

JUNE 2024 EDITION





Continuing Repeater Site Work

Improvements continue at the Paxton Hill repeater site. As reported in <u>last month's newsletter</u>, the urgent roof repair project was consummated by professional service and a few generous and efficacious amateurs. That significant progress has finally made it possible to commence with other long-overdue site improvements. ... <u>COVER STORY</u>, page 3

Northern Lights

A geomagnetic storm on May 10~11, 2024 ... <u>LIGHTS</u>, p.5



Aurora produced by the geomagnetic storm of May 10~11, 2024. — Photo by Bryan **KF6YGK**

Information At A Glance

Upcoming Club Meetings

Monthly club meetings on the 3rd Thursday at 1800.

ு Date & Time ♥ Location

<u>June 20</u>	@	1800	Yucca Valley Church of the Nazarene
July 18	@	1800	Yucca Valley Church of the Nazarene
Aug 15	@	1800	Yucca Valley Church of the Nazarene

Local Nets

Net Name	፟ Day	&	Time
Amateur Radio Emergency Service	MON	@	1915
MBARC Weekly Net	<u>TUE</u>	@	1900
MBARC "Cawfee Tawk"	DAILY	@	1000

MBARC Linked Repeater System

For more info, see the 2^{nd} to last page for detailed diagram of the **MBARC** Linked Repeater System or visit <u>w6ba.net</u>.

♥ Site	\sim MHz	'/ _	T
W6BA Yucca Valley / Paxton Hill	146.790	_	136.5
W6BA Twentynine Palms / Donnell Hill	147.060	+	136.5
WB6CDF Landers / Fire Station	447.580	_	173.8
AD6G Pipes Canyon	446.120	Ø	146.2

Local VoIP-to-RF Nodes

 System	# Node	♦ RF Link
AllStarLink	503088	KM6IAU to W6BA YV
EchoLink	KM6IAU-L	KM6IAU to W6BA YV
EchoLink	WO4ROB-L	WO4ROB to W6BA YV
AllStarLink	503085	KM6IAU to 146.520 ØØ YV

Local RF-to-VolP Nodes

♀ Site	\MHz ½	T	写 System	# Node/TG
KD6DIQ YV	145.770 Ø	67.0	AllStar	28855
WB6CDF YV	447.000 -	CC 10	DMR/BM	TS1:TG 3106
				TS2:TC 2

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MBARC Board of Directors

<i>President</i> Rob Cloutier	WO4ROB
Vice PresidentKeith Board	N6GKB
Secretary Paul Edwards	AA6SM
<i>Treasurer</i> Glenn Miller	N6GIW
Board Member Aaron Chesney	KM6IAU
Board Member Larry Mollica	AD6G
Repeater Trustee Glenn Miller	N6GIW

MBARC Beacon --- May 2024 EDITION

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President's Message

Hello fellow radio operators! The summer heat has started and it's time to get ready for Field Day. As Amateur Radio Operators, we should always be ready for the unexpected, and Field Day is our time shine. I encourage everyone to get on a High Frequency and make a long distance contact with the minimal amount of equipment.

Judy and I are continuing our travels through Europe with a few bumps along the way. I ended up developing an upper respiratory infection after breathing in a bad smell in a pedestrian tunnel in London. Antibiotics are curing me now. So far we visited Portugal, Spain, Italy, Belgium, England, Norway, Germany, and Czechia. Here's some travel tips:

Most people know English and are very friendly. Using a contact-less credit or debit card, in their currency, is the best way to pay for 90% of your purchases. The free WiFi at hotels and cafes are awesome. Pharmacies are everywhere in the city, they're friendly, give free advice, and the medicine is very reasonably priced. The food seems healthier.

We can still be reached via text or email and we will respond when we have internet access. We will post photos in Facebook at my RobCloot page. Go to the website aprs.fi and search for WO4ROB-i to see where my iPhone is located in the world.

