

S⚡H⚡O⚡R⚡T⚡S

The Bulletin of the Bedford County Amateur Radio Society

Number 22 -Volume IV –October 2015

MAJOR APRS EFFORT UNDERWAY FOR BCARS!

In order to mitigate the difficulties we experienced during the recent **BIKE-BEDFORD** event in August, our crack APRS team has launched a major effort to improve our APRS coverage within Bedford County and beyond. Headed up by our own Digital Master Blaster, John – KB3DFZ, Digipeaters are popping up all over! First up was a system at K3NQT to take advantage of the elevated Two Meter antennas at the courthouse. Unfortunately, coverage was disappointing. Next KA3UDR and KB3DFZ headed for Needmore, PA and re-installed an APRS station to cover the Southeast quadrant of the county. That system is now up

with connections all the way through Maryland into Virginia! Near term plans include an improved site at Martin's Hill in the Southern portion of the county and later Mount Dallas mountain in Everett. When all is said and done, the APRS coverage throughout the region should be seamless. If you are not yet APRS equipped, contact Kenny, Steve (UDR) or John. They have some ideas how you can join the effort at minimal cost.

“In the Shop”

This is the first of a new **S*H*O*R*T*S** column that that will feature news of technical innovations as provided by our members. First up is John Hogenmiller -KB3DFZ.

KB3DFZ MESH NETWORK

*"This is my APRS mesh box. It is: * **#aprs** (fill-in) Digipeater + IGate (if connected to Internet) **#raspberrypi**
* **UPSPi** - battery backup + safe shutdown module for Pi
* **#hssm** pi Mesh networking node * Standard access point
* Bluetooth console serial port (configured at 115200bps).*

*Upon plugging it in, the radio will turn on and the Pi will boot up, starting direwolf, placing it quickly into APRS digipeater mode. It will also join any **#hssm** mesh network within range. It's currently connected to my home node, granting it Internet access. The TP-Link AP lets nearby devices (phones, laptops, etc) connect and join onto the mesh. "*

APRS Addition

"On 5 September 2015, KA3UDR and KB3DFZ journeyed to Needmore, PA to liaison with long-time BCARS Associate Member, Ed Crouse. We

disconnected a long-disabled packet station belong to KA3UDR and put in place the APRSmesh unit "KB3DFZ-14", a field-expedient APRS digipeater and mesh networking node. This APRSmesh unit will operate a temporary digipeater until the former UDR packet station is re-purposed, and re-installed at this location as a full time APRS digipeater.

Additionally, a survey of APRS coverage East of Bedford, PA was completed. It was determined that East of Everett, PA to Needmore, PA is an APRS black hole. With the addition of the KB3DFZ-14 node in Needmore, coverage was extended to Warfordsburg, PA but it did not fill in as much of an area as hoped. Plans are underway to add coverage to Martin's Hill and Mt. Dallas."

Contributed by John-KB3DFZ

```

BlueTerm connected: kb3dfz-14
2352 root 20 0 102m 3464 2824 S 13.6 0.1
4 0:16.63 direwolf RES SHR S %CPU %MEM T 241
1 pi 20 0 4920 2492 2152 R 0.7 0.3 0:00.20 to
p 20 0 102m 3464 2824 S 43 root 20
0 0 0 0 S 0.3 0.0 0:00.16 kworker/0:1
50 root 20 0 0 0 S 0.3 0.0 0:00.3
8 kworker/u8:1
2051 root 20 0 2692 2164 1932 S 0.3 0.2 0:00.6
8 olsrd
1 root 20 0 2152 1264 1160 S 0.0 0.1 0:04.2
pi@k0sign-1:~$ ls
direwolf-1.2 direwolf.conf-1.2 hsmm-pi
python_games
direwolf-1.2-src.zip direwolf.conf-station kb3dfz-1
test
direwolf.conf Downloads kb3dfztest.wav
wiringPi
pi@k0sign-1:~$ sudo reboot
Broadcast message from root@k0sign-1 (ttyAMA0) (Fri Sep 4 0
9:31:55 2015):
The system is going down for reboot NOW!
pi@k0sign-1:~$ [ 343.002328] reboot: Restarting system
Uncompressing Linux... done, booting the kernel.
[ 0.000000] Booting Linux on physical CPU 0xf00
[ 0.000000] Initializing cgroup subsys cpu
[ 0.000000] Initializing cgroup subsys cpucct

```

Once again allow me to express my appreciation for your invitation to your recent meeting.

