

THE AERO AERIAL



Kermit is in Town

The newsletter of the Aero Amateur Radio Club

Volume 4 Issue 6
June 2007

Editor Frank Stone AC3P

Officers

Frank Stone	AC3P
Bob Landis	WA3SWA
Joe Miko	WB3FMT
Pat Stone	AC3F
Warren Hartman	W3JDF
Ron Distler	W3JEH

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Phil Hock W3VRD
Frank Stone AC3P
Joe Miko WB3FMT
Bob Landis WA3SWA
Frank Stone AC3P
Al Alexander K3ROJ

ABOUT THE AERO AMATUER 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: <http://www.aeroarc.us>

Net Reports

2 Meter Net: WB3FMT(NCS) KB3KRW AC3P K3ROJ W3JEH KB3ONA
10 Meter Net: WB3FMT (NCS) K3ROJ KB3RMX KB3KRW

LOCAL AREA NETS

Day	Time	Frequency (MHz)	NET NAME
Daily	9 – 10 am	147.03	ORIOLE Net
Daily	6 – 6:30 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> COMMEX
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

Emergency Communications



The monthly COMMEX was held on Tuesday May 8th. KB3KRW was at the helm at St. Joseph's Hospital. AC3P covered Franklin Square Hospital. WB3FMT supported Sheppard-Pratt.

There will be another "all-hands" exercise on June 12th.

Station Activities

WA3SWA is back from flight testing his GPS. K3ROJ will be searching for The Bermuda Triangle. After winning the 50-50, KB3JDE is going to Disney World!

Public Service

Spring brings many opportunities for amateur radio operators to give something back to the community. BRATS has opportunities to help in the coming months.

- **June 9-10, 2007, [MS 150 Bike Tour](#)** in Salisbury, Md. for the MS 150 we would like Hams with mobiles AND HTs to hang at the rest stops and cruise the routes. All will be fed and lodged with advanced sign up. It's a good idea to get down to Salisbury early evening Friday the 9th so we can all get a good start on Saturday morning.

For any of the above events, contact Ed, N3GXH or Ian, N3CVA, 410-303-1412, N3CVA@hotmail.com.

It's June So It Must Be Field Day

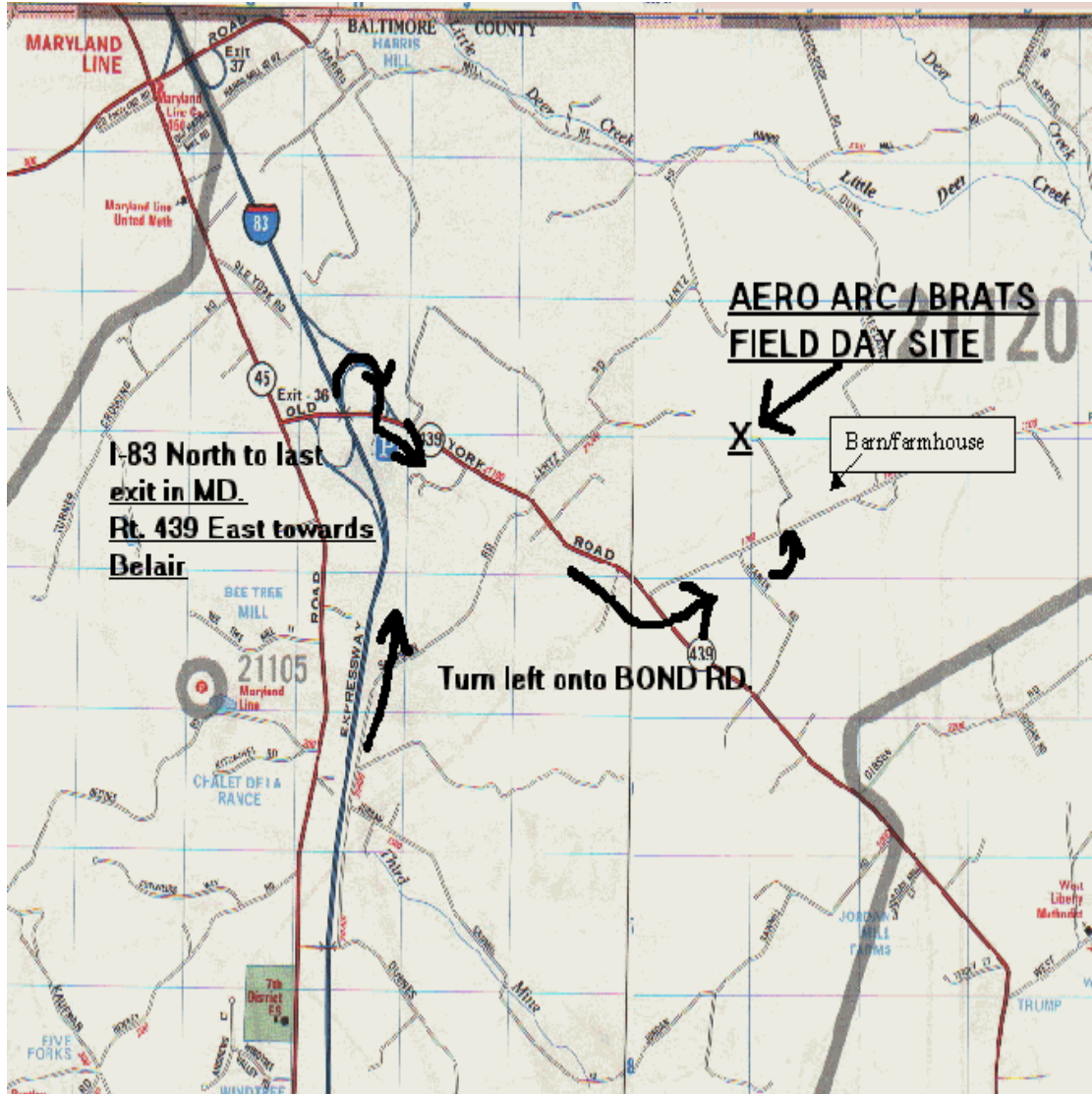
In what has become an Aero tradition, the club will be heading up to CampGenyara on June 22 through 24 for ARRL Field Day.

