

THE AERO AERIAL



The W3PGA Repeater Site

The newsletter of the Aero Amateur Radio Club
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Volume 5 Issue 1
January 2008

Editor Frank Stone AC3P

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Frank Stone	AC3P
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Joe Miko	WB3FMT
Pat Stone	AC3F
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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) W3JEH W3VRD AC3P KB3KRW KA3SNY KB3QAX
10 Meter Net: WB3FMT (NCS) K3ROJ KB3KRW W3JEH AC3P

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

Station Activities

Welcome and Congratulations to Ken KB3QAX whose first QSO was on the Aero 2 meter Net.
KB3JDE harmonic, Pvt. Michael Carl is home on leave for the holidays. AC3P was heard on the ARRL
160 meter Contest with 54 QSO's. Somebody has to be last. WB3FMT, K3ROJ and KB3KRW were
heard on 6 meter AM. Could a regular Net be coming?

VE Corner *by AC3F*

January 19th kicks off the 2008 Testing Session at White Marsh Library. The 2008 Schedule is as follows:

January 19

**White Marsh Library
8133 Sandpiper Circle
White Marsh, Md. 21236**

March 15

**White Marsh Library
8133 Sandpiper Circle
White Marsh, Md. 21236**

May 31

**White Marsh Library
8133 Sandpiper Circle
White Marsh, Md. 21236**

September 27

**White Marsh Library
8133 Sandpiper Circle
White Marsh, Md. 21236**

November 22

**White Marsh Library
8133 Sandpiper Circle
White Marsh, Md. 21236**

**Registration at 1:00 p.m.
Fee: \$14**

**Testing Begins at 1:30 p.m. ARRL VEC
Contact: Pat Stone AC3F email: ac3f@juno.com
Phone: 410-687-7209**

Looking Back at 2007

Overall 2007 was a good year for the Aero Amateur Radio Club.

In January KB3KRW won the honors in the AERO 20 Days and Nights of FUN Contest while our VE team kicked off another testing year. K3ROJ and WA3SWA represented the club by putting W3PGA/8 on the air for the VHF contest.

February witnessed the End of Ham Radio As We Know It with the FCC eliminating the Morse Code Requirement. The VE team held as special paper only for those wishing to upgrade to General under the new rules.

In March the VE Team continued to handle a large number of applicants.

In April Frank AC3P tested the ACME all-band antenna.

May witnessed AERO members holding the fort during the Hurricane Hunters visit and the Baltimore County Waterfront Festival.

June played host to another successful Field Day at Camp Genyara. Club members also helped with the MS Bike tour in Salisbury Md. The train left the station as all the officers were re-elected to another term.

In July Aero member WA3SWA assisted with the Towson July 4th parade and the VE Team chalked up another test session.

In August the Aero 10 meter net could be heard down in Cocoa Beach, Fla. and Georgia.

In September the VE team held another test session while other members helped with public service events. The Aero members who belonged to RACES started up another season of preparedness drills at the hospitals.

October dawned with Aero members coordinating the Amercian Diabetes Association Walk in downtown Baltimore on one Saturday and turning out the following Saturday to help with the Baltimore Marathon

In November the VE team closed out the 2007 Test Schedule with a very successful session.

For December the members took time to work the ARRL 160 and 10 meter contests and await the arrival of The Jolly Old Elf while visions of Kenwoods, Icoms and Yaesus danced in their heads.

We look forward to a good 2008 club year.

The Voice of The Aero ARC

W3PGA/RPT



Storage 147.24 449.575



A Closer look at the 2 meter repeater

In the late 1960's FM exploded on the amateur radio scene. Many operators were converting old commercial FM units to amateur frequencies. In 1965 this writer logged in information from Ralph K3PHH(sk) concerning the popular calling frequencies for both 6 and 2 meters.

By 1972 the radio manufactures of the day were beginning to produce transceivers of 2 meters that were small and compact. Running mobile with small FM radios became the rage.

