



Spring is Here!

The Aero Aerial

The Newsletter of the Aero Amateur Radio Club
Middle River, MD
Volume 14, Issue 5
May 2018

Editor Georgeann Vleck KB3PGN

Officers

President	Joe Miko WB3FMT	Repeater	Phil Hock W3VRD Jerry Cimildora N3VBJ
Vice-President	Jerry Cimildora N3VBJ	VE Testing	Pat Stone AC3F
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		Contests	Bob Venanzi ND3D Charles Whittaker KB3EK

Website: <http://w3pga.org>

Facebook: <https://www.facebook.com/pages/Aero-Amateur-Radio-Club/719248141439348>

About the Aero Amateur Radio Club

Meetings

The Aero Amateur Radio Club meets at 7:30 pm on the first and third Wednesdays of the month at Essex SkyPark, 1401 Diffendall Road, Essex. Meetings begin at 7:30 p.m. local time. Meetings are canceled if Baltimore County Public Schools are closed or dismiss early.

Repeaters

W3PGA 2 M : INPUT : 147.84 MHz, OUTPUT : 147.24 MHz, PL 123.0
W3PGA 70 Cm: INPUT : 444.575 MHz, OUTPUT : 449.575 MHz, PL123.0
W3JEH 1.25 M: INPUT : 222.24 MHz, OUTPUT : 223.84 MHz

Club Nets

Second Wednesday Net – 10 Meters (28.445 MHz) @ 8 p.m. Local Time

Fourth Wednesday Net – 2 Meters (147.24 MHz Repeater) @ 8 p.m. Local Time

Fifth Wednesday Net – 70 Centimeters (449.575 MHz Repeater) @ 8 p.m. Local Time

Radio License Exams

The Aero Amateur Radio Club sponsors Amateur Radio License Exams with the ARRL VEC. Examination sessions are throughout the year. Walk-ins are welcome; arrive no later than 30 minutes after start time. \$15 charge.

2017-18 Examination Schedule

Time:	1:15 pm		
Dates:	Sunday, May 27		
Where:	White Marsh Library		

White Marsh Library, 8133 Sandpiper Circle, White Marsh, MD

Contact: Patricia Stone AC3F, email: ac3f@juno.com, landline: 410-687-7209

LOCAL AREA NETS

Day	Time	Freq. (MHz)	Net Name
Daily	9 – 10 am	145.330	Oriole Net
Daily	6 pm	3.820	Maryland Emergency Phone Net
Daily	6:30 – 7 pm	145.330 no PL	Balto. Traffic Net (b/u 146.670 PL 107.2)
Daily	7 pm & 10 pm	3.643	MD/DC/DE Traffic Net
2 nd Tue	7:30 pm	146.670	Baltimore County RACES 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
Fridays	7:30 pm	145.330	Back in the Day Net
When activated by NOAA		147.030	SkyWarn (primary)



*William Douglas (Doug) Ermer, AI3G
September 23, 1944 ~ December 11, 2017 (age 73)*

[Obituary] William Douglas (Doug) Ermer, 73, of Milford, DE formerly of Baltimore, MD passed away Monday, December 11, 2017 at home. Doug was born in Baltimore, MD the son of the late William and Bertha (Cearfoss) Ermer. Doug worked as an Engineer for the State of Maryland at S.H.A. for 30 years before retiring. He then worked another 5 years for the State of Maryland as a consultant before leaving to enter the private sector, where he worked another 7 years before retiring for good. He was a ham radio operator and was a member of the Lewes Amateur Radio Club. He also enjoyed bass fishing and golfing. Doug was preceded in death by his wife of 24 years Marguerite M. (Marge) Ermer in 2015.

He is survived by his step-sons George (Will) Biles, Jr. and his wife Candi and Alan Biles, one cousin Cindy Zimmerman and her husband Daniel W., his four grandchildren, and his beloved dog Max.

Doug had been a long-time member of the Aero Amateur Radio Club, and for the past several years was a resident of Delaware. The photo of Doug was taken at the 2005 Field Day event held at Camp Genyara in northern Baltimore County (2010 was the last year the club had FD at Camp Genyara).

NET REPORTS

3-28-18: 147.240, 20:00 – 20:20 local.

W3PGA Joe NCS Essex, W3VRD Phil Essex, N3VBJ Jerry Remote from Las Vegas, KC3FBM Franklin Parkville, W3JEH Ron Perry Hall

There were 5 members on the net.

