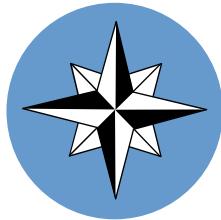


February 2009

Volume 6 Issue 2



THE AERO AERIAL

Get Ready For Digital TV ?

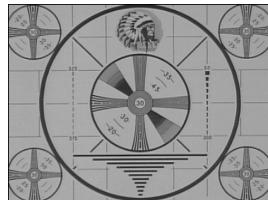
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On February 17th analog broadcast television signals will go off the air leaving digital television in its place. For months the public has been inundated with announcements heralding the change. The government has offered discount coupons for converter boxes to the owners of analog sets. Has the public paid attention? Who knows?

With the first major change to television broadcast in 40 years, how will the switch to the new mode impact the amateur radio operator. Will the local amateur get blamed when

the analog signals disappear?



Ever since Mad-Man Muntz offered his cheap sets for sale, the sight of an amateur antenna on a tower or roof sparked complaints from the neighbors even before the ham operator flipped the ON switch.

With the change to digital TV local ham nemesis

channel such as Channel 2 along with channels 3 through 6 will be distant memories. The remaining channels 7 through 62 will carry all sorts of programming and with the narrower transmission local stations will be able to broadcast on multiple sub-channels.

But will ham harmonics cause problems resulting in blue screens across the land or at least frozen pixels?

It may be time for radio clubs to revive their RFI committees for the coming brave new world of digital TV.

World Radio Magazine Goes Online

Last November *World Radio* was bought by *CQ* Publications. Beginning this month, *World Radio* will become an online only publication.

Amateurs who have enjoyed this no-frill maga-

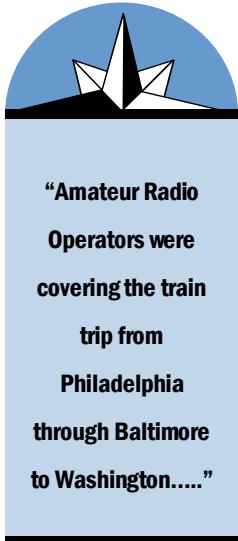
zine, "just the facts", can receive it for free.

To subscribe, go on the internet to:

<http://mailman.sunserver.com/mailman/listinfo/WorldRadio-L> or to:
www.wr6wr.com.

This update was provided by Ben Johnston, W3BE.

Amateur Radio Assists during Inauguration



With the expected onslaught of 5 million people descending on Washington D.C. for the inauguration on the new President, the current President, George Bush, declared a state of emergency for the weekend leading up to the event as well as Inauguration Day.

In response the Maryland Department of health requested that shelters be opened at various locations, as a precaution for any needed evacuation. Shelters were opened in Prince Georges, Baltimore and Harford Counties.

The opening of these shelters required the assistance from the local RACES/ARES groups in the area.

A primary shelter was opened at UMBC and staffed around



Md DHR and Red Cross folks standing by at the UMBC Shelter On Inauguration Day

the clock from Saturday January 17th through Wednesday January 21st. Amateur Radio operators were covering the train trip from Philadelphia through Baltimore to Washington on Saturday and before, during and after the administration of the oath of office.

The Aero ARC supported this operation with Frank Stone AC3P pulling an eight hour shift at the UMBC shelter on Inauguration Day.

Net Reports

2 Meters

Due to Christmas Eve there Was no 2 meter net.

70cm

There was a net scheduled but due to 440 repeater problem it was cancelled.

10 Meters

WB3FMT (NCS)
W3JEH
AI3G
AC3P
W3VRD
KA3SNY
WA3TAD

Maybe They're On To Something

For many years the Baltimore Amateur Radio Club has hosted and admission free mini-fest in one of the buildings at the Timonium Fairgrounds. In recent years, the event seemed to attract more people. This year was no exception.

