



Crash of Flight 93, Shanksville, PA, September 11, 2001

The Aero Aerial

The Newsletter of the Aero Amateur Radio Club
Middle River, MD
Volume 17, Issue 9
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Editor Georgeann Vleck KB3PGN

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		Contests	Bob Venanzi ND3D

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

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

Fifth Wednesday Net – 10 Meters (28.445 MHz) @ 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.

2021 Examination Schedule DUE TO COVID-19 DATES May be **Canceled!**

Time:	1 pm	1 pm	
Dates:	September 11 new date	November 20	
Where:	American Legion, Rosedale	American Legion, Rosedale	

American Legion Post 180, 1331 Seling Ave., Rosedale, MD 21237

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	449.575	Aero ARC Net
4 th Wed	8 pm	147.240	Aero ARC Net
5 th Wed	8 pm	28.445	Aero ARC Net
Fridays	7:30 pm	145.330	Back in the Day Net
When activated by NOAA		147.030	SkyWarn (primary)

Palm Coast, Monday, Aug. 2, 2021

Emergency Management trains with old-school methodology for innovative communications backup during disasters

Staff tested and trained using multiple radio systems, satellite phones, email, and standard telephone systems.

by: [Julie Murphy](#) Flagler County Public Information Officer



It goes without saying that open lines of communication with residents is especially critical during disasters and emergencies, but what is lesser known is that Flagler County Emergency Management trains regularly with seemingly old-school methodology for cutting-edge results.

"Staff is working with volunteers, amateur radio operators, neighboring Emergency Management agencies (currently St. Johns, Volusia, Marion, and Putnam), and the Florida Division of Emergency Management to test multiple backup communication tools," said Emergency Management Director Jonathan Lord. "These will be used when traditional communication tools, like the phone and the Internet, are down because of an emergency or disaster."

The backup communications toolbox includes resources, such as:

- [Shared Resources High Frequency Radio](#), which is a federal government program that allows national security and emergency preparedness agencies to communicate even when landline and cellular communications are unavailable.
- [Statewide Law Enforcement Radio System](#) which is a unified statewide digital radio network that allows for radio voice communications between certain emergency response agencies.
- [General Mobile Radio Service](#) is a publicly available FCC licensed radio service that is widely used by families and volunteer organizations, with the most common use of the channels being for short-distance, two-way voice communications using hand-held radios, mobile radios and repeater systems.
- [Amateur Radio](#), also known as ham radio, has been around since 1890, and is capable of bringing people together to talk across town, around the world, and even into space – all without the Internet or phones.

Additionally, staff tested and trained using satellite phones, email, and standard telephone systems. "This training – which we are going to do monthly – is crucial for ensuring preparedness," Lord said. "We have to regularly exercise our capabilities and test the equipment so that we know we are ready."

<https://www.palmcoastobserver.com/article/emergency-management-trains-with-old-school-methodology-for-innovative-communications-backup-during-disasters>

ARRL Now Provides Free RF Exposure Calculator

The FCC has adopted guidelines and procedures for evaluating environmental effects of RF emissions. The new guidelines incorporate two tiers of exposure limits based on whether exposure occurs in an occupational or "controlled" situation, or whether the general population is exposed or exposure is in an "uncontrolled" situation.

Under the new FCC rules, some amateurs need to perform routine station evaluations to ensure that their stations comply with the RF exposure rules. This can be as simple as running an online calculator to determine the minimum safe distance between any part of your antenna and areas where people might be exposed to RF energy from your station. Although amateurs can make measurements of their stations, evaluations can also be done by calculation.



To make this easy for amateurs, ARRL now provides an [RF exposure calculator](#) on its RF Exposure page. To use the calculator, enter your transmit peak-envelope power (PEP) and operating mode, and answer the questions about the maximum amount of time you might be transmitting. The calculator will give you the minimum distance people must be from your antenna and human exposure. You can print the results and keep them in your station records. There is no requirement to send your results to the FCC.

