The Rumble

Next Meeting

June 5, 2024 6:00PM

Program TBD

Meeting Location:
Northern AZ Fire Station #31,
2600 Northern Ave

From the Pres May 2024:

It seems I have run out of anything of weight to say, so I will leave this June issue to other of your elected officers and Board members.

73
Jerry, WS7T President HARC

CLUB EVENTS

June 22-23 A.R.R.L. Field Day
Club Breakfast 8AM at the Field Day site ☺

From H.A.R.C. Director and immediate Past President, Rick, K7CNT:

D-Star Repeater update:
The three-band D-Star system is closer to being operational on one band now with the first coax cable extended from the roof, through the conduit to reach the 2-meter duplexer. Other good news is that the existing 2-meter antenna is resonant.

The photo shows the three racks in the equipment room. Left to right: WB6RER FM repeater (the D-Star monitor is on top of the FM repeater), W7KDS D-Star 3-band rack with its computer at the top and the WECOM gear (hospital communications).

D-Star 12v power supply and other cabling for the support peripherals were installed. We are now waiting for the gateway server (not the repeater controller) to be checked out for any settings that may need to be adjusted. A D-Star compatible radio is required to access the system.

Practical use of a D-Star System: (copied from a article on the internet). Most D-Star Repeaters are connected to Reflectors. Any Radio Operator registered with D-Star can connect with another

Radio Operator beyond the coverage of the local Repeater. Connection to any part of the world is possible with a relatively simple combination of button presses. D-Star can be used with Digital Access points such as the DVAP, Openspot and DVmega, etc.

One of the outstanding features of D-Star is the ability to call another operator without knowing their current location, or on which Repeater, or Gateway they are located. If an operator has used a

Repeater or Gateway in the UK, it is possible to connect to their call sign via one's own Repeater/Gateway and D-Star will automatically route to the last known destination. If the operator should move to another area and use D-Star, it will automatically route to the new location. A D-Star compatible radio is required to get into the system.

There is also a learning curve involved with D-Star, so don't be intimidated by it. Others can do it; we can do it, too.

Fox Hunt:

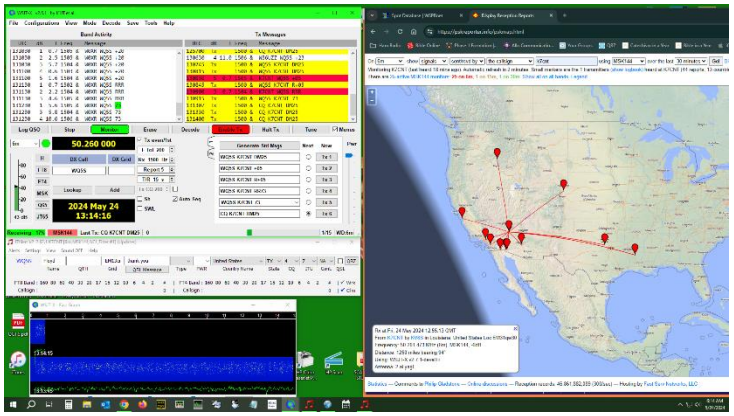
Congratulations to Alan K7LUC (love his call sign) he won his first fox hunt. Great job, Alan!

K7CNT radio station:

I have been enjoying the new 5-element 6-meter Yagi that is now on the 20ft tower. It really is a great medium-size Yagi for the 6-meter band. I have set a new personal distance record on the band with it having an FT8 QSO with an Australian station. Next, with this antenna and a borrowed 6-meter amplifier running about 300 watts, my contact rate has boomed when running Meteor Scatter (MSK144 mode).

Stations 1,200 miles away have decoded my signal via reflection of my signal off ionized gas produced by small meteorites coming into our atmosphere. They burn up, creating ionized gas, which only lasts a second. WSJT-X encoding on the transmitted carrier is sent hundreds of times per minute and a small amount of data is reflected down to earth which includes my call sign and grid square. It's quite amazing !

Above the 6-meter Yagi is a Tom Schiller design 2-meter Bravo vertical antenna that works great. It is a big improvement over the old Ringo Ranger vertical.



Balloon updates:

WB6RER balloon has not been spotted since May 5, 2024. It has been stuck in the southern hemisphere for some time now. Last spots came from Australian and Tasmanian stations. It was still at 50,000ft. We lost track of its orbit count at 14 or 15 so keep your fingers crossed it might pop-up again.

The KJ7VBX balloon that Bob Goulden launched 27 days ago is on its 2nd orbit cruising at 43,000ft plus or minus a few hundred feet. This has been a very successful flight for Bob, his first circumnavigation. Congratulations, Bob. Great job! Last year's attempt by Bob to circumnavigate the globe fell short when the balloon failed over Hong Kong.

May God bless you

Thank you, Rick/K7CNT 73

Chs-rick@live.com

From the Secretary

Congratulations to Alan Webster (K7LUC) for taking first place in the monthly Fox Hunt this time around, also congrats to Rick Cooper (K7CNT) for second

place and Scott Henry (KK7KBQ) for third. Slipping a little there, Scott?

