



Christmas Party December 18

The Aero Aerial

The Newsletter of the Aero Amateur Radio Club
Middle River, MD
Volume 15, Issue 12
December 2019

Editor Georgeann Vleck KB3PGN

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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.

2019-2020 Examination Schedule

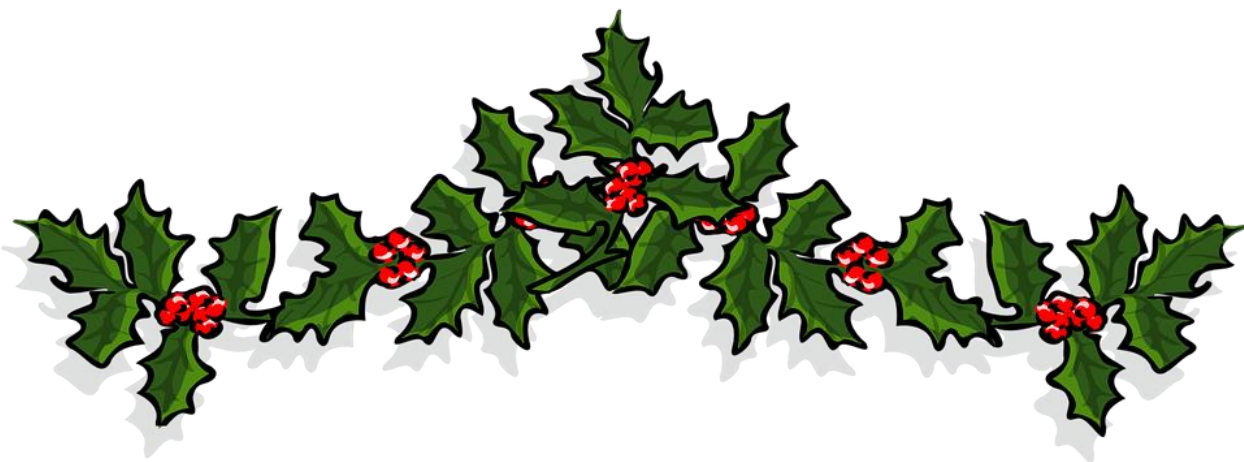
Time:	1:15 pm	1:15 pm	
Dates:	Sunday, Jan. 26, 2020		
Where:	White Marsh Library	White Marsh Library	

White Marsh Library, 8133 Sandpiper Circle, White Marsh, MD

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)



Aero Club Annual Christmas Party

Wednesday, December 18, 2018

Bring some goodies to share

NET REPORTS

11-13-19: 449.575r 123.0 PL., 20:00 to 20:36 local.

W3PGA NCS Joe Essex, KC3FBM Franklin Parkville, KB3QWC Larry Middle River, KB3JVP Ken Middle River, W3JDH Ron Perry Hall, KB3VAE Richard Middle River

6 stations on the net.

11-27-19: 147.24 MHz, 20:00 to 20:10 local.

W3PGA NCS Don K3DON, 5 check-ins.
(no detailed report sent.)



VE CORNER

by Pat Stone, AC3F

The AERO VE Team held its final session for 2019 on Nov. 10, 2019. We served 3 applicants. Congratulations to new techs KC3OKC Loren Kim, KC3OKD Wayne Powell and KC3OKX Wayne Tonkins.

Many thanks to VE's: WB3FMT, KC3FBL, AC3EK, AC3EO, AC0LP and N3RES for assisting me with our session. We couldn't do this without you. Thanks for another year of dedicated service to you and all who have served on our VE team for 2019. As always it is a joy working with all of you.

Our first test session of 2020 will be held on Sunday, January 26th at 1:15PM in the White Marsh Library. Hope to see you then.

ARRL to Launch New "On the Air" Magazine in January



ARRL is launching a new magazine, *On the Air*, in January 2020. To be published on a bimonthly basis, *On the Air* will offer new and beginner-to-intermediate-level radio amateurs a fresh approach to exploring radio communication. Each issue will include advice and insights on topics from the variety of Amateur Radio interests and activities: radio technology, operating, equipment, project building, and emergency communication. The goal of this new magazine is to be a vital resource in helping new and newer radio amateurs get active and involved in radio communications.

