Day in any way. **Dennis KA3QOT** put some photos on line at <http://photos.yahoo.com/ka3qot>. Click on the icon that says "Field Day."

BOARD OF DIRECTORS, 2003

PRESIDENT

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

VICE PRESIDENT

Bart Feroe K4BF 610-367-4288
k4bf@arrl.net

SECRETARY

Bob Haase W3SA 610-293-1919
rhaase@bellatlantic.net

TREASURER

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

MEMBERSHIP SERVICES

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

PUBLIC RELATIONS

Bob Weiss KB3FSQ 215-477-6475
kb3fsq@netcarrier.com

PUBLIC SERVICE

Bob Palin N3JIZ 610-687-4587
rjpelectric@worldlynx.net

TECHNICAL

Dennis Silage K3DS 610-353-4829
silage@temple.edu

PROGRAMS

MEMBERS-AT-LARGE

To 9/30/2004: AI Maslin N3EA
610-446-4936, amaslin@earthlink.net
To 9/30/2003: Gene Hoenig N3HG
610-353-3281, n3hg@arrl.net

CALLSIGN TRUSTEES

WB3JOE: AI Maslin N3EA
610-446-4936, amaslin@earthlink.net
W3NWA: Kay Craigie N3KN
610-993-9623, n3kn@arrl.net

FIELD DAY PLANNING MEETING

Nine club members got together at N3AO / N3KN's house on May 24 to plan Field Day. **Kay N3KN** prepared an agenda (more like a disk dump) of tasks which must be done before, during, and after Field Day. Other members attending were **Carter N3AO, Dennis KA3QOT, Bob W3SA, Bob N3JIZ, Dick KB3IIN, Bob KB3FSQ, Rich N3AGS, and Leland N3LJB.**

In addition to the 9 members who were able to attend the holiday-weekend meeting, several other people indicated by e-mail that they would be willing to do specific jobs and supply some equipment.

This put a very different light on Field Day, which was looking iffy owing to the lack of an event captain. With more than a dozen people willing to take specific jobs, the event seemed certain to come off without burning out any individual.

It is likely that our field for the past 21 years will have buildings on it by next June. We need suggestions for alternative sites located near our membership core in the Main Line and nearby suburbs.

RAY STEEVER N3BPJ, SILENT KEY

Long-time MARC member **Ray N3BPJ**, "Big Pickle Jar," became a Silent Key on June 7 at the age of 87. He had been living at Dunwoody retirement center for some time and had not been on the air in recent years. Ray used to be active in the MARC traffic nets and took part in the holiday traffic events the club held at Bryn Mawr Hospital. He always had a cheerful word and was a fountain of funny stories about his engineering adventures way back when.

HUGH TOOLE N3HT, SILENT KEY

Former MARC member, Volunteer Examiner, and net control station **Hugh N3HT** (ex-KC3IE) became a Silent Key on May 20. Hugh was an active member of several area ham clubs. In his last years, Hugh had Alzheimer's, which made life challenging for him and those around him. But in his day, Hugh was a faithful ham radio volunteer, and respect is due him for that.

BRAIN TEASER

Two cars start from the same spot on a straight highway, but facing in opposite directions. Each travels 6 miles, turns left, travels 8 more miles on another straight road, and stops. How far apart are the cars when they stop? (a) 2 miles, (b) 11 miles, (c) 14 miles, (d) 20 miles, (e) 26 miles.

The answer is on page 5

FUND-RAISING FYI

Some hams have been heard on HF proclaiming that the Broadband over Power Line issue is baloney, that other spectrum users think BPL is no biggie, and that it's all just a ploy by the ARRL to make money.

That, ladies and gentlemen, is not even true enough to qualify as baloney. Some other spectrum users ARE upset about BPL, and some of them are Real Big Dogs.

About fund-raising drives by the ARRL . . . When the League asks you to donate for a specific purpose (fighting BPL, spectrum protection, the education project, etc.), IRS regulations require the ARRL to spend the donations only on the project for which you gave the money. Breaking that rule would jeopardize the League's 501(c)(3) status, a categorically insane thing to do.

So if you give money to fight BPL, it will not be spent on DXCC, sending Vice Presidents to hamfests in Utah, scraping snow off the HQ parking lot, or paperclips for **Dave Sumner's** desk. The money for those worthy causes has to come from somewhere else! If you are financially able to donate anything -- \$5 is \$5 -- to the ARRL fund drive of your choice, please do so. The missions are critically important, and so is your support.

SOME EXHIBITORS EXPECTED AT MARC'S HAMFEST

American Radio Relay League
CQ Publications
Military Affiliate Radio System
Radio Shack
West Mountain Radio
Local clubs and ARES/RACES groups

EURO POSTAGE UPDATE

According to information reported to *The Daily DX*, postage rates have increased in France. As a result, \$1 is no longer enough to pay the € 0.90 return postage from France to North America. It's probable, also, that rates from overseas departments of France such as French Guiana (FY) have also gone up. What a shame there's no 50-cent note!

