



Look up!

The Aero Aerial

The Newsletter of the Aero Amateur Radio Club
Middle River, MD
Volume 17, Issue 5
May 2021

Editor Georgeann Vleck KB3PGN

Officers

President	Joe Miko WB3FMT	Repeater	Phil Hock W3VRD Jerry Cimildora N3VBJ 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	Jerry Cimildora N3VBJ
Treasurer	Warren Hartman W3JDF	Trustee:	Dave Fredrick KB3KRV (W3PGA) Jim Marshalek KC3FBL (AE3RO)
Resource Coordinator	Ron Distler W3JEH	Club Nets	Joe Miko WB3FMT
		Contests	Bob Venanzi ND3D

Website: <http://w3pga.org>

Facebook: <https://www.facebook.com/pages/Aero-Amateur-Radio-Club/719248141439348>

About the Aero Amateur Radio Club

Meetings

The Aero Amateur Radio Club meets at 7:30 pm on the first and third Wednesdays of the month at Essex SkyPark, 1401 Diffendall Road, Essex. Meetings begin at 7:30 p.m. local time. Meetings are canceled if Baltimore County Public Schools are closed or dismiss early.

Repeaters

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

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

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.

2021 Examination Schedule DUE TO COVID-19 DATES May be Canceled!

Time:			1 pm
Dates:			Sat., May 15
Where:		American Legion, Rosedale	American Legion, Rosedale

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

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

LOCAL AREA NETS

Day	Time	Freq. (MHz)	Net Name
Daily	9 – 10 am	145.330	Oriole Net
Daily	6 pm	3.820	Maryland Emergency Phone Net
Daily	6:30 – 7 pm	145.330 no PL	Balto. Traffic Net (b/u 146.670 PL 107.2)
Daily	7 pm & 10 pm	3.643	MD/DC/DE Traffic Net
2 nd Tue	7:30 pm	146.670	Baltimore County RACES Net
2 nd Wed	8 pm	449.575	Aero ARC Net
4 th Wed	8 pm	147.240	Aero ARC Net
5 th Wed	8 pm	28.445	Aero ARC Net
Fridays	7:30 pm	145.330	Back in the Day Net
When activated by NOAA		147.030	SkyWarn (primary)

Please Support Our Friends



Saturday, May 8, 2021
8:30am to 11:30am
Masks & Social Distancing
Required for this Event, Please
Presented By Essex
Skypark Association

ESSEX SKYPARK

Join us for Pancakes,
Sausages, Danish,
Coffee & Juice
*While Supplies Last

Essex Skypark Annual Max Lichty
Pancake Breakfast & Fly-In (W48)
1401 Diffendall Rd. Essex, MD 21221
www.EssexSkyparkAssn.org
FB Friends of Essex Skypark
Donations Accepted & Appreciated

Not to Be Missed! Yes, it's a real live HAMFEST!!

IT'S ON!! According to the website!

Sunday, June 20, 2021, 8 am – 2 pm: Father's Day Hamfest at Arcadia

Location: Arcadia Fairgrounds, 16920 Carnival Ave., Upperco, MD 21155

Website: <http://W3FT.com>

Sponsor: Baltimore Amateur Radio Club

Admission: \$5

Talk-In: 146.67 (PL 107.2)

Public Contact: David Shadwell , AB3TE, P.O. Box 120 Reisterstown, MD 21136, Phone: 410-252-2878,

Email: W3FT67@yahoo.com Attn: Hamfest Chair

2021 BARC Father's Day Hamfest and Marketplace (from the website, edited)



Features a giant flea market for traditional tailgating, miscellaneous items, and food. Featured items include: amateur radio gear, electronics, radio control, and disaster preparedness items. Hours: 8 am.-2 pm. Location: the Arcadia Volunteer Fire Company grounds, 16020 Carnival Avenue, Upperco, MD 21155. Admission: \$5 attendance and \$10 per tailgating space. Truck Of Deliciousness has been selected as our food vendor and will be

there early with a breakfast menu, plenty of coffee, lunch items, and other goodies.

Plenty of tailgating spaces and free customer parking. Indoor rest room facilities!

[Includes free deer with admission, where applicable. Ed.]

Remember, our event is the last area hamfest before the annual ARRL Field Day for those last minute shoppers. Please join us on Father's Day 2021 for our next event. 2021 printable hamfest flyer.