Source: The ARRL Letter for August 5, 2021

From: k3nem@googlegroups.com [mailto:k3nem@googlegroups.com] **On Behalf Of**
roland.anders@comcast.net

Sent: Thursday, August 12, 2021 11:58 AM

To: 'K3NEM ARCNEM Membership'

Subject: Tech Class Course starting on Zoom, Sept 9 Please publicize.

I am starting a free Technician Class course on Zoom beginning Thursday, September 9 and running for 7 sessions. Sessions will start at 6:30, and run 3 hours. No charge, of course. These are the classes sponsored by the National Electronics Museum that we have been holding for years. Please publicize this with your club and anyone you know whom you think would be interested. Those wishing to sign up should email me at roland.anders@comcast.net.

Thanks,
Rol Anders, K3RA

Board Creates Emergency Communications and Field Services Committee

At its just-concluded July 2021 meeting, the ARRL Board of Directors approved By-Law changes creating a third Standing Committee that joins the existing Administration and Finance Committee and Programs and Services Committee. The charter of the new Emergency Communications and Field Services Committee (EC-FSC) is to develop and recommend new or modified Board policy and programs for emergency communications through the Amateur Radio Emergency Service® (ARES®) and National Traffic System™ (NTS™) entities.

The committee also will offer enhanced support for its Field Organization leadership volunteers, including Section Managers, and an increased focus on ARRL-Affiliated Clubs.

Further, the EC-FSC will provide guidance to the CEO in translating Board policy into prioritized tasking, funding, and staffing of programs, services, and training in support of amateur radio emergency communications, Field Organization volunteers, and recruitment and retention of new and existing members through assistance to Affiliated and Special Service Clubs.

The EC-FSC will have the additional responsibility of monitoring and assessing trends in emergency communications technology and participant skills worldwide, and for identifying "best practices" for voluntary emergency communications provided by ARES and NTS, coordinating and cooperating with other amateur radio national societies as appropriate. -- *Thanks to The ARES Letter*

Source: The ARRL Letter for July 22, 2021

Net Reports

None received.



VE CORNER

by Pat Stone, AC3F

Our next test session has been changed to **Saturday, September 11th** at 1PM at the American Legion Post in Rosedale. Hope to see you there.

Hamfests

Sunday, October 3, 2021: CARA Fest

Location: Howard County Fairgrounds, 221 Fairgrounds Rd, West Friendship, MD 21794

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

Sponsor: Columbia Amateur Radio Association (CARA)

Talk-In: 147.390 MHz /R+ CTCSS 156.7 Hz

Public Contact: David Parkison , KB3VDY, P.O. Box 911 Columbia, MD 21044, Phone: 443-492-9501,

Email: vendorsales@carafest.org

FCC Application Fees Unlikely to Go into Effect Until 2022

The previously announced schedule of FCC amateur radio application fees likely will not go into effect before 2022. FCC staff confirmed during a recent virtual meeting with Volunteer Examiner Coordinators (VECs) that the agency is still working on the necessary changes to the Universal Licensing System (ULS) software and other processes and procedures that must be in place before it starts collecting fees from amateur applicants.

Once it's effective, a \$35 application fee will apply to new, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications. All fees will be per application. Administrative update applications, such as those to change a licensee's name, mailing, or email address, will be exempt from fees. ARRL VEC Manager Maria Somma, AB1FM, said Volunteer Examiner (VE) teams will not face the burden of collecting the \$35 fee.



"Once the FCC application fee takes effect, new and upgrade applicants will pay the exam session fee to the VE team as usual, but they'll pay the \$35 application fee directly to the FCC using the [FCC Pay Fees](#) system," she explained. When the FCC receives the examination information from the VEC, it will email a link with payment instructions to each successful candidate, who then will have 10 days from the date of the email to pay.

After the fee is paid and the FCC has processed an application, examinees will receive a second email from the FCC with a link to their official license. The link will be good for 30 days. Licensees also will be able to view, download, and print official license copies by logging into their FCC ULS account. The FCC no longer provides printed licenses.

