

# MOUNTAIN SPARK GAPS

NPARC—The Radio Club for the  
Watchung Mountain Area



Website: <http://www.nparc.org>  
Club Calls: N2XJ, W2FMI

VOLUME 48 NO. 1 January 2013

## UPCOMING EVENTS

### Regular Meetings

Mon. 2/11 & 2/25 7:30 PM  
Salt Brook School Cafeteria

### Annual Auction 2/22

Doors Open 5:30

NP Municipal Center Gymnasium

Details on Club Web Site

**WWW.NPARC.ORG**

## Meeting Schedule

**Regular Meeting:** 7:30—10:30 PM  
**2nd Monday of each month** at the  
Salt Brook School Cafeteria  
Springfield Ave. and Maple St.  
New Providence

**Informal Project Meeting:** 7:30—9:00 PM  
**4th Monday of each month** at the  
Salt Brook School Cafeteria  
Springfield Ave. and Maple St.  
New Providence

### Everyone is Welcome

If a normal meeting night is a holiday,  
we usually meet the following night.  
Call the contacts below.  
When Schools are closed,  
Meetings are held in the Recreation  
Department Meeting Room in Borough Hall

## Club Officers for 2013

President: K2MUN David Berkley  
908-500-9740  
Vice President: K2WUF David Bean  
973-747-6116  
Secretary: K2HLA Hillary Zaenchik  
908-244-6202  
Treasurer: K2YG Dave Barr  
908-277-4283  
Activities: W2PTP Paul Wolfmeyer  
201-404-6914

## On the Air Activities

Club Operating Frequency  
145.750 MHz FM Simplex

Sunday Night Phone Net  
Murray Hill Repeater (W2LI) at 9:00 PM  
Transmit on 147.855 MHz  
With PL tone of 141.3 Hz  
Receive on 147.255 MHz  
Net Control K2AL

Digital Net  
First & Third Mondays 9 PM  
Details as announced.

## Club Internet Address

Website: <http://www.nparc.org>  
Webmaster K2MUN David Berkley  
Reflector: [nparc@mailman.qth.net](mailto:nparc@mailman.qth.net)  
Contact K2UI, Jim

## MOUNTAIN SPARK GAPS

Published Monthly by NPARC, Inc.  
The Watchung Mountain Area Radio Club  
P.O. Box 813  
New Providence, NJ 07974  
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Editor: K2EZR Frank McAneny  
Contributing Editors:  
WB2QOO Rick Anderson  
WB2EDO Jim Brown

Climatological Data for New Providence for  
December 2012

The following information is provided by  
Rick, WB2QOO, who has been recording  
daily weather events at his station for the  
past 31 years.

### TEMPERATURE -

Maximum temperature this December, 62 deg.  
F (December 4)  
Last December (2011) maximum was 60 deg.  
F.  
Average Maximum temperature this December,  
45.3 deg. F  
Minimum temperature for this December, 20  
deg. F (December 31)  
Last December (2011) minimum was 19 deg. F.  
Average Minimum temperature this December,  
31.9 deg. F  
Minimum diurnal temperature range, 5 deg.  
(47-42 deg.) 12/16; (43-38) 12/17  
Maximum diurnal temperature range, 23 deg.  
(55-32 deg.) 12/5  
Average temperature this December, 38.6  
deg. F  
Average temperature last December, 38.7  
deg. F  
Number of days this December with daily  
maximum temperatures of  
50 deg. or higher - 8; last December - 11.

### PRECIPITATION -

Total precipitation this December - 3.4"  
snow; 5.72" rain/melted snow.  
(Note: snowfall stick measurement for Dec.  
26, 27 not available due to being away, but  
snow melt included).  
Total precipitation last December - 4.05"  
rain.

Maximum one day precip. event this Decem-  
ber; December 29, 3.0" snow.  
Measurable rain fell on 15 days this Decem-  
ber, 8 days last December.  
Measurable snow fell on 3 days this Decem-  
ber.

=====

Rick Anderson 1/4/12  
243 Mountain Ave.  
New Providence, NJ  
(908) 464-8912

[rick243@comcast.net](mailto:rick243@comcast.net)

**Lat = 40 degrees, 41.7 minutes North**

**Long = 74 degrees, 23.4 minutes West**

Elevation: 380 ft.

CoCoRaHS Network Station #NJ-UN-10



KC2WUF

## **PRESIDENTS COLUMN**

### **By K2MUN**

This is my first column for Mountain Spark Gaps as President of our radio club. I look forward to writing a column each month that, in some small way, adds to your enjoyment of our shared hobby and our shared club.

I'm open to suggestions on topics but over the next few months I'd like to use this space to introduce you to our Executive Committee. Most of you have met all four other members but, like me, probably know little about them. First, let me say that I am grateful they we will be working together this year to continue a tradition of many years.

It was hard to decide who to write about first. All of us are essential for the club to function in the long run but, since I will eventually cover all the Committee members, I am starting with David Bean, KC2WUF, our Vice President. Vice-President is traditionally a thankless job; filling in for the President when necessary and, in general, stepping up to whatever job isn't being done. In NPARC the job is also a stepping stone to the President's position and this makes the position more important than in other circumstances.

