

# MOUNTAIN SPARK GAPS

NPARC—The Radio Club for the  
Watchung Mountain Area



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

VOLUME 47 NO. 07 July 2012

## UPCOMING EVENTS

### Regular Meetings

**Mon. 8/13 & 8/27 7:30 PM**  
**New Providence Municipal Center**

**Brian, KA2MPG, has volunteered to give a presentation titled “Staying on Time and Frequency” At our 8/13 meeting. He will discuss techniques to compensate for drift in crystal oscillators.**

**James, KB2FCV, will describe his EME experiments at the 9/10 meeting.**

## 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 2012

President: N2KDK Paul Campano  
908-508-9595  
Vice Pres.: K2MUN David Berkley  
908-500-9740  
Secretary: K2JV Barry Cohen  
908-464-1730  
Treasurer: K2YG Dave Barr  
908-277-4283  
Activities: K2JV Acting

## 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

## 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:  
WB2QOO Rick Anderson  
WB2EDO Jim Brown

## Climatological Data for New Providence for June 2012

The following information is provided by  
Rick, WB2QOO, who has been recording  
daily weather events at his station for the  
past 29 years.

### TEMPERATURE -

Maximum temperature this June, 95 deg. F  
(June 20, 21, 29)  
Last June (2011) maximum was 93 deg. F.  
Average Maximum temperature this June, 81.7  
deg. F  
Minimum temperature for this June, 47 deg. F  
(June 4)  
Last June (2011) minimum was 52 deg. F.  
Average Minimum temperature this June, 60.2  
deg. F  
Minimum diurnal temperature range, 8 deg. (73  
- 65 deg.) 6/11  
Maximum diurnal temperature range, 29 deg.  
(83 - 54 deg.) 6/7

Average temperature this June, 71.0 deg. F  
Average temperature last June, 70.9 deg. F

Number of days this June with daily maximum  
temperatures of  
90 deg. or higher - 6; last June - 4.

### PRECIPITATION -

Total precipitation this June - 2.82" rain.  
Total precipitation last June - 2.8" rain.

Maximum one day precip. event this June;  
June 22; 0.58" rain.  
Measurable rain fell on 12 days this June, 7  
days last June.

=====  
Rick Anderson  
7/8/12  
243 Mountain Ave.  
New Providence, NJ  
(908) 464-8911  
[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

## FIELD DAY 2012



Assembling the VHF Beam



Preparing to Raise the Tower



Rotor in Place



Base Ready to go



Success



BIRD Watt Meter?



Guy, K2EFB, and XYL of W2FMI



GOTA Station



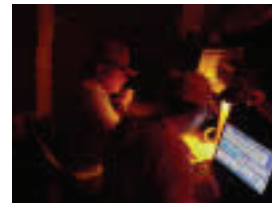
Lauryn, WW2OLF at the GOTA Station



Literature Table



Al, K2AL, Cooking



Night Phone Operation



WB2QOQ at VHF Station

As you will notice, these photos are low resolution. If anyone has better ones, please send them along as JPG files. The higher the resolution, the better.

## Results from the FM SPRINT Contest

<b>Station</b>	<b>2 mtrs</b>	<b>440 MHz</b>	<b>6 Mtrs</b>	<b>222 MHz</b>	<b>Points</b>	<b>Zips</b>	<b>Score</b>
<b>N2XJ</b>	<b>19</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>63</b>	<b>28</b>	<b>1764</b>
<b>W2FMI</b>	<b>15</b>	<b>8</b>	<b>7</b>	<b>1</b>	<b>56</b>	<b>23</b>	<b>1288</b>
<b>K2YG</b>	<b>12</b>	<b>2</b>			<b>20</b>	<b>9</b>	<b>180</b>
<b>K2MUN/R</b>	<b>9</b>	<b>4</b>	<b>1</b>		<b>27</b>	<b>13</b>	<b>351</b>
<b>W2PTP</b>	<b>15</b>				<b>19</b>	<b>10</b>	<b>190</b>
<b>KC2WUF</b>	<b>13</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>55</b>	<b>20</b>	<b>1100</b>
<b>NJ2HN</b>	<b>17</b>	<b>3</b>		<b>5</b>	<b>44</b>	<b>19</b>	<b>836</b>
<b>WB2QOQ</b>	<b>22</b>	<b>9</b>	<b>6</b>		<b>64</b>	<b>29</b>	<b>1856</b>
<b>K2AL</b>	<b>23</b>	<b>9</b>	<b>5</b>		<b>63</b>	<b>30</b>	<b>1890</b>
<b>W6PAM/R</b>	<b>15</b>	<b>8</b>	<b>4</b>		<b>53</b>	<b>17</b>	<b>901</b>
<b>KC2CFL</b>	<b>19</b>	<b>6</b>			<b>39</b>	<b>14</b>	<b>546</b>
<b>N2OCS</b>	<b>7</b>	<b>3</b>			<b>15</b>	<b>8</b>	<b>120</b>
<b>KC2YNC</b>	<b>6</b>	<b>7</b>			<b>26</b>	<b>7</b>	<b>182</b>
<b>KC2OII</b>	<b>5</b>				<b>5</b>	<b>3</b>	<b>15</b>

# SCIENTIFIC TIDBITS

## Land-Mine Detection

Land-mine detection is critical for military and civilian personnel in war zones. Student researchers at Poland's Military University of Technology have created an application that uses a phone's built-in magnetometer to detect magnetic fields around buried land mines, show the location and notify the user. The application has a 75% accuracy rate. This is all well and good, but what about the unfortunates that activate the remaining 25%. Also, what does one do about those mines constructed of non-metallic substances? It seems that a little more work is required.

## Co-Pilot

A car co-pilot developed by MIT researchers may provide an interim step between cars driven by people and cars that drive themselves. The MIT system includes a laser range finder and camera to spot obstacles, and software to compute their locations and identify safe zones. The system is currently being tested and, if it proves effective, it should show up in new cars in a relatively short period of time. Mercedes already has a system now on their cars that measures safe distances between two cars and alerts the driver to being dangerously close given the cars speed. This MIT system takes this development one step further.

## Driving & Texting

Texting while driving is known to be dangerous. Some studies have shown this practice to be more dangerous than drunk-driving. I can certainly attest to this as I have not had any near misses on the road from a drunk driver in quite some time, but I have had numerous close encounters with drivers who are either texting or talking on their cell phone. But cheer up folks there may be help on the way. Researchers in India have found a system to detect when someone is texting, and once detected, jams the phone. The device uses a radio-frequency identification chip to find out if the vehicle is moving and whether the driver is texting. Unlike similar devices, this technology can tell the driver from the passenger and jam only the driver's phone. Hooray for science!

*As a contributing editor of this publication, I would like to make a plea to the readership to volunteer their talents by contributing articles for publication herein. As I recall, when Frank (K2EZR) volunteered to take over the editorship of "Mountain Spark Gaps" there was a pledge from the membership to supply all sorts of aid to Frank in supplying material for publication. To date no material has been forthcoming as promised and Frank has been basically left in the lurch. I would think it would be nice if just one member, other than the two who publish every month, would fulfill their promise. Gee, I cannot imagine why it is so difficult to get people to volunteer for club assignments.*

Jim WB2EDO