



MARC Beacon

Volume 9, Issue 6

The Morongo Basin Amateur Radio Club Newsletter

JUNE 2020

President's Message

Hello Morongo Basin Radio Operators! It's June, my favorite month because of Father's Day, my birthday, the beginning of summer, and of course Field Day. Since restrictions have been reduced and businesses are starting to open up, **we are planning on having a meeting this month 1800 Thursday 18 June 2020 at the Church of the Nazarene in Yucca Valley.** Stand by for more details. During the meeting we will have a friendly do it yourself (DIY)/home made 2-meter antenna competition. **See last month's news letter for the specific rules.**

The "Cawfee Tawk" net every morning at 1000 -1100 is a big success. Get all your radio news, tech talk, and questions answered by tuning in every morning on the linked repeater system.

I still plan on participating in this year's field day 27-28 June at the Yucca Mesa Community Center. I highly recommend getting on the High Frequency (HF) bands during the last weekend of June whether you are at home, at the community center, or anywhere else in the world. **Contact Keith N6GKB for more details about Field Day 2020.**

I am currently working on a radio remote control using a \$4 MT8870 Dual Tone Multi Frequency (DTMF) Decoder Module. More details in next month's news letter. What radio project are you working on?

I look forward to hearing you on the 10am morning "Cawfee Tawk" net, the 7pm Tuesday evening weekly net, this month's meeting, and at Field Day 2020. **Take care everyone 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

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 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



Field Day is ham radio's open house. Every June, more than 40,000 hams throughout North America set up temporary transmitting stations in public places to demonstrate ham radio's science, skill and service to our communities and our nation. It combines public service, emergency preparedness, community outreach, and technical skills all in a single event. Field Day has been an annual event since 1933, and remains the most popular event in ham radio.



Field Day is always the fourth full weekend of June, beginning at 1800 UTC Saturday and running through 2059 UTC Sunday.

Field Day 2020 is June 27-28.
LOCAL INFO FOR OUR FIELD DAY

This year we will be having Field day at the Yucca Mesa community center: 3133 Balsa Ave. Off of Aberdeen and close to the Yucca Mesa Elementary School

I will be gathering plans for the antenna layouts and ideas for this year's event. I have a few cool ideas that might shake it up a little and make it fun as well.

I will be announcing soon during the 10 AM Daily nets as well as Tuesday nights net the Planning Committee Times and dates and HOW we will be meeting.

Keith Board N6GKB
n6gkb@live.com



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We are having an informal DAILY net, that started Monday May 30th. 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.

Global COVID-19 Radio Event Set for June 6 - 7

Stations bearing call signs that promote the "stay-at-home" message and the value of social distancing and isolation have sprung up during the COVID-19 pandemic, with some 150,000 messages of support shared around the world. An [on-air gathering](#) over the June 6 - 7 weekend will offer a further opportunity for stay-at-home stations and radio amateurs to share greetings in a contest-like framework, looking toward the day that restrictions will ease, eventually making the stay-at-home injunction obsolete.



The patron of the STAYHOME radio [campaign](#) is Finland's Foreign Minister Pekka Haavisto, and the worldwide activity has the endorsement of International Amateur Radio Union (IARU) President Tim Ellam, VE6SH/G4HUA, and the United Nations

Amateur Radio Club.

"Amateur radio operators across the world are experiencing something we have never seen before, with the current COVID-19 pandemic," Ellam said. "In times like this, on-the-air activities can benefit our communities and ourselves. Events such as this are important to improve operating skills. It is also encouraging us to get on the air and keep active, as well as promoting social distancing." Ellam expressed thanks to the national regulators in more than three dozen countries that made special stay-at-home-suffix call signs available for amateur use.

Sponsoring the event and campaign are the Finnish Amateur Radio League (SRAL), in cooperation with Araucaria DX Group (ADXG) of Brazil, and Radio Arcala (OH8X) in Finland.