I apologize for not making it out to do the Second Saturdays Portable gathering the last couple of months. Sometimes life just gets in the way.

I have a portable solar panel that I still need to test, and, due to a roof leak and the associated construction, I am currently shackless (hey look, I just coined a new word), so portable is the only way for me to get on the air right now.

With the warmer weather, I'll be looking into doing Second Saturdays a bit earlier in the day, say 8 or 9 in the morning, possibly even earlier, depending on the forecast. I should probably also look into a different venue for a few months since it's ball season and the parking lot gets full down at Centennial Park. I should also think about taking the banner along, just to announce our presence. Much to think about…

I'll announce the time and location of the next Second Saturdays Portable at the next meeting and on the Club's Facebook page, so stay tuned.

I'm also looking into locations to do a Club POTA activation, probably in either Kaibab National Forest or Prescott National Forest. If you think you might be interested, please let me know.

Speaking of getting on the air, it's almost time for **Field Day** once again. It is always held on the last full weekend in June, so it will be June 29-30 this year.

We extended an invitation to the Mohave Amateur Radio Club to join us this year, but we got no response back from them. I did see a post on Facebook that they won't be doing Field Day as a club this year. The invitation is still open, so if you know anyone who is a member of the Mohave club who is not a member of HARC, please let them know they are welcome to join us.

We still need some volunteers; I know that Jerry did an informal poll at the last meeting and quite a few expressed interest. We have a club member who has volunteered to run a GOTA (Get On The Air) station on 20m this year, so that will be fun. We still need someone to be our Safety Officer this year, basically make sure that we don't hurt, kill or otherwise maim anyone, including ourselves. We also need operators, CW, Phone and FT8/4. Please contact me at KG6ECW@gmail.com.

We still have work that needs to be done on the trailer. The last scheduled workday was just Billy, Alan and myself, so in addition to socializing, I put together a list of the things we'd would like to do, some of which are more on the need to do side. So, at least we have a workable plan.

We need to get the wiring in place for the new solar panels. We also need to build a storage bench along the wall, which will give us some extra seating and provide a location for the batteries for the solar system. We'll need to install a vent to the outside as well.

Wayne Glover (WE7G) found a pretty good deal on LiFePo batteries on Amazon, so the decision was made to go forward with setting up to power two radios rather than just one, as we had not yet touched any of the max $500 that you approved for us. We may also need to purchase a different charge controller, as the one that was donated by Jerry Zitterkopf (WS7T) may not have the current handling capacity we'll need.

Rick Cooper (K7CNT) purchased two boost converters, one for each radio, and will be submitting a request for reimbursement at the June meeting. And I found a couple of heavy-duty switches that we'll be adding into the system. One switch will be to completely disconnect the batteries from the solar panels, and the second will be to switch between shore power and solar power, with a center off as well.

We've also decided to go with an A-Frame type setup for the panels, rather than mounting them on the roof. There are a couple of reasons for this decision, not the least of which is there is some question as to whether or not the roof can support the weight. Scott Henry (KK7KBQ), our illustrious Vice-Prez, thinks he may have a source for the materials for constructing the frames.

I'm hoping we can get the solar set up and running in time for Field Day, so if anyone is willing to help us, wiring, frame construction, etc., please let either me or Rick know.

We've located a spot on the trailer that would work quite well for some SO-239 bulkhead connectors. We're thinking two to get started and there is plenty of room to add on, should we decide to. But for now, we just need to replace the existing PL-259 at the front of the trailer, as it was damaged at some point and no longer provides a satisfactory connection. If anyone would like to tackle that little project, please let us know.

Many thanks to our Prez and his wife for hosting this month's breakfast at his house. Great food, great conversation; it was fun. If you weren't there, you really missed out. Thank you again Jerry and Trina!

And last, but certainly not least, we had our first Board of Directors meeting immediately following breakfast, all of the Board Members were present, and I'll be putting together the minutes for that meeting along with the minutes from the last Club meeting.

In the immortal words of Porky Pig, "That's all folks!"

73 de KG6ECW

Something New

https://www.ratpac.us/

Mission of the project

Radio Amateur Training Planning and Activities Committee (RATPAC) comprises Amateur Radio Operators of a wide variety of backgrounds and experiences. Together, we host nationwide Amateur Radio Zoom presentations twice-a-week, Wednesdays on general radio topics and Thursdays on amateur radio emergency communications. The topics are selected from audience recommendations that the planning committee then seeks topic experts or discussion panel members. The presentation audience consists of thousands of amateur radio operators worldwide who participate directly in the Zoom sessions or with video links of the presentation and related documentation sent out after each session.

Besides a lot of additional information on their web site, take a look at this partial screenshot:

List of RATPAC Programs- use tabs at top of list to choose different sort orders.
You can also use Ctrl-F (Windows) or Cmd-F(Mac) to search for individual words.
If you prefer a spreadsheet listing click here.

