



Merry Christmas and Happy New Year!

The Aero Aerial

The Newsletter of the Aero Amateur Radio Club
Middle River, MD
Volume 14, Issue 12
December 2018

Editor Georgeann Vleck KB3PGN

Officers

President	Joe Miko WB3FMT
Vice-President	Jerry Cimildora N3VBJ
Recording Secretary	Lou Kordek AB3QK
Corresponding Secretary	Pat Stone AC3F
Treasurer	Warren Hartman W3JDF
Resource Coordinator	Ron Distler W3JEH

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Repeater	Phil Hock W3VRD Jerry Cimildora N3VBJ
VE Testing	Pat Stone AC3F
Public Service	Bob Landis WA3SWA
Webmaster, Facebook	Jerry Cimildora N3VBJ
Trustee	Dave Fredrick KB3KRV
Club Nets	Joe Miko WB3FMT
Contests	Bob Venanzi ND3D Charles Whittaker KB3EK

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 – 10 Meters (28.445 MHz) @ 8 p.m. Local Time

Fourth Wednesday Net – 2 Meters (147.24 MHz Repeater) @ 8 p.m. Local Time

Fifth Wednesday Net – 70 Centimeters (449.575 MHz Repeater) @ 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 Examination Schedule

Time:	1:15 pm		
Dates:	Sunday, Jan. 6		
Where:	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	28.445	Aero ARC Net
4 th Wed	8 pm	147.240	Aero ARC Net
5 th Wed	8 pm	449.575	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 19, 2018

Bring some goodies to share



Club News 11/7/18 Meeting

Treasury: \$1941.41 in the bank, \$10 on hand (sale of 1 hat)

There is still a 1½ minute limit on our 2m repeater. Ken NE3A stated that this is a firmware problem difficult to alter. Recommended methods to deal with this limit: talk less, be briefer, use Q-codes.

NASA special events 11/20, 12/4, 12/21. Go to NASA.gov for details.

The second meeting in December, 12/19, will be the Aero Christmas party.

Heads up from Rich KB3VAE: this coming June the Chesapeake District Boy Scouts will have their Aviation Day at Essex SkyPark (camping). Unknown at this time whether it will coincide with Field Day.

There was no meeting November 21 because of the Thanksgiving holiday.

NET REPORTS

10/31/18: 449.575r MHz, 20:00 to 20:22 Local.

W3PGA NCS Joe Essex, KB3JVP Ken Middle River, KB3QWC Larry Middle River, KC3FBL Jim Parkville, KC3FBM Franklin Parkville, W3VRD Phil Essex, KB3VAE Rich Middle River, K3TEL Arnold Towson

8 club members on the net

11-14-18: 28.445 MHz, 20:00 to 20:22 local.

W3PGA NCS Joe Essex, W3JEH Ron Perry Hall

2 club members on the net.

11-28-18: 147.24 MHz simplex, 20:00 to 20:55 local.

W3PGA NCS Joe Essex, TD3TP Steve Jarrettsville Mobile, KC3ANG Gregg Lutherville visitor, K3TEL Arnold Towson, KB3JVP Ken Middle River, KC3CMS Dan Overlea visitor, AC3F Pat Middle River, KC3FBL Jim Parkville, KC3MMN James Nottingham, KB3VAE Rich Middle River, W3JEH Ron Perry Hall, KC3IPK Dave Perry Hall, AC3CZ Jim Dundalk

9 club members and 4 visitors on the net.

Pat stated the code practice on 2 meters is doing well. She is giving the on-air class on Tues, Fri, and Sun at 8pm on 146.55s on non-meeting weeks. On meeting weeks, no Tues practice, practice will be held on Wed at the FBO at 7pm before the meeting.



VE CORNER

by Pat Stone, AC3F

The AERO VE Team held its final session for 2018 on Nov. 11th, 2018. We served 6 applicants. Congratulations to new Generals KC3LPV John Monks, KC3IYV Donte Trasatti, and KC3KMP Charles Padgett, also new techs KC3MMM Joe Price, KC3MMN Jim Trimmer and KC3MMO Joshua Li.

