



Essex SkyPark Fly-in & Breakfast 2013

The Aero Aerial

The Newsletter of the Aero Amateur Radio Club
Middle River, MD
Volume 12, Issue 5
May 2015

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Editor Pro Tem Georgeann Vleck KB3PGN

Officers

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		Contests	Bob Venanzi ND3D

Website: <http://home.comcast.net/~frank-stone/Aero%20ARC/aero.htm>

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, 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.

2015 Examination Schedule

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

Time: 1 p.m.

Dates: May 23, August 22, October 24

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	146.670	Baltimore Traffic Net
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
When activated by NOAA		147.030	SkyWarn (primary)

RED ALERT!! RED ALERT!!

Election Day

Elections for Club Officers will be held on Wednesday, May 20th, at the regular 7:30 pm meeting. Be there or prepare to get on the train.

NET REPORTS

4-8-2015: 28.445 MHz, 20:00 - 20:20 local.

AC3P (NCS) Frank Middle River, W3JEH Ron Perry Hall, W3VRD Phil Essex, KC3AID Marty Rosedale

4-22-15: 147.24 MHz, 20:00 to 20:28 local.

W3PGA NCS Joe Essex, W3JEH Ron Perry Hall, KC3AID Marty Rosedale, AC3P Frank Middle River, KB3PGN Georgeann Essex, KA3SNY Dave Essex

The repeater was repaired on Monday 4/20/15; all seems well. The 440 machine is at Phil's house undergoing repairs. News – Ron got the repair parts to fix the Gamma Match on the 20 meter beam. He will work on it in the next few days.

STATION ACTIVITIES

By Frank Stone, AC3P

WB3FMT, KB3PGN, KC3ANJ, AC3F and AC3P attended the SKYWARN Basic I, class in Howard County. **N3VBJ** and **W3VRD** have the 2 meter repeater back on the air. **W3JEH** is repairing the 20 meter beam. Welcome back, Margaret **NOCALL/2**.

Thanks to **WB3FMT** for an excellent EME presentation at the April 15 meeting.

SKYWARN CLASS

Thursday, 5/28/2015 - 6:30 - 9:30 pm, FLOOD - (BASIC 1 Required)
Prince George's Laurel City OEM, Laurel City Hall, 8103 Sandy Spring Rd,
Laurel, MD 20784.

POC: Paul Bowling

To register: <http://skywarn-flood-0515.eventbrite.com/?aff=NWSLWX>
For more classes, check weather.gov/lwx/skywarn

Upcoming Second Wednesday Presentations

These presentations will be given at the Essex SkyPark FBO building following a short business meeting.

Date	Topic	Presenter
5/20	Field Day Best Operating Practices	Bob Venanzi
6/17	ISS Sighting and Contacting	Frank Stone
7/15	Contest Logging w/N1MM	Bob Venanzi
8/19	FM digital & D Star	Jerry Cimildora

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



VE CORNER

by Pat Stone, AC3F

Aero ARC VE 2015 Test Schedule

Where: White Marsh Library, 8133 Sandpiper Circle, White Marsh Md. 21236
Time: 1 P.M.
Dates: May 23, August 22, October 24

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

UPCOMING HAMFESTS and EVENTS

Saturday, May 2, 2015: Hagerstown Hamfest

Washington County Ag Center, Hagerstown Md.

7313 Sharpsburg Pike (Route 65 South), Boonsboro, MD 21713

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

Sponsored by Antietam Radio Association

Ticket Donation is \$7.00, Tailgating is \$7.00, Indoor vendor is \$15.00

Talk-In: 147.090 (PL 100) + Repeater & 146.94 – backup

Contact: Brian Umbrell, W3PDW, 235 East King St, Chambersburg, PA 17201

Phone: 717-264-6403, E-mail: w3pdw@earthlink.net

Featured speaker: Steve Struharik, WA8EIH, topic: "Wire Antennas".

Basic concepts, practical examples of antennas that are inexpensive and easy to build, and ideas on how to enhance station performance.

Following the speaker: "Left-Over" Auction.

Includes items from tailgaters and from the ARA Club sale table.

Vendor: Eagle One. Antennas, coax, connectors etc.

Meet current Section Manager Jim Cross WI3N, new Section Manager elect Marty Pittinger, KB3MXM and Atlantic Division Director Tom Abernathy, W3TOM.

