

The Hertzian Herald



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Off The Kuf:

By Mike – N8KUF



The December MCRCA meeting was certainly filled with good cheer, good food, good gifts, good music, and GOOD Friends. Allow me to thank the individuals who were able to join us early to help with setup activities. Because of your presence the job was not so bad and didn't take all that long. After wrapping up the setup efforts in short order, I was able to stand back and watch as participants continued to arrive and continued to arrive, and the food table contents continued to grow and grow. WOW, it was awesome to watch.

Thanks to Glen K8GO for arranging for the excellent location, and a HUGE THANKS to Brenda (and Fred) who were largely responsible for pulling everything together. NICELY DONE!!

I'm personally very thankful for the ability to join so many good friends on that evening of celebration. I hope everyone there enjoyed themselves as much as I did.

At the January meeting, the 2020 officers for the MCRCA board of directors will be elected. There is still time to contact the head of the nominating committee (Paul W8PI) to solicit a nomination for any of the positions. If you are unable to reach him in advance remember that during the meeting the floor is always opened for additional nominations before the election is held. Fresh energy, and fresh ideas, are a vital part of what it takes to keep an organization alive and thriving.

While I can't say that I've accomplished everything I had hoped to accomplish when I accepted the President position a year ago, I CAN say that together we've accomplished quite a bit during the past year. With your input and participation there is so much more that we can accomplish in the future.

Please consider stepping forward, as an officer, as a mentor, as a program presenter, as an energetic volunteer, or at a minimum as an enthusiastic member eager to learn something new and willing to have a good time. ALL are welcome, and ALL are needed in order to continue to grow the organization. It is well within the reach of this organization to make MCRCA Meetings "the Ham place to be" on the third Thursday of every month.

In closing - May this New Year bring good health, good fortune, and many more good meetings with good friends. And, most importantly, may all of us keep those who may be less fortunate included in our thoughts, prayers, and actions.

Cheers!!!

I'll see YOU at the meeting,
Mike Karmol – N8KUF
2019 President – MCRCA

<http://mcrca.org/>

[www.facebook.com/
groups/
1643856795878368/](http://www.facebook.com/groups/1643856795878368/)

Club Officers

PRESIDENT

Mike Karmol N8KUF
mkarmol@bex.net

VICE PRESIDENT

Paul Trouten W8PI
ptrouten@bex.net

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The Fainting of Betelgeuse

DR. TONY PHILLIPS

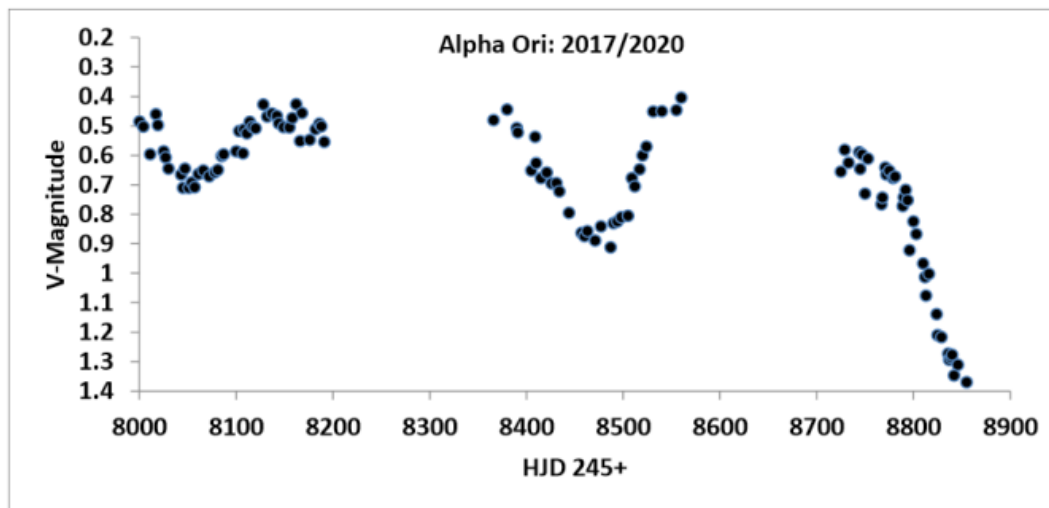
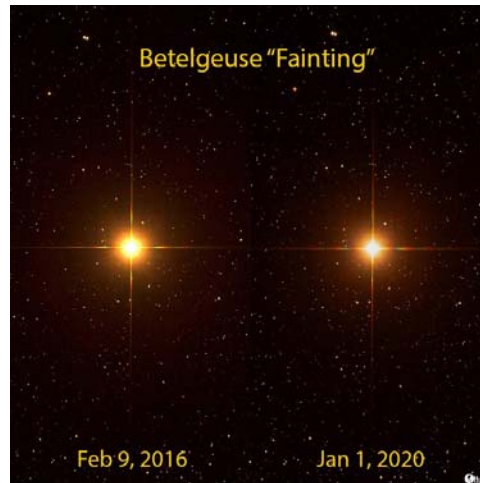
Jan. 10, 2020: One day, perhaps in our lifetimes, perhaps a million years from now, the red giant Betelgeuse will dim a little—and then explode. The resulting supernova will rival the full Moon and cast shadows after dark, completely transforming the night skies of Earth. No wonder astronomers are closely tracking the current “fainting of Betelgeuse.”

