

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)**

May 2025

Volume 58 No. 5

Regular Meetings

**Second & Fourth Mondays
at New Providence Salt Brook School**

**May 12 - Instant Tuning by
W6EFI and WB3EFT**

May 26 - Memorial Day Parade

Upcoming Events

**Digital Net Mondays at 9 PM – 28.085 MHz (+/-)
CW Training Net, 9PM Thurs – 28.050 or 7.030 MHz**

Check announcements in the Reflector for details.

Meeting Schedule

Regular Meeting: 7:30—9:00 PM
**2nd & 4th Monday
of each month**
Watch for Emails

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 2025

President: K2AL, Al Hanzl
908-872-5021
Vice President: W2EMC Brian DeLuca
973-543-2454
Secretary: K2AL, Al Hanzl
908-872-5021
Treasurer: K2YG, Dave Barr
908-277-4283
Activities: N2TO, Kevin Glynn
917-885-4424

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
Mondays 9 PM
28.084 — 28.086 MHz
Will be using PSK and RTTY
Net control KC2WUF

CW Training Net
Thursdays 9 PM
28.050 or 7.050 MHz
Net control K2YG

Club Internet Address

Website: www.nparc.org
Webmaster KC2WUF David Bean
Reflector: nparc@mailman.qth.net
Contact K2AL, Al

MOUNTAIN SPARK GAPS

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Contributing Editors:
WB2QOQ Rick Anderson

Climatological Data for New Providence - March 2025

The following information is provided by Rick, WB2QOQ,
who has been recording daily weather events at his station
for the past 44 years.

TEMPERATURE -

Maximum temp. this March, 80 F (March 29)
Last March(2024) maximum was 71 F.
Average Maximum temp this March, 55.0 F

Minimum temp this March, 18 F (March 3)
Last March(2024) minimum was 24 F.
Average Minimum temp this March, 34.6 F

Minimum diurnal temp range, 8 F (51 – 43 F)3/30
Maximum diurnal temp range, 36 F(80 - 44 F)3/29

Average temp this March, 44.8 F
Average temp last March, 45.0 F

PRECIPITATION -

Total precipitation this March– 4.62” rain
Total precipitation last March - 7.52” rain/melted snow

Maximum one day precip. event - March 5, 1.41” rain
Measurable rain fell on 13 days this March
12 days last March.

YTD Precipitation – 8.23” rain/snow melt

=====
Rick Anderson 4/13/2025
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

President's Report

NPARC is celebrating its 60th anniversary as an incorporated radio club this year. In celebration of this event, we have planned a get-on the -air operating event in May with the call sign N2J.

This special event call sign is reserved from May 17 (0000UTC) through May 31 (2359UTC). Members planning to operate should sign up at: docs.google.com

Special Event Details

- **BANDS:** 160-10 meters and 2 meter simplex including the WARC bands (it is not a contest). Please adhere to your class operating privileges.
- **EXCHANGE:** RST and State and name
- **QTH:** Operate from your home operating station. Members are welcome and encouraged to operate mobile, portable, or as a POTA station.
- **MODES:** All modes- phone, CW and digital modes including FT8 and FT4.
- **CALL ID:** Per FCC rules, you must identify with our assigned call once per hour if using a 1x1 call. The assigned call associated with N2J is N2XJ. On FT8 or FT4 or CW, send "N2J ID N2XJ" once per hour. On phone, "This is N2XJ operating special event call sign N2J".
- **LOGGING:** For N3FJP AC Log users, go to:

File>New>"Start a New Log with a New Database".

Name the file : "LogData N2J.mdb (my recommendation). Log your contacts here.

When you have completed your operating for the event, save your ADIF file. Go to:

File>Export ADIF>Whole Log

and save your ADIF file as "ACLogADIF_N2J_Your Call.adi" (my suggestion). Make sure to note the directory path where you saved it so you can retrieve it later. Email this ADIF file to kc2wuf@arrl.net. For other logging programs or if you do not have a program or any logging questions, contact me at k2al@arrl.net.

- **SPOTTING NETWORKS:** It is OK and highly encouraged to "spot yourself" on Telnet and DX Summit or whichever spotting networks you access. You can send "SES 60th Anniversary NPARC" , for example, in the info section.
- **CALLING CQ:**
 - Phone: "CQ CQ CQ Special Event Station N2J. November 2 Juliet calling CQ Special Event for the 60th Anniversary of the New Providence Amateur Radio Club.N2J calling CQ and standing by"
 - CW: An example- "CQ CQ CQ de N2J N2J NPARC SES CQ de N2J BK". Send and receive RST and state as a minimum exchange. Sending your name is also a nice courtesy.

