# Central Pennsylvania Repeater Association Inc.

# **W3ND January 2012**

**NOTICE:** The next general meeting of the CPRA will be on Thursday, January 19, 2012 at 7:00 PM, at THE WHARF restaurant on Derry Street.

# A MESSAGE FROM OUR PRESIDENT: From WA3CPO, Gary Blacksmith, MD

Please come to the next meeting on Thursday, January 19, 2012 at 7:00 PM, at THE WHARF restaurant on Derry Street. At that meeting Phil Thesis, K3TUF, will tell us about solar power for a dual-band radio. Many hams have only one radio and they would like to have it powered by emergency off-grid power. A generator has fuel requirements and has many associated issues. Solar power with a storage battery seems to be a reasonable choice if it is cost effective. Phil has also been watching EBay for the best pricing and will pass along his findings. This should be a very interesting and practical meeting. You may come early if you wish to dine. Your favorite beverage is available anytime. If you only wish to attend the meeting without eating or drinking that is not an issue.

#### **REPEATER STATUS:** We have four new repeaters.

**The new 220 MHz repeater** at Blue Mtn. is working well. The antenna is mounted on the shelter at Blue Mountain Building # 3. Output is 224.18 MHz, PL 123.0 and the input is 222.58 MHz, PL 123.0. The repeater is an ICOM 2210. Mobiles are available on EBAY. Search for 220 MHz mobiles such as ICOM 37A or 38A, etc. They are frequency agile.

A new W3ND UHF repeater is operational north of Newport. This is a commercial Motorola MSF5000 repeater. The output frequency is 444.550 MHz, PL of 123.0. This repeater has exceptional coverage on the North end of Harrisburg and the 322 corridor going North.

A second new W3ND UHF repeater is operational at Reeser's Summit. This is also a commercial Motorola MSF5000 repeater and has a 446.425 MHz output with PL of 123.0, 441.425 MHz input, PL of 123.0. This repeater performs the function of filling the hole between Harrisburg and York with good coverage into Cumberland, Northern York and Southern Dauphin counties.

The Lebanon Valley Society of Radio Amateurs (LVSRA) has established a new K3LV repeater at Cornwall. This is a commercial Motorola MSF5000 repeater with an input of 447.925 with a PL of 82.5, input 442.925 MHz, also with PL of 82.5.

All of these UHF repeaters, the 444.550, 446.425, 447.925 and the existing 444.450 will be interconnected to form the Regional Repeater Network. This is a system of all of these repeaters connected on a full time basis via the Central Pennsylvania IP Network (CPIN) Microwave infrastructure. This network will allow across-the-region connectivity so no matter where you are, you will have portable coverage into the system.

This will be especially useful in times of emergency and for keeping in contact when a local two-meter repeater simply will not do the job. The geographic diversity of these repeaters combined with the fact that they are underutilized makes this a natural way to repurpose and gain benefit for the entire area.

Watch for one or maybe two additional repeaters to be added to this network once the interconnection is established. If weather continues to be favorable, the interconnection should be completed in approximately 90 days.

The 444.3 repeater at Mt Holly, PL tone of 127.3, has an additional satellite voting receiver at Waggoner's Gap. I can now access the system with a portable inside my house in Carlisle. KB3HJC can access the satellite receiver at Blue Mountain on the North side of Carlisle inside his home with a tiny portable radio. Cumberland County now enjoys superb receiving from three different directions. This has been made possible by the Central PA IP Network.

#### **CENTRAL PA IP NETWORK:**

The Red Cross in Harrisburg has joined the Central PA IP Network (CPIN). They now have off site disaster internet access with multiple gateways, VoIP telephone service with multiple public network gateways, and a fax line.

**The Cumberland County EOC** has also joined the Central PA IP Network. They now have off site disaster internet access with multiple gateways, VoIP telephone service with multiple public network gateways, and an operational laser fax machine. Visiting lap tops may operate via a wired or wireless connection. HD cameras will become available within the next 60 days and will be added to the capabilities at the EOC.

**The Dauphin County EOC** will be connected this year. Design and implementation is planned for the second quarter.

**The Hilltoppers** in southern York County have requested a connection to the Central PA IP Network. That circuit will have field testing within the next 30 days.