“Fainting” is an actual astronomical term. It means dimming, the opposite of brightening. And right now, Betelgeuse is definitely fainting.

Edward Guinan of Villanova University and colleagues caused a minor sensation last month when they reported “[Betelgeuse] has been declining in brightness since October 2019, now reaching a modern all-time low of $V = +1.12$ mag on 07 December 2019 UT. Currently this is the faintest the star has been during our 25+ years of continuous monitoring.”

Little did they know when they issued their telegram in December that Betelgeuse was about to become even fainter. “On 06 January 2020 UT, the magnitude of Betelgeuse was $V = +1.37$,” reports Guinan. That’s 20% dimmer than the “modern all-time low” registered last month.

This 3-year plot of the Villanova team’s data shows Betelgeuse’s rapid decline:



The fainting is easy to see with the naked eye. Not too long ago, Betelgeuse was the 10th brightest star in the sky. Now it is the 21st. Observers of Orion rising in the east after sunset can’t help but notice that the Hunter’s shoulder is dimmer than it used to be.

Astronomers have long known that Betelgeuse is on the precipice of an energy crisis. It’s about to run out of fuel in its core. When that happens, the star will collapse and rebound explosively, producing the first bright supernova in the Milky Way since 1604. Experts in stellar evolution believe Betelgeuse could die at any time during the next 100,000 years or so—a blink of an eye on time scales of astronomy.

Does the current dimming herald that final blast? Probably not. Betelgeuse is a slowly variable star, and this is probably no more than an episode of deeper-than-usual dimming. Of course, one day astronomers will think the same thing ... and then the night sky will change forever.

Committees

Classes

Club Station

Wes Busdiecker KC8SKP

DX Net

Field Day

Jeff Breitner KA8NCR

Finance

Paul Trouten W8PI (chair)

Fred VanDaele KA8EBI

Dale Williams WA8EFK

HamFest

Fred VanDaele KA8EBI

Hertzian Herald

Fred VanDaele KA8EBI

Historian

Paul W8PI

Public Relations

Jeff Breitner KA8NCR

Scholarship

Fred VanDaele KA8EBI

School Liaison

open

Programs

open

Membership

Terry Kolton N8NYP

n8nyp@arrl.net

Planning

open

Property Custodian

open

Monroe County ARPSC

Happy New Year and welcome to 2020!

The December ARPSC meeting was held and everyone presented ideas for what they wanted to see in the way of training sessions and events for the upcoming year, along with ideas to help grow our ranks. The 2020 calendar will be included with this newsletter. Everyone is welcome to participate in most of the events even if you are not part of ARPSC.

