



*Ham Shack, early 1930's  
Joseph H. Punte, W3RP*

## ***The Aero Aerial***

The Newsletter of the Aero Amateur Radio Club  
Middle River, MD  
Volume 13, Issue 4  
April 2016

Editor Georgeann Vleck KB3PGN

### ***Officers***

President	Joe Miko WB3FMT	Repeater	Phil Hock W3VRD Jerry Cimildora N3VBJ
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		Contests	Bob Venanzi ND3D

### ***Committees***

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 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  
**W3PGA**      **70 Cm:** INPUT : 444.575 MHz, OUTPUT : 449.575 MHz  
**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.

### 2016 Examination Schedule

Where:      White Marsh Branch, Baltimore County Public Library  
                  8133 Sandpiper Circle, White Marsh, Md. 21236

Time: 1 p.m.	9 a.m.	1 p.m.
Dates: January 30	March 19	May 15

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	Baltimore 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	28.445	Aero ARC Net
4 <sup>th</sup> Wed	8 pm	147.240	Aero ARC Net
5 <sup>th</sup> 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)

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# Feeling nostalgic?

*Want to talk over the Good Old Days?*

*Join Calvin AB3PP's new net -*

## ***The Back in the Day Net***

*Fridays, 7:30 pm, 145.330 (Shawsville repeater)*

*For an hour's quick trip to former days. Sounds like fun!*

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## **NET REPORTS**

### **03-09-16: 28.445 MHz, 20:00 to 20:28 local.**

W3PGA Joe (NCS) Essex, W3JEH Ron Perry Hall, W3VRD Phil Essex, KB3JVP Ken Middle River, KA3SNY Dave Essex, KB3PGN Georgeann Essex

### **03-23-16: 147.240, 20:00 to 21:00 local.**

W3PGA Joe (NCS) Essex, W3JEH Ron Perry Hall, N3VBJ Jerry Dundalk, KB3MXM Marty Owings Mills, KE3HAY Keon Reisterstown, KC3AID Marty Rosedale, KC3AID Charles Dundalk, KC3FRH Chuck Parkville, KC3FBL Jim Parkville

### **03-30-16: 449.595 MHz, 20:00 to 21:01 local.**

W3PGA Joe (NCS) Essex, KB3QWC Larry mobile near White Marsh, AC3F Pat Middle River, W3JEH Ron Perry Hall, KB3PGN Georgeann Essex, KC3AID Marty Rosedale, KA3SNY Dave Essex, N3VBJ Jerry Dundalk, AB3PP Calvin Towson, KE3HAY Keon Baltimore, KB3JVP Ken Middle River

*We had a report that the BARC repeater is down, and its return questionable. The BRATS repeater is up but seems to be working sporadically.*

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## **STATION ACTIVITIES**

Larry KB3QWC is still NPOTA at Hampton Mansion.

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## Upcoming Second Meeting Presentations

These presentations will be given at the Essex SkyPark FBO building after the business meeting.

<i>Date</i>	<i>Topic</i>	<i>Presenter</i>
4/6	Operating a Contest: Propagation and Hamming Techniques	Keyon Hayes
4/20	National Traffic System (NTF) Explained	Jerry Cimildora
5/18	No Presentation – Elections	
6/15	No Presentation – Field Day last meeting prep	
TBA	Volunteer Examiner Testing	Patricia Stone
TBA	Contest Logging with N1MM	Bob ND3D

*Any questions call Joe Miko at 443-956-0197.*

Presenters who wish to submit a description of their talk may email it to Georgeann at  
[KB3PGN@reagan.com](mailto:KB3PGN@reagan.com) for inclusion in the Aerial.

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## VE CORNER

*by Pat Stone, AC3F*

The AERO VE Team held its first morning session on March 19<sup>th</sup>, 2016 at the White Marsh Library. We served 2 applicants. Congratulations to new Tech Patricia KC3GVI.

A very special thanks to WB3FMT, KC3FBL, KB3KRV, KB3EK, AC0LP and KC3AIJ for assisting me with this session. It was a pleasure working with all of you.

A special thanks to Lisa KC3AIJ who served her first (of many I hope) session and Jobst AC0LP who has relocated to Maryland from the St. Louis area for volunteering to serve with our AERO team. Kudos to Dave KB3KRV and Joe WB3FMT for the excellent training they provided.

