

MOUNTAIN SPARK GAPS

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



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

VOLUME 48 NO. 12 December 2013

UPCOMING EVENTS

Regular Meetings

Mon. 7:30

Jan. 13 & 27

Salt Brook School Cafeteria

Kids Day

Sunday 1/5/14 2—5 PM

Berkeley Heights Rec. Center

See inside for details

Annual Auction

Feb. 21

New Providence High School

New location—Same rules

Meeting Schedule

Regular Meeting: 7:30—9:00 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 2013

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

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Editor: K2EZR Frank McAneny
Contributing Editors:
WB2QQQ Rick Anderson
WB2EDO Jim Brown

Climatological Data for New Providence for
November 2013

The following information is provided by
Rick, WB2QQQ, who has been recording
daily weather events at his station for the
past 33 years.

TEMPERATURE -

Maximum temperature this November, 67 deg.
F (November 1)

Last November (2012) maximum was 68 deg.
F.

Average Maximum temperature this November,
50.4 deg. F

Minimum temperature for this November, 16
deg. F (November 25)

Last November (2012) minimum was 24 deg. F.
Average Minimum temperature this November,
32.1 deg. F

Minimum diurnal temperature range, 7 deg.
(33-26 deg.) 11/28

Maximum diurnal temperature range, 29 deg.
(60-31 deg.) 11/27

Average temperature this November, 41.3
deg. F

Average temperature last November, 40.8
deg. F

PRECIPITATION -

Total precipitation this November - 2.64"
rain, Trace snow.

Total precipitation last November - 9.0"
snow, 1.41" rain/melted snow.

Maximum one day precip. event this Novem-
ber; November 27, 1.23" rain.

Measurable rain fell on 10 days this Novem-
ber, 1 day last November.

=====
Rick Anderson
12/8/13

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

NPARC

The Amateur Radio Club for the Watchung Hills Area

In cooperation with the Berkeley Heights Recreation Commission
and the New Providence Recreation Department

Presents “Ham Radio KIDS DAY”



A chance for kids of all ages to operate a Ham Radio Station and speak with other kids from all over the USA and Canada, and possibly from all over the world!

This event takes place on **Sunday January 5, 2014** at the Berkeley Heights Community Center, 29 Park Avenue next to the Town Hall, **between 2:00 PM and 5:00 PM**

No experience required. Just show up at any time in the afternoon.

Licensed Radio Amateurs from NPARC will set up the station starting at noon, and will be available to answer any questions which you or your parents may have.



PRESIDENTS COLUMN

By K2MUN

When you read this column, we should be heading into 2014, the New Year. Besides the probable snow, ice and cold, your new NPARC Officers take over for 2014. Well, actually, most of the officers are continuing from 2013: I will be continuing as President; David Bean (KC2WUF) as Vice President; Paul Wolfmeyer (W2PTP) as Activities Manager and Dave Barr (K2YG) as Treasurer. However, we do have one new Officer: Tim Farrell (KD2EKN) is taking over from Hillary Zaenchik (KC2HLA).

As I did last year, I'd like to introduce your 2014 officers by providing additional background about them. For the continuing 2013 officers, I have already done this and if you are curious take a look at the back issues of Spark Gaps with my officer introductory columns. These are available on the web site at <http://nparc.org/newsletters.htm>. Specifically the column on David Bean was January; Paul's was in February while March was my month. Dave Barr needs no introduction although if there is popular demand I'm willing to do so anyway.

So, I'd like to introduce you to Tim, our new Secretary. Tim embodies the old adage that if you want something done, ask somebody who is already busy! He was trained as an Engineer, graduating from Rutgers in 2003 with a B.S. in Electrical and Computer Engineering. He has used that training in various ways moving from Sales Engineer to his current company ASCO Power Technologies, working in Florham Park, where he is Senior Laboratory Engineer. ASCO makes power control systems including monitoring equipment, transfer switching gear and other industrial control systems. As many of you may recall, we had a Panel Discussion in December 2012, "Preparing for the Next Electrical Power Failure" (<http://www.nparc.org/2011/Emergency%20Power/Emerq.pdf>) — certainly an ongoing discussion to which Tim can contribute greatly. In addition to his demanding work at ASCO, he also has his own business selling AMSOIL synthetic motor oils (<http://www.tahotrods.com/>).

If two jobs aren't sufficient, Tim has been a soccer referee for the past 20 years and now works games at youth travel level, high school varsity and college matches. He has refereed in multiple state championships matches something that requires exceptional understanding of the game; a quick accurate eye, the ability to make rapid decisions and to deal with confrontations when the decisions are controversial. These capabilities may be of help working with NPARC. In addition, Tim is a volunteer with the Patriot's Path Council of the Boy Scouts of America. There he serves as a Merit Badge Counselor as well as a member of both the Watchung Mountain District Advancement Committee and the Patriot's Path Council STEM Committee. Amateur radio is relevant to these activities and I hope Tim will tell us more about them in future. Finally, on the volunteer front he is an active member of the Military Transport Association of New Jersey, assisting the U.S. Marines at Picatinny with their annual Toys for Tots collection work including acting as a crew member on the annual Toys for Tots Train (<http://www.toysfortotsnj.com/>).

