

# **MOUNTAIN SPARK GAPS**

**NPARC—The Radio Club for the  
Watchung Mountain Area**



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

**VOLUME 50 NO.5 May 2015**

## **UPCOMING EVENTS**

### **Regular Meetings**

6/8 & 6/22  
Monday 7:30  
NP Community Center

Field Day  
6/27—6/28  
**It is coming up fast!**

## Meeting Schedule

**Regular Meeting: 7:30—9:00 PM**  
**2nd Monday of each month** at the  
NP Senior & Adult Center  
15 East Forth Street  
New Providence

**Informal Project Meeting: 7:30—9:00 PM**

**4th Monday of each month**  
**Same location**

**Everyone is Welcome**  
If a normal meeting night is a holiday,  
we usually meet the following night.  
Call one of the contacts below  
or check the web site

## Club Officers for 2015

President: KC2WUF David Bean  
973-747-6116  
Vice President: K2UI Jim Stekas  
973-377-4180  
Secretary: KD2EKN Tim Farrell  
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

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Editor: K2EZR Frank McAneny  
Contributing Editors:  
WB2QOQ Rick Anderson  
WB2EDO Jim Brown

Climatological Data for New Providence  
for April 2015

The following information is provided by  
Rick, WB2QOQ, who has been recording  
daily weather events at his station for the  
past 34 years.

### TEMPERATURE -

Maximum temperature this April, 80 deg. F  
(April 18)  
Last April (2014) maximum was 82 deg. F.  
Average Maximum temperature this April, 64.1  
deg. F  
Minimum temperature for this April, 27 deg.  
F (April 1)  
Last April (2014) minimum was 27 deg. F.  
Average Minimum temperature this April, 40.5  
deg. F  
Minimum diurnal temperature range, 6 deg.  
(43-37 deg.) 4/9  
Maximum diurnal temperature range, 37 deg.  
(66-29 deg.) 4/2

Average temperature this April, 52.3 deg. F  
Average temperature last April, 50.6 deg. F

Number of days this April with daily minimum  
temperatures of  
32 deg. or lower - 4; last April - 7.

### PRECIPITATION -

Total precipitation this April - 2.35" rain  
Total precipitation last April - 0.25" snow;  
7.26" rain/melted snow

Maximum one day precip. event this April;  
April 20, 1.48" rain.

Measurable rain fell on 9 days this April,  
11 days last April.

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Rick Anderson  
5/18/15  
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

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

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

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

## New Providence Memorial Day Parade

Once again Rick, WB2QOQ, was able to convince (dragoon) some members of NPARC to represent the rest of us in the annual New Providence Memorial Day parade. This parade is one of the few opportunities to let the town know that the club exists and that at least some of us are able to walk a few miles. Thanks to all who marched and especially to Rick for organizing it. K2EZR



Memorial Day this year turned out to be a nice day; with fine weather, though a bit warm in the sun. As in numerous prior years, our club participated in the parade lineup. This year, we had 7 members in attendance in the parade unit, which was a small but appreciated turnout. There were two members carrying our club banner with the rest behind, all with handie talkies, and waving small American flags.

It was a successful club activity, and we received applause and cheers from our fans along the parade route and especially as we passed the reviewing stand. A club with a membership of over 60 members, but only 7 taking part in an event such as this, is a real shame. Thanks to the following who participated in the parade unit: Andy Bean, KC2WUF; Bob Willis, K2GLS; Jim Stekas, K2UI; Andy Meyer, N2FYE; Paul Wolfmeyer, W2PTP; Tim Farrell, KD2EKN; and Rick Anderson, WB2QOQ.

