



# MARC Beacon

Volume 10, Issue 3

The Morongo Basin Amateur Radio Club Newsletter

MARCH 2021

## Hello fellow HAM radio operators!

Spring is in the air. The weather is getting warmer and it's time to start your gardens and or repair outside antennas. Be on the lookout for all the critters that will be coming out of hibernation.

Last month's inaugural internet video teleconference meeting using "Zoom Video Communications" was such a success that we will host one every third Thursday of the month at 6pm/1800 hours until the pandemic is lifted. If you are interested in attending the next virtual meeting using your own computer at home, then please email Glenn Miller at [deacon733@msn.com](mailto:deacon733@msn.com) to be added to the invitation list. Any computer or smart phone with a connection to the internet can join the virtual meeting. Contact me or Glenn for more details, or join us on the "Cawfee Tawk" net between 10am and 11am on the linked repeater system to ask questions.

Most MARC memberships expire on the 1st of April. In order to renew your membership, go to <http://w6ba.net/marc.pdf> to print the Membership Application Form. Complete the form and mail it with your check to MBARC, PO BOX 1995, YUCCA VALLEY, CA 92286.

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.

This is WO4ROB, Rob from Joshua Tree.

**Rob Cloutier**  
**WO4ROB**

Joshua tree  
Club President  
(760)401-6666

[rob\\_cloutier@hotmail.com](mailto:rob_cloutier@hotmail.com)



### 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

### Nets

Amateur Radio Emergency Service (ARES)  
Mon @ 1915  
Morongo Basin Amateur Radio Club (MARC)  
Tue @ 1900

### Social Media,

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

Facebook:

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

### Club Meeting

**(Cancelled Until Further Notice)**

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



**TOM MEDLIN W5KUB WEEKLY WEBCAST 1HAM RELATED. TUESDAY NIGHTS AT 8PM**  
<http://tmedlin.com/> OR <http://w5kub.com>



STARTING ON January 6, 2021 HAMNATION WILL BE on the **Ham Radio Crash Course YouTube channel!** Run by Josh KI6NAZ.

[MOVING TO YOUTUBE SEE MARCH NEWSLETTER.](#)



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](https://www.wunderground.com/dashboard/pws/KCAYUCCA35?cm_ven=localwx_pwsdash)

Keith N6GKB



**We are still having our informal DAILY net, that starts 10AM M-SUN Join us with your own cup!**



## KI6FKP Silent Key John B Stevens

Germaine Stevens' announcement today on Facebook. John Stevens Update 3/01/2021 - Day 196 He passed quietly at 12:57 am, Nurse Andy said he went slowly and peacefully.

He has been licensed since about 2006 and he got into Ham Radio because of volunteering in Disaster Community Education and Emergency Communication with a group in Topanga Canyon, Ca 90290 USA The group is Topanga Coalition For Emergency Preparedness [www.t-cep.org](http://www.t-cep.org)

Since then he upgraded to General Class and enjoy the Hobby very much.

Now as of December 2014 he moved to Yucca Valley, CA from Topanga Canyon .



**OUR MONTHLY CLUB MEETING WILL NOW BE HELD ON THE REGULAR THIRD THURSDAY OF THE MONTH VIA A ZOOM ONLINE MEETING AT 6:PM CONTACT GLENN N6GIW OR ROGER KF6BIG TO BE PUT ON THE EMAIL LIST .**

**OUR FEBRUARY ZOOM MEETING WAS GREAT HAD ABOUT 20 PEOPLE SHOW, WE ALL HAD A GREAT TIME SEEING AND TALKING WITH THE CLUB MEMBERS AGAIN!**

## WO4ROB.COM WEBSITE

If you type wo4rob.com in a web browser, then you will see the beginning of my website. A website is a set of related web pages located under a single domain name, like wo4rob.com, typically produced by a single person, like me. Web pages are computer documents or files located on a web server. A web server is a computer connected to the internet that stores computer files.

I purchased the Domain Name "wo4rob.com" at GoDaddy.com. It cost me \$31.43 for the Domain Registration for 2 years, and \$19.98 for Privacy and Protection, for 2 years.

My web server is a small Raspberry Pi computer I purchased at Adafruit.com for \$30, connected to my internet home router via an Ethernet cable located in my house. The software on my server is the free Raspberry Pi Operating System (OS) lite and the free Apache 2 Web Server software loaded on a 32 GigaByte (GB) micro Secure Digital (SD) memory card.