<http://www.arrl.org/news/arrl-to-launch-new-on-the-air-magazine-in-january>

The first issue of *On the Air* will be published in January 2020 (January/February issue) and will be introduced as a new ARRL membership benefit. Effective November 1, when eligible US radio amateurs join ARRL or renew their memberships, they will be prompted to select the print magazine of their choice — *On the Air* or *QST*. Current members receiving the print edition of *QST*, upon renewal, may choose to continue receiving the monthly print edition of *QST* or the print edition of the bimonthly *On the Air*.

see also <http://www.arrl.org/on-the-air-magazine>

Source: MDC Section News, Vol. 15, No. 10, Thursday, October 17, 2019 and [http://www.arrrl.org/news/arrrl-to-launch-new-on-the-air-magazine-in-january](http://www.arrl.org/news/arrrl-to-launch-new-on-the-air-magazine-in-january)

December 11 marks the 98th anniversary of the success of ARRL's [Transatlantic Tests](#) in 1921, organized to see if low-power amateur radio stations could be heard across the Atlantic using shortwave frequencies (i.e., above 200 meters). On that day, a message transmitted by a group of Radio Club of America members at 1BCG in Greenwich, Connecticut, was copied by Paul Godley, 2ZE, in Scotland. While the first two-way contact would not take place until 1923, the 1921 transatlantic success marked the beginning of what would become routine communication between US radio amateurs and those in other parts of the world -- the birth of DX.

To commemorate this amateur radio milestone, Maxim Memorial Station W1AW will be on the air through the day on December 11 with volunteer operators. The goal is to encourage contacts between radio amateurs in the US and Europe while showcasing the significance of the transmissions that pioneered global communication and laid the groundwork for technology widely used today.

The event will run from 1300 until 0000 UTC. Some details are still being worked out, but operation will focus on 40 and 20 meters (SSB).

Contact Clark Burgard, N1BCG, for more information.

Hamfests

Saturday, Dec. 7, 2019: 4th Annual SantaFest, 8:30 am – 12 pm

American Legion Youth Camp, 9201 Surratts Rd., Cheltenham MD 20623

Sponsor: American Legion, Prince George's County Emergency Radio Association

Talk-In: K3ERA Repeater 145.230 PL 110.9

Admission: \$6

VE Exams: 9 am to 11 am (Walk-ins must sign in no later than 10:30)

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

For information, or to reserve table and/or tailgate space, contact: selbynet@hotmail.com

Sunday, Jan. 26, 2020: Post Holiday Hamfest

Sponsor: Maryland Mobileers Amateur Radio Club

Location: Odenton Volunteer Fire Company, 1425 Annapolis Road, Odenton, MD 21113

Website: <https://sites.google.com/site/marylandmobileers/hamfests-1/hamfest-2>

Type: ARRL Hamfest

Talk-In: 146.805 (-) (PL 107.2)

Contact: Bruce McPherson , AB3AC, 484 Peach Leaf Ct., Odenton, MD 21113, Phone: 410-456-2500,

Email: bmcpherson73@verizon.net

SKYWARN Recognition Day Celebrates 20 Years on December 7

SKYWARN Recognition Day ([SRD](#)) will mark its 20th anniversary on December 7, 0000 to 2400 UTC. This is the day each year when radio amateurs operate from National Weather Service (NWS) forecast offices across the country, celebrating the long relationship between the amateur radio community and the National Weather Service SKYWARN program. The purpose of the event is to recognize amateur radio operators for the vital public service they perform during times of severe weather and to strengthen the bond between radio amateurs and their local NWS offices.

Developed in 1999, SRD is cosponsored by ARRL and the NWS. Traditionally, radio amateurs have assisted the mission of the NWS through providing near real-time reports of severe weather and storm development. Reports received from radio amateurs have proven invaluable to NWS forecasters.



During SRD, participants exchange contact information with as many NWS stations as possible on 80, 40, 20, 15, 10, 6, and 2 meters, plus 70 centimeters. Contacts via repeaters are permitted. Stations should exchange call signs, signal reports, and locations, plus a quick description of the weather at your location (e.g., sunny, partly cloudy, windy, rainy, etc.). EchoLink and IRLP nodes, including the Voice over Internet Protocol Weather Net ([VoIP-WX](#)), are expected to be active as well.

[WX4NHC](#) at the National Hurricane Center will also be on the air for SRD, 1300 - 1700 UTC, for its 21st year of SRD participation.

Event certificates are electronic and printable from the main website at the conclusion of SRD. To learn more, visit the [SKYWARN Recognition Day website](#).

'Twas the Night before Christmas Retold



'Twas the nocturnal segment of the diurnal period preceding the annual Yuletide celebration, and throughout our place of residence, kinetic activity was not in evidence among the possessors of this potential, including that species of domestic rodent known as *Mus musculus*.

Hosiery was meticulously suspended from the forward edge of the wood burning caloric apparatus, pursuant to our anticipatory pleasure

regarding an imminent visitation from an eccentric philanthropist among whose folkloric appellations is the honorific title of St. Nicholas.



