

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)**

July 2025

Volume 58 No. 7

Regular Meetings

Second & Fourth Mondays

at New Providence Municipal Bldg (3rd Floor)

July 14 - VEC Program, Eric Russell, KD2ONY

July 28 TBD

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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
973-615-1262
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 - May 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 May, 84 F (May 3)
Last May(2024) maximum was 85 F.
Average Maximum temp this May, 70.0 F

Minimum temp this May, 45 F (May 24)
Last May(2024) minimum was 45 F.
Average Minimum temp this May, 53.4 F

Minimum diurnal temp range, 4 F (51 – 47 F)5/22
Maximum diurnal temp range, 27 F (82 - 55 F)5/2,
27 F (76 – 49 F)5/12

Average temp this May, 61.7 F
Average temp last May, 64.4 F

PRECIPITATION -

Total precipitation this May– 8.49” rain
Total precipitation last May -4.0” rain

Maximum one day precip. Event - May 14, 2.91” rain
Measurable rain fell on 17 days this May
17 days last May.

YTD Precipitation – 20.22” rain

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Rick Anderson 6/9/2025

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

N2J

The N2J special on-air event commemorating NPARC's 60th Anniversary as an incorporated radio club wrapped up last month.

I would like to acknowledge the following members for participating in the event and for making a combined 779 contacts over the course of the 15-day event : K1DK, KC2OSR, KC2WUF, N2TO, W2EMC, W2PTP and K2AL. Modes operated were phone, CW, FT8 and FT4. David, Kevin and Brian also operated POTA with N2J. We worked 49 countries and 44 states.

NPARC Field Day

NPARC 2025 Field Day is in the books and by all accounts was a success. I would like to thank all those members and family members and friends who participated in the planning, preparation, set-up and tear down and who operated and logged. We will acknowledge individuals and report results in depth at the July 14 meeting and in formal reports over the coming weeks.

Sussex Hamfest

The club has reserved two indoor tables at the Sussex Hamfest, Sunday, July 13, for club members to use.

Club Meetings

A reminder that the summer Club meetings are at the Municipal Building, 360 Elkwood Avenue in New Providence, 3rd floor conference room. The room is reserved for the July 14, July 28 and August 11 meetings.

So, hoping everyone is enjoying the start of summer and taking advantage of the warm weather to get all those antenna projects done.

73

Al K2AL

Popular Contests in July 2025

Dave Barr – K2YG

Contest Name*	Dates (EDT)	Modes	Exchange	Notes & Websites**
Thirteen Colonies***	7/1 Tue 9am to 7/7 Mon 12m	All Modes	RST/State	All HF Bands except 60 m; Work 13 calls: K2A thru K2N + GB13COL, WM3PEN and TM13COL See: 13colonies.us
Marconi Mem HF Test	7/5 Sat 10 am to 7/6 Sun 10 am	CW	RST + Serial #	QRP/LP/HP 160-10 m (no WARC bands) See: www.arifano.it
IARU HF World Championship	7/12 Sat 8am to 7/13 Sun 8am	CW Phone	IARU HQ: rs(t)+Society All others: rs(t)+ITU Zone	QRP/LP/HP 160-10 (no WARC bands) See: www.arl.org
NA QSO Party, RTTY	7/19 Sat 2pm to 7/20 Sun 2am	RTTY	NA: Name+St/Prov/Country Others: Name	QRP/LP 80 – 10 m (no WARC Bands) See: NAQP-Rules.pdf
Alabama QSO Party*	7/26 Sat 11am to 11pm	CW Phone	AL: rs(t) + county Non AL: rs(t) + state	QRP/LP/HP 80-10 m (no WARC Bands) See: alabamacontestgroup.org

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.

** No WARC bands in any contest.

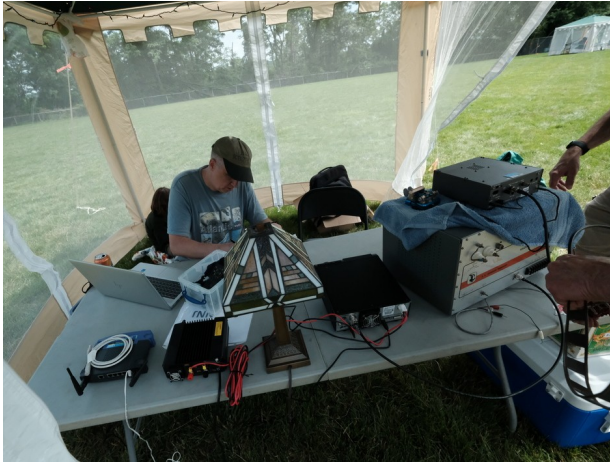
***13 Colonies is not a true contest.