On phone, be prepared to give a brief description of the history of the club- We are an ARRL affiliated club serving the Watchung Hills NJ area, incorporated in 1965 by Bell Labs employees in Murray Hill, NJ and have been actively serving local hams and the local communities for 60 years. We have 75 members with a wide array of interests who participate in public service events, Field Day, Kids Day and STEM Fairs at local schools. And remember to say go to the N2XJ QRZ page for info on the N2XJ call sign and the club and how to get a special commemorative QSL card.

Please use good operating procedures. Listen before transmitting and it is always good to ask if the frequency is in use. Stay away from net frequencies and politely move if asked. On the rare occasion that an operator gets rude, remember you are representing the club on the air. Be polite, patient and courteous.

Any questions regarding the event, contact me or our Activities Chair, Kevin, N2TO.

Memorial Day Parade

In other Club happenings, NPARC will be marching in the New Providence Memorial Day Parade again this year. It is always nice to have a big turnout and W2PTP will once again be driving one his beautifully restored classic cars. See the article by WB2QOQ for full details.

Field Day

And Field Day is rapidly creeping up on us. We are in the process of obtaining approval to use the ball field behind Governor Livingston High School in Berkeley Heights once again this year. Field Day is June 28-29 so reserve the dates.

Given the longer days and warmer weather, its time to inspect your antennas and dream about stacked yagis on a 100-foot tower....

73 es 88

Al, K2AL

NPARC President

Popular Contests in May 2025

Dave Barr – K2YG

Contest Name*	Dates (EDT)	Modes	Exchange	Notes & Websites**
ARI Int DX Contest	5/3 Sat 8 am to 5/4 Sun 8 am	CW Phone RTTY	Italy: rs(t)+prov code non: rs(t)+serial #	QRP/LP/HP 80-10 meters See: concursos.ure.es
7th Area QSO Party	5/3 Sat 9 am to 5/4 Sun 3 am	CW Phone Digi (no FT)	7's: rs(t)+st&cnty non: rs(t)+state	QRP/LP/HP 160-10 m Exch=5 letters: 2 letters for state and 3 for county. Only 2 letter state for us. See: 7qp.org
Indiana QSO Party	5/3 Sat 11am-11pm	CW Phone	IN: rs(t)+county non: rs(t)+state	QRP/LP/HP See: www.hdxcc.org
Delaware QSO Party	5/3 Sat 1 pm to 5/4 Sun 8pm	Phone Digi RTTY CW	DE: rs(t)+county non: rs(t)+state	QRP/LP/HP 160-10 meters, VHF Bonus K3QBD See: www.fsarc.org
New England QSO Party	5/3 Sat 4pm -1am (Sun) 5/4 Sun 9am - 8pm	Phone CW/Digital	NE: rs(t)+county non: rs(t)+state	QRP/LP(<150)/HP 160-10 meters See: neqp.org
VOLTA RTTY Cont	5/10 Sat 8am to 5/11 Sun 8am	RTTY	RST + Serial # + CQ Zone	No power restrictions 80-10 meters See: www.contestvolta.it
Canadian Prairies QSOP	5/10 Sat 1pm - 11pm	CW Phone	VE4-6: rs(t)+district Non: rs(t) + state	QRP/LP/HP 40-10m (no 80m) See: cpqp.ve6hams.ca
Arkansas QSO Party	5/17 Sat 10am- 10pm	CW, Phone, Digi (no FT)	AR: rs(t)+county non: rs(t)+state	QRP/LP(150w)/HP 160-2 meters Bonus: WR5P See: www.arkqp.com
Feld Hell Sprint	5/17 8 am to 12 N	FeldHell	Name, FH# (if member); QTH; Grid	No power restrictions. See website for freqs & get member #. See: Feld Hell Club
CQ WW WPX CW	5/23 Fri 8pm to 5/25 Sun 8pm	CW	rst + serial #	QRP/LP/HP 160 – 10 meters www.cqwp.com
ARI Int DX Contest	5/3 Sat 8 am to 5/4 Sun 8 am	CW Phone RTTY	Italy: rs(t)+prov code non: rs(t)+serial #	QRP/LP/HP 80-10 meters concursos.ure.es

Check www.contestcalendar.com or contest specific websites
for more information on these and many other radio contests.