Saturday, May 2, 2015, 8:30 –11:30 am, Essex Skypark Fly-In Drive-In

Menu: Pancakes – Sausage – Danish – Coffee – Juice – Tea – Cost: Donation

Sunday, June 7, 2015: Breeze Shooters Hamfest and Computer Show

Butler Farm Showgrounds, 627 Evans City Rd., Butler, PA 16001

Website: www.breezeshooters.net Sponsor: Breeze Shooters ARC Talk-In: 147.300+

Contact: Robert Benna, N3LWP, 1010 Willow Dr., Pittsburgh, PA 15237

Phone: 412-366-0488, E-mail: N3LWP@verizon.net

Sunday, June 14, 2015: Manassas Hamfest & Maker Technology Show

Prince William County Fairgrounds, 10624 Dumfries Rd., Manassas, VA 20108

Website: manassashamfest.org Sponsor: Ole Virginia Hams Amateur Radio Club. Talk-In: 146.97 Contact: Terry Erlacher, KC4DV, PO Box 1255, Manassas, VA 20110

Phone: 571-292-1490, E-mail: chairman@manassashamfest.org

Sunday, June 21, 2015: BARC Hamfest, Arcadia VFC, Upperco, MD.

Baltimore Amateur Radio Club Father's Day Hamfest will be held on Sunday, June 21st 2015 at the Arcadia Volunteer Fire Company Grounds. The address is 16020 Carnival Ave, Upperco, MD 21155. It is just a few miles north on Route 30 from the top of I-795. The show will be from 8 am until 12 noon and it will be a TAILGATE hamfest. The prices will be \$5 admission and \$10 per tailgate spot.

Saturday, September 19, 2015, 9:00 am – 4:00 pm, Essex SkyPark, Annual Wings & Wheels Fly-in

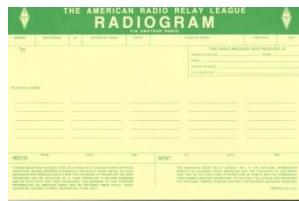
This Is W3PGA Calling, The Aero Amateur Radio Club Net...

By Joe Miko, W3FMT

What is this? This is a call to a radio net, an informal gathering of Aero club members and other interested hams. The purpose of this net is to have a club radio function where members who can't make it to a meeting can keep in touch with club activities. The Aero Amateur Radio Club (Aero ARC) has a number of radio nets per months and also on special occasions ad hoc.

Types of radio nets: There are several – Traffic Nets, Club Nets, DX Nets, Weather Nets, Public Service Nets, to name a few.

Traffic Nets operate primarily to relay written messages. These messages can be for local, national, or international delivery. As part of the American Radio Relay League's (ARRL) National Traffic System (NTS) amateur radio operators pass both routine and emergency messages on behalf of others as part of its public-service mission. Messages are sent via the NTS and resemble the old style Western Union telegram and are usually 25 words or less. These messages are transmitted from the point of origin to its final destination via receiving traffic nets along its intended route. At the final destination the message is relayed to the recipient by radio, hand carried, or telephoned. Locally we have the Baltimore Traffic Net, which interjects messages into the NTS. The BTN meets nightly on the Baltimore Amateur Radio Club's (BARC) 146.670 W3FT/R repeater at 18:30 local. The BTN was established in 1995.



Club Nets such as the Aero ARC Nets are organized to promote communications between club members and other interested hams on a regular basis. The Aero ARC has a number of nets throughout the month. All regularly scheduled nets are held on the non-meeting Wednesdays at 20:00 local. The club normally has 2 to 3 nets per month. The 2nd Wednesday is a 10 meter net held on 28.445 MHz. The 4th Wednesday is a 2 meter net on the clubs 147.24 repeater. When there is a 5th Wednesday there is a 70 cm net on the 449.575 repeater. The 10 meter net is operated from one of the club members QTH; the repeaters are located at Kenwood High School in Essex, Md. On special occasions we will have special nets on 6 meters or 220 Mhz celebrating a Blue Moon, Snow Net, or other occasions as they pop up.

DX Nets are organized to help amateur radio operators make contact with stations in distant locations or regions where amateur radio operators are scarce. By checking into a DX net, a ham is placed in a waiting queue, and waits his turn to talk to a distance station.

