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)

February 2026
Volume 59 No. 2

Regular Meetings

Second & Fourth Mondays
at Salt Brook School

Feb 9 - Basic Electronic Power Supplies
Barry, WB2ZDH

Feb 23 - Final Auction Planning

Feb 28 - NPARC Auction

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 2026

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: KC2OSR, Sam Sealy
973-462-2014

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 - December 2025

The following information is provided by Rick, WB2QOQ, who has been recording daily weather events at his station for the past 45 years.

TEMPERATURE -

Maximum temp. this December, 56 F (December 19)
Last December(2024) maximum was 57 F.
Average Maximum temp this December, 37.0 F

Minimum temp this December, 15 F (December 9)
Last December(2024) minimum was 7 F.
Average Minimum temp this December, 23.5 F

Minimum diurnal temp range, 3 F (35 - 32 F)12/23
Maximum diurnal temp range, 27 F(56 - 29 F)12/19

Average temp this December, 30.3 F
Average temp last December, 34.0 F

PRECIPITATION -

Total precip this December – 3.37” rain/snow melt, 10.9” snow
Total precip last December – 4.69” rain, 5.0” snow

Maximum one day precip. event this December-
December 19, 1.21” rain; Dec. 14, 6.0” snow
Measurable rain fell on 4 days this December
13 days last December.
Measurable snow fell on 6 days this December
YTD Precipitation – 51.44 ” rain/snow melt

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Rick Anderson 1/5/2026
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

January NPARC President's Report

As I write this report, we are in the middle of a deep freeze and it is definitely NOT antenna weather, but it is a good time to get in the shack and get on the air. The winter months provide a great opportunity to focus on indoor projects, such as updating your station layout, experimenting with new operating techniques, or exploring the latest amateur radio software. If you've been meaning to try building a kit or fixing up some older equipment, now is the perfect time to tackle those projects without the distraction of warmer weather activities.

And do not forget our weekly nets. It is a good time to brush up on your CW skills every Thursday night at 9PM on the CW net with NCS K2YG. And maybe it is time to get into digital modes with our Monday Night Digital Net run by KC2WUF, David. We put together a Mentor List just recently, so take advantage of it if you need help or direction.

NPARC Winter Field Day

We had a great WFD at the Salt Brook School last Saturday. We had a nice turnout and made lots of contacts. And Don, K2DAM presented a "show 'n' tell" with his Mag Loop antenna and new Xeigu G90 portable HF radio. See details in the WFD article later in this edition of MSG.

NPARC 2026 Auction and Flea Market

Plans are coming together for our annual auction which takes place on Saturday, February 28 at the Salt Brook School cafeteria. So, look around the shack for gear or accessories that are just gathering dust and bring them to auction or to the mini flea market that follows the end of the auction.

Future Presentations

Our Activities Chairman, Sam, KC2OSR, has been hard at work lining up some great programs. Check the Reflector for announcements. On February 9, Barry, WB2ZDH, a new member, will be presenting a demonstration and talk on "Basic Electronics- Power Supplies" with some hands-on measurement activities, so bring your Digital Multimeter to the meeting, Sam is also lining up programs on tracking down EMI and RFI issues and an introduction and tutorial on the ARRL Logbook of the World (LoTW). This year, Sam is looking for those members who may not have given a talk in a while. So, contact Sam with your ideas.

73 fer now and CU on the Nets and at the next meeting.

Al Hanzl, K2AL

NPARC Winter Field Day 2026

Al Hanzl – K2AL

We have been participating in WFD as a club for the past two years. It was an opportunity to get used to using our new Yaesu FT-710 radios and to take a break from the winter doldrums.

I was not sure how it would turn out in the middle of winter. We reserved the Salt Brook School cafeteria, so other than setting up the antenna, we stay warm inside.

Despite the bitter temps last Saturday, 10 degrees with wind chills near zero, it turned into a successful event . We had 17 attendees, with lots of volunteers to help set up the antenna and gear. Several members got on the air, having fun operating phone and brushing up on their CW skills. We set up the K2UI Off Center Fed Dipole, the center up 24 feet. We made 85 contacts, working as far West as Western Washington state and up into Canada and down to Florida.

Don, K2DAM, brought his indoor Mag Loop and we played with his new Xeigu G90 HF radio. A pizza lunch was provided by the club. So, by all accounts, everyone had a great time, undeterred by the weather. (Fortunately, the snow waited until Sunday morning to arrive!)