Many thanks to VE's: WB3FMT, KC3FBL, KC3FBM, AB3QK, AC0LP and KD3TP 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 2018. As always it is a joy working with all of you.

Our first test session of 2019 will be held on Sunday, January 6 at 1:15PM in the White Marsh Library. Hope to see you then.



It seems appropriate to the time of year that I forgot to include this in the Aerial a couple months ago.

** The Editor*

The Holly Net



The Holly Net is now the official name of the Anne Arundel Radio Club's former *Morning Net*, named in honor of Margaret "Holly" Bevan (N3MB), shown at the left at her 100th birthday party. "Holly" was our beloved control operator for over 30 years.

In the military in WWII, there were five Margaret's in her office, so she received the nickname "Holly" based on her maiden name. By the end of the war "Holly" was the ranking female in her branch of service as a Chief Petty Officer. After the war she took up teaching, and eventually got into ham radio in the late 70's by taking an AARC sponsored course her son signed her up for. In addition to

her Master's Degree, "Holly" became an Amateur Extra and took the vanity call sign with her initials in it, N3MB. She paid the ham community back a thousand fold, first at a Ham Arundel News editor, and later as a Volunteer Examiner, a Field Day greeter, and as the lone network control operator of our *Morning Net*, year after year. She finally left us just short of age 102. There wasn't a member in the club who was not inspired by N3MB. We still miss her.

While she was with us, "Holly" was about the only person in the club who didn't call it ***The Holly Net***. She knew well what we called it, but she was too modest to use that name herself. But we are not the slightest bit shy about singing her praises, and have now, finally, officially renamed this net in her honor as, ***The Holly Net***.

The Holly Net	147.105+ PL 107.2	Weekdays	0600
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Source, and for more information: www.w3vpr.org

UPCOMING HAMFESTS and EVENTS

Saturday, Dec. 8, 2018: Third Annual SantaFest

Location: American Legion Youth Camp, 9201 Surratts Road, Cheltenham, MD

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

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

Talk-In: 145.230(-) PL 110.9 K3ERA Repeater

Contact: Charles Hallock, AA3WS, Phone: 301-535-1666 | Email: selbynet@hotmail.com

Sunday, January 20, 2019: The 6th RadioWinterFest!

Location: National Electronics Museum, 1745 W Nursery Rd, Linthicum Hts, MD 21090

Sponsor: ARC of the National Electronic Museum

Website: <http://www.k3nem.org/>

Talk-in: 146.7600- (107.2), WA3DZD Jessup, MD

Near the BWI Airport, just south of Baltimore

Sponsor: Mid-Atlantic Antique Radio Club

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

Sunday, January 27, 2019: Maryland Mobileers Post Holiday Hamfest

Odenton Fire Hall, 1425 Annapolis Rd, Odenton, MD 21113

Sponsor: Maryland Mobileers Amateur Radio Club

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

Talk-In: 146.805(-) PL 107.2, W3CU in Millersville, MD

Contact: ka2jai@arri.net for Amateur radio license exams

Saturday, February 2, 2019: Richmond Frostfest

Location: Richmond Raceway Complex, 600 East Laburnum Avenue, Richmond, VA 23218

Website: <http://frostfest.com>

Sponsor: Richmond Amateur Telecommunications Society (RATS)

Type: ARRL Convention

Talk-In: 146.880+ (PL 74.4)

Contact: Robert Marshall , KI4MCW, PO Box 70613, Henrico, VA 23255, Phone: 804-620-7287

Email: ki4mcw@frostfest.com

Take The Bus To FrostFest!!!

Submitted by AE3D on Tue, 08/14/2018 - 11:09



FrostFest is the largest winter Amateur Radio Event in the Mid-Atlantic Region. It's coming up again on Saturday, February 2, 2019 at the Richmond Raceway Complex in Richmond, VA. You know you want to be there, but likely you don't want to drive the two hours plus each way.