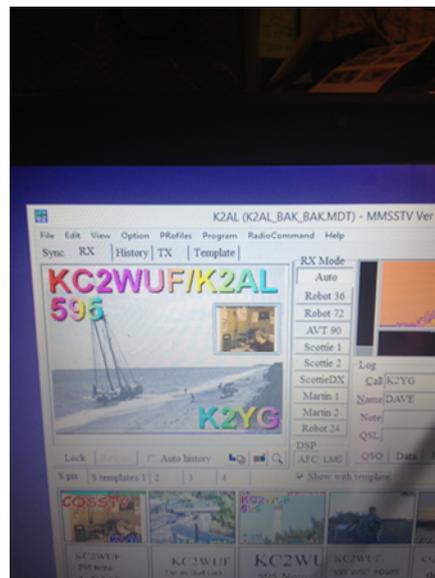
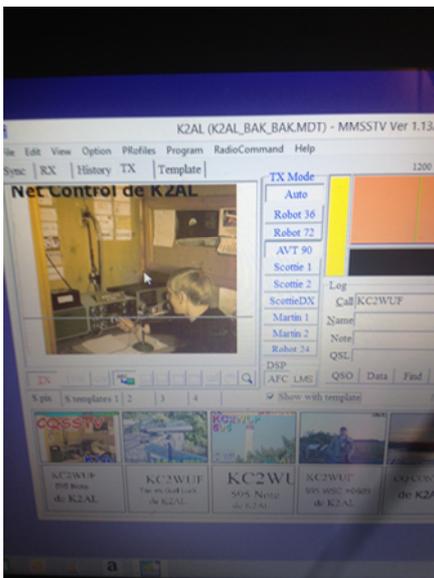
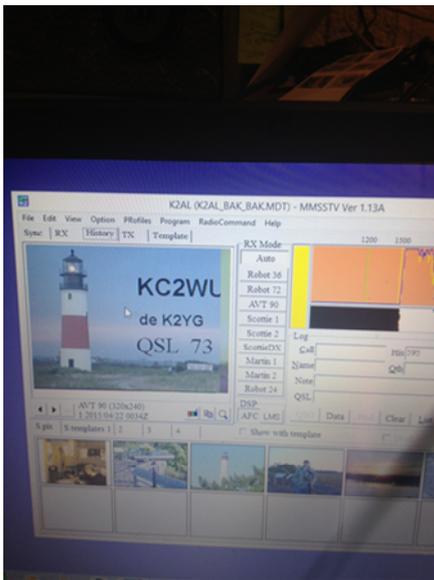
The April NPARC Digital Net tried out SSTV (Slow Scan TV). Participating were KC2WUF (NCS), K2YG, K2EZR, N2FYE and K2AL.

We were operating on 28.686 MHz.

The MMSSTV software can be easily downloaded. Frank, K2EZR, did it while the net was in progress. So we would like to see more members participate.

Here are some screen shots of our transmissions during the net.

Al, K2AL



First and Third Mondays at 9 PM. Join in if you can.

## SCIENTIFIC TIDBITS

### A New Kind of Antibiotic

For the first time in nearly three decades, scientists have uncovered a new class of antibiotics. This could be a game changer in the war against infections that do not respond to standard drugs. Over decades of exposure, many bacteria have evolved to become resistant to existing antibiotics. These superbugs now cause 2 million illnesses and 23 million deaths every year in the United States. Up to now, researchers have had little success developing new antibiotics. Nearly all antibiotics are derived from naturally occurring bacteria that produce their own antibiotics to kill off rivals. These bacteria are generally found in soil, but the problem has been that they will not grow in laboratory conditions; so researchers at Northeastern University developed a device that may finally allow them to access millions of “uncultured” bacteria as a source of potential antibiotics. The device is filled with tiny chambers that allow bacteria to be isolated while still growing in their native soil, enabling scientists to trick them into being “domesticated.” Of the 25 antibiotics they discovered, one, called teixobactin, proved to be highly effective in treating certain types of pneumonia, tuberculosis, and the staph infection MRSA in laboratory mice. Because of the way the new antibiotic works, by breaking down microbes’ outer cell walls, researchers believe it could be decades before any resistant strains emerge. This antibiotic essentially has evolved to be free of resistance. This discovery, which could take up to 5 years to reach the market, is thought to provide a promising source of new antimicrobials and go a long way in reviving the field of antibiotic discovery. Maybe by the time it takes for microbes to evolve resistance to this new antibiotic they will have lost their resistance to the old antibiotics so we can go back to them when the time comes – very interesting.

## SCIENTIFIC TIDBITS continued

### Atom-thick Transistor

A new material will let semiconductor makers design tinier chips, which could lead to faster, cheaper smartphones, tablets and other devices. University of Texas researchers created the material, which is called silicene and is an amazing one-atom thick. A barrier to ultrathin transistors until now has been that electrical signals tend to jump unexpectedly, causing problems. Silicene is made of silicon, the same stuff most chips are made of today, which should make it easier to work with. An atom-thick transistor made of silicene can function for up to a few minutes, potentially creating more opportunity for even smaller microchips. It's the first silicene transistor ever made and could eventually be used in place of underperforming graphene materials.

It seems to this writer that if our electronic world keeps getting smaller and smaller, it will someday disappear altogether.

Jim WB2EDO