Hours before the doors were to open people began lining up to get in. The hall was filled with people selling their

used gear and even a few small vendors with connectors adapters and antennas. A caterer was serving hot-dogs and pretty good crab soup. The atmosphere was reminiscent of the old Calvert Hall Hamfest, the precursor to the Baltimore Ham-

boree.

If the trend of the last few years continues, the mini-fest may not be able to remain mini much longer.

Congrats to BARC for a FB event.



WA3SWA WB3FMT K3ROJ
AK3RX W3VRD and W3JDF at the Mini-fest

Reliving the Novice Experience

The Novice license was once the gateway into amateur radio. At its inception in 1950 carried a 1 year term, was not renewable and limited the new ham to CW only segments on 80, 40 and 15 meters and for a time voice privileges on 2 meter AM at a crystal controlled power limit of 75 watt input to the final transmitting tube.

In an attempt to return to those days of yesteryear. We assembled a typical Novice

Station similar to that of WN3SSV who is now known as AC3F. The original station consisted of a Drake 2NT transmitter, a Lafayette HA-350 with Heathkit "Q" multiplier and a vertical antenna.

The reassembled station consists of a Drake 2NT transmitter which was brought to life thanks to Eric WA3TAD, the Drake R2B receiver that was featured in an earlier article and the Butternut vertical antenna.

The 2NT transmitter was limited 75 Watts input and was crystal controlled.

Since there is no longer a Novice Band operation was limited to the CW portion of 40 meters on 7038 kcs, 7040 kcs, 7053 kcs and 7070 kcs, the only frequencies of the crystals on hand. We have a 7070 kcs crystal but that is a prime PSK channel today.

The Drake 2NT is a very basic transmitter. It uses a 6EA8 tube in a modified Pierce crystal oscillator. The oscillator output is fed to a 12BY7 driver which is grid-blocked keyed to excite a 6HF7 sweep tube amplifier in a Class C configuration.

The transmitter has a built-in TR relay using half of the 6EA8 elements. The output from the final amplifier is fed via a pi network to the antenna transmission line. There are a few solid diodes in the built-in power supply.

The initial intent of setting up this station was to use it during Straight Key Night, but coaxial cable problems prevented us from making any contacts that night.

Since then, the station has

been on the air several times with favorable results.

To operate the station, one must turn on each component and wait for the tubes to warm up. With the crystal for the desired frequency installed, the operator then puts the transmitter in the spot position and listens for a signal in the receiver. Next the receiver is tuned to the signal turning the dial until the audio frequency is at its lowest or "zero beating". With this step accomplished, the operator adjust the tune control for a dip on the milliammeter and then uses the power set control to adjust the meter at 150 millamps for 75 watts. Then the operator is ready to transmit.

The Drake 2NT/R2B/2-CQ combination did not disappoint. We had several QSOs with stations in Maine, Ohio, and Mississippi giving good signal reports.

We found the constraints of crystal control more of a challenge to making contacts. But in all it was great fun re-living those novice days.



The WN3SSV Novice Station (except for the rotator control)

Station Activities

WA3TAD made an appearance at the January 7th meeting. Welcome back Eric.

The AC3P antenna saga continues. The tripod is on the roof.

W3JDF has lost 3 meetings in a row. Is the streak over?

WB3FMT was interviewed as part of a *Baltimore Sun* article regarding the winter solstice. Congrats to Joe.

W3VRD is back in town.

K3ROJ is cleaning out his basement via Aero raffles.

AI is donating the proceeds to the club.

KB3PGN is on her way back to Annapolis to keep an eye on the asylum.

AI3G was spotted at the BARC mini-fest.

The Foundation For Amateur Radio



Scholarships for the 2009 - 2010 Academic Year

As was the case last year, the FAR Scholarship application form is being supplied as a PDF form file. This form gives you two options:

1. You may fill out the form electronically using either Adobe Reader or Adobe Acrobat , then print it out for signature
2. Or, you may simply print the blank form and fill it out by hand.