CLUB MEETINGS

04/07/2021: Aero Radio Club Meeting Minutes

7:30 - 8:20 pm

Members Present: Don K3DON, Rob AE3B, Jerry N3VBJ, Larry KB3QWC, Phil W3VRD, Joe WB3FMT, Bob WA3SWA, Ray N3RES, and Dave N3SOI

Via Zoom: Rich KB3VAE, Harry AC3EK, Steve KD3TP, Keon KE3HAY, George KB3TBH, Pat AC3F, Georgeann KB3PGN, and Dave KA3SNY

17 members, 9 in person, 8 via Zoom

Raffle: Phil W3VRD \$5.50 and \$5.50 to the club. Donated all to the club.

Treasury: \$2438 in the bank.

Repeaters: Both repeaters are working fine.

Correspondence: Pat said that State taxes are paid on 1 June.

Public Service: None at this time.

EmCOM: Skywarn course information is the on the NWS Sterling webpage. Jerry said if taking an online course chose one for this area, since they are different for other areas.

VE Testing: The VE test session will be held on 15 May. This session will be held at the American Legion in Rosedale. The address is 1331 Seling Ave Rosedale, MD 21237.

Old Business: Bob WA3SWA got his certificate for the club contest. The antenna bill information was emailed by Joe.

New Business: For Field Day last year we ran 3A and looking to possibly to run 4A this with one station being just digital. Will have a Field Day planning meeting in May 5 and this meeting will start at 7 pm. Club members can still work from home and add to our score for 2021. Joe asked Pat to get out the invitations for guests earlier this year. Joe we need to have the rotator for the beam. Jerry said we have the items to use the rotator in the trailer.

Bob asked about the members that didn't pay the due during the grace period. Bob also asked if the club contest is feasible with the lack of logs submitted.

4-21-21: Aero ARC ZOOM Rag Chew Meeting Notes

7:00 - 8:18pm

Members Present: by ZOOM - Rob AE3B, Richard KB3VAE, Harry AC3EK, Pat AC3F, Tom WA3QLY, Tom N3TJR, Dave KB3KRV, Dave KA3SNY, Georgeann KB3PGN, 9 members

at SKYPARK - Joe WB3FMT, Don K3DON, Bob WA3SWA, Phil W3VRD, Larry KB3QWC, 6 members
Total 15 Joe had a laptop running Zoom at the Airport.

50/50 winner was Don K3DON, \$3.50 & \$3.50 to the club.

For this meeting there was a "You Tube" presentation about Compression on HF. You tube link:
<https://youtu.be/sLGS8kiGe8>

Background: Ham Dave Casler, KE0OG, has a Thursday Night Q&A session from 9-10 pm on "YouTube". Here is the link to Dave Casler's "Youtube" home page:

<https://www.youtube.com/c/DavidCasler/featured>

If you like the reports by Dave Casler let me know, and I will look for more of them!
If you have any topics you would like to have discussed about RADIO, Astronomy or Weather or if you have seen a neat presentation and think the club would like it send me the link and we will run it for a Rag Chew meeting.

Items covered at the meeting: A letter from the ARRL for April 15, 2021. The FCC has announced that rule changes detailed in a lengthy 2019 Reports and Order (R&O) governing RF exposure standard go into effect May 3, 2021. The new rules do not change existing RF exposure (RZFE) limits but do require that stations in all services, including amateur radio, be evaluated against existing limits, unless they are exempted. For stations already in place, that evaluation must be completed by May 3, 2023. After May 3rd of 2021, any new station, or any existing station modified in a way that's likely to change its RFE profile – will need to conduct an evaluation by the date of activation or change. Check the ARRL web site for additional info and RFE aids.

Porta Pot and wash - Pat got a quote from the Maryland Portable Restrooms Inc. for a Handicap porta potty and hand wash station, The Porta Potty was listed at \$160.00, a 4-station sink was listed at \$110.00. I thought that the cost of a hand washing sink was too costly. We polled the members at the Skypark and on ZOOM and it was unanimous not to rent the 4 station sink, the club would purchase hand washing liquid and hand wipes in its place. Joe will send a check for the Porta Potty next week.

Field Day 2021 rules and regs are posted and the ARRL has extended FD rule Waivers from 2020 to 2021 and Add Class D and E Power Limits.

Airport News - The Skypark Fly-in Pancake Breakfast is a GO! The date is Saturday May 8th time is 9 am to 12 noon. Social distancing and maskd are required. The event is free, but donations are welcomed. Come hungry and bring money!

