



*Hope it's loads better than the old one!!!*

## ***The Aero Aerial***

The Newsletter of the Aero Amateur Radio Club  
Middle River, MD  
Volume 17, Issue 1  
January 2021

Editor Georgeann Vleck KB3PGN

### ***Officers***

President	Joe Miko WB3FMT
Vice-President	Rob Ballou KC3ROB
Recording Secretary	Larry Hill KB3QWC
Corresponding Secretary	Pat Stone AC3F
Treasurer	Warren Hartman W3JDF
Resource Coordinator	Ron Distler W3JEH

### ***Committees***

Repeater	Phil Hock W3VRD Jerry Cimildora N3VBJ Ken Erisman NE3A Dave Brunner AC3EO
VE Testing	Pat Stone AC3F
Public Service	Bob Landis WA3SWA
Webmaster, Facebook	Jerry Cimildora N3VBJ
Trustee:	Dave Fredrick KB3KRV (W3PGA) Jim Marshalek KC3FBL (AE3RO)
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	1 pm	1 pm
Dates:	Sat., Jan. 16	Sat., Mar. 20	Sat., May 22
Where:	American Legion, Rosedale	American Legion, Rosedale	American Legion, Rosedale

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

Contact:        Patricia Stone AC3F, email: [ac3f@juno.com](mailto: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 <sup>nd</sup> Tue	7:30 pm	146.670	Baltimore County RACES Net
2 <sup>nd</sup> Wed	8 pm	449.575	Aero ARC Net
4 <sup>th</sup> Wed	8 pm	147.240	Aero ARC Net
5 <sup>th</sup> 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)

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## CLUB MEETINGS

### **Aero ARC ZOOM Meeting: December 2, 2020**

Start Time: 07:28 pm End time: 08:25 pm

**Members Present:** Rob AE3B, Don K3DON, Joe WB3FMT, Bob WA3SWA, Shane KC3PPM, Harry AC3EK, Gus AA3GG, Pat AC3F, Jon N7JKR, Tom WA3QLY, Lou AB3QK, Rich B3VAE, Larry KB3QWC, George KB3TBH, Geigg K3POJ, Montel KA3RFI, Ray N3RES, Bill AC3DX, Chris AB3WG, Dave KB3KRV, Steve KD3TP and Danny Sliger  
22 members present

**Treasury Report:** Bank \$2,352.90 On Hand: \$0.00  
Tires for trailer delivered

**Repeater Report:** 2 m: No Problems 70 cm: No Problems  
The New Yaesu DX-1 was installed on 11/10/20, set to Auto Mode FM and C4FM.

**Correspondence:** Sent a letter to the American Legion thanking them for the setup and use of the Hall.

**Public Service:** We still need for our members to continue checking in with and helping neighbors and your fellow hams if possible.

**EmCOM:** Nothing scheduled before the end of hurricane season that season ended on November 30th. 30 Tropical Storms, 12 Hurricanes and 6 Hurricanes made landfall in the US or US territories.

SKYWARN Classes - None listed as of 12/2/20.  
To Check on or Register for the Online Classes, see the SKYWARN site.

**VE Testing:** The last test session was held on Saturday, November 14, at the American Legion Hall in Rosedale. A larger than expected crowd can to the site for testing. Fifteen applicants showed and 13 passed. See the VE Corner for a full report. Standard Covid-19 protocols were followed.

**Old Business:** Trailer: Warren ordered tires from another distributor. I also asked him to get two new bumper jacks to replace the broken ones. I also asked him to get four jacks stands to be used to raise the tires off the ground, to be used when changing a tire. Warren has received the tires for the club trailer. He is waiting for the Jacks. They should be in the next few days. Once that happens, I will canvass the members to get a work party together. Action Item: Richard stated that Marty has jacks that will work on the trailer. I will contact Marty to find out.

**Dues:** I still have 9 members that still owe dues for this year! If you are in questioned, send me a email at joseph.miko@verizon.net or call me a 443-956-0197.

