

THE AERO AERIAL



The newsletter of the Aero Amateur Radio Club

Middle River, Md

Volume 11 Issue 6

June 2014

Editor Frank Stone AC3P

Officers

Joe Miko	WB3FMT	President
Bob Venanzi	ND3D	Vice-President
Lou Kordek	AB3QK	Recording Secretary
Frank Stone	AC3P	Corresponding Secretary
Warren Hartman	W3JDF	Treasurer
Ron Distler	W3JEH	Resource Coordinator

Committees

Repeater	Phil Hock W3VRD
VE Testing	Pat Stone AC3F
Public Service	Bob Landis WA3SWA
Webmaster	Al Alexander K3ROJ
Trustee	Frank Stone AC3P
Club Nets	Joe Miko WB3FMT
Contests	Bob Venanzi ND3D

ABOUT THE AERO AMATEUR RADIO CLUB

Meetings: First and Third Wednesdays at 7:30 pm at Coffman's Diner
(Middle River and Orem's Rd.)

Nets: See Local Area Net Schedule

Repeaters: W3PGA (147.24 MHz - / 449.575 MHz -)
W3JEH (223.84 MHz -)

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

LOCAL AREA NETS

Day	Time	Frequency (MHz)	NET NAME
Daily	9 – 10 am	147.33	ORIOLE Net
Daily	6 pm	3.820	Maryland Emergency Phone Net
Daily	6:30 – 7 pm	146.670	Baltimore Traffic Net
Daily	7 pm and 10 pm	3.643	Maryland/DC/Delaware Traffic Net
2 nd Tues	7:30 pm	146.670	Baltimore County <u>RACES</u> 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		146.67	SKYWARN

AERO NET REPORT

28.445 MHz. WB3FMT(NCS) W3JEH W3VRD AC3P KA3SNY KC3ANJ

**147.24 MHz. AC3P(NCS) W3JEH KB3VAE N3VBJ (remote from Richmond) W3VRD KC3ANJ KC3APF
KB3JVP K3YGC**

449.575 MHz. WB3FMT(NCS) N3VBJ (remote from Alabama) KB3JVP AC3P KA3VAE

Station Activities

N3BVJ is on the NASCAR circuit. **KB3ANJ** is experimenting with helical dipoles. **W3VRD** is downsizing the radio collection. **W3JEH** is expanding the radio collection. **K3YGC** is back.

Airplanes and Pancakes



The Essex Skypark had its annual fly-in pancake breakfast on Saturday April 26th. The event ran from 9 am till 11:30 am. A nice crowd was present local area residents and fly-ins. The menu was Donken Donuts, pancakes, sausage links, orange juice and coffee. All for the cost of a donation! The Aero radio club was represented at the event. Present were Joe WB3FMT, Warren W3JDF, Ken KB3QAX and YYL (niece), Eric KB3YJS, Bob ND3D, John W3JMI and is XYL.

I also saw Max and the new president of the Skypark Association Claudius Klimpt. The Skypark is having another Wings and Wheels Fly-in on September 20th from 10am to 5 pm, we have been asked to participate in this upcoming event.

Revisiting The International Space Station by AC3P

In the July 2004 issue of *The Aero Aerial* I wrote an article on how to use simple packet commands and APRS software to use the digipeater onboard the International Space Station. A few weeks ago when my granddaughter was visiting “Mt. Essex”. She noticed a bright object speeding overhead and asked what it was. Immediately I recognized the ISS and made plans to see if APRS communication was still possible.

In the 2004 article I described using an ICOM 706 at 10 watts to a Cushcraft Ringo. The interface was an MFJ TNC using WINAPRS software on a Windows 2000 platform. STSPLUS tracking software was used to predict when the ISS communications footprint would intersect the AC3P range.

While the ISS APRS operation is still on the air, a few things have changed since 2004. Much of the computer software and hardware has become more advanced and some of the older software will not run on the newer operating systems. Some of the ISS operating frequencies have changed.

For the 2014 operation I used an ICOM 706 Mark II G running at 50 watts to a dual-band Ringo. The computer was running the Windows 7 operating system supporting the UI-VIEW APRS. For the radio to computer interface, I used the Signalink with AWGPE software. Instead of the old DOS-based STSPLUS tracking program, I relied on the Heavens-Above website for ISS pass predictions.

During the ISS pass AC3P-1 sent several BEACON transmissions on 145.825 MHz. in hopes of being digipeated to a ground I-GATE station for confirmation on the FIND-U webpage.