73,
Joe M

Net Reports

04-14-21: 449.575r, 20:00 to 20:37 local.

W3PGA Joe Essex, N3FQC Don Perry Hall, W3JEH Ron Perry Hall, K3DON Don Joppatowne, KC3RRK Carlos Baltimore City, W3VRD Phil Essex, KB3QWC Larry Middle River

7 people on the net

4-28-21: 147.24r, net ran for 25 minutes.

W3PGA Joe Essex, AC3EK Harry Overlea, K3DON Don Joppatowne, AC3F Pat Middle River, N3FQC Don Perry Hall, KB3QWC Larry Middle River, KB3VAC Richard Middle River, W3JEH Ron Perry Hall, WA3QLY Tom Middle River

9 participants



VE CORNER by Pat Stone, AC3F

The AERO VE Team held its second and largest session for 2021 on Mar. 20th. We served 15 applicants. Congratulations to new Generals: Ross Kathy KC3POO, Dale KC3RQV, Susan KC3RID, Livingston KC3RRB and Brad KC3RGK and also new Techs: Matt KC3RQS, Paul KC3 RQT, Roy KC3RQR, Brian KC3RQU, Carlos KC3RRK, Tim KC3RQW, James KC3RQX, Frank KC3RQY, Agatha KC3RQZ, and Phil KC3RRA.

Many thanks to VE's: WB3FMT, KB3VAE, N3FQC, N3RES, AC3EK, and WA3QLY for assisting me with our second session of 2021. We couldn't do this without you. Hope to see you in May. As always, it is a joy working with you.

Our next test session will be held on Saturday, May 15 at 1 pm in the American Legion Post 180 in Rosedale, Md. Hope to see you then.

Ham News

Amateur Radio Credited with Rescue of Back-Country Hiker in Tennessee

A back-country hiker was rescued from Great Smoky Mountains National Park with assistance from amateur radio after she became exhausted on the trail and possibly dehydrated. A member of the hiking group on the park's Little River Trail, Tim Luttrell, KA9EBJ, put out a call on the evening of April 11 via the W4KEV linked VHF repeater in Gatlinburg, Tennessee, requesting assistance in extricating the injured member. No cell phone service was available at the location, and Luttrell's signal was spotty at times, owing to the mountainous terrain.



Responding was David Manuel, W5DJR, who obtained more information and called 911, which routed the call to Great Smoky Mountains National Park Emergency Medical Service (GSMNP EMS). The national park EMS relayed through Manuel a request for the group to continue down the trail as far as possible to shorten the rescue time.



A medic with the Park Service search-and-rescue team subsequently reached Manuel by telephone, who served to relay questions to Luttrell. Manuel contacted members of the hiker's family after Luttrell provided contact numbers. Manuel was asked to relay information for the family to arrange to meet in Cherokee, North Carolina, and be prepared to transport the distressed hiker's vehicle to her home. Manuel got a call from Luttrell indicating "all clear" shortly after 2 AM.

The injured hiker was hospitalized and required surgery and rehabilitation. ARRL Tennessee Section Manager Dave Thomas, KM4NYI, told ARRL that he'd learned another hiker in the same group was close to hypothermia by the time they were rescued. Thomas will recognize each of the radio amateurs involved in the rescue with a Certificate of Merit during the ARRL Tennessee State Convention in Knoxville on June 19. [Read an expanded version.](#)

Source: *The ARRL Letter* for April 29, 2021

St. Vincent Radio Amateurs on Alert during Volcano Emergency

Donald de Riggs, J88CD, on the Caribbean island of St. Vincent, says that on April 13, the 42nd anniversary of the 1979 eruption of the La Soufrière volcano, island residents were awakened to another column of volcanic ash creating a thick blanket obscuring part of the eastern sky as the volcano continues to erupt violently.

"Almost all residents in the Red Zone have been evacuated, save for a few diehards who will not move, for reasons unknown," he said.

Since the effusive eruption began last December, local hams have been in a state of readiness via 2-meter networks and regional networks via HF. A 24-hour regional HF network and vigil has been active since violent eruptions resumed earlier this month to provide communication support should telephone service be disrupted by the volcanic hazard. This includes a twice-daily link-up on HF with the Caribbean Disaster Emergency Management Agency ([CDEMA](#)). There is also a 2-meter gateway via EchoLink on the J88AZ node. The other active VHF repeater is the main resource for domestic communications.