There are many more contests every month including weekly and monthly repeating contests with a variety of abilities required, such as slow speed cw contests. For info on more contests, please check www.contestcalendar.com.

NPARC Field Day 2025

Don Madson – K2DAM





N2J Special On-Air Event Summary

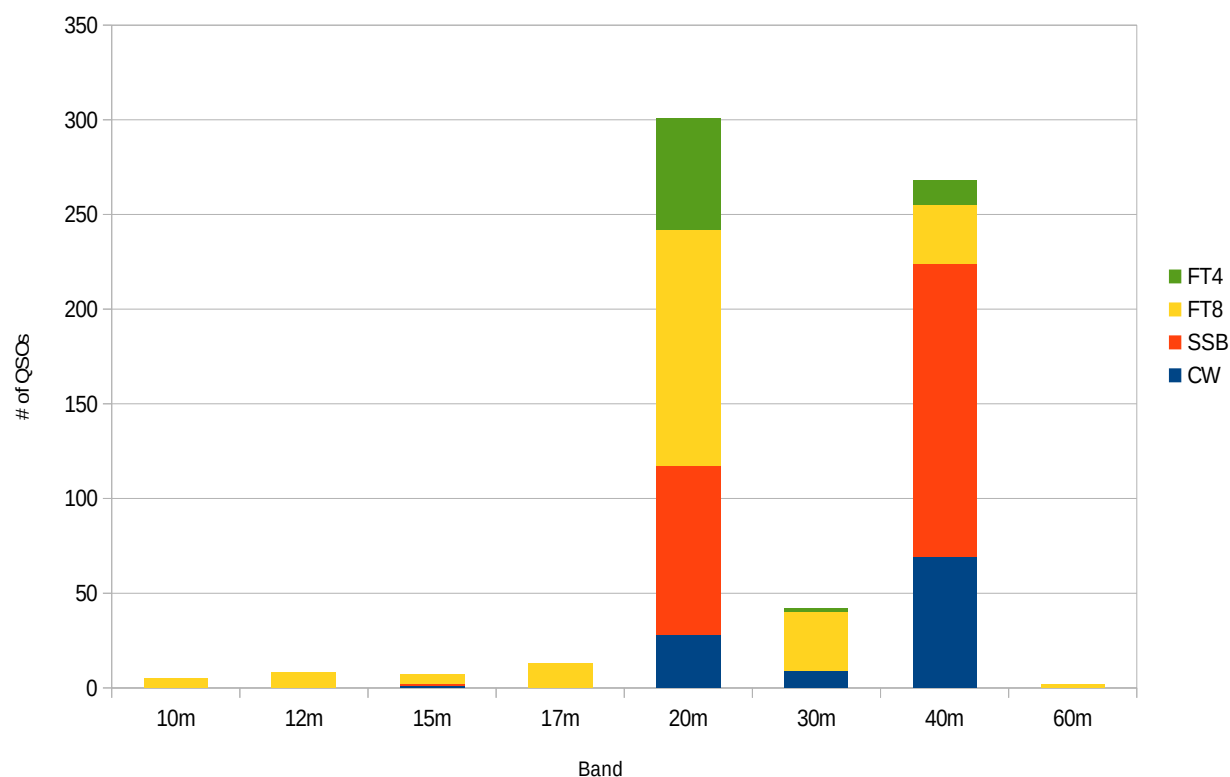
David Bean – KC2WUF

The N2J Special Event took place from 17May2025 0000UTC thru 31May2025 2359UTC to help NPARC celebrate our 60th Anniversary as an incorporated club. Over the 15 days of operation, 8 operators signed up for slots and operated from their own QTHs or at a valid POTA park. The band conditions during the period was less than ideal, but the various operators succeeded in making 779 QSOs. After uploading the QSOs to LotW, we have received 398 LotW QSLs as of 14Jun2025.