In GoDaddy.com I forwarded my Domain Name (wo4rob.com) to my public IP address (47.155.147.174).

Port Forwarding on my home router was used to open ports 80 (HTTP) and 443 (HTTPS) on my Raspberry Pi web server to allow the outside world in my web site within my home's local area network (LAN).

Hypertext Markup Language (HTML) was used to create my web pages. It's nothing more than a text file with html tags. The following YouTube videos explain how to create web pages with html tags.

A 5 minute lesson video: <https://youtu.be/4K4QhIAfGKY>  
A 21 minute lesson video: <https://youtu.be/WwNuvGLbIJU>  
A 2 hour lesson video: <https://youtu.be/pQN-pnXPavG>

Email me at [wo4rob@gmail.com](mailto:wo4rob@gmail.com) for more details or comments/recommendations about my website.



## HAM NATION IS MOVING

DECEMBER 16, 2020 K8JTK

If you missed the show on 12/16/2020, go back and [watch it](#). Big announcements were made.

First off, the Ham Nation episode that airs on 12/23/2020 will be a "Best of Ham Nation." The following week (12/30/2020) will not have a live show either. There will be no after show nets either days.

Second, Ham Nation is no longer associated with TWIT. The show is moving to the YouTube channel of [Josh KI6NAZ, Ham Radio Crash Course](#). When Ham Nation returns, it will return January 6, 2021 on the HRCC YouTube channel.

There are a lot of questions and changes coming. Please watch the video. If, after watching, there are still questions about the show, reach out to Amanda – K1DDN via her email on QRZ. She has made herself available to help answer questions about the show's transition. There are no changes planned for the nets at this time. We will see you **STARTING ON January 6, 2021 on the [Ham Radio Crash Course YouTube channel!](#)**

## ARRL CEO David Minster, NA2AA, to Keynote QSO Today Virtual Ham Expo

ARRL CEO David Minster, NA2AA, will keynote the [QSO Today Virtual Ham Expo](#) March 13 - 14 weekend.

Minster's talk -- part of an [80+ speaker lineup](#) -- will begin at 2000 UTC (3 PM EST) on March 13. His appearance will highlight ARRL's featured role at the expo, which will also include "Ask The ARRL Lab." ARRL is a QSO Today Virtual Ham Expo Partner. Minster, who assumed the ARRL Headquarters leadership position last September, has launched major projects and assembled teams to foster innovation and individual skill development in radio technology and communications.



# MARC Beacon

The Morongo Basin Amateur Radio Club Newsletter

In his keynote, Minster will share his enthusiasm for advancing amateur radio and highlight current ARRL initiatives to engage and inspire the current generation of hams.



His presentation topics will include:

- ARRL's digital transformation, which promises to bring new value to ARRL members. An all-in digital approach will improve the way members access and engage with content, programs, and systems.
- The ARRL Learning Center, a hub for members to discover the many facets of amateur radio and develop practical knowledge and skills.
- Increasing video content, opening opportunities for amateur radio content creators and member-volunteers to learn, stay informed, and keep connected.
- Improving training and tools to engage radio clubs, emergency communication volunteers, and students.
- 

The ARRL expo booth will feature "Ask The ARRL Lab," where Lab staffers will answer questions live. Attendees



can come into the booth lounge and ask the Lab's technical wizards for tips about projects or suggestions to address various station installations and problems. Attendees can also learn about Product Review

equipment testing, see a presentation on how the Lab can help hams with RFI problems, and tour W1AW virtually.

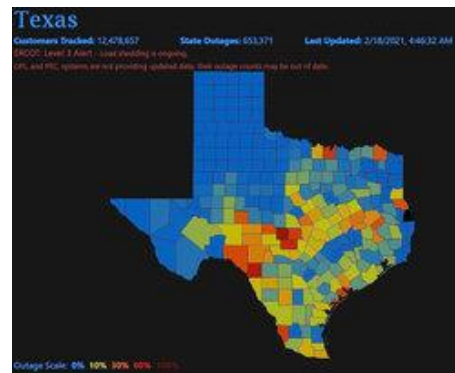
QSO Today Virtual Ham Expo Chairman Eric Guth, 4Z1UG, also announced four live group kit-building workshops. Workshop instructors will guide participants through building a variety of kits, which will be available for purchase and delivered prior to the expo so attendees can build them at home. Early-bird discount tickets and links to purchase kits can be found at the [QSO Today Expo website](#). Read [an expanded version](#).

