THE AERO AERIAL

Our Tenth Year of Publication



The newsletter of the Aero Amateur Radio Club Middle River, Md Volume 10 Issue 5 May 2013

Editor Frank Stone AC3P

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Ron Distler	W3JEH	Resource Coordinator	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 -)

LOCAL AREA NETS

Day	Time	Frequency (N	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
4th Wed	8 pm	147.240	AERO ARC Net
5 th Wed.	8 pm	449.575	AERO ARC Net

AERO NET REPORT

28.445 MHz: WB3FMT (NCS) AC3P W3JEH

147.24 MHz: WB3FMT (NCS) KB3VAE KA3SNY AC3P/m KB3MXM

Station Activities

KB3PGN has returned from the Twilight Zone.. Rumor has it that she is starting a rain barrel concession. **KB3JVP** made a rare appearance on the 10 meter net.

Election Notice

Just when we thought the political battles of 2012 were behind us, the Aero ARC faces another election day. Be sure to attend the May 15th meeting when the Aero Express pulls into Coffman's Station. The train will arrive at 7:30 p.m. and could pull out at 7:31 p.m.

If you're not at the station you may find yourself on the train.

Welcome

Welcome to our visitors, Naura and Charles Ester and John Kirchner, W3JMI.

From T-MARC

March 2013

Applications in Process:

Kent County ARC Sent Construction Coordination for move of 146.9700- from previous location. (Actually sent in February 2013). Received Certificate of Operational status. Sent Final Coordination

Kent County ARC Received coordination application for modification of 147.1950+. Sent Notice of Proposed Coordination to adjacent coordination groups. Objection received from ARCC. Found alternate pair and sent another proposed coordination to adjacent coordination groups and co-channel in TMARC area. Sent Construction Coordination for 146.9100- at Woodside, Delaware.

Fauquier ARA Received request for ERP and AGL increase for 442.25000+.

Note: Jan. 2013 update incorrectly specified freq as 442.5000+

Sent Notice of Proposed Coordination to neighboring coordination groups.

Sent Construction Coordination for ERP, AGL, and HAAT increase.

Sussex ARA Received Certificate of Operational Status. Sent Final Coordination for 145.2500- at Bethany Beach, Delaware.

N3HTT Received request for sponsorship change of 448.8250- in Delaware City, Delaware to the DelMarVa Group.

DelMarVa Group -- Received application for CTCSS change and ERP increase for 448.8250- in Delaware City, Delaware.

DelMarVa Group -- Received application for CTCSS change and ERP increase for 442.4500+ in Harrington, Delaware. Sent modified coordination.

Univ. of Pa. ARC Received application for coordination of 442.0000+ in Wilmington, Delaware. Sent Construction Coordination for 442.0000+.

On Air Status Requests sent to:

O II I III D WWW	110000000000000000000000000000000000000	
145.4500	N4USI	Haymarket, Va.
442.4125	N4USI	Haymarket, Va.
224.8000	BRATS	Baltimore, Md.
439.2500	BRATS	Baltimore, Md.
443.3500	BRATS	Baltimore, Md.
911.2500	BRATS	Baltimore, Md.
1289.250	BRATS	Baltimore, Md.
448.5250	Boumi ARC	Cockeysville, Md.

Coordinations Withdrawn / Cancelled:

442.0000 Univ. of Pa ARC Seaford, Del. (Construction Coordination)
 440 Link Univ. of Pa ARC Seaford, Del. (Construction Coordination)

440 Link AARC Curtis Bay / Davidsonville, Md. (Const. Coord.)

Other:

Received Notice of Proposed Coordination from Western Pa. Repeater Council

for 144 pair.

Received 3 Notice of Proposed Coordinations from South East Repeater Assoc.

for 144 pair.

Received Notice of Proposed Coordination from Western Pa. Repeater Council

for 220 pair.

Received Notice of Proposed Coordination from Western Pa. Repeater Council

for 440 pair.

Please Contact Mike Hess N3EAQ (mkhess@kias.org) DIRECTLY with regard to this item:

I'm putting up for sale a complete UHF Quantar Analog/P25 repeater/station I'm taking off the air here in Charles Town, WV.

If anyone is interested in the set-up, please contact me. I'm not interested in selling off pieces.

The price is quite reasonable, considering that JUST the Quantar alone

sells for the price I'm asking. Add up all the other piece parts and it's a good deal. No one EVER uses this repeater, so I'm done feeding it electricity for no good reasonâ€.

Here's what I'm selling:

Fully functional Motorola Quantar Low Power Unit Dual Mode P25/Analog Unit Currently on-line at 444.350/449.350

Includes the 4W WL Card

Copy of RSS & the Latest Firmware updates on CDs

These are reported to be the last updates before Moto discontinues support for the Quantar.

Not yet installed, but you can do it once you make the purchase.