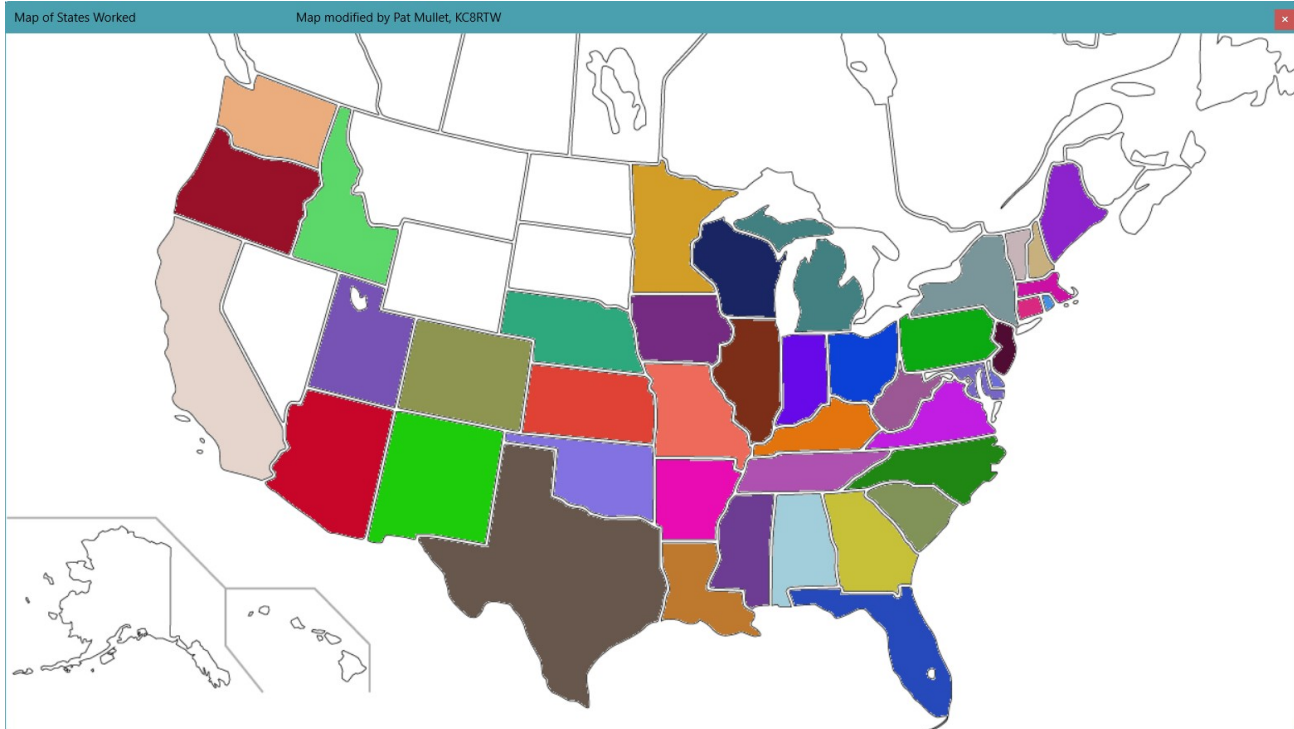
Of the 779 QSOs worked during the 15 days, N2J stations worked 43 States, 4 Canadian Provinces and 47 other DXCC entities using 4 modes (CW, SSB, FT8 and FT4).