## ARES/RACES INFO: From Your Editor, Roger, W3HUP

#### PEMA AND OTHER LOCAL NETS AND FREQUENCIES:

Central Area meets on 3993.5 KHz every Sunday at 8:30 AM Local Eastern Area meets on 3987.5 KHz every Sunday morning at 9:00 AM Local

Western Area meets on 3990.5 KHz every Sunday morning at 9:00 AM Local

Our **PA State Net** meets the **FIRST SUNDAY** of every month on **3993.5 kHz** at **8:00 AM Local.** This net is usually called by John Kruk, K3KR, Lock Haven; at which time he calls Eastern, Central and Western Area Stations in that order. The **New York State** net usually meets on **3993.5 kHz** at **9:00 AM** right after our Central Area net.

Central Area PEMA frequencies are: 3993.5 KHz - Primary, Alternates: 3984.5 KHz, 3999.5 KHz, 7248.5 KHz, 7250.5 KHz

The weekly Harrisburg Amateur Radio Club Information Net is held every Wednesday at 8:00 PM local on the 146.76 HRAC repeater, except for the second Wednesday of the month which is club meeting night, and the Capital Area Skywarn Net Wednesday evenings at 9:00 PM local on the 145.11 RACES repeater. All are welcome to check in.

#### ON-LINE OPERATOR TRAINING COURSE AVAILABILITY:

The NIMS (National Incident Management System) courses show how emergency management is organized and how volunteers such as us fit in to the process. Available training includes the ICS 100, 200 and 700 certification courses which can be completed in a day or less each on-line. These are recommended for both ARES and RACES operators. The Amateur Radio Emergency Communications Course Levels 1 and 2, available from the ARRL, cover Amateur Radio emergency operating procedures. The June 2011 issue of QST Magazine (pages 80 and 81) contains an excellent introductory article on the NIMS.

#### **IMPORTANT - FROM THE 12-24 DEC 2011 PA-ARES-RACES-L DIGEST:**

USA: 5MHz for EMCOMM, not Ragchew, not Contest/DX---an article by Bonnie Crystal, KQ6XA.

The 60 meter ham band has quite different operating privileges in various countries of the world. The frequencies, rules, purpose, regulations, operating procedures, and levels of priority are all different in each country. In the USA, the 5MHz channels for ham radio were specifically requested, justified, and **approved primarily for Emergency and Disaster Communications.** 

The stated justification is the need for NVIS and regional disaster response communications to fill in the propagation gap between 40 meters and 80 meters. The process of the Amateur Radio Service gaining access to these 5MHz frequencies was long and exacting. Recently, due to another multi-year process of proposal and rulemaking, FCC increased the privileges slightly for hams on 5MHz.

However, the FCC put even tighter technical restrictions on 5MHz operation than on any other ham bands. 60 meters **is not** a normal ham band. In this new ruling, FCC re-

affirmed and clearly spelled out major restrictions for hams on 5MHz. Hams are secondary users (or less) and the Primary users of the 5MHz channels must not be interfered with in any way. Non-interference with a Primary user isn't just a matter of stopping transmitting if you are asked to.

It can also mean refraining from transmitting, if there is \*any chance\* that you might be preventing a Primary user from utilizing or starting communications on the channel, even if you are not asked specifically. The only way we can hope to fulfill our requirement for non-interference, is to use very short transmissions and listen/watch carefully between transmissions.

What are some common amateur radio operating practices that may not be suitable for 5MHz 60 meter band operation in USA?

- 1. Calling CQ DX.
- 2. Long CQs.
- 3. Long winded ragchews.
- 4. Calling in pile-ups.
- 5. High power transmissions.
- 6. Contesting.
- 7. Sending a 'brag file' on PSK31

In order to be ready for Emergency/Disaster Communications, hams need to have good familiarity with the band and have equipment capable of operating 5MHz. Hams can only do this by participating in active operating on the 5MHz band. Somehow, we need to achieve a balance between a good level of activity and the requirement for non-interference. Finding this balance may be difficult, but for the most part, hams are quite adept at good operating habits.

Every ham operator transmitting on 5MHz must pay special attention to the different operating methods and procedures that this unique authorization requires.

There are proposals in the works to create an international ITU allocation of a 60 meter Amateur Radio Service band with Secondary status. If hams in USA are found to be operating in ways that disregard the spirit of the requested, justified, and approved reasons for which we obtained 5MHz privileges, then it may be extremely difficult to ever get FCC support for increased spectrum.

Regards, Bonnie Crystal KQ6XA http://hflink.com/5mhz http://hflink.com/60meters

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REPAIR WORK AVAILABLE: Forwarded by Nick Rylatt, AA3T

Just a note to inform you, and say that I would appreciate it if you could pass the word that I am finally able to begin taking-on radio service work again! I'm getting my service shop cranked-back-up after about a two year hiatus.