State QSO Parties allow out-of-state stations to contact only in-state stations for that specific contest. In-state stations may contact all contest stations. See websites for county abbreviation lists. The county codes for the New England QSO Party have changed radically since last year.

The 7th Area QSOP includes AZ, ID, MT, NV, OR, UT, WA & WY. The New England QSO Party includes: CT, MA, ME, NH, RI & VT. All New England, 7th Call Area, and Indiana county codes are 5 digits beginning with the 2 letter state abbreviation and followed by a 3 letter county code. Delaware county codes remain the same 3 digit codes as they have been. The N1MM logging program has a logging choice named "IN7QPNE" which will log all qso's in the 7QP, the NEQP as well as the concurrent INQP and DEQP in a single log. That (Cabrillo format) log can be uploaded to each of the 4 qsop's sites which will automatically sort QSOs into the four contests. The advantage is we do not have to switch from one log to another as we participate in these four qso parties.

New Providence Memorial Day Parade

Rick Anderson – WB2QOQ

NPARC members are invited to participate in this years Memorial Day Parade, taking place on Monday, May 26. Our club has participated in this town event, for many years.

This is the one public event where hundreds of town's people get to see the club members, and a good attendance from our members is most welcomed.

Our unit will walk the parade route, down Springfield Ave., between Central Ave. and Academy St. Please consider taking part in this community event. As last year, Paul W2PTP, offered one of his classic cars, for members who may not be comfortable walking the route. Please reach out to me to register for this event, either walking or riding; or questions. Limited room in car. Members are requested to wear club shirts and caps, as last year.

Thanks Much !

Rick Anderson, WB2QOQ

rick243@comcast.net

(908) 464-8911.



Parade Participants, 2024, with Classic Car following !

Junkbox Bargain Problem

Jim Stekas – K2UI

Last month we posed the following problem:

Hiram, a local ham, embarked on a homebrew project for which he required ten resistors with the following values: 100Ω, 220Ω, 680Ω, 1.8kΩ, 2.7kΩ, 6.2kΩ, 33kΩ, 47kΩ, 470kΩ, and 2.0MΩ. By a stroke of good fortune, a visit to Greenbrook Electronics uncovered a large box of surplus ¼ watt resistors of 5% tolerance. The box contained 100 resistors of each of the 168 standard resistance values.

How many resistors should Hiram expect to pull from the box in order to get one of each of the ten values he required?

Solution:

Starting with a pile of 16800 resistors, 1000 of which have values he needs, Hiram has a probability of $p = 1000/16800$ of getting a needed value on the first pick. The expected number of picks he needs to get the 1st needed resistor is: $E_1 = \frac{1}{p} = \frac{16800}{1000} = 16.8$.

After getting the 1st good resistor, Hiram picks again hoping to get one of the 9 other values. In the box there would now be $16800 - E_1$ resistors and any of 900 would give a 2nd needed resistor. Since $E_1 \ll 16800$ we will ignore it and estimate the number of picks to get at the second useful value as: $E_2 \approx \frac{16800}{900} = 18.7$.

Ignoring the slow depletion of the 16800 resistors with each round, the total expected number of picks to get all 10 values is:

$$\sum_{n=1}^{10} E_n \approx 16800 \cdot \left(\frac{1}{1000} + \frac{1}{900} + \frac{1}{800} + \frac{1}{700} + \frac{1}{600} + \frac{1}{500} + \frac{1}{400} + \frac{1}{300} + \frac{1}{200} + \frac{1}{100} \right) = 492$$

The above calculation assumes a constant number of 16800 resistors in the box for every pick. But by the time Hiram is done the box contains 16308 fewer resistors which is 97% of what we started with. So our simplifying assumptions isn't so bad. A detailed numerical calculation taking into account the slow depletion of resistors in the box gives:

$$\sum_{n=1}^{10} E_n \approx \frac{16800}{1000} + \frac{16783}{900} + \frac{16765}{800} + \frac{16744}{700} + \frac{16720}{600} + \frac{16692}{500} + \frac{16659}{400} + \frac{16617}{300} + \frac{16562}{200} + \frac{16479}{100} = 484$$

Not significantly different from the simplified estimate.

Reference

1. This is a variation on the [Coupon Collector's Problem](#) .