



SHARC bytes

Volume XIII, Issue I January 2026

Published for members and friends of the...



Spring Hill Amateur Radio Club

Happy New Year to all Members and their families, welcome to 2026. SHARC has a lot to be thankful for this fresh New Year. We have a new meeting Location at **2750 Kingswood Cir, Brooksville, FL 34604**. Still, the 3rd Thursday of the month with the same start time @ 6:30 pm and ending at 8:30 pm. This is a gated Community, Sylvan Grove. **The entrance gates close at 7:00 pm and no one will be admitted after 7:00 pm.**

I would like to thank our previous board members for their service in 2025 and give a big welcome to our new board members for 2026. As I have stated a few times towards the end of 2025, 2026 will be the year of improving and streamlining the "business side" of SHARC. Our new By-Laws committee, overseen by our new VP Bruce King (W3BMK), has already been hard at work examining our Constitution and By-laws for changes and improvements. There is still at least one open position on this committee, so if you would like to be a part of our By-laws committee, please contact Bruce at VP@Springhillarc.com.

As most of you are aware, we have had growth in our membership over this past year. With that growth comes more work and the need for more volunteers to fill Committees and lead Activities. Take a few minutes to look at our club website at www.springhillarc.org under the "Club info" then "Officers" then scroll down to the bottom of the page to see all our "open Positions" that need volunteers. SHARC's success depends on the members' efforts. Although your \$20 yearly membership fee is a blessing, SHARC CAN NOT be successful without the members' input and effort. So please come and be a part of SHARC's 2026 success. Lets become active, proactive, and not reactive.

Remember we have Winter Field Day coming up on January 24th and 25th. We are looking for volunteers to help with food prep and equipment setup. We have a great location already and look forward to a great winter field day. Have a great 2026 and let's make SHARC the best Amateur radio Club it can be in 2026.

Thank you and have a great January,
Earl Brannon K4EEB
Email: President@springhillarc.org

Inside this issue:

President's Ramblings	1
Membership Dues	2
New Meeting Location	3
Position Available	4,5
Winter Field Day	6
Ft Myers Hamfest	7
Dipole Antenna	8-11
Contact Us	12

INSIDE:

- **PLEASE PROVIDE FEEDBACK!**
- **DUES REMINDER**

SHARC Repeater Information

Repeaters are open to all licensed amateurs...membership not required but we sure would like you to join!

2 Meter: 146.805 MHz-600K no tone

70 CM: 443.800 MHz + 5M no tone

SSTV @ 6:30 PM Tuesday*

SHARCnet @ 7:30 PM Tuesday*

70 cm Ragchew Net - Mon. @ 7:00**
PM**

SHARC Meetings Information

Regular monthly meetings are held on the third Thursday of each month.

UF/IFAS Ext. Bldg.

16110 Aviation Loop-Next to P.O.

Please use side door.

Visitors are always welcome!

Meetings begin at 7:00 PM.

Stop by early and say, "Hi!"

Happy New Year, Dues Time at SHARC

SPRING HILL AMATUER RADIO CLUB



HELLO TO THE MEMBERSHIP

IT IS THAT TIME OF YEAR AGAIN WHEN THE YEARLY DUES NEED TO BE TURNED IN.

THE CLUB USES THESE FUNDS FOR THE OPERATING EXPENSES THAT ARE INCURRED THROUGHOUT THE YEAR.

DUES ARE STILL \$20.00 AND REQUESTED TO BE MAILED OR TURNED AT THE CLUB MEETING BY DEC 31

MAILING ADDRESS IS:

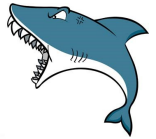
SPRING HILL AMATEUR RADIO CLUB INC.

