



THE AERO AERIAL

THE NEWSLETTER OF THE AERO AMATEUR RADIO CLUB

1 Ham News

2 Events

**3 SKYWARN/
ARES/RACES**

3 Training

4 VE Corner

**5 Community
Service**

5 Ham Radio Tools

6 Nets

**7 From the Skies
Over Mt. Essex**

8 About the Club

Meetings

**FEBRUARY
5 & 19**



[Moskva Illustration/vecteezy.com](#)

Ham News

Ham Radio Contests

From Harry Rundall (AC3EK)

The following link will take folks to 5 weeks of Ham Radio Contests of all types. Instead of just SSB HF contests, this listing provides access to the details of a contests by point and click on the "+" sign on the left hand contests. <https://www.contestcalendar.com/fivewkcal.html>

Is Amateur Radio in the United States dying?

From Frank K4FMH

The short answer is NO. But it is CHANGING. Here is why and how. This article is a version of a brief assessment of the ham radio market. It is based on best available evidence rather than a well-funded deep-dive study of the commercial market for amateur radio. [Read the article](#)

Events

Cherryville Hamfest and Tech Expo

Date: 3/8/2025

Location: Clinton, NJ

Sponsor: Cherryville Repeater Association

Website: <https://www.w2cra.org>

Winterfest - The National Capital Area Ham Radio Fair

Date: 3/9/2025

Location: Vienna, VA

Sponsor: Vienna Wireless Association

Website: <https://viennawireless.net/wp/events/winterfest/>

FredFest 2025

Date: 3/22/2025

Location: Frederick, MD

Sponsor: Frederick Amateur Radio Association

Website: <https://frederickarc.org/fredfest-2025/>

More Ham News

How can a lossy wire on the ground work better than a quarter wave vertical antenna?

From John VA3KOT

Let's get real here! If we lay a wire antenna on the ground, surely it can't radiate more power than that cool-looking, expensive quarter-wave whip you just spent a small fortune to buy? Well, yes it can - but with a few caveats. [Learn more](#)

The Case of The Shrinking Technicians

From Bob K0NR

The decline in ARRL Membership and Market Share, has some interesting data and observations about licensing trends in the U.S. [See the trends](#)

52 Week Ham Radio Challenge Roundup

From Ian Renton

A new amateur radio activity for this year that you may not be aware of is the "52 Week Ham Radio Challenge". Coordinated via the website and via a Mastodon bot, it provides 52 challenges for 2025, approximately one a week, for players to work on alongside each other. [See the Weeks 1-4 challenges](#)

How Should I Attach a Ham Radio Antenna to My Vehicle?

From OnAllBands

This is one of the most frequently asked questions the team at DX Engineering receives when helping customers find the best solution for installing a mobile radio (transceiver) in their vehicle. The good news is that there are multiple options. [Learn how](#)

More Events

Delmarva Amateur Radio and Electronics Expo, ARRL Delaware State Convention

Date: 4/26/2025

Location: Georgetown, DE

Sponsor: Sussex Amateur Radio Association

Website: <https://www.arrl.org/hamfests/delmarva-amateur-radio-and-electronics-expo-arrl-delaware-state-convention-2>

In case you missed it,



check out the January issue.

SKYWARN, ARES, RACES

To learn more about Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES), [click here](#).

To learn more about SKYWARN® and how to become a spotter, [click here](#).

Harford County ARES/RACES Group meets at the Harford County Emergency Operations Center in Forest Hill, MD, the first Thursday of each month, 7:00-9:00 p.m. Let them know in advance if you would like to attend, via email to Steven Fook (K2EJ), Harford County Emergency Coordinator.

The Harford County, MD, ARES on-air net meets on the second and fourth Tuesday of each month, 7:00 p.m. on the KC3FHC analog repeater, frequency 146.775, (-) PL tone 146.2. ARES/RACES membership is not a requirement to participate in the net.

Training

SKYWARN® Basics Classes

February 11, 2025, 6-8 p.m. at Fairfax County Public Safety and Transportation Center, 4890 Alliance Drive, Fairfax, VA 22030. [Registration Form](#)

Technician/General Classes

General class begins April 9, 2025, 6:30-9:00 p.m.

Preregistration for either Google Meet class is required at <http://www.w3vpr.org/preregister>.



Radio License Exams

The Aero Amateur Radio Club sponsors Amateur Radio License Exams with the ARRL VEC. Examination sessions are throughout the year. Walk-ins are welcome; arrive no later than 30 minutes after start time. \$15 charge.

W3PGA Exam Location

To be determined

Contact

Patricia Stone, AC3F
 email: ac3f@juno.com
 landline: 410-687-7209



VE Corner

Pat Stone, AC3F

The AERO VE Team held its first session for 2025 on January 18th. We served 4 applicants. Congratulations to new new Techs: Zach Wiley, Derek Harberts, and Jae Yung!