The January ARPSC meeting covered the topic of Go-Kits and several members brought their kits for Show and Tell and so others could get ideas for theirs.

Saturday February 1st will be the 15th Annual Muskrat run held at Sterling State Park. We are always looking for more help to cover the checkpoints. Briefing will be at 10:30am and we should be done around 12:30pm. Obviously this will be held outside and I am not optimistic that the current unseasonably warm temps will still be around then, so dress warmly. If you are interested in helping, contact me at my e-mail ke8byc@yahoo.com by Jan 25th.

Spring time will be here before we know it and the NWS SKYWARN training for Monroe County has been scheduled for Thursday March 12th 6:30pm-8pm. The location is still being worked on, but we should know soon. Registration will be required on the county Emergency Management page and I will let everyone know that link once it is active.

As always, you can keep track of us via the webpage which is linked though the MCRCA Website and the Facebook page, which is also linked via the club webpage. We thank the group and the club webmaster for doing this for us!

73 until next month
Lance Charter KE8BYC
Emergency Coordinator
Monroe County Amateur Radio Public Service Corp

<https://monroearpsc.wordpress.com/>

<https://www.facebook.com/MCARPSC/>

2019 MCRCA Annual Christmas Party



MCARPSC

Training Outline-Meetings and Supplemental Sessions

Meetings are 1st Thursday at 7:30pm @ EMD Training Room 987 S. Raisinville

Saturday Sessions are 1st Saturday of odd months September-May unless noted- 9am @ EMD

Bring your PTB's to a meeting to have training courses checked off-Saturday sessions will be used for skills check-offs.

January Meeting 11/2:

Goal: Go-Kits-Suggested items, Bring your kit for show and tell

January Session 1/11: Intro to EmComm

January 11th-Ohio VHF Simplex Contest 10a-4pL-Good practice for Fall SET-www.ohsimplex.org

January 25 & 26- Winter Field day 2pm-2pmL

February Meeting 2/6:

Goal: Monroe County Operations Info-Will go over the new MCARPSC Guidebook

Feb. Event 2/1:15th Annual Muskrat Run 10:30am-12:30pm

March Meeting 3/5:

Goal: Radio Terminology

March Session 3/7: Field Operations basics-Will be held outside-Dress for weather and bring your field station

Monroe SKYWARN Training: Thursday 3/12 time/date: TBD

April Meeting 4/2:

Goal: Local SKYWARN Training-Net Control-MICON Liaison

April Session: Statewide "Rising Waters" AUXCOMM Event 4/14-16

May Meeting 5/7:

Goal: Discussing portable Antennas

May Session 5/9: Antenna Basics-Field Expedient Antennas, calculations, viewing results with Analyzers

June Meeting 6/4:

Goal: NTS Hierarchy

Field Day 6/27-28: ARPSC Project Construction Assistance

July Meeting 7/2:

Goal: Packet Operations

July Event 7/4: Dundee Independence Day Parade

August: No Meeting

September Meeting 9/3:

Goal: Visit from Mark Hammond County Emergency Manager for FERMEX discussions

September Session 9/5: ECC Operations

October Meeting 10/1:

Goal: SET prep

October Event: 10/3 National S.E.T

November Meeting 11/5:

Goal:

November Session 11/7: NTS practice

November 17th -FERMEX EOC Drill #1

December Meeting 12/3: Planning

Goal: Meeting/Training Session Ideas for 2021

December 1st-FERMEX EOC Drill #2

December 15th-FEMA Evaluated EOC Drill



The History of Radar

The history of radar usage is a long and twisting one. The raw science behind radar was discovered all the way back in the 19th century by Heinrich Hertz. Although he demonstrated in his lab that radio waves could be reflected off solid objects, he didn't continue with the research in a meaningful way.

Later, in 1895, Alexander Popov developed a radar-based device that was used to detect lightning strikes—it was the first-time radar was put into application detecting things at a distance.

Popov was also the first to observe that you could use radar to detect ships out at sea when he noticed he could detect ships passing between his apparatus and the distant lightning strikes he was recording. While he wrote of how his lightning strike detector could be used for detecting ships and such, he didn't pursue the topic.