Please schedule time to check in on the 7 PM Tuesday net, and if you can, please join us on the "*Cawfee Tawk*" net everyday from 1000 to 1100 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



760-401-6666



WO4ROB@gmail.com



COVER STORY, continued

... Glenn **N6GIW**, club repeater trustee, writes:

"Greetings fellow hams. I would like to continue the beautification project at our Paxton Hill repeater building. There is an old shed attached to the side of the building that is a real eyesore. The shed is not used, and needs to be removed before we paint the building. The fascia board needs to be primed and painted, and the four sides of the building need paint. The club can buy the materials. We will just need volunteers to remove the shed and do the painting, and a trailer to haul away the old shed. Also, think of what color would be appropriate for the paint. The new shingles on the roof are white.

Contact me if you have suggestions or can volunteer time or materials."

Twentynine Palms Repeater Situation

By Larry Mollica **AD6G** – article submitted May 22, 2024



The repeater antenna is atop the wooden pole on the left. The repeater building in foreground. – Photo by Larry **AD6G**

By now, probably most users of the **MBARC** linked repeater system have heard the noises on top of some transmissions through the Twentynine Palms repeater on Donnell Hill. Typically this is a crackling sound, ranging from <u>annoying</u> to <u>enough to blanket transmissions</u>.

Recently it's been established that the noises happen when the user's signal into the Twentynine Palms repeater is rather weak, but does not affect stronger signals. Paul **AA6SM** in Twentynine Palms has consistently been interfered with when using an HT indoors. After getting his roof mounted J-pole antenna connected, the noise has been absent.

The conventional wisdom is that these types of noises are typically caused by problems with the outside gear: antenna and feed line. This poses challenges at this site that are outlined below. It is possible however that the problem, with luck, might be at ground level. I had arranged a trip with Glenn **N6GIW** to the site but he is not available for that at this time. We will investigate the indoor situation when access can be arranged. If the trouble is not to be found at ground level, the antenna and feed line must be investigated and possibly replaced.

Understandably, questions have been asked regarding what it will take to get the antenna work done. With the help of Chris **WB6CDF**, here are some authoritative answers to some of those questions.

- **Q** What's with the cracking noises on the Twentynine Palms repeater?
- **A** There is almost certainly an intermittent connection in the repeater's RF path; the most likely points being the antenna, feed line, and connectors.
- **Q** What is the difficulty in getting it fixed if it indeed turns out to be an outdoor problem?
- **A** The biggest hold up at this point is that it will take a boom lift or similar piece of gear to work on the antenna and feed line. The current wooden pole is somewhat deteriorated and our qualified tower climbers feel it is unsafe to climb.

- Okay, so what does it take to get the use of a boom lift?
- **A** At this point the rental cost is not in the club's budget. We are hoping that at some point when antenna work is being done by others at the site, this might afford us an opportunity to share the use of a lift.
- **Q** Well what does that cost? I'd be willing to contribute. (*I* asked Chris if we could use a towable boom lift such as we used on the Landers repeater rebuild, which would be under \$500 for the day.)
- **A** The towable booms can't reach the antenna. Looking at close to \$800 total for delivery, use and pickup [of a capable boom lift].
- **Q** Why don't we use that tower that used to be Keith's and is now sitting in Rob's yard, waiting for someone to make use of it?
- **A** The site is owned by the Twentynine Palms water district. If we're going to put up a tower there, it would need to be

- a commercial rated tower and would have to be engineered for our wind loading. Cost approximately \$30k to \$70k.
- **Q** So let's just move it to another site. (*Paul AA6SM has offered the use of the former repeater site*)
- **A** We moved it from Noel's site because it didn't have good hand-held coverage in Twentynine Palms proper for potential disaster needs. The location now is the most optimal for a 2-meter Twentynine Palms repeater.

So there you have it. I'm not going to delve into the feasibility here of raising the lift rental expense (*if it comes to that*) through donations; nice if it could happen but I'll leave the logistics to someone else. Chris has good connections in the right places, so the chances of getting some shared or charity use of a lift already on site for a commercial job are probably pretty good, just a matter of when.