Weather Nets are normally local nets initiated by the National Weather Service (NWS) to get real time, on-the-ground condition reports; these are sometimes necessary because of rapidly changing weather conditions.

SKYWARN is a National Weather Service program whose primary purpose is to solicit Storm Spotter reports from NWS-trained participants. Over 80% of Storm Spotters are ham radio operators. The primary goal is to provide ground-truth reporting to supplement NWS radar and other sensors, better enabling forecasters to issue more timely and accurate warnings to the public. The secondary role, though just as important if not more so in many cases, is to report storm damage to both NWS and public service officials.



In our area, the NWS utilizes the NOAA transmitter in Pikeville, MD on a frequency of 162.400 (KEC83) (and other means) to alert Skywarn Storm Spotters of impending conditions. Storm Spotters would be advised to check into local Skywarn nets. The Skywarn net for the Baltimore Metro Area uses the 147.030 repeater. Normally only NWS spotters respond to this net activation.

Public Service Nets include the Radio Amateur Civil Emergency Service (RACES), the Amateur Radio Emergency Services (ARES), and Special Event Nets. This used to be called EmComm and was changed in 2014 because of confusions in terminologies and concepts. See the article in QST magazine June 2014 pg 75. *[There are two opinions about this. See CQ editorial "Miscommunication Emergency" by Rich Moseson, W2VU, CQ, July 2014, p. 8-9, and article "It's All Emergency Communications When You Think about It" by Richard Fisher, KI6SN, CQ, July 2014, p. 64-66. Also, ARRL itself seems to have backtracked a little. See QST, October 2014, p. 73-75, "ARRL Board of Directors Meets in Hartford, Following Convention", subhead "Emergency Communications Role Reaffirmed." – The Editor.]*



The Radio Amateur Civil Emergency Service (RACES) is a federal program designed to allow state and local emergency management officials to take control of amateur (ham) radio frequencies using trained ham radio operators during extreme instances of emergency or disaster that might require government control of these vital communications resources.



The Amateur Radio Emergency Service (ARES) is an Amateur Radio Relay League nationally sponsored program where ham radio operators work together at the local level to provide emergency communication services to government and public service agencies.

Emergency service is one of the basics of the Amateur Radio Service and there is sometimes come some confusion about ARES, the ARRL arm of emergency services and RACES, the government arm of amateur emergency services.

ARES is activated before, during and after an emergency. Generally, ARES handles all emergency messages, including those between government emergency management officials. RACES, on the other hand, almost never starts before an emergency and is active only during the emergency and during the immediate aftermath, if government emergency management offices need communications support. RACES is normally shut down shortly

after the emergency has cleared.

Special Event Nets are usually local in nature, sponsored or supported by local amateur radio clubs. They can be a local bike marathon, parade, car rally, or something large like the Boston Marathon. In these cases local radio clubs coordinate and assist local governments in providing real time status and, if needed, emergency communications to a central command location.

How nets work. A net is controlled by an amateur radio operator working as the **Net Control Station** (NCS). The NCS is responsible for keeping order on and in the net operations. He or she is the net “traffic cop”. Some of the responsibilities are to log and keep track of stations on the net, record or assist in relaying traffic (messages) on the net, and ensure the safety of net members. The NCS also ensures that net members follow the protocols established for that type of net (if any) and to follow FCC regulations.

Protocols. Some nets employ special procedures; some use special formats and information structure. The NTS and BTN nets use ARRL formats. Some nets are restricted, where only certain amateur stations can participate. Such a net is RACES. SKYWARN has a training requirement; it utilizes trained storm spotters. Normally a radio net is a closed activity unless the NCS ask for operators to join the net.

Subject Matter. What's fair game, well.... Normally politics, religion, and sex are out, with the exception of a few questions, What's a 3rd party?, Is the Pope Catholic?, And is Pat an OM or YL? Remember keep it civil, watch your language, and remember anything you say, will probably come back...

How to join a Net or become a NCS. Just remember the 4 L's – Listen, Listen, Learn, Leap – that's it. Listen to a few nets, see how they run, formal or informal, once you feel comfortable, join a net. After that, when you think you are ready, take a shot at Net Control.

Joe Miko was NCS for the Baltimore Traffic Net from 2004-2008, and has run the Aero ARC nets since 2005.

