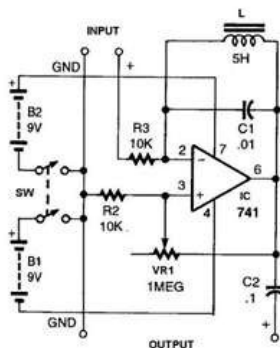


THE AERO AERIAL

The Aero ARC Celebrating 65 years of Amateur Radio Fun



The newsletter of the Aero Amateur Radio Club
Middle River, Md
Volume 8 Issue 9
September 2011

Editor Frank Stone AC3P

Officers

Joe Miko	WB3FMT	President
Bob Venanzi	ND3D	Vice-President
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Pat Stone	AC3F	Corresponding Secretary
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VE Testing	Pat Stone AC3F
Public Service	Bob Landis WA3SWA
Webmaster	Al Alexander K3ROJ
Trustee	Frank Stone AC3P
Club Nets	Joe Miko WB3FMT

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 -)

WEBSITE: www.aeroarc.us

LOCAL AREA NETS

Day	Time	Frequency (MHz)	NET NAME
Daily	9 – 10 am	147.03	ORIOLE Net
Daily	5:30– 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
1 st Tues	7:30 pm	145.330	Baltimore ARES 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

The Aero Quantum Mechanics Net: Anytime any Frequency contact WB3FMT. The last one was on 449.575 MHz on Tuesday 8 pm on March 30th. Who knows where or when the next one may be?

Aero Net Reports

July

70 Cm: WB3FMT(NCS) AC3P W3JEH KB3PGN W3PG KA3SNY W3VRD

10 Meters: WB3FMT(NCS) KA3SNY KB3PGN W3PG

2 Meters: WB3FMT(NCS) KB3VAE W3VRD AC3P

Station Activities

WB3FMT is portable 2 in St. Regis NY. **K3CXC** has been found live and well in Florida. Congrats to Bernie on his new QTH in Sarasota. **AC3F** and **AC3P** were mobile from Western Md. and Pa. **KB3JVP** was monitoring .24 during the Irene visit.

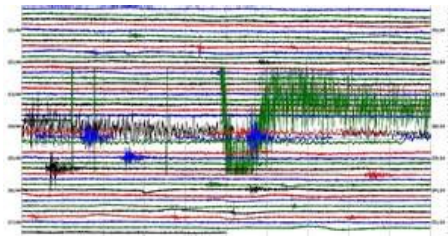
VE Testing

The next test session is on Saturday September 17, 1 pm at White Marsh. This will be the last session at this location. Future sessions will be held at the Essex Branch of the county library in the Middlesex Shopping Center.

Public Service

Set you calendars for October 15th for the running of the Baltimore Marathon. Operators will be needed for this citywide event. Contact Bob WA3SWA for more information.

East Coast Earthquake 2011



At approximately 13:50 local time on August 23, a 5.8 Earthquake rolled up the eastern seaboard causing minimal damage in the Baltimore Area. While the communications seemed to be relatively unaffected, the cell phone carriers were overloaded with millions trying to get in contact. Land-line circuits seemed to be working. It was unnecessary to activate ARES/RACES and most repeaters remained on the air.

Hurricane Irene



No sooner had the Baltimore area recovered from an earthquake, we found ourselves in the sights of a hurricane. While Hurricane Irene roared off the coast of Ocean City, Md. The 500 mile wide storm pounded the Eastern Shore and most of Maryland with wind and torrential rain.

Most local RACES nets were activated. Baltimore County RACES provided communications for a shelter at Eastern Technical High School. The Aero club lent support by making the 147.24 Mhz repeater available should it be needed.

The repeaters remained in operation throughout the storm.



Packeteers To Convene in Baltimore

In the 1980's, before Al Gore invented the internet, computer geeks set up dial-up bulletin boards where users could post articles, send email and converse. Likewise in the amateur radio world hams would set up bulletin board networks to accomplish the same thing. From about 1990 through 1995 a nationwide robust packet radio network.

