

## The Rumble

Next Meeting is DINNER!

Wed. December 4, 2024 6:00PM

Dambar Restaurant

**HARC Meeting Location:** 

Northern AZ Fire Station #31, 2600 Northern Ave

## Letter from the Prez, WS7T—

Sitting here in my home office (and shack) a couple of days before Thanksgiving, it seems a good time to attempt an honest look at 2024 from the perspective of HARC.

I just counted members from what I believe is the most recent membership roster and membership stands at 42. We have lost a few members who seem to have been replaced with some folks who have great potential for the future of our club. Recently, one or two board members and I contemplated the reason(s) for losing some longtime members who contributed many hours of effort to the club and left leaving most if not all of us with some great memories. We attempted to contact some of those members and were met with a cold shoulder. These, it seems, have retired from the club with prejudice. Others have left the club having cultivated interests in other areas of life or even other areas of amateur radio outside of club membership. I suspect some people, despite our best efforts, have simply grown bored with amateur radio or the program that HARC provides to its members.

Then there is the ubiquitous subject of personality conflict. I'm one of those guys who thinks that everybody should be my friend. I'm a nice guy; one who strokes kittens and pets dogs, avoids getting drunk and nasty, doesn't take drugs, and generally avoids discussions regarding religion and politics. Yet, I am certain that some have found fault in me

and tolerate me more than look upon me as a good president or friend. I've always been a talker.

My father tried to leave me with some helpful words of wisdom which I don't believe arose from his intellect as much as his life's experiences. I was blathering away one day on some subject, now long forgotten, when he stopped me saying, "You know you can learn a lot more listening than you can talking." Then there is the one we have all heard, but constantly need to be reminded of, "It is better to have people think you are ignorant than to open your mouth and prove it." My favorite is, "You can please all of the people some of the time, and you can please some of the people all of the time, but you can't please all of the people all of the time." There is more to be said about the comings and goings of perfectly normal folks, but it tends to meander to the dark side a little too much; something about their inability to take a joke.

So, what has gone right? My opinion:

- \_\_We have had some great meetings in which everyone had an opportunity to voice their opinion. Discussions were civilized, democratic, and fruitful.
- \_\_We have had some exceptional learning opportunities thanks to our members.
- \_\_We have developed some lasting friendships around our mutual interests in amateur radio.
- \_\_We launched several balloons with radio tracking, one that has circumnavigated the earth more times than we have been able to keep track of.
- \_\_We had a great Field Day Event with minimal interpersonal conflict.

\_\_We finally made our com trailer solar power capable and added bench storage and safety features.

\_\_We were a big part of the nationwide Route 66 On the Air event with several thousand contacts to the credit of our club.

\_\_At least once a month we enjoyed a Fox Hunt event. Kingman Arizona is now a dangerous place for a fox to live as many members have made foxhunting antennas and know how to use them.

\_\_We have enjoyed a club breakfast every month this year, with a record-setting 20 members and friends at the Airport Café in November.

Our Christmas Party will be at the Dambar Restaurant on December 4th at 6:00. Members and family are welcome. I hope to see you all there. Here is to a great New Year ahead.

The Prez Jerry Zitterkopf, WS7T

### **From the Secretary**

Thank for voting me in as HARC Secretary for another year.

73 de KG6ECW

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

I hope everyone had time to enjoy their ham radios during the month of November. It was a busy ham radio month for me and I enjoyed every minute of it. And the club breakfast was awesome.

## WB6RER repeater

We finally took a ladder up on the roof and had a good look at the two antenna mounts. The ladder was necessary, because you cannot see them from the main roof area as the antenna area is elevated about 10'. What we found was that one of the antennas has been hit by lightning and is badly burned at the bottom 12 inches. A couple cables for other items in this roof area are also charred a bit. There are lightening rods all along the roof line, but not this elevated area.

