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## **PARA**



>> GENERAL MEETING November 9, 2004 - 7:30 PM !! << including FREE Swapfest starting at 7:00 PM

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## Philadelphia Area Repeater Association

### **Membership Information**

PARA is an association of members that operate and support 19 Amateur Radio Repeaters and links in Southeastern Pennsylvania and Southern New Jersey. PARA was formed in 1970 and incorporated as an IRS 501c3 non-profit in 1973 through a merger of several repeater groups.

PARA repeaters serve the Amateur Radio community for normal everyday hobby communications as well as provide a system for emergency and disaster communications. PARA also promotes technical developments which ham radio has done so much of in the past.

PARA has four quadrant repeaters and one regional system on the 2-meter band as well as other repeaters on the 224 MHz and 440 MHz bands. PARA also has an Amateur TV System that relays television signals in the Philadelphia and Wilmington metropolitan areas.

Your membership dues support those repeaters listed below and help assure availability for emergency communications: 146.76 MHz, 146.82 MHz, 146.88 MHz, 146.94 MHz, 146.97 MHz, 443.90 MHz, 223.86 MHz, 224.94 MHz, 224.98 MHz, 52.41 MHz, 439.25 MHz (ATV), and all links between the remote receivers.

### **Joining PARA**

NEW MEMBERSHIP FEES AND DUES	\$ 25.00
YEARLY RENEWAL	\$ 20.00
5 YEAR MEMBERSHIP	\$ 85.00 (\$90.00 FOR NEW MEMBERS)
LIFE MEMBERSHIP	\$400.00
SENIOR LIFE MEMBER	\$100.00 (AGE 65 AND OVER)
ASSOCIATE MEMBERSHIP	\$ 20.00 (non-hams) no voting privileges

Associate memberships, when licensed, may upgrade to full membership with no additional initiation fee. Members also gain one free month on their membership for each new member you sponsor.

Corporate annual sponsorship memberships are also available: \$100, \$500, \$1000, \$5000, etc. Annual sponsorships of \$500 or more will receive free advertising in PARA's newsletter. Certificates of sponsorships are given to corporate sponsors.

Please detach & fill out (PRINT) the form below and mail with a check or money order to:

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CAN HELP WITH THE FOLLOWING: TOWERS ANTENNAS BLDG MAINTENANCE Radio Equipment Maintenance WRITING / PUBLISHING PUBLIC RELATIONS Other

(01-25-2004)

### From the President

Gene Mitchell, K3DSM

Field Day has come and gone again. I wrote a news story for the radio station again (WCOJ) and it was aired in all its glory. Not only was Field Day itself mentioned, but a short story about Ham radio was given. Then, the week before the MARC Hamfest, I was surprised when the station contacted me to write up the details for it. Again, I got a chance to tell Ham Radio's story. The Hamfest and Ham story ran all day Friday. I also understand that the Inquirer did a Field Day story as well, although I had nothing to do with that. Hopefully, all this publicity will benefit Ham radio.

PARA also had a booth at the MARC Hamfest and the Banner was hung and flyers were on the table. I had to work at the station, so I do not know if there was any response. I did hear that the Hamfest was well attended.

I was recently invited to a special meeting at the Government Services Building for Chester County where Lor, W3QA, gave a presentation on the ICOM D-Star system. The ICOM Rep was also there with the equipment to demonstrate. It looks like Chester County will also be involved in this project. I also learned that the ARRL is very much behind it as well. D-Star provides broadband data as well as voice, and although it operates on 1296 Mhz, it will give better range than cell phones because of its higher power. With repeaters, it should be similar to our 440 Mhz repeaters. The equipment is finally scheduled for release by summer's end.

As you may remember, I included D-Star in the latest revision of the Grant that PARA is seeking. Speaking of the Grant, I finally received an acknowledgement from FEMA. Without all the details, I have a lot more paperwork to do, but they are interested. If you want to help me with all this work, I could use help at this point.