Summary:

- 17 attendees
- 85 contacts over 5 hours operating time.
- Operators:K2AL K2PER K2YG KB2FCV KC3LNB WB2ZDH
- 36 ARRL Sections worked, 31 states and Canada provinces
- (Photos: K2DAM K2AL KC2WUF)

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K2AL's Contest Summary Report for WFD
Created by N3FJP's Winter Field Day Contest Log
Version 2.9.1  www.n3fjp.com

Total Contacts = 85
Total Points = 142

Operating Period: 2026/01/24 16:02 - 2026/01/24 21:02

Total op time (breaks > 30 min deducted): 5:00:19
Total op time (breaks > 60 min deducted): 5:00:19

Avg Qs/Hr (breaks > 30 min deducted): 17.0


Total Contacts by Band and Mode:

Band       CW   Phone     Dig   Total       %
----       --   -----     ---   -----     ---
  40       14       0       0      14      16
  20       39      28       0      67      79
  15        2       0       0       2       2
  10        2       0       0       2       2
            --   -----     ---   -----     ---
Total      57      28       0      85     100


Total QSOs Running = 42, Minutes = 48, Rate = 52.7
Total QSOs Search and Pounce = 43
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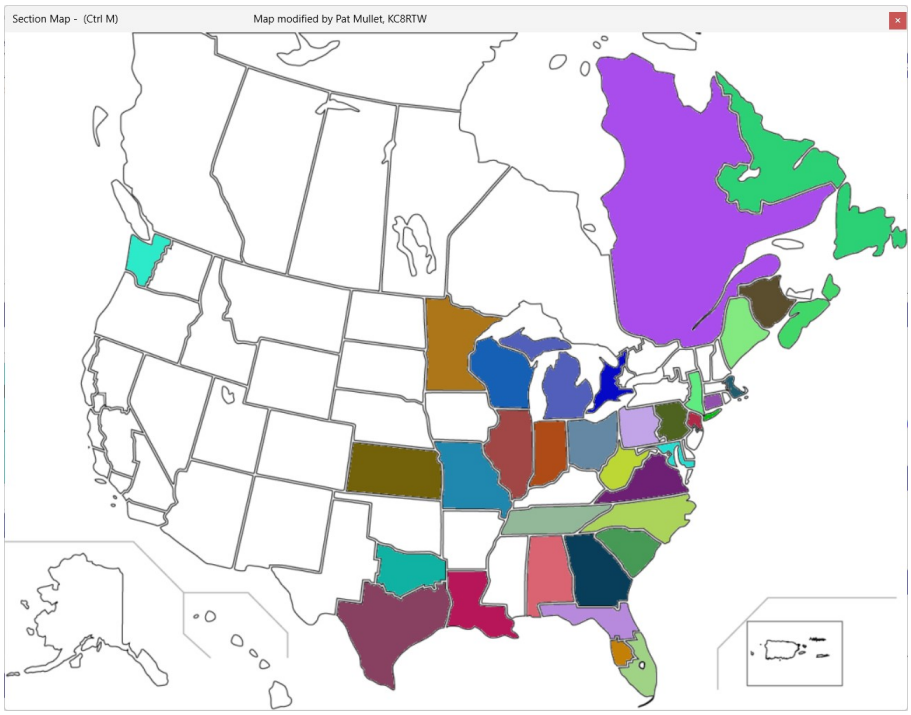
Photos by: K2DAM, K2AL, KC2WUF


Section Map - (Ctrl M)
Map modified by Pat Mullet, KC8RTW


14.041.540

Popular Contests in February 2026

Dave Barr – K2YG

Contest Name*	Dates (EDT)	Modes	Exchange	Notes & Websites**
Vermont* QSO Party	2/6 Fri 7pm to 2/8 Sun 7pm	All	VT: rs(t)+County Non VT: rs(t)+State	HP/LP/QRP classes. 160 thru UHF** Details at: www.ranv.org
Mexico RTTY Contest	2/7 Sat 7am to 2/8 Sun 7pm	RTTY	XE: RST+State Non XE: RST+Serial #	HP/LP (no qrp). 80 thru 10 meters**. See details at: rtty.fmre.mx
Minnesota* QSO Party	2/7 Sat 9am to 7pm	CW-RTTY; Phone	MN: Name+Cnty Non MN: Name+State	HP/LP/QRP; no FT. 160 thru 10 m**. See: www.w0aa.org
British* Columbia QSO Party	2/7 Sat 11am-11pm 2/8 Sun 11am-7pm	CW SSB	BC: RS(T)+Dist Non BC: RS(T) +State/Prov	HP/LP/QRP. 160 thru 10 meters**. See: www.orcadxcc.org
CQ WW RTTY WPX Contest	2/13 Fri 7pm to 2/15 Sun 7pm	RTTY	RST + Serial #	HP/LP/QRP 80 thru 10 m**. Details at: www.cqwpxrtty.com
ARRL DX Contest, CW	2/20 Fri 7pm to 2/22 Sun 7pm	CW	W-VE: rst+state/prov DX: rst+power	HP/LP/QRP. 160 thru 10 m**. Details at: www.arrl.org
CQ 160 Meter SSB Contest	2/27 Fri 5 pm to 3/1 Sun 5 pm	SSB	W-VE: rs+state/prov DX: rs + CQ Zone	HP/LP/QRP 160 meters only. Details at: www.cq160.com
South* Carolina QSO Party	2/28 Sat 10am-9pm	CW Digital Phone	SC: rs(t) + County Non SC: rst+state	HP/LP/QRP . 160-6 meters**. Details at: scqso.com
N American QSO Party RTTY	2/28 Sat 1pm - 1am (3/1)	RTTY	Name+State/Prov or NA Country. DX: Name only	LP and QRP only. 80 thru 10 meters**. Details at: www.ncjweb.com