UN Amateur Radio Club President James Sarte, K2QI, has said that 4U1UN will be on the air to support of the global STAY HOME movement, as will sister stations 4U1GSC (operated as 4U9STAYHOME) and 4U1A (operated as 4U2STAYHOME).

Special event station W2I/STAYHOME, helmed by Ria Jairam, N2RJ, and Peter Dougherty, W2IRT, will also be on the air, operating CW, SSB, and FT8 simultaneously. (Jairam is ARRL Hudson Division Director.)

The STAYHOME event gets under way at 1000 UTC on Saturday, June 6, concluding 24 hours later. Bands will include 80, 40, 20, 15, and 10 meters, with CW, SSB, and digital (FT4/FT8 only). Exchange is a signal report and operator age, except for FT4/FT8 reports. Awards and certificates in the various operating categories will be available. [Email](#) for more information.



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Temporary Rule Waivers for ARRL Field Day 2020

From ARRL, 5/28/2020

With one month to go before 2020 **ARRL Field Day**, June 27-28, the ARRL Programs and Services Committee (PSC) has adopted two temporary rule waivers for the event:

1) For Field Day 2020 only, Class D stations may work all other Field Day stations, including other Class D stations, for points.

Field Day rule 4.6 defines Class D stations as “Home stations,” including stations operating from permanent or licensed station locations using commercial power. Class D stations ordinarily may only count contacts made with Class A, B, C, E, and F Field Day stations, but the temporary rule waiver for 2020 allows Class D stations to count contacts with other Class D stations for QSO credit.



2) In addition, for 2020 only, an aggregate club score will be published, which will be the sum of all individual entries indicating a specific club (similar to the aggregate score totals used in ARRL affiliated club competitions).

Ordinarily, club names are only published in the results for Class A and Class F entries, but the temporary rule waiver for 2020 allows participants from **any Class** to optionally include a single club name with their submitted results following Field Day.

For example, if Podunk Hollow Radio Club members Becky, W1BXY, and Hiram, W1AW, both participate in 2020 Field Day — Hiram from his Class

D home station, and Becky from her Class C mobile station — both can include the radio club’s name when reporting their individual results. The published results listing will include individual scores for Hiram and Becky, plus a combined score for all entries identified as Podunk Hollow Radio Club.

The temporary rule waivers were adopted by the PSC on May 27, 2020.

ARRL Field Day is one of the biggest events on the amateur radio calendar, with over 36,000 participants in 2019, including entries from 3,113 radio clubs and emergency operations centers. In most years, Field Day is also the largest annual demonstration of ham radio, because many radio clubs organize their participation in public places such as parks and schools.

Due to the COVID-19 pandemic, many radio clubs have made decisions to cancel their group participation in ARRL Field Day this year due to public health recommendations and/or requirements, or to significantly modify their participation for safe social distancing practices. The temporary rule waivers allow greater flexibility in recognizing the value of individual and club participation regardless of entry class.

EMERGENCY MEDICAL NET on COVID-19

A special emergency informational medical net on COVID-19, is being held at **0030 UTC**, every **Thursday** on **7.222 MHz** and is hosted by: Bio/Medical Physicist, & Infectious Disease Specialist, **Professor Harry J. Przekop, WB9EDP**, and assisted by **Dr. Jerry Ziperstein, N4TSC**.

This special net has a worldwide listenership and will be live-streamed, thanks to **MARCO** (the **Medical Amateur Radio Council Organization**), at www.MARCOAUDIO.net, for those with internet access and archived for anytime access on their website. You do not have to be a medical professional to participate.



W5KUB.COM

Flight Call Sign
W5KUB-18

High altitude balloon project

Our Mission and Goal:

To launch a high altitude balloon for long duration and multiple trips around the world. For this flight we will use a balloon called the SBS-13 (expensive) that has the capability of flying in the altitude range of 43000-45000 ft. It will be filled with hydrogen to obtain higher altitude. We hope to fly around 45,000 ft. It will be solar powered only (no batteries so it will only transmit during daylight). We will receive tracking every 10 minutes via WSPR on HF.