## ARES and Red Cross Cooperate to Assist Storm-Affected Residents in Texas

ARRL Amateur Radio Emergency Service (ARES®) and American Red Cross volunteers joined forces in Texas under the ARRL/Red Cross memorandum of understanding in responding to the situation resulting from unseasonably frigid weather. Kevin McCoy, KF5FUZ, said the Red Cross formally requested an ARES activation in Texas to address the effects of the natural disaster, which included a lack of drinking water, power outages, fuel shortages, and frozen plumbing. Red Cross in Central Texas supported more than 60 warming shelters at the request of governmental agencies.



"We made a special effort to use Winlink email over radio to get reports of infrastructure problems and unmet needs [and to] communicate information about warming centers," McCoy said, adding that Winlink operators provided the most valuable contribution in the disaster response. Several teams deployed to support emergency operations centers (EOCs) in Bexar, Brazos, Kerr, Travis, and Williamson counties, he added.



Power outages have dropped considerably since the publication of this February 18 status map, and damage assessment is under way.

"Our effort in the start of the activity was to focus on folks with medical needs who required power, and to get those folks to safety," McCoy said. "Reports from operators were passed to Disaster Program Managers and Disaster Action Teams and to Red Cross Disaster Mental Health personnel for

evaluation. Government partners and citizens provided transportation and Red Cross provided hotel rooms in areas with reliable power to keep these citizens safe while following COVID-19 protocols."



On February 20, the Red Cross made a formal stand-down request to Texas ARES sections from the Central and South Texas Red Cross Region. "Transportation, communication, and internet had restored sufficiently to allow for that change of status," McCoy said. "We did let all Winlink operators know that we would still monitor the tactical addresses until the disaster recovery was over."

Key issues remaining include the prolonged power outage and the freezing weather that left Texas with damaged water infrastructure. "Things are improving rapidly," McCoy said on February 22

## ARRL Podcasts Schedule

The latest episode of the *On the Air* podcast (Episode 14) takes a deeper dive into the subject of HF antenna tuners, including some shopping tips.



The latest edition of *Eclectic Tech* (Episode 28) features a discussion on grabbing NOAA weather satellite



images at 137 MHz and a chat with Nigel Vander Houwen, K7NVH, about how he has combined rockets and high-altitude ballooning with amateur radio.

The *On the Air* and *Eclectic Tech* podcasts are sponsored by Icom.

Both podcasts are available on iTunes (iOS) and Stitcher (Android), as well as on Blubrry -- [On the Air](#) | [Eclectic Tech](#).



### ARRL to Extend Field Day Rule Waivers from 2020, Add Class D and E Power Limit

02/10/2021

The COVID-19 pandemic-modified **ARRL Field Day** rules from 2020 will continue this June with the addition of a power limit imposed on Class D (Home Stations) and Class E (Home Stations-Emergency Power) participants. The news from the ARRL Board's Programs and Services Committee comes as many clubs and groups are starting preparations for Field Day in earnest. Field Day 2021 will take place June 26 – 27.

"This early decision should alleviate any hesitancy that radio clubs and individual Field Day participants may have with their planning for the event," said ARRL Contest Program Manager Paul Bourque, N1SFE.

For Field Day 2021:

- Class D stations may work *all other* Field Day stations, including other Class D stations, for points. This year, however, Class D and Class E stations will be limited to 150 W PEP output.
- An *aggregate* club score will be published — just as it was done last year. The aggregate score will be a sum of all individual entries that attributed their score to that of a specific club.

ARRL Field Day is one of the biggest events on the amateur radio calendar. Last summer, a record 10,213 entries were received.

"With the greater flexibility afforded by the rules waivers, individuals and groups will still be able to participate in Field Day, while still staying within any public health recommendations and/or requirements," Bourque said.

The preferred method of submitting entries after Field Day is via the web applet. The ARRL Field Day rules include instructions on how to submit entries, which must be submitted or postmarked by Tuesday, July 27, 2021.