NOAA Alerts Over The Repeater System

By Larry Mollica AD6G – article submitted April 30, 2024

Some club members may have already heard brief automated weather alert announcements on the MBARC linked repeater system. Starting April 4th, with the approval of the club board and repeater committee, we have initiated a system for announcing *Nation Weather System Alerts* for the local area via the existing AllStar node run jointly by Aaron KM6IAU and myself. The purpose of this is to provide a supplemental source for important area weather and emergency alerts, which is a particular concern as the Morongo Basin is a dead zone for NOAA VHF Weather Radio broadcasts. This is not intended to be a substitute for NOAA emergency broadcasts, but rather to alert listeners that "something is up" that may need attention. More complete information may then be obtained through the usual ways.

The alerts are generated for the repeater system by a modified version of a software package for AllStar nodes; <u>SkywarnPlus</u>.

Here's what it does:

* Within 5 minutes of the NWS posting a change in alert conditions for the Morongo Basin area such as a new alert, it will make a brief announcement. E.g.: "Updated weather information. Excessive heat warning; Morongo Basin. From AD6G." These will pop up anytime an alert comes into effect or is cleared by NWS (with exceptions; see "What it will NOT do").

- * At around 29 and 59 minutes after the hour, ceasing at 2200 and resuming at 0700, plays a brief reminder announcement indicating an alert/s is already in effect. E.g.: "Excessive heat warning; Morongo Basin. From AD6G."
- * When an alert condition has been removed, another change announcement will be initiated. If only one of multiple alert conditions has been removed, the remaining alerts will be announced. When all alert conditions have cleared, the system will state that all alerts have been cleared, and the reminder announcements will cease.
- * SkywarnPlus supports all 128 alert types included in the NWS v1.2 API. These include advisories/watches/warnings for conditions such as Excessive Heat, Earthquake, Fire, etc. Any of these can be blocked from making announcements, and as time goes by I will probably be doing further fine tuning with regard to alerts that may not warrant the initiation of a transmission.
- * It will not play NWS county-wide weather alerts. Given the size of this county, I feel that would probably be excessive. I've configured it to include alerts from the following NWS Public Forecast Zones:
 - * CAZ525: Morongo Basin
 - * CAZ560: Joshua Tree Park West

- * Alerts are also announced for the following <u>Fire Zones</u>:
 - * CAZ228: Mojave Fire Zone 228 (This is quite a large zone, but there is no smaller fire zone containing the Morongo Basin.)
 - * CAZ230: Joshua Tree Park Fire Zone 230

What it will NOT do:

- * As configured, SkywarnPlus <u>does not</u> play the lengthy radio announcements as heard on the NOAA Weather Radio channels. SkywarnPlus uses it's own set of brief canned announcements (*such as quoted above*).
- ***** It has been configured to <u>not</u> operate during the Monday and Tuesday evening nets. It will resume operating at 1945 on those days.
- * SkywarnPlus will not initiate a transmission while the repeater is on the air, it will wait for the repeater carrier to drop first. But because the node is connected via radio link rather than directly to the repeater, it is possible that an announcement it makes might double with a user's

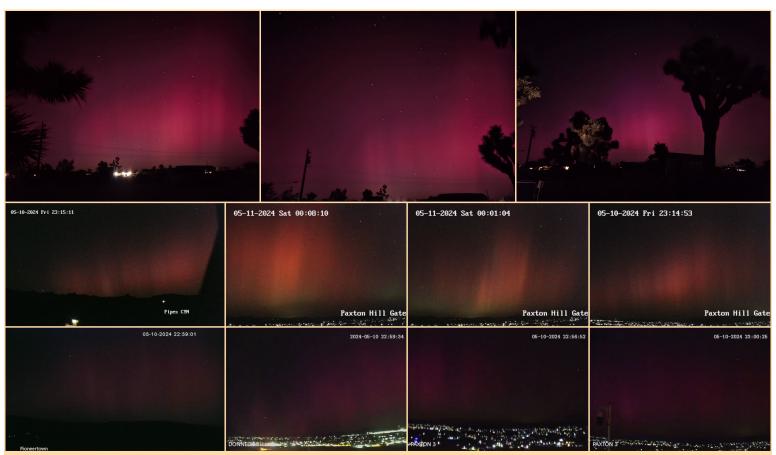
transmission <u>if</u> they both happen to key up at the exact same time. This is no different than doubling that occurs between any two users. The weather announcements are usually brief, and are typically few and far between. So far no problems have been noticed.