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 state's contest. In-state stations may contact all contest stations. See websites for county abbreviation lists. State qso parties begin again in February.

** No WARC bands in any contest.

*** NPARC plans to enter Winter Field Day from Salt Brook School. Contact K2AL for details.

Dipole or Doublet?

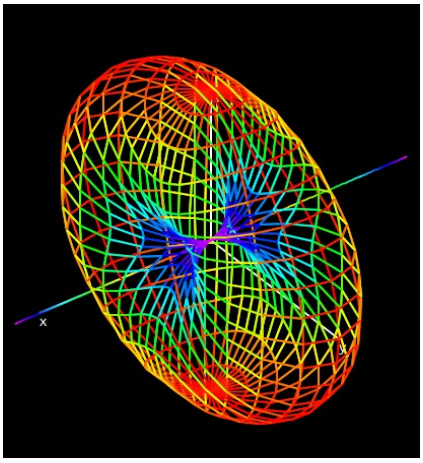
Jim Stekas – K2UI

The center-fed half wave dipole is probably the most ubiquitous antenna in ham radio. It is simple to construct, costs practically nothing, and performs well. A dipole is a particular realization of a more general class of antenna called the doublet. So when is a doublet a dipole and when is it not?

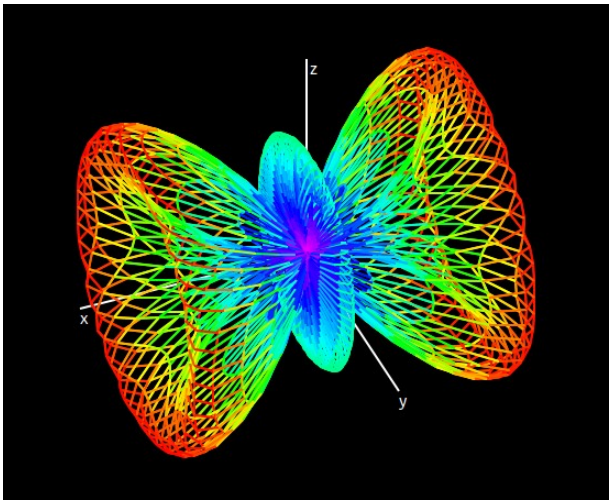
The radiation pattern of a half-wave dipole antenna is a toroid (donut) who's axis is the antenna wire. This toroidal pattern is characteristic of the fundamental E&M dipoles, for example:

- the electric field from a dipole of closely spaced + and – charges, or
- the magnetic field of a bar magnet of N and S poles.

Any dipole antenna shorter than ½ wavelength will have the same toroidal radiation pattern as a half-wave dipole. (A small magnetic loop antenna will also have the same radiation pattern.)