Our next test session will be held at 1 pm on May 15<sup>th</sup> at White Marsh Library. Hope to see you then.

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## CLASSES, ETC.

**Thurs, 4/21/16, 7:00 – 10:00 pm: Skywarn Flood** (BASIC Required)

Sponsor: Anne Arundel OEM, Paul Bowling

Location: Anne Arundel County Office of Emergency Management, 7480 Baltimore Annapolis Blvd., Glen Burnie, MD 21061

Info: <http://annearundelcountyskywarnflood.eventbrite.com>

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## UPCOMING HAMFESTS and EVENTS

**April 4, 2016: Martin Aviation Museum Speaker Series, 7 pm, Lockheed Auditorium**

Tom Jones, NASA astronaut, discusses his new book Ask the Astronaut: A Galaxy of Astounding Answers to Your Questions on Spaceflight (to be released in March 2016).

**May 2:** Huey Panel

**June 6:** Former USAF pilot Darrel Whitcomb talks about his experiences in Vietnam

**July 11:** Mike Scassero talks about the latest in drones from University of Maryland

**Saturday, April 9, 2016: York Hamfest, 8 am – 1 pm**

Elicker's Grove Park, 511 Roth Church Rd., Spring Grove, PA 17362

Website: [www.yorkhamfest.org](http://www.yorkhamfest.org) Check for updates. Sponsor: York Hamfest Foundation

Talk-In: 147.330 + PL 123.0, alternate 146.52 simplex

Contact: [duane.sterner@yahoo.com](mailto:duane.sterner@yahoo.com)

General Admission at 8 am: \$5 pp, under 16 free with accompanied by adult

Free VE Test; card checking; door prizes; food vendor

**Saturday, April 9, 2016: Culpeper Amateur Radio Swapfest**

Culpeper Agricultural Enterprise, 10220 James Monroe Hwy., Culpeper, VA 22701

Website: <http://w4cul.org> Sponsor: Culpeper Amateur Radio Association

Talk-In: 147.120 (PL 146.2)

Contact: Bob Stohlman, K4RCG, 223 West Park Avenue, Culpeper, VA 22701, Phone: 540-825-2770, Email: [bobstohlman@gmail.com](mailto:bobstohlman@gmail.com)

**Glenn L. Martin Aviation Museum, 2016 Open Cockpit Days**

April 9, May 14, June 11, July 9, August 13

**Saturday, April 16, 2016: Delaware State Convention (Delmarva AR & Electronics EXPO) – Rescheduled**

Sussex Technical High School, 17099 County Seat Hwy., Georgetown, DE 19947. Website: [www.radioelectronicsexpo.com](http://www.radioelectronicsexpo.com)

Sponsor: Sussex Amateur Radio Association. Talk-In: 147.090 (PL 156.7)

Contact: Herb Quick, KF3BT, PO Box 1431, Seaford, DE 19973

Phone: 302-629-4949, E-mail: [herb@hamltongraphics.com](mailto:herb@hamltongraphics.com)

**Friday, April 15 thru Sunday April 17, 2016: VHF Super Conference**

Holiday Inn Washington-Dulles International Airport, 45425 Holiday Dr, Sterling, VA 20163

Website: <<http://vhfsuperconference.com/>>

Sponsor: Southeastern VHF Society, North East Weak Signal Group & Mt. Airy VHF Radio Club. Hosted by the Grid Pirates Contest Group and Directive Systems and Engineering  
Talk-In: None

Contact: Terry Price, W8ZN, 2702 Rodgers Terrace, Haymarket, VA 20169, Phone: 703-754-3876, Email: <[w8zn54@verizon.net](mailto:w8zn54@verizon.net)>

### **Saturday, April 24, 2016, 8 – 2 pm: 44th ANNUAL HAMFEST & WPA CONVENTION**

The Boston Spectrum, 6001 East Smithfield Street, Boston, PA

Website: <<http://www.trarc.net>>

Sponsor: Two Rivers ARC of McKeesport, PA

Talk-In: 146.730- MHz (PL Tone 100.0) WA3PBD Home & 146.520 MHz Simplex Mobile

Contact: William Hetrick , N3LQC, 190 Mary Reed Rd., Baden, PA 15005. Phone: 724-242-5347, Email: [n3lqc@comcast.net](mailto:n3lqc@comcast.net)