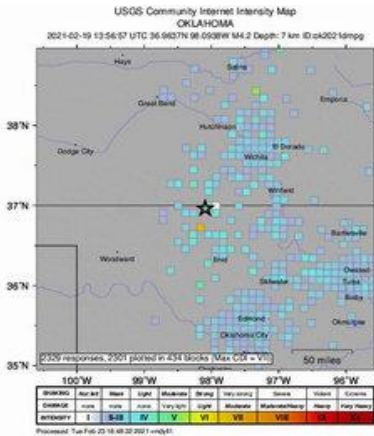
The **ARRL Field Day** web page contains for complete rules and entry forms, as well as any updated information as it becomes available. Join the ARRL Field Day **Facebook page**.

## Amateur Radio Helping to Fill Earthquake Report "Donut Holes"

An [article](#) describing how radio amateurs can help fill the information "donut hole" by providing post-earthquake "Did You Feel It" ([DYFI](#)) reports via [Winlink](#) HF radio email. An [article](#) describing how radio amateurs can help fill the information "donut hole" by providing post-earthquake "Did You Feel It" ([DYFI](#)) reports via [Winlink](#) HF radio email appeared on February 22 in the American Geophysical Union (AGU) magazine *Eos*. As the article points out, "Ham radio networks gear up to provide real-time, on-the-ground information about earthquake shaking and damage when other communication pathways are knocked out of commission." Authors of the article were David J. Wald of the US Geological Survey (USGS), Vincent Quitoriano, and Oliver Dully, K6OLI.



As the article explains, DYFI uses a questionnaire to gather individuals' experiences and observations, and USGS uses the information to evaluate the shaking intensity at that person's location. DYFI has been in operation since 1999 in the US and 15 years around the world, during which the USGS has gathered more than 5 million individual DYFI intensity reports.



The article notes that a potential problem is that "public access to it may be compromised as a result of strong earthquake shaking," with affected individuals experiencing power and communication outages or may be distracted by more

immediate priorities.

"USGS and other global seismic network operators have witnessed felt report 'donut holes' in areas of strong shaking due to loss of internet communication," the article said, "most recently during the magnitude-5.7 earthquake that hit near Salt Lake City in March 2020." The article suggested that "alternative pathways" of communication are needed to "gather important ground-truth shaking data with minimal delay." And this is where amateur radio groups come into play.



"We now expect to sample the donut hole with the help of amateur radio groups worldwide," the article's authors said. "These groups can mobilize a significant number of licensed radio operators after a strong earthquake, especially near large population centers, ensuring a baseline level of macroseismic intensity reporting even in heavily affected areas."

As the article explains, USGS has partnered with [Winlink](#), a radio email platform with more than 28,000 users worldwide, and with ARRL Amateur Radio Emergency Service (ARES®) members. Winlink adapted the USGS DYFI questionnaire to its platform, and this version is now available to all radio amateurs, the article said.

## ARRL Interview Explains Background of Ham Radio in Space Film Short

Josh Tanner, the Australian filmmaker who produced the thriller [Decommissioned](#) by Perception Pictures, has explained how he came up with the idea to develop the movie short. In the approximately 6-minute film, SuitSat returns in the future to haunt International Space Station commander "Diaz," played by Joey Vieira, who spots SuitSat, the surplus



Russian *Orlan* spacesuit that Amateur Radio on the International Space Station ([ARRL](#)) turned into an amateur radio satellite several years ago .

An exclusive ARRL [video interview](#) premiering on Saturday, February 27, brings together Tanner, who directed the sci-fi horror film about an eerie ham-radio-in-space reencounter, and ARRL-International Chair Frank Bauer, KA3HDO. In the interview, conducted by ARRL volunteer Josh Nass, KI6NAZ, of the popular YouTube channel [Ham Radio Crash Course](#), Tanner described the uniquely creative and technical aspects of the filmmaking involved in *Decommissioned* and its connection with the real-life *SuitSat-1*.

"My wife, Jade, who is also a co-writer of this short film, and I are both really obsessed with space, and we discovered SuitSat on Wikipedia," Tanner said in the interview. "It was an initial sort of two-pronged reaction. One, this is genius. It's amazing that they did this; I'd never heard this before. And the second one was, this is kinda creepy...that they had what looks like a stranded, dead astronaut floating around the Earth...and there were voices of children being transmitted from it."