4-11-18: 28.445 MHz, 20:00 – 20:29 local.

W3PGA Joe NCS Essex
W3JEH Ron Perry Hall

There were 2 members on the net.

4-25-18: 147.24r MHz, 20:00 – 20:38 local.

W3PGA Joe NCS Essex, K3TEL Arnold Towson, K3DON Don Joppatowne, W3JEH Ron Perry Hall, KB3JVP Ken Middle River, KB3TBH George White Marsh, KC3FBM Franklin Parkville, N3RES Ray Lutherville, WA3QLY Thomas Edgewood

There were 9 members on the net.

Upcoming Second Meeting Presentations

<i>Date</i>	<i>Topic</i>	<i>Presenter</i>
TBA	FT8 – New Digital Mode*	Phil W3VRD
TBA	Contest Logging with N1MM	Bob ND3D
TBA	The Acu-rite Weather Station	?Kelly KC3APF

*See article from ARRL below.

These presentations will be given at the Essex SkyPark FBO building after the business meeting.

Any questions call Joe Miko at 443-956-0197. Presenters who wish to submit a description of their talk may email it to Georgeann at KB3PGN@reagan.com for inclusion in the Aerial.



VE CORNER

by Pat Stone, AC3F

The AERO VE Team held its second test session for 2018 on Sunday, March 11th, 2018 at the White Marsh Library. We served 2 applicants.

Congratulations to new Extra KC3CMZ Tim Hofmeister and new Tech KC3LAQ Jason Stover.

A very special thanks to VE's: WB3FMT, KD3TP, W1ASA, KC3FBL, KC3FBM, KB3VAE and AC0LP for assisting me with this session. You all did a great job. It was a pleasure working with all of you.

Our next test session for 2018 will be held at 1:15PM on Sunday, May 27, at the White Marsh Library. Hope to see you then.

Public Service Opportunity

Sunday, June 3, 2018: 2018 Tour de Cure: Maryland

Base Location: Goucher College, 1021 Dulaney Valley Rd, Baltimore, MD 21204

The Aero Club will again provide communications for this event. Joe figures we will need about 15 volunteers. WE STILL NEED ABOUT 5 VOLUNTEERS.

Events: Ride: 63MI, 30MI, 12MI; 5K Walk and 5K Run

All the routes will be fully supported with bike mechanics, volunteer route marshals, rest stops with food and water, cheering volunteers and more.

ADA Tour de Cure 6/2/18 - latest info as of 4/19/18

Route Length	Check-In Time	Start Time	End Time
63 MI	6:00AM	7:00AM	TBD
30 MI	8:00AM	9:00AM	TBD
13 MI	10:00AM	11:00AM	TBD
5K WALK	TBD	TBD	TBD
5K RUN	TBD	TBD	TBD

UPCOMING HAMFESTS and EVENTS

Saturday, April 21, 2018: Delaware State Convention (Delmarva Amateur Radio & Electronics EXPO)

Cheer Community Center, 20520 Sand Hill Rd., Georgetown, DE 19947

Website: www.radioelectronicsexpo.com

Sponsor: Sussex Amateur Radio Association

Type: ARRL Convention

Talk-In: 147.090 (CTCSS: 156.7 Hz), Sussex County ARES® Primary Repeater, Millsboro, DE

Contact: Herb Quick, KF3BT, PO Box 1431, Seaford, DE 19973, Phone: 302-629-4949, E-mail:

herb@hamltongraphics.com

Saturday, April 28, 2018: York Hamfest

Location: Elicker's Grove Park, Spring Grove, PA

Sponsor: York Hamfest Foundation

For more info, click on: <http://www.yorkhamfest.org>

Saturday, May 5, 2018: The Great Hagerstown Hamfest

Sponsor: Antietam Radio Association

Location: Washington County Agricultural Center

For more info, click on: <https://www.W3CWC.org/hamfest>

Sunday, May 6, 2018: Eastern Pennsylvania Section Convention

Sponsor: Warminster Amateur Radio Club

Location: Bucks County Community College - Lower Bucks Campus, Bristol, PA

Website: <http://www.k3dn.org>

Sunday, May 27, 2018: Memorial Day Hamfest

Howard County Fair Grounds, West Friendship, MD

Sponsor: Maryland FM Association

For more info, click on: [<http://www.marylandfm.org/Hamfest.htm>]