### **Saturday, May 7, 2016: The Greater Hagerstown Hamfest**

Washington County Agriculture Center, MD Route 65 South, Sharpsburg Pike, Hagerstown, MD Sponsor: Antietam Radio Association

<<http://www.w3cwc.org/Menu/Hagerstown-Hamfest>>

Talk-In: 147.09 (PL 100) & 146.94 backup

Contact: Brian Umbrell, W3PDW, 235 East King St., Chambersburg, PA 17201, Phone: 717-264-6403, E-mail: <[w3pdw@earthlink.net](mailto:w3pdw@earthlink.net)>

### **Sunday, May 29, 2014: Memorial Day Hamfest**

Howard County Fairgrounds, 2210 Fairgrounds Rd., West Friendship, MD 21794

Website: <<http://www.marylandfm.org>> Sponsor: Maryland FM Association

Talk-In: 146.76, 224.76, 444.0 (PL 107.2)

Contact: John Elgin, WA3MNN, 518 Copley Lane, Silver Spring, MD 20904, Phone: 301-641-5313 Email: <[marylandfm@verizon.net](mailto:marylandfm@verizon.net)>

### **Sunday, June 19, 2016: BARC Father's Day Hamfest**

Arcadia Volunteer Fire Company Grounds, 16020 Carnival Ave, Upperco, MD 21155

Website: <<http://www.w3ft.com>> Sponsor: Baltimore Amateur Radio Club

Talk-In: 146.67 (PL 107.2)

Contact: Dave Shadwell, AB3TE, PO Box 922, Reisterstown, MD 21136, Phone: 410-842-5019, Email: <[w3ft67@yahoo.com](mailto:w3ft67@yahoo.com)>

Visit [www.arrl.org/hamfests-and-conventions-calendar](http://www.arrl.org/hamfests-and-conventions-calendar) for complete listings.

## **DID YOU KNOW . . . ??**

At the 1979 [World Administrative Radio Conference](#) in Geneva, Switzerland, three new amateur radio bands were established: [30 meters](#), [17 meters](#) and [12 meters](#). Today, these three bands are often referred to as the [WARC bands](#) by hams.

# How to Permanently Install a BNC on Your HT

by Charles T. Ester, III, KC3ANJ

Joe M. KB3FMT and I once discussed all the reasons why it can be a good idea to use BNC for your antenna connections in the field. We also talked about how confusing it could be to figure out the right connector. One of my big peeves is the adapters on sale at the candy store. They exert all of the force on the connector and board while leaving a gap for water to get in. Worse, they are too expensive. And don't get me started on using the lossy coax-based adapters. All the parts below can be bought on a popular web site for buying and selling books.

## Advantages to Standardizing:

- Save time when switching between rubber duckies or connecting to your external antenna.
- Avoid accidental damage to your HT antenna port, such as cross threading.
- Impress other hams with your forethought and planning.
- Install a "Tiger Tail" between the stock antenna and the BNC adapter.

## This is how you might convert your HT and accessories:

- Use the first adapter or second adapter on your HT with a small rubber O-ring between them.
- Use Number 4 or 5 to on your "stock" antenna for your HT.
- You may want number 5 for connecting a mag mount antenna.
- Number 6 is that antenna that gives you better gain but gets in the way some times.

### 1) SMA male to BNC female for the Yaesu FT-1DR and I-COM.

- Hint the SMA is the small socket.

[http://www.amazon.com/gp/product/B00CVQL14A/ref=pd\\_luc\\_rh\\_sbs\\_02\\_04\\_t\\_img\\_1h?ie=UTF8&psc=1](http://www.amazon.com/gp/product/B00CVQL14A/ref=pd_luc_rh_sbs_02_04_t_img_1h?ie=UTF8&psc=1)



**2) SMA female to BNC female “Chicom”/ Kenwood.**

➤ Hint the SMA is the small end.

[http://www.amazon.com/2pcs-coaxial-coax-adapter-female/dp/B00CVQK466/ref=sr\\_1\\_10?s=pc&ie=UTF8&qid=1458841244&sr=1-10&keywords=SMA+male+to+BNC+female](http://www.amazon.com/2pcs-coaxial-coax-adapter-female/dp/B00CVQK466/ref=sr_1_10?s=pc&ie=UTF8&qid=1458841244&sr=1-10&keywords=SMA+male+to+BNC+female)



**3) SMA male to BNC Female for “ChiCom” or Kenwood antenna’s.**

➤ Hint the SMA is the small end.

