

Volume 9, Issue 10

The Morongo Basin Amateur Radio Club Newsletter

OCTOBER 2020

### **President's Message**

Hello Morongo Basin HAM Radio Club Operators

September is gone and the weather will start to cool off a bit. We had some hot days in August and September. Just a reminder that all regular monthly meetings are canceled until further notice.

Welcome to Fall/Autumn. Hopefully the 100+ degree weather is gone for the year.

Judy and I are going on a road trip to Indiana, and lots of places in between, during the month of October. If you want to follow us on Facebook, then my account name is Rob Cloot.

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





### **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



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TOM MEDLIN W5KUB WEEKLY WEBCAST 100% HAM RELATED. TUESDAY NIGHTS AT 8PM

http://tmedlin.com/ OR http://w5kub.com



HAMNATION IS A WEEKLY HAM RADIO RELATED TV SHOW WITH FAMOUS HOSTS SOME OF YOU MAY KNOW LIKE, GORDON WEST, BOB HEIL AND OTHERS. WEDNESDAY NIGHTS AT 6PM

https://twit.tv/shows/ham-nation



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



We are having an informal DAILY net, that started Monday March 30<sup>th</sup>. Join us with your own cup!

For right now it's called the "CAWFEE TAWK" net at 10:00 am till 11:00. It's just a way for any and all hams to check in, say good morning and see what everyone is up to. With all the things going on in this world we would just like to stay connected and be sure our local community of hams are ok. A little meet and greet with your coffee and donuts in the morning is a great start.

More like ice coffee now that it has warmed up!



These Vehicle magnets are still available from Rob, WO4ROB.

They 12" long. I believe they are \$10 each. Contact him with your order.



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# MARS Communications Exercise to Involve Amateur Radio Community

Military Auxiliary Radio System (MARS) volunteers will take part in the Department of Defense (DOD) Communications Exercise 20-4, starting on October 3 and concluding on October 26. The MARS focus is interoperability with ARRL and the amateur radio community.

"Throughout the month of October, MARS members will interoperate with various amateur radio organizations that will be conducting their annual simulated emergency tests with state, county, and local emergency management

personnel,"
said MARS
Chief Paul
English,
WD8DBY.
"MARS
members will
send a DODapproved
message to the
amateur radio
organizations
recognizing this



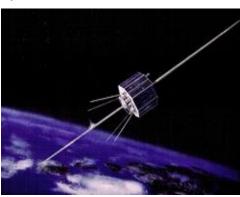
cooperative interoperability effort."

MARS members will also train with the ARRL National Traffic System (NTS) and Radio Relay International (RRI) to send ICS 213 general messages to numerous amateur radio leaders across the US.

"This exercise will culminate with MARS Auxiliarists sending a number of summary messages in support of a larger DOD communications exercise taking place October 20 - 26," English added. Throughout the month of October, MARS stations will operate on 60 meters, and WWV/WWVH will broadcast messages to the amateur radio community. English assures no disruption to communications throughout the month-long series of training events.

## Venerable AO-7 Satellite Approaching a Return to Full Solar Illumination

AMSAT-OSCAR 7 (AO-7), the oldest amateur radio satellite still in operation, is nearing a return to full illumination by the sun, which should take place around September 25 and continue until around December 26. AMSAT's vice president of operations Drew Glasbrenner, KO4MA, says that



during this period, AO-7 likely will switch between modes A (2 meters up/10 meters down) and B (70 centimeters up/2 meters

down) every 24 hours. He reminded users to use only the minimum necessary power and to avoid "ditting" to find their signals in the passband, which can bounce the entire passband up and down and sometimes even cause the transponder to reset to mode A.

"Try to find yourself with very low power, or on SSB, or best, with full Doppler control," Glasbrenner said. "If you have to use high power to find yourself, your receive antenna and system probably needs improvement."

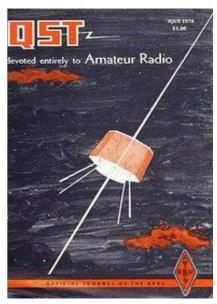
Last May, the nearly 46-year-old AO-7 made possible a contact between Argentina and South Africa -- a distance of more than 4,300 miles. Both stations were aiming just 2° or 3° above the horizon. AO-7 only works when it's receiving direct sunlight and shuts down when in eclipse.

Launched in 1974, AO-7 surprised the amateur satellite community by suddenly coming back to life in 2002 after being dormant for nearly 30 years and periodically re-emerging. AMSAT considers AO-7 "semi-operational." Theory is



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that AO-7 initially went dark after several years of operation when a battery shorted. and it returned to operation when the short circuit opened. With no working batteries. AO-7 now only functions when it's receiving direct sunlight. and it shuts down when in eclipse.



Built by a multinational team under AMSAT's direction, AO-7 carries a non-inverting Mode A transponder (145.850 - 950 MHz up/29.400 - 500 MHz down) and an inverting Mode B (432.180 - 120 MHz up/145.920 - 980 MHz down) linear transponder. AO-7 has beacons on 29.502 and 145.975 MHz, used in conjunction with Mode A and Mode B/C (low-power mode B), respectively. A 435.100 MHz beacon has an intermittent problem, sometimes switching between 400 mW and 10 mW.