The Grenada repeater, which is linked to St. Lucia and Barbados, is also accessible by hams in Tobago, Trinidad, and St. Vincent and the Grenadines. Frequencies being used for disaster-related communications may include 3.815, 7.188, or 7.162 MHz. Volcanic ash is also falling in Barbados, Dominica, St. Lucia, and Grenada.

The La Soufrière volcano on St. Vincent began its most recent series of explosive eruptions on April 9, sending clouds of hot ash some 20,000 feet into the air, blanketing much of the island in ash and causing water and power outages. The volcano is "a constant threat," according to CDEMA. -- *Thanks to [The Daily DX](#)*

Source: *The ARRL Letter* for April 15, 2021

National Hurricane Center's Annual WX4NHC Station Test is May 29

WX4NHC at the National Hurricane Center ([NHC](#)) in Miami will conduct its annual on-the-air test on Saturday, May 29, 1300 - 2100 UTC. The traditional exercise takes place each year ahead of the Atlantic Hurricane Season, which runs June 1 - November 30. This hurricane season, WX4NHC operators plan to be working remotely again; the NHC will maintain all CDC pandemic protocols until the end of 2021. Only the chief meteorologist and staff may enter the building.

"Last year's season was an incredibly busy one, but the remote WX4NHC operations were successful, collecting many important reports via the Hurricane Watch Net, VoIP Hurricane Net, Winlink, the online hurricane report form, as well as many other means and modes," said WX4NHC Assistant Coordinator Julio Ripoll, WD4R.



Elna Michael, J88NEK, reported strong tremors in Fancy, St. Vincent, before being evacuated from the Red Zone just ahead of the explosive phase.



Hurricane Preparedness Week is May 9 - 15. Radio amateurs in hurricane-prone areas of the US should have an emergency plan in place before June 1. Now is the time, too, to harden and prepare your station for power outages. This means having multiple sources of back-up power, including batteries and, perhaps, a gas-powered generator. Test them now. Ensure your ability to take down and install antennas quickly and efficiently when storms threaten your area.

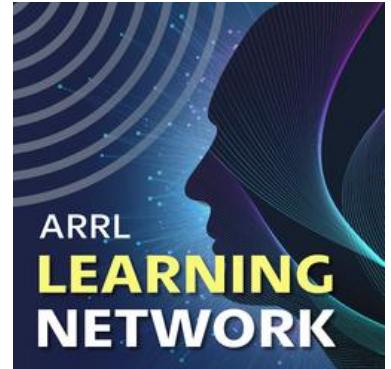
Hurricane Season 2021 nets to know include the Hurricane Watch Net ([HWN](#)) on 14.325 and 7.268 MHz, the Caribbean Emergency Weather Net ([CEWN](#)) on 3.815 and 7.188 MHz, the Marine Maritime Services Net ([MMSN](#)) on 14.300 MHz, the [Intercontinental Net](#) on 14.300 MHz, and the Salvation Army Team Emergency Radio Network ([SATERN](#)) on 14.260 MHz. -- *Thanks to [The ARRL ARES Letter](#)*

Source: The ARRL Letter for April 22, 2021

ARRL Learning Network Webinars

HF Noise Mitigation ARRL Northwestern Division Director Mike Ritz, W7VO / Thursday, May 6, at 3:30 PM EDT (1930 UTC)

An educational seminar to help both new and experienced HF operators who find themselves plagued with noise. We'll learn what "noise" is, discuss the various noise sources, and talk about how to mitigate those noises using a variety of techniques.



W1AW Antenna Farm -- W1AW Station Manager Joe Garcia, NJ1Q / Tuesday, May 18, at 1 PM EDT (1700 UTC)

Experience a bird's-eye view and description of the antennas used by W1AW for the station's scheduled transmissions and visiting operator activity. All the antennas used at W1AW are single-band Yagis. Viewers will also see the 5 GHz sector antennas that are part of W1AW's AREDN system.

Ask the Lab: How ARRL's Technical Information Service Can Help You -- ARRL Laboratory

Manager Ed Hare, W1RFI / Tuesday, June 8, at 1 PM EDT (1700 UTC)

Learn all about the ARRL Technical Information Service (TIS) and the expert ARRL Laboratory staff who answer thousands of questions each year from members. Get tips about projects, suggestions to address various station installations, and help for some of your most pressing ham radio questions. You'll discover how to search ARRL's extensive Periodicals Archive, find helpful articles, read test reports, access technical forums, and find answers to technical questions beyond the Lab.