*SuitSat-1* transmitted a voice message, "This is SuitSat-1 RSORS!", in several languages, plus telemetry and a slow-scan TV image on an 8-minute cycle as it orbited Earth.

Tanner said a lot of the films he produces involve "pieces of history that are rather quite odd or interesting that maybe a lot of people don't know about."

Bauer described the background of the 2006 *SuitSat* project, which involved ARISS's relationship with Sergey Samburov, RV3DR. Samburov was "the initial brainchild" behind the *SuitSat-1* concept, and ARISS ran with it, Bauer recounted.

"We had 3 weeks to pull it all together and get it ready for launch," Bauer said, and that included getting safety approvals. *SuitSat-1* operated for about 2 weeks, and a contest of sorts evolved to guess when it would burn up in the atmosphere, which wasn't until about 6 months later. A *SuitSat-2* was launched from the ISS several years later.



Tanner said the *Decommissioned* script was written about 3 years ago, but creating the realistic atmosphere and sets involved a number of complexities, which was "very expensive," he revealed. A big push toward using video game engine technology in feature-film development made it possible. *Decommissioned* was produced using a game engine called *Unreal Engine*, which was also used



to produce the TV show *The Mandalorian*.

Grab your popcorn and avoid a spoiler. ARRL recommends viewing the [short film](#) before watching the 45-minute interview. The interview premieres on ARRL's [YouTube channel](#), Saturday, February 27, at 1600 UTC.



ARRL reminds interested schools and educational organizations in the US that the latest [window](#) to submit proposals to host scheduled ham radio contacts with an ISS crew member opened on February 15. Contacts would be scheduled January 1 - June 30, 2022. Proposals are due to ARISS by 0759 UTC on April 1.

In the US, ARRL is a partner in the ARISS program, along with AMSAT, NASA, and the ISS National Lab, which has kept amateur radio on the air from the International Space Station for 20 years.

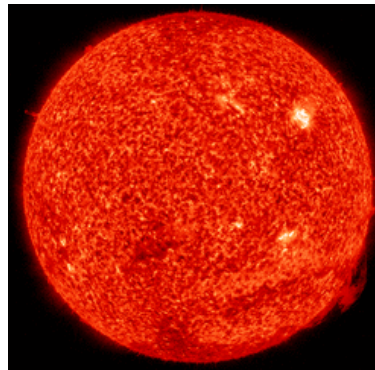
---

## The K7RA Solar Update

Tad Cook, K7RA, Seattle, reports: Sunspots have returned, and solar activity increased on every day over this reporting week.

The average daily sunspot number shot up from zero to 19.6, while the average daily solar flux rose from 72 to 75.7. Geomagnetic activity was also higher, with average daily planetary A index increasing from 7.7 to 16, and average daily mid-latitude A index rose from 5.6 to 12.4.

Predicted solar flux for the next 30 days is 82 on February 25 - 28; 78 on March 1; 74 on March 2 - 4; 73 on March 5 - 6; 74, 70, 74, and 76 on March 7 - 10; 72, 71, 72, and 70 on March 11 - 14; 71, 72, 71, 73, 76, and 75 on March 15 - 20; 72 on March 21 - 22; 76 on March 23 - 24, and 74 and 73 on March 25 - 26.



Predicted planetary A index is 12 on February 25; 5 on February 26 - March 1; 15 and 12 on March 2 - 3; 5 on March 4 - 5; 15 on March 6; 5 on March 7 - 11; 15, 10, and 5 on March 12 - 14; 15, 5, 8, and 18 on March 15 - 18; 20 on March 19 - 20; 10 and 8 on March 21 - 22, and 5 on March 23 - 26. Geomagnetic activity is expected to increase by March 28.

Sunspot numbers for February 18 through 24 were 12, 12, 12, 11, 26, 31, and 33, with a mean of 19.6. The 10.7-centimeter flux was 71.1, 72.9, 76.4, 75.3, 75.9, 78.1, and 80.5, with a mean of 75.7. Estimated planetary A indices were 5, 17, 20, 20, 17, 12, and 21, with a mean of 16. Middle latitude A index was 2, 13, 15, 18, 13, 10, and 16, with a mean of 12.4.

---



## Amateur Radio Users Want to Be of Service When Modern Technology Fails

Talking with members of Nashville Amateur Radio Club, which has been around for 85 years.