**New Business:**

- 24 Repeater - Additional work needs to be done on the 24 repeater, the amplifier needs to be placed further from the Repeater. It needs to be the last device behind the duplexers. Phil suggested that we get a used Motorola or GE amplifier, increase the cable length to ~ 10 feet and use double shielded cables. Run the repeater at 5 watts and the amp at 60 to 100 watts. I will check with Jerry and Ken for additional info. Also, to make sure a Class C amp can run C4FM digital.
- An additional work group will be tasked with removing the old 440 and 24 repeaters later.
- Jon and Marty are members of the same AL Post, and this post is interested in starting and building a radio station, AERO ARC may be able to help them out?

**New Ideas for Club Meetings:** The following suggestions were made:

- During the Covid-19 plague, do you still want to have 2 meetings per month or an extra radio net. Any changes to or for the monthly format.
- How about a presentation for the club via Zoom? If not how about sending an article to Georgeann for the Aerial!
- Anyone have a radio or astronomy topic that they would like to have it explained? Send it to me and I will see who can answer it, either in writing or a Power Point presentation.
- Suggestion to have a Zoom Meeting on the 1st Wednesday of the month and have an additional radio net on the 3rd Wednesday of the Month. That would make at least 4 nets per month. What do you say?
- Use the second ZOOM meeting as a RAG CHEW event no meeting just Chew!
- Keep the same food menu for FD 21, use FD 20, we didn't use it.
- Keep the same proposed FD 20 plans for FD 21, less work.

**Please look at the above suggestions, please let me telling me which ones you would like to do. Or do you have any other ideas the club can use? Email to: joseph.miko@verizon.net**

JMM

**Aero ARC ZOOM Rag Chew Meeting: December 16, 2020**

Start: 07:00 pm; End: 08:15 pm

**Members Present:** Rob AE3B, Don K3DON, Joe WB3FMT, Bob WA3SWA, Shane KC3PPM, Harry AC3EK, Pat AC3F, Jon N7JKR, Tom WA3QLY, Lou AB3QK, Rich KB3VAE, George KB3TBH, Ray N3RES, Chris AB3WG, Dave KB3KRV, Steve KD3TP, Lou KC3NMT, Don 3FQC, Jerry N3VBJ  
19 members present

**New Ideas for Club Meetings:** Zoom Meeting Format Change! The second ZOOM meeting as a RAG CHEW event – no meeting, just Chew!

Welcome to the requested and new 2nd meeting of the month ZOOM Meeting, presenting a non-formal club meeting format.

For this meeting there was a "You Tube" presentation about one of our member's antenna setup at his home in Overlea. Background, there is a HAM Dave Casler that has a Thursday Night Q&A session from 9-10pm on You Tube. The presentation was "SuperAntenna: Oggie AC3EK's Experience (#327) – You Tube". The show ran about 17 minutes and included photos of Harry's antenna and Harry, setup information, configuration and operating data, and of course pricing and where it can be purchased.

Harry also sent me some additional links for other topics that I want to use in the upcoming second ZOOM RAG CHEW of the month. If you have any new ideas or topics that you want to do or show, let us know and we will turn the stage over to you.

**Still Old Business: Trailer:** The tires and trailer jacks stans are in.

**Dues:** I still have 9 members that still owe dues for this year! If you have questions, send me an email: [joseph.miko@verizon.net](mailto:joseph.miko@verizon.net) or call me at 443-956-0197.

**24 Repeater:** Additional work needs to be done on the 24 repeater, the amplifier needs to be placed further from the Repeater. Jerry and I are working on a time to go back to Kenwood. An additional work group will be tasked with removing the old 440 and 24 repeaters later. This may be in the Spring?

*JMM*

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***AERO AMATEUR RADIO CLUB 600 Hours,  
25 DAYS AND 25 NIGHTS OF FUN  
JANUARY 2021.***

**When:** 05:00 UTC Friday 01 January 2021 (00:00 EST )  
Thru 23:59 UTC Tuesday January 26, 2021 (18:59 EST)

**Eligibility:** All current AERO members.

**Station:** You may operate from any amateur radio station...from your home, a guest's home, terrestrial mobile, maritime mobile, aeronautical mobile, local nets. **When mobile or at another location please use the appropriate designation, i.e., AB3OO/P for portable, or AB3OO/m for mobile, etc...**