Tx/RX Engineering Duplexer Model 28-70-02 tuned to the freqs noted above

DCI model DCI-445-10C band pass/noise filter

Diamond 144/440 dual band base antenna

Andrew wall mount copper ground block w/ 440 Mhz polyphasor

Motorola $\hat{A}^{1/2}$ height rack w/ front and back doors (no keys)

Moto microphone

Paper Manual (bound original, not a photocopy)

Asking \$2350.00 for all of the above. The station is currently on the air, but I will tear it all

down, re-rack it, and make it

Available for pick up at sale time. Pick-Up ONLY, will not ship it! Charles Town, WV.

T-MARC

The Mid-Atlantic Repeater Council

www.tmarc.org

VE Corner by Pat Stone AC3F

The March $23^{\rm rd}$ Test Session had a larger than usual turnout of applicants. Twelve folks had pre-registered. Eleven actually showed up. Congratulations to:

New Tech Hams:

Jenn Keller KC3AIG
Jason Scmitt KC3AIF
Perry Scnuck KC3AIE
Lisa Edwards KC3AIJ
Marty Braun KC3AID
Paul Rey KC3AIC
John Harris KC3AIB

General Upgrade

Gill Edwards WB3JDO

Extra Upgrades

Kirk Lattner KB3UQF Andrew Cary KB3ZUL Don Moore KB3ZYH

Thanks to VE's AC3P KB3KRV and AK3QK for making this session a success.

Our next Test Session at White Marsh will be on Saturday, May 11th at 1 p.m.

THE JOY OF BEING A VOLUNTEER EXAMINER

by Pat Stone AC3F

Have you ever considered becoming a volunteer examiner? Yeah, I know the old saying, "Never volunteer for anything." However, if you were tested by volunteers yourself then perhaps you should reconsider that old saying. All you need is a General or Extra Class license to volunteer. You will be given an open book test by the ARRL that will take you about an hour or so to complete.

Test sessions generally only last about 2 hours and are held every other month. Of course you don't have to show up for all of the sessions but any session you can make will be a big help.

It's been nearly 15 years since I served my first exam session. I guess I've been part of testing 300 or so applicants over the years and I still enjoy every minute of it. It's truly gratifying to see the sense of accomplishment and pride displayed each time an applicant is successful. The really fun part is when I can say congratulations you passed. Of course not every examinee is successful but most do well when encouraged to return.

To all of you who currently serve as a VE, thank you so much. Our schedule for next year will be posted here soon. Please let Frank or me know which of the dates you can serve. To those of you who qualify, please consider becoming a VE. The atmosphere is friendly and you will be helping to perpetuate ham radio.

Field Day Prep

Members who have laptops that could be used for the logging network on Field Day are asked to bring them to the May 1st meeting in order to load the logging software.

Due to the time required to check out the laptops, the first meeting in May will start early at 7 p.m.

On Saturday, April 13th, the ad hoc Field Day Committee met at Essex Skypark to survey the area. The committee members met with the Essex Skypark members and received permission to use the new hanger building as the operations site and the adjacent property for antenna setup.

Field Day 2013 runs from Saturday June 23 to Sunday June 24 with setup beginning Friday June 22.

Skypark Pancakes



The Essex Skypark Association is holding a Fly-in Pancake Breakfast Saturday, April 27th 9 to 11:30 am. One The menu includes pancakes, sausages, coffee and juice. Admission free but donations appreciated. Aero Members are invited. Aircraft fly-in not required.

Wallops Island Launch/Amateur Radio Nexus



For anyone following the activities at NASA's Wallops Island Launch Facility on Virginia's lower Eastern Shore, the events there have been getting more interesting. With the cancellation of the space shuttle program, there has been an increase in test launches of private space companies' vehicles.

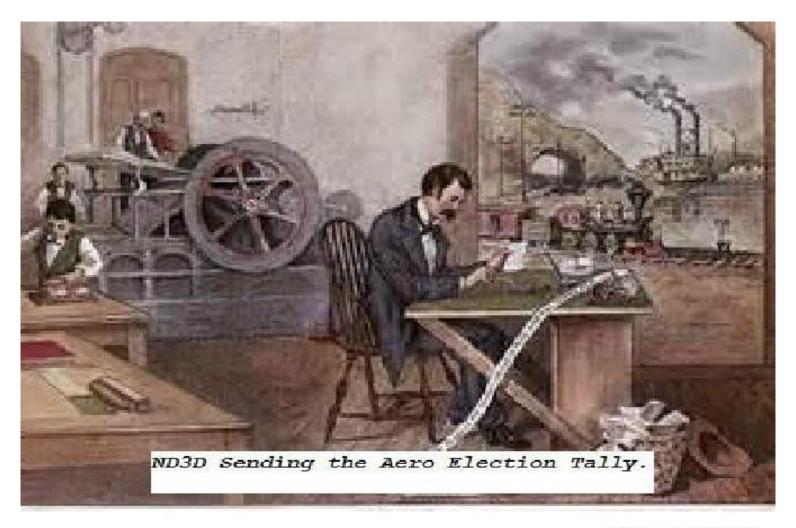
One such vehicle is the two-stage Antares booster. The Antares is designed to launch supply capsules to the International Space Station.