N2J Special Event

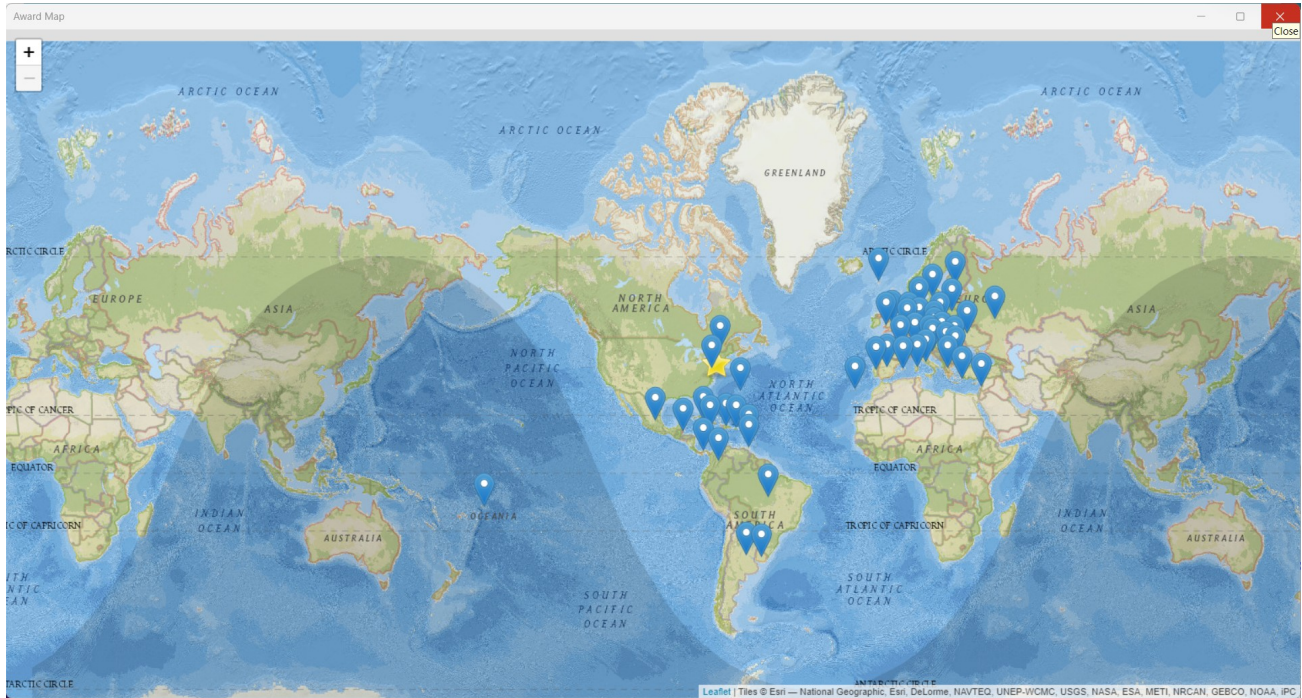
QSOs by Band, Mode



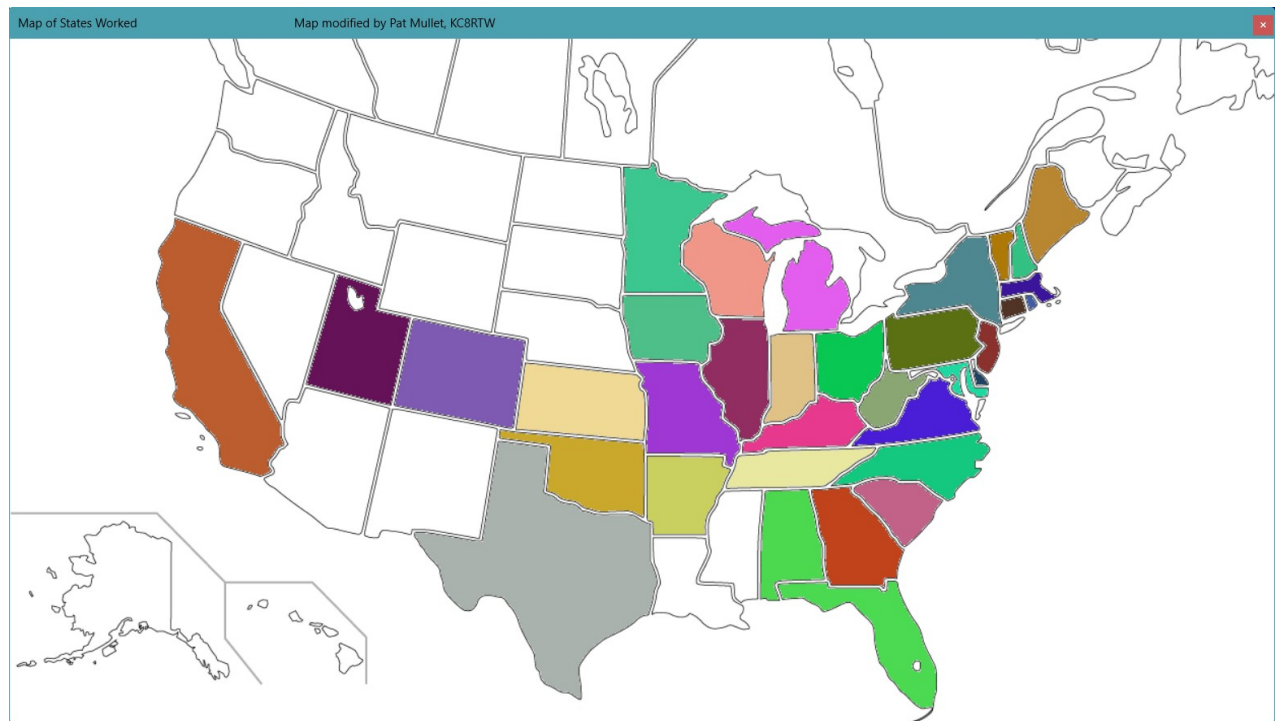
States Worked



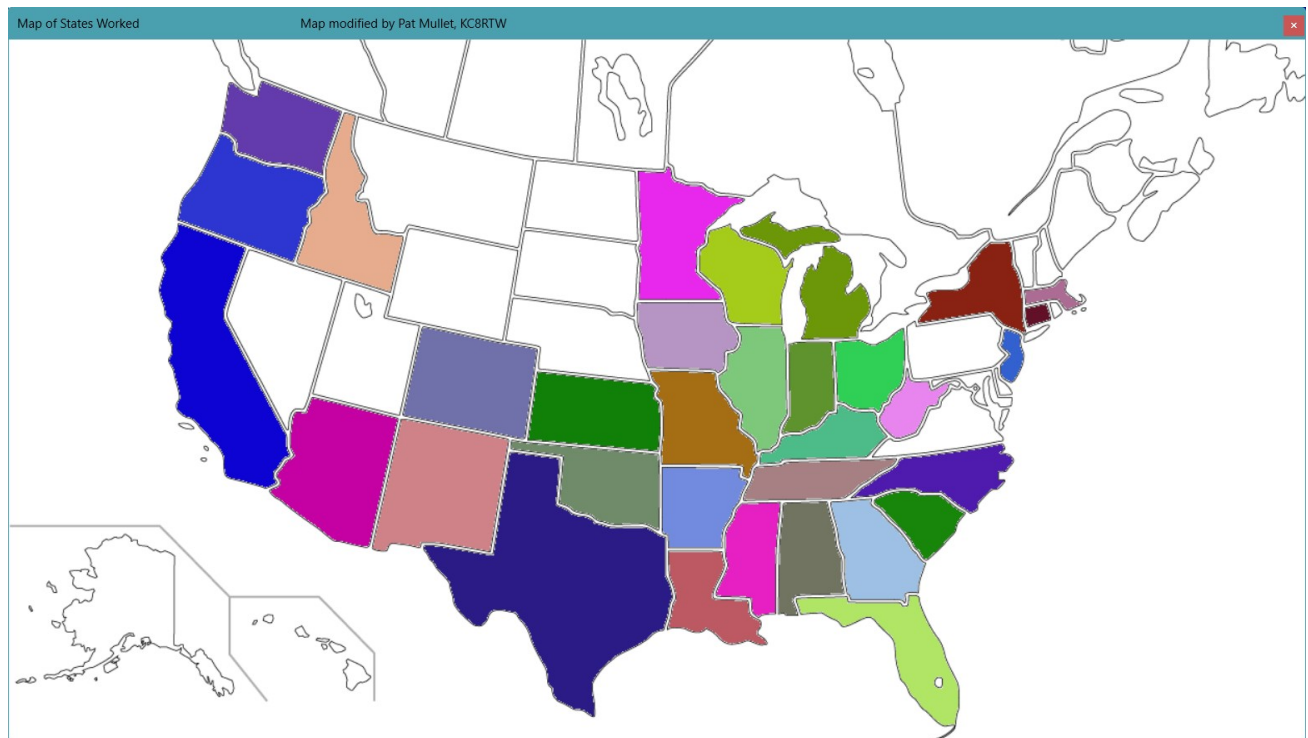
DXCCs Worked



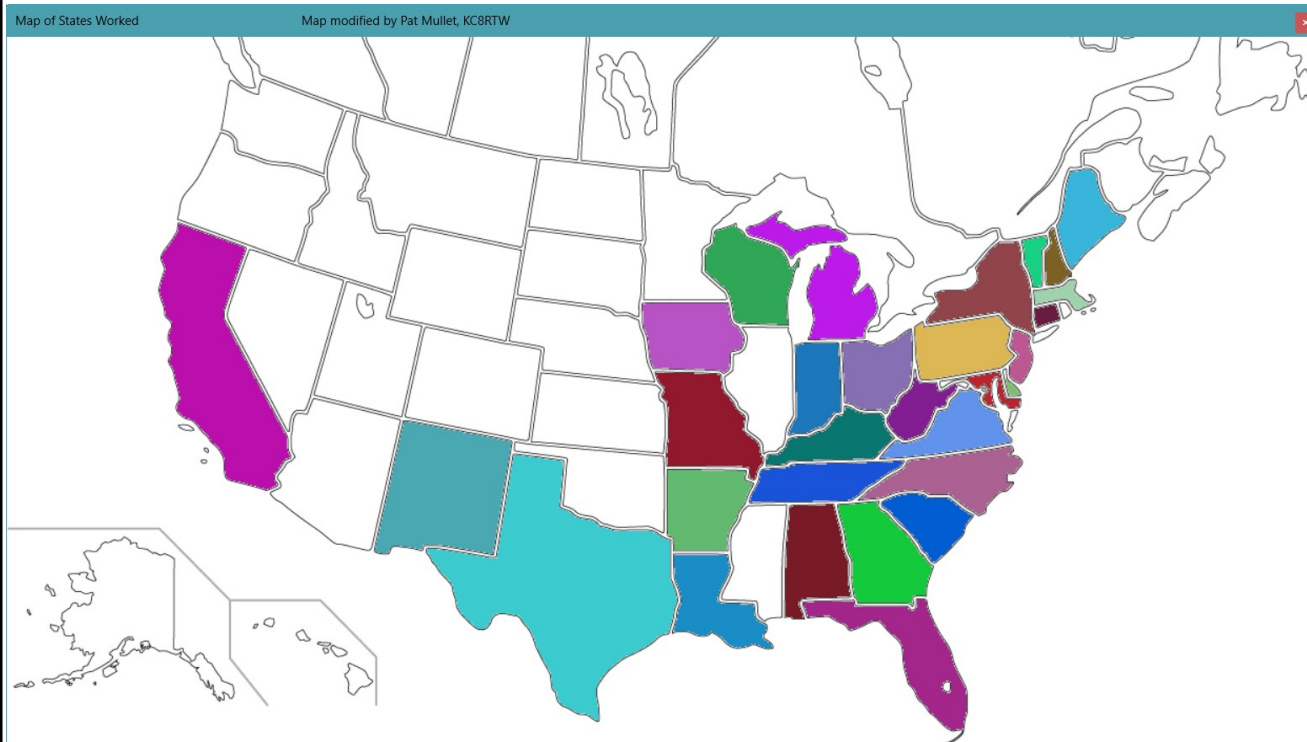
States Worked on 40m



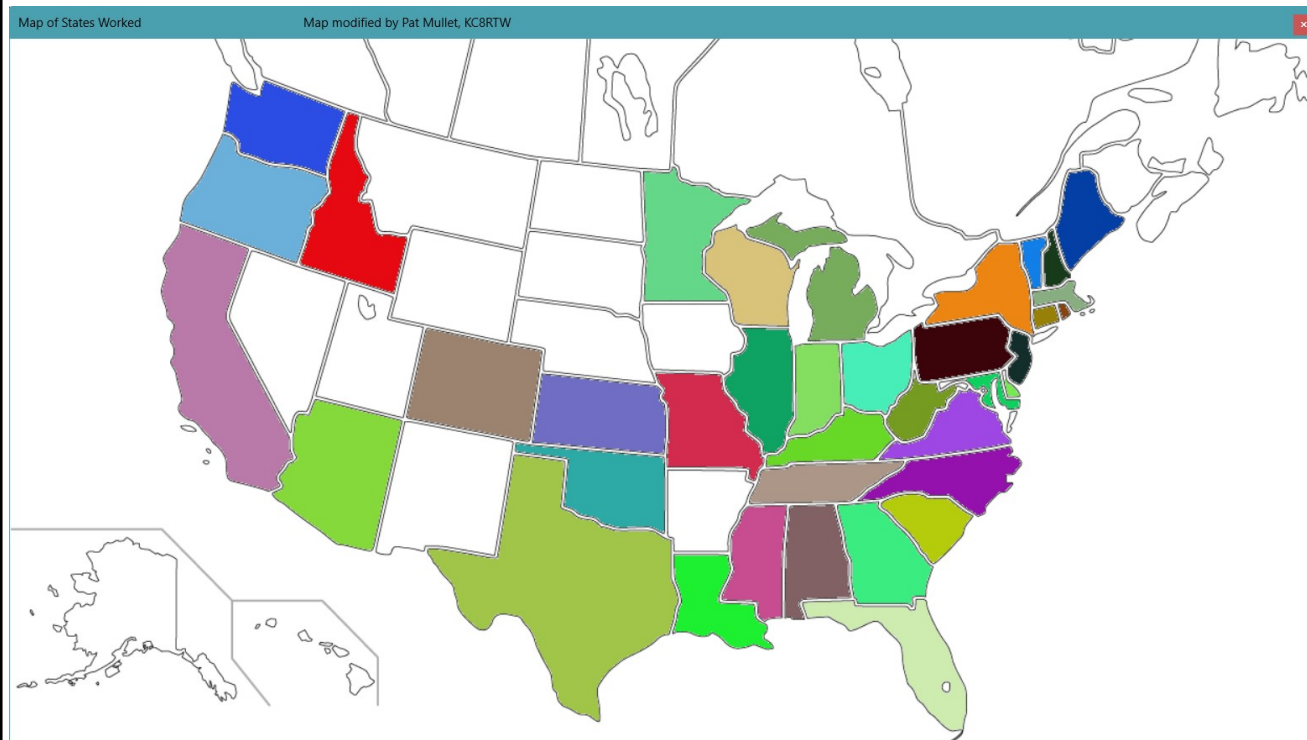
States Worked on 20m



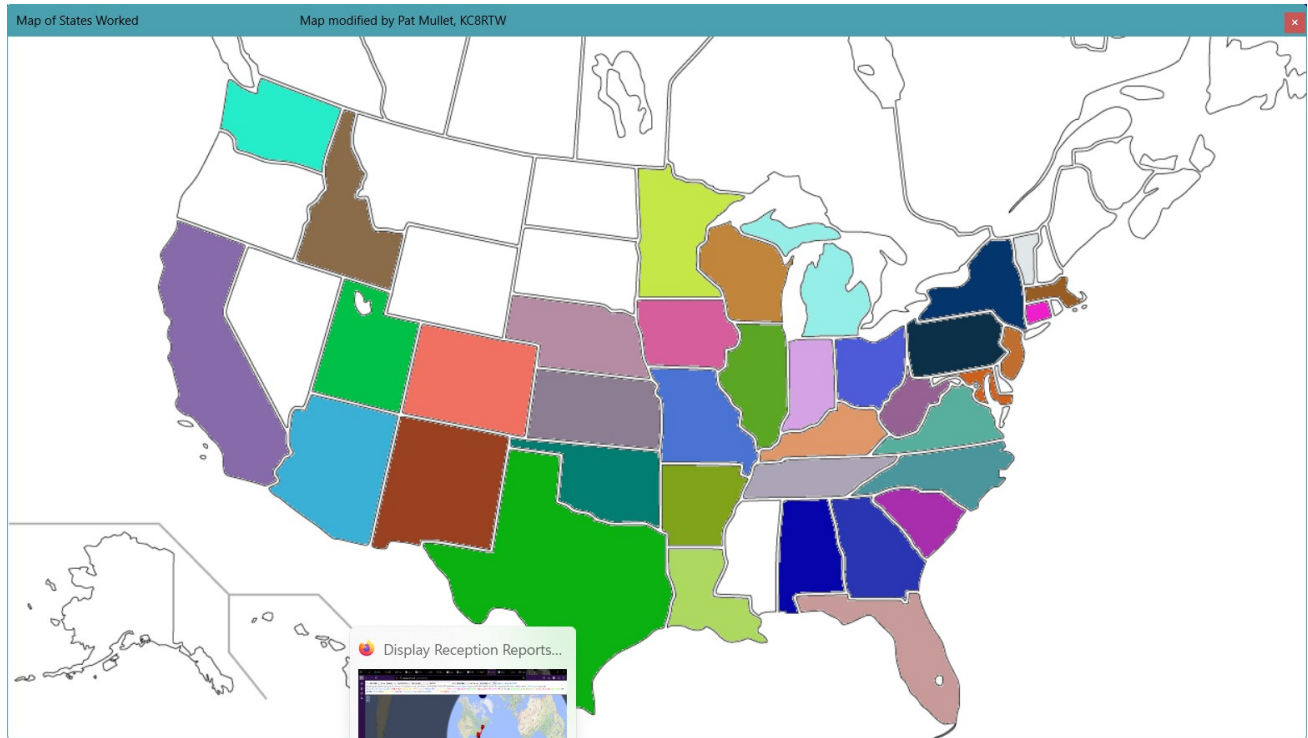
States Worked with CW



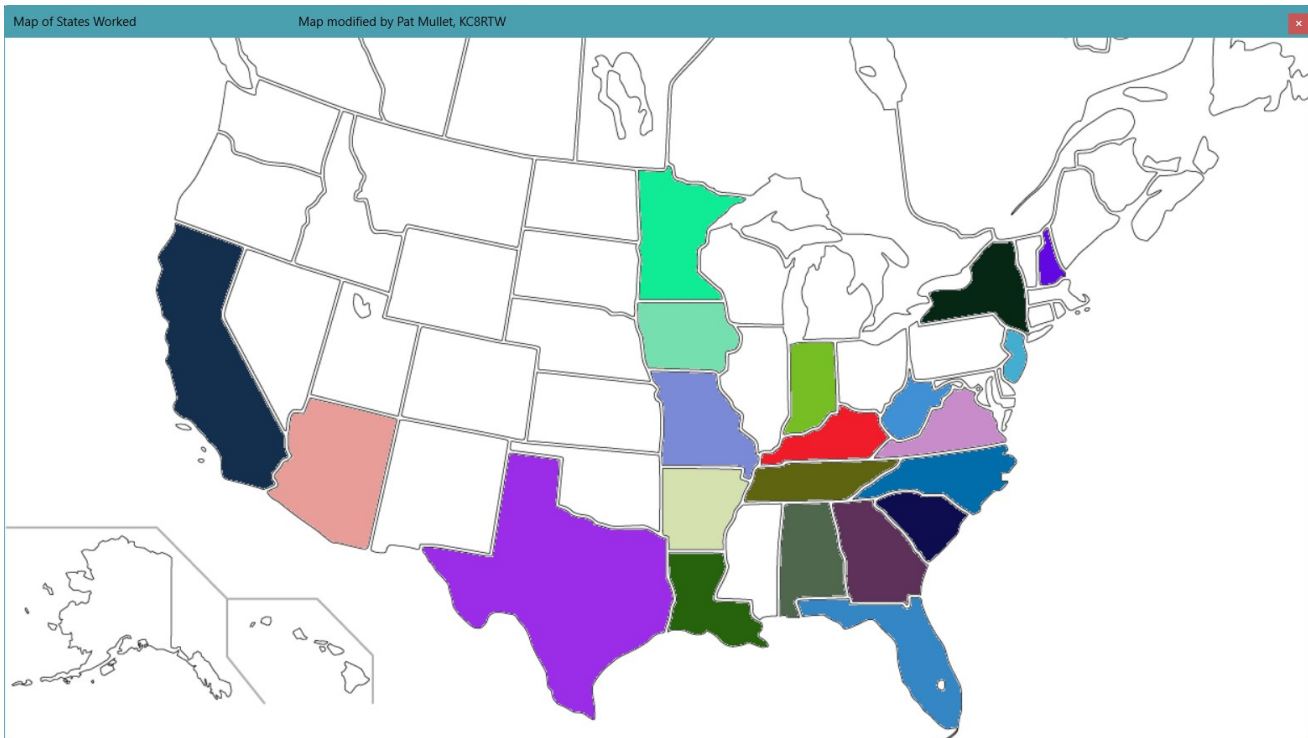
States Worked with SSB



States Worked with FT8



States Worked with FT4



POTA Contributions

