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**>> GENERAL MEETING MAY 13, 2003 - 7:30 PM !! <<**

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# PARA PHILADELPHIA AREA REPEATER ASSOCIATION

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### MEMBERSHIP APPLICATION & RENEWAL

NEW MEMBERSHIP FEES AND DUES . . . . .	\$ 25.00
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Associate memberships are available to non-amateurs, with no voting privileges, for \$20.00 per year. When licensed the associate may upgrade to full membership with no additional fees. You also gain **TWO** free months (limited time offer) on your membership for each **new** member you sponsor. Corporate Sponsorships are available.

### PARTIAL LIST OF PARA REPEATERS:

53.410 MHZ VALLEY FORGE (2-inputs)	223.860 MHZ WORCESTER
146.760 MHZ VALLEY FORGE (6-inputs)	224.940 MHZ VALLEY FORGE
146.820 MHZ CAMDEN, NJ	224.980 MHZ FEASTERVILLE
146.880 MHZ HILLTOWN	443.900 MHZ VALLEY FORGE
146.940 MHZ WEST CHESTER	147.435 MHZ ATV DIRECT INTERCOM
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	923.250 MHZ ATV CHESTNUT HILL

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Please complete the following, include a check or Money Order payable to **“PARA”**, and mail to the above address.

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WRITING/PUBLISHING \_\_\_\_\_ PUBLIC RELATIONS \_\_\_\_\_ OTHER \_\_\_\_\_

## From the President

This edition of my letter is the mailed edition since it contains the May meeting notice. I hope you are reading the electronic editions that are posted on the PARA web site between the mailed editions.

I guess the biggest news is that the Grant to upgrade our equipment as well as expand with “PARALink, has been applied for. As a matter of fact, I am preparing a second application in the unlikely event that the first should fail, to another possible grantor. We are talking about \$150,000.00 here and this is no small deal. If all goes as planned, PARA will be in the spotlight and it should have other hams joining the organization to get involved. The goal here is to get commercial grade equipment to eliminate interference and add reliability. It will also add emergency power to sites that don't have it. Over the last months, I have had crash courses in writing and submitting grants. What I found out is that the hardest part is finding out who and how to submit the grant rather than writing it. The grant writers actually had me doing the writing as well as answering questions that came up after I submitted the information. I ended up writing about what ham radio is and what frequencies and bands are.

Lloyd, W3QT, came up with the concept of “PARALink” several years ago. I took his idea and designed the setup that would allow it to work. PARALink would tie all quadrants together on demand when the need was there, yet, on command, each quadrant could still operate independently. This, along with the EchoLink, which I will get into shortly, should give us very interesting connection possibilities as well as interest in PARA again.

W3HQ submitted a very good article on EchoLink that should be included in this issue of *PARA-Graphs*. It was amazing how fast the article was submitted after he was asked after the board meeting. The board did approve the EchoLink project. There was virtually little to no activity on the 94 repeater until the testing of the project started, and now, there is lots of activity again. A slight infusion of new technology always helps.

We expect to be working on 76 this spring. It is in need of serious rewiring. There is a slight possibility that it might operate as a single sight repeater while this project is taking place for a short period of time. A long over due cleanup of the Valley Forge site is taking place, both inside and out. The Eagleville input will be going through a tower/antenna change in the near future. As you can see, a lot is being done. There is room for others to join the technical committee if you are so inclined to help when they need it.

The 82 repeater was recently overhauled and seems to be working better than ever. The Camden site also now has a 16 input that should help mobiles in Philadelphia get into 76 better. There is a possibility that 82 might linkup with the Jersey shore in the near future. The efforts of the technical committee including, KA3VTM, W3GSC, K3ZKO, and N3ATD are most appreciated. Gee, I hope I didn't miss someone here! K3ITH and KA3VTM should be getting the new controller on 76 shortly.

It is my intention to find new repeater or link sites that we can use on public or commercial property where we do not have to pay electric. If you have any contacts with a commercial property in a good location, you should contact one of us so we can evaluate it.

Anybody for Powerpoles? Many of us in the Southwest quadrant have equipped our radios with these 12 volt connectors to standardize, so we can move our radios to emergency locations or from mobile to base with one type of standard connector. I plan to show them at the PARA May General Meeting. [www.powerwerz.com](http://www.powerwerz.com) is the web site and the 30 amp connector is what we are using. There are very inexpensive.

