MARC Beacon

Volume 10, Issue 10 **The Morongo Basin Amateur Radio Club Newsletter** **OCTOBER 2021**

Hello everyone!

Hello fellow HAMs! It's actually chilly in the morning now. I love October temperatures. It's a lot better than 100+ degree weather.

The City of Twentynine Palms Parks & Recreation Department will hold the 85th Annual Pioneer Days Parade at 1000 Saturday 16 October 2021 in Twentynine Palms. The parade theme is "Pioneering Spirit Alive in 29!". The entry fee is $20. I can not participate because I will not be in the area. For more information please contact Christina Benton at (760)367-6799 ext 1025.

During the "Cawfee Tawk" net on Thursday 21 October, we will be participating in "The Great California ShakeOut" drill that starts at 1021. I encourage everyone to checkin during that time.

At 1800 Thursday 21 October, we will have a Halloween party during our in person meeting at the Church of the Nazarene, 56248 Buena Vista Dr, Yucca Valley. You are encouraged to wear a costume because Judy will present goody bags to the top 3. For more information please contact Judy KK6NWG.

1000-1400 Saturday 23 October, MARC will have a communication canopy setup in the Walmart parking lot assisting CERT with their earthquake awareness. MARC members may assist me in setting up, talking to the public about HAM radio communications, and tearing down at the end of the event. I do not want people just hanging around the booth. If you want to visit the booth and check out the setup, then that's fine.

Please schedule time to check in on the 7 PM Tuesday net, and if you can, please join us on the "Cawfee Tawk" net every morning at 10 AM.

Take care of yourself and enjoy each day. If you're not having fun, then you're doing something wrong.

Rob Cloutier
WO4ROB
Joshua tree
Club President
(760)401-6666
rob_cloutier@hotmail.com

Nets

Amateur Radio Emergency Service (ARES)
Mon @ 1915
Morongo Basin Amateur Radio Club (MARC)
Tue @ 1900
MARC Daily unformal Kawfee Talk
1000-1100 DAILY

Social Media,

Club web page: http://www.w6ba.net

Facebook:
https://www.facebook.com/MorongoBasinAmateurRadioClub

Club Meeting

Every 3rd Thursday of the month at 6 PM. At the church of the Nazarene in Yucca Valley at 56248 Buena Vista Dr

Linked Repeaters

Yucca Valley, W6BA
146.790 MHz (- shift = 146.190 MHz) 136.5 Hz PL/CTCSS

Twentynine Palms, W6BA
147.060 MHz (+ shift = 147.660 MHz) 136.5 Hz PL/CTCSS

Landers, WB6CDF
447.580 MHz (- shift = 442.580 MHz) 173.8 Hz PL/CTCSS

OTHER AREA REPEATERS

IRLP Node KD6DIQ 145.770 pl 67.0
ONYX Peak N6LXX 446.880 (–) pl 110.9
San Jacinto TRAM one 145.480 (-) pl 107.2
Snow Peak 445.160 (-) pl 67.0

ALLSTAR NODE on the mesa 147.705 pl 146.2

29 PALMS rptr linked to KELLER peak
448.580 pl 146.2

WEATHER UNDERGROUND

The weather station on Paxton Hill at the W6BA repeater site is working great. It will show accurate wind speed and direction measurements for the top of the mountain .

https://www.wunderground.com/personal-weather-station/dashboard?ID=KCAYUCCA57
Glenn N6GIW

I also have A weather station by the high school in Yucca Valley N6GKB. Showing the temps and wind speeds in the center of Town.
https://www.wunderground.com/dashboard/pws/KCAYUCCA35?cm_ven=localwx_pwsdash
Keith N6GKB

.Our next club meeting will be a HALLOWEEN PARTY/MEETING.. Please feel free to come dressed up for the occasion !

KEN HENDRICKSON, W6BZY

Some helpful you tube videos from Ken W6BZY about Linux and raspberry Pi.

Search W6BZY on YouTube.

HAM.BAND

Ham.band, the easy to remember site that shows you the US amateur radio band plan!

Check out ham.band ... Easy to read on desktop and mobile!