The Anne Arundel Radio Club has the answer. Take the bus. We are looking for 45 to 55 hams who can make their way to the Park & Ride at the intersection of U.S. Rte. 50 and MD Rte. 424 by 6:00 am on the morning of FrostFest. That's when we plan to leave, returning to the same location between 4:00 pm and 6:00 pm later that day. The \$45 fee includes early admission to FrostFest at 8:00 am, 30 minutes before the gates open to the general public. Talk ham radio all the way down and back, or take a nap. It's up to you.

Right now we are just collecting info on those interested, but with enough interest we will start collecting funds. We need to have a minimum number of paid-up riders by January 1 or we will have to cancel. So please, [click here](#) to let us know you want join us. We'd love to take you with us to FrostFest.

Source: www.W3VPR.org

Sunday, March 24, 2019: WINTERFEST

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

Sponsor: Vienna Wireless Society

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

Talk-In: 146.910- (77.0), WD5DBC Tyson's Corner, VA

Contact: Harry Mamaux, K3NF, Phone: 703-395-6721 | Email: k3nf@cox.net

Saturday, April 27, 2019: Delaware State Convention (Delmarva Radio & Electronics EXPO)

Location: Cheer Community Center, 20520 Sand Hill Road, Georgetown, DE 19947

Sponsor: Sussex Amateur Radio Association

Website: <http://radioelectronicsexpo.com>

Talk-In: 147.090+ (PL 156.7), WS3ARA Millsboro, DE - Sussex ARA

Contact: Herbert Quick, KF3BT, Phone: 302-629-4949, Email: herb@hamiltongraphics.com

Saturday, April 27, 2019: York Hamfest

Location: Elicker's Grove Park, 511 Roth Church Road, Spring Grove, PA 17362

Sponsor: York Hamfest Foundation

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

Talk-In: 147.330+ (PL 123.0), W3MUM PennMar, PA

Contact: Duane Sterner, KB3QLQ, Phone: 717-332-1385, Email: duane.sterner@yahoo.com

You may view upcoming Hamfests at: <http://www.arrl.org/hamfests-and-conventions-calendar>

SPECIAL EVENTS

Saturday, December 8, 2018: USS Arizona at Pearl Harbor Day

<http://www.tucsonhamradio.org/>

Pearl Harbor remembrance from USS Arizona memorial on University of Arizona campus

Sunday, December 8, 2018 from 1700 to 2359 UTC: USS Midway Museum Ship Special Event: Pearl Harbor Remembrance Day

Station: NI6IW, San Diego, CA onboard USS Midway (CV-41) Museum Ship

Wednesday, December 26 thru 30, 2018 from 1400 to 2200 UTC and December 31 to Jan. 4, 2018 to 2019: Battle of Trenton and Battle of Princeton

Station: W2T at Trenton, NJ with Delaware Valley Radio Association

Station: W2P at Princeton, NJ with Delaware Valley Radio Association

W2T (Battle of Trenton) and W2P Battle of Princeton) to get a certificate of Commission in the Continental Army Signal Corps.

See website for details. <http://www.w2zq.com>

SKYWARN RECOGNITION DAY 2018 IS SATURDAY, DECEMBER 1 UTC

SKYWARN™ Recognition Day (SRD) 2018 takes place on Saturday, December 1, from 0000 until 2400 UTC. Developed in 1999 by the National Weather Service (NWS) and ARRL, SRD celebrates the contributions that SKYWARN volunteers make to the NWS mission, the protection of life and property. During SKYWARN™ Recognition Day, special event stations will be on the air from NWS offices, contacting radio amateurs around the world.

"Amateur Radio operators comprise a large percentage of the SKYWARN™ volunteers across the country," the NWS announcement said. "Amateur Radio operators also provide vital communication between the NWS and emergency management, if normal communications become inoperative."



The object of SRD is for all amateur stations to exchange contact information with as many National Weather Service 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 sign, signal report, and location 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.

Stations will employ various modes, including SSB, FM, AM, RTTY, CW, and PSK31. While working digital modes, special event stations will append "NWS" to their call signs (e.g., N0A/NWS). It's suggested that during SRD operations a non-NWS volunteer serve as a station control operator. Event certificates are electronic and printable from the main website at the conclusion of SRD. Submit SRD log summaries using the online submission form.