# Hams Help Find Kids by Monitoring FRS Channel

Late on the afternoon of September 16, the police department in Post Falls, Idaho, received a 911 call that two juveniles -- ages 9 and 11 -were missing from a Post Falls residence for about an hour. According to the report, the pair had left home intending to play in the neighborhood with some Family Radio Service (FRS) radios. Several patrol cars were dispatched to the area to conduct a visual search, and detective Neil Uhrig, K7NJU, responded as officer in charge due to his training experience with missing investigations. The initial search focused on a 2mile radius from the missing kids' residence.

One officer received information from witnesses that the pair was probably using FRS Channel 1 (462.5625 MHz). An officer returned to police headquarters to retrieve some FRS radios for distribution to the patrol officers, in the event they might be able to hear the youngsters talking.



Uhrig, meanwhile, pulled out his VHF/UHF handheld with the thought of setting up FRS Channel 1 as an auxiliary

frequency, but without the manual at hand, he wasn't able to execute the channel setup. But Uhrig did hear the Northwest Traffic Net (NWTN) that had begun at 6:30 PM on the local 2-meter repeater.

Checking into the net at about 6:45 PM, Uhrig explained the missing persons situation to net control station Shannon Riley, KJ7MUA, and asked if net participants in the Post Falls area with FRS capability could listen for the youngsters talking.

A number of stations promptly checked in to say they had FRS radios and were monitoring FRS Channel 1. It was assumed that only stations located near the missing youngsters would hear them, given the limited range of FRS radios.

Not long after 7 PM, Jim Hager, KJ7OTD, reported hearing children talking on FRS Channel 1. Uhrig went to Hager's home to confirm his observation, and the patrol units were redirected to the new search vicinity. A



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short time later, the missing pair was found safe and returned home.

Uhrig said the most remarkable thing about the incident was that the missing youngsters turned out to be some distance from the original search area, and in the opposite direction from where they were thought to have been headed.

Net Manager Gabbee Perry, KE7ADN, said, "I'm so proud of what a superior job NWTN NCS Shannon [KJ7MUA] and all the operators did last Wednesday. It was a very unusual situation, but everyone had excellent focus and used their resourcefulness to help quickly find the missing kids." -- Thanks to ARRL Assistant Idaho Section Manager Ed Stuckey, AI7H

The QSO Today Virtual Ham Expo has announced that all Expo presentations are available by clicking on "August Speaker Presentations" on the right-hand side of the Expo home



page. Topping the list is keynote speaker Scott Wright, KOMD, the editor of *NCJ*, who spoke on "Amateur Radio's Impact on Problem Solving to Create a Global Response to the Pandemic." Presentations spanned topics from "Portable Operating" by John Jacobs, W7DBO, to "Everything you need to know about Lithium Batteries" by Marcel Stieber, Al6MS, and individual presentations given by young hams organized by Carole Perry, WB2MGP. The next QSO Today Virtual Ham Expo is set for March 13 - 14, 2021.

# **Hello Solar Cycle 25**

# Analysis determines we are in Solar Cycle 25

**September 15, 2020** - The solar minimum between Solar Cycle 24 and 25 - the period when the sun is least active - happened in December 2019, when the 13-month smoothed sunspot number fell to 1.8, according to the Solar Cycle 25 Prediction Panel, co-chaired by NOAA and NASA. We are now in Solar Cycle 25 with peak sunspot activity expected in 2025, the panel said.

Solar Cycle 24 was average in length, at 11 years, and had the 4th-smallest intensity since regular record keeping began with Solar Cycle 1 in 1755. It was also the weakest cycle in 100 years. Solar maximum occurred in April 2014 with sunspots peaking at 114 for the solar cycle, well below average, which is 179.

Solar Cycle 24's progression was unusual. The Sun's Northern Hemisphere led the sunspot cycle, peaking over two years ahead of the Southern Hemisphere sunspot peak. This resulted in solar maximum having fewer sunspots than if the two hemispheres were in phase.

#### Solar Cycle 25

For the past eight months, activity on the sun has steadily increased, indicating we transitioned to Solar Cycle 25. Solar Cycle 25 is forecast to be a fairly weak cycle, the same strength as cycle 24. Solar maximum is expected in July 2025, with a peak of 115 sunspots.

"How quickly solar activity rises is an indicator on how strong the solar cycle will be," said Doug Biesecker, Ph.D., panel co-chair and a solar physicist at NOAA's Space Weather Prediction Center. "Although we've seen a steady increase in sunspot activity this year, it is slow."

The panel has high confidence that Solar Cycle 25 will break the trend of weakening solar activity seen over the past four cycles. "We predict the decline in solar cycle amplitude, seen from cycles 21 through 24, has come to an end," said Lisa Upton, Ph.D., panel co-chair and solar physicist with Space Systems Research Corp. "There is no indication we are approaching a Maundertype minimum in solar activity."