Due to the short range of these new radios many clubs began building repeater systems to extend the range of these low power units and place them into emergency and public service communications. The Aero Club was no exceptions.

The Aero Repeater began about 1973 as a commercial radio system that W3VRD, W3JDF designed and retuned 147.24Mhz output with the input on 147.84 Mhz. The initial repeater was located at the QTH of W3JDF. Warren said that an abandoned laundry room housed the transmitter while the receiver was in his basement. The controller was designed by Bill Werner, W3EAO.

By 1974 the FCC required that repeaters had to have separate callsigns which would be granted when diagrams of the repeater system its technical specifications and antenna patterns were submitted with the application.

To conform with these requirements and through the help of Joe Donat K3FRX(sk) the repeater was relocated to Kenwood High School. Joe was a science teacher at the school and moderated the high school radio club under the call of K3IVM. Ralph, K3PHH (sk) and the other club members helped with the move.

On March 5, 1975 the FCC licensed the Aero repeater as WR3AFI. At the same time Aero coordinated the repeater with The Mid-Atlantic Repeater Council (T-MARC) which coordinated all repeaters in Maryland Delaware and Virginia.

The repeater has been active at Kenwood ever since.

By the 1990s the FCC determined that separate licenses would no longer be required for repeaters, so the call sign was changed to W3PGA, the club's station call.

Today there are two repeaters, one on 2 meters and another on 70 centimeters at the site. Both are housed in cabinets in the elevator penthouse. Both machines consist of GE Master II transmitters and receivers. The receivers are located in a roof shed on the roof on the opposite side of the building from the penthouse and are connected to the transmitters by cable. The repeaters are controlled by a 449 Mhz link that can be remotely accessed by the control operator should it be necessary to shut them down.

The repeater site is about 100 feet above sea level and the antennas are mounted at about 34 feet above that. The repeaters put out about 50 watts with 6 db gain antennas.

As a single site system the general range of the machine is pretty good. The 2 meter repeater can be heard as far west as Catonsville and Woodlawn and as far North as Harford County. To the south one can hear it into Anne Arundel County.

Transmitting to the input is another matter. As a single site it can pick up east of Perring Parkway on I-695. On I-95 it can be accessed from just north of I-695 but it's out of range as one approaches the Ft. McHenry Tunnel.

The 70cm repeater range is not quite as good and is pretty much limited to the Essex/Middle River Area.

The Aero Repeater is one of many in the area that is designated for use by Baltimore County Office of Emergency Preparedness RACES program. It is available for use during RACES drills and was used for actual emergency operations during Hurricane Isabel. It has also been the primary frequency for local public service operations during the Hurricane Hunters visit to Martin State Airport and the Baltimore County Waterfront Festivals.

\$\$\$\$\$ DUES ARE DUE \$\$\$\$\$

Be sure to see \$Warren\$

What's in your Station?

The Aerial is looking for pictures of the members' gear. If you have a picture of your station please send in to ac3pATjuno.com along with a brief description. We talk to each other on the air during the nets. It would be interesting to see what your "rig" looks like on the other side of the antenna.

BARC Mini-Fest Is ON

The Baltimore Amateur Radio Club has invited us to it's annual indoor Mini-Fest at the Timonium Fairgrounds. Admission is free. This year the fest will be held Wednesday January 23 from 3 – 9 p.m. Admission is free but there will be a request for donations to defray expenses.. Tables and chairs are available to sellers.

Coming Events

January 2008

Jan 1 – ARRL Straight Key Night/ Start of Aero Contest

Jan. 2 Meeting Coffman's 7:30 p.m.

Jan 5-6. ARRL RTTY Roundup

Jan. 9 10 Meter Net 28.445 Mhz. 8 p.m.

Jan. 16 Meeting Coffman's 7:30 p.m.

Jan. 19th VE Exams. White Marsh Library 1 p.m./ ARRL VHF Sweepstakes (19-20th)

Jan. 23 2 meter Net. 147.24 Mhz. 8 p.m. BARC Mini-fest

Jan 27 Odenton Hamfest www.mobileers.org

Jan. 30 70 cm Net 449.575 Mhz. 8 p.m.