Monvel Maskew PHOTO: ERIC ENGLAND

Thousands of Nashvillians were [affected by the cell and internet service outage that came after the Christmas Day bombing downtown](#) — but it was exactly the type of situation amateur radio operators prepare for. They pride themselves on not needing internet or cell service to relay electronic

radio operators, sometimes known as “hams,” to get a license, and in 1914 the national Amateur Radio Relay League was founded. Nashville Amateur Radio Club has been around for 85 years, making it one of the oldest clubs in the country. The group’s 70 members now look for ways to be of service in a world in which technology has evolved beyond amateur radio’s original usefulness.

“When the news started coming out about the bombing, there were a lot of hams online, there to assist with the radio for people who worried about their relatives when they couldn’t reach them on the phone,” says Monvel Maskew, president of Nashville Amateur Radio Club.

The Federal Communications Commission allocates parts of 29 different bands — or ranges of frequencies — for amateur radio operators. Some work best for chatting locally. Some are capable of national, international or even off-planet communication. (The International Space Station has a ham radio kit.) Taking a test to get a license is required to send messages, but not to listen.

On Monday nights, area hams convene on a “net,” a planned gathering on a specific frequency. This serves as practice for when an emergency would call for an impromptu net. Most members of the club are also part of the local chapter of the Amateur Radio Emergency Service. Lee Alder, president of Davidson County’s ARES chapter, was inspired to join after [Nashville’s historic 2010 flood](#) affected internet connections and cell service.

“Basically, we are radio people waiting for a place to be in the event that Metro needs us,” Alder says. “We fill this little gap of communication when everything else quits. And radio usually works.”

When activated, Nashville’s Office of Emergency Management used to call on hams for help relaying messages, though they haven’t in recent years. Alder says in the event of the bombing, hams could have hooked up phones and email to a frequency that still works, albeit slower than we’re used to. But instead, for now, the hams try to help by passing information to friends and neighbors.

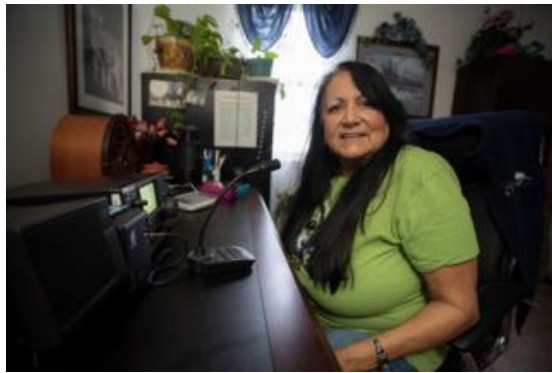
“I think the Christmas Day bombing would have been a perfect event that we could have helped out had we had this understanding going on,” Alder says. “But unfortunately, we didn’t.”

The need for ham radio has of course been shrinking. Services like WhatsApp can connect us to people around the world. Improvements in weather radar and an online weather messaging system erased the need for ham storm trackers to be in the same room as meteorologists, and the prevalence of reliable cell phones keeps us connected — most of the time. Even so, the practice has continued among hobbyists, and the barriers for entry for have been lowered. When Maskew first became interested as a teen, radio supplies were way out of his budget — \$200 to \$300 in 1970s dollars, the equivalent of roughly \$1,500 today. Today, he says, you can get started for less than \$100. Testing used to happen only in person, but now Maskew spends around 30 hours a week proctoring license tests over Zoom. Until 1991, aspiring hams had to learn Morse code, and while it’s still a common part of the hobby, it’s no longer required.

Roger Womack learned to operate a radio with help from the Courage Kenny Handiham program, an organization in Minnesota that adapts radio supplies for people with disabilities.

“There has been an upsurge in the last year or so of new members and people getting into the hobby,” says Womack, who is visually impaired. “Because people are sitting home, and new people are getting their license where they can talk to people and communicate. I can think of right offhand maybe 15 or 20 new ones [on local nets] I’ve heard in the last year, probably more than that just listening.”





**Cindy Leech** PHOTO: ERIC ENGLAND

Though the hobby tends to skew boomer-age and male, club member Cindy Leech would like to see that change.