Just type ham.band into your browser!

Aaron C. KM6IAU

OUR CLUB MEETINGS!!!!

IN THE MONTH OF JULY OUR LOCAL CLUB MEETINGS WILL BE BACK.

6:00 P.M. OCTOBER 21ST

At Church of the Nazarene in Yucca Valley at 56248 Buena Vista Dr

NEW CLUB FACEBOOK GROUP

FOR THE MARC CLUB,

I have created a Facebook "Group" for the Club. We currently have a FB "Page" which only allows Admins and Moderators to post directly on the Posts section.

Here is the link to the new "Group" - so if you are on Facebook, please click on this link and LIKE our new Group.

https://www.facebook.com/groups/577155023327981

The new Group will be must more user friendly. Feedback is most welcome.

Thanks,
Judy
N6JLL

THANK YOU JUDY, KEITH N6GKB)

Deaf Pupils Set to Speak with ISS Crew Member in a World-First Event

Amateur Radio on the International Space Station (ARISS) will offer a group of pupils at the Mary Hare School for deaf children in Berkshire, England an opportunity to speak with an astronaut via amateur radio. The contact is expected to take place sometime during October 10 - 17. Mary Hare School, with Pippa Middleton as its Ambassador, is the largest school for the deaf in the UK. The event will mark the first time an ARISS contact has been arranged with a school for deaf youth.

"It is a very exciting event -- a world first for deaf pupils," said Alex Ayling, a science teacher at the school. "I think it is very important to our deaf pupils, as it shows whatever your challenges with communication, there is no limit to what you can achieve. The sky is not the limit."

Ciaran Morgan, M0XTD, ARISS operations lead for the UK, said that technical aspects of the radio contact are being handled by the ARISS-UK team. The Newbury and District Amateur Radio Society (NADARS) will provide "the amateur radio experience" for the students, through ham radio events and activities at the school. Lessons related to ARISS include a crystal radio, electricity and circuits, forces, energy, sound, electromagnetism, space and space exploration, the ISS, and rocketry.

During September, the school has been conducting a competition, inviting students to enter questions from one of five categories -- science in space, space technology, living in space, space communication, and Earth from

space. The school staff will pick the 10 best questions, and those students will be invited to ask their questions. The astronaut's response will then be rendered as text for the students.

At the school, an expected audience of 250 socially distanced spectators will be able to see the radio contact firsthand. The remaining students and audience members will be linked in via a web feed.

Amateur radio equipment has been on board the ISS for more than 20 years, and most astronauts hold ham radio licenses. A live web feed will be available.

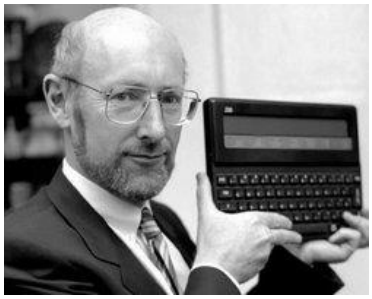
Mary Hare School educates some 240 profoundly and severely deaf children, aged 5 - 19, each year.

In the US, ARISS is sponsored by NASA, the ISS National Laboratory, ARRL, and AMSAT. -- *Thanks to* UK News

In Brief...

The AO-92 and FalconSAT-3 satellites have been shut down. AO-92 (Fox-1D) had started to change its behavior after a number of weeks of being powered on. In particular, the integrated housekeeping unit (IHU) switched to safe mode. This was likely due to low voltage during eclipse, which is when it should be drawing very little power if no one uses it. Mark Hammond, N8MH, also reported that he was turning off FalconSAT-3's transmitter, due to low voltage. -- *Thanks to Burns Fisher, WB1FJ, AMSAT Engineering Team, via* AMSAT News Service

The IARU Region 1 Monitoring System finds Radio France International splatter "untenable." The International Amateur Radio Union Region 1 Monitoring System (IARUMS) August newsletter reports that Radio France International was active daily between 2100 and 2200 UTC on 7205 kHz. The report says splattering appeared "massively" down to 7186 kHz, which IARUMS called "an untenable condition." IARUMS said that the "especially well-known intruders" included Voice of Broad Masses (VOBM) on 7140 and 7180 kHz from Eritrea. "From time to time, China Radio International was heard on 14,000 kHz (and intermodulation of 13,855 kHz and 13,710 kHz)." The usual players among the over-the-horizon radar (OTH-R) systems also were active almost daily. Intruding signals heard in IARU Region 1 may be causing problems elsewhere in the world.