Tracking data will give us Altitude, Speed, Voltage, Temperature, future course predictions. Entire payload is approx. 9 Grams. Transmissions will be turned off over the UK, Yemen, and North Korea due to regulations.

About the Tracking:

We are solar only so no data or reports during the dark hours. Due to regulations no transmissions over North Korea, Yemen, or UK.

HabHub:

This site gives you speed, heading voltage, Altitude, Temp, lat. and Lon. Under settings you can set things like metric or imperial measurements. If you click on Hysplit, it will give you estimated prediction paths for the balloon.

WSPR:

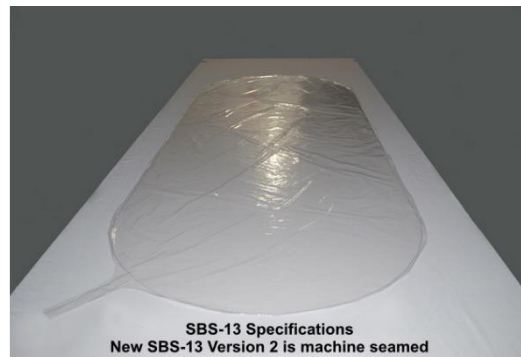
Our WSPR transmitter works on HF at 14 MHz and has a range of over 5000 miles. It is only running 10 mw of power. Baud rate for data is 1.4 Baud. Yes you read it right 1.4. The signal bandwidth is only 6 Hz wide. Standard WSPR does not give us all the data we need. We are using a modified WSPR protocol which uses an additional time slot to send GPS data information.

The payload consists of a homemade tracker (YO3ICT design) that contains the GPS system, and an HF transmitter running only about 10 milliwatts. This is less power than most of your Blue-Tooth devices at home. We are trying a different power system on this launch. This solar panel is a single 3.6 volt 100 ma panel. We are using a 2 F super capacitor across it and have implemented a 3.3 v regulator to get the proper voltage to the

tracker board. See Pictures below:

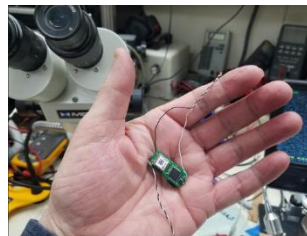


Ed and Tom precisely filling the sbs-13 balloon with 8 grams of free lift.



SBS-13 Specifications
New SBS-13 Version 2 is machine seamed
Estimated Altitude (43k-45k feet) (13.1km -13.7km)
Dimensions when flat on table (3' W X 7.5' L) (0.91m W X 2.28m L)
Film Thickness, (1mil)

This is what the sbs-13 balloon looks like before filling.



This is the homebrew WSPR tracker (design YO3ICT) Parts are so small you have to build it under a microscope



Shown is the finished tracker we are flying for W5KUB-18. The tracker and voltage regulator are glued and taped under the back side of the solar panel. The gps antenna sticks up off the edge of the panel. A 20 meter dipole completes the entire system.

The antenna is 34 ft total. One half (17 ft) goes from the tracker up to the balloon, and the other half (17 ft) hangs below the tracker.



Another New Beta Version of WSJT-X is Available

A new beta ("release candidate"), WSJT-X version 2.2.0-rc2, is now available for downloading from the [WSJT-X website](#), along with a [list of new features](#). The WSJT-X development team has also published additional FT8 "overflow" frequencies, as the WSJT-X 2.2.0-rc2 [Release Notes](#) explain:

"Increasing FT8 usage on 40, 30, and 20 meters means that the default 3 kHz sub-bands are often wall-to-wall with signals.



Overcrowding encourages some to turn on their amplifiers, which only makes things worse. On a trial basis, and in response to numerous suggestions from around the world, we have added a second set of suggested dial frequencies for FT8 on three HF bands and also on 6 meters...7.071, 10.133, 14.071, and 50.310 MHz.

"These frequencies will appear in your dropdown band-selector list after you go to the 'Settings | Frequencies' tab, right-click on the frequency table, and select 'Reset.'