Since there are two identical antennas and two coax drops going into the building, we are not sure which cable is attached to which antenna until we can get back up there and make that determination. Tom Schiller, N6BT has offered to build us a new mono band antenna (with a lightning rod above the antenna), one of his commercial grade designs. I would hope the club will be willing to reimburse him for the materials. I am hopeful that a better antenna will improve coverage in Golden Valley. The antenna will be similar to this one built for a Houston, TX repeater on top of a large commercial building:



Ken, KK7VOB, KRMC is still waiting for the internet connection to be approved. He is hopeful that it will happen.

#### **WB6RER Pico Balloon**

The club's balloon is still active circling the Antarctic continent every 5 to 10 days and DPOGVN is still the only WSPR station spotting it.

#### K7CNT balloon, a Bob Goulden/Rick Cooper flight:

This flight is probably going to set an orbit speed record (for our balloons only) on this first orbit.

Currently 12-01-2024 its over China. Reported GPS speeds have showed a few time slots of over 100 mph for hours at a time. This 10-meter tracker is using dual dipoles (not tried before) cut to 8'3" each from #34 copper wire as we are trying to improve system durability without adding to much excess weight. This tracker, its complete assembly weighed in at 12 grams. Thank you, Bob Goulden, for financing these flights.

#### Contesting

I had the pleasure of working the CQ WW CW contest from Vicki and Tom's contest station at their home. They have two SDR radios (Flex 6600) with two, 500w amplifiers. Tom worked 15 meters and I worked 10 meters. Even with high power we had no interference between radios, because of the high quality band pass filters used for the two stations. It was a great opportunity for me to work on my operating skills and my endurance.

May God bless you

Thank you, Rick/K7CNT 73

Chs-rick@live.com

#### **OPERATING**

(use ctl-click to follow the links)

ARRL 160-Meter Contest 2200Z, Dec 6 to 1600Z, Dec 8 http://www.arrl.org/160-meter

ARRL 10-Meter Contest 0000Z, Dec 14 to 2400Z, Dec 15 http://www.arrl.org/10-meter

ARRL Rookie Roundup, CW 1800Z-2359Z, Dec 22 http://www.arrl.org/rookie-roundup

**Stew Perry Topband Challenge** 1500Z, Dec 28 to 1500Z, Dec 29 https://www.kkn.net/stew/

RAEM Contest 0000Z-1159Z, Dec 29 https://raem.srr.ru/rules/

Marconi Club ARI Loano QSO Party Day 0700Z-2100Z, Jan 4

http://www.ariloano.it/marconiclub/mcd\_reg/regola mentomcday\_ENG.pdf

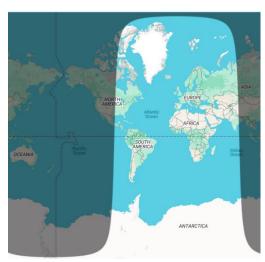
ARRL Kids Day 1800Z-2359Z, Jan 4 <a href="https://raem.srr.ru/rules/">https://raem.srr.ru/rules/</a>
Other News:

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**N6BT CQWWCW** 15m single band, single op, assisted, high power: 616 QSO, 37 Zones, 116 Countries, 263k points

#### Long Path, aka "Grey Line"

One of the unique opportunities operating HF is that there are many propagation modes you will come across. Most often, it will be that you are communicating on a direct path (point A to Point B).



How your signal gets to Point B can vary, of course. It can be via ground wave, like a direct, straight line (as using a handheld VHF radio, "line of sight"). It can also be via skywave, where your signal goes up to the ionosphere and is refracted back to earth, landing somewhere near Point B. This also applies to what is called "NVIS" (Near Vertical Incident Skywave), where your signal is going up to the ionosphere at a very high angle and then back down.