YOU CAN BET ON IT!

The Eternal Truths about ham radio are not all in the stuff you had to learn for your license tests. On the Force 12 antenna reflector, **William Hall K3CQ** posted some antenna axioms, including:

- No matter how good your antenna is, someone else has a better one.
- No matter how well you build your antenna system, someone else can tell you how you fouled it up.

Nothing like a Know-It-All to dampen your campfire, if you get my meaning.

This reminds me of the time, back in the 1980's, when **Carter** then-**KA3IME** and I purchased a certain Japanese company's latest HF rig, our first solid-state transceiver. It was fine for my DXing but was bit drifts and thus annoyed Carter during his ragchews and traffic-handling. As we were reaching the decision to replace it with a rig that would stay where you put it, the Local Know-It-All brayed, "What'd you buy that piece of %#! for in the first place? Everybody knows [*that company*] makes lousy HF rigs!"

If that company's HF rigs of the 1980's were typically lemons or if we just got a sour one, I couldn't say, though the outfit certainly make peachy-sweet ones now. What was true back then, and what remains true throughout eternity, is this:

No matter what brand and model of rig you buy, some Grand High Gansemacher of Know-It-Alls will ask you, sounding deeply annoyed that you didn't seek his advice, why in the world you bought THAT piece of %#!.

This brings me to the final axiom I want to share with you today. It is just as true in other slices of life as in ham radio:

The rest of us were put here on this earth to irritate the know-it-alls, and we must fulfill our destiny.

I know I'm doing my part. How about you?

SOME MARC HAMFEST PRIZE DONORS

American Radio Relay League
BRATS Hamfest
Buckmaster
CQ Publications
Radio Amateur Callbook
Worldradio

Watch for the complete list of donors in the next *REMARCS*.

TOP TEN THINGS TO DO TO MAKE SURE YOU ENJOY YOUR NEXT BUSINESS TRIP**By Ned Smith WQ3Z**

#10 E-mail the local ARRL Section Manager and get suggestions for local repeaters, nets, and events.

#9 Just after the plane lands and you disembark, make a CQ call on the local repeater BEFORE you clear airport security, and check-out how Transportation Security Administration checks YOU out.

#8 Make a new on the air friend as TSA checks you out.

#7 Check into a local traffic net (several days in a row if possible -- see #6 below). Make several new friends.

#6 Check into the local traffic net enough times that the net control station recognizes your call and asks how your stay is going. Cement the friendships made in #7.

#5 Help out with the local RACES or ARES group with a field event. You will (a) learn how another group does things differently (or, in some cases, the same), and (b) make more new friends.

#4 Send a piece of traffic back to your home traffic net telling them about the great time you are having.

#3 Send a piece of traffic back to your ARES / RACES head telling him or her about the experience you had with the local group mentioned in #5.

#2 Get directions to the stuffy business dinner event so that you are not too late for dinner. Slip out to send the traffic in numbers 4 and 3. At this point you would rather check into the net with all your new-found friends than attend that business dinner anyway.

#1 Send a brief article to the editor of your club's newsletter summarizing what a GREAT time you had on your recent business trip because of Amateur Radio.

Operator's Note: It is assumed that you travel with an HT, spare battery, wall charger, cigarette lighter adapter, and repeater directory. Doesn't everybody?

LEAGUE WARNS OF BOGUS "SUBSCRIPTION" SOLICITATION

Somebody out there is trying to "sell" subscriptions to QST, but it's not the ARRL. ARRL Customer Service/Circulation Manager **Kathy Capodicasa N1GZO** said she has received several phone calls and e-mails from members reporting the scam.

"Apparently, there is some kind of bogus telephone solicitor out there trying to get people's names, addresses and credit card numbers," she said. "ARRL does not solicit for 'subscriptions' to QST. Under no circumstances should members give out their

credit card numbers to someone trying to sell them QST."

QST is the official membership journal of the ARRL and is not available to the general public from a magazine distributor or publishing house. Should you receive a call from the phony solicitor, Capodicasa asks that you try to get the solicitor's name and check the caller ID box, if one is installed, for the caller's number. The information can be e-mailed to her at n1gzo@arrl.org, or you can reach her at 860-594-0257.

BRAIN TEASER ANSWER

As Pythagoras could have told us, the answer is (d) 20 miles. Each car travels 6 miles in a straight line, turns left and travels 8 more miles in a straight line. Assuming, reasonably, that the turn taken was at 90 degrees from the original road, each car has just traveled along 2 legs of a right triangle. Applying the Pythagorean theorem, we know that the hypotenuse of this right triangle whose legs are 6 miles and 8 miles is 10 miles. Each car is thus 10 miles from the starting point, so the two cars are 20 miles from each other.