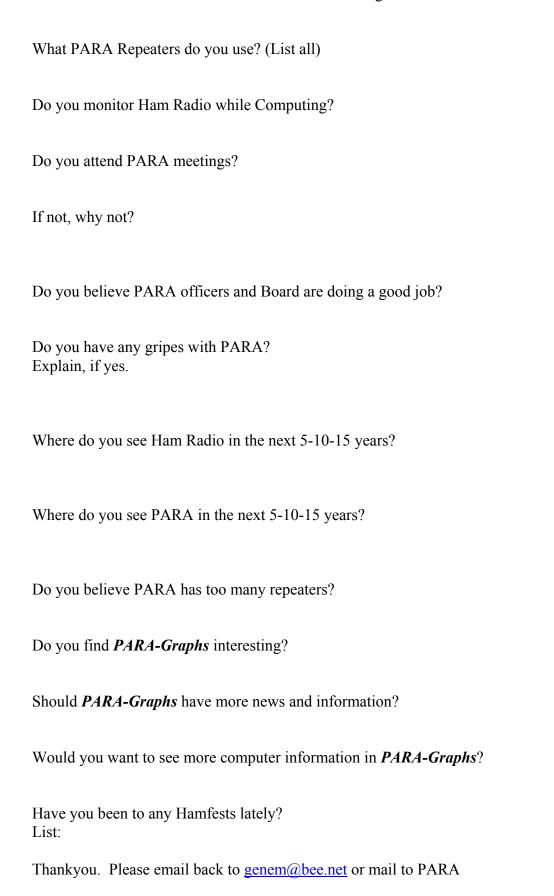
For what it's worth, I thought I would tell you what has been keeping me busy lately. It's Bugs and Viruses. About 90% of the computers coming in for service have Viruses. Many have up to date protection, but we find the anti-virus auto-protect is off. I also believe is that certain "popups" have the ability to disable virus protection. I actually had something "pop" through my "instant messenger" and even through my Firewall. I immediately checked my anti-virus and found it turned off. It was on automatic earlier that same day. This is the first thing that "got me". I have also found that Norton and McAfee are not detecting some of the new viruses, and others in the business are reporting the same.

When I go home at night, I find myself back into Ham Radio with the computer turned off. Ham Radio seems more fun than computing.

I believe it is time again for members to give some feedback to the Board and myself as to how we are doing and where you see things going. I have come up with a relatively short questionnaire, and since this is an electronic issue of *PARA-Graphs*, you should be able to cut, paste, and email it back. If you feel it necessary to remain anonymous, you can also mail it back without name attached.

## **PARA Questionnaire**

August 2004



### Notice to PARA members in the Northwest Quadrant

No members from Northwest Quadrant attended the PARA November 2003 General Meeting where elections were held for the Northwest Director.

PARA should have two directors from this quadrant to represent its repeater and interests. If you are interested in serving, please e-mail me, Gene K3DSM, at genem@bee.net. If there are more than one interested, we will announce an election. This is your chance to be involved with PARA with a vote on the Board of Directors. There are now only four scheduled Board meetings a year - it is possible to have an unscheduled meeting should the occasion arise. Even if you are slightly interested, so indicate so we can discuss it.

Thank you, Gene K3DSM, President E-mail: genem@bee.net

#### FREE MAGAZINES

Written by Dick K3ITH

FREE to good home: ... QST, 73, and CQ magazines all the way back to the 1930's and 1940's. Anyone know a personal or public library looking for ham radio magazines? Please contact Fred W3PHL at 610-933-6918 in the evenings. Must pickup.

### **ADVERTISING in PARA-graphs**

At the November 1999 Board meeting approval was received to accept ads in *PARA-graphs* to help offset ever raising printing and postage costs. The following per issue ad schedule was approved: Full Page \$125. Half Page \$75. Quarter Page \$50. Business Card \$25. Non-Commercial Classified 3 lines \$10. Repeater ad in following issue(s) will receive a 10% discount. Contact Dick K3ITH to place an ad.