I'll take-on anything, but prefer vintage and hybrid (70, 80,90's) gear. I will only accept work that can be dropped-off at, or shipped-to my home here in Liverpool. Rates and estimates upon request and **I do take credit cards**.

Please feel-free to pass the word around. I also have some used and new gear and accessories for sale. HF wire antennas, coax, new in-the-box 2m SSB beams and other items which can be seen at my home.

Tnx & 73!

John, WN3V- Owner, Crystalaire Aviator Supply, LLC Aviation Supplies and Communications Radio Service/Vintage Radio Repair 717-877-3267

## "BOILER PLATE": From your editor, W3HUP

## Officers, Board, and Committee Members

President: WA3CPO Gary Blacksmith, MD

V. President: KA3AAA Terry Phillips
Secretary: KA3ECQ Terry Ash
Treasurer: KA3ECQ Terry Ash
Past President: K3SZX Alan Abt

Trustee for W3ND: KA3AAA Terry Phillips
Member at large: WA3MMD Bob Kurtinecz

Member at large: N3JQM Neil Shatto Member at large: AA3T Nick Rylatt

Alternates: KA0JQO Kevin Maglouglin

KB3RRV Mike Brulo K3DRE Douglas Evans

Web Master: N3PRO Dave Hoffman

IRLP Committee: KA0JQO Kevin Magloughlin RACES team: WB3BKN Terry Snyder, RACES R/O

K3JJK Lee Ash, and N3JQM Neil Shatto

Public Relations: W3KB Keith Beebe Recruitment: KZ3J Curtis Zell

News Letter Editor: W3HUP Roger Urban

Facilities with the CPRA club call sign W3ND:

144.39	APRS node from Reeser's Summit.		
145.11-	Dauphin County RACES repeater, CTCSS 123.0 Hz		
29-	IRLP node 7060 Blue Mtn. IRLP CTCSS 123.0 Hz		
47-	Med coverage, Blue Mtn, CTCSS 123.0 Hz (Primary HEARS Repeater)		
224.18-	222.58 In, Blue Mtn, CTCSS 123.0		
444.45+	Medium coverage from Blue Mountain CTCSS 123.0 Hz		
444.55+	Extended coverage to North, CTCSS 123.0 Hz		
446.425-	Reeser's Summit, CTCSS 123.0 Hz		
448.075-	Dauphin County RACES repeater CTCSS 123.0 Hz		
53.01-	RCVR at Blue Mtn (Nally's site), being moved, CTCSS 123.0 Hz		
3480	ATV Repeater Output (ATV only when requested)		
5GHz	Access Point at Blue Mountain with links to Reeser's Summit,		
	Cornwall and North. Links from Reeser's Summit to Blue Mountain and White Rock.		

Monthly Ham Radio Lunch: at the Old Country Buffet in east Harrisburg the last Thursday of each month at noon unless it is a major holiday. This restaurant is located on route 22 in Colonial Park in the vicinity of Value City Furniture, K-Mart and Home Depot. Good way to meet some new people...this is open to ALL area hams!

Club Web Site: WWW.W3ND.ORG

Pay it a visit...we have links to various services, general information and the current and back issues of the Newsletter.

<u>Dues:</u> are \$20/yr for a single membership and \$35/yr for a family membership, which includes all licensed amateurs living in one household. If you have not renewed please do so...we need your support! If you have, consider an additional donation! For most members, renewal is due by April.

## USE THE REVISED MEMBERSHIP APPLICATION SHOWN ON PAGE 7.

Thanks! Please make your <u>check</u> payable to:

Central Pennsylvania Repeater Association, Inc. 1430 Marene Drive, Harrisburg, PA 17109

**DO NOT SEND CASH!** 

## **APPLICATION FOR MEMBERSHIP IN CPRA**

$\square$ New member $\square$ Renewal $\square$ Fa	amily 🛚 Updating	Information		
□ Donation □ □ O	ther			
Dues are \$ 20.00 Individual and \$ 35.00 Family.				
Total amount enclosed \$				
Name:	Call(s)			
Address:	City:			
State: Zip code	License class: _			
Email address for newsletters:				
Phone:	☐ Listed	☐ Unlisted		
Are you an ARRL member?   Yes	□ No			
Are you a member of WITF				
EMERGENCY RACES VOLUNTEER INFORMATION				
This information will only be used in the event of an emergency. This information will only be given to the emergency RACES coordinator and will not be distributed for general information in any form!				
Work number including extension:				
Cell Phone:				
Email address:				