These Learning Network presentations are sponsored by Icom.

ARRL members may register for upcoming presentations and view previously recorded [Learning Network](#) webinars. ARRL-affiliated radio clubs may also use the recordings as presentations for club meetings, mentoring new and current hams, and discussing amateur radio topics.

The ARRL Learning Network schedule is subject to change.

Source: The ARRL Letter for April 29, 2021



From the Skies over Mt. Essex

SKY Events for May 2021

May 3rd - Last quarter Moon, Mercury 2° s of Pleiades (M45) 22UT, 18 EDT.

May 4th - Jupiter 5° N of the Moon 21UT, 17 EDT.

May 5th - USA's Alan Shepard became the 1st American in Space, 1961.

May 6th - η-Aquariid meteor shower peak 2UT, 22EDT 5/5

May 11th - New Moon

May 12th - Venus 0.7° N of the Moon 22UT, 18 EDT

May 13th - Mercury 2° N of Moon 18UT, 14 EDT.

May 16th - Mars 1.5° S of Moon 5UT, 01:EDT

May 17th - Mercury greatest elongation E (22°) 6UT, 3 EDT.

May 19th - First Quarter Moon

May 23rd - Double shadow transit on Jupiter 15:15UT, 11:15 EDT.

May 26th - Full Moon, Traditional the Milk Moon, Celtic Bright Moon, largest Moon in 2021. .

May 28th - Double shadow transit on Jupiter 21:28UT, 17:28 EDT.

May 29th - Mercury 0.4° S of Venus 6UT, 02 EDT.

Planet Lookout at mid-Month EDT

Sunrise 05:53 EDT and Sunset 20:04 EDT

Mercury -- Evening Rises 07:03 Sets 21:56 Mag 0.3 and Size 7.7 arc seconds

Venus -- Evening Rises 06:39, Sets 21:08, Mag -3.9 and 10.1 arc seconds.

Mars -- Evening Rises 09:04, Sets 23:49, Mag 1.7 and 4.4 arc seconds.

Jupiter -- Morning Rises 02:14, Sets: 13:03, Mag -2.3 size 39.1 arc seconds.

Saturn -- Morning, Rises 01:25 Sets 11:40, Mag 0.6 size 17.2 arc seconds.

Uranus -- Evening Rises 05:16, Sets 18:53; Mag 5.8 size 3.3 arc seconds.

Neptune -- Morning Rises 03:13 Sets 14:53; Mag 8.0 size 2.3 arc seconds.

Care and Feeding of Your Planisphere!

Don't panic its not a house plant. A planisphere consists of a circular star chart attached at the center to an opaque circular overlay that has a clear opening so that stars of a given date or time are visible. They can be made out of heavy stock paper, cardboard, or plastic. The star chart contains the brightest stars, constellations, and some deep-sky objects visible from a particular latitude on Earth.

The planisphere is a star chart utilizing analog computer device. The two basic parts are first the Star Chart with a yearly calendar dates marked on the rim of the star chart, the second the Horizon Overlay, which shows us the brighter stars. A feature on this overlay is that it has the 24 hours marked on it.

You have two ways to use a planisphere. 1: What is out tonight? All you have to do is align the top overlay which has the times and put the hour mark over the date. If you try May 5th at 11 PM

Spica is due South in Virgo

Antares is rising in the East in Scorpius

Regulus is in the West in Leo

2: What or when is a Star or Constellation visible? Example: When is the first time I can see Orion? 3am, 8/1

Since the planisphere shows the celestial sphere printed flat, there is always some type of distortion. Using the polar azimuthal equidistant projection the sky is charted centered on one of the celestial poles (polar), while circles of equal declination (for instance 60°, 30°, 0° (the celestial equator), -30°, and -60°) lie equidistant from each other and from the poles.

The planisphere's top, with the clear opening, is designed for a set Latitude N or S of the celestial equator. The latitude is your position north of the Earth's Equator, Baltimore is 39.N. Planispheres are normally made for a latitude say 40° N, normally this would work for a range of latitudes from 35° to 45° N Latitudes.



This astronomy tool has been around since 200 BCE. It was invented by the Greeks and made out of light wood and metal. This is one analog device that is not broken and does not need to get fixed.

Astronomy Magazine sells one for about \$12.00, Orion Telescopes has one for \$10.00.

[Ed. Note: Don't buy a small one. Should be at least 10 1/2" in diameter for good visibility. The voice of experience!]