

QRZ NEWS

A MONTHLY PUBLICATION OF
SOUTHERN PENNSYLVANIA AMATEUR RADIO CLUB, INC
PO BOX 1033 - LANCASTER, PA 17608-1033

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AN AFFILIATED SPECIAL SERVICE CLUB OF THE ARRL, INC.

"Public Service through Communication"

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December 2009

Happy Holidays to Everyone!

President's Message

One Man's Junk.....

SPARC recently accomplished a long-standing goal – removal of the Forward Support Van tow vehicle from the club site. We had not used the GMC truck, which is registered to the county, for several years because of a persistent overheating problem. Since there is now no need for a separate tow vehicle we decided to turn the GMC truck back to the county. Easy right? Well last week, after a year and a half of attempts I received permission from LEMA to move the truck from our site to the county training center.

After about an hour of trying Dave Payne, N3LOM, and I got the old V-8 fired up and drove the truck onto the clubs trailer. We were afraid we would not be able to get it started again so we left the engine running while we used the club's truck to haul the rusty hulk to the training center.

When we pulled into the county center the manager was actually excited that after nearly two years they had this wreck to play with. Then he noticed that the engine was running and excitement turned to elation! You mean it still runs? The guys will really be excited about that! We can use it around

here for a year or so. And it has 4-wheel drive? Even better.

So I parked the old friend next to two retired police cruisers. I'm sure the local firemen and rescue crews will put it to good use.

Isn't it funny, we couldn't wait to get rid of this rusting piece of junk, but the trainers at LEMA see it as a useful training tool. I couldn't help but thinking of all the junk lying around our shacks, or at least that's how our wives see it. (sigh) They just don't understand.

Harry Bauder,
WA3FFK

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**HIGHLIGHTS OF THE
NOVEMBER 2009 MEETING OF
THE
SOUTHERN PENNSYLVANIA
AMATEUR RADIO CLUB
(SPARC)**

Held Wednesday, November 18, 2009 at 7 PM at the Rapho Township Municipal Building

The following members and guests were present:

Dave Payne, N3LOM
Rick Watson, N3SWJ
Harry Bauder, WA3FFK
Ted Freedman, K3KSA
Jim Silvius, KW3E
Steve Hass, KB3SJU
Dave Sarraf, N3NDJ
Mike Warner, N3XPD
Gerry Wagner, KB3SSJ
Dick Hess, KB3LOJ

The meeting was called to order at 7:00 PM by Harry Bauder, with a round robin introduction by name and call.

The October membership meeting minutes were read. One amendment was noted: on a motion by George Gadbois and a second by Gerry Wagner, the club voted to sell the truck at a price to be set by the BOD. On a motion by Dave Payne and a second by George Gadbois the minutes were approved as amended.

The Board of Director's meeting minutes were read by Harry Bauder.

Ted Freedman read the Treasurer's Report. As of November 1, all bills were paid. The source of the noted donations was questioned. Some was income from Harry working at Dutch Wonderland; some was a

donation made to SPARC for a radio repair made by another club member. Other income was from Cars By Dealers, who pay SPARC to haul outdated magazines. Ted discussed a list of near-term expenses that he developed. On a motion by Gerry and a second by Mike Warner the Treasurer's Report was approved as read pending review by the audit committee.

Old and New Business

- Harry noted that the value of recycled goods is rising, and he would like to use some of our recycle income to put a lump sum payment on the mortgage this year. George noted that the proceeds from the truck sale should also be put on the mortgage. Harry will call the bank to get their approval to sell the generator; we would also put those proceeds toward the mortgage.
- Harry discussed the Pump and Plug program by the DEP that provides grant money to close underground tanks.
- Jim Silvius took the club's fire extinguishers for inspection and found that they were too old. He purchased new ones and donated them to SPARC.
- Harry is working on a site plan. One task is to place the poles to be donated by Air Products. He is also thinking about our eventual new operating building. Ted had site maps available. They were copies of copies and were rather fuzzy. A member volunteered to redo them using CAD.

- It was announced that Rick Watson cannot serve in 2010 and that a replacement will be needed. George Gadbois was mentioned as a possible candidate.
- A member asked for help with a tube radio.

On a motion by George and a second by Gerry the business portion of the meeting was closed.