### INTERESTED IN WRITING FOR PARA-GRAPHS ??

Several great articles were submitted in past issues by your follow **PARA** members such as Joe K3JV, Larry W2CAM, Hank W3GSC with help from Vince N3AGD, Gene W3ZXV, and Gene K3DSM. Please feel free to submit anything Amateur Radio related. Articles may be mailed to our PO Box, or e-mailed to k3ith@arrl.net

Thank you.	Dick K3ITH					
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# PARA Swapfest 2004

# And Main Meeting

Tuesday November 9, 2004 7:30 PM

St. Gertrudes Church Hall, 209 Merion Ave, West Conshohocken, PA
Easy to find and plenty of free parking
Talk in 146.76 MHz

First of all, we want you to come out and join us at the meeting. We have a good program, you can have a great time talking "eyeball" with fellow hams and guests, and you might unload or find something neat. Second, we want you to invite non-members and others from surrounding clubs. Make a copy of this page and spread it around to surrounding clubs. As we have done in the last few years, we are going to have our indoor flea market as well as tailgating in the parking lot. (no admission and no fees). Bring your unused equipment to sell, swap, and trade. There are tables available on a first come basis. (*Please don't bring junk to leave behind and please use care when placing equipment on the tables*). There will be refreshments available and a 50-50. There will also be some incentives to join or rejoin *PARA*. We only have 2 meetings a year and it's about time you came out for a change. Take a break from the Internet and TV. We have started the meeting earlier and we end between 9 and 9:30 PM, so now what's your excuse?

The technical committee has been busy upgrading sites and a detailed prepared report will be given. The 76 repeater should be in full operation and better than ever. A status report on the grant will be made.

The 94 repeater is more alive than ever with EchoLink and our alliance with Chester County ARES RACES is better than ever.

### PARA's "ROLL"

PARA membership is holding. There is better activity on 82, 94, and 76 both during the day and evening. Meetings have been better attended. The Board is working hard for its members with fewer meetings and better contact by email.

Look to <a href="http://para.buxcom.net">http://para.k3dsm.net</a>

# PARA BOARD OF DIRECTORS MEMBERS AND ASSIGNMENTS

TERM	POSITION	NAME	CALL
2004/2005	PRESIDENT:	Gene Mitchell	K3DSM
2003/2004	VICE PRESIDENT:	Pete Butler	WB2B
2003/2004	TREASURER:	Paul Tabatschkow	N3UD
2003/2004	CORRESPONDING		
	SECRETARY:	Mark Sardaro	KA3VTM
2004/2005	RECORDING		
	SECRETARY:	Larry Gasperone	W2CAM
		DIRECTORS:	
2004/2005	NORTHEAST	Bud Batyi	N3JQB
2003/2004	NORTHEAST	John Brochon	K3ZFD
2004/2005	NORTHWEST	(vacant)	
2003/2004	NORTHWEST	Stan Bentley	KB3EXB
2004/2005	SOUTHEAST	Joe Ruder	N2SXH
2003/2004	SOUTHEAST	John Goheen	KB2ADL
2004/2005	SOUTHWEST	Al Rabenau	W3AHR
2003/2004	SOUTHWEST	Joe Vilardo	K3JV

PARA-graphs Editor & Publisher

**Dick Stewart** 

K3ITH

E-mail: para76@juno.com Web Site: http://para.buxcom.net

### PARA MEMBERSHIP EXPIRED??

Do you know when your PARA membership dues are due? It's real easy to check. Just look at the mailing label on this issue of *PARA-graphs*. The first line contains your call letters and membership expiration date; the format is a 4-digit year followed by a 2-digit month. If your membership expiration date is circled in **red** then your **PARA dues are now due**. Please send a \$20.00 check payable to **PARA** to:

PARA POST OFFICE BOX 64 VALLEY FORGE, PA 19481-0064

Thank you for renewing promptly!! If you viewing this issue in softcopy you may also send e-mail requesting your membership expiration date. Please send your request to: para76@juno.com

### **MOVING???**

If moving, please notify **PARA** of your new address as soon as possible. The Post Office will **NOT** forward your mail after 30-days. With each issue of **PARA-graphs** several copies are returned by the Post Office marked "**RETURN TO SENDER, NO FORWARD ORDER ON FILE**". Please forward your new address so we may keep our database up-to-date and, of course, **PARA-graphs** in your hands.