***If you operate remote, please use the "R" designation for remote.***

**Bands & Modes:** Work any legal mode(except SSTV/ATV) and bands allowed by your license class. Modes: C4FM, *dsDMR*, *Echo Link*, *IRLP* and *Wires X* contacts are permitted. *This especially applies to VHF operation.*

**Repeater contacts are OK.**

**Scoring:**

- Two (2) points per AM or SSB contacts
- Three (3) points per FM contact
- Three (3) points per UHF and VHF DMR, C4FM
- Four (4) points per RTTY contact
- Ten (10) points per CW contact.
- Five (5) points per DIGITAL contact i.e. PSK-31, FT4/FT8

**Bonus Points:**

- Any contact on 6 meters any mode 25 points per contact.
- Any contact via remote operation 50 points per contact.
- Any EME (earth-moon-earth) contact 1000 points per contact per team member

**Other Info:** Worked stations once per band per day. Repeats are allowed if contact is made on a different day, band or mode.

The Winner of this contest gets a special certificate and surprise gift. The Winner will be bestowed the honor of organizing the contest for the following year.

Log sheets may be compiled in Cabrillo or ADIF format or whatever exported readable ASCII format your logbook supports. You may email them to AC3EK at [hbr3@outlook.com](mailto:hbr3@outlook.com). Or mail them to: Harry Rundall 6909 Linden Ave, Apt A., Baltimore, MD 21206.

Make sure it contains the usual information date/time, station worked, their QTH, RST and Mode report. [Please](#) submit your logs by February 19, 2020.

***HAVE FUN - Warm up the winter blahs with FUN  
ON THE AIR! Good luck to all!!***

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## *Net Reports*

### **12-9-20: 440 net, 20:01 to 20:43 Local.**

W3PGA NCS Joe Essex, AC3F Pat Middle River, AC3EK Harry Parkville, N3VBJ Jerry Rosedale, N3FQC Don Perry Hall, Wa3QLY Tom Middle River, KB3JVP Ken Middle River, KB3VAE Richard Middle River, NE3A Ken Middle River

9 people on the net

### **12-16-20: 2 meter net, 20:00 to 20:26 Local.**

W3PGA NCS Joe Essex, N3RES Ray Lutherville. K3DON Don Joppatowne, KB3QWC Larry Middle River, N3FQC Don Perry Hall, KB3VAE Richard Middle River, KB3TBH George White Marsh

10 people on the net

### **12-30-20: 10m net on 28.445 MHz, 20:00 to 20:40 Local.**

W3PGA NCS Joe Essex, W3VRD Phil Essex, AC3F Pat Middle River, WA3QLY Tom Middle River, KC3AID Marty Rosedale, AC3EK Harry Overley, K3DON Don Joppatowne, N3FQC Don Perry Hall, NE3A Kenny Chase

9 radio operators on the net



## ***VE CORNER***

***by Pat Stone, AC3F***

Our next test session of will be held on Saturday, January 16, 2021 at 1 pm at the American Legion Post 180, 1331 Seling Ave. Rosedale, MD 21237. Hope to see you then.

Here are the 2021 test dates we have reserved at the American Legion Hall Post 180 in Rosedale, Md. All dates are Saturdays, and all tests will start at 1 pm.

**January 16, March 20, May 22, September 18, November 20**

We will also have our annual FD exam session at the Sky Park at noon on June 26.

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# Hamfests

## **CANCELED**

### **Sunday, March 14, 2021: Winterfest, ARRL Virginia Section Convention 2021**

Location: Richard Ernst Community Center, Northern Virginia Community College, 8333 Little River Turnpike, Annandale, VA 22003

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

Sponsor: Vienna Wireless Society

Talk-In: 146.910 (no tone)

Public Contact: Harry Mamaux , K3NF, 8425 Peace Lily Ct Apt 316 Lorton, VA 22079, Phone: 703-395-6721, Email: [k3nf@cox.net](mailto:k3nf@cox.net)

## **NO NOTICE OF CANCELLATION AS OF 1/1/21**

### **Sunday, June 20, 2021: Father's Day Hamfest at Arcadia**

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

Website: <http://W3FT.com> [Facebook](#) [Baltimore Amateur Radio Club](#)

Sponsor: Baltimore Amateur Radio Club

Talk-In: 146.67 (PL 107.2)

Public Contact: David Shadwell , AB3TE, P.O. Box 120 Reisterstown, MD 21136, Phone: 410-252-2878, Email: [W3FT@yahoo.com](mailto:W3FT@yahoo.com)

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## **AERO ARC Year in Review 2020**

*by Joe Miko and Patricia Stone*

The Aero Amateur Radio Club had a great year. The membership continued to increase we went from **46** members in 2019 to **49** at the close of 2020. The members were engaged in many operating activities and public service events.

