MOUNTAIN SPARK GAPS

NPARC—The Radio Club for the Watchung Mountain Area

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

VOLUME 49 NO. 11 November, 2014

UPCOMING EVENTS

Regular Meetings
12/8 & 12/22
Mon. 7:30
NP Senior Citizens Center

Annual Holiday Luncheon
Saturday 12/6
Chimney Rock Inn
342 Valley Road
Gillette

Kid's Day
Sunday 1/4/15
Details to Follow

See Third Page

Meeting Schedule

Regular Meeting: 7:30—9:00 PM
2nd Monday of each month at the
NP Senior & Adult Center
15 East Forth Street
New Providence

Informal Project Meeting: 7:30—9:00 PM
4th Monday of each month
Same location
Everyone is Welcome
If a normal meeting night is a holiday, we usually meet the following night.
Call one of the contacts below or check the web site

Club Officers for 2014

President: K2MUN David Berkley
908-500-9740
Vice President:KC2WUF David Bean
973-747-6116
Secretary: KD2EKN Tim Farrell
908-244-6202
Treasurer: K2YG Dave Barr
908-277-4283
Activities: W2PTP Paul Wolfmeyer
201-404-6914

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

Digital Net
First & Third Mondays 9 PM
Details as announced.

Club Internet Address

Website:http://www.nparc.org
Webmaster K2MUN David Berkley
Reflector: nparc@mailman.qth.net
Contact K2UI, Jim

MOUNTAIN SPARK GAPS

Published Monthly by NPARC, Inc.
The Watchung Mountain Area Radio Club
P.O. Box 813
New Providence, NJ 07974

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Contributing Editors:
WB2QOQ Rick Anderson
WB2EDO Jim Brown

Climatological Data for New Providence for October 2014

The following information is provided by Rick, WB2QOQ, who has been recording daily weather events at his station for the past 33 years.

TEMPERATURE -
Maximum temperature this October, 77 deg. F (October 14)
Last October(2013) maximum was 83 deg. F.
Average Maximum temperature this October, 64.7 deg. F
Minimum temperature this October, 35 deg. F (October 20)
Last October(2013) minimum was 32 deg. F.
Average Minimum temperature this October, 48.0 deg. F
Minimum diurnal temperature range, 4 deg. (53-49 deg.) 10/23
Maximum diurnal temperature range, 28 deg. (68-40 deg.) 10/6;(72-45 deg.)10/28.

Average temperature this October, 56.4 deg. F
Average temperature last October, 56.5 deg. F

PRECIPITATION -
Total precipitation this October - 4.21" rain.
Total precipitation last October - 0.74" rain.

Maximum one day precip. event this October; October 15, 0.82" rain.
Measurable rain fell on 15 days this October, 8 days last October.
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Rick Anderson
11/6/14
243 Mountain Ave.
New Providence, NJ
(908)464-8912
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

On the Agenda

Holiday Luncheon

Below is the entrée menu for the luncheon on December 6. Also included are "pizza" appetizers, soft drinks, and hot fudge sundaes for dessert.

The cost for the luncheon is $28 per person. Please bring a check (or cash if you must) to the Nov 24th meeting, or mail a check made out to NPARC to Dave Barr, 29 Montrose Ave, Summit NJ 07901, or if necessary, pay me at the luncheon. Payment for beer, wine and mixed drinks is the responsibility of the individual ordering.

Even if you pay at the luncheon, we need to know ahead of time if you intend to attend; the restaurant needs a head count. Please reply to this e-mail, or leave a message at the phone number listed in the club roster.

I look forward to seeing everybody there.

73, Dave, K2YG

Choice is made at the luncheon. We do not need to know the choice ahead of time.

Includes Pizza Appetizers & Garden Salad (and dessert).

Apple Grove Salad

Garden fresh field greens mixed with Granny Smith apples, raisins,

caramelized onions, toasted almonds and gorgonzola cheese

tossed in fat free raspberry vinaigrette

Chicken Française

Boneless chicken breast egg battered & sauteed in a

white wine lemon butter sauce over linguini

Capellini Monaco

Angel hair pasta tossed in olive oil, garlic, fresh spinach and ripe **toma-toes**

Menu Continued

Shrimp Scampi

Succulent shrimp sauteed w/ garlic, white wine, lemon, &

butter, sprinkled with fresh parsley over linguini

Eggplant Parmigiana

Breaded fresh eggplant topped with tomato sauce,

ricotta and mozzarella cheese, served with a side of linguini

Rigatoni Vodka

Rigatoni pasta in our classic pink creamy vodka sauce

Chicken Parmigiana

Breaded boneless chicken breast smothered in tomato sauce

and topped with mozzarella cheese, served over linguini

Open Sliced Steak with French Fries

On Italian toast

Kids Day

Sunday 1/14/15

Probably will take place at the Senior Citizen's in New Providence.