“The club has a great community of mostly guys that will help you out if needed,” she says. “They’re very welcoming. I just wish there were more women, because it’s a different thing for women. The guys tell me, and most other radio operators say, you can tell the difference on the radio. A woman’s voice carries better.”

Leech got into the hobby to be closer to her father, who lives in New Mexico. He used to help relay messages to families from soldiers overseas. His loud machine’s beeps reverberated through the house when Leech was a child, and now the practice is something she’s made her own through volunteering with the club. Amateur radio operators often volunteer for things like charity horse races, runs and bike rides, especially in rural areas lacking adequate cell service. Leech says on one occasion that meant alerting bike riders to a llama on the path, though other times she’s needed to call for medical attention.

“What was interesting to me and very fulfilling was the community aspect, where they’re always willing to volunteer and help out these organizations to make their event successful,” Leech says.

Still other hams do “contesting,” wherein they try to make the most connections to other operators in a given period of time, or they’ll attempt to reach all 50 states, or 100 countries.

On a national level, ARES maintains a partnership with the National Weather Service. Red Cross stations, including the one in Nashville, maintain radio rooms in the event of a disaster too.

“All they have to do is call and go, ‘Hey, come operate the radio,’” Alder says. “Usually, you don’t have to tell a ham twice about that.”

The space granted to amateur radio operators by the FCC has been shrinking over the years, with most frequencies bought out by commercial radio stations and used by cell phones. Because hams can use radio waves for free, they don’t have much leverage when a larger entity wants to pay for them. So it’s “use it or lose it.” Part of the reason hams are so eager to get more people involved is to fill up

those frequencies, but it’s hard to say how long those frequencies and this practice will survive.

In the meantime, the hams are here for backup.

“I hope it doesn’t go away for phones,” Leech says. “Because sometimes phones, in an emergency, are not gonna work. They’re gonna lock up. So that’s one thing I don’t think people realize. It’s really important that we get people in ham radio so that we have plenty of coverage in case that happens.”

For more information about local ham radio, visit Nashville Amateur Radio Club’s website at [K4cpo.org](http://K4cpo.org); Monday night nets take place at 7:30 p.m. at 147.015 megahertz



## Starlink

Starlink is a satellite internet constellation being constructed by SpaceX providing satellite Internet access. The constellation will consist of thousands of mass-produced small satellites in low Earth orbit, working in combination with ground transceivers.



60 Starlink satellites stacked together before deployment on 24 May 2019

**SpaceX’s Starlink satellite ISP is poised to make a big difference in rural America, according to exclusive Ookla Speedtest data shared with PCMag.**

**Starlink is currently in a semi-public beta, serving [more than 10,000 users](#) at speeds [up to 170Mbps](#), with no data caps, according to beta testers.**

**You can control the system from your smartphone app that you can download.**



# MARC Beacon

The Morongo Basin Amateur Radio Club Newsletter



SpaceX started accepting preorders for its Starlink satellite internet service late on Monday, as the company broadens its beta program to “a limited number of users per coverage area.” Members of the public can now enter their home address and put down \$99 for an antenna-router bundle that Starlink’s website says will ship “on a first-come, first-served basis,” depending on location.

The \$99 deposits are fully refundable and “may take 6 months or more to fulfill,” the [website](#) says. Some locations entered on the website return a notice saying coverage won’t be available until “mid to late 2021,” while some say 2022. The full Starlink kit costs \$499 plus \$50 shipping and includes a mountable pizza-sized dish antenna, Wi-Fi router, and power supply.

Service will cost \$99 a month. There are a few Youtube videos of some of the beta testers showing the dish. The setup is so easy literally ready out of the box and no dish pointing just a clear sky and it will do the rest. Elon Musk made this Idiot Proof.



**The dish and wifi router.**

<https://www.starlink.com/>



# MARC Beacon

Volume 10, Issue 3

The Morongo Basin Amateur Radio Club Newsletter

MARCH 2021

## MARCH 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS LARRY	KAFEE TAWK 10AM DAILY CLUB REPEATER	ARES Meeting 6:00 pm		
7	8	9	10	11	12	13
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS GLENN				
14	15	16	17	18	19	20
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS FRED		ZOOM CLUB MEETING CONTACT GlennN6GIW READ NEWSLETTER		
21	22	23	24	25	26	27
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS KEITH				
28	29	30	31			
		MARC Net 7:00 pm NCS JESSE				