### **COVID-19 Pandemic**

*Events were running as normal until the week of March 8<sup>th</sup>, then all daily routines and social interactions came to a halt. The cause of the multi-month disfunction was caused by a virus called Covid-19. We found ourself caught up in a deadly world-wide pandemic. Shelter in place became the norm, with outings restricted to Food stores, Pharmacies, Doctors, and a selected group of other retailers. Government offices shut down and we all waited for the pandemic tide to subside. Facial coverings and a 6 foot personel buffer became the norm. On May 29<sup>th</sup> after 5 pm, restaurants could serve food to outside tables, with social distances and face mask. This was the second part of Phase 1 of a State-required 3-phase regimen to get back to "Normal".*

*But just before Thanksgiving the daily infection rate started to climb in the state. By the second week of December the gains made in the summer months were wiped out! So it looking like a bleak winter.*



*Please hold on, pray and help when and where you can.*

## **Club Contest January 25 Days of FUN**

The year kicked off with the club's **25 Days and 25 Nights of Fun Contest**. And this year's winner was, Harry Rundall AC3EK. He was awarded a Certificate and a Handmade Maryland Flag mouse pad. The Maryland Flag mouse pad award gets passed along to the winner of the 2021 contest, along with a new certificate.

## **Aero Club Radio Nets - CW, Phone, and the Baltimore Traffic Net**



Business at the Aero Club monthly Nets was brisk! A second net joined the series. It was Pat's CW net held on Sundays at 20:00 on 146.55 simplex. She also runs the CW nets on other days as needed. Stats for the CW net: **85** sessions as of December 27. A big thanks to Coz WA3RQD and Dave AC3EO for their help as net control in my absence and there were 10 stations that checked in throughout the year. Kudo's to Ken KB3JVP, Jim KC3FBL, Frank KC3FBM and Dave AC3EO for their dedication to the net and practicing their CW skills.

As Pat stated, I am grateful for the interest and dedication these folks have shown for Mr. Morse and his code. I am also proud to report that all of those I have had the pleasure of working with during the past year and a quarter are becoming true "Brass Pounders". Several of them are already making CW QSOs. I am sure that the rest will be on the air using code within the next few months. Rob Ballou is currently using his Morse Code skills working as a representative going from the Baltimore Traffic Net (BTN) to the Maryland, Delaware, and District of Columbia (MDD), a CW traffic net.

I hope you will consider checking into one of our "CW Training Nets". We meet on the air every Sunday at 8PM on 146.55 and at 7:00 pm at the SkyPark, before the regular meetings. Hope you will consider joining our "fine fisted folks" one evening during our CW training nets.

The Club Phone net changes made in 2019 for the club's Phone Nets, seem to work well, the normal 2<sup>nd</sup> Wednesday 440 net, 4<sup>th</sup> Wednesday 2-meter net and the 5<sup>th</sup> Wednesday 10-meter nets.

As for the Phone nets, there were **27** nets held during 2020. The breakdown for the nets was:

70 cm: **10 nets, 6 hrs 3 mins with 67 check-ins**

2-meters: **13 nets, 8 hrs 53 mins with 135 check-ins**

10 meters: **4 nets, 2 hr 24 mins 32 check-ins**

**ZOOM Tela-conferences 16 sessions, 14hrs 26mins with 266 check-ins.**

There were no snow nets in 2020. A total of **500** people checked in to nets or ZOOM for a combined time of **31 hrs and 46 mins**.



Also, several of our club members participate in the **Baltimore Traffic Net**, the local part of the National Traffic System (NTS) a voice net held every day at 6:30pm on the Shawsville Repeater 145.330r. This net acts as a starting point to move formal traffic in the form of an ARRL Radiogram (Think the old-style Western Union Telegram) within the State and across the U.S. and Foreign countries.