Annual Auction

2/27/15

Time to clean out the shack!

PRESIDENTS COLUMN
By K2MUN

November 2014

The end of my two year term as President of NPARC is coming next month. This is the final President's column I will write, at least in the near future. I want to take a few lines to say that I have enjoyed my stint as President. Working with all of you on major events, such as our Auction and Field Day, has been exciting and rewarding.

I have been fortunate to be surrounded by a group of enthusiastic and skilled executives. Even better, all of these fellow hams will continue as members of your executive board in the next year as a result of the Elections for 2015.

In summary, for 2015:
President: David Bean, KC2WUF
Vice President: Jim Stekas, K2UI
Program Manager: Paul Wolfmeyer, W2PTP
Secretary: Tim Farrell, KD2EKN
Treasure: Dave Barr, K2YG

These new officers will be introduced formally at the Holiday Luncheon and will begin their new roles (or continue their old roles), at the beginning of the New Year.

We have an exciting year coming up which is a major anniversary for NPARC, about which you will hear more as we enter the new year, and I look forward to participating fully!

Here is a final note, for those who have hung on through a number of columns exploring design of antennas and who want to hear the final solution for the problem that 'started it all'; my need for an antenna that worked properly on 40 meters in limited space. Although I think the problem had many solutions, using the available space, the actual solution came in an unexpected manner.

I am in the process of moving to Metuchen, NJ, and, as part of the move, found that I now have more space for antennas. As a first step, I was able to re-install the 40 meter off-center fed dipole I had used for a number of years and that tunes well on all bands from 80 meters through 6 meters. Of course the radiation pattern is best controlled on 40 meters but I have made worldwide contacts on many bands with the added advantage that my new location is much quieter than downtown Westfield. I can reach W2LI from Metuchen but the digital net, for now, seems out of reach.

Lastly, I want to remind you of several upcoming events:

The NPARC Holiday Party will be at Chimney Rock Inn in Gillette on Saturday, December 6. Menu choice information is available on the website! No selections need be made before the luncheon, in any case. Please plan to bring your 'significant other' and enjoy good cheer, the introduction of 2015 Officers and a great array of awards.

Kid's Day is just after New Year's on January 4th. This year we will probably try a new, much more comfortable, venue. Details to be announced shortly.

At this time I want to sincerely thank David for his monthly columns. Having material I can count on makes the task of putting this publication together every month much easier. I hope his successor will keep up the good work.

It is also a good time to thank Rick, WB2QOQ, and Jim, WB2EDO, for their faithful contributions. I encourage anyone who has interesting material to send it along. If I can format it and it is not too long it will be used.

Frank, K2EZR

SCIENTIFIC TIDBITS

From Chaos to Electricity

Around 2008 or 2009, a civil engineer by the name of Martin Wickett was thinking about what he could possibly use to drive a generator and came up with an answer: "Whatever." It was then that the Whatever Input to Torsion Transfer (WITT) transmission was born. In a nutshell, the WITT is a mechanism that converts energy collected by two pendulums into unidirectional rotation in a flywheel, which then drives a generator. Thus, random movement of the WITT is converted to electricity.

Having undergone a few years of development and receiving financial and engineering support from a consortium of universities and other participants, a working device has now been completed by Supacat Ltd., a Devon, UK based developer of high mobility vehicles. It is slated to undergo extensive testing by the University of Exeter at their Dynamic Marine Component Test Facility. Because things that float around in the sea are exposed to substantial wave movement, it should be the perfect environment for evaluating the device's performance.

The current version weighs about 220 pounds, is built from precision-engineered components and cast aluminum, and is about the size of a desktop computer. The beauty of it is that the WITT can be scaled up or down for a nearly unlimited range of applications. According to Paul Weston, renewable energy technical manager for ship repair and conversion company A&P Falmouth, "The device can also be used in all types of movement whether on land or at sea, on a backpack, yacht, or ship. It is a pioneering project that transfers motion into energy…"

To see one in operation check out the video at: (www.witt-energy.com).

Innovation

Combining nanotechnology and 3-D printing, scientists are now able to create mechanical devices that mimic the functions of human organs, says Steve Dent, a researcher at the University of California at San Diego. He revealed a new liver-like device that can remove dangerous toxins from the blood, a potential boon for victims of animal stings, bacterial infections, and other toxic horrors. Nanoparticles have already been found to help neutralize toxins in the blood, but ingesting them can cause secondary infections. To solve this problem, scientists 3-D printed a hydrogel matrix to house nanoparticles. Used outside the body like a dialysis machine, the device acts as a faux liver, cleansing the blood by attracting and capturing toxins. Though still in early development, a test model successfully destroyed all toxins in multiple studies. Wow, what a breakthrough this will be! You can get liver dialysis while waiting for a liver transplant.

Jim WB2EDO