The relative non-pursuit of radar for civilian and military application would continue for nearly half a century. In 1917, Nikola Tesla outlined research on how radar could be used to detect ships and their speed. In 1922, A. Hoyt Taylor pitched the idea of a 60 MHz radar system to the Navy arguing that it would be excellent for detecting ships in foggy and poor weather conditions. The Navy remained uninterested until, years later, they wanted to apply the technology to tracking aircraft.

Around the world research on radar continued in a fragmented and halting fashion until the 1930s when research by Robert M. Page, at the Naval Research Laboratory, demonstrated the first modern pulse-based radar system. By the time World War II was underway, most of the world's super powers like the United States, Britain, France, and the Soviet Union had independently developed radar-based defense systems.

While modern systems keep civilian air planes safe and detect enemy vessels at sea, they all can trace their family tree back to the designs of Russian scientist that really just wanted those pesky merchant ships to get out of the way so he could go back to tracking storm heads and lightning strikes.



Monroe County Radio Communications Association

Dues run from January 1st to December 31st of each year. As a current / Past Member, you are invited to attend our monthly meetings to find out the latest plans for our club. You may pay your dues at any regular meeting or by filling in the form below and mailing it to: **MCRCA, PO Box 237, Monroe, MI 48161**. Your membership and support will help with the continued success of our club. Thank you.

MEMBERSHIP APPLICATION / RENEWAL FORM

Regular – \$10 — Add'l Family – \$5 each

DATE _____ ARRL MEMBER? Y _____ N _____ RRRR Member? Y _____ N _____

NAME _____

ADDRESS _____ PHONE _____

CITY _____ STATE _____ ZIP _____

CALL _____ CLASS _____ E-MAIL: _____

ADDITIONAL Family Members: _____

Please Circle All That Apply:

Active Bands: 160 80 75 40 30 20 17 15 12 10 6 2 220 440 higher

Modes: CW - SSB – PACKET - RTTY - FM - DX - MOBILE - QRP - SSTV - ATV - EME - SAT

Interests: Traffic - DX - Contests - Foxhunts - Satellites - Nets – Antennas - Computers
Emergency - ARES/RACES - Skywarn - Classic Radios (circle all that apply)

Do you plan to upgrade your license? Y _____ N _____ If yes, what class? _____

What kinds of meeting programs would you like to see?

Other activities you would like to see the Club offer

General Comment's

Signature _____ Date _____



The American Radio Relay League's round-up of the forthcoming week's DX activity on the amateur radio bands

This week's bulletin was made possible with information provided by CO3JK, W4GKR, The Daily DX, the OPDX Bulletin, 425 DX News, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

VIET NAM, 3W. Wolfgang, DL5MAE is QRV as 3W2MAE from Phan Thiet. Activity is on the HF bands using CW and SSB. QSL to home call.

CUBA, CO. Special event station CO0CW is QRV during January to celebrate the 5th anniversary of Group CW of Cuba. Activity is on 40 and 20 meters. QSL via CO3JK.

ENGLAND, G. John, M0XIG is QRV with special call sign GB200FN until February 3 to commemorate the 200th anniversary of the birth of Florence Nightingale, the founder of modern nursing. QSL direct to home call.

ECUADOR, HC. Jon, EA1VE is QRV as HC2JKT from Puna Island, IOTA SA-034, until January 30. Activity is on 40 to 6 meters using SSB. QSL to home call.

JAPAN, JA. Members of the JARL Okinawa Branch are QRV with special event station 8N6SHURI during 2020 while supporting the reconstruction of Shuri Castle, a UNESCO World Heritage building that burned down on October 2019. QSL via bureau.

BULGARIA, LZ. Members of the Bulgarian Radio Club Blagovestnik are QRV with special call sign LZ1908IK during January to honor the memory of Bulgarian saints. QSL via bureau.