Source: ADAW – Arizona Desert Aire Waves, Vol. 43, No. 12, December 2018

Make a Portable Antenna Mast for under \$50

by Joe Miko WB3FMT

Seeing the multitude of radio towers used by the Aero Club on Field Day gave me an idea. About two weeks ago I was thinking about the upcoming ARRL November Sweepstakes the club is participating in – I need a tower. I decided I needed one that one person could handle, unlike the crank ups. I decided I needed one that could fit in the van, and could reach 20 feet high.

Enter my son the carpenter, after musing the idea with him about the mast and van connection, we came up with two possible solutions. Utilize the existing tow hitch or design a drive-on base. The drive-on base won out.

Using an existing galvanized 10-foot fence rail, the project began. My son took to the task of measuring, cutting and MIG welding the parts. Using tubed metal poses unique challenges when trying to fabricate pieces. Hint: tubed metal has a tendency to roll. C-clamps, a vice (thanks Dave) and a miter box were used to stake, hold and assist in cutting saws all, (another note to self, need to replace the plastic miter box, the cuts on the box are too wide due to the saws all, oops).

The base and mast were made 10-foot top fence pole. The steel tension bar used on chain on the base and no damage, ground.



with the same material, a cut up piece of braces for the base were made from the link fences. Yes, we did an auto VAN test the test was done on a road way, not

Roll Problem

Plastic Miter Problem



10 foot top fence rail

From finding the material to completion and van testing took about 3 hours.

The specs: The base and vertical pole are all made from same 10' section of fence top rail.

The dimensions are: Length are 16 inches, width 5 inches (outside diameters) the upright pole is 28 ¼ inches with the crimped edge at the top.

Equipment needed: All items purchased at Home Depot.

3 - 10-foot sections of 1-3/8 in x 10 feet 6 in. 17-Gauge Galvanized top Rail. \ \$10. 23 ea. \$30.69

1 - 4 foot Tension Bar / \$4.98

1 – Can of Primer Paint Rust-Oleum 15oz can / \$4.98

1 - 2 in Nickel Plated Pulley / \$4.26

1 - Rope 1/8" 50 feet of Para cord / \$2.48

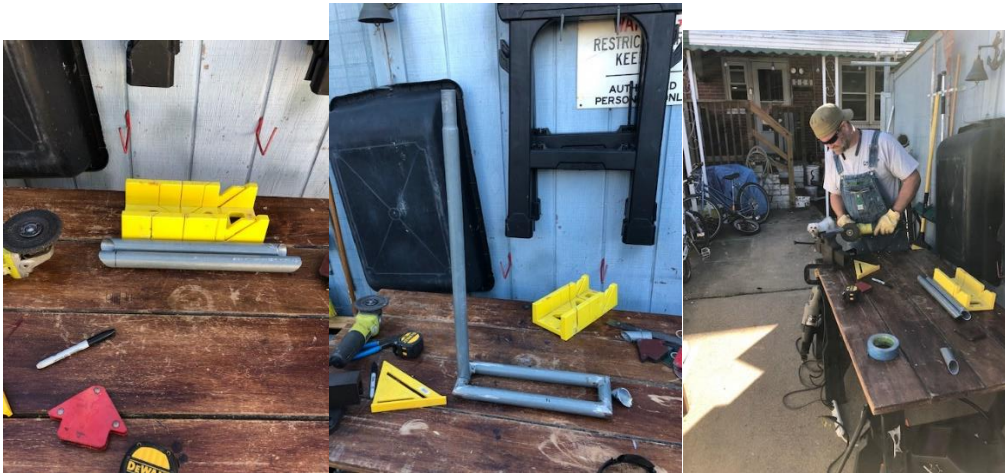
Providing you have or can get the equipment below the above tower should **cost about \$48.**

MIG Welder

Electric grinder

Sawsall (Reciprocating Saw)

Antenna base will support 2 10 foot sections.