One of the recent board meetings was held on the Battleship New Jersey. After the meeting, we were given a tour of the ship. The communications equipment was most impressive. It is an impressive tour, and if you get a chance to take it while visiting Jersey, try to add it to your plans. There is a possibility of a program on the Battleship at the May meeting. If that doesn't work out, I am working on alternatives. Plan to attend as we always have a good social before, during, and after. Remember, you can bring equipment to sell before the meeting.

# PARA-FEST 2003

**Coming Tuesday, May 13, 2003 at 7:00 PM**

**St. Gertrudes Church Hall, 209 Merion Ave, West Conshohocken, PA  
General Meeting starts at 7:30 PM (Note new starting time & DATE)**

**Talk-in will be on the 146.76 MHz Repeater**

**PARA** is on a roll! The 146.76 MHz Repeater is running at full speed with a signal as good as ever. Remote receivers are now picking up signals again in the far reaches of the Philadelphia area. And there are more remote receivers soon to come on line. The new 146.94 MHz Repeater location and our alliance with Chester County ARES/RACES has placed the 94 machine on the "most active" list.

We want you to invite non-members and others from surrounding clubs. We are going to have a big indoor flea market (no admission and no fees) and some demonstrations. Bring your unused equipment to sell. There will be 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.* We are guests at this, our regular semi-annual meeting location.) There will be refreshments available and a 50-50.

The technical committee has come up with a five year plan and an additional proposal has been made to expand part of the **PARA** system with corporate grants to a PARA-Link system. The technical report will be printed and posted. Other reports will also be posted rather than read so the evening can be more casual.

## PARA's ROLL

**PARA** membership is on an up-swing again. There is activity on 94 and 76 both during the day and evening. 76 and 94 are really working well. We have ads in *PARA-graphs* covering most mailing and printing expenses. There is life in the meetings. The Board is working hard for its members and is also experimenting with a chat-room for virtual Board meetings in the future. There are now extensive web pages relating to the 76 and 94 repeaters with loads of pictures. Look to: <http://para.buxcom.net> and <http://www.5dnet.com> for many links.

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PARA May General meeting speaker's topic is on the **Battleship New Jersey**, by the Battleship Ham Club

# WEATHER WONK

OK, look, I admit it, I'm a weatherholic.

We watch the Weather Channel constantly and know all the meteorologists by name. I even get Christmas cards from Jim Cantori.

We have a collection of weather instruments at home where I can tell you the wind speed, barometric pressure, relative humidity, dew point, and indoor and outdoor temperatures – in either Fahrenheit or Celsius.

I can measure rainfall in hundredths of an inch and I will tell you with virtually no provocation at all how much precipitation we've had in the past hour, the past 12 or 24 hours or the totals by the week and the month.

We even have a lightning detector that can warn us when there's a lightning strike within 40 miles of the house.

For the past twenty years at least, I've tracked every Atlantic hurricane with pencil and paper and, in more recent years, by computer. I even keep an eye on Pacific typhoons, *El nino* and the current path of the jet stream across the North American continent.

But there's one weather statistic that the weather mavens keep sticking in my face: the "wind chill" temperature. It's apparently calculated by some mathematical manipulation of the real temperature and how fast the wind is blowing.

From what I can tell, it's supposed to be how cold it "feels".

How cold it feels to whom?

How cold it feels where?

Suppose it's  $n$ -degrees outside and the wind is blowing from the north at  $x$  mph. What happens to the wind chill when I am standing on the north side of the house and duck around to the lee side of the house? Can I make the wind chill drop by 30-degrees simply by getting out of the wind?

Is it how cold it feels if you're running around in shortsleeves or how cold it feels if you have long johns on under your mackinaw? Hat on or off?

I know people who run around all winter with just a light sweater on and I know people bundled up in so many clothes that they can't pull their arms in to their sides. So, to which person should we turn to ask, "How cold are you 'feeling'?"

Wind chill seems to me like a highly subjective, completely unscientific and totally useless statistic so don't insult my intelligence by quoting this silly number.

Real world numbers can be measured by real instruments calibrated against known and recognized standards. Wake me when you discover a wind chill meter and I'll listen to you when you tell me what the wind chill is today.

