



THE AERO AERIAL

THE NEWSLETTER OF THE AERO AMATEUR RADIO CLUB

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CreativelImages/[vecteezy.com](https://www.vecteezy.com)

Ham News

How to Use AI in Your Ham Shack

From Broken Signal

Are you using artificial intelligence (AI) in your ham shack? If not, you could be missing a powerful companion in the shack. Learn how AI tools like ChatGPT or Claude.ai can revolutionize your amateur radio experience, from building antennas to troubleshooting schematics of radios. [Watch the video](#)

Locating an HF Noise Source in the House Without Using Special Equipment

From Kevin Loughlin

Learn a relatively simple and quick way of finding offending radio frequency noise sources in the house. [Watch the video](#)

Meetings

(see p. 5 for date changes)

JANUARY
8 & 22

Events

Winterfest

Date: 1/11/2025

Location: Harrisburg, PA

Sponsor: Harrisburg Amateur Radio Club

Website: <http://www.w3uu.org>

Cherryville Hamfest and Tech Expo

Date: 3/8/2025

Location: Clinton, NJ

Sponsor: Cherryville Repeater Association

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

Delmarva Amateur Radio and Electronics Expo, ARRL Delaware State Convention

Updated 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>

More Ham News

Send a Radiogram Via the Web

From ARRL

ARRL asks hams to utilize the National Traffic System to send radiograms. Learn more about what they are and how to send them. [Go to the webpage](#)

A Ham's Night Before Christmas

From ARRLHQ

Here's a video In case you missed the ham radio rendition of "A Night Before Christmas," by Gary Pearce, KN4AQ.

[Watch the video](#)

ARRL The National Association for Amateur Radio Launches Dream Station Sweepstakes

From ARRL News

ARRL has introduced a sweepstakes, offering members the chance to win an Icom Dream Station including a limited-edition IC-7760 HF/50 MHz transceiver, IC-PW2 amplifier, and microphone, generously donated by Icom America. The ARRL Sweepstakes will run from January 3 to December 31, 2025. [Learn more](#)

ARRL Contest Dates in 2025

From ARRL

To stay up to date and plan ahead for upcoming events in 2025, check out ARRL's 2025 contest calendar for the next 12 months. [View the Calendar](#)

More Events

Warminster ARC - Annual Hamfest, ARRL Eastern Pennsylvania Section Convention

Date: 5/4/2025

Location: Bristol, PA

Sponsor: Warminster Amateur Radio Club

Website: <http://wp.k3dn.org/hamfest/>

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

Technician class begins January 8, 2025, 6:30-9:00 p.m.

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>.

In case you missed it,



check out the December issue.



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

American Legion Post 180
1331 Seling Ave.
Rosedale, MD 21237

Contact

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



VE Corner

Pat Stone, AC3F

Our next test session of will be held on Saturday, January 18th at 11AM at the American Legion Post in Rosedale. Hope to see you then.

2025 AERO ARC Testing

January 18 (Rosedale)
March 22 (Rosedale)
May17 (Rosedale)
June 28 (Essex)
September 20 (Rosedale)
November 15 (Rosedale)

See page 6 for information about a free Extra Class Course on Zoom starting January 16, 2025.

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.

Special Club News

Meeting Night Snow Plan

If Baltimore County Schools are closed for the day or have an early dismissal, the Aero Club meeting for that night will be canceled. Late School opening doesn't count. If a meeting is canceled due to weather conditions, we will run a 2-meter net at 8 pm that evening.



VE Testing Snow Plan

If the Baltimore County Snow Plan is in effect on the testing day (Saturday) the VE Testing session for that day will be cancelled. Testing applications that have pre-registered will be notified by phone. Pat will put a Snow Closure message on her home phone. Due to the scheduling requirements, we can't schedule a makeup session. Testing will resume on the next scheduled testing date. VEs will be notified by phone in the event of a closure.

Event for Date Changes for January '25

- January 8th will be the first meeting of the new year.
- January 15th, 440 radio net will be at 20:00 local.
- January 22nd will be the second meeting of the month.
- January 29th, the 2-meter net will be at 20:00 local.
- February 5th will be the first Wednesday regular meeting.

Essex Skypark FBO Update

Still no word on when the Essex Skypark FBO will reopen for meetings and such. The remaining work is awaiting the release of funding. Work is expected to be completed by mid-Spring. **Update:** Stabilizing the basement of the FBO is complete. The airport grounds failed to perk, therefore no approval for septic drain fields. The contractor has been selected to install two 1,500 gallon concrete holding tanks. The new well has been permitted and will be dug in the northwest corner of the FBO inside the fence. Grading and paving the space in front of the community hangar has been split into two contracts. A Kitchenette will be installed in the room next to the utility room/entrance. HVAC contractor has not been finalized yet.

Joe and Rob also met with Martin Aviation Museum about the use of the Martin Star.



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

There were no radio nets in December.