Many thanks to VE's: WB3FMT, KB3VAE, N3FQC, N3RES, and WA3QLY for assisting me with our first session of 2025. We couldn't do this without you. Its always it is a joy working with you.

Our March 22nd session has been suspended until we are able to locate a new exam site.

Exam Overview

LEVEL 1: Technician Class License

- Exam Requirement: 35-question Technician Written Exam (Element 2).
- Privileges: All VHF/UHF Amateur bands (frequencies above 30 MHz). Limited operations in certain HF bands.

LEVEL 2: General Class License

- Exam Requirements: 35-question General written exam (Element 3).
- License Privileges: All VHF/UHF Amateur bands and most HF privileges (10 through 160 meters).

LEVEL 3: Extra Class License

- Exam Requirement: 50-question Extra written exam (Element 4).
- License Privileges: All Amateur band privileges.

Use Your License to Serve the Community

From ARRL

ARRES

The Amateur Radio Emergency Service (ARES) consists of trained radio amateurs who provide public service communications support. [Learn More](#)

Emergency Training

Be prepared to help your community during a disaster. Get the special training required to be an ARRL emergency communications volunteer. [Learn More](#)

Public Service Training

Find useful resources on public service equipment, operating, and regulations. [Learn More](#)

NTS

The ARRL National Traffic System (NTS) handles written messages via several modes of communication. [Learn More](#)

Served Agencies and Partners

How can I get involved? Discover what organizations need volunteers. [Learn More](#)

Sign up for a course

View ARRL's online course catalog which provides course descriptions and instructions on how to enroll in public service courses. [Learn More](#)

Ham Radio Tools

Morse Walker

A free, web-based CW pileup trainer with modes such as POTA, SST, and CWT, plus beginner-friendly features, including adjustable speeds and Farnsworth spacing.

Time Mapper UHD

EI8IC provides a visually stunning program that combines mapping and time functions to produce an ever-changing 4K or HD World Clock display.



Club Nets

Second Wednesday Net

70 Centimeters (449.575 MHz Repeater)

@ 8 p.m. Local Time

Fourth Wednesday Net

2 Meters (147.24 MHz Repeater)

@ 8 p.m. Local Time

Fifth Wednesday Net

10 Meters (28.445 MHz)

@ 8 p.m. Local Time

Net Reports

From Joe Miko, WB3FMT

The Aero ARC had its 440 Radio net on 1/15/25. The net was on 449.575 MHz and ran from 20:00 to 20:18 local. There were four participants on the Net.

W3PGA	NCS	Joe WB3FMT	Essex
KB3QWC	Larry		Middle River
K3POJ	Gregg		Rosedale
KB3VAE	Richard		Essex

The AERO ARC had its 2 meter net on 1/29/25. The net was on 147.24 MHz and ran from 20:00 to 20:16 local. There were three participants on the Net.

W3PGA	NCS	Joe WB3FMT	Essex
K3DON	DON		Joppatowne
KB3VAE	Richard		Essex

Local Area Nets

Day	Time	Freq. (MHz)	Net Name
Daily	9 - 10 am	146.670	Oriole Net
Daily	6 pm	3.820	Maryland Emergency Phone Net
Daily	6:30 - 7 pm	146.670 PL 107.2	Baltimore Traffic Net
Daily	7 pm & 10 pm	3.557 CW	MD/DC/DE Traffic Net
2nd Tue	7:30 pm	146.670	Baltimore County RACES Net
2nd Wed	8 pm	449.575	Aero ARC Net
4th Wed	8 pm	147.240	Aero ARC Net
5th Wed	8 pm	28.445	Aero ARC Net
When activated by NOAA		147.030	SkyWarn (primary)

From the Skies Over Mt. Essex

For current solar activity, visit <https://www.solarham.com/>

SKY Events for February 2025

(h:m) EST (EDT)

Feb 01 15:27 Venus 2.3°N of Moon
 01 17:06 Moon at Ascending Node
 01 21:43 Moon at Perigee: 367457 km
 05 03:02 FIRST QUARTER MOON
 06 01:43 Pleiades 0.5°S of Moon
 09 07 Mercury at Superior Conjunction
 09 14:36 Mars 0.8°S of Moon: Occn.
 10 00:19 Pollux 2.1°N of Moon
 12 08:53 FULL SNOW MOON
 12 18:21 Regulus 2.2°S of Moon
 14 Zodiacal Light vis in N lat in W after
 evening twilight for the next two weeks.
 14 17:00 Venus greatest illuminated -4.9 mag.
 15 01:53 Moon at Descending Node
 17 07:01 Spica 0.3°N of Moon
 17 20:11 Moon at Apogee: 404882 km
 19 13 Venus at Perihelion
 20 12:33 LAST QUARTER MOON
 21 03:21 Antares 0.4°N of Moon
 25 16:00 Mercury 1.7° N of Saturn
 25 16:02 Double Shadows on Jupiter
 27 19:45 NEW MOON
 28 23:03 Mercury 0.4°N of Moon: Occn.