The technical portion of the meeting was a presentation by Rick Watson. He has taken on the role of planning officer for RACES. He discussed a planned ham-only drill on 9 October 2010 that simulates an outage of a telephone company remote and affects businesses, a school and a nursing home. Rick also discussed the new HSEEP program for planning, evaluating, and executing drills and exercises. The drill will be conducted using standardized communication modes, possibly including FLDIGI. The RACES technical committee is discussing options and will make a decision early so that hams can try out the equipment and work out bugs far in advance of the drill.

Respectfully submitted,
 Dave Sarraf, N3NDJ
 SPARC Secretary

Coming Events

Wednesday, 16 December 2009

The SPARC business meeting will be held at the Rapho Township Municipal Building, 971 N. Colebrook Rd, in Rapho Twp. Meeting time is 7:00PM. Everyone interested in Amateur Radio is invited to attend. A technical discussion will follow a short business meeting.

Sunday, 3 January 2010 0000UT Earth at perihelion, 91,402,485 miles from the Sun.

Tuesday, 6 July 2010 1100UT Earth at aphelion, 94,508,351 miles from the Sun.

See QRZ News for March 2009 for a summary relating Es propagation to meteors and aphelion/perihelion.
http://www.k3ir.org/QRZ_News/QRZ_News_March_2009.pdf

23-25 January 2009 ARRL VHF Sweepstakes

Begins 1900 UTC Saturday, ends 0359 UTC Monday (Start 1400 EST Saturday – End 2259 EST Sunday) All bands 50MHz and up. Band openings are unlikely so this is a good time to learn your base operational capabilities.

You will need to know your grid square for the exchange. Filing a log is not required.

Recycle Update

Please take recyclables to Dave Payne's mini recycling center at 1373 Malleable Rd, Columbia or to a SPARC club meeting.

Recycle prices are creeping up a bit so this is a good time to recycle paper and metals. Dave is recycling all metals including iron. As always, clean recyclables bring the best price and keep our recycler happy.

The SPARC heavy duty pickup used for transporting recycled paper is now for sale. If you know anyone who might be interested, contact Dave Payne, N3LOM.

Editor's Notes

Many hams have noted the decline in rag chewing via SSB on the VHF bands. It's true that many just listen and wait for a band opening so they can grab a new grid or a new country on VHF. I recently checked to see if the long running Northeast 2m SSB coastal net is still running and found out that it is. I still don't have a horizontal beam for 2m so I am effectively out of it.

Back in the 1980s I vacationed almost every summer in Wakefield, NH on the Maine – New Hampshire border a little north of the K1WHS super station in Lebanon, ME. I was on every morning for the 2m net and talked to a station in Portland, ME and one on Cape Cod. Hills prevented contacts further to the west. From Cape Cod, the net stretched all the way to NJ.

Mike, K2DZM, Colonia, NJ updated me during one of our 1296MHz contacts on the 2m Northeast net which still operates Mon – Fri on 144.176MHz. Mike says that K1PXE, Milford, CT is a regular and would have his beam in this general direction. See the net listings below for more information.

The key to the long term success of the Northeast 2m SSB net is the coastal location. Enhanced propagation is much more common along a coastline.

Last month I said that I would write an article on Ahead and Behind. Unfortunately, I have not had time to do the research for the article so it is postponed to a future issue. Briefly, Ahead and Behind are moving ahead and behind the Earth in its' orbit around the Sun. They are associated with the NASA STEREO mission launched in January 2009. On February 6, 2011, the STEREO mission probes will be 180° apart

and will be able to observe the whole Sun. No sunspots will escape their eyes.

See Sandy Goodman's article below on the Carrington event for information on why solar observations are very important to us.

Incidentally, NASA is studying the effects of galactic cosmic rays on the human body. When astronauts venture outside the protection of the Earth's magnetic field their exposure must be limited. Mars missions will be a big problem. Thanks to Ed Garrity, KB3IIX, for supplying information on this research.

The Mayan calendar does not expire on 21 December 2012. It just rolls through 0.0.0.0 and starts a new Baktun. See Sky & Telescope for November 2009 for more details.

73,
George, W3FEY

ARES/RACES



As part of the SPARC commitment to emergency communications, the SPARC repeater system is maintained as available for linking with other area repeaters.