Sunday, June 03, 2018: W4OVH Manassas Hamfest / Convention

Prince William County Fairgrounds, Manassas, VA

Sponsor: Ole Virginia Hams ARC

For more info, click on: [<http://manassashamfest.org/index.html>]

Sunday, June 17, 2018: BARC's Father's Day Hamfest

Arcadia VFC Carnival Grounds, Upperco, MD

Sponsor: Baltimore Amateur Radio Club

For more info, click on: [<http://w3ft.com/hamfest.htm>]

Saturday, June 30, 2018: Harrisburg Radio Amateurs Club Firecracker Hamfest

Harrisburg Area Community College, 3599 Industrial Road, Harrisburg, PA 17101

Website: <http://www.w3uu.org>

Sponsor: Harrisburg Radio Amateurs' Club

Talk-In: 146.76 (CTCSS 100.0 Hz)

Contact: Tim Lehman, KB3OZA, PO Box 453, Hummelstown, PA 17036, Phone: 717-461-3398,

Email: kb3oza@arrl.net

Sunday, August 5, 2018: 68th Annual Berryville Hamfest

Clarke County Ruritan Fairgrounds, Berryville, VA

Sponsor: Shenandoah Valley Amateur Radio Club

Website: [<http://svarc.us/hamfest/>]

Saturday, September 01, 2018: Pennsylvania State Convention (Uniontown Gabfest)

Uniontown ARC Clubhouse, Uniontown, PA

Sponsor: Uniontown Amateur Radio Club

For more info, click on: [<http://w3pie.org/gabfest.htm>]

Printable Flyer: [<http://www.w3pie.org/W3PIEUARChamfest2018.pdf>]

Saturday, September 8, 2018: Virginia Beach Hamfest

Virginia Beach Convention Center, Virginia Beach, VA

For more info, click on: [<http://virginiateachhamfest.com/>]

Sunday, October 7, 2018: CARAfest

Howard County (Maryland) Fairgrounds

Sponsor: Columbia Amateur Radio Association

For more info, click on: [<http://www.carafest.org/>]

Saturday, December 8, 2018: Third Annual SantaFest

American Legion Youth Camp, Cheltenham, MD

Sponsor: Prince George's County Emergency Radio Association & American Legion

For more info, click on: [<http://pgares.org/santafest/>]

You may view upcoming Hamfests at: <http://www.arrl.org/hamfests-and-conventions-calendar>

Essex SkyPark

Saturday, May 5, 2018, 8:30 – Noon: Pancake Breakfast Fly-in (Rain or Shine)

Saturday, September 15: 2018 Wings and Wheels (Rain or Shine)



FT8 Mode is Latest Bright Shiny Object in Amateur Radio Digital World

ARRL, News, 08/01/2017

It's still in beta testing, but FT8 — the latest digital bauble to capture the imagination of the Amateur Radio community — has been luring away many of those already using the popular JT65 "weak-signal" mode. FT8 is included in a beta release of [WSJT-X](#), version 1.8.0-rc1. Among its biggest advantages is a shorter transmit-receive cycle, meaning quicker contacts. The [notes](#) for the "candidate" release say that FT8 offers "sensitivity down to -20 dB on the AWGN channel." Contacts are four times faster than with JT65 or JT9, and an entire FT8 contact can take place in about 1 minute.

The new mode is named after its developers, Steven Franke, K9AN, and Joe Taylor, K1JT. The numeral designates the mode's 8-frequency shift keying format. Tones are spaced at 6.25 Hz, and an FT8 signal occupies just 50 Hz. Unlike JT65 or JT9, transmit and receive cycles in FT8 each last about 15 seconds. Like JT65, FT8 requires accurate time synchronization. An auto-sequencing feature offers the option to respond automatically to the first decoded reply to your CQ.

"FT8 is an excellent mode for HF DXing and for situations like multi-hop Es on 6 meters, where deep QSB may make fast and reliable completion of QSOs desirable," Taylor's release notes assert.

The beta release came out just days before the July CQ VHF Contest and proved to be a boon to many operators who took advantage of FT8 on 6 meters. In a limited outing for the CQ VHF, Frank Donovan, W3LPL, made 22 FT8 contacts on 6 meters, "during which the FT8 software reported SNRs from my receiver below -10 dB (measured in a 2,500-Hz bandwidth). Some of the 22 QSOs may have been difficult to complete on CW."