Pocket calculator inventor and home computing pioneer Sir Clive Sinclair died at his home on September 16 following a long illness. He was 81. Sinclair may have been best known for popularizing the home computer. Leaving school at 17, he worked for 4 years as a technical journalist to fund Sinclair Radionics and created the Sinclair Spectrum and the first computer, the Sinclair ZX-81. Many modern-day titans of the games industry got their start on one of his ZX models. Back in the day, the gamer's computer of choice was either the ZX Spectrum 48K or its rival, the Commodore 64. Among his other inventions

was a coin-sized radio. Despite his computer background, Sinclair declined to use the internet, email, or even computers.

Registration Opens for US Amateur Radio Direction Finding Championships

Registration is now open for the 2021 US and IARU Region 2 Championships of Amateur Radio Direction Finding (ARDF), set for October 13 - 17. Competition venues will be near Asheboro, North Carolina. Postponed from 2020, these championships will be conducted in accordance with CDC COVID-19 guidelines.

"The US ARDF Championships are an ideal opportunity to watch and learn from the best radio-orienteers in the US," said ARRL ARDF Co-coordinator Charles Scharlau, NZ0I. "Winners who qualify by citizenship or residence may be selected for positions on ARDF Team US, which will travel to Serbia for the 2022 ARDF World Championships."

Wednesday, October 13, will be a model event for equipment testing and a competitor briefing. Thursday, October 14, will be devoted to the Sprint championship, a short course with 12-second fox transmissions instead of the usual 60 seconds.

Classic 2-meter and 80-meter competitions will take place on Friday and Sunday. Between the days of classic competitions will be Foxoring, a combination of radio direction-finding and classic orienteering, held on Saturday morning. An outdoor pizza picnic will be held on Saturday evening. Presentation of medals for foxoring, sprint, and Friday's classic event take place at the picnic. Awards for Sunday's Classic competition will be presented immediately after the competition.

Three optional practice days are planned for Sunday through Tuesday, October 10 - 12, just prior to the championships. A practice event on Sunday in Chapel Hill, North Carolina, will provide the experience of a full ARDF course in a friendly environment, with the clock as the only opponent. The practices on Monday and Tuesday will be held in Durham, North Carolina, and will offer informal sessions in which the participants help with setting the transmitters in the woods.

Postponed in 2020, the 2021 ARDF USA Championships will take place October 13 - 17 in North Carolina.

Experienced radio orienteers and event organizers from the Backwoods Orienteering Klub (BOK) will organize the 2021 US and IARU Region 2 Championships. An email reflector is available for questions and answers with the organizers, as well as for coordinating transportation and arranging equipment loans. -- *Thanks to Joe Moell, K0OV* Read an expanded version.

AWA Video: SSB was Slow to Catch On as a Ham Radio Mode

Hams are often early adopters of new technology, such as FT8, but this was not the case with single sideband (SSB) amplitude

modulation. First referenced in Major General George Squier's 1911 patent that had nothing to do with RF applications, SSB didn't really catch on as a popular ham radio phone mode until the 1960s.

Antique Wireless Association (AWA) museum curator Ed Gable, K2MP, recounted "The History of Single Sideband" as part of the inaugural "AWA Shares" program, presented on August 19. Gable described Squier as an "early idea man" in the history of SSB at a time when hams had hardly adopted AM in *any* form.

As Gable explained, John Renshaw Carson built on Squier's patents to define the principles of SSB radio transmission theory, using a balanced modulator and filters. AT&T went all in with SSB, basing its first long-haul telephone system on the technology. Its SSB voice service to Europe, which kicked off in 1923, lasted for more than 3 decades. A receiving site in Scotland took advantage of Beverage antennas put in place for the ARRL transatlantic tests.