After the pass was completed, I checked the FIND-U page and saw the AC3P-1 icon displayed on the ISS Stations Heard map. Success!

Next on the agenda is to attempt a two-way QSO via the ISS.

Station List [Click here to see times in absolute UTC](#)

Call	Messages	lat	lon	Age (dd:hh:mm:ss)
 ISS	<u>*</u>	35.15089	94.94215	00:00:00:01
 ISS-10	<u>*</u>	6.61475	120.99265	00:00:00:01
 ISS-5	<u>*</u>	21.48322	109.38453	00:00:00:01
 RS0ISS	<u>*</u>	13.72737	100.43475	00:00:05:52
 R4UAB-7	<u>*</u>	54.07250	44.97017	00:00:06:08
 HG8GL-4	<u>*</u>	46.70583	19.85683	00:00:08:12
 SV2CPH	<u>*</u>	40.32183	21.79133	00:00:09:10
 ON4AVM	<u>*</u>	51.02583	4.48350	00:00:10:04
 SQ6OCZ-6	<u>*</u>	51.12400	16.98433	00:00:10:40
 OK2MEZ	.	49.46617	17.44150	00:00:11:04
 S53AK	<u>*</u>	46.68133	15.98967	00:00:11:35
 F5SN	<u>*</u>	47.07400	5.49433	00:00:11:44
 EA5FUZ-6	<u>*</u>	40.40833	0.42517	00:18:32:55
 EA1JM-6	<u>*</u>	40.90283	-5.19950	00:18:34:33
 F4FPR-6	.	48.35433	-3.73900	00:18:35:09
 AC3P-1	<u>*</u>	39.32033	-76.42600	00:18:49:09
K8OE-9 	<u>*</u>	42.57683	-83.35217	00:18:49:19



Press Release

June 2, 2014

The Aero Amateur Radio Club of Middle River, Md. will be setting up a field transmitting site to participate in the American Radio Relay League's annual emergency communications exercise known as Field Day.

Field Day is a 24 hour event during which amateur radio operators demonstrate their readiness to provide communications in an emergency or disaster by setting up transmitters, receivers, antennas and generators in the field and communicating with other amateur radio stations throughout the U.S. and around the world.

This year Field Day takes place on June 28 through June 29.

Club members will activate radio station W3PGA at Essex Skypark in Essex, Md. Operations will begin at 2 p.m. Saturday and continue until 2 p.m. Sunday. There will be demonstrations of Morse code, voice and digital communications.

Members of the press and public are invited to visit.

Essex Skypark is located at 1401 Diffendal Rd. off of Back River Neck Rd. Directions to the site can be found below.

For more information and directions to the site, call Joe Miko at 410-687-4367 or e-mail joseph.miko@verizon.net

The Aero Amateur Radio Club began as an employee activity sponsored by the Glenn L. Martin Co. in 1946. Although the club is no longer sponsored by Martins it has been continuously active in the Essex-Middle River area.

Joe Miko

President Aero ARC

Directions to Essex Skypark W48.

The Skypark is located at 1401 Diffendall Road, in Essex Maryland. It is approximately 4.6 miles south of intersection of Eastern Boulevard MD 150 and Stemmers Run Road.

From Eastern Blvd. and Stemmers Run road go South on Stemmers Run Road it turns into Back River Neck Road. Stay on Back River Neck Road for approximately 4.1 miles you will see an Airport sign Essex Skypark. Make the right turn go about ½ mile the Field Day site is on the right just before the parking lot.

You can also reach the Airport by taking Baltimore Beltway I695 past exit 35 or JFK I95 (exit 33SB or 64NB) and going toward Essex. After passing Pulaski Highway RT 40 (exit 35) stay in the left lane and take RT 702. Stay on RT 702 till the end it runs into Back River Neck Road. Go about 1.6 miles and you will see the Airport sign on the right. Make a right turn and go about ½ mile. The site is on the right.

If you plan a fly-in the Airport's FAA designation is W48, located on the Washington Sectional and is 3 nm SE of Baltimore City. Use CTAF/UNICOM 122.7.

Aerial Suspension?

In January 2004 I began this newsletter for the Aero Club. It's hard to believe that my efforts have been going on for over 10 years. It's been fun to put this publication together.

Recently, I have been having health issues. For the time being, I doubt I will be able to edit the newsletter.

So unless someone is willing to pick up the baton, I will suspend publication.

Thanks to all who have supported this effort over the years.