Of course any network requires protocols to operate efficiently. The one organization that provides the standardization of packet radio codes is the Tuscon Amateur Packet Radio (TAPR) . TAPR sets and maintains the AX.25 protocols and other digital communications standards for Amateur Radio.

Every year TAPR holds a convention at which research papers are presented as well as the latest in Amateur Radio Digital Communications technology. This year the TAPR annual convention will be held at the Four Points Sheraton Hotel on September 16-18.

For more information check out the TAPR website: www.tapr.org/dcc.html

Ed Note: Thanks to Dave KA3SNY for the heads-up.

From the Skies over Mt. Essex

SKY Events for September 2011

The Zodiacal Light

September 3rd – Mercury at greatest elongation W 18°.

September 4th – First Quarter Moon

September 9th – Mercury 0.7° North of Regulus in the Dawn sky ½ hour before sunrise.

September 11th - Full Moon “**Nut Moon**” Native American tribes or “**Harvest Moon**” the Colonial Americans.

September 16th - Pluto (the former 9th Planet) is stationary.

September 20th – Last Quarter Moon

September 23rd - Fall Equinox at 5:05 am EDT.

September 25th - The zodiacal Light is visible in the Northern Latitudes in the East before morning twilight for the next 2 weeks. Morning twilight begins at 5:20 am EDT w/Sunrise at 6:48 am EDT. Uranus at opposition visible all night. Mag +5.7 3.6 arc sec.

September 26th - Asteroid Ceres at opposition (Dwarf Planet w/ 4.6 year orbital period, magnitude +6.7) Ceres is the largest asteroid 594 miles (957 km).

September 27th - New Moon

September 29th - The planets Venus and Saturn are 1.3° apart.

Planet Lookout

Mercury – Eastern horizon ½ hour before sunrise, magnitude -0.9 size 6.1 arc seconds.

Venus – Hidden in the sunset, reappears in the West in the last half of the month.

Mars – Rises about 2:00 am EDT in Gemini, . Magnitude +1.4 size 4.8 arc seconds.

Jupiter – Rises 2hours after sunset in Aries, Magnitude -2.7 size 45.4 arc seconds.

Saturn- Lost in the sunset



The **Zodiacal light** is a faint white glow seen in the predawn or post twilight sky which extend along the ecliptic from the vicinity of the sun. In the mid-latitudes, the zodiacal light is best observed in the western sky in the spring after the evening twilight has completely disappeared, or in the eastern sky in the autumn just before the morning twilight appears. The zodiacal light appears as a column light, (image seeing the lights of a city in the far distance, only you can never reach that city), brighter and bulging at the horizon and coming to a round point overhead. It lies in the plane of the ecliptic and is nearly vertical during the spring and fall.

You need a clear moonless night to see this faint glow. The zodiacal light is brightest near the sun and decreases in intensity with distance from the Sun. In fact, the zodiacal light covers the entire sky, being responsible for 60% of the total skylight on a moonless night. The phenomenon of zodiacal light was first investigated by the astronomer Giovanni Cassini in 1683.

Based on its spectrum the Zodiacal light is the reflected sunlight. Its spectrum is the same as the solar spectrum being made up by dust particles having diameters between a couple of micrometers and a few millimeters and it is so tenuous that moonlight or light pollution makes seeing the Zodiacal light almost impossible.

Roy L. Bishop writing in the *Observer's Handbook*, published by the “The Royal Astronomical Society of Canada”, you should begin looking for the zodiacal light before the beginning of astronomical twilight, the time when sunlight first begins to be in the sky. Astronomical twilight begins about 1 1/2 hours before sunrise. Near the horizon it may be more than 15 degrees wide, narrowing to about 5 degrees and under ideal conditions may be as bright as the brightest parts of the Milky Way. When seen early in the morning it is sometimes called the false dawn, followed later by the true dawn., writing for the describes it as "a huge, softly radiant “pyramid of white light” with its base near the horizon and its axis centered on the zodiac."