David is a fairly new member and also new ham. Within a month of obtaining his Tech license on March 1, 2010, David had progressed to Extra. He is also an active and enthusiastic VE. As a Ham he enjoys casual contesting and has generated well over 1000 QSO's for each year on the air. His most active mode is RTTY closely followed by SSB and, JT65 (HF) a mode which was new to most club members when he talked about it last year. Beyond those, David has worked more digital modes than I knew existed. However, this Ham radio focus is in David's blood since he is following in the footsteps of his Grandfather, W2CIY (SK, January, 2012, age 96), a long time member of NPARC, licensed in 1932, who had worked DXCC when David wasn't yet 5 years old.

Some background. David was born in Orange, NJ and grew up in various parts of NJ until graduating from Rutgers Electrical Engineering in 1985. He then, moved to PA, at Boeing Helicopter Division where he worked in various technical capacities for almost 20 years. He worked as a Quality Control R&D Engineer, dealing with image processing data, followed by a long stint as a Systems Analyst and Programmer where he has lived through the evolution in hardware and software over almost two decades. This has certainly given him a strong background for digital ham radio.

Recently, David did something more difficult than an engineering career, he moved in with his Grandparents to help care for them. Both his Grandmother (who is still living) and his Grandfather (W2CIY, mentioned above) suffered from various serious ailments of old age. David cared for them on a day-to-day basis until his Grandfather's passing and a recent increase in medical needs for his Grandmother necessitating full-time nursing care. This daily effort was relieved a bit by his Grandfather's collection of ham radio gear (including Satellite and Digital capability) that David used to add to his QSO count. However, he still continues to visit his Grandmother frequently and drive her as needed. In addition he does extensive volunteer work at the food pantry serving Morris County.

I also want to point out that David, besides his role in the management of NPARC, has been actively working in NPARC to organize various trips to places of interest to Hams. This past month he put together a trip to ARRL headquarters, very much enjoyed by those who joined him. He also hopes to get folks together for a trip to InfoAge, once they recover from the ravages of Sandy.

Next month I will say some words about another Executive Committee member. For now, I just want to encourage each and every one of you to attend our meetings; join the Sunday Night Net and contribute your expertise; express your interests and involve yourself in our club in a way that enhances your satisfaction and excitement in amateur radio.

I also want to encourage you to attend our major function for February, our annual Auction Friday, February 22. The Auction is our largest source of funds. Those are funds that make some of our other activities (including Field Day) possible. In addition, in itself, it is great fun. Attend; participate; enjoy! The Auction itself starts at 6:30 PM, with sellers coming at 5:30 PM but come much earlier and help set up. I look forward to seeing all of you, and many other hams (and non-hams), at the New Providence Municipal Center that evening.

Did you know the saying "God willing and the Creek don't rise" was in reference to the Creek Indians and not a body of water? It was written by Benjamin Hawkins in the late 18th century. He was a politician and Indian diplomat. While in the south, Hawkins was requested by the President of the U.S. to return to Washington. In his response, he was said to write, "God willing and the Creek don't rise." Because he capitalized the word "Creek" it is deduced that he was referring to the Creek Indian tribe and not a body of water.

# KIDS DAY 2013



## Summary

22 QSO's on 20 meters. Best DX—YV3DVH ( Venezuela)

7 QSO's on 2 Meters.

## SCIENTIFIC TIDBITS

### VIRUS GENERATOR

As we know, viruses are nasty little entities that can affect all types of plants, animal, and other organisms. Even though they contain DNA, they are so primitive that they do not even qualify as a life form. In humans, their effects range from such annoyances as the common cold and chickenpox to serious diseases like Ebola, AIDS, and severe acute respiratory syndrome (SARS). It now appears that scientists at the U.S. Department of Energy's Lawrence Berkeley National Laboratory have figured out how to harness the little blighters to convert mechanical energy into electricity. In what is billed as the first example of generating electricity by harnessing the piezoelectric properties of a biological material, the researchers have created a generator that employs a postage stamp-size, virus-coated electrode to generate enough current to run a small LCD. Making it even more interesting, the viruses self-assemble themselves into an orderly film that makes the generator work which is a highly prized characteristic in the world of nanotechnology. When pressure is applied to the electrode, the device produces up to 6 nA of current and 400 mV, which is about  $\frac{1}{4}$  of what you can get out of an AAA cell. With the obligatory "further research", it could lead to things like shoe soles and stair-steps that produce essentially free power. In case you're wondering, the device poses no risk to nearby life forms. It uses the M13 bacteriophage which only attacks bacteria. Plus, it replicates itself by the millions within hours, so will always be a plentiful supply. Let us not go overboard on this one as we will be overrun by the little beasts.

### HORNET COLOR USED IN SOLAR CELL

Scientists in Israel and the U.K. have built an electricity-generating solar cell using a pigment from the oriental hornet, saying it represents a technically and economically feasible alternative to today's silicon-based solar technology. These scientists reported extracting a yellow pigment called xanthopterin from the hornet's shell and inserting it into a solar cell that uses dyes to absorb light. The shell's structure not only efficiently absorbs but also traps in light instead of reflecting it making it a much more efficient producer of electric current. This must make the hornets rather testy I would think.