FREE Amateur Radio Extra Class

A free, weekly, live, Amateur Radio Extra Class Licensing course on Zoom will begin on Thursday, January 16, 2025, and will run through Thursday, March 27. There will be 11 sessions. The three-hour sessions will start at 6:30 PM Eastern Time. Sessions will be recorded. Those attending should hold (or be studying for) the General Class Amateur Radio License. These are the classes that we have been holding for years sponsored by the National Electronics Museum. Please publicize this with anyone that you think would be interested. Those wishing to sign up should email roland.anders@comcast.net.

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 January 2025

January 1st, Wednesday **HAPPY NEW YEAR 2025 A.D.**

(h:m) EST (EDT)

Jan 03	10:24	Venus 1.4°N of Moon
03	10	Quadrantid Meteor Shower
04	09	Earth at Perihelion: 0.98333 AU
04	12:18	Saturn 0.7°S of Moon: Occn.
05	14:46	Moon at Ascending Node
06	18:56	FIRST QUARTER MOON
07	18:34	Moon at Perigee: 370173 km
09	20:01	Pleiades 0.3°S of Moon
09	23	Venus at Greatest Elong: 47.2°E
13	16:45	Pollux 2.1°N of Moon
13	17:27	FULL Wolf MOON
13	22:42	Mars 0.2°S of Moon: Occn.
15	20	Mars at Opposition
16	09:57	Regulus 2.2°S of Moon
18	11	Venus 2.2°N of Saturn
19	20:48	Moon at Descending Node
19	09	Mercury at Aphelion
20	22:53	Spica 0.1°N of Moon
20	23:55	Moon at Apogee: 404299 km
21	15:31	LAST QUARTER MOON
23	12:07	Mars 2.3°S of Pollux
24	18:34	Antares 0.3°N of Moon
29	07:36	NEW MOON
31	23:46	Saturn 1.1° S of Moon Occn.

Planet Lookout at mid-Month

Sunrise 07:14 EST and Sunset 17:09 EST

Mercury Morning Rise 6:33 Set 15:52; Mag -0.4 Size 5.2 arc seconds

Venus Evening Rise 09:38, Sets 21:03, Mag -4.5 size 26.3 arc seconds.

Mars Evening Rise 16:40, Sets 07:50, Mag -1.4 size 14.5 arc seconds.

Jupiter Evening, Rise 13:42, Sets 04:22, Mag -2.6 size 45.4 arc seconds.

Saturn Evening, Rise 09:52, Sets 21:08, Mag +1.1 size 16.3 arc seconds.

Uranus Evening Rise 12:37 Sets 02:52; Mag +5.7 size 3.6 arc seconds.

Neptune Evening Rises 10:17 Sets 22:07; Mag +7.9 size 2.4 arc seconds.

Upcoming Events for 2025

Planets - Mercury and Venus

Maximum Eastern and Western Elongations

		Date	°
Mercury	EE	3/8	18.2° E
		7/4	25.9° E
	WE	10/29	23.9° E
		4/21	27.4° W
		8/19	18.6° W
		12/7	20.7° W

Venus EE 1/10 47.2°E WE 6/1 45.9°

Mars Opposition 01/16/25 Closest Encounter 01/12/25, Distance 59.7 million miles (0.64228 AUs)

Moon 2025

Blue Moon - (3rd FM in a Season of 4 FMs) None in 2025

Harvest Moon & Hunter Moon - 10/06/2025

Super Moons - Full Oct. 7th, Nov. 5th, Dec 4th

Closest Nov 5th 221,817 miles

Largest Nov 5th Smallest 4/12, 5/12 & 11/20

Lunar Eclipses - 1 Total Eclipse 3/13-14/2025

Sun Began cycle 2025 on Dec. 19

Friday 13th - 6/13/2025

Solar Eclipses None visible in 2025

Meteor Showers Predictions - 6 Good, 2 Fair

Quadrantids 1/3	1st Qtr. Moon	Good	>120/hr
Eta Aquarids 5/6	New Moon.	Good	50/hr
Delta Aquarids 7/31	4th Quarter	Good	25/hr
Perseids 8/12	Full	Fair	80-100/hr
Orionids 10/21	New	Good	20/hr
Leonids 11/07	New	Good	15/hr
Geminids 12/14	4th Quarter	Fair	>150/hr

Seasons in 2025

Earth Perihelion 01/04/2025 08:28 EST

Earth Aphelion 07/03/2025 15:55 EDT

Vernal Equinox 03/20/2025 05:01 EDT

Summer Solstice 06/20/2025 22:42 EDT

Autumnal Equinox 09/22/2025 14:19 EDT

Winter Solstice 12/21/2025 10:03 EST

Daylight Saving Time 2025

Starts 03/09/2025 - Ends 11/2//2025

Easter Dates 2025 Full Moon 04/13/2025

Good Friday (Western) and {Greek} April 18,2025

Easter Western and Greek (Orthodox). April 20,2025

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

Until further notice, the club will meet in-person at 7:30 p.m. at the American Legion Post 180, 1327 Seling Avenue, Rosedale, MD 21237, and Zoom link is <https://us02web.zoom.us/j/81878093019?pwd=SSOPXxhvM33s1aS0SqPnXW3CckQm21.1>
Meeting ID: 818 7809 3019 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