Gable credited Robert M. Moore, W6DEI, with introducing SSB to the ham radio community, through an article in *R9 Magazine* in the early 1930s. The technology remained more of a curiosity, however, in part because of the Great Depression, cost, and technical difficulty. Besides, hams of that era saw no real advantage to narrowband modes, since bands were not that crowded.

The mood began to change after World War II, though. In 1948, Oswald Villard, W6QIT, engineered the airing of SSB signals via Stanford University's W6YX, re-introducing the mode to a burgeoning and more technically savvy post-war ham community that included a lot of veterans. A 1950 *GE Ham News* article by Don Norgaard, W2KUJ, described plans for a 5 W, three-tube SSB transmitter he dubbed "The SSB Jr."

The Central Electronics Model 20A.

Expanding on this, Central Electronics' Wes Schum, W9DYV, built the first SSB exciter, the 10A, in 1952, and it became the company's first product, spawning a series of successor products that included a VFO based on a modified BC-458 military surplus transmitter, an "SSB slicer" for receiving, and even a linear. SSB equipment was neither inexpensive nor accessible, however.

"Cheap and Easy S.S.B." by Anthony Vitale, W2EWL, which appeared in *QST* in 1956, spoke to hams' attitudes, helping to advance the adoption of SSB among radio amateurs. Byron Goodman, W1DX, addressed receiver improvements with his *QST* article, "The Product Detector."

In the same decade, General Curtis LeMay, K3JUY/K4RFA, promoted the advantages of

The Collins KWM-1 is considered the first "true" transceiver, sharing receive and transmit circuitry.

SSB to the military, heralding a phase-out of AM as the dominant voice technology. Many hams were not convinced of SSB's advantages, deriding the signals as sounding like Donald Duck. Adoption didn't really take off until the Collins KWM-1 came along in 1957. It was the first SSB transceiver to share receiver and transmitter circuitry. Heathkit, Viking, and B&W produced SSB adapters for use with current AM gear.

Other manufacturers including National and Swan came along to further boost adoption of the mode, and it wasn't that many years before SSB eclipsed AM as the predominant voice mode on the HF bands.

LETTER FROM THE EDITOR

Hello Keith here N6GKB

As some of you know I have been very busy with family and moving during the last month or more. Resulting in NO newsletter in August and late in September. I am slowly getting my office and HAM shack back together at my new QTH still in Yucca Valley. So hopefully I can get back on track here. I THANK YOU all for your patients during my transition.

Next SpaceX Commercial Crew to ISS Comprised of Radio Amateurs

Four radio amateurs will head to the International Space Station (ISS) aboard a commercial flight, thanks to Amateur Radio on the International Space Station (ARISS). They are Raja Chari, KI5LIU; Tom Marshburn, KE5HOC; Kayla Barron, KI5LAL, and Matthias Maurer, KI5KFH, a European Space Agency (ESA) astronaut. The targeted launch date is no sooner than October 31, from Kennedy Space Center in Florida. The launch will mark the third SpaceX Crew

Dragon spacecraft and Falcon 9 rocket launch

The SpaceX Crew-3 astronauts (L-R) Matthias Maurer, KI5KFH; Thomas Marshburn, KE5HOC; Raja Chari, KI5LIU, and Kayla Barron, KI5LAL, during pre-flight training at SpaceX headquarters in Hawthorne, California.

combination as part of NASA's Commercial Crew Program, which provides transportation to and from the ISS. The crew is scheduled for a 6-month stay aboard the orbiting laboratory, living and working as part of what's expected to be a seven-member crew.

The launch will be the first spaceflight for Chari, Barron, and Maurer, and the third for Marshburn.

NASA's SpaceX Crew-3 will be the third crew rotation mission to the ISS with astronauts on a US rocket and spacecraft and the fourth flight with astronauts, including the Demo-2 test flight

in 2020, the Crew-1 mission in 2020 - 2021, and the ongoing Crew-2 flight as part of the Expedition 65 crew.