Adding to his busy life, Tim joined the ranks of Ham Radio and earned his call, KD2EKN, in July of 2013. He is now studying for his General license with a target test date of early 2014. Tim doesn't come from a Ham background but his father did spend time in Army intelligence during the Vietnam War. Tim has had the experience of seeing his father interpret the 'secret' language of CW from random sources including a military-themed game where the verdict was 'meaningless nonsense.' His fiancée's (to whom he is to be married in July) father is a silent key (KA2KET) who he never met.

I want to welcome Tim as Secretary of NPARC where I am sure he will bring the capabilities that have allowed him to managed his demanding life to benefit our club. Please take the time to get to know him better and support him, and the rest of your Officers, in doing their jobs.

Reminder: Even before our first meeting (January 13) we have our Winter Kid's Day on Sunday, January 5! Kids will be there, actively on the air, from about 2:00 - 5:00 PM but setup will be from about 12:30 PM (Pizza available first-come, first-serve). Members are also needed to discuss Amateur Radio, and its benefits for kids, with Parents during the event. This is an important event for NPARC and will take place at the Berkeley Heights Community Center, 29 Park Avenue (next to Town Hall). Come and participate!

I look forward to 2014 and wish you all a Happy New Year!

At the Annual NPARC Holiday Luncheon a revised version of the "Grand Old Ham" award was presented for the first time.



Congratulations Jim. You deserve it!

SCIENTIFIC TIDBITS

Super-Duper Computers

The position of top dog in the battle for supercomputer supremacy is constantly shifting. In November 2010, it belonged to China's Tianhe-1A system, with a demonstrated performance of 2.57 petaflops per second. By June 2011, it had shifted to Japan's K Computer that performed at 8 petaflops per second, and which retained the title by pushing its performance to 10.51 petaflops per second the following November.

However, the United States regained its dominance in June 2012 thanks to the IBM BlueGene/Q system installed at the Lawrence Livermore Lab, which performed at 16.32 petaflops per second. Now, however, the Oak Ridge National Lab has picked up the torch with Titan – the first machine to achieve 20 petaflops per second.

To put these speeds into perspective, a petaflop is a quadrillion floating-point operation, so we are talking about 20,000 trillion calculations per second. Imagine that there is no such thing as hair loss. Then, take the number of hairs on the heads of all seven billion people on Earth and multiply it 23 times. That is pretty close to the number we are talking about.

The Titan's design is a Cray XK7 system that contains 18,688 nodes – each of which operates with a 16-core AMD Opteron 6274 processor and an NVIDIA Tesla K20 GPU accelerator. These have access to 7,000 TB of memory. Titan will be harnessed to provide computing power for research in energy, climate change, efficient engines, materials, and a myriad of other disciplines. Even though Titan is currently the top performing super computer, competitors will be continuing to push the speed envelop. As an example of the competitive quality out there, China has announced that it is building a machine, which when deployed in 2015, will run at 100 petaflops per second.

We have really come a long ways from the TRS-80's days.

Jim WB2EDO

Since Jim was awarded the “Grand Old Ham” , he is being given an additional page. I believe he is aiming for an another award.

SCIENTIFIC TIDBITS

Women’s Gift

Ever since the dawn of civilization man has considered himself the stronger and wiser of the two sexes. The possible reason for this viewpoint was the first males of the Stone Age were bigger, hairier, and stronger and knew how to wield a club. Very quickly the females succumbed to the male’s superior physical strength. Traditionally man was a warrior who hunted and brought home the food and the woman cooked, kept the house and raised the children. As we all know this relationship between the sexes has been equalizing for centuries until in this millennium it has reached a point where women have been accepted for combat duty alongside men on the battlefield. The relationship between the abilities of men and women has been the subject of countless studies over the years and has turned up many areas where women are superior in performance to their male counterpart. One such study several years ago was conducted by the U.S. Air force and showed that women were very capable fighter pilots and in certain situations were superior to men.

Now there has been another fascinating study that concerns women’s ability at multitasking. Busy women who juggle home and career often claim to be better at multitasking than men, and now there is evidence to support them. After administering several tests to 120 men and 120 women, British psychologists concluded that men have more trouble juggling priorities and are slower and less organized than women when switching between them. The researchers found that men and women were equally adept at completing two tasks on a computer when they could tackle them one at a time, but men’s performance slowed more substantially – 77% compared with 69% for women – when they were forced to switch rapidly between the tasks. In another experiment, participants were given eight minutes to locate restaurants on a map, do simple math problems, answer the phone, and decide how to search for a lost key in a field. Particularly in the lost-key challenge, women out performed men, who were more impulsive and failed to think through their search. University of Hertfordshire psychologist Keith Laws tells BBC.com that the study suggest that “in a stressed and complex situation, women are more able to stop and think about what is going on in front of them.”

Sorry guys it looks like we are heading toward a matriarchal society whether we like it or not. Bill Cosby was right when he said that he thought when he was first married that he was the boss of the family. But somewhere along the line he lost it. As a matter of fact he said, “I don’t think I ever had it. If the truth were known, I don’t really want her job.” This author tends to agree; it is a very tough job.

Jim WB2EDO