In late April an orbital mission was set to launch a dummy payload. Along with the dummy payload were three mini-satellites designed to test using smart-phone technologies as platforms. The three mini-moons are named Alexander, Graham, and Bell.

The amateur radio connection?

Alexander, Graham and Bell will be transmitting signals on 437.425 MHz. in the 70 Centimeter Amateur Radio Band. The satellite designer is asking for signal reports during the 10 day mission.

More information can be found at: http://www.phonesat.org.



May 2013

			Meeting Coffmans 7 pm			Hagerstown Hamfest www.w3cwc.org
			1	2	3	4
			28,445 MHz Net 8 pm			VE Testing White Marsh 1 pm
5	6	7	8	9	10	11
			Meeting Coffmans Elections 7:30 pm			
12	13	14	15	16	17	18
			147.24 MHz Net 8 pm			CQ WW WPX Contest CW
19	20	21	22	23	24	25
Md. FM Assoc. Hamfest Howard County Fairgrounds			449.575 MHz Net 8 pm			
26	27	28	29	30	31	

From the Skies over Mt. Essex

SKY Events for May 2013

May 2nd & May 31st - Last Quarter Moon.

May 5^{th} - Eta Aquarid Meteor Shower, look towards the East before Dawn. Rate about 60 meteors per hour. Best below 40° N latitudes.

May 9th - New Moon.

May 10th - Annular Solar Eclipse visible in Australia and Pacific.

May 12th - Moon is the 3° S of Jupiter at 20:00EDT.

May 18^{th} - First Quarter Moon, Venus is 6° N of Aldebaran at 06:00 EDT.

May 20th - Mercury is 7° N of Aldebaran at 21:00 EDT.

May 22nd - Moon passes 0.005° N of Spica at 07:00EDT occultation visible in SE Asia.

May 23^{rd} - Moon is 4° South of Saturn at 06:00EDT.

May 24 thru 31st - Venus, Jupiter & Mercury from a equilateral triangle at Dusk in the West, within a 5° circle.

May 25th - Full Moon "Strawberry" for the Shawnee American Indian tribe and the "Flower" Traditional Full Moon Names. – Penumbral Lunar eclipse visible in the U.S. less than 1.6° or .5 arc minutes of the Moon will be affected. Starts 23:53 on 5/24 and ends 00:27 on 5/25.

May 27th- Mercury is 2° N of Jupiter at 06:00EDT.

May 28th- Venus is 1° N of Jupiter at 17:00EDT.

Planet Lookout at mid-Month Sunrise 05:50 EDT and Sunset 20:14 EDT

Mercury - Dusk in the West, Mag -1.7, size 5.2 arc sec.

Venus - Dusk in Western Sky, Mag -3.9 Size 10.1 Arc sec.

Mars – Out of sight this month in the glare of the Sun.

Jupiter - West at sunset Mag -1.9 size 32.8 arc seconds.

Saturn - East in evening sky Mag +0.2 size 18.8 arc sec.

Uranus - Dawn sky . Mag+5.9 size 3.4 arc seconds.

Neptune - Dawn sky. Mag +7.9 size 2.5 arc seconds.

Ring..Ring...Ring?

What do rings and planets have in common? Well we have three type of Planets, Rocky Terrestrials, Gas Giants and Dwarf Planets circling our Sun.

The rocky planets are Mercury, Venus, Earth and Mars; the gas planets are Jupiter, Saturn Uranus and Neptune; the dwarf planets are Ceres (asteroid), Pluto, Haumea, Eris and Makemake (dwarf planets).

The terrestrial planets are all rocky, having a solid stand on surface. The dwarf planets also have a solid surface made up of rocks and frozen gasses. The gas planets are unique they don't have a solid surface to walk on like Earth or Mars. While, they have thick outer layers of liquid and gaseous molecular hydrogen and helium and metallic hydrogen, they might have near-solid inner cores of molten heavy metals. All of the gas planets share some of these similarities they all are much larger – have a much bigger volume – than the terrestrial planets.

Because the gas giants are composed of gas, they are less dense than the terrestrial planets. Their large size is what makes them more massive than the inner (terrestrial) planets. Additionally, all of Solar System's gas planets have planetary ring systems and many moons. All of the gas planets have rings, from Earth you can see Saturn 7 major rings, Uranus's 11 rings, Neptune's 5 rings and Jupiter with 3 rings, but to see Jupiter's rings you must be behind the planet. None of the terrestrial planets have a discernable dust ring.



Photo by Frank Stone AC3P from Mt. Essex