As in previous years we will be running several HF and VHF transmitters and put up an antenna farm. Hopefully the weather will cooperate and we will improve upon last years score. But most of all we hope to have as much fun as we have had in the previous events.

Everyone should try to lend a hand even if it is only for a few hours.

Directions

- From Baltimore, take I 83 North to Exit 36, Route 439 East.
- Take 439 east approximately 1 mile to BOND RD.
- Turn left onto BOND RD.
- Take BOND RD. approximately 1/2 mile to a dirt road on the left. (If you come to a barn and farmhouse on the left, you have gone too far.)
- Turn left onto the dirt road; follow it through the field and through a grove of tall pine trees. The pine trees have created a tunnel over the road. The Field Day site is at the end of the pine trees.



Hurricane Hunter's visit to the Martin State Airport – May 2, 2007



By Joe Miko WB3FMT

The National Oceanic & Atmospheric Administration (NOAA), made its second visit to the Baltimore Area, the first visit was 2 years ago. On the previous visit the NOAA aircraft was the P3-Orion known as "Miss Piggy", there are two P3s in service "Miss Piggy" and "Kermit".

The "Kermit the Frog" aircraft which landed today, has special meaning to the residents of Baltimore County, two of the recent hurricanes to make land fall in Maryland were Floyd in 1999 and Isabel in 2003, the 2003 Hurricane caused hundreds of Millions of dollars in damage in Maryland, with most of the damage located in Eastern Baltimore County.

The P3 Orion aircraft arrived prior to 9:30 am and was parked next to hanger 4, just to left of the control tower. It was on display from 10:30 am to 5:00 pm, it was open to the general public from 1:00 pm to 5:00 pm.

Various TV news crews were on hand, Channels 11, 13 and 45 from Baltimore, Channel 8 Lancaster PA and Channel 16 in Salisbury, MD. This made the local news at 12, 4, 5, 6 and 11pm.

Baltimore County Department of Emergency Management along with Maryland Emergency Management Agency (MEMA) as well as NOAA personnel from Sterling, VA. Set up displays for students and the general public. On the outside in the airport parking lot, Baltimore County Fire and Police had displays of various units. The displays included the Baltimore County Police Communications Van, Baltimore County Fire Department's Urban Rescue unit, a hook and latter unit, as well as paid and local volunteer units. The Middle River Volunteer Ambulance and water rescue also had an outdoor display. Central Alarmer's #155 provided coffee, tea and snacks for the county and support personnel.

Amateur Radio operators were asked to help the county provide net communications for student coordination and transportation. There were six radio operators which provided support from 9:30 am to 2:00 pm.

The operators were: Frank Stone AC3P, Joe Miko WB3FMT, Doug Ermer KB3KRW, Doc Frank Barranco N3FBQ, Joe Krysoforsky, Henry Katz KB3NYW and Bob Jones W3URJ. Joe WB3FMT provided the FT8900 radio for simplex and repeater operations, this was setup next to the Emergency Management display. A special thanks to Aero Amateur Radio Club (W3PGA) Frank, Doug and Joe M. for their support. Even though this was a county event it was not used as a RACES event.



