

MOUNTAIN SPARK GAPS

NPARC—The Radio Club for the
Watchung Mountain area



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

VOLUME 46 November 2011

NO. 11

UPCOMING EVENTS

Regular Meetings

Mon. Nov. 28 & Dec. 12 7:30 PM
Salt Brook School

Holiday Luncheon

12/3 Chimney Rock Inn
Valley Road, Gillette
Details inside

Ham Radio Kid's Day

January 8, 2012
BH Community Center
29 Park Avenue
2:00 PM to 5:00 PM
Setup at noon

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 2011

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: 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
Contact K2UI, Jim

MOUNTAIN SPARK GAPS

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Contributing Editors:
WB2QOQ Rick Anderson
WB2EDO Jim Brown

Climatological Data for New Providence for October 2011

The following information is provided by
Rick, WB2QOQ, who has been recording
daily weather events at his station for the
past 29 years.

TEMPERATURE -

Maximum temperature this October, 78 deg. F
(October 9)

Last October(2010) maximum was 75 deg.
F.

Average Maximum temperature this October,
62.2 deg. F

Minimum temperature for this October, 28
deg. F (October 31)

Last October(2010) minimum was 37 deg. F.

Average Minimum temperature this October,
46.4 deg. F

Minimum diurnal temperature range, 5 deg.
(61 - 56 deg.) 10/12

Maximum diurnal temperature range, 26 deg.
(78 - 52 deg.) 10/9.

Average temperature this October, 54.3 deg.
F

Average temperature last October, 55.2 deg.
F

PRECIPITATION -

Total precipitation this October - 6.0"
snow; 4.77" rain/melted snow.

Total precipitation last October - 4.27"
rain.

Maximum one day precip. event this October;
October 29; 6.0" snow; 1.6" rain/melted
snow.

Measurable rain fell on 11 days this Octo-
ber, 15 days last October.

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Rick Anderson

11/27/11

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

HOLIDAY LUNCHEON

The 2011 Holiday Luncheon will take place this year Saturday December 3rd at the Chimney Rock restaurant located at 342 Valley Road in Gillette. The cost per person is \$28.00. This includes pizza appetizers, garden salad, your choice from the menu (next page) and dessert. You don't need to decide your menu choice beforehand. The luncheon starts at 11:30am. Please pay our treasurer Dave Barr K2YG and he prefers a check made out to NPARC.

ANNUAL NPARC AUCTION

The auction is scheduled for 2/24/12 with a rain (snow?) date of 3/2/12. The location is the New Providence Municipal Center gym (same as previous years). Time to start going through the shack, junk box, garage, attic, etc. to find goodies you no longer want but someone else might.

Menu

Please Choose One Entree

Includes Pizza Appetizers & Garden Salad

Chicken Francaise

Boneless chicken breast egg battered and sautéed in a white wine lemon butter sauce, served over linguini

Apple Grove Salad

Garden fresh eld greens mixed with grannie smith apples, craizins, caramelized onions, toasted almonds & gorgonzola cheese tossed in fat free raspberry vinaigrette

Penne Avelino

Penne pasta tossed in a special sauce made from re roasted organic tomatoes, roasted garlic, fresh cream, basil and parmesan cheese

Shrimp Scampi

Succulent baby shrimp sauteed with garlic, white wine, lemon & butter, sprinkled with fresh parsley, served over linguini

Eggplant Parmigiana

Breaded fresh eggplant topped with tomato sauce, ricotta & mozzarella cheese, served with a side of linguini

Rigatoni Vodka

Rigatoni pasta with our classic pink creamy vodka sauce

Chicken Parmigiana

Breaded boneless chicken breast smothered in tomato sauce & topped with mozzarella cheese served over linguini

Open Sliced Steak with French Fries

On Italian toast with French Fries

Kids Menu

Please Choose One Entree

Jr. Chicken Tenders & French Fries,

Jr. Spaghetti & Meatball, Jr. Macaroni & Cheese, Jr. Grilled Cheese

SCIENTIFIC TIDBITS

VISIBLE LIGHT COMMUNICATIONS

The soaring popularity of wireless communication devices like smart-phones and tablets as well as the introduction of new mobile communication networks by wireless service providers has led to a surge in the demand for data. This has led to the cramming of the radio spectrum allocated for those services. So great has the problem become that researchers are now looking for ways to transmit large data volumes using a different portion of the spectrum: that of visible light. It seems that three factors are driving higher data consumption: higher usage of devices such as smart-phones and tablets; the deployment of high speed 4G networks; and data pricing.

Research groups using the visible light spectrum have demonstrated the feasibility of transmitting data using LEDs. The technology has the potential for a multitude of high speed, human-computer-data interactions. This is due to light-producing devices, such as indoor and outdoor light, TVs, computer screens, digital cameras, mobile phones with cameras, advertising displays, traffic light & signs, as well as power lines, may be able to transmit huge amounts of information at high speeds to receivers capable of converting light into electrical pulses. As an example, the digital camera and the camera on cell phones are very excellent systems to receive the visible light.

LEDs have a special characteristic to light on and off very fast. The data can be transmitted by lighting LEDs on and off at ultra-high speed. As the incandescent light bulb is now in the phase-out stage, LED light bulbs are beginning to enter their phase-in stage. This will lead to these lights simultaneously to be used for not only lighting but to be used for the transmission of data.

Businesses are starting to look favorably upon Visible Light Communication because of the lack of regulations for this technology and the possibility of using lower energy in data transmissions compared to radio waves. Not only is the cost cheaper but this type of transmission doesn't interfere with hospital, factory and space station equipment (and I might add amateur radio equipment). It also has the potential to be more secure than wireless local area networks because only the photoreceptors in the receivers could acquire particular information. However, poor visibility due to rain, snow, fog and other line-of-sight difficulties impede outdoor light data transmissions. Further research will have to take place to overcome these negatives, but with the enormous possibilities that this technology presents, the odds are very great that they will be overcome. This entire area is just opening so increased research funded by private capital will, as Captain Kirk said, "allow man to go where no man has gone before".

Jim WB2EDO