Okay, here is the part that would be played at ridiculously high speed on a AM/FM radio commercial: This service is provided as a supplement to and not a replacement for NWS/NOAA emergency alerting. Of necessity, potential single points of failure exist such as: the **MBARC** repeater system, the **KM6IAU** AllStar node, internet service to Aaron's house, etc. ... Hey, it's free.

If you have comments or suggestions please contact myself, Larry **AD6G**, either on air or see the club roster for contact info. If there should be an on air malfunction such that SkywarnPlus needs to be temporarily disabled, please contact me or alternately Aaron **KM6IAU**.

LIGHTS, continued

... provided a rare photo opportunity in the Morongo Basin. Bryan **KF6YGK** shares his Northern Lights photos with us.



Top row – Samsung phone using $\frac{1}{2}$ sec exposure. Middle row – PTZ at Pipes Canyon, PTZ at Paxton Hill \times 3. Bottom row – PTZ at Pioneertown, PTZ at Donnell Hill, PTZ at Paxton Hill \times 2. – All photos provided by Bryan **KF6YGK**

Vice President's Field Day Message

Welcome to Field Day 2024!

First, I need to ask who were the one or two person(s) that purchased an end-fed antenna (MFJ?) a couple months ago at the club auction? I really need to see if we can use one of them for Field Day. Also I am asking the club members for help on antenna choices that we should use. I am in need of some new ideas and wish to see who has what available to use. I do have a couple of long-wires tuned for different bands and also a couple different kinds of vertical HF antennas and a horizontal 20 meter bazooka. So, any new ideas, please shoot me an email.

We will see what our food options are at the next club meeting and Kathie Edwards has volunteered to help on that aspect. Ideas at this point are greatly appreciated for each meal!

I shall be supplying laptops for each station that needs one for logging and we might have WiFi available. The Yucca Mesa Community Center is extremely nice facility with A/C, plenty of room, clean restrooms and a kitchen. The outdoors has plenty of property for parking and antennas galore.

I am sending this first contact Field Day newsletter to all club members. If you are certain you want to be included on the distribution lists for of these newsletters, please email or text me.

I would also like to know who plans on attending and who can help with setup on Friday afternoon and evening and then take down on Sunday morning.

For those who plan on staying overnight, there are electrical hookups for your travel trailer if you wish.

We will have a talk in station using the Yucca Valley repeater.

We are entered on the ARRL Field Day Directory.

Any one willing to give ideas about anything involving Field Day, please contact me at the phone number or email below. I AM REALLY LOOKING FOR IDEAS TO CHANGE UP FROM THE LAST COUPLE YEARS THAT I HAVE BEEN INVOLVED IN FIELD DAY. THANK YOU FOR YOUR INPUT!

I plan on putting out a newsletter for Field Day for now at least every other week in May, then every week in June OR more often if needed for any updates that might arise.



Keith Board N6GKB **MBARC** Vice President



7<u>60-401-5124</u>



N6GKB@live.com

Club History – JULY 2018

By Glenn Miller **N6GIW** – article submitted May 23, 2024

 ${f I}$ was looking at our club bulletin from July 2018 today. I have many old bulletins on my hard drive. Some of the information in this bulletin were:

- * Club President was Andy **NS6V** (silent key). Andy was a big part of our club. He was known for his willingness to help and his friendly, humble personality. He helped many of us in numerous ways.
- * Vice President was Aaron **KM6IAU**. The club was meeting at Apache Mobile Park Clubhouse during this time period. We held Field Day at Joshua Tree Lake. Aaron KM6IAU was the Field Day coordinator.
- **★** Manuel **AE6SG** was awarded lifetime club membership.

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MBARC Meeting Minutes - May 2024

Recorded by Paul Edwards AA6SM, Club Secretary

The Vice-President Keith **N6GKB** opened the meeting at 1803. The President Rob **WO4ROB** is on vacation.

The Secretary Paul **AA6SM** read the minutes of the April 2024 meeting.