### **WELCOME OUR NEWEST MEMBERS**

Please welcome the following new PARA members: Greg N2NHL

### **PARA** News heard around our repeaters:

Callsign Update- Retired from WCAU-TV, Charlie N3NQX is now know as W3CAU!!

Carter Craige, N3AO, has been appointed ARES EC in Chester County – Lloyd Roach, W3QT, steps down from that position.

Lloyd W3QT is now the proud owner of 12 radio stations, both AM & FM along Rt. 81, for the most part. This fulfills a dream he has had for several years. He is bringing local programming back to them after other big groups had previously bought them and turned them into remote satellites.

PARA's May 2004 General Meeting program on the Pennsylvania Turnpike was an interesting program with pictures and frequencies of the various repeaters given. The system will be going to 800 MHz in the future.

Paul, N3UD, went to the Dayton Hamvention this year again and his XYL Lynnette, W3GZZ, had to keep him from ordering one of everything.

Al, W3AHR, also one of PARA's newer Board members was appointed ARES District EC for Eastern PA.

PARA member Joe Valardo, K3JV, gave an interesting talk to members of MARC concerning the proper power connections when using emergency generators.

Remember KK W3ZVK? KK makes regular appearances as VP6IP on our 146.94 MHz Repeater through EchoLink, from down under in Australia.

Members of the Delaware County Amateur Radio Association hosted a tour of Philadelphia International Airport Control Tower and an invitation went out to PARA members on their list. Several PARA members, including Gene K3DSM, participated and enjoyed the tour.

The "Roosters" recently held their annual banquet and picnic in Valley Forge, and this year it was the same weekend as the MARC HamFest. "Rooster of the Year" honors go to Dick K3ITH (your *PARA-graphs* Editor (who?)) for his many digital photographic and web site contributions as the Official Rooster Photographer. See photo below.



The following thanks to the **ARRL** and **THE ARRL LETTER** dated July 30, 2004:

### BROADBAND PROVIDER TO DROP BPL IN NEW YORK TRIAL COMMUNITY

The broadband provider that's been testing BPL in the Village of Penn Yan, New York, reportedly plans to "move away" from that technology. The Western New York community of some 5000 residents has been considering various proposals with Data Ventures (DVI) to offer broadband service. A BPL trial has been underway in Penn Yan for several months. The village reportedly would get 10 percent of the generated revenue. According to an article in the July 28 edition of the Finger Lakes Times Online, DVI now is proposing to employ wireless mesh "WiFi" technology instead of BPL. ARRL CEO David Sumner, K1ZZ, congratulated Penn Yan Mayor Douglas G. Marchionda Jr and DVI for going with wireless broadband instead of BPL.

"Not only will your citizens receive better service, but a serious radio spectrum pollution problem has been averted as well," Sumner said in a fax to Marchionda and to DVI CEO Marc Burling. "We hope that other communities will be able to profit from your experience." Sumner raised the issue of interference complaints from the Penn Yan BPL trial with Marchionda last April.

The Finger Lakes Times report quotes Burling as saying that his company didn't feel BPL was "commercially deployable." He also cited issues with the BPL trial including security concerns and interference--which will not be an issue with the wireless system.

Burling told ARRL that the Penn Yan BPL system remains on line but would be shut down once DVI starts deploying its wireless system. As for BPL, "We are going to sit back and wait for an official ruling from the FCC and go from there," Burling added.