AERO AMATEUR RADIO CLUB

20 DAYS AND 20 NIGHTS OF FUN

When: 0000 UTC Tuesday 01 January 2008 (1900 EST Monday 12/31)
UNTIL
2359 UTC Sunday, 20 January 2008 (1859 EST Sunday 1/20)

Who's Eligible: All current AERO members

Location: All contacts must be made within a radius of 25 miles of your home QTH.

Frequency/Mode: Any mode legal within your license class on any amateur band. This excludes repeater, EchoLink, internet, & IRLP contacts. (satellite OK).

Exchange: Call, Name, and State

Scoring: The sum of all numerals in the main portion of the callsign. Do not use portable designators.

Examples:

9Q1D	1 pt !!!	V26R	8 pts
WA3SWA	3 pts	L73X	10 pts
TI7/K4XXX	4 pts	S58D	13 pts
K6XXX/3	6 pts	J7ØJ	17 pts (each digit Ø counts 10 pts)
4N7ZZ	7 pts	4N5ØØZZ	25 pts !!!

Bonus: Worked all numbers 0 thru 9 50 pts
Worked all US time Zones 25 pts (4 continental time zones)
Word in suffix of call (ie ka3OUT) 5 pts
Worked all letters of the alphabet as the first letter of the suffix of the call. 100 pts
Examples: K3AAC, VE6BQW, LU7CHY, count for the letters A, B, and C.

Misc.: The same station may be worked only once regardless of mode or band.
Winner of contest will receive an award in addition to running the contest next year.
Exercise good operating practices at all times

Submissions: Log sheets in the MS Excel format: (A shell for your log sheet will be included with the December mailing of the Aero Club newsletter.)

Due Date: Turn in log at the Aero Club meeting on 6 February 2008 or
e-mail your log to d_ernerer@msn.com by 4 February 2008.

GOOD LUCK & HAVE FUN!



Membership Application

Name _____ **Call** _____

Address _____

City _____ **State** ____ **Zip** _____

Phone _____

Email _____

ARRL Member ?(yes or no) ____

Type Aero Membership Regular (check one)

Regular ____ **Family** ____

Regular dues (\$12/year) ____ Family dues (additional \$2 per year) ____

If Family, call-sign of Regular Member _____

New Member ____ **Renewal** ____

I agree to abide by the FCC rules and Regulations and to abide by the goals and by-laws of th Aero Amateur Radio Club.

Signature _____ **Date** _____

FAR Scholarships Announced

THE FOUNDATION FOR AMATEUR RADIO, INC., a non-profit organization with headquarters in Washington, D.C., plans to administer fifty-six (56) scholarships for the academic year 2007 - 2008 to assist licensed Radio Amateurs. The Foundation, composed of over seventy-five local area Amateur Radio Clubs, fully funds three of these scholarships. Eleven are funded with the income from grants. The remaining forty-two (42) are administered by the Foundation without cost to the various donors.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. The awards range from \$500 to \$3000 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs. Amateur Radio Clubs, especially those in Delaware, Maryland, Ohio, Pennsylvania, Texas, Virginia and Wisconsin, are encouraged to announce these opportunities at their meetings, in their club newsletters, during training classes, on their nets and on their world wide web home pages.

Additional information and an application form may be requested by letter or QSL card postmarked prior to April 30, 2007. Please send name, call and address to:

FAR Scholarships

Post Office Box 831

Riverdale, MD 20738

Applications are also available electronically upon request to Scholarships@Farweb.org.

The Foundation for Amateur Radio, incorporated in the District of Columbia, is an exempt organization under Section 501(C)(3) of the Internal Revenue Code of 1954. It is devoted exclusively to promoting the interests of Amateur Radio and those scientific, literary and educational pursuits that advance the purposes of the Amateur Radio Service.

The Foundation encourages all qualified amateurs to apply for these awards.

