MOUNTAIN SPARK GAPS

NPARC—The Radio Club for the Watchung Mountain Area

Website: http://www.nparc.org
Club Calls: N2XJ, W2FMI
Facebook: New Providence Amateur Radio Club (NPARC)

VOLUME 53 NO. 12 December 2018

Regular Meetings

1/14 & 1/28
Monday 7:30
DeCorso Community Center

Upcoming Events

Kids Day
1/5/19 DeCorso Center
15 East Fourth St.
New Providence, NJ
2:00 to 5:00 PM
Setup 12:00

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 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 2018

President: W2PTP Paul Wolfmeyer
201-406-6914
Vice President:K2GLS Bob Willis
973-543-2454
Secretary: K2AL: Al Hanzl
908-872-5021
Treasurer: K2YG Dave Barr
908-277-4283
Activities: KA2MPG Brian Lynch
973-738-7322

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
28,084 — 28,086
Will be using PSK and RTTY
Net control K2YG

Club Internet Address

Website: http://www.nparc.org
Webmaster KC2WUF David Bean
Reflector: nparc@mailman.qth.net
Contact K2UI, Jim

MOUNTAIN SPARK GAPS

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Editor: K2EZR Frank McAneny
Contributing Editors:
WB2QOQ Rick Anderson
W2PTP Paul Wolfmeyer
K2UI Jim Stekas

Climatological Data for New Providence for November 2018

The following information is provided by Rick, WB2QOQ, who has been recording daily weather events at his station for the past 37 years.

TEMPERATURE -
Maximum temperature this November, 71 deg. F (November 2)
Last November(2017) maximum was 72 deg. F.
Average Maximum temperature this November, 47.7 deg. F
Minimum temperature this November, 16 deg. F (November 23)
Last November(2017) minimum was 20 deg. F.
Average Minimum temperature this November, 36.9 deg. F
Minimum diurnal temperature range, 5 deg. (34 - 29 deg.)11/15
Maximum diurnal temperature range, 16 deg. (69-53 deg.)11/1;(62-46)11/3; (48-32)11/12;(43-27)11/21.

Average temperature this November, 42.3 deg. F
Average temperature last November, 42.9 deg. F

PRECIPITATION -
Total precipitation this November - 8.19" rain/melted snow; 5.5" snow
Total precipitation last November - 1.67" rain

Maximum one day precip. event this November -
November 15, 5.5" snow; 1.42" rain/melted snow,sleet
Measurable rain fell on 12 days this November, 13 days last November.

YTD Precipitation - 59.40"

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Rick Anderson
12/11/18

243 Mountain Ave.
New Providence, NJ
(908)464-8912
rick243@comcast.net

Lat = 40 degrees, 41.7 minutes North

President's Column December 2018

Well, it's time to bid farewell to 2018—I think it has been a good year for NPARC.

We moved our auction to Saturday and experienced increased attendance and active participation. So we'll try it again in 2019—on Saturday February 23.

We tried our hand at Direction Finding with the TriCounty group. Bob Willis, K2GLS, helped us get plans and equipment together. But we could have used more dry-runs practicing with our equipment… anyway, we tried it and had fun.

Field Day started out with threats of rain but turned out ok. We ended up first in the Northern New Jersey Section for Class 2A. About half of our points were duo to "extras" like visiting dignitaries, publicity, etc…but it all counts… Thanks to everyone who participated whether before the event, setting up, operating, helping with food, securing extra points, submitting info and the scores…

Throughout the year a number of our members participated in the ARRL Grid Square Competition…..notable in the top third of New Jersey participants were KC2WUF, K2AL, W2UDT, K2GLS, and KC2ONL (now N2JU). Congrats on the steady work and achievement.

And the Holiday Luncheon! Hillary and Eric's Happy Birthday for Marilyn was a highlight I understand. Congrats to the award winners:

Ken Hanzl, W2IOC, as Rookie of the Year—he's really jumped into the hobby!

Tim Farrell, KD2EKN, as our Ham of the Year—now a regular leader at Mile 17 in the NY Marathon, he's also an active volunteer with Toys for Tots and other activities.

Brian DeLuca, W2EMC, received the Wouff Hong.

Again—a good year—on to 2019:

January 5—Kids Day

February 23—Auction

Hope your holidays are going well…

73 for now

The Immortality of Standards

Jim Stekas - K2UI

Over 200 years ago Benjamin Franklin conducted experiments with static electricity, charging and discharging Leyden jars. He proposed a theory of electricity as a fluid, which explained the charge of a Leyden jar as an excess of electric fluid on the glass. By definition a “positive” excess of charge was left on glass after rubbing it with silk. Franklin had no way of knowing that the charge left on the glass was due to the transfer of negatively charges electrons to the silk leaving behind positively charged “holes” in the glass.

Thanks to Franklin's definition the flow of current in a wire is in the opposite direction to the flow of physical charges (i.e. electrons.) Electrons in a vacuum tube flow from the cathode to the plate but the current flow is from plate to cathode, a very inconvenient truth for a prospective novice to grasp. Since Franklin's time the metric system has redefined the standards for length and mass but no one has had the chutzpah to flip the definition of charge.

When the Bell System was in its infancy batteries were used to power the circuits and 48V was adopted as the standard. This was high enough to provide good range with a carbon microphone without being a dangerous shock hazard. Standard in-home telephone wiring uses a pair of green/red wires (tip/ring [1]) with DC voltages of -48V [2] (red) and 0V (green) to which you could connect a candlestick phone from 1915 and it will work just fine. Even though FiOS and Vonnage use VOIP (voice over IP) for their telephony networks, both support the 100 year old standard telephone interface and it could well be around for another 100 years.

The RF world has pretty much adopted 50 Ω as the standard input/output impedance used for almost all microwave modules and test equipment. The standardization on 50 Ω was made during WW2 as a compromise between coax cable loss and power handling capability[3]. For hams, 75 Ω might make more sense because it gives a good match to a dipole. However, the ham world adopted the 50 Ω standard a long time ago and there is no good reason to change. (Ditching the PL-259 / SO-239 ***would*** be an improvement, however.)

The most ridiculously incongruous standard that will never change is the QWERTY keyboard. Microsoft will happily change user interfaces to Windows and Office apps that people have grown comfortable with and used for many years. But even Microsoft would never think of “improving” on the QWERTY keyboard.

The QWERTY keyboard is analogous to a saxophone, with notes mapped to seemingly random fingerings. The “improved” Dvorák keyboard has the keys in alphabetical order, which is analogous to the keys on a piano arranged in pitch order. But once an instrument is mastered the fingers “know” where they need to go and the player doesn't consult an imaginary diagram in his head. What is important is not the particular configuration but that it doesn't change. The world doesn't need, or want, an “improved” sax that professional sax players can't play.

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1 Telephone terminology is tip/ring rather than green/red, referring to the connections made to the phone plugs on the patch panels operators used to complete calls 100 years ago.

2 The reason for using -48V rather than +48V is that it minimizes the rate of oxidation of the copper.

3 The CATV industry has standardized on 75 ohm coax which has lower loss than 50 ohms. But 50 ohm coax has a thicker center conductor a a higher current/power capacity.