Penn Yan already has rejected two DVI proposals to bring high-speed Internet service to the community, the newspaper said. Village officials reportedly met again with DVI representatives this week. DVI is partnering with Nortel to offer the wireless service.

In a March 23 article "In This Power Play, High-Wire Act Riles Ham-Radio Fans," Wall Street Journal reporter Ken Brown described a "firestorm" of protest from amateurs when Penn Yan approved the BPL test plan.

ARRL also has learned that Energy East--a cooperative of New York State Electric & Gas and Rochester Gas & Electric--decided against deploying BPL in their Western New York service area. Energy East based its decision in large part on the high levels of radio frequency interference an engineer and company officials observed during a visit to the Penn Yan field trial.

On July 29, Grand Haven, Michigan, announced that it had become the first community in the US to deploy a WiFi network

<a href="http://www.ottawawireless.net/about-us/press-room.html">http://www.ottawawireless.net/about-us/press-room.html</a> that blankets the city and up to 15 miles off shore in Lake Michigan with broadband Internet access.

For more information on BPL, visit the "Broadband Over Power Line (BPL) and Amateur Radio" <a href="http://www.arrl.org/bpl/">http://www.arrl.org/bpl/</a> page on the ARRL Web site.

## ARRL SEEKS CLARIFICATION OF FCC RESPONSE TO BPL INTERFERENCE COMPLAINT

The ARRL wants the FCC to further explain its recent response to a North Carolina amateur's complaint of BPL interference. FCC Office of Engineering and Technology (OET) Deputy Chief Bruce A. Franca replied July 22 to an April 27 BPL interference complaint from Thomas A. Brown, N4TAB, of Wake Forest. Brown had complained of BPL interference to his amateur HF mobile station emanating from a Progress Energy Corp (PEC) BPL field trial in the Raleigh area. In his letter, copied to ARRL, Franca said an on-site investigation had concluded that PEC's BPL trial "is in compliance" with FCC rules and that the company's ham band notching efforts "are effective" to avoid the potential for harmful interference. ARRL CEO David Sumner, K1ZZ, however, cited evidence to the contrary.

"It is not at all clear that the tests and measurements taken by the FCC . . . established the absence of harmful interference to licensed stations," Sumner responded July 22. He said the League would like the OET to make its test report available to the general public or at least to the League for technical review and comment. The ARRL also wants to know what steps PEC took between April 27 and June 28--when the FCC began its testing—to address interference complaints from Brown and several other radio amateurs.

The FCC defines as "harmful" any interference that "seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with the Radio Regulations."

According to Franca, FCC personnel "undertook extensive testing and measurements" of the PEC BPL system between June 28 and July 2. The complainant--Brown--says the FCC delegation never contacted him while it was in North Carolina. Franca says FCC measurements indicated notch depths averaging 24 dB below Part 15 emission limits, which he characterized as "sufficient to eliminate any signals that would be deemed capable of causing harmful interference, including interference to amateur operations."

Franca maintained that "in no instances" were signal levels high enough to "cause serious degradation, obstruction, or repeated interruption" of amateur mobile or fixed communications. He conceded, however, that notching on 10 meters was somewhat less effective at the low end of the band and said the FCC would instruct PEC and its partner, Amperion, to widen its notch there.

Sumner noted that the Part 15 device operators "must eliminate all harmful interference, and therefore in some cases must achieve more--in certain cases, considerably more--than a 24 dB reduction in order to be in compliance." He also cited recent reports from amateurs in the area indicating that strong BPL interference continues in parts of the PEC trial zone.

Sumner told Franca that amateurs in the Raleigh area on July 17 and again July 22 monitored a BPL signal "at full strength and causing harmful interference" from 14.290 to 14.350 MHz. "Harmful interference" also was reported in the first 100 kHz of 15 meters as well as on the WWV/WWVH frequencies of 15.000 and 20.000 MHz and on several international broadcasting bands.