I was impressed by the many activities your members are doing, and your commitment to Public Service planning and activities is commendable. If there is anything I or the WPA Section can do to assist your club in its activities, or answer any questions, please contact me at the following contact points and I will be happy to be of assistance!"

Really Big Nuz!

"To the Members and Officers of Bedford County Radio Society:

Congratulations for extending your ARRL Special Service Club Status for another two years! Special Service Clubs are those who go the extra mile to serve all local amateurs and their communities. Your club is an asset to them, to the WPA Section and to Amateur Radio!

***73,
Joe W3BC
Affiliated Club Coordinator,
WPA Section ARRL***

"QTC"

"I think that a newsletter of BCARS "stuff" is timely, appropriate, interesting and worth pursuing. As a former military commander, I looked for results. (I either had commo or I didn't) The rest of it I left up to my commo chief to make sure it went as it was supposed to and I could call for fire support if the situation with the bad guys turned ugly.

I'm beginning to understand the depth and complexity of their job requirements."

Contributed by: Mac -KC3BTA

***BCARS PICNIC. A
Gastronomical and
Electromagnetic Success!***

With one mention of food, nearly the whole club shows up for the annual BCARS Picnic held at the WB3JEK & Sharon sponsored Merritt's Pond RV Resort. Everyone contributed food, entertainment and adult beverages for the 22 August Soirée! Unfortunately, no HAM was served, only **HAM**burgers.



**KC3AFO in spiffy Fox News
Radio Hat!**



Vietnam Vet CPO -KB3VZC



Large Chow Hall



KE3ZT & XYLs

“My Shack”

SHORTS is pleased to introduce our newest feature. Every month, we'll take you to a different QTH to see, “What's in My Shack.”

We journeyed down to a cove and over a mountain to see the extraordinary QTH of Bernie -W3DRW. The first thing you notice on Bernie's 145 acre potential antenna farm is his nifty grass airstrip!



In addition to his Ham Radio license, Bernie has been a licensed pilot for many years.

The aircraft you see in the picture is completely home brew! It's a simple experimental one-seater with absolutely no avionics! His aircraft radio is an HT stuck to the inside of the fuselage. In addition to the aeronautical mobile, Bernie has a nice radio shack with a vintage TS-520, Heathkit tuner and a really wild looking antenna – You have to go to Chaneyville to see it!



W3DRW at Home

On two meters, Bernie runs a Kenwood TM-271. Bernie has an amazing background working at major federal radio sites. Get him to tell you some war stories! Congratulations Bernie.

HAM, HAMS and More HAMS!

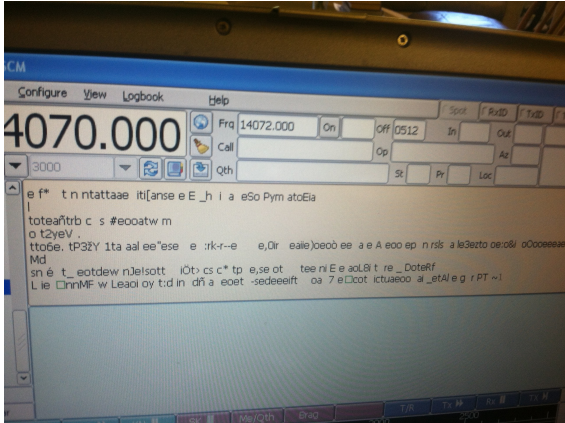
The BCARS crack VEC team headed for the Bedford County Christian Church and created opportunity for four (4) new Technician Class Hams! Attending VEs were: KC3CMF, K3SCM, KA3UDR, KE3ZT, WB3JEK and K3QNT. Prior to the testing, KB3DFZ put on an impressive NBEMS (Narrow Band Emergency Message System) demonstration. This mode is especially effective during EMComm operations because you can send an actual ICS-213 message form over HF and VHF with minimal equipment.



Bernie and N30051



Happy Test Takers



NBEMS SCREEN

REMINDERS!!

If you haven't gotten on the BCARS email mailing list, contact KB3DFZ. Right away. It's free!

SKYWARN Training at the Bedford County EOC 24 September 2015 – The training session is presented by the Department of Emergency Services.

Don't forget, if you have any contributions to

make to S*H*O*R*T*S

Contact:

Lloyd Bankson Roach – K3QNT

k3qnt@aol.com