Planet Lookout at mid-Month

Sunrise 06:57 EST and Sunset 17:43 EST

Mercury Evening Rise 07:19 Set 18:04 Mag -1.4 Size 5.0 arc seconds

Venus Evening Rise 08:16, Sets 21:06, Mag -4.9 size 40.1 arc seconds.

Mars Evening Rise 14:00, Sets 05:19, Mag -0.7 size 12.2 arc seconds.

Jupiter Evening, Rise 11:42, Sets 02:23 Mag-2.4 size 41.3 arc seconds.

Saturn Evening, Rise 08:02, Sets 19:26, Mag+1.1 size 15.8 arc seconds.

Uranus Evening Rise 10:39, Sets 00:54; Mag +5.7 size 3.5arc seconds.

Neptune Evening Rise 08:21, Sets 20:14 Mag +7.9 size 2.4 arc seconds.

Are You Sirius...Hot and Sweaty!

After locating the belt stars in the constellation follow the three belt stars (δ delta, ϵ epsilon, and ζ zeta) in Orion go to the lower left. You will find the brightest star (except for the Sun) in the sky.

This star is -1.46 magnitude and is located 8.65 light years from the Earth. It is almost twice as bright as the next brightest star Canopus, located in constellation, Carina "the Keel". A light year is 5.8 trillion miles or the time it takes light to travel 1 Earth year.

By comparison we are 8 minutes and 20 seconds from the Sun at the speed of light. Sirius is about 2 times as massive and 26 times brighter than the Sun.

The name Sirius comes from the Greeks meaning "glowing or scorcher". It was Sirius that the Egyptians based their calendar. It also was used to predict the annual flooding of the Nile.

*In ancient Egypt, the appearance of the star Sirius, also known as the "Dog Star," in the sky just before sunrise (called the **heliacal rising**) signaled the imminent flooding of the Nile River, which was crucial for their agricultural cycle, essentially marking the start of their planting season and new year; therefore, the Egyptians closely associated Sirius with the annual Nile flood.* 1. Google

If you remember the movie "Dog Day Afternoon" this also goes back to Sirius, because the ancients believed that the heat from Sirius, the Greek word for scorcher was combined with the Sun's heat produced a hot August and affected the dogs. Being in Baltimore, Is it really the Heat or the Humidity?

In the realm of space Sirius is just a star in the constellation Canis Major which is a hunting dog for Orion the Hunter.

About the Aero Amateur Radio Club

Officers		Committees			
President	Joe Miko, WB3FMT	Repeater	Phil Hock, W3VRD Ken Erisman, NE3A Dave Brunner, AC3EO		
Vice President	Rob Ballou, AE3B	VE Testing	Pat Stone, AC3F		
Recording Secretary	Larry Hill, KB3QWC	Public Service	Bob Landis, WA3SWA		
Corresponding Secretary	Pat Stone, AC3F	Webmaster, Facebook	Rob Ballou, AE3B		
Treasurer	Tom Hawkins, WA3QLY	Trustee	Dave Frederick, KB3KRV (W3PGA) Jim Marshall, KC3FBL (AE3RO)		
Resource Coordinator	Ron Distler, W3JEH	Club Nets	Joe Miko, WB3FMT		
		Contests	Harry Rundall, AC3EK		
Newsletter Editor		Cathy Feinman, W3CLF			
Aerial archives dating to 2004 are available at https://w3pga.net/the-aerial-newsletter-library/					
Website: http://w3pga.net					
Facebook: https://www.facebook.com/W3PGAClub					
Email: w3pgaclub@gmail.com					

Meetings

We will be meeting virtually. Zoom link for February 5 is

<https://us02web.zoom.us/j/86302257276?pwd=igQTkHZQJ3RfBHalHDzoailaGHlruy.1>

Meeting ID: 863 0225 7276 Passcode: 147240

All are welcome to attend.

W3PGA 2 M INPUT: 147.84 MHz, OUTPUT: 147.24 MHz, PL 123.0

W3PGA 70 Cm INPUT: 444.575 MHz, OUTPUT: 449.575 MHz, PL123.0

W3JEH 1.25 M INPUT: 222.24 MHz, OUTPUT: 223.84 MHz