...Gene Pressler

The following thanks to the ARRL and *THE ARRL LETTER* dated April 25, 2003:

## **"BROADBAND OVER POWER LINE" POSES HF INTERFERENCE THREAT**

The FCC soon will invite public comment on the concept of using existing electrical power lines to deliver Internet and broadband service to homes and offices. The Commission initiated a Notice of Inquiry (NOI) in ET Docket 03-104 when it met April 23. What the FCC calls "Broadband over Power Line" (BPL) is a form of carrier-current technology typically known as power line communication (PLC). Whatever its name, the technology is raising serious interference concerns within the Amateur Radio community, since BPL would apply high-frequency RF to parts of the power grid. One aspect of the NOI is to gather information on potential interference effects on authorized spectrum users.

"Entire communities will be affected, so every amateur in that community could have part of the radiating system 'next door' on the power wiring on his or her street," cautioned ARRL Lab Supervisor Ed Hare, W1RFI. Hare chairs the PLC Work Group of the IEEE C63 Accredited Standards Committee on Electromagnetic Compatibility <<http://c63.ieee.org/>>.

The complete NOI has not yet been released, and until that happens, the FCC will not formally accept comments in the proceeding. The ARRL will be among those expected to submit detailed comments in ET 03-104.

So-called "access BPL" would use medium-voltage (1 kV to 40 kV) power lines to deliver Internet and broadband applications. Hare says access BPL is likely to be a more significant interference source than in-building PLC technology "because overhead electrical wiring is a much better antenna than the electrical wiring within a building."

ARRL CEO David Sumner, K1ZZ, editorialized on the subject of PLC in "It Seems to Us . . ." in the October issue of 2002 QST. "Is it possible to do power line communications without causing interference to over-the-air communications?" Sumner asked. "Count us among the skeptics. What may be a fine transmission line at 60 Hz looks more like an antenna at HF." Hare said his own computer analyses of interference potential from access BPL/PLC suggest "a significant increase in noise levels" from deployed systems.

The FCC appears enthusiastic about BPL, however, saying it has the potential to "provide consumers with the freedom to access broadband services from any room in the house without adding or paying for additional connections." The Commission also touted BPL as "a competitive alternative to digital subscriber line and cable modem services."

New digital power line designs use multiple carriers spread over a wide frequency range--from 2 MHz up to 80 MHz--and capable of high data rates--up to 20 MB/s, the FCC said.

In addition to viewpoints on interference potential, the FCC also has requested comments on the current state of high-speed BPL technology, test results from BPL experimental sites, appropriate measurement procedure for testing emission characteristics for all types of carrier-current systems, changes that may be needed in Part 15 technical rules, and the equipment approval process to foster the development of BPL.

Tests of BPL are under way in several states, including Alabama, Maryland, Missouri, New York, Ohio, Pennsylvania and Virginia. Hare says ARRL Lab personnel will visit some of the test cities this spring to take field measurements to quantify the potential for interference to Amateur Radio operations.

BPL/PLC technology already has been deployed in some European countries, and amateurs there have complained about interference. Japan—responding in part to concerns expressed by its amateur community--decided last year not to adopt the technology because of its interference potential.

## PARA BOARD OF DIRECTORS MEMBERS AND ASSIGNMENTS

<u>TERM</u>	<u>POSITION</u>	<u>NAME</u>	<u>CALL</u>
2002/2003	PRESIDENT:	Gene Mitchell	K3DSM
2003/2004	VICE PRESIDENT:	Pete Butler	WB2B
2003/2004	TREASURER:	(vacant)	
2003/2004	CORRESPONDING SECRETARY:	Mark Sardaro	KA3VTM
2002/2003	RECORDING SECRETARY:	Larry Gasperone	W2CAM
<b><u>DIRECTORS:</u></b>			
2002/2003	NORTHEAST	Bud Batyi	N3JQB
2003/2004	NORTHEAST	John Brochon	K3ZFD
2002/2003	NORTHWEST	Mel Richman	K3KHU
2003/2004	NORTHWEST	Stan Bentley	KB3EXB
2002/2003	SOUTHEAST	Joe Ruder	N2SXH
2003/2004	SOUTHEAST	John Goheen	KB2ADL
2002/2003	SOUTHWEST	Joe Myshko	N3YGW
2003/2004	SOUTHWEST	Joe Vilardo	K3JV
	<i>PARA-graphs</i> Editor & Publisher	Dick Stewart	K3ITH

**E-mail:** [para@buxcom.net](mailto:para@buxcom.net)

**Web Site:** <http://para.buxcom.net>

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### **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:

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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: [para@buxcom.net](mailto:para@buxcom.net)

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### **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.