[http://www.amazon.com/BNC-Male-SMA-Coax-Adapter/dp/B001T75RGK/ref=sr\\_1\\_4?s=electronics&ie=UTF8&qid=1458839852&sr=1-4&keywords=sma+male+to+bnc+male](http://www.amazon.com/BNC-Male-SMA-Coax-Adapter/dp/B001T75RGK/ref=sr_1_4?s=electronics&ie=UTF8&qid=1458839852&sr=1-4&keywords=sma+male+to+bnc+male)



**4) BNC Male to SMA Female for “Stock” Yaesu and I-COM antennas.**

➤ Hint the SMA is the small socket.

[http://www.amazon.com/Bluecell-Male-Female-Plug-Adapter/dp/B00QPO7EWC?ie=UTF8&psc=1&redirect=true&ref\\_=ox\\_sc\\_act\\_title\\_1&smid=A3JMKZ8DR0NSCW](http://www.amazon.com/Bluecell-Male-Female-Plug-Adapter/dp/B00QPO7EWC?ie=UTF8&psc=1&redirect=true&ref_=ox_sc_act_title_1&smid=A3JMKZ8DR0NSCW)



**5) BNC To SO-239 Adapter UHF Female to BNC Male Coax Cable Adapter for the antenna with the PL.**

➤ Hint the BNC is the smaller end.

[http://www.amazon.com/Maxmoral-2-Pack-SO-239-Adapter-Female/dp/B016HHLAK8/ref=sr\\_1\\_3?ie=UTF8&qid=1458840563&sr=8-3&keywords=PL+to+BNC+male](http://www.amazon.com/Maxmoral-2-Pack-SO-239-Adapter-Female/dp/B016HHLAK8/ref=sr_1_3?ie=UTF8&qid=1458840563&sr=8-3&keywords=PL+to+BNC+male)

2 PACK



**6) Diamond (Original) RH77CA 144/440 MHz. Dual-Band High Gain Handheld Antenna with BNC Connector.**

[http://www.amazon.com/Diamond-Original-Dual-Band-Handheld-Antenna/dp/B00M1X73EA/ref=sr\\_1\\_1?s=pc&ie=UTF8&qid=1458840356&sr=8-1&keywords=BNC+diamond+antenna](http://www.amazon.com/Diamond-Original-Dual-Band-Handheld-Antenna/dp/B00M1X73EA/ref=sr_1_1?s=pc&ie=UTF8&qid=1458840356&sr=8-1&keywords=BNC+diamond+antenna)

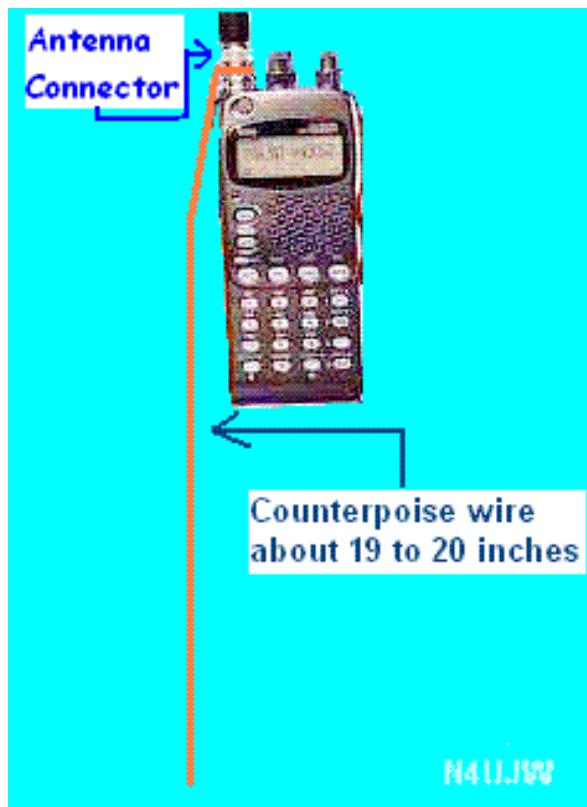


## Bonus Round!

**Make A Tiger Tail:** A piece of wire with a ring connector on one end. The idea is that an HT using a “rubber duck” has -5db gain compared to a quarter wave antenna that is held at shoulder height. Speaking in terms of effective radiated power, a 5 watt HT with rubber duck antenna held at shoulder height is actually only radiating 1.5 watts on key-down. The stock antenna is a horrible radiator, and it lacks a counterpoise or a ground plane to keep the RF from coupling to your body. Similar to using a 1/4 wave mobile mag-mount and not mounting it to a metal surface.