Licensees can log into the [ULS](#) with their 10-digit FRN (FCC Registration Number) and password at any time to view and manage their license and application, [print their license](#), and update anything in their FCC license record, including adding an email address.

Read [an expanded version](#) of this story.

Source: *The ARRL Letter* for August 19, 2021

From the Skies over Mt. Essex

SKY Events for September 2021

Sept 1st – The Moon is 1.3 °N of M35 Open Cluster, 19UT, 6EDT.

Sept 5th - Zodiacal Light vis in N Lat in E before morning twilight for next 2 weeks. Venus 1.7° N of Spica 6UT, 02 EDT.

Sept 7th - New Moon

Sept 10th – Venus is 4° S of the Moon 2UT, 20 EDT on 9/9.

Sept 13th - First Quarter Moon

Sept 14th – Mercury greatest elongation E (27°) 4 UT is 0.1° S of Mars 04UT, 00 EDT, Neptune at opposition 9UT, 05 EDT.

Sept 17th - Saturn is 4° N of the Moon 3UT, 23 EDT on 9/16.

Sept 18th – Jupiter is 4° of Moon 7UT, 03 EST.

Sept 20nd - Full Moon Traditional Name is Harvest Moon and Celtic The Singing Moon.

Sept 22nd – Equinox 19:21UT 15:21 EDT.

Sept 23rd Mercury 1.7° S of Spica 13UT, 09 EDT.

Sept 24th – Uranus 1.3 N of Moon 16UT, 12 EST.

Sept 29th – Last Quarter Moon

Planet Lookout at mid-Month EDT

Sunrise 06:44 EDT and Sunset 19:09 EDT

Mercury – Evening Rise 08:59, Set 20:01, Mag 0.1, Size 7.1 arc seconds.

Venus – Evening Rises 10:16, Sets 20:52, Mag -4.1 and 16.3 arc seconds.

Mars -- Evening Rises 07:21, Sets 19:29, Mag 1.8 and 3.6 arc seconds.

Jupiter -- Evening Rises 17:51, Sets: 04:28, Mag -2.8 size 48.1 arc seconds.

Saturn – Evening , Rises 17:00 Sets 03:06, Mag 0.4, Size 18.0 arc seconds

Uranus— Evening Rises 21:17, Sets 11:04 ; Mag 5.7 size 3.6 arc seconds.

Neptune -- Evening Rises 19:03 Sets 06:45; Mag 7.8 size 2.3 arc seconds.

How about a Round Up?

Nope it's not the Messier's challenge. It's a chance to do a Planet Round Up. Unlike the all-nighter for the Messier the planetary roundup can be done from sunset 19:09 EDT through 02:00 EDT. The first task is to orange the planets in their setting order.

You will have a scant 20 minutes to find the first planet before it sets at 19:29 EDT that's Mars.

The next two planets are Mercury set at 20:01 EDT and Venus at 20:52 EDT.

Now you have time to get a coffee or soda before you hunt for Pluto which sets at 02:00 EDT.

The remaining four planets set between 03:06 to 11:04 EDT.

A dwarf planet chart can be found in the RASC 2021 Handbook page 243. With anything less than 14" you won't see any discernable planet disk approx. 0.1 arc second.

Planet	Set Local	Mag	Size "
Mars	19:29	+1.8	3.6
Mercury	20:01	+0.1	7.1
Venus*	20:52	-4.1	16.3
Pluto	02:00	+14.3	0.1
Saturn	03:06	+0.4	18.0
Jupiter	04:28	-2.8	48.1
Neptune	06:45	+7.8	2.3
Uranus	11:04	+5.7	3.6

Venus, Mercury, and Mars locations at 19:00 local time.

* You may be able to see Venus just before sunset, it will be 19° altitude and Azimuth 233°
Mercury 11° altitude and azimuth 247°
And Mars will be 5° altitude and azimuth 266°