The treasurer's report was sent by Glenn **N6GIW** via email and reported the following:

Starting bal. Apr 1:	\$ 3200.87	
Expenses:	\$ 234.55	Paxton roof project: labor and dump fee
Income:	\$ 62.00	\$ 30.00 membership \$ 32.00 ⁵⁰ / ₅₀ drawing
Current balance:	\$ 3028.32	

The roof of our building at the Paxton repeater site has been repaired. Thanks was given to all that made that happen.

Field Day 2024 is coming the fourth weekend of June. Keith will be sending additional newsletters out about the subject.

Preparation for Field Day was discussed. Topics included:

- * What antennas are going to be brought by individuals.
- * What antennas are going to be brought by Keith.
- * How and where the antennas will be set up.
- **★** How to prevent the antennas from interfering with each other.
- **★** Computers and logging software that will be needed for the event.
- **★** The need to have an accurate count of who will be there at what time so meals can be properly planned.
- * Kathie will be taking Judy's usual spot as the food point of contact.
- * Food budget.

The meeting was adjourned at 1900 by Keith N6GKB.

MBARC Member-Provided Resources

The Digital Ham - Ken W6BZY

<u>Ken Hendrickson **W6BZY**</u> has put together some helpful YouTube videos about Linux, Raspberry Pi, and amateur radio: https://youtube.com/@Kensownvids

OpenWebRX - Aaron KM6IAU

<u>Aaron Chesney **KM6IAU**</u> has set up a pool of publicly-accessible OpenWebRX servers. OpenWebRX is a "web-SDR," a web server which provides access to one or more SDR receivers. You can reach them here: https://sdr.**KM6IAU**.net/

Paxton Hill Webcam - Chris WB6CDF

<u>Chris Nichols **WB6CDF**</u> has a publicly-accessible webcam atop Paxton Hill. http://**WB6CDF**.com/paxton-cams.htm More resources are available at his site, wB6CDF.com.

Hobby Notes – Rob WO4ROB

<u>Rob Cloutier WO4ROB</u> has collected and organized his hobby notes on his personal website, <u>WO4ROB.com</u>.

Your Newsletter, Your Voice.

If you have material you'd like to share in a future newsletter, contact me. — 73 de **KM6IAU**