"Even in the notched bands," Sumner said, "the interference was still evident on ordinary amateur equipment." He said it's clear to ARRL that the system's Holland Church Road site--where the most recent amateur measurements were taken--is in violation of Part 15.

For his part, Brown--an engineer with considerable RF experience--said he was glad the FCC finally took some action but found some of Franca's assertions "very troubling." He told ARRL that his 14-page complaint cited interference "sufficient to mask a weak signal," although it did not register on his S meter. An active Amateur Radio Emergency Service District Emergency Coordinator, Brown said it's not unusual to have to copy similarly weak signals during an HF emergency net.

"I suspect the principal reason for their coming down here was to say they've actually done something," Brown commented. He also worried that the FCC was attempting to define a standard of "acceptable interference" within the framework of what constitutes "harmful interference."

"If it interferes, it interferes," he maintained.

Sumner also requested that the FCC clarify some additional aspects of its North Carolina testing and measurement activities.

"Until these points can be clarified," he concluded, "we trust that the Commission will not permit its conclusion to be erroneously represented as having given the Progress Energy trials a 'clean bill of health."

## AMSAT "ECHO" SATELLITE OPENS FOR FM VOICE TRIAL RUN

AMSAT-NA's new "Echo" satellite (AO-51) has been turned on for general use in FM repeat mode for a trial period of about three weeks. During that time, command stations on Earth will monitor AO-51's power budget and adjust the UHF Transmitter B (TX B) power as needed for good battery management. They'll also be watching the AMSAT Bulletin Board e-mail reflector, amsat-bb@amsat.org, for reports of how Echo is working.

"We are most interested in hearing about how well Echo hears you and how well you hear it," said the Echo Command Team--Jim White, WD0E, and Mike Kingery, KE4AZN--in an AMSAT bulletin. White and Kingery note that this is a trial period of the FM voice repeater. The digital portion of Echo is not yet open for use.

AMSAT Vice President for User Services Bruce Paige, KK5DO, says reports of successful QSOs on Echo's first day of operation came from all over the world, including the US, Brazil, New Zealand and Germany.

A Russian Dnepr LV rocket carried AO-51 and several other payloads into orbit June 29 from Baikonur Cosmodrome in Kazakhstan. The 10-inch-square microsat, circling some 800 km above Earth in a sunsynchronous orbit, will permit voice communication using handheld transceivers.

The digital transponder and the store-and-forward BBS, are not yet open for general use.

Initially, the AO-51 downlink transmitter was running at about 0.5 W. At that power level, AMSAT says, Earth stations will need a small directional antenna to hear it. If onboard power permits, ground controllers will slowly increase the transmitter's output during the trial period.

The Echo FM voice uplink frequency is 145.920 MHz, and the downlink is 435.300 MHz. The downlink transmitter will come on when it hears an uplink signal with a 67 Hz CTCSS (PL) tone for about 1 second, and it will stay on for 10 seconds after that signal goes away. "This operation is just like a terrestrial FM repeater with a 1 second 'kerchunk' filter and a 10 second hang time," AMSAT noted. Transmitter A (TX A), now sending telemetry, generally will continue to operate on 435.150 MHz.

AMSAT points out that Echo, which launched June 29, is still "wobbling a great deal," so the downlink polarization sense will vary.

The Echo Command Team says it expects Echo will be heavily used during the first few days of the trial period. "It is good amateur practice and common courtesy to let everyone have a chance," they said. "Echo will hear you as well as or better than any previous amateur FM repeater satellite."

With hundreds of stations trying out AO-51, ground controllers say they expect the transmitter will be on continuously when the spacecraft is over populated areas.

The Echo satellite project is still some \$8000 short of the \$110,000 that was needed to launch the spacecraft. AMSAT guaranteed the full fare by borrowing from its dedicated funds, which now must be repaid. AMSAT—a 501(c)(3) organization--welcomes additional donations to bridge the funding gap. Visit the AMSAT AO-Echo Web page for additional details.--AMSAT News Service