### ***ARRL Phone International DX Contest - March 6-8, 2020***

Club members were invited to the annual "ARRL Phone International DX Contest." The contest started Friday night, March 6, at 20:00 local and ran to Sunday 19:59 local. Our plan was to setup Saturday afternoon and run to about 16:00 on Sunday.

It came together thanks to Ron W3JEH, who provided the information about the contest run by ARRL. The operating place was easy, all it took was an email to the Dean and Mandy of the Skypark Association. I brought my trusty Off Center Fed Dipole (OCD) that works 80-10. Dave AC3EO's brought his rig a YAESU FT DX101MP, it a radio with dual SDR's, a 3-Dimensional Spectrum Stream that can view up to the last 25 seconds of band conditions in real time. It has filters for its filters. Oh, it's a 200-watt rig that happens to have a Touch Screen.



A set up crew consisting of Dave AC3EO, Molly KC3OUU, Tod and Liza, Ray N3RES, and Joe WB3FM was onsite at the Fixed Base Operation (FBO) building at noon on the 7th.



We had two antennas to use, a G5RV and an Off Center fed Dipole (OCD). While erecting the antenna we encountered problems with the weather. Clear skies, mild temps, but the wind speed in the teens made it difficult to put one let alone two. Based on the performance characteristics of the OCD made it the antenna of choice. The antennas were setup and we were operational by 13:30 EST on Saturday.

Using one of the club's towers the OCD Antenna was set up at the side of the Fix Base Operator (FBO) building, my OCD, an MFJ fiber glass pole was used at the center. The end connection was held up with 2 10-foot sections connected to a fence pole. One 100 foot of RG 8 was run and connected to the FTDX101MP. The rig was turned on and no, I mean NO Static at all. The digital noise filters and roofing filters did their job superbly.

We got on the air about 13:30 EST, Dave AC3EO made the first contact, a station in Germany, at 13:38 EST and we were on our way.

Dinner consisted of a couple of Pizza John's Pepperoni Pizzas. Throughout the evening a series of operators came and went, but somehow managed to stay for the pizza, No Problem!



The crew consisting of Larry KB3QWC, Ray N3RES, Dave AC3EO Tod and Lisa, Molly KC3OUU, Bob WA3SWA, Pat AC3F, Tom WA3QLY, Don K3DON his driver friend Gordon, Jerry N3VBJ, Jim KC3FBL his XYL Donna and myself WB3FMT.

The rig was continuously manned from then to about 03:00 EDT and was at 75 contacts when Jerry left the building. I got back on the radio about 07:30 EDT and the rig was manned till we shut down at 16:45 EDT. Dave AC3EO also made the 100th contact at 11:57 EDT to a station from Lithuania. We all had a lot of fun and are looking forward to doing another contest in the Fall. Come on, as for any club activity any and of the members are welcome to attend to watch, snack out and participate if you want.



(Dave with his Harmonics and Molly)

We ended our Skypark DX-pedition at 16:45 EDT and everything was wrapped up, car loaded. We left the Airpark at 17:30 Sunday afternoon.



Below are the stats from the contest.

Total Contacts = 136

DX Contacts 135

US State HI 1



80 meters	24	18%
40 meters	39	29%
20 meters	73	54%
	136	

Total Points = 37,905

Total DX miles (QSOs in USA not counted) = 537,027

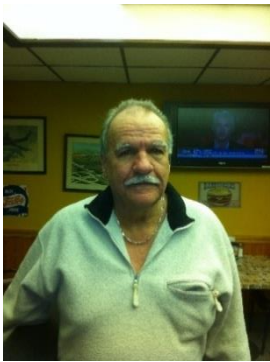
Average miles per DX QSO 4,008 miles

Continents worked Africa, Europe, North America, South America and the Central Pacific Ocean countries.

Again, special thanks for helping to make this a fun event.

Photos by Dave AC3EO & Joe MikoWB3FMT

## ***Silent Key, Al Alexander, K3ROJ***



For the second time in two years the Aero ARC lost a beloved and long-time member.