Enthusiasts will have to wait a little longer for Logbook of The World ([LoTW](#)) to accept FT8 contacts as FT8 contacts. Because FT8 is still in beta, it has not yet been added to the ADIF tables. [Configuring TSQL](#) to automatically map FT8 contacts to "DATA" will enable users to upload FT8 contacts now, and confirmations will be valid for DXCC Digital, VUCC, WAS Digital, and WPX Digital awards. A new *TSQL* configuration will be released once the new mode has been accepted to ADIF, which could happen within a week.

Operational documentation for FT8 has not yet been finalized. "We know that the advent of new mode FT8 means that new material is needed for the *User Guide*," Taylor told the Yahoo [Meteor Scatter and Weak Signal Group](#) this week. "We will be working on that in the near future."

A new [Facebook group](#) has been established for FT8 experimenters.

Source: <http://www.arrl.org/news/ft8-mode-is-latest-bright-shiny-object-in-amateur-radio-digital-world>

From the Skies over Mt. Essex

SKY Events for May 2018

And Leon getting larger...err Mars!

May 4th – Saturn is 1.7° S of the Moon (16 EDT)

May 5th – Eta Aquarid meteor shower peaks (03 EDT; Alan Shepard first American in space in 1961.

May 6th – Mars is 3° S of the Moon (03 EDT)

May 8th – Last Quarter Moon

May 9th – Jupiter is at opposition

May 12th – Mercury is 2° S of Uranus (17 EDT)

May 13th – Mercury is 2° N of the Moon (13 EDT)

May 14th – Skylab launched in 1973.

May 15th – New Moon.

May 17th – Venus is 5° N of the Moon (14 EDT)

May 20th – Moon is 1.7° S Beehive (M44) (08 EDT)

May 21st – First Quarter Moon

May 21st – Venus 0.7° N of M35 Open Cluster in Gemini (06 EDT)

May 29th - Full Moon Colonial Full Moon name is “Milk Moon” and Cherokee as “Planting Moon”

Planet Lookout at mid-Month Sunrise 05:52 EDT and Sunset 20:12 EDT

Mercury Dawn rises 05:04mag -0.3 size 6.1 arc sec.

Venus Evening, Sets 22:45, mag. -4.0, size 12.3 arc sec.

Mars Morning rises 00:58, mag -0.8 and 12.9 arc sec

Jupiter Evening, rises 19:24, mag -2.5 size 44.7 arc sec.

Saturn Evening, rises 23:23, Magnitude 0.3 size 17.9 arc sec.

Uranus Morning sky rises 04:46 mag +5.9 size 3.3 arc sec.

Neptune Morning, rises 03:02, mag +7.9, size 2.4 arc sec.

If you haven't noticed it yet, Mars is getting larger. Yes it is at that time in the orbit, when Mars and Earth are at closest approach. This happens about every 2 years and 50 days on average.

Mars puts on its best show in 15 years in 2018. At closest approach on July 31, it will be 35,787,916 miles from that's .385 Astronomical Units (1 AU = 92,959,628 miles). *It will not look as large as the moon!*

Mars will grow in apparent size and brightness from 11.1" arc seconds and magnitude -0.4 on May 1st to 24.33" and -2.77 by August 1st. By December 1st it will be at a size of 9.28 and -0.04.

At its peak in August 2003, Mars apparent size at closest approach was 25.1 arc seconds and its magnitude was a -2.9, the closest approach in 50 thousand years. Mars will remain larger than 10" for the period from April 19th until November 20th.

During this close approach of Mars we will view the planet during its autumn. And its seasons last 171.7 days compared to Earth's 91.3 seasonal days.

As a note, this close approach will be the closest approach until September 11, 2035 when it will be .38 AU's or 464,778 miles closer than on July 31, 2018.

Mars information

Diameter 4,220 miles - **Rotation** 24 hrs 37 minutes
Avg distance from the Sun 141,620,000 miles
Axis Tilt 25.2° - **Gravity** .375 of the Earth
Temp at the equator -80 to +70 ,in summer
Atmosphere 95.3% CO₂, 2.7% Nitrogen, 1.6% argon
Atmospheric Pressure 5 – 10 millibars, equals to being over 100,000 feet altitude on Earth.

Moons (2) - **Phobos** (fear) 16x11 miles
- **Deimos** (Dread) 10 x 6.2 miles