RATPAC Video Presentations Lists

Upcoming/Recent | By Date | By Topic | By Presenter(s) | By Category | Get Notification | Entry

Action			Visit RATPAC Web Page- www.ratpac.us			Get Update Notifications		
Date	#	Topic	Speaker	Category				
Zoom Passcode-RATPAC		Intro to RATPAC				YouTube Video		
Jul 04, 2024		No RATPAC for Indepence Day						
Jul 03, 2024		No RATPAC for Indepence Day						
Jun 20, 2024		No RATPAC for FD						
Jun 19, 2024		No RATPAC for FD						
Jun 12, 2024	391	YLRL (Young Ladies Radio League) 2024 Hamvention Club of Year	YLRL Officers	Public Relations				
Jun 05, 2024	389	Intro to GMRS	Jim Mohan. AA7JM					
May 30, 2024	390	Training the New Emcomm Operator	Marty Woll., N6BI	First Steps in EmComm Prep				
May 29, 2024	387	Maritime N. California Coastal Station History	Richard Dillman, W6AWO	Historical				
May 23, 2024	388	2024 Annual ARRL Field Day Update & Planning	Marty Woll, N6VI & Anthony Luscre, K8ZT	First Steps in EmComm Prep	YouTube Video	Documents & Slideshow	Vimeo Video	
May 22, 2024	385	Organizing Your Digital Assets	David Vine, WA1FAW	Organizing	YouTube	Documents	Vimeo	

May 30, 2024 CONNECT WITH SPACE.COM

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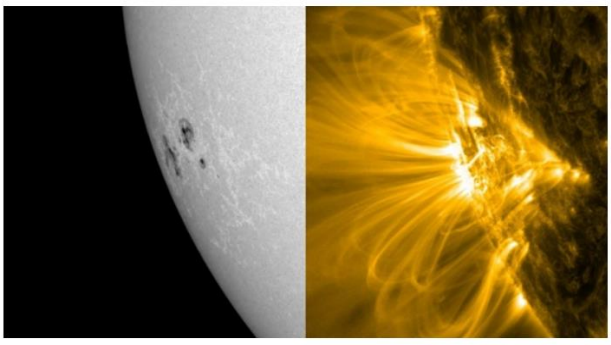
THE LAUNCHPAD

Giant sunspot is back and may amp up the northern lights



(NASA Solar Dynamics Observatory)

Old sunspot region AR 13664, now renamed AR 13697, is back. With its re-arrival, can we expect a resurgence of solar activity?**Full Story:** Space (5/29)

*** Question:**

How does antenna height affect the azimuthal radiation pattern of a horizontal dipole HF antenna at elevation angles higher than about 45 degrees?

A. If the antenna is too high, the pattern becomes unpredictable

B. Antenna height has no effect on the pattern

C. If the antenna is less than 1/2 wavelength high, the azimuthal pattern is almost omnidirectional

D. If the antenna is less than 1/2 wavelength high, radiation off the ends of the wire is eliminated

(See the last column for the answer.)

OPERATING

(use ctl-click to follow the links)

ARRL June VHF Contest1600Z, Jun 8 to 1600Z, Jun 9 1800Z, Jun 8 to 0259Z, Jun 10
https://www.arrl.org/june-vhf

All Asian DX Contest, CW 0000Z, Jun 15 to 2400Z, Jun 16 https://www.jarl.org/English/4_Library/A-4-3_Contests/2023AA_rule.htm

West Virginia QSO Party 1600Z, Jun 15 to 0400Z, Jun 16 https://www.qsl.net/wvsarc/

ARRL Kids Day 1800Z-2359Z, Jun 15
http://www.arrl.org/kids-day

ARRL Field Day 1800Z, Jun 22 to 2100Z, Jun 23
http://www.arrl.org/field-day

ARRL Field Day is the most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June, more than 35,000 radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.

https://www.hamconzion.com/

Question on ferrite material and loss

If using an EFHW antenna, it contains an UNUN at the feed point. The UNUN is an impedance transformer of various ratios, such as 9:1, 49:1, etc. The UNUN will contain a ferrite core with wire wound on it in a specific number of turns. If the ferrite material is not of the correct mix, or a poor product, how much loss might the UNUN have? Maybe 1dB? Up to 4dB? Yes

The material is very important

The June solstice is the solstice on Earth that occurs annually between June 20-22 according to the Gregorian calendar. In the Northern Hemisphere, the June solstice is the summer solstice (the day with the longest period of daylight), while in the Southern Hemisphere it is the winter solstice (the day with the shortest period of daylight). It is also known as the northern solstice.

Question & Answer:

How does antenna height affect the azimuthal radiation pattern of a horizontal dipole HF antenna at elevation angles higher than about 45 degrees?

C. If the antenna is less than 1/2 wavelength high, the azimuthal pattern is almost omnidirectional

[General Class question pool (2023-2027) no. G9B05 (https://www.ncvec.org/index.php/2023-2027-general-question-pool-release)]

…end