

# MOUNTAIN SPARK GAPS

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



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

VOLUME 47 NO. 10 October 2012

## UPCOMING EVENTS

### Regular Meetings

**Mon. 11/12 & 11/26 7:30 PM  
Salt Brook School Cafeteria**

### **Annual Holiday Luncheon**

**Saturday 12/1**

**Chimney Rock Inn**

## 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

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### 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

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### 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

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### 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

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### MOUNTAIN SPARK GAPS

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WB2QOO Rick Anderson  
WB2EDO Jim Brown

**This is the Sandy storm edi-  
tion.**

**Sorry is it late and short.**

**Weather summary not available.  
(Will have a double next time)**

By Bill WA2CG 6 Oct 2012

NPARC members enjoyed an early get together on Oct. 6<sup>th</sup> at the B.A.R.A. Hamfest @ Westwood School, on Ridgeway Ave in Wash. Twp. Barry, K2JV, along with Michael KD2APR, Club Pres. Paul, N2KDK, Brian KC2ZSZ, and Bruce, KQ2E made the 7:00 AM trip from Berkeley Heights to Bergen County. They were joined by Bill, WA2CG from Atlantic Highlands, and Bill, W2UDT from Gillette. Gene from KJI Electronics was on hand with plenty of ham gear, and the parking lot was full of “flea market” items for bargain hunters looking to complete their hamshacks. Another club member, Rich N2AUG was among them. The weather cooperated -- food and fellowship was all around and this event was a “beauty”. Something for everyone. Barry, K2JV and Bill WA2CG were door prize winners. Thanks to Bergen Amateur Radio Assn. for a job Well Done.

*Thanks Bill*

# SCIENTIFIC TIDBITS

## A New Camera

A pinhead-size camera costing only a few cents to make has been developed by Cornell researchers. This potentially improves the imaging capabilities of medical instruments and miniature robots at a much lower cost. The camera, which consists of a silicon chip, measures half a millimeter on each side and 100<sup>th</sup> of a millimeter in thickness. It can resolve images about 20 pixels across. It would seem that this development would open up a whole new way to exam the internal portion of the human body less invasively.

## Energy Scavenger

By scavenging energy in the air around us, a new antenna gathers energy that can be used to power wireless chips and other small devices. Georgia Tech researchers invented the device, which collects electromagnetic energy from radio, TV, cell phone and satellite waves. They say they have successfully operated a temperature sensor using energy captured from a nearby TV station's signal. Now if they can develop this system further, it may produce enough power to operate a ham rig in the field. Now that would be useful.

## Hooray for Algae

Speaking of energy, algae-derived biofuels could replace 17% of U.S. fuel imports by 2020, if the development of this alternate fuel source continues at its current pace, an Energy Department study shows. The study also concluded that algae can produce more than 80 times more oil per hectare a year than corn and is not a widespread food source, the use of which has caused the price of corn to soar. Algae can digest pollutants like nitrogen and phosphorous as well, which is something corn cannot do. Why the U.S. Government hasn't made a concerted push in this area the same way they have pushed corn seems to indicate that more votes are available in the farm vote than from those growing algae.

## A Wire Made of Bacteria

Certain types of bacteria have been found to produce protein strings that can conduct electricity better than some metals, according to scientists at the University of Massachusetts. The protein strings are a byproduct of the digestive process in those bacteria. With their conductive properties, such living nanowires could help merge biological systems and electronic devices. Scientists also see them used in biological batteries that are more powerful than chemical ones. Sure makes sense to me.

Jim WB2EDO