OTHER AREA HAMFESTS IN JULY & AUGUST

July 4 - Harrisburg RAC, Harrisburg, PA
July 6 - Murgas ARC, Wilkes-Barre (Dallas), PA
July 27 - BRATS, Timonium, MD
Aug. 17 - Gloucester Co. ARC, Mullica Hill, NJ

Additional information about these and other hamfests is available on the ARRL Web site at www.arrl.org/hamfests.html.

MARC BOARD NOMINATIONS OPEN NOW

(Continued from page 1)

long you have been a MARC member.

Board members are expected to carry out their specific duties and to participate monthly board meetings that make decisions about the overall best interests of the organization.

Although most members of the present board will probably seek re-election, as we go to press some board members are not sure they will run again.

Also, the program chairman position has been vacant for years, putting a burden on the rest of the board to come up with programs in addition to doing their normal duties for the club. How about stepping up to the plate on that one?

Handling this year's nominations duties is **AI N3EA** (see page 3 for his contact information). He can tell you about the responsibilities of each board position. Please think seriously about running for club office!

WE NEED YOU AT THE MARC HAMFEST!

(Continued from page 1)

Set-Up on Saturday

Set up for the hamfest will begin at 1 PM on Saturday, July 12. We have to arrange the tables and chairs inside, mark off the tailgate spaces outside, place directions signs along roadways, and set up the members' sales table. Wear your grubbies and work boots, and bring work gloves.

Club members' sales table

If you feel like tailgating or buying an indoor table with some friends, we'll take your money, but another way to dispose of your unwanted ham radio and computer gear is to put it on the members' sales table, managed expertly by **Gene N3HG** and **Judy N3MBW**. You can bring stuff during set-up on Saturday (the building is locked overnight) or on Sunday morning. When your stuff has been sold, you can put the cash in your pocket, or you can choose to donate some or all of the proceeds to the club. Donations from the members' sales table has added nicely to the revenue in past years, and we deeply appreciate that generosity. If some of your stuff doesn't sell, please take it home and don't dump it at the fairgrounds.

It starts early!

We never have enough volunteers really early on Sunday morning when the vendors are arriving and when the bulk of the buyers show up. We need lots of people to sell tickets and direct traffic, especially during this early rush hour. If you show up at the crack-of, you aren't expected to work all day. Give a few hours of your time, then go enjoy the hamfest.

It doesn't last all day

Most one-day hamfests are in the bucket by shortly after lunch time. If you can't come early, come later in the morning and stick around for clean-up. We always leave the building and grounds cleaner than we find them, and we find them clean.

Event captains

Mike KF3CD is the hamfest chairman. Please contact him today to find out how you can help (610-935-4429, mpilotti@anro.com). In charge of set-up and the actual event will be **Carter N3AO** and **Bob N3JIZ**. When you come to set-up and the hamfest, report to Carter or Bob and find out where they need you to help.

The "R" word

Despite pleading, wheedling, and beseeching by MARC members of all persuasions to whatever Spirits and Sprites we perceive in the cosmos, the sun does not always shine on our hamfest. The hamfest goes on, no matter what, so we need you to volunteer, no matter what. Trust me, you won't melt.

Time is flying

Little time remains between now and the hamfest. Again, please talk up the hamfest whenever you can. Every member's participation, one way or another, is extremely important to the success of the event.

Volunteer for the Hamfest
Contact Mike Pilotti KF3CD
610-935-4429, mpilotti@anro.com

BROADBAND OVER POWER LINES

(Continued from page 1)

kill us. Go to the ARRL Web site's explanation of BPL at www.arrl.org/bpl -- read it carefully, and act immediately.

Comments are due on or before July 7. Reply comments are due on or before August 6. The FCC now is accepting electronically filed comments via its Electronic Comment Filing System (www.fcc.gov/cgb/ecfs/). Under ECFS Main Links, click on "Submit a Filing." In the "Proceeding" field, enter "03-104" and complete the required fields. Comments may be typed into a form or you may attach a file containing your comments.

Comments also may be submitted via e-mail per instructions on the ECFS page. The FCC has created a Web page that offers more information about filing comments, <http://wireless.fcc.gov/csinfo/comments.html>. There's also a mailing address for those wishing to file comments by postal mail.

JULY & AUGUST PROGRAM TOPICS

(Continued from page 1)

The August 19 program will be presented by **Don McAlarnen**, a member of the Delaware Valley Amateur Astronomers. Don will speak on radio astronomy -- specifically, how he listens to radio noise from Jupiter on the HF bands. The giant planet is best heard at night, and it can be heard at the bottom of the 15 meter phone band! Don will talk about his antenna, and he has a handout of Web sites you can visit to find out more. The Delaware Valley Amateur Astronomers has a Web site at www.dvaa.org. Tnx **Bob N3JIZ** for arranging this program.

**HAPPY FOURTH
 OF JULY!
 REMEMBER
 AMERICANS IN SER-
 VICE OVERSEAS!**