BRAZIL, PY. A group of operators will be QRV as ZW6C from Tinhare Island, IOTA SA-080, from January 16 to 19. Activity will be on 40, 20 and 10 meters using CW and SSB. QSL direct to PY6TV.

PALAU, T8. Operators JI3DNN, JH3LSS, JA3HJI, JA3IVU, JA3ARJ and JA3AVO are QRV as T88CZ, T88DK, T88DN, T88ED, T88EF and T88MB, respectively, from Koror Island, IOTA OC-009, from January 15 to 23. Activity will be on 160 to 10 meters. QSL to home calls.

COSTA RICA, TI. Rich, W4GKR will be QRV as TI5/W4GKR beginning January 14 to February 4. Activity will be holiday style on 160 to 6 meters using mostly digital modes and possibly slow CW. QSL to home call.

NORFOLK ISLAND, VK9N. Janusz, SP9FIH will be QRV as VK9NK from January 12 to April 12. Activity will be on 160 to 10 meters using CW, SSB and RTTY. QSL to home call.

MONTSERRAT, VP2M. Duane, WV2B is QRV as VP2MDT until January 15. Activity is holiday style on the HF bands using CW and SSB. QSL direct to home call.

TURKS AND CAICOS ISLANDS, VP5. David, KM3T is QRV as VP5/KM3T from Providenciales Island, IOTA NA-002, until January 14. Activity is holiday style on 160 to 10 meters using CW and possibly FT8. This includes being an entry in the North American CW QSO Party. QSL to home call.

INDIA, VU. Members of the West Bengal Radio Club are QRV as 8T2G from Sagar Island, IOTA AS-153, until January 17 during the annual pilgrimage of people to the Ganges Delta. QSL via VU2NRO.

SERBIA, YU. Members of the Serbian CW Club are QRV with special call YT50SCWC during 2020 to celebrate the club's 50th anniversary. QSL via YU1MM.

CAYMAN ISLANDS, ZF. Pete, K8PGJ will be QRV as ZF2PG from Grand Cayman, IOTA NA-016, from January 11 to 19. Activity will be on the HF bands. This includes being an entry in the upcoming North American SSB QSO Party. QSL direct to home call.

THIS WEEKEND ON THE RADIO

The North American CW QSO Party, NCCC RTTY Sprint, QRP 80-Meter CW Fox Hunt, NCCC CW Sprint, YB DX SSB Contest, Old New Year Contest, SKCC Weekend CW Sprintathon, UBA PSK63 Prefix Contest, NRAU-Baltic Contest, DARC 10-Meter Contest, The IQRP Quarterly Marathon and the RSGB AFS Data Contest are all on tap for this upcoming weekend.

The Classic CW Exchange runs from January 12 to 15.

The 4 States QRP Group Second Sunday Sprint is scheduled for January 13.

The CWops Mini-CWT Test, Phone Fray and QRP 40-Meter CW Fox Hunt are scheduled for January 15.

Please see January 2020 QST, page 81, and the [ARRL](#) and [WA7BNM](#) contest web sites for details



Amateur Radio Examinations Monroe, MI

Monroe County Radio Communications Association Amateur Radio examinations are held the 3rd Saturday of every even numbered month at:

American Red Cross Chapter Bldg.
1645 North Dixie Highway
Monroe, MI 48161

Walk-ins are always welcome.

2020 Schedule:

February 15	April 18
June 20	August 15
October 17	December 19

TESTING BEGINS PROMPTLY AT 9:00 AM

Applicants are expected to have all forms filled out and be ready to take tests at that time. Coffee and doughnuts are available at 8:30 AM. For more information or to make reservations, call Paul Trouten - W8PI at 734-854-2224

Join us at the next meeting

January 15th at 7:30 pm
American Red Cross Chapter Bldg.
1645 North Dixie Highway
Monroe, MI 48162

Local Net

ARPSC Net - Every Monday evening on '72-Monroe (146.72 Mhz) starting at 8:00pm.

ARPSC Meeting first Thursday of every month at the EMD office on Raisinville Rd.. 7:00 PM