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### **WELCOME OUR NEWEST MEMBERS**

Please welcome the following new PARA members:

Dave N3NTN

Chris K3CW

The following thanks to the **ARRL** and THE *ARRL LETTER* dated March 21, 2003:

**RADIO COMMENTATOR PAUL HARVEY PLUGS HAM RADIO'S  
EMERGENCY COMMUNICATIONS ROLE**

Veteran ABC Radio Networks commentator Paul Harvey this week offered some kind words for Amateur Radio. The mention was the second item on "page four" of his March 19 Paul Harvey Noon News and Comment program.

"America's quiet warriors are the legion of ham radio operators, 700,000 of them, who are always at ready for backup duty in emergencies--amateur, unpaid, uncelebrated, civilian radio operators, during and after floods and fires and tornadoes," Harvey said. "After the 9/11 attacks, hams were indispensable in reuniting friends and families. Most recently it was they who expedited the search for debris after the disaster to the space shuttle Columbia, and right now, at this moment, they are involved in homeland security to a greater degree than you would want me to make public."

The commentary's enigmatic and mysterious final sentence--typical of Harvey's habit of leaving his listeners hanging--apparently refers to the fact that many Amateur Radio Emergency Service (ARES) and Radio Amateur Emergency Service (RACES) teams have ramped up their alert status as hostilities get under way in the Middle East.

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**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.

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

Several great articles were submitted in past issues by your fellow **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@buxcom.net](mailto:k3ith@buxcom.net)

Thank you. Dick K3ITH

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# Imagine a QSO with no QRM, QRN, QSB, or propagation changes

while you are in a roundtable QSO with Hams in all continents. NO WAY?! Yes, it is possible via EchoLink.

EchoLink is software, which allows Amateur Radio stations to communicate with one another over the Internet, using voice-over-IP (VoIP) technology. The program allows worldwide connections to be made between stations, from computer to station, or from computer to computer. There are more than 100,000 registered users in 131 countries worldwide!

EchoLink is now officially accessible via PARA's 146.94 repeater via the W3HQ-L. To access EchoLink you will need to use the following codes via your DTMF.

EchoLink Control Sheet:

- 00 Connect to random NODE on Internet  
(Someone's computer, simplex link, OR, repeater)
- 01 Connect to random LINK or REPEATER on Internet
- 02 Connect to random CONFERENCE on Internet
- 03 Connect to random USER on Internet

To connect to a specific node, just enter the node number into the keypad. For example:

Node #	Call	Name	QTH
20424	JA1COR	Sanyo	Tokyo, Japan
58274	TA1E	Aziz	Istanbul, Turkey
78754	K3HED	George	West Chester
91769	W3HGF	Henry	West Chester, PA
9999	EchoLink Test Server – Records your call to hear yourself.		
7203		Sky Warn	
62872	GB3DX-R		Birmingham, UK
57801	VK6RLM-R		Perth, AUS
9020	PY2KJF-R		San Paolo
#	Disconnect	(Make sure you hit pound sign # after your QSO every time!)	
09	Reconnect to LAST node	08	Link status * System information

### Hints & Tips:

Wait until the machine says "Link Connected." until you start calling CQ. If it just says "connecting to xx..." do not talk yet, wait for it to connect fully. It will say "Connected" when it's connected.

Allow a few seconds for the 94 repeater to drop before you start talking, so the repeater will reset.

If you hear "Link Disconnected" right after you connect, this means the remote station has a firewall or internet problem. Just try another station at this point.

When you are finished, wait until the station drops, and press # ONE time only. Pressing #### multiple times will not drop the link, and only causes a problem.

Remember, not every station may be at their computer when you call. If they do not answer, the system times out in one minute. You can then call someone else or have the system find another station via 03 – random selection. You will be able to talk to Hams around the world in different time zones and languages. Enjoy!

Since you access EchoLink via 2 meters, you need to ID in accordance with FCC standards.

Please visit [www.echolink.org](http://www.echolink.org) on the web to learn more about the system, more node # or download it to your computer. You will need a computer with a sound card, microphone and a valid HAM license. Broadband is recommended since dial up bandwidth is limited for multiple station round tables QSOs.