Crew-3 astronauts plan to arrive at the station to overlap with NASA Astronauts Shane Kimbrough, KE5HOD, and Megan McArthur; Japan Aerospace Exploration Agency (JAXA) Astronaut Akihiko Hoshide, KE5DNI, and ESA Astronaut Thomas Pesquet, KG5FYG, who flew to the station as part of the agency's SpaceX Crew-2 mission in April 2021.

Mission teams have a target launch date of no earlier than April 15, 2022, for the launch of the SpaceX Crew-4 mission. "NASA's Commercial Crew Program is working with industry through a public-private partnership to provide safe, reliable, and cost-effective transportation to and from the International Space Station, which will allow for additional research time and will increase the opportunity for discovery aboard humanity's testbed for exploration," NASA said. "The space station remains the springboard to space exploration, including future missions to the moon and Mars."

For launch coverage and more information about the mission, visit the NASA website.

ROBS PROJECTS CORNER

Global Position System (GPS)

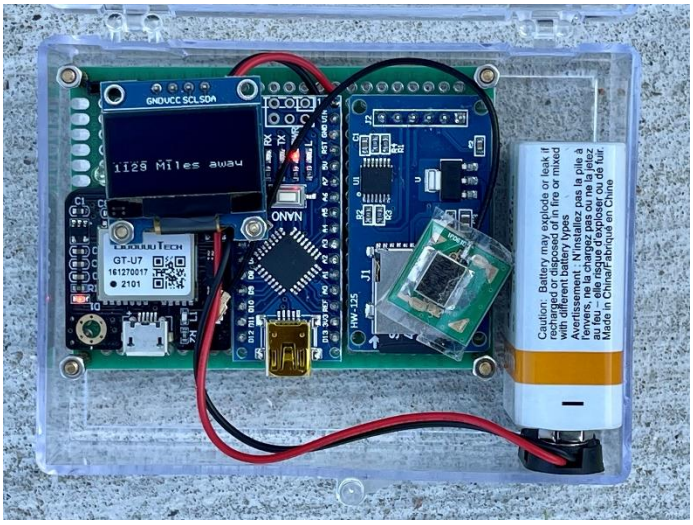
The Global Positioning System (GPS) is a satellite-based radionavigation system owned by the United States government and operated by the United States Space Force. It is one of the global navigation satellite systems (GNSS) that provides geolocation and time information to a GPS receiver anywhere on or near the Earth where there is an unobstructed line of sight to four or more of the 30 GPS satellites 12,550 miles above the earth.

I find it fascinating that these satellites have been used by civilians to discover their location and accurate time keeping since the mid 1980s.

I wanted to make, or purchase, a device to attach to my granddaughter so that I would never lose her. I did some research and discovered the tiny “Tracki Real Time GPS Tracker” for less than $20 on Amazon. A monthly $20 fee is required to monitor the Tracki’s location on your smart phone. I used Tracki on my road trip to Texas and Florida. It worked great. I was able to send a link to my sons where they could see where we were on the road.

This got me thinking about how I could use an Arduino to pull free information from the GPS satellites. That’s when I discovered the GT-U7 GPS receiver module on Amazon for about $10. This module is about the size of a large postage stamp. When connected to an Arduino microprocessor, it receives information from the GPS satellites to determine the Latitude, Longitude, Speed, and Altitude of the GPS receiver. The GPS satellites also transmit the current Coordinated Universal Time (UTC), (a.k.a. Greenwich Mean Time (GMT) or Zulu time) and date.

After experimenting with the GPS receiver module, and studying a bunch of Arduino programming code, I realized that I could make a portable hand held device that could record a location and then tell me how to navigate to that location no mater where I was in the world, by only using GPS satellites and no WiFi or cellphone services. This device would be perfect for hiking in places like the Joshua Tree National Park. I am currently working on the final designs and should be done with the project before the end of August.



ROB WO4ROB

Microsoft Releases Windows Version 11

The official release date for the new Windows 11 operating system is October 5, Microsoft has announced, but it will be a slow reveal. Radio amateurs may be eager to learn if it will run the station software they're running under Windows 7 or Windows 10, and if they'll need new device drivers.