New miter needed!

Finished product.

Mike at work.

Suggest putting the pulley on second mast section about a foot from the top of the mast, to allow space of a 2 meter or 70 centimeter antenna while leaving room to raise a dipole.

From the Skies over Mt. Essex

SKY Events for December 2018

Dec 1st – Venus greatest illuminated extent -4.9 Mag at 19:00 EST

Dec 4th - Earliest end of evening twilight

Dec 7th – Earliest sunset & Neptune is 0.3° lower right of Mars also a New Moon.

Dec 9th – Saturn is 1.1° S of the Moon at 00.00 EST

Dec 14th – Geminids Meteor Shower peak

Dec 15th - First Quarter Moon

Dec 15th – Mercury at greatest elongation W (21°)

Dec 20th -Shortest day of the year 9hrs 20min and Winter Solstice 17:23 EST

Dec 21st – Mercury is 0.9° upper left of Jupiter

Dec 22nd - Full Moon, Colonial Full Moon name is “Cold Moon” and Cherokee as “Snow Moon”.

Dec 29th - Last Quarter Moon

Planet Lookout at mid-Month

Sunrise 07:19 EST and Sunset 16:43 EST

Mercury – Morning- Rises 05:33 Set 15:32 Magnitude - 0.4 Size 6.6 Arc Seconds

Venus - Morning. Rise 03:55 Set 14:22 Magnitude -4.6 Size 33 Arc Seconds

Mars - Evening. Rise 12:03 Set 23:36 Magnitude 0.2 Size 8.3 Arc Seconds

Jupiter - Evening. Rise 06:06 Set 15:45 Magnitude -1.7 Size 31.3 Arc Seconds

Saturn - Evening. Rise 08:26 Set 17:73 Magnitude 0.5 Size 15.1 Arc Seconds

Uranus - Evening. Rise 13:38 Set 02:56 Magnitude +5.7 Size 3.6 Arc Seconds

Neptune - Evening. Rise 11:52 Set 23:08 Magnitude +7.8 Size 2.3 Arc Seconds



Sky Giant – Orion not only Size!

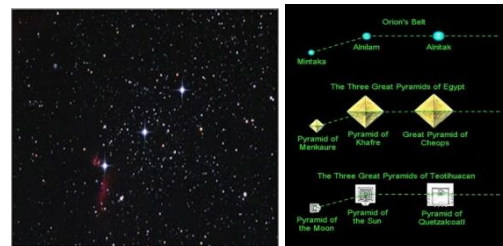
The winter constellation “Orion the Hunter” is the 26 largest constellation and covers 594.1 square degrees. It also takes up 1.44% of the night sky. Orion has been known since Biblical times, and is one of the original constellations devised by Ptolemy who lived between 90 – 168 A.D.

There are 20 stars that makeup the main constellations, the hipparcos satellite has cataloged 1952 stars of which we can see 128 with the naked eye. Of the 286 brightest Stars (above 3.47 *mv*) listed in The Royal Astronomical society of Canada” 11 stars in in Orion.

Other facts: Orion contains 3 Messier objects M43 Emission/Reflection Nebula, M78 Reflection Nebula, M42 (Great Orion Nebula) Emission /reflection Nebula Non-Messier- B33 Horsehead a dark nebula., NGC 2024 the Flame or Running man an emission nebula.

Exoplanet star CVSO 30 one of the first stars to have an exoplanet imaged, this star is location north of the belt of Orion.

There are also up to 13 meteor showers that occur during the year within this constellation based on information by A. Mickiewicz University located in Poland.



Possible alignment of the belt stars Alnitak, Alnilam and Mintaka (left to right in the photo on the left. It was suggested in a 1996 publication “keepers of Genesis” that alignment of these three stars align with the Pyramids of Giza, and the Great Pyramid of Teotihuacan located in Mexico.

Representation of the central tenet of the Orion Correlation Theory: the outline of the Giza pyramids superimposed over a photograph of the stars in Orion's Belt. The validity of this match has been called into question by Hancock's critics.