WB3FMT at ECOMM Demo

At about 3:00 pm Zachary (15 year old grandson) took a tour of the ship and met the captain and ships navigator. During our conversation we learned about the NOAA service in which the Hunters fly. The service, NOAA, is 200 years old it started out with Thomas Jefferson establishing it as the Coast Survey in 1807 which later became the U.S. Coast and Geodetic Survey. Other agencies such as the Weather Bureau, National Marine Fisheries, Environmental Data Services, National Oceanographic, National Sea Grants and other activities were combined and NOAA was created in 1970.

The pilot stated that there are about 280 members of the NOAA uniform service (smallest of the 7 uniform services) all commissioned officers. The officer ranks are the same as the Navy. He also stated that the Hunters work is mainly on the East and Gulf coast of the U.S. The Navy uses ships and satellites to monitor weather conditions in the Pacific Ocean. During off seasons, crews will be dispersed to service ships to count whales, and other oceanographic activities. In the next few weeks this captain's mission will be off to Alaska flying a float planes taking cartographers to Alaskan islands for mapping and then off to count the whales before hurricane season starts in June.

The navigator explained that "Kermit" was flying down the East Coast, landing at Baltimore on May 2nd, with the next port or calls at Elizabeth City, NC. On May 3rd, Daytona Beach, FL, on May 4th ending up at their home base at Tampa, FL on May 6th. The navigator's primary job is to keep the aircraft on the proper flight path. Hurricane hunters make up to 6 passes through a normal hurricane. It's his job to plot the course and to ensure there is enough fuel to do the mission. At his disposal are various electronic devices, such as a military grade global positioning satellite (GPS) navigation, radio beacons and special shipboard inertial navigation systems.

During a hurricane investigation flight mission specialist will launch (eject from the belly of the aircraft) over 50 weather sensors into the storm. These "Dropsondes" measure air temperature, humidity and atmospheric pressure, the dropsonde are attached to a parachute which allows it to fall at about 35 miles per hours. It uses GPS information to help determine the winds in and around a hurricane. They also drop an expendable bathythermograph or AXBT, this probe measures water temperature down to about 1,500 feet.

The following is an excerpt from the NOAA's web site providing selected information about the aircraft.

Lockheed WP-3D Orion



Orion P-3 (Kermit) Cockpit View



Meteorological Station

Two of the world's premier research aircraft, the renowned NOAA WP-3D Orions, participate in a wide variety of national and international meteorological, oceanographic and environmental research programs in addition to their widely known use in hurricane research and reconnaissance. These versatile turboprop aircraft are equipped with an unprecedented variety of scientific instrumentation, radars and recording systems for both in-situ and remote sensing measurements of the atmosphere, the earth and its environment. Obtained as new aircraft from the Lockheed production line in the mid-70's, these robust and well maintained aircraft have led NOAA's continuing effort to monitor and study hurricanes and other severe storms, the quality of the atmosphere, the state of the ocean and its fish population, and climate trends.

With their world-wide operating capability, they have participated in numerous research experiments from the Indian Ocean, Australia and the Solomon Islands to Ireland, the North Sea and the Alps. On a national scope they have operated from the Arctic Ocean and Alaska through most regions of the U.S. and into the Caribbean. Hurricane and tropical storm research have taken place in the Atlantic, Caribbean, Gulf of Mexico and the Eastern Pacific. Estimated useful lifetime for these two research platforms is another 10 to 15 years.

Crew:	2 Pilots, Flight Engineer, Navigator, Flight Director (meteorologist), 2 or 3 Engineering/Electronic specialists, Radio/Avionics specialist, and a up to 12 Scientist or Media personnel.
Ceiling:	27,000'
Operational Airspeeds:	170 - 250 KIAS
Standard Fuel Burn:	4500 - 6000 lbs/hr depending on altitude and airspeed
Maximum Range and Duration:	LOW ALTITUDE - 2500 NM OR 9.5 HRS HIGH ALTITUDE - 3800 NM OR 11.5 HRS

Dimensions (external):	Wingspan = 99' 8" Length = 116' 10" Height to top of fin = 34' 3" Top of fin to lower skin = 24' 4"
Fuel Load:	58,000 lbs.

June 2007						
					1	2
3 Manassas Va. Hamfest	4	5	6 Meeting Coffman's 7:30 pm	7	8	9
10	11	12	13 10 Meter Net 28.445 MHz 8 pm	14	15	16
17	18	19	20 Meeting Coffman's 7:30 PM	21	22	23 Field Day
24 Field Day	25	26	27 2 meter net 147.24 MHz Repeater 8 pm	28	29	30

Estate Sale

SWAN 350B 80, 40, 20, 15, 10 meter 125 watt transceiver	\$ 150
SWAN SWR 1A Power Meter	\$ 10
Ringo 10 meter vertical (Must be removed from roof)	\$50

All prices negotiable.

Contact Frank Stone AC3P
410-687-7209 ac3p@juno.com