We encourage you to use the electronic completion method to ensure the legibility of the completed document.

Either way, you are **required** to submit a paper copy of the form, complete with the required signatures.

If you choose to fill out the form electronically, please note the following instructions:

- The tab key will take you to each successive blank requiring input.
- Simply click on the check boxes to select them. If you check a box in error, simply click it again to clear the check mark.
- A number of items allow multiple line answers, but you will have to tab to the next line as you fill each line.
- Question 37 on page 5 contains blanks and drop down boxes for you to use in filling in your personal eligibility information. (Note that the table provides a simple means for use to determine whether you are, in fact, eligible for any particular scholarship.)
- Once you have completed the form, please print it out. A signed, paper copy of the form is the only valid form of submission.

You are no longer required to mark which scholarships you believe you are eligible for; however, you fill out the chart (question #37) at the bottom of page 5 to be considered for scholarships.

If you have questions about, or problems with use of the electronic form, please contact Dave Prestel, W8AJR, at or by phone at (410) 552-2652.

You will need to download **both** the documents below, as both are needed to properly complete the application. Save each document to your computer by right clicking and choosing "Save link/target as...".

1.

Regardless of how you choose to complete the form, please obtain the required recommendation signatures on Page 7 and be sure to sign Page 7 yourself.

Incomplete forms, forms sent by email, and unsigned forms will not be considered.

You may mail the completed and signed form to:

FAR Scholarships

P.O. Box 831

Riverdale, MD 20738 or, you may FAX the completed and signed form to 410 981-5146.

Note that applications must be **received by May 1, 2009**.

February 2009

S U N

M O N

T U E

W E D

T H U

F R I

S A T

1

2

3

4

Meeting
Coffman's
7:30 p.m.

5

6

7

Richmond
Frostfest
[Wwww.frostfest.com](http://www.frostfest.com)

8

9

10

11
10 Meter
Net
28.445 Mhz
8 p.m.

12

13

14

15

16

17

18
Meeting
Coffman's
7:30 p.m.

19

20

21
ARRL DX
Contest
CW

22

23

24

25
2 Meter Net
147.24Mhz
8 p.m.

26

27

28

Vienna
Winterfest
[Www.viennawireless.org](http://www.viennawireless.org)



ABOUT THE AERO AMATUER RADIO CLUB

Meetings: First and Third Wednesdays at 7:30 p.m. 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>

Officers

Joe Miko	WB3FMT	President	VE Testing
Doug Emer	AI3G	Vice-President	Repeater
Frank Stone	AC3P	Recording Secretary	Public Service
Pat Stone	AC3F	Corresponding Secretary	ECOMMS
Warren Hartman	W3JDF	Treasurer	Contests
Ron Distler	W3JEH	Property Mgr	Trustee

Committees

Pat Stone	AC3F
Phil Hock	W3VRD
Frank Stone	AC3P
Joe Miko	WB3FMT
Doug Emer	AI3G
Frank Stone	AC3P
Bob Landis	WA3SWA
Al Alexander	K3ROJ
Joe Miko	WB3FMT

LOCAL AREA NETS

Day	Time	Frequency (MHz)	NET NAME
Daily	9 – 10 am	147.03	ORIOLE Net
Daily	6 – 6:30 p.m.	3.820	Maryland Emergency Phone Net
Daily	6:30 – 7 p.m.	146.670	Baltimore Traffic Net
Daily	7 p.m. and 10 p.m.	3.643	Maryland/DC/Delaware Traffic Net
2 nd Tues	7:30 p.m.	146.670	Baltimore County <u>RACES</u> COMMEX
2 nd Wed.	8 p.m.	28.445	AERO ARC Net
4 th Wed	8 p.m.	147.240	AERO ARC Net
5 th Wed.	8 p.m.	449.575	AERO ARC Net