PO BOX 6083

SPRING HILL, FL 34611-6083

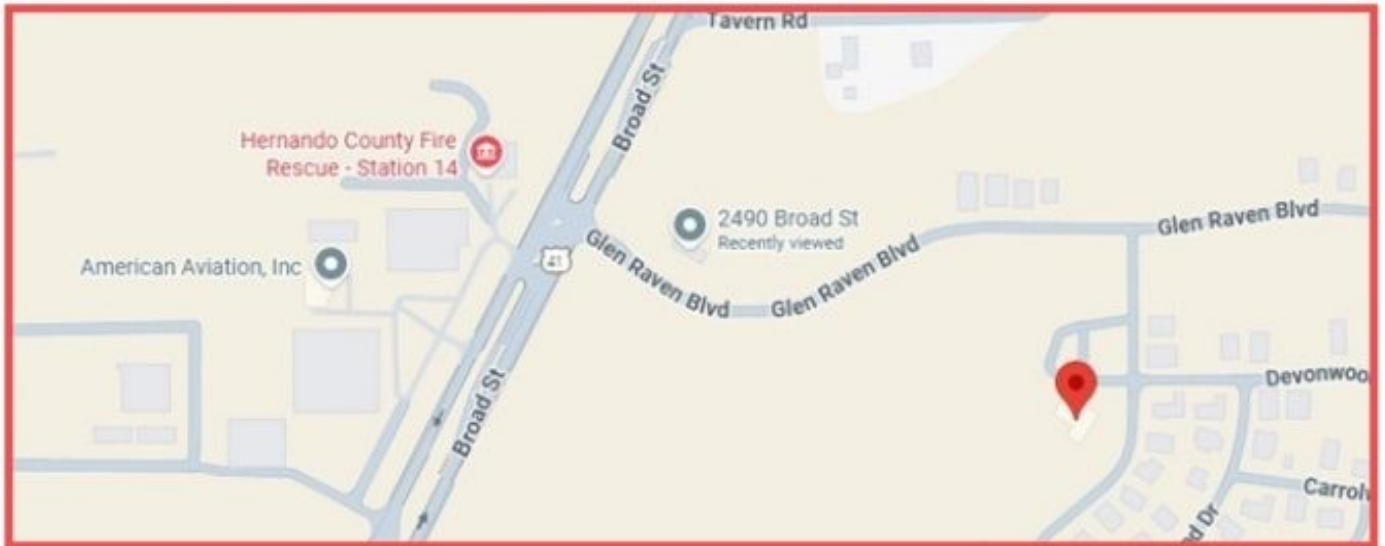
THANK YOU FOR YOUR CONTINUED SUPPORT,

From your board officers



Club Meeting January 15th @ 6:30pm

This is a gated community. Gates close at 7:00pm. You must be in the gate by 7. No admittance after that.



Just attend the meeting and you will be entered into the drawing. Bring your spouse and double your chances of winning!!



<http://springhillarc.org>



SHARC Historian Position Open



**Now
Hiring**

position available
Club Historian

A club historian documents a club's history by creating a record of its activities, accomplishments, and members. Key responsibilities include collecting photos, news clippings, and other memorabilia; organizing this information into a digital archive and collaborating with other officers. The goal is to create a comprehensive and meaningful record for both current and future members to understand the club's story and growth.

***If you would like to volunteer
please email***

board@springhillarc.org

SHARC Historian Position Open



**Now
Hiring**

position available
Health & Welfare

A Club Health and Welfare Person is a dedicated role responsible for ensuring a safe and positive environment for its members. They serve as a central point of contact for welfare-related concerns, report concerns about vulnerable individuals, and promote best practices for member well-being and protection. This role is crucial for fostering positive experiences and preventing issues from escalating by providing guidance, support, and a clear pathway for members to address any concerns they may have.

***If you would like to volunteer
please email***

board@springhillarc.org



SPRINGHILL AMATEUR RADIO CLUB

We will be operating Winter Field Day
ON January 24 and 25 TH 2026

SPECIAL 1X1 CALLSIGN



K4S



Equipment setup at 10 a.m.

RV space available, tent space available

Bathrooms and Shelter in case it rains.



Winter Field Day

www.SpringHillarc.org



2026 SOUTHWEST FLORIDA REGIONAL HAMFEST

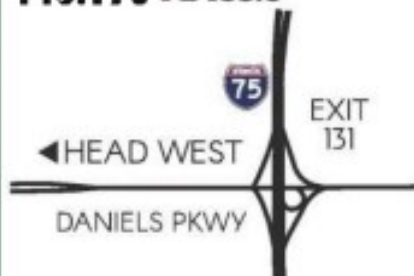
HAMFEST

SPONSORED BY
FORT MYERS AMATEUR RADIO CLUB
FRIDAY AND SATURDAY

JAN 16 & 17

FLORIDA SOUTHWESTERN
STATE COLLEGE-BLDG U
8099 COLLEGE PARKWAY,
FORT MYERS, FL 33919

TALK IN
145.170 PL 136.5*



TAKE DANIELS PKWY TO FSW
LANE. LOOK FOR THE LARGE
PIRATE HEAD SEE MAPS ON BACK

FREE PARKING
HANDICAP PARKING AVAILABLE



**GREAT
RAFFLE
& DOOR
PRIZES!**



Grand Prize
Yaesu FT-710

GENERAL ADMISSION:
\$10 BEFORE 12/31-\$12 AT DOOR
FRIDAY 12PM-5PM AND SATURDAY 8AM-3PM
A FREE RAFFLE TICKET WILL BE GIVEN FOR EACH
ADMISSION TICKET PURCHASED

