

MOUNTAIN SPARK GAPS

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



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

VOLUME 47 NO. 06 June 2012

UPCOMING EVENTS

Regular Meetings

**Mon. 7/9 & 7/23 7:30 PM
New Providence Municipal Center**

July 3, 7 PM

NPARC Emergency Response Team (ERT) will be responsible for assisting the Town Officials and the Event Organizers with communications.

Team will meet in the Village Shopping Center (A & P) parking lot.

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
Contact K2UI, Jim

MOUNTAIN SPARK GAPS

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Contributing Editors:
WB2QOO Rick Anderson
WB2EDO Jim Brown

Climatological Data for New Providence for
May 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 May, 93 deg. F (May
29)

Last May(2011) maximum was 86 deg. F.
Average Maximum temperature this May, 75.2
deg. F

Minimum temperature for this May, 42 deg. F
(May 11)

Last May(2011) minimum was 41 deg. F.
Average Minimum temperature this May, 56.3
deg. F

Minimum diurnal temperature range, 6 deg. (68
- 62 deg.) 5/24

Maximum diurnal temperature range, 35 deg.
(81 - 46 deg.) 5/19

Average temperature this May, 65.8 deg. F

Average temperature last May, 63.6 deg. F

Number of days this May with daily maximum
temperatures of
80 deg. or higher - 11; last May - 8.

PRECIPITATION -

Total precipitation this May - 5.13" rain.

Total precipitation last May - 4.27" rain.

Maximum one day precip. event this May; May
21; 1.26" rain.

Measurable rain fell on 19 days this May, 12
days last May.

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Rick Anderson
6/12/12

243 Mountain Ave.
New Providence, NJ
(908) 464-8911

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

New Providence Memorial Day Parade

NPARC members and guests participated in the New Providence Memorial Day Parade. The turnout was far better than last year. Thanks Rick, WB2QOQ, for all your efforts.



**2012 Marchers.
Thanks everyone!**

Field Day Pictures will be in next issue.

SCIENTIFIC TIDBITS

TRANSISTOR POWERED SIMILAR TO CELL

UC Merced scientists embedded a nanosized transistor in a cell like membrane and powered it using the same fuel a living cell uses. They built the transistor using carbon nanotubes and coated it in lipid bilayer, which mimicked a cell's membrane. They then added an ion pump and a solution of the cellular fuel adenosine triphosphate. Scientists measured the resulting electrical charges that passed through the nanotransistor. Such transistors may one day help monitor or treat medical conditions. Nanoscience is becoming more and more intriguing.

GENERATOR GETS POWER FROM HEART

A tiny, nearly invisible generator could be used as a medical implant, which generates power by the movement of a patient's own heart. The generator, which is only 100-500 microns wide, is made of zinc oxide and was developed by scientists at the Georgia Institute of Technology. The device can produce electricity when attached to a rat's heart. The device could be an ideal power source for sensors that monitor blood pressure, the heart and glucose level, according to MIT Technology Review. The device also can generate power from finger-tapping. It would seem that a lot of nervous people could generate a fair amount of power if hooked together in a proper network.

SCIENTISTS AIM FOR ARTIFICIAL BRAIN

MIT and Harvard scientists are developing a computer that they believe will mimic the brain's ability to visualize objects. If successful, such a computer could enable an autonomous vehicle to recognize obstacles and navigate around them. The scientists are researching how advanced graphics processing units could one day simulate the functions of the brain's visual cortex. They estimated it could take 5 to 10 years before the technology would be ready for application. If the military becomes interested in this project, it will undoubtedly take a much shorter time to come to fruition.

NEW DESALINATION MEMBRANES

New desalination membranes have been developed by UCLA engineers, who say a novel surface structure and chemical make-up will help the membranes clog less often with filtered impurities. The membranes, which the engineers say are ready for commercialization, can reduce the operating costs of reverse-osmosis desalination. When one considers the ever increasing water shortages worldwide, any process that improves the efficiency of desalination is tremendously important.

Jim WB2EDO