"We are not too concerned," said Tom Wagner, N1MM, of the widely popular, free logging software that bears his call sign — *N1MM Logger+*. "One member of the team and one end user has tested with Windows 11 and not reported issues. We will fix them if they arise."

The *WSJT*-X Development Group is similarly unconcerned. "A few *WSJT*-X users have been running on the beta Windows 11 release without any issues," said Bill Somerville, G4WJS. "This seems to be reasonable evidence that there should be no serious problems."

Microsoft said that the free upgrade to Windows 11 has begun rolling out to eligible Windows 10 PCs, and PCs that come pre-loaded with Windows 11 will start to become available for purchase on October 5. A prompt to upgrade to Windows 11 will come to newer devices first, with all eligible devices to receive their updates by next summer, according to *Gear Patrol*.

Windows 11 has higher technical requirements than Windows 10, which will be deprecated in 2025. Microsoft no longer supports Windows 7 or earlier iterations. Machines will need to have a 64-bit CPU, 4 GB of RAM, 64 GB of storage, and have Trusted Platform Module (TPM) version 1.2 or later enabled.

Aaron Woodman, General Manager of Windows Marketing at Microsoft, told *The Verge*, "We expect all eligible devices to be offered the free upgrade to Windows 11 by mid-2022."

Microsoft will continue to support Windows 10 until October 14, 2025. Read an expanded version.

The Premiere of *NIGHT*, the Movie

During the Edmond (Oklahoma) Amateur Radio Society's ARRL Field Day 2021, Marcus Sutliff, N5ZY, spoke with visitors from John D'Aquino's Young Actors Workshop (YAW) and learned of

their plans to make a short film in which amateur radio plays a role, and that they needed some help. The filming was to take place in Stillwater, Oklahoma, and they needed someone with film or video experience and someone who could serve as a technical advisor. Kevin O'Dell, N0IRW -- a member of the ARRL Public Relations Committee -- became involved in the project, and in short order, he was able to assemble radios and props, consult on the script, and get ready for a long day of filming.

The film's purpose is to give aspiring young actors a chance to hone their craft in a real movie environment. Thanks to the Oklahoma Film and Music Office, they were able to shoot three movie shorts in Oklahoma. In the Camp Hollywood 2021 film *NIGHT*, the young actors mature as the movie progresses.

Ham radio provides a tenuous link to the outside world in the film mystery. (Note Kevin O'Dell's, N0IRW, QSL card at the upper left.)

The story begins on a day when the sun mysteriously has failed to rise. One character mentions firing up grandpa's ham radio. His younger brother reminds him that he once called ham radio "the dinosaur's internet," but now it could be one source of help or information. The actual internet is down, along with power, telephones, and apparently satellites. All the adults are conveniently absent. The ending will leave you hoping for *NIGHT 2*. The movie premiered recently and is now available on YouTube as a 34-minute short.

O'Dell stars as the ham radio voice of Colonel. He and Sutliff appear in the credits, so stay through the end.

O'Dell got a shout-out from ARRL Oklahoma Section Manager Mark Kleine, N5HZR. "Thanks, Kevin, for putting a great light on amateur radio," he said.

Just announced!

Yaesu to release a new 50W Dual-Band mobile radio, the FTM-6000R!

The FTM-6000R delivers reliable and stable **50W** transmit performance. The heavy-duty heat sink is equipped with **FACC (Funnel Air-Convection Conductor)**. The speaker delivers **3W** of clear and crisp receive audio which has been specifically tuned for radio communication. The front panel of the FTM-6000R is **detachable** and can be mounted at the most desirable operating position. The new FTM-6000R supports optional Bluetooth® wireless operation using the SSM-BT10* Headset or a commercially available Bluetooth® headset*.

For more information or to order yours today, click HERE!

MARC Beacon

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OCTOBER 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
	KAFEE TAWK 10AM DAILY CLUB REPEATER					
3	4	5	6	7	8	9
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS FRED		ARES Meetings begin !! 6:00 pm		
10	11	12	13	14	15	16
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS KEITH				
17	18	19	20	21	22	23
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS JESSEY		CLUB MEETING BEGIN TODAY!! 6PM		
24	25	26	27	28	29	30
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS ROB				
31						