73,

Frank Stone AC3P

From the Skies over Mt. Essex

SKY Events for June 2014

June 3rd – 200" Hale telescope dedicated in 1948. Ed White 1st American space walk in 1965.

June 5th - First Quarter Moon.

June 7th – Mars is 1.6° N of the Moon.

June 8th – Spica is 1.8° S of the Moon.

June 10th - Saturn is 0.6° N of the Moon, occultation 15:11 EDT.

June 13th -- Full Moon . “**Moon of Horses**” for the Celtic and the “**Full Strawberry Moon**” Traditional Full Moon Names.

June 18th - Mercury largest apparent size in 2014, 12.2.

June 19th - Last Quarter

June 21st – Summer Solstices 06:51EDT (10:51 UT). Also the heliacal rising (becomes visible just before sunrise) of Sirius.

June 27th - New Moon. Boötids Meteor shower approx 10 – 40 meteors per hour.

June 28-29 – ARRL Field Day Weekend, Good Luck!

June 30th –Tunguska Siberia impact 1908.

Planet Lookout at mid-Month

Sunrise 05:39 EDT and Sunset 20:34 EDT

Mercury in the Evening Sky very low WNW sets 20:47 EDT, magnitude -+4.3; 11.9 arc seconds.

Venus – In the East at dawn, rises about 03:48 EDT magnitude -4.0 and 13 arc seconds.

Mars - SW sky at dusk, sets about 02:05 EDT, magnitude -0.2 and 10.6 arc seconds wide.

Jupiter - SW after dusk, magnitude -1.8 size 32 arc seconds, sets about 22:30 EDT.

Saturn - Southern Sky sets about 03:45 EDT, magnitude +0.3 size 18.4 arc seconds.

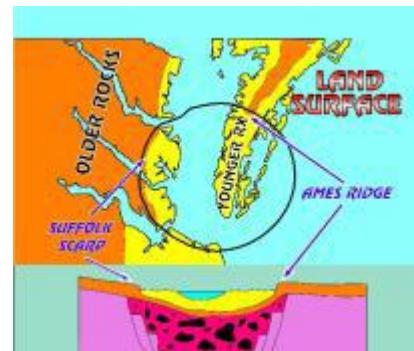
Uranus - Rises about 02:10 EDT, magnitude +5.9, size 3.4 arc seconds.

Neptune Rises about 00:30 EDT, magnitude +7.9, size 2.4 arc seconds.

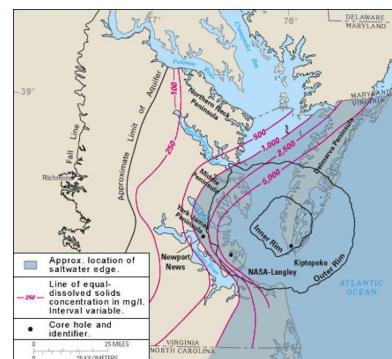
On our Door Step - Impact Crater!

Back in March I was on a trip to Virginia Beach and stopped for lunch in Newport News Va. This area is famous for Jamestown, Williamsburg, Norfolk Naval base, Oceania Naval Air Station, NASA Langley to list a few and oh by the way, a meteor crater.

It's not a famous or as old as the Chicxulub Crater in Mexico. But it's on our door step. The Chesapeake Bay Crater is located at the mouth of the bay near Cape Charles, VA and just above Virginia Beach. This event occurred 35 million years ago, the impact area was a marsh area the bay was not formed until about 10,000 years ago, after the last ice age. The crater is 56 miles wide, 1.3 miles deep. It was made by a 1 mile wide object that struck the Earth at 70,000 mph with an explosive force of up to 1 million tons of TNT.



This crater was rediscovered and confirmed in 1990s. As far back as the American Civil War, soldiers at Ft. Monroe were drilling wells in search of fresh water after several attempts and going down 907 feet all they found was salt water. In 1993 Texaco turned over seismic data to the United States Geological Survey, which showed evidence of the crater and supporting the theory of a meteor impact.



Duck and Cover!

June 30, 2014 is the 106 anniversary of the asteroid or comet airburst over Southern Siberia near the Podkamennaya Tunguska River.



June 2014

1	2	3	Meeting Coffman's 7:30 pm	4	5	6	7
Mannassas Hamfest			28.445 MHz Net 8 pm				ARRL VHF Contest
8	9	10		11	12	13	14
ARRL VHF Contest			Meeting Coffman's 7:30 pm				
15	16	17		18	19	20	21
			147.24 MHz Net 8 pm				
22	23	24		25	26	27	28
Field Day Essex Skypark							
29	30						