By using a tiger tail counterpoise, you give your HT a missing lower quarter wave and along with a quality aftermarket antenna (flexible 1/4 wave or telescoping 1/2 wave) you succeed in creating a center-fed half-wave vertical dipole, giving the HT much more effective radiated power. The tiger tail can be left to dangle, but is directional and the radiation pattern can pointed in the direction of the station you are attempting to contact for better results. I offer the link below for those brave souls willing to experiment with it.....

<http://pelicanbayarc.com/radio-workshop-tiger-tails/>



# From the Skies over Mt. Essex

## SKY Events for April 2016

Apr 2<sup>nd</sup> – First photograph of the Sun in 1845

Apr 4<sup>th</sup> – Neptune is 1.9° S of the Moon

Apr 6<sup>th</sup> – Venus is 0.7 S of the Moon

Apr 7<sup>th</sup> – New Moon, Total Solar eclipse, visible in Indonesia and Pacific Ocean, not mainland U.S.

Apr 10<sup>th</sup> – Aldebaran is 0.3° S of the Moon 18 EDT

Apr 12<sup>th</sup> – Yuri Gagarin (USSR) 1<sup>st</sup> man to orbit the Earth.

Apr 13<sup>th</sup> – First Quarter Moon

Apr 14<sup>th</sup> – Apollo 13 mission aborted due to onboard explosion in 1970.

Apr 18<sup>th</sup> – Mercury is 20° E of the Sun 00:10 EDT

Apr 20 -21<sup>th</sup> – Lyrids meteor shower 10-20 per hr, but a full moon, poor viewing

Apr 21<sup>st</sup> - **Full Moon** “**Pink Moon**” for the Traditional American and the “**Peony Moon**” for the Chinese Full Moons.

Apr 25<sup>th</sup> – Hubble Space Telescope deployed in 1990

Apr 29<sup>th</sup> – Last Quarter Moon.

### Planet Lookout at mid-Month

**Sunrise 06:28 EDT and Sunset 19:44 EDT**

**Mercury** Dusk sets 21:30, Mag. -0.1, size 7.2 arc sec

**Venus** Hidden in Sun’s Glare

**Mars** Late Eve rises 23:04, mag -1.0 and 13.9 arc sec.

**Jupiter** Dusk, rises 16:00, magnitude -2.4 size 42.3 arc sec.

**Saturn** Late Eve rises 23:33, mag 0.3 size 17.8 arc sec.

**Uranus** In the Sun’s Glare.

**Neptune** Dawn rises 04:42, magnitude +7.9 size 2.4 arc sec.

Pigs in Space! Well... not quite!



© Muppet. The 88 stellar constellations contain a host of birds, fishes, instruments, and a host of animals, But sadly no pigs, as seen on the Muppets.

The constallations earliest depiction by the the people of Mesopotamia around 3000 BC. From that period thruough the middle ages constellations were created and added by the , Egyptians, Greek, Chinese, Arabs and Dutch navigators.

The current list of 88 constellations recognized by the International Astronomical Union since 1922 is based on the 48 listed by Ptolemy in his *Almagest* in the 2nd century, with early modern modifications and additions (most importantly introducing constellations covering the parts of the southern sky unknown to Ptolemy) by Petrus Plancius, Johannes Hevelius and Nicolas Louis de Lacaille (1763).

A break down of the devices, people and anamals are as followed: 8 Tools; 5 Navigational Aids: 3 Ship parts; 2 weapons and crowns the remaining 12 are - Clock, mountain, cross, furnance, river, easel, cup, Lyar, hair, easel, cross and an alter.

3 Females including 1 Queen and 2 madens; 13 Males including a King, 1 Twins, 2 Heros, 1-Hunter, Herdsman, Sculper an Indian and others.

The birds, fishes and animals round out the remaining 42 constellations. Consiting of 9- Birds; 6 Snakes, Dragons, Lizards and Serpents; 5 Fishes; 3 Dogs: 2 Bears and Lions; 1 each – wolf, cat, fox, crab, ram, bull, hare, goat, gariffe , whale and 2 insects a fly and scoripan.

Take a look into the night sky and see the world!