STUDENTS FREE WITH VALID STUDENT ID
(NO RAFFLE TICKET)
KIDS 12 & UNDER FREE WITH PAYING ADULT

- ON-SITE SECURITY PROVIDED
- GREAT FOOD AT REASONABLE PRICES AVAILABLE
- INFORMATIONAL FORUMS BOTH DAYS!
- FREE FCC LICENSE TESTING ON SATURDAY
Preregistered 10:00 AM | Walk-ins 9:00 AM



SCAN WITH PHONE
FOR MORE INFO

ARRL Southern Florida Convention

PURCHASE TICKETS ON-LINE:
SWFLHAMFEST.COM



MAIL TICKET REQUESTS WITH CHECK OR MONEY ORDER TO:
FMARC • PO BOX 061183 • FORT MYERS, FL 33906-1183
PLEASE INCLUDE SASE, OTHERWISE TICKETS WILL BE HELD AT THE DOOR.



NEED MORE INFORMATION? SWFLHAMFEST.COM

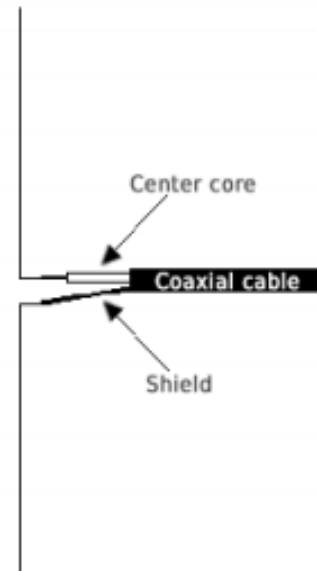


Building a 146 MHz Dipole Antenna: Design, Theory, and Construction

Submitted By Chris Bloxom

A dipole antenna is one of the most fundamental and widely used antennas in amateur radio. Simple, efficient, and easy to build, the dipole performs exceptionally well on the 2-meter band, including the popular frequency of 146 MHz used for FM voice, repeaters, simplex, and emergency communications. Because it offers predictable radiation patterns, good gain for its size, and reliable performance even with minimal equipment, the 146 MHz dipole is often the first DIY antenna new operators construct—and a trusted standby for seasoned hams.

This essay explains the principles behind a 146 MHz dipole, provides exact dimensions, and walks through a straightforward construction process that requires only basic tools and inexpensive materials.



Understanding the Dipole Antenna

A dipole antenna consists of two conductive elements of equal length, fed in the middle by a transmission line. When an RF signal is applied, currents flow along each element, producing an electromagnetic field that radiates energy into space. At its resonant frequency, a dipole offers low impedance and maximizes power transfer from the transmitter, resulting in efficient radiation.

The classic dipole is half-wavelength long, meaning each leg is one quarter wavelength ($\frac{1}{4}\lambda$). At 146 MHz, the wavelength is approximately:

$$\lambda = \frac{300}{146} \approx 2.05 \text{ meters}$$

Thus, a half-wave dipole is about 1.02 meters (40 inches) long overall.

Calculating the Dipole Element Lengths

A common formula for dipole element length (in inches) is:

$$\text{Total } \frac{468}{146} \text{ length (inches)} = \frac{468}{\text{frequency in MHz}}$$

For 146 MHz:

$$\frac{468}{146} \approx 3.205 \text{ feet} \approx 38.4 \text{ inches}$$



Basically the length is going to be:

- Total length: ~38.4 inches
- Each element: ~19.2 inches

Because end effects and material differences slightly affect resonance, building the antenna slightly long—then trimming to tune—is standard practice.

Materials Needed

The following simple components work well for a 146 MHz dipole:

Materials

- Two pieces of #12 or #14 copper wire (solid or stranded)
- SO-239 panel connector or a center insulator block
- Coaxial cable, preferably RG-58 or RG-8X
- Small screws, solder, or crimp connectors
- Electrical tape or heat-shrink tubing
- Nylon cord, rope, or PVC for mounting

Tools

- Wire cutters
- Measuring tape
- Soldering iron (optional but recommended)
- Drill (if using a PVC center mount)



Step-by-Step Directions to Build the Antenna

1. Cut the Wire Elements

Cut two wires to 19.5 inches each.

(We build them slightly long to allow trimming during tuning.)