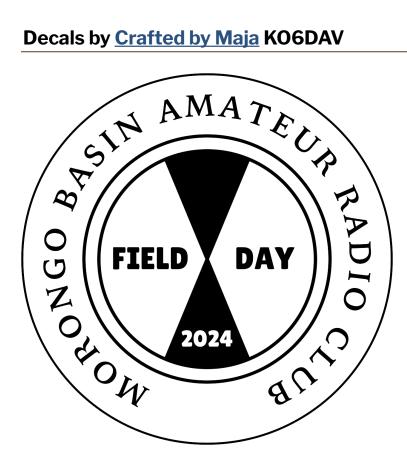
Aaron Chesney **KM6IAU**



442-205-1873, ext 5



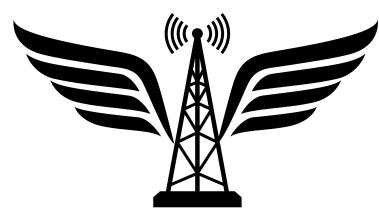
Aaron@KM6IAU.net



HAM RADIO THE ORIGINAL **SOCIAL NETWORK**



I'M A LICENSED



HAM RADIO ****

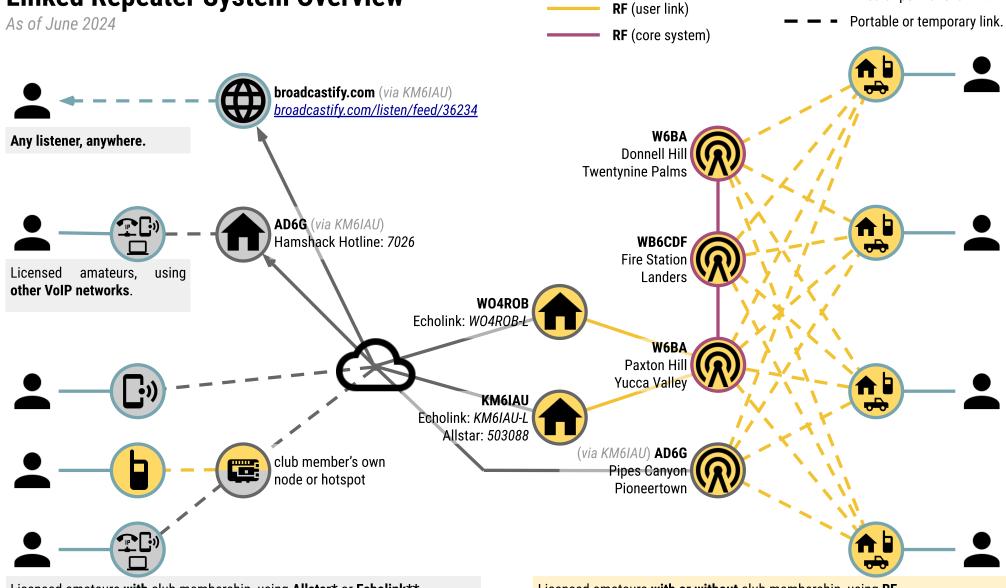
OPERATOR

PROUD TO BE THE 0.2%



MBARC Linked Repeater System Overview

Morongo Basin Amateur Radio Club Linked Repeater System Overview



Licensed amateurs with club membership, using Allstar* or Echolink**.

Please use restrictive access means, such as PL tone and low-gain antenna for RF links, or password access for IP links. <u>Do not</u> link-in broad-access systems, such as other repeaters or reflectors, where such linking could transmit onto our club's system. Thank you.

- * Allstar access needs to be manually set up. Contact linkrequest@W6BA.net to submit your request.
- ** Echolink access may need to be manually set up. Contact linkrequest@W6BA.net to submit your request.

Licensed amateurs with or without club membership, using RF.

VOICE (audio signal)

DATA (internet protocol)

One way link.

Fixed or permanent link.

Please <u>do not</u> link-in broad-access systems, such as other repeaters or reflectors, where such linking could transmit onto our club's system. Thank you.

MBARC Calendar - June 2024

SUN	MON	TUE	WED	THU	FRI	SAT
May 26	May 27	May 28	May 29	May 30	May 31	1
	1915 – ARES net	1900 – Club net				
2	3	4	5	6	7	8
	1915 – ARES net	1900 – Club net ctrl: Aaron KM6IAU				
		Cur. Adron KiviorAC				
9	10	11	12	13	14	15
	1915 – ARES net	1900 – Club net ctrl: Glenn N6GIW				
		ctrl: Glenn N6GIW				
16	17	18	19	20	21	22
	1915 – ARES net	1900 – Club net		1800 – Club mtg		1100 – FD begins
		ctrl: Larry AD6G				
23	24	25	26	27	28	29
1 100 – FD ends						
		ctrl: Keith N6GKB				
30						

KD6DIQ AllStarLink Node#28855 Schedule

YV: 145.77MHz, Øshift, **□**67.0Hz

EVERYDAY

0000 – 0100 WIN System #2560 2200 – 2400 WIN System #2560

SUN

No additional program, system open.

MON

0400 – 0730 East Coast Refl. #45225 1000 – 1300 Alaska Morning #29332

TUE

0400 – 0730 East Coast Refl. #45225

1000 – 1300 Alaska Morning #29332

1700 – 1900 East Coast Refl. #45225

WED

0400 – 0730 East Coast Refl. #45225

1000 – 1300 Alaska Morning #29332

1700 – 1900 East Coast Refl. #45225

THU

0400 – 0730 East Coast Refl. #45225

1000 – 1300 Alaska Morning #29332

1700 – 1900 East Coast Refl. #45225

FRI

0400 – 0730 East Coast Refl. #45225

1000 – 1300 Alaska Morning #29332

1830 – 2400 WIN System #2560

SAT

0400 – 0730 East Coast Refl. #45225

1000 – 1300 Alaska Morning #29332

1700 – 1720 Newsline

2000 – 2200 East Coast Refl. #45225