He worked in Civil Defense with Baltimore County Auxiliary Police from 1968 – 1974, and upon becoming a ham in 1978 joined Baltimore County RACES Communications, where he continued until June 2008, and participated in ARES Communications with Baltimore Metro Area from 2004 to 2005. He has been a Skywarn Spotter since 2006.

PUBLIC SERVICE – Another Opportunity Lost

Per Warren, the Martin State Airport Museum has no need for radio communications this year for their Open Cockpit events. They plan on using cell phones.

Received from Warren at 17:18 EDT.

Joe Miko

From the Skies over Mt. Essex

SKY Events for May 2015

May 3rd - Full Moon “**Hare Moon**” for the English Medieval and the “**Full Flower Moon**” for the Colonial American.

May 4th – Eta Aquariid meteor shower-waning Gibbous Moon – (Poor due to moonlight) about 45 per hour.

May 5th - Cinco de Mayo, Alan Shepard 1st American in Space 1961.

May 7th – Mercury at greatest Eastern elongation 21°

May 11th - Last Quarter Moon

May 14th – U.S. Skylab launched 1973

May 15th – Uranus 0.2° N of Moon at 12UT, 08EDT

May 17th – New Moon

May 20th – Double shadow transit Jupiter 20:06 EDT

May 22nd – Saturn at opposition

May 25th - First Quarter Moon

May 27th – Two shadows on Jupiter 22:02 – 00:19 (5/28) EDT

Planet Lookout at mid-Month

Sunrise 05:52 EDT and Sunset 20:13 EDT

Mercury Visible at dusk around the 17th, magnitude 1.6; 9.9 arc seconds

Venus High at Dusk magnitude -4.2 and 19.0 arc seconds.

Mars is hidden in the Sun’s glare all month.

Jupiter High at Dusk, sets in early a.m., magnitude -2.0 size 36.2 arc seconds.

Saturn Rises at dusk. Magnitude +0.1 size 18.6 arc seconds.

Uranus – Rises about 4:00 EDT, Magnitude 5.9, Size 3.3 arc seconds.

Neptune East at Dawn rises at 02:40 EDT. Magnitude +7.9 size 2.4 arc seconds.

Figures in the sky! Can you connect the dots?

The term constellation can be translated as “set of stars”. The term was first used in astrology, of asterisms (pattern of stars), that supposedly exerts influence, on mankind. Try reading your local horoscopes for any given day, check a couple of papers and see how general and non committal it is! But, back to the lines.

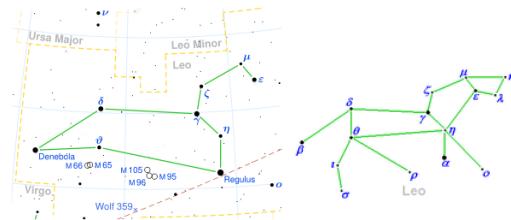
The constellations are a group of 88 blocks of stars in the sky. There are currently 88 constellations redefined and recognized by the International Astronomical Union since 1922. Thirty-six are in the Northern and the other 52 are located in the Southern hemisphere.

We rarely if ever see the entire constellation, but only notice the brighter stars. Only then and only as an easy way to notice or remember its asterism. For example Ursa Major the “Great Bear” contains over 70 stars, 6 bright, 14 less bright and 51 dim stars based on Naked Eye Stars by R. H. Lampkin. We at best can pick out a Dipper, and would be hard pressed to find the Bear.



Another example is Orion the Hunter. Maybe a Kite!

But H.A. Rey (9/16/1898 – 8/ 26 1977) with an interest in astronomy which began during World War I and led to his desire to redraw constellation diagrams, which he found difficult to remember, so that they were more intuitive. This led to the 1952 publication of *The Stars: A New Way to See Them*. Take a look at Leo the Lion.



Rey's looks more like the King of Beasts.



May 2015

								Hagerstown Hamfest w3cwc.org
								1 2
				Meeting Skypark 7:30 pm				
3	4	5	6		7	8	9	
			28.445 mhz Net 8 pm					
10	11	12	13		14	15	16	
			Meeting Skypark 7:30 pm Elections					VE Testing White Marsh 1 pm
17	18	19	20		21	22	23	
Md FM Assoc. Hamfest Howard Cnty Fairgrounds			147.24 mhz Net 8 pm					
24	25	26	27		28	29	30	
31								