Straighten the wires for best performance.

2. Create the Center Insulator and Feedpoint

You may use:

- A SO-239 chassis connector
- A small piece of PVC pipe drilled to accept screws



For a simple design using an SO-239:

- Solder one wire to the center pin
- Solder the other wire to the mounting flange (ground side)



This creates the classic center-fed dipole configuration.

3. Mount the Elements Horizontally or Vertically

The antenna can be configured as:

- Horizontal (for SSB/CW)
- Vertical (for FM and repeater work)
—This is most common on 146 MHz.

To build a vertical dipole, place one element pointing upward and the other downward.

Use a piece of PVC or fiberglass rod to support the antenna so that the coax does not pull on the feedpoint.

4. Attach the Coax Feedline

Connect the coax to the SO-239 using a PL-259 connector.

To minimize pattern distortion:

- Allow the coax to drop straight down for at least 18–24 inches
- Avoid sharp bends near the feedpoint

Optionally, create a simple choke balun:

Choke Balun (Optional but Helpful)



Wrap 5–7 turns of coax on a 4–6 inch diameter coil, secured with zip ties.

This reduces RF on the feedline and improves SWR.

5. Tune the Antenna

After assembly, check the SWR using a meter or antenna analyzer.

If the resonant frequency is below 146 MHz, the antenna is too long—trim both elements equally in 1/8-inch steps.

If the resonant frequency is above 146 MHz, the antenna is too short—add small extensions or start with a longer element.

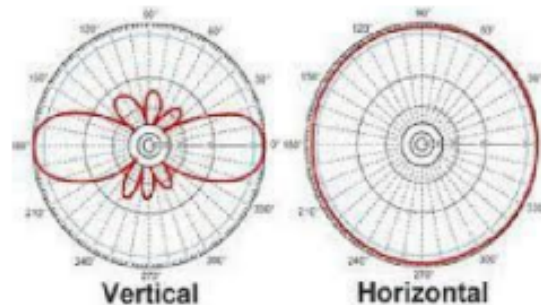


Fine-tuning ensures maximum efficiency, reduced feedline losses, and optimal performance on the target frequency.

Performance and Characteristics

A properly tuned 146 MHz dipole has:

- Gain of about 2.1 dBi
- Impedance close to 50 ohms when fed with a balun or kept clear of surrounding objects
- Omnidirectional radiation pattern (if vertical)



- Figure-8 pattern (if horizontal)

Mounted at a sufficient height—typically above 10–20 feet—the dipole provides excellent local coverage and can reach distant repeaters with ease.

Its simplicity also makes it ideal for:

- Emergency field operations
- Portable and backpack-mounted stations
- QRP and low-power experimentation
- Learning about antenna design and tuning

To sum this all up

Building a 146 MHz dipole antenna is an excellent project for any radio amateur, from beginners to experienced operators. The design is simple, inexpensive, and based on solid principles of radio-wave propagation. With just a few pieces of wire, a connector, and basic hand tools, you can produce a reliable, efficient antenna capable of excellent performance on the 2-meter band.

Whether you need a quick emergency antenna, a portable field antenna for ARES/RACES, or simply want to experiment with VHF antennas, the 146 MHz dipole offers a perfect balance of practicality and performance. The construction process teaches valuable skills in measurement,



tuning, and RF behavior—making it an essential project in any ham's journey.

AA4CB Chris Bloxsom
Webmaster and more @ SpringHill ARC
FaceBook-aa4cb Twitter-@aa4cb
email: aa4cb@arri.net
www.springhillarc.org





Spring Hill Amateur Radio Club



Officers



PRESIDENT

K4EEB Earl Brannon

president@springhillarc.org



Vice-President

KZ4QX Bruce King

vp@springhillarc.org



Secretary

WA2MMY Bonnie Bloxsom

secretary@springhillarc.org



Treasurer

K4WEB Wayne Bord

treasurer@springhillarc.org

Board of Directors

AI Mattor KQ4TDQ 2026-2027

It's Dues Time at SHARC!

Hello to all members. It's that time of year when annual dues need to be turned in. Your club uses these funds to help defray operating expenses that are incurred throughout the year. Dues are still \$20 and should be turned in at the November meeting but not later than December 31st.

We Need Your Feedback

Hi, I'm Jerry Sweet, editor for the SHARC newsletter. We need your ideas, information, and articles to help our newsletter grow. Please send them to newsletter@springhillarc.org or call me at 727-857-6204.

73's
Jerry
KO4RDI

Hi, I'm Jerry Sweet, editor for the SHARC