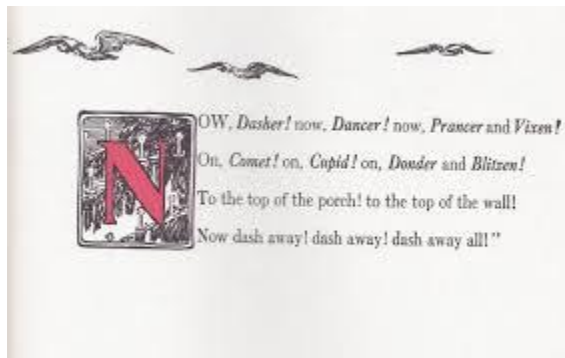
The prepubescent siblings, comfortably ensconced in their respective accommodations of repose, were experiencing subconscious visual hallucinations of variegated fruit confections moving rhythmically through their cerebrums.

My conjugal partner and I, attired in our nocturnal head coverings, were about to take slumberous advantage of the hibernal darkness

when upon the avenaceous exterior portion of the grounds there ascended such a cacophony of dissonance that I felt compelled to arise with alacrity from my place of repose for the purpose of ascertaining the precise source thereof.

Hastening to the casement, I forthwith opened the barriers sealing this fenestration, noting thereupon that the lunar brilliance without, reflected as it was on the surface of a recent crystalline precipitation, might be said to rival that of the solar meridian itself – thus permitting my incredulous optical sensory organs to behold a miniature airborne runnered conveyance drawn by eight diminutive specimens of the genus *Rangifer*, piloted by a minuscule, aged chauffeur so ebullient and nimble that it became instantly apparent to me that he was indeed our anticipated caller. With his ungulate motive power travelling at what may possibly have been more vertiginous velocity than patriotic alar predators, he vociferated loudly, expelled breath musically through contracted labia, and addressed each of the octet by his or her respective cognomen –

"Now Dasher, now the uppermost through which the concatenations of extremities.



Dancer..." et al. - guiding them to exterior level of our abode, structure I could readily distinguish each of the 32 cloven pedal

As I retracted my cranium from its erstwhile location, and was performing a 180-degree pivot, our distinguished visitant achieved - with utmost celerity and via a downward leap - entry by way of the



smoke passage.



He was clad entirely in animal pelts soiled by the ebony residue from oxidations of carboniferous fuels which had accumulated on the walls thereof. His resemblance to a street vendor I attributed largely to the plethora of assorted playthings which he bore dorsally in a commodious cloth receptacle.

His orbs were scintillant with reflected luminosity, while his submaxillary dermal indentations gave every evidence of

engaging amiability. The capillaries of his malar regions and nasal appurtenance were engorged with blood which suffused the subcutaneous layers, the former approximating the coloration of Albion's floral emblem, the latter that of the *Prunus avium*, or sweet cherry. His amusing sub- and supralabials resembled nothing so much as a common loop knot, and their ambient hirsute facial adornment appeared like small, tabular and columnar crystals of frozen water.

Clenched firmly between his incisors was a smoking piece whose grey fumes, forming a tenuous ellipse about his occiput, were suggestive of a decorative seasonal circlet of holly. His visage was wider than it was high, and when he waxed audibly mirthful, his corpulent abdominal region undulated in the manner of impectinated fruit syrup in a hemispherical container. He was, in short, neither more nor less than an obese, jocund, multigenarian gnome, the optical perception of whom rendered me visibly frolicsome despite every effort to refrain from so being. By rapidly lowering and then elevating one eyelid and rotating his head slightly to one side, he indicated that trepidation on my part was groundless.

Without utterance and with dispatch, he commenced filling the aforementioned appended hosiery with various of the aforementioned articles of merchandise extracted from his aforementioned previously dorsally transported cloth receptacle.



Upon completion of this task, he executed an abrupt about-face, placed a single manual digit in lateral juxtaposition to his olfactory organ, inclined his cranium forward in a gesture of leave-taking, and forthwith effected his egress by renegotiating (in reverse) the smoke passage. He then propelled himself in a short vector onto his conveyance, directed a musical expulsion of air through his contracted oral sphincter to the antlered quadrupeds of burden, and proceeded to soar aloft in a movement hitherto observable chiefly among the seed-bearing portions of a common weed. But I overheard his parting exclamation, audible immediately prior to his vehiculation beyond the limits of visibility:

"Ecstatic Yuletide to the planetary constituency, and to that self same assemblage, my sincerest wishes for a salubriously beneficial and gratifyingly pleasurable period between sunset and dawn."

OR



“Happy Christmas to all, and to all a good night!”