Lancaster County RACES VHF Net is held on the first Tuesday of the month at 2030 hours local time. Presently being held on the 145.310 MHz repeater.

The Lancaster County primary ARES/RACES repeater is on 145.310 MHz with minus offset and 118.8 PL.

Combined York County Amateur and ARES/RACES NET convenes at 8:30 PM (2030) Mondays on 146.97.

Pennsylvania RACES HF Nets are held at 3993.5 kHz LSB on all Sundays except holidays.

The statewide net is on the first Sunday of the month at 0800 hours local time.

The Central Area (including Lancaster County) net is at 08:30 local time.

SPARC Nets

SPARC holds nets on the 2nd, 3rd, 4th, and 5th Tuesday (every Tuesday except the first) at 2030 local time on 145.230 MHz minus offset and a PL of 118.8.

Club Officers

President Harry Bauder – [WA3FFK](#)
Vice-President: Rick Watson - [N3SWJ](#)
Secretary - Dave Sarraf. - [N3NDJ](#)
Treasurer - Ted Freedman - [K3KSA](#)
Repeater Trustee - Dave Payne - [N3LOM](#)
Past President - Mike Warner – [N3XPD](#)
Board of Directors - Jim Silvius – [KW3E](#)

Nearby Nets of Local Interest

York County Sponsored Nets:

Combined York County Amateur and ARES/RACES NET convenes at 8:30 PM (2030) Monday on 146.97.

Tuesday Nets (Note new schedule for Technical Net)

Elmer/DIGITAL NET -- Tuesday, 8 PM on the York 146.97 Repeater --

The first 15 minutes or so will be open to questions. DIGITAL Communications testing will continue after that.

Friday Digital Net

Friday evenings starting at 8 PM on the 146.610 (PL:131.8 Hz) EARS repeater on Ephrata Mountain.

This is an excellent Digital net called by Bob, AB3GF. Check in is by digital, BPSK125. It is an informal, well run net with plenty of Digital transmissions along with discussion by voice.

Delaware Co. Mobile Sixers Net Schedule Sunday 2000 50.550 MHz USB

PACKRAT MONDAY NIGHT NETS TIME FREQUENCY NET CONTROL

7:30 PM 50.145 MHz K3EOD FM29II
8:00 PM 144.150 MHz N3ITT FN20kl
8:30 PM 222.125 MHz K3TUF FN10we
8:30 PM 224.58R MHz W3GXB FN20jm
9:00 PM 432.110 MHz WA3EHD FN20kd
9:30 PM 1296.100 MHz W2SJ FM29LW
10:00 PM 903.125 MHz W2SJ FM29LW
Visit the Mt Airy VHF Radio Club at: www.packratvhf.com or www.w3ccx.com

2M Northeast SSB Net Mon – Fri, 0700 check on 144.200MHz for possible DX openings. 0730 – 0830 net on 144.176MHz. This is a very long running net that runs from NJ up the coast to CT and beyond.

QRZ News Publication

QRZ News is published monthly on the second Wednesday of each month, one week before the monthly meeting. Deadline for article submission is the second Tuesday of each month.

We operate on an exchange basis with other non-commercial publications. Articles printed in QRZ News may be reprinted in a not for profit publication provided proper credit is given. Reprinted articles require permission from the original source.

QRZ News is archived at http://www.k3ir.org/QRZ_News.html. Documents are in PDF format.

Dave Payne, N3LOM, recently found a paper copy of the first quarter 1999 issue of QRZ News. This is the oldest copy of QRZ News in the archive. The next oldest copies are from 2001.

The Carrington Event

What would happen if another solar outburst with the magnitude of the Carrington event were to hit Earth today? With society so much more dependent on electricity, the effects could be tremendously expensive, causing serious disruption to the economies of nations in the northernmost and southernmost portions of the globe. An example of this vulnerability occurred

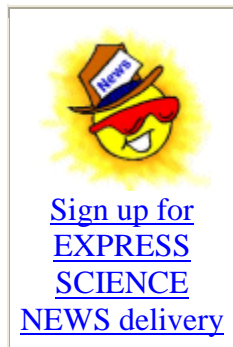
during the March 13, 1989 geomagnetic "Superstorm" when a severe geomagnetic storm triggered strong direct currents in the long wires of the Canadian electric power grid.