3 operators took to the field and operated from 3 different POTA locations. They contributed 169 out of the 779 QSOs made during the event. Band conditions were less than ideal most of the 15-day period.

Date	Callsign	Park	Location	CW	Data	Phone	Total
05/31/25	N2J	US-1613 Delaware and Raritan Canal State Park	US-NJ	0	11	0	11
05/25/25	N2J	US-0454 Great Swamp National Wildlife Refuge	US-NJ	8	0	2	10
05/24/25	N2J	US-0454 Great Swamp National Wildlife Refuge	US-NJ	16	0	0	16
05/19/25	N2J	US-0454 Great Swamp National Wildlife Refuge	US-NJ	20	0	31	51
05/19/25	N2J	US-2069 Harriman State Park	US-NY	0	0	53	53
05/18/25	N2J	US-0454 Great Swamp National Wildlife Refuge	US-NJ	7	0	7	14
05/18/25	N2J	US-2069 Harriman State Park	US-NY	0	0	14	14
				51	11	107	169

Hope to see you all on the air for the next NPARC on-air special event,

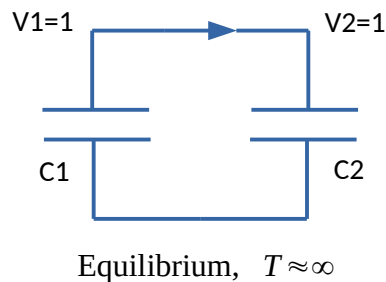
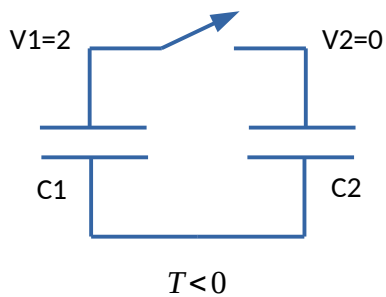
73 David KC2WUF

Where Did the Energy Go?

Jim Stekas – K2UI

Conservation of energy is a fundamental law of nature. One would think that discharging and charging capacitors would be a simple way to demonstrate the conservation of energy in simple circuits.

Consider the simple lossless circuit below with two identical capacitors, $C_1 = C_2 = 1$, in series with a switch. At time $T < 0$, capacitor C_1 is charged to 2 volts, C_2 is fully discharged, and the switch is open.



At time $T = 0$ the switch is closed and charge flows from C_1 to C_2 . A long time later, both capacitors reach equilibrium. They will have equal charges and voltages of 1 volt. (The total charge is the same but the capacitance has doubled, halving the voltage.)

Remember that capacitor charge and voltage are related by $Q = C \cdot V$, and the energy stored in the capacitor is $E = \frac{1}{2} Q \cdot V$. Using these formulae we can fill out the table below with circuit parameters for $T < 0$ and $T \approx \infty$.

	$T < 0$	$T \approx \infty$
V1	2	1
$Q_1 = C_1 \cdot V_1$	2	1
$E_1 = \frac{1}{2} Q_1 \cdot V_1$	2	1/2
V2	0	1
$Q_2 = C_2 \cdot V_2$	0	1
$E_2 = \frac{1}{2} Q_2 \cdot V_2$	0	1/2
$E_1 + E_2$	2	1

Somehow we managed to lose $\frac{1}{2}$ the energy we started with in our “lossless” circuit. Where did it go?