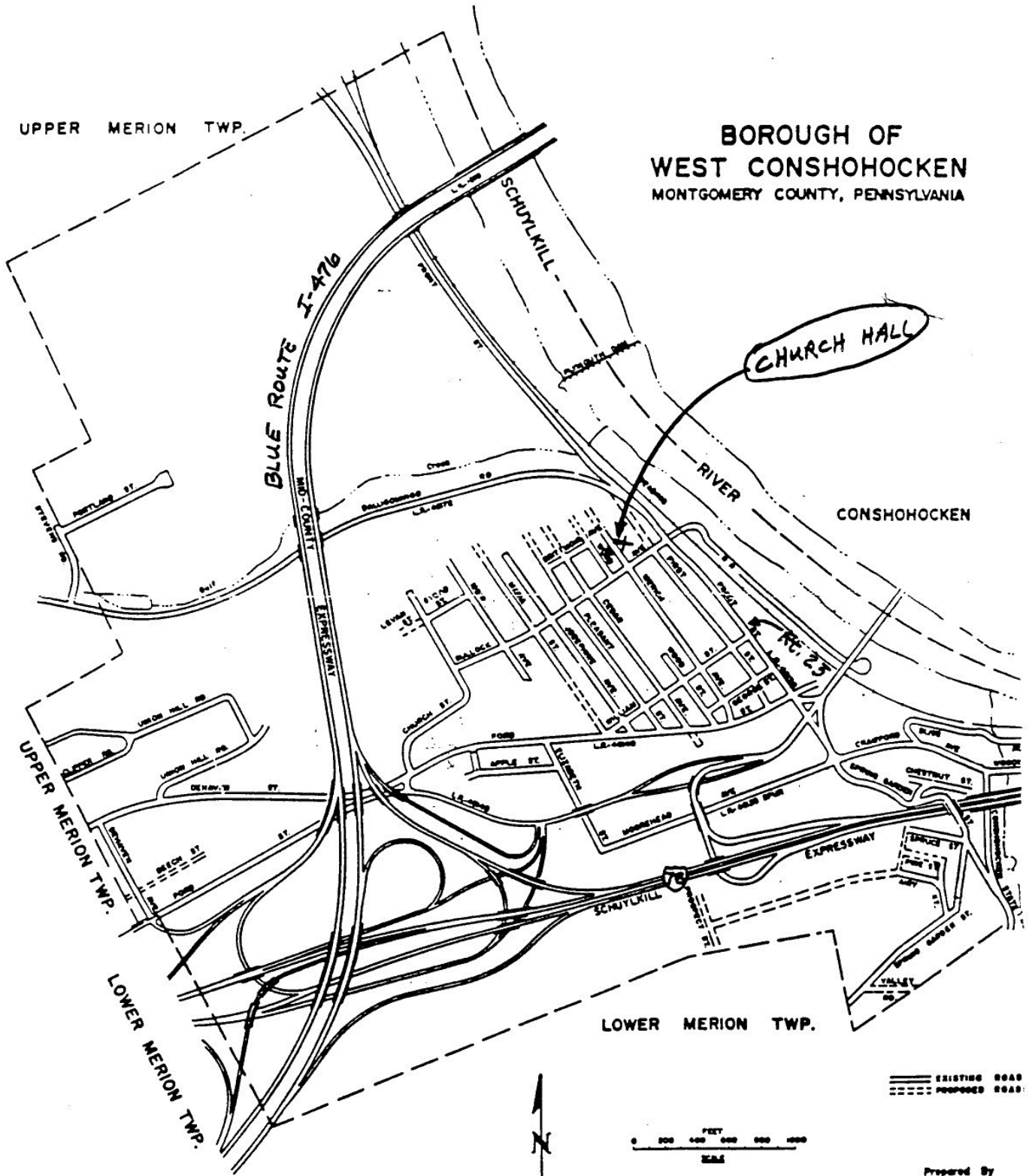
**BEWARE.** EchoLink is fun and it may cause a complete change of life, marital problems or make you act like a kid again. You may find yourself driving in the car more often, sitting in parking lots while your spouse is shopping, walking around with your HT speaking to HAMS in a foreign language or working WAC in 10 minutes!

**Enjoy! Curt, W3HQ**

UPPER MERION TWP.

# BOROUGH OF WEST CONSHOHOCKEN

MONTGOMERY COUNTY, PENNSYLVANIA



CONSHOHOCKEN

LOWER MERION TWP.

EXISTING ROAD  
PROPOSED ROAD

0 200 400 600 800 1000  
FEET  
SCALE

Prepared By  
F.X. BALL ASSOCIATES,  
June 1977  
REVISED 4/1/89