*Author Unknown.
Submitted by Lou Smith*

From the Skies over Mt. Essex

KY Events for December 2019

2020 Meteor Shower Highlights by IMO

Dec 4th – First Quarter Moon and Earliest end of Twilight

Dec 8th – Earliest Sunset

Dec 10th - Venus is 1.8° S of Saturn at 23:00 EST

Dec 12th - “Full Cold” Moon, for Traditional and the “Twelfth Moon” for the Dakota Sioux American Indian.

Dec 15th - Moon is 1.0° N of Beehive OC S of M44 OC

Dec 21st – Shortest day of the year 9hr 20mins at 40° N Lat, Winter solstice starts at 23:19 EST.

Dec 19th - Last Quarter Moon

Dec 24th – First human voyage to the moon (orbited the Moon) in Apollo 8, 1968.

Dec 26th - New Moon

Dec 28th - Venus is 1.0° N of the Moon at 21:00 EST.

Planet Lookout at mid-Month

Sunrise 07:08 EST and Sunset 16:46 EST

Mercury Morning Rise 06:01 EST, Sets 15:52 EST;
Mag -0.6 and 5.1 arc seconds.

Venus Evening Rise 09:24 EST, Sets 19:03 EST,
Mag -4.0, Arc Sec 12.3

Mars Morning Rise 04:15 EST, Sets 14:35 EST,
Mag 1.7, Arc Sec 4.1

Jupiter Evening, rises 07:49 EST, Sets 17:22 EST;
Mag -1.8 size 31.8 arc seconds.

Saturn Evening. Rises 08:55 EST Sets 18:38 EST;
Mag 0.6 size 15.3 seconds.

Uranus Evening 13:45 EST Sets 03:07 EST;
Mag 5.7 size 3.6 arc seconds.

Neptune Morning Rises 11:49 EST Sets 23:13 EST;
Mag 7.8 size 2.5 arc seconds

- The first quarter Moon on January 3rd creates excellent viewing conditions for the expected **Quadrantid meteor shower** (QUA) maximum on **January 4th 08h20m UT** – λ_{\odot} 283 . °15, expected ZHR = 120 (can vary \approx 60–200). The 08h UT timing for the peak will be favorable for North America, whereas European observers should spot the activity increase all along the night. The λ_{\odot} = 283 . °15 maximum timing is based on the best-observed return of the shower ever analyzed, from IMO data collected in 1992, as confirmed by radio results in most years since 1996.
- Famous **Perseid meteor shower** (PER) will suffer of the presence of a last quarter Moon for its maximum on **August 12th 13-16h UT** – λ_{\odot} 140 . °0, expected ZHR = 110, but will remain observable. Earth will potentially cross a filament on **August 12, around 10h UT**, with expected ZHR close to 100, just like it was predicted and it recorded in 2018.
- According to Jérémie Vaubaillon's models, activity outbursts may be expected from the famous **Draconid meteor shower** (DRA) when Earth will come close to two dust trails released by in 1704 and 1711. This could lead to two activity increases on **October 7, around 01h 25min UT and 01h 57min UT**.
- The same could occur with the **Leonid meteor shower** (LEO) according to Mikiya Sato's calculations. Earth could come close to a few dust trails released by 55P/Tempel-Tuttle in the year 1600 (giving a potential outburst on **November 17, between 06h 50min UT and 08h 13min UT**), in 901 (**November 18, 00h 58min UT**) and in 1234 (**November 20, 15h 28min UT**).
- Moon is new on December 14 and thus creates perfect viewing conditions for the best and reliable **Geminid meteor shower** (GEM) maximum on **December 14 00h50m UT** – λ_{\odot} 262 . °2, with an expected ZHR = 150. The timing for the peak will be favorable for European observers. Peaks ZHRs were slightly increasing over the past years and now reach up to 140-150 levels.
- The **Ursid meteor shower** (URS), active in December, may also be the source of a significant outburst (ZHR up to 400), according to Peter Jenniskens, when our planet will cross dust trails released by 8P/Tuttle in 829 (**December 22, 06h 10min UT**) and 815 (**December 22, 03-22h UT**) as well as a filament to be encountered on **December 22, 05h 27min UT**. Less important activity increases may also happen, according to Mikiya Sato's calculations, when dust trails released in 719/733 (December 22, 03h 15min – 03h 40min UT) and 801 (December 22, 17h 31min UT) dust trails will be crossed.

Abbreviations:

- α, δ : Coordinates for a shower's radiant position, α is right ascension, δ is declination.
- r : The population index, a term computed from each shower's meteor magnitude distribution. $r = 2.0$ – 2.5 implies a larger fraction of brighter meteors than average, while r above 3.0 is richer in fainter meteors.
- λ_{\odot} : Solar longitude, a precise measure of the Earth's position on its orbit.
- ZHR: Zenithal Hourly Rate,