"While we are not predicting a particularly active Solar Cycle 25, violent eruptions from the Sun can occur at any time," Biesecker added. Solar cycle prediction gives a rough idea of the frequency of <a href="mailto:space-weather-storms">space-weather</a> storms of all types, from <a href="mailto:radio-blackouts">radio-blackouts</a> to <a href="mailto:geomagnetic-storms">geomagnetic-storms</a> and <a href="mailto:solar-radiation-storms">solar-radiation-storms</a>. It is used by many industries to gauge the potential impact of space weather in the coming years



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The new radio on the International Space Station is now up and running! Frank Bauer, KA3HDO and members of the ARISS team will be on the show LIVE Thursday night (9/17) to talk about it and take your questions and comments.

Tune into Ham Talk Live! Thursday night at 9 pm EDT (Friday 0100Z) by going to hamtalklive.com. When the audio player indicates LIVE, just hit the play button!

If you miss the show live, you can listen on demand anytime also at hamtalklive.com; or a podcast version is on nearly all podcast sites a few minutes after the live show is over. Some sites include Apple Podcasts, Stitcher, Google Play, SoundCloud, and iHeart Podcasts; and it's also available on YouTube. A replay is also broadcast on WTWW 5085 AM on Saturday nights at approximately 3:30 pm Eastern.

Be sure to CALL in with your questions and comments by calling 859-982-7373 live during the call-in segment of the show. You can also tweet your questions before or during the show to @HamTalkLive.

### A Short History Of US Amateur Radio License Fees

So, here's a short history of US Amateur Radio License fees (not VE test fees). The following is based on QST articles from the time periods listed.

In all cases, the ARRL strongly opposed the fees. Sometimes the opposition was effective, sometimes it wasn't.

In 1933, the FRC (predecessor of the FCC) proposed a fee of \$5 (\$100.17 in 2019 dollars) for amateur operator licenses. In those days operator license terms were 3 years. This proposal was strongly opposed and was not enacted.

In 1954, the FCC proposed a fee of \$3 (\$28.93 in 2019 dollars) for amateur licenses. In those days, and until the early 1980s, license terms were 5 years. This proposal was strongly opposed and was not enacted.

In the early 1960s the FCC again proposed fees for amateur licenses, and this time the proposal was enacted despite the opposition. The original effective date of January 1, 1964 was delayed a few months by a legal challenge, but by mid-March, 1964 the following fees were enacted:

New or renewed license: \$4 (\$33.45 in 2019 dollars)

Modified license: \$2 (\$16.72) Special callsign: \$20 (\$167.25)

Novice and RACES licenses remained free.

Effective August 1, 1970, the FCC raised the above fees for amateur licenses to the following:

New or renewed license: \$9 (\$60.09 in 2019 dollars)

Modified license: \$4 (\$26.71) Special callsign: \$25 (\$166.92)

Novice and RACES licenses remained free.

Effective March 1, 1975, the FCC lowered the above fees for amateur licenses to the following:

New or renewed license: \$4 (\$19.27 in 2019 dollars)

Modified license: \$3 (\$14.46) Duplicate license: \$2 (\$9.64) Special callsign: \$25 (\$120.46)

Novice and RACES licenses remained free.

Finally, effective January 1, 1977, FCC dropped all fees for amateur licenses. From then until now, all US amateur licenses have been free.

VE testing fees are set by the VECs, and go to pay the costs of conducting the test sessions - space rental, duplication, postage, etc. The FCC sets a maximum fee, but VECs can set the fees lower, or waive them entirely.

Modern vanity-call fees have varied over time... Someone else can write their history.

In the above schedule of fees, a "new or renewed license" included the fee for taking the tests, pass or fail, for a new license or a license upgrade. A "modified" license meant a change of address or name, but not a license upgrade.

Special callsigns in those days followed different rules than today, but there were specific cases where an amateur could get a callsign that wasn't sequentially issued. The special-callsign fee was a one-time charge.

All 2019-equivalent prices are from the Westegg Inflation Calculator:

https://westegg.com/inflation/

It is left to the reader to figure the per-year cost of the above fees.



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# **OCTOBER 2020**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
10AM DAILY CLUB REPEATER		STAY SAFE STAY HEALTHY STAY TOUCH		ARES Meeting 6:00 pm		
4	5	6	7	8	9	10
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS GLENN				
11	12	13	15	17	16	17
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS KEITH		NO MEETING		
18	19	20	21	22	23	24
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS FRED				
25	<b>26</b>	<b>27</b>	28	29	30	31
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS TBD				

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### FT8 HEAVY WEIGHTS EVENT 2020

The event takes place on December 26th at 00:00 UTC to 23:59 - only 24 hours.

The frequencies we will use are non-standard FT8 frequencies.

We have narrowed it down to 3 major bands of 17m, 20m, and 40m

The unofficial frequencies we'll use are: 18.095 MHz, 14.090 MHz and 7.064 MHz

Please message me for more Info 73

https://grznow.com/ft8-heavyweights-by-9z4y-kc0bra/...

"Make Ham radio great again" Join the fun, get the contacts.

FT8 Heavy Weights 2020 edition
On Dec 25 at 8 PM – Dec 26 at 8 PM UTC

Be there or be square.