Sad to report that K3ROJ/SK, a long-time FIST Member who could send code with his foot, no kidding I saw him do it at the Baltimore Ham Fest in Timonium.

Al, an Aero member since the mid-sixties, passed away on March 17, 2020 after a brief illness. Al leaves behind his wife Mary.

## ***Aero Club Elections***

I didn't forget about the club's election not held on May 20<sup>th</sup> due the COVID-19's ban on groups over 10. The election of club officers was postponed until we could have a face-to-face meeting. It was done on 7/1/20. It happened so fast; people were elected before the polls closed. As I recall, I never saw or heard the train as it went by the station. It happens so fast I did not see the **FRED**.



Flashing rear-end device

## ***VEC Testing***



The VE Testing Program was successful as much as we could be! For the 2020-year Pat AC3F and her VE's tested worked at 4 test sessions, 2 at the White Marsh public library and 2 at the Community Hanger building at the Essex Skypark on Field Day Saturday and 1 at a new location the American Legion in Rosedale. Joh Royer N7JKR and the AL staff volunteered the Hall for our use. This is great because libraries are using their conference rooms (our testing locations) to stage returned books as a quarantine measure. The Test session on November 14<sup>th</sup> held at the AL Post had 15 applicants show up and 13 passed.

All told we tested **39 applicants**, **36** were successful. The breakdown was **25** Techs, **8** Generals **3** Extras. The number of VE's participating in 2020 was 13.



## ***Public Service Support and Club Contest***

The Aero ARC was not able to participate in the customary civic events as we normally do. At least 5 events this year, all of which were open to the public at various locations on the Eastern Shore, Baltimore County, and the Essex Skypark were canceled or became a virtual event because of COVID-19.

On the Public Service front, Aero member, Bob WA3SWA continued to assist BRATS for various **Multiple Sclerosis Bike Tours** and Walks and participated in other area clubs' activities. This event was canceled.

**The American Diabetes Association's Tour de Cure 20** also canceled due to Covid-19.

**Chesapeake Scouts Aviation Event** was planned for May 15-17, 2020, rescheduled for November 7, then was also canceled.

**Essex Skypark's** annual pancake breakfast open to the public usually held in May was canceled due to COVID-19.

**Essex Skypark's** Wings and Wheels, a Fly-In and Custom and Antique Cars and Truck display open to the public, held in mid-September, was canceled due to COVID-19.

**ARRL Phone Sweepstakes** scheduled for Nov 21 – Canceled. This contest was planned for November 21 -22 but a spike in the daily infection rate, caused cancellation of this event out of caution.

## ***Field Day 2020 was like no other!***

First of all, we had to contend with COVID-19 and all the medical stuff with it. Second, there was a new tenant at the Skypark, who took over the room next to the STEM Flight Simulators. That room was a former storage room the stuff had to go somewhere. We had to contend with the rearranging of furniture and the excessing of not needed artifacts. This meant that the customary VEC testing had to find a new home for the day. It was decided to hold the test in multiple pavilions to meet health requirements and social spacing.



Secondly the Community Hanger had not one but two planes in various stages of being rebuilt. This cut our operational space in half.

So to get started it was agreed to have a modified Field Day Operation. So, we downsized from a 5A station configuration to a 3A configuration – 3 HF stations, 1 CW / Digital and 2 HF stations for voice a 20-meter station and a 10 thru 80 meter station.

We put good use to two Off Center Fed Dipoles and a G5RV. We did not use the multi-band vertical nor the 20-meter beam. Maybe a bad choice?

The Aero ARC's modified Field Day setup did have good results. We worked 36 states (No DE), Canada, Rico, and tow DX contacts Slovak Republic and Vatican City. We made 219 contacts, using Phone, and CW, no digital.

Total Points 1542 = QSO 592 + Bonus 950

Stats by Band	80 CW	31	80 Phone	22
	40	36	80	81
	20	-	20	39
	<u>15</u>	<u>10</u>	<u>15</u>	
Totals		77	142	= 219

This year because of the pandemic operators could work from home and submit their scores under their call sign and list the club's call sign. QST would then add together the aggregate scores in the December QST (pg. 72). We found out the one of our members working from home had a score of 122 points. This gave us a total score of **1664** points with 2 entries.