Alternatively, you can add the new FT8 frequencies manually. When the conventional FT8 sub-band on 6, 20, 30, or 40 meters seems too full, please try moving your dial frequency down 3 kHz! [A]s currently implemented, WSJT-X will set your dial to the lowest frequency for the selected mode and band, when you switch bands."

The latest "general availability" (GA) release is WSJT-X 2.1.2.

Southgate Amateur Radio News

Mid-Altitude Ham Radio Balloon Race Planned for June 1

Students in three Space Station Explorer teams will participate in exciting distance learning

ARISS educator, **Joanne Michaelis**, an amateur radio operator with callsign **KM6BWB**. Joanne is also a science coach at the Wiseburn Unified School District in Los Angeles, California where she leads her students in several balloon launch attempts from the Los Angeles area each year.

With this year different because of the pandemic, Joanne wanted to "shake things up a bit" and give students, world-wide, a unique distance learning treat while keeping all safe during the pandemic. So Joanne challenged **Ted Tagami, KK6UUQ**, from Magnitude.io to a mid-altitude cross-continent balloon race and Ted accepted the challenge!

Ted plans to launch his balloon from Oakland, Calif. ISS Above inventor, **Liam Kennedy, KN6EQU**, from Pasadena, California, got "wind" of the idea and he asked to participate, too. All three organizations: **ARISS, Magnitude.io** and **ISS Above** are ISS National Lab Space Station Explorer (SSE) partners that work to inspire, engage, and educate students in Science Technology Engineering, Arts & Mathematics (STEAM) topics and to pursue STEAM careers.

The three SSE teams plan to launch their balloons simultaneously on June 1st. The winner will be the first one to cross the "Finish Line" — the Eastern Time zone. Launch time is planned for 15:00 UTC/11:00 EDT/10:00 CDT/9:00 MDT/8:00PDT. A live video feed of the launch is planned to start approximately 5 minutes prior to the event.

Once the balloons are airborne, students can track each balloon's location, altitude, and temperature via amateur radio APRS (Automatic Packet Reporting System) which is fed automatically to the aprs.fi web site. Educators and parents around the globe can excite at-home youth with this initiative. Students can tally and track the states each balloon travels through and plot altitude versus temperature, etc. Also, by researching weather patterns, students can make assumptions from their own data. This could include speed variations due to weather. They also can predict each balloon's flight path and when they might cross the finish line!

For more information on the balloon launch, lesson plans, and the livestream video link, please go to: <https://www.ariss.org/mid-altitude-balloon-race.html>



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About ARISS:

Amateur Radio on the International Space Station (ARISS) is a cooperative venture of international amateur radio societies and the space agencies that support the International Space Station (ISS). In the United States, sponsors are the Radio Amateur Satellite Corporation (AMSAT), the American Radio Relay League (ARRL), the ISS National Lab and National Aeronautics and Space Administration (NASA).

The primary goal of ARISS is to promote exploration of science, technology, engineering, the arts, and mathematics topics by organizing scheduled contacts via amateur radio between crew members aboard the ISS and students. Before and during these radio contacts, students, educators, parents, and communities learn about space, space technologies, and amateur radio.

For more information, see www.ariss.org

<http://www.southgatearc.org/news/2020/may/mid-altitude-ham-radio-balloon-race-planned-for-june-1.htm>

JUNE 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
KAFEE TAWK 10AM DAILY CLUB REPEATER		MARC Net 7:00 pm NCS JOHN		ARES Meeting 6:00 pm CHECK ON STATUS.		
7	8	9	10	11	12	13
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS FRED				
14	15	16	17	18	19	20
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS KEITH		Board meeting 5:30 - Club meeting 6:00 PM		
21	22	23	24	25	26	27
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS ROB				
28	29	30				
	ARES Net 7:15 pm	MARC Net 7:00 pm NCS GLENN		STAY SAFE STAY HEALTHY STAY IN TOUCH		