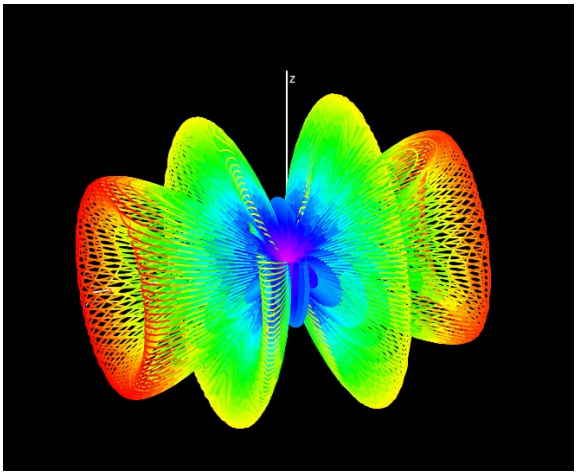
Dipole Radiation Pattern



3/2 – Wave Radiation Pattern

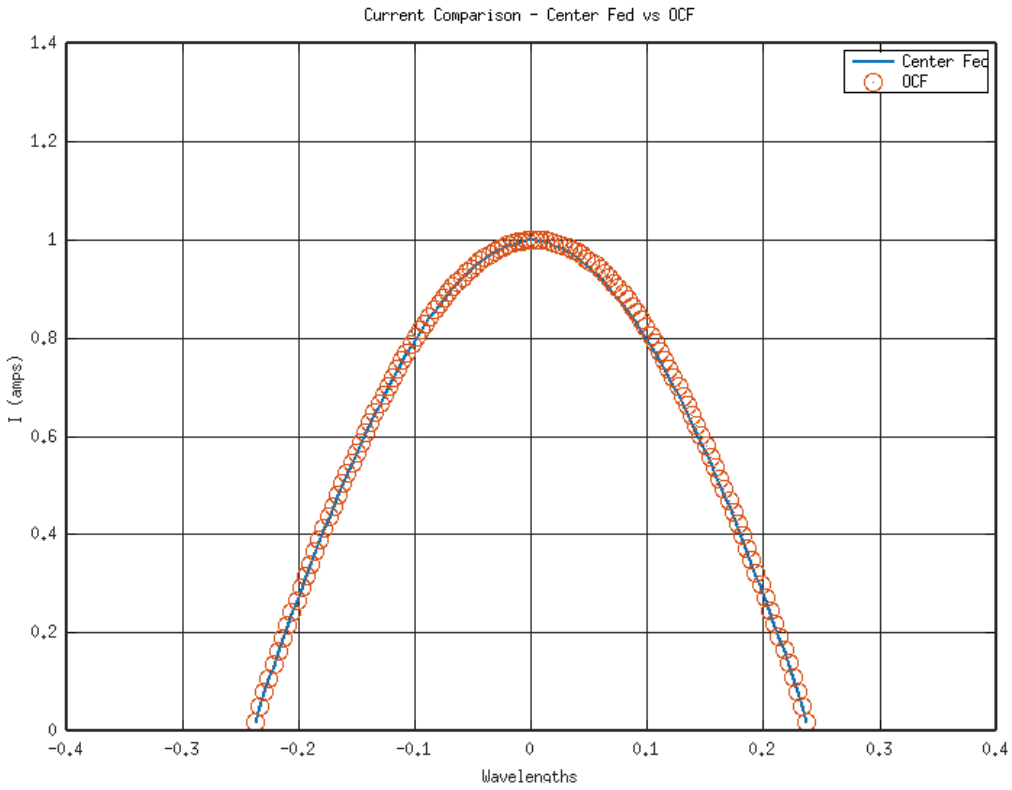
As any ex-novice class licensee knows, a 7 MHz half-wave will also resonate around 21 MHz where it is 3/2 waves long. However, the radiation pattern (left) no longer has the the classic dipole shape. It has lobes off broadside and is behaving a bit like a long-wire antenna. It's still is a doublet, but no longer a dipole.

At 35 MHz the antenna is 5/2 waves long and the pattern has a four lobes and looks nothing like a dipole. When the excitation frequency is 77 MHz is will be 11/2 waves long and have a radiation pattern with 10 lobes! It is clearly no longer a dipole. It's a doublet on the verge of being a long wire!



5/2 – Wave Radiation Pattern

It is reasonable to ask whether the feed point of a dipole has any effect on the radiation pattern. The answer is that it does not. The figure below shows the antenna current distribution of a center fed half-wave verses the Off Center Fed dipole (as used in WFD) which was fed 1/3 of the way from the end (0.085 wavelengths).



The currents in the two antennas are nearly identical, with only a small difference in the neighborhood of the OCF feed point. This is because the current on the antenna is a resonant standing wave that depends very little on how it is fed. (An analogy would be the motion of a playground swing being independent of where in its cycle a small push occurs.) Since the current distributions are the same, so are the radiation patterns.

While the current distribution on the half-wave dipole is independent of the feed point, the input impedance is not. An End-Fed Half-Wave (EFHW) dipole will radiate just like a center-fed dipole but the input impedance will be very high and will vary due to coupling between the coax braid and antenna.

In Conclusion

Any straight wire antenna with a length less than or equal to a half wavelength at the operating frequency will have the classic dipole radiation pattern and may be properly called a “dipole”. Antennas that are longer than a half wavelength on the operating frequency will have a multi-lobed radiation pattern and is properly called a “doublet”.

So what do we call a muti-band wire antenna? “Doublet” isn’t wrong, but most multi-band designs have their own more descriptive names: G5RV, Double-Zep, OCF, EFHW, etc.