There were 18 Aero Members and 1 Guest Ham participating in FD 2020.

Aero members operating and supporting with this event were: Dave KB3KRV, Joe WB3FMT, Larry KB3QWC, Dave AC3EO, Liea & Todd , Bob WA3SWA, Phil W3VRD, Warren W3JDF, Pat AC3F, Jerry N3VBJ, Richard KB3VAE, Ray N3RES, Rob AE3B, Steve KD3TP, Brittany KB3YKN, Dan KB3CMS, Harry AC3EK, John KN4GXB, Molly KC3OUU. And Sue Landis for the Cookies!

Members of AERO ARC members were onsite between 07:00 am on 6/26 thru 4:00 pm on 6/28.

## ***Repeater Upgrade***

On November 10<sup>th</sup> of 2020, the Aero ARC replaced the old 147.24 MHz repeater system. The original system utilized a split site configuration, that is, a transmitter on top of the elevator penthouse and the receiving antenna about 600 feet away on a tower at the gym. This configuration worked well but had a few drawbacks. It did not have a 3-minute timer, the timer was 1 ½ minutes and was unable to use CTCSS tones on both input and output and it was a vintage (old) transmitter and receiver configuration. Last year when Baltimore County added air conditioners to the school, the repeater was down for a few months because of a damaged control cable running from the penthouse to the roof of the gym.

It was then decided to investigate getting a replacement for the 2-meter system and a new duplexer. Several years ago, the club replaced the 449.575 MHz repeater with a state-of-the-art FM and C4FM

digital unit by Yaesu. This was the DX-1 dual band and dual mode repeater; it could operate on 2-meters or 70 centimeters (one or the other) and receive and transmit in Analog FM or Digital FM in its automatic mode. Whichever mode it receives, it will transmit the same mode out. This was the same model repeater as the 70-centimeter repeater.

With a minimum of problems, the task was done in about 4 hours. The existing 440 repeater was left intact with only the transmitting antenna removed. It is now a single site repeater and it is running 20 watts output. Additional work is planned to add an additional cable to isolate the amplifier, and de-install the old 2-meter and 70-centimeter repeaters. Thanks to club members Jerry N3VBJ, Ken NE3A, Richard KB3VAE, Marty KC3AID, and Joe WB3FMT.

### ***Club's Equipment Trailer***

Thanks to Marty KC3AID, Richard KB3VAE, and Joe WB3FMT, the trailer has a new set of tires installed by Marty and the stabilizer front and rear jacks. This was a two-day effort by Marty, a couple of hours each day on Dec. 22nd and 23<sup>rd</sup>. Thanks for a needed job well done! Looks like the trailer is good for another 20 years.

### ***2020 Aero Christmas Party Stolen by the COVID-19 Grinch (the cookies too!)***



Due to the increase in daily COVID-19 in the State of Maryland, and surrounding States, all group activities involving 10 or more persons were asked to reconsider and cancel, for Health and Safety reasons.

Before I close, I would like to thank everyone who made and helped at the face-to-face meetings and a special thanks to Rob AE3B for hosting the bi-monthly ZOOM meetings. Again, thanks to all the members of the Aero Amateur Radio club, for all your help and continued support. A club is only as good as its members want it to be!

Remember the only purpose of Hate is to "Destroy the container it's in." As Galileo Galilei said to Pope Urban VIII in July 1633, "**E pur si muove**". On 31 October 1992, Pope John Paul II acknowledged that the Church had erred in condemning Galileo, 350 after the fact. "And yet it moves" and, yes, with Grace we shall all move from this pandemic, God speed.

*Joe Miko, President*

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# From the Skies over Mt. Essex

## SKY Events for January 2021

January 1<sup>st</sup> **HAPPY NEW YEAR 2,459,216 Julian Day**

Jan 2<sup>nd</sup> - Earth at Perihelion (closest to the Sun)  
91,399,454 miles at 8:51 EST.

Jan 3-4<sup>th</sup> – Quadrantids Meteor shower approx 60 -120  
meteors per hour, look NE toward Bootes after mid-  
night. 4<sup>th</sup> latest sunrise of the year.

Jan 6<sup>h</sup> –Last Quarter Moon

Jan 8<sup>h</sup> – Stephen Hawking born 1942.

