

# MOUNTAIN SPARK GAPS

NPARC—The Radio Club for the  
Watchung Mountain area



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

VOLUME 46 April 2011 NO. 4

## UPCOMING EVENTS

### Regular Meetings

**Monday May 9 & 23**  
**7:30 PM**  
**Salt Brook School**

### Special Event

**May 30**  
**New Providence**  
**Memorial Day Parade**  
**Information inside**

## 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.

## Club Officers for 2011

President: N2KDK, Paul Campano  
908-508-9595  
Vice Pres.: K2MUN, David Berkley  
908-500-9740  
Secretary: K2JV Barry Cohen  
908-464-1730  
Treasure: K2YG Dave Barr  
908-277-4283  
Activities: KC2OSR, Sam Sealy  
973-635-8966

## 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  
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WB2QOO Rick Anderson  
WB2EDO Jim Brown

Climatological Data for New Providence for  
March 2011

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 March, 77 deg. F  
(March 18)  
Last March (2010) maximum was 73 deg. F.  
Average Maximum temperature this March, 49.3  
deg. F  
Minimum temperature for this March, 19 deg.  
F (March 3)  
Last March (2010) minimum was 26 deg. F.  
Average Minimum temperature this March, 31.2  
deg. F  
Minimum diurnal temperature range, 6 deg.  
(56 - 50 deg.) 3/6; (42 - 36) 3/31.  
Maximum diurnal temperature range, 32 deg.  
(77 - 45 deg.) 3/18.

Average temperature this March, 40.3 deg. F  
Average temperature last March, 46.3 deg. F

### PRECIPITATION -

Total precipitation this March - 6.74" rain/  
melted snow; 4.0" snow  
Total precipitation last March - 11.16"  
rain, no snow

Maximum one day precip. event this March;  
March 6; 2.4" rain.  
Measurable snow fell on 2 days this March, 0  
days last March.

=====  
Rick Anderson  
4/11/11

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

## MISCELLANEA

### PRESIDENT'S COLUMN

*Not available at press time.*  
(Hint, Hint)

NPARC members are invited to participate in this years Memorial Day Parade, taking place on Monday, May 30. Yea, I know; it may seem a bit premature to talking about the parade, but it will be here before we know it. Our club has annually participated in this town event, for as long as I can recall; and a decent attendance in this club activity is requested. This is the one public event where hundreds of town's people get to see the club members, and a good attendance is most welcomed. Last year we had 10 members participate in our parade unit, which was a fairly decent number, but it would be great to have a better showing. Our unit will walk the parade route, down Springfield Ave., between Central Ave. and Academy St. Please consider taking part in this community event. Please contact Rick, WB2QOQ, if you are interested in participating in the parade or have questions. [rick243@comcast.net](mailto:rick243@comcast.net); (908) 464-8911.



### 2010 Marchers

**In addition, the NPARC Emergency Response Team will provide communications assistance to the parade organizers and borough officials.**



# SCIENTIFIC TIDBITS

## Military Microwave Weapon

The U.S. military has tested a vehicle-mounted device in Afghanistan that uses microwaves to create an intense heating sensation on the skin. The Active Denial System is designed as a nonlethal weapon for safer crowd control versus firearms. A two second blast from this device can reportedly heat the skin to 130 degrees Fahrenheit. The skin would begin to burn after four minutes of sustained exposure. It is assumed that an individual exposed to this microwave assault would have the intelligence to move out of the microwaves' path long before combustion would take place. However, as this writer has come to realize, one should never assume anything. If this system is deployed for crowd control, it would really be bad public relations for those charged with controlling demonstration crowds to have people bursting into flames. It is a little scary to think such a device will be under the control of a bureaucratic brain!

## Nanocrystals Boost Solar Power

Researchers have found that nanosize crystals made from lead and selenium can increase the amount of light that solar cells transfer into electricity. The semiconducting Nanocrystals, or quantum dots, move electrons while letting less of their energy dissipate as heat. The material could theoretically boost a solar cell's efficiency by up to 66%. However, the researchers also stated the necessary wiring to carry the solar power to its destination would also have to be constructed of quantum dots. This wiring has yet to be developed. Oh well, back to the old drawing board.

## Biofuel Cell Implant Tested

French scientists have developed a glucose-powered fuel cell, which could replace batteries as the energy source for pacemakers and other implanted medical devices. A biofuel cell wouldn't run out of electricity, as long as it receives oxygen and sugars. One biofuel cell produced 6.5 millivolts, short of the 10 millivolts needed for today's pacemakers. However, the scientists predict that in a short time they will be able to develop more advanced devices that not only will power pacemakers but also more power hungry implants such as artificial kidneys for diabetics. I wish them nothing but good fortune in their development.

Jim  
WB2EDO