The grid was not designed to handle this, and the result was a power outage that knocked out power to the entire province of Quebec, Canada--six million people--for nine hours. The 1989 event very nearly brought down the electrical power grid over a large portion of the U.S., as well, and we were very lucky that the storm was not stronger.

The Thursday, September 1, 1859 Carrington event was three times more powerful than the 1989 "Superstorm", and would likely cause the failure of a huge portion of the U.S. power grid were it to hit today.

Just before dawn the next day, skies all over planet Earth erupted in red, green, and purple auroras so brilliant that newspapers could be read as easily as in daylight. Indeed, stunning auroras pulsed even at near tropical latitudes over Cuba, the Bahamas, Jamaica, El Salvador, and Hawaii.

Even more disconcerting, telegraph systems worldwide went haywire. Spark discharges shocked telegraph operators and set the telegraph paper on fire. Even when telegraphers disconnected the batteries powering the lines, aurora-induced electric currents in the wires still allowed messages to be transmitted. See NASA reference



http://science.nasa.gov/headlines/y2008/06may_carringtonflare.htm for more of the story.

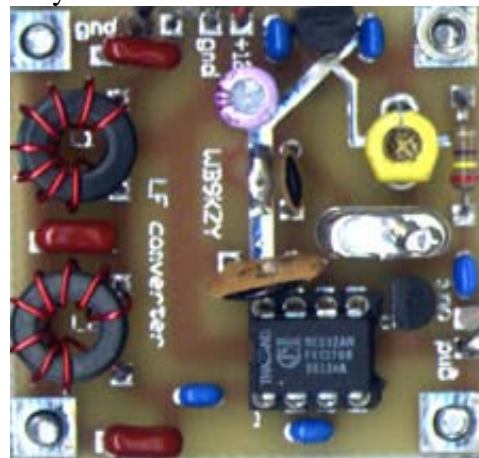
Sandy Goodman, N3ECF

LF for \$25 or Less

Last month we presented information on a top of the line LF converter, the SDR-IQ. Perhaps you are interested in getting started in LF from the shallow end of the pool.

John Jaminet, W3HMS, recently built a low cost up converter from Jackson Harbor Press. See <http://jacksonharbor.home.att.net/lfconv.htm>

The basic cost of the very simple kit is \$17 delivered. You will need to provide a case and other parts to make use of the board only kit.



John installed the board in a recycled minibox that was already drilled for connectors. The large box has plenty of space for added filters if they are needed.

The PC board is on standoffs in the center of the box. A solderable ground buss is on the top left side. Good shielding is a requirement to keep out signals at the up converter output frequency.



Box end showing input and output connectors. Not much new drilling required.



Front panel showing the complex controls.

George, W3FEY

6m Report from W7GJ

At 0637Z on 6 December 2009, I completed with ET3BN in KJ99 on 6m EME on 50.190. His JT65A signals peaked at -25 dB here. This was DXCC #149 for me on 6m (#99 via 6m EME), and appears to be a USA first. For sure it was the first ever 6m EME from ET. Peter was running a new IC7600 barefoot into a 6M7JHV at 30' during his moonset.

Kp was under 2; Degradation as predicted by WSJT was -1.3 dB. Great to see such exciting activity and such rare stations taking advantage of these superb conditions for 6m EME!!!

GL and VY 73, Lance

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Lance Collister, W7GJ (ex: WN3GPL, WA3GPL, WA1JXN, WA1JXN/C6A, ZF2OC/ZF8, E51SIX)

The Rest of the Story - Santa Train 1966



Last month we ran a photo of Strasburg locomotive 1223 at W. King and Water St. The Scribbler, Jack Brubaker, added a lot of detail to the story of Santa's arrival at the West King Street Station in the 24 Nov Intel/New Era. Dave Bowser read the article and supplied some great color photos of the event from a friend in Michigan.



Here 1223 is crossing Orange Street on the way to King St. Note the price of gasoline in 1966.



Photo by Lloyd Jury

In this photo, the Santa train appears to be backing into Lancaster from Strasburg. Turning a locomotive around takes some special trackage or a turntable. The Strasburg Railroad doesn't have either. All the Strasburg locomotives are oriented to enter the Strasburg station from Leaman Place going forward.

The cars in the train are PRR FOM (Fleet of Modernism) cars from the late 40s.