Jan 11<sup>th</sup> – Jupiter, Mercury 1.4° lower left with Saturn  
2.3° to lower right.

Jan 13<sup>th</sup> – New Moon

Jan 20<sup>th</sup> - First Quarter Moon

Jan 21<sup>st</sup> – Uranus is 1.6° south of Mars

Jan 23<sup>rd</sup> – Mercury is 19° east of the Sun

Jan 28<sup>th</sup> – Full Moon, “Winter Moon” for Traditional  
and the “The big cold Moon” for the Mohawk American  
Indian

## Planet Lookout at mid-Month

**Sunrise 07:14 EST and Sunset 17:08 EST**

**Mercury** Morning Rise 08:15 Set 18:23; Mag -0.9; Size 5.7  
seconds

**Venus** Morning Rise 6:11, Sets 15:47; Mag -3.9 and 10.5 arc  
seconds.

**Mars** Evening Rises 11:40, Sets 01:14, Mag +0.1 and 9.0  
arc seconds wide.

**Jupiter** Evening, rises 07:54, Sets 17:57; Mag-1.9 size 32.5  
arc seconds.

**Saturn** Evening, rises 07:44, Sets 17:43; Mag+0.6 size 15.2  
arc seconds.

**Uranus** Evening **Rises** 11:54 Sets 01:25; Mag +5.8 size 3.5  
arc seconds.

**Neptune** Evening Rises 09:55 Sets 21:26; Mag +7.9 size 2.4  
arc seconds.

## Upcoming Events for 2021

### Planets – Mercury and Venus in 2021

Maximum Eastern and Western Elongations

		Date	°		Date	°	
<b>Mercury</b>	EE	1/23/21	18.5	E WE	03/06/21	27.3	W
		5/17/21	22.1		07/05/21	21.3	
		9/14/21	26.4		10/25/21	18.4	

<b>Venus</b>	EE	10/30/21	47.1	E WE	None		W
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### Moon – 2021

**Blue Moon** – ( 3<sup>rd</sup> FM in a Season of 4 FMs) - 08/22/21

**Black Moon** – (2 New Moons in a month) – None in 2021

**Harvest Moon** - 09/20/21

**Hunter Moon** - 10/20/21

**Super Moons** - Full 3/28, 4/27, 5/26 and 6/24

**Lunar Eclipses in 2021** - 1 Total- Visible in the US 5/26/21  
& 1 Partial 11/19/21

**Sun** Ended Sunspot cycle 24 began cycle 25 in Dec. ‘19

### Solar Eclipses in 2021 (2) - 0 Partial, 2 Total

- One is visible in the New England Area of US 01/21/21

**Meteor Showers for 2021** Predictions - 5 Good, 3 Poor

Quadrantids 1/4	3 <sup>rd</sup> Quarter	Poor	60-120 per hr
Lyrids 4/22	1 <sup>st</sup> Quarter	Good	10 per hr
Eta Aquarids 5/5	3 <sup>rd</sup> Quarter	Poor	45 per hr
Delta Aquarids 7/29	3 <sup>rd</sup> Quarter	Poor	16 per hr
Perseids 8/12	1 <sup>st</sup> Quarter	Good	60-80 per hr
Orionids 10/8	New Moon	Good	18 per hr
Leonids 11/17	1 <sup>st</sup> Quarter	Good	15 per hr
Geminids 12/14	1 <sup>st</sup> Quarter	Good	120 per hr

### Seasons in 2021

Earth Perihelion	01/02/2021	08:50 EST	13:50 UT
Earth Aphelion	07/05/2021	18:27 EDT	22:27 UT
Vernal Equinox	03/20/2021	05:37 EDT	10:37 UT
Summer Solstice	06/20/2021	23:32 EDT	03:32 UT
Autumnal Equinox	09/22/2021	15:21 EDT	19:21 UT
Winter Solstice	12/21/2021	10:59 EST	15:59 UT

### Daylight Saving Time 2021

Begins 03/14/2021 - Ends 11/7//2021

### Easter Dates 2021 Full Moon 03/28/2021

Easter Christian (Western) 4/04/2021  
Eastern Greek (Orthodox) 5/02/2021