The above conditions are the most common and occur on a regular basis, day after day, month after month, as long as you are on the air at the right time of the day for the frequency you are using, that the ionosphere is "friendly" and there are no big disturbances on the sun. An on-line resource that is quite useful to knowing more about this is:

#### **Understanding Skywave Propagation**

https://www.qsl.net/4x4xm/Propagation/HF-skywave-propagation-for-radio-amateurs.htm

At the beginning of the above is another link to HF:

#### **Understanding HF Skywave Propagation**

https://www.gsl.net/4x4xm/HF-Propagation.htm

The above site includes a more time-sensitive path is called "Long Path", or "Grey Line." Actually, it is not only time sensitive, it is date sensitive, as it only can occur at certain times of the year, besides at certain times of the day. It is, however, quite an eye-opener when you experience it, plus you will be smiling at the contact you just made. The reason is that your signal path is going the long way around, the earth instead of the direct, or short path to Point B. So, when does this happen?

Long path usually occurs in the fall of the year, beginning some time in November. It can be on the high bands, such as 10 meters, but also happens on the low bands, namely 40 and 80/75 meters. The low bands are more difficult than the high bands, mainly because the antennas are larger and often do not have gain (i.e. a single vertical, or a dipole). The path becomes available after the Autumnal Equinox, which is when we have equal days and nights, as shown in the following screenshot:

Although not centered on us in Arizona, this shows that almost the whole world has equal days and nights. This active plot is from: **Academo** 

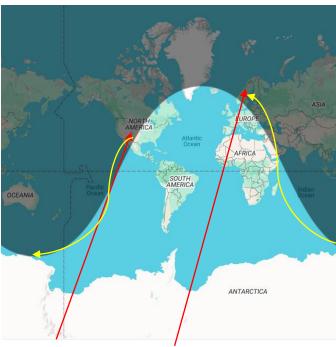
#### **Day/Night Terminator Map**

#### https://academo.org/demos/day-night-terminator/

As we progress in time, December 21 is the shortest winter day for us in the northern hemisphere and the longest day for those in the southern hemisphere. You might also note the folks in Scandinavia, Alaska, etc. are having those long, long nights:

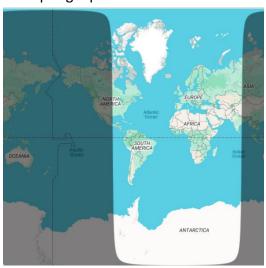


The plus side is that the long path is now available for 2 or 3 months. This means that if we follow the line between day and night (the terminator), we can see where we can work low band DX via this "grey line." For example, on November 28<sup>th</sup>, at 1400Z, I worked LA1MFA in Norway on 40 meters CW and the terminator (long path) looked like this:

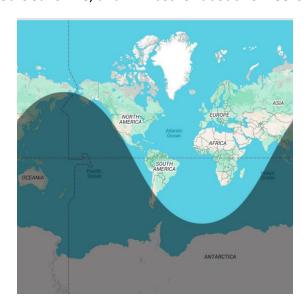


I am here and Kjell is here — not exactly on the terminator, but close enough, as the path is a few hundred miles wide along the terminator. The path was this way, as shown with the curvy yellow lines (although the actual path is probably not curvy!).

Along in March, this path has all gone away, as we have the Spring Equinox:



This heads us into summer and our longest summer day is on June 21 when the days begin to get shorter (thankfully for the high temps), the southern hemisphere is in their center of winter and the high latitudes in Scandinavia have their super long days when the sun only gets dim. As LA1MFA says on his QRZ,com page, "20 of May and midnight sun up here above the arctic circle, no sunrise or sunset, 24 hours sunshine, and will last for about 10 weeks":



Another web site that is interesting with tons of info including satellite passes, constellations... is:

## In-The-Sky

Dec 2024

https://in-the-sky.org/twilightmap.php

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#### From QRZ web site (Dec 1, 2024):



WB6RER's Pico Balloon launched by the Hualapai Amateur Radio Club, Kingman AZ is officially over the Antarctic continent as of 04:42utc 10-25-2024 (last night) Pink blob is the balloon and the green blob is DPOGVN/1 spotting station. Flight duration 514 days and we will never know how many times it went around the world. Last count was 13 orbits as of May 2024 and then it became very sporadically spotted and moved down into the far southern hemisphere. The transmitted WSPR signal is very very weak -27/-28 snr. It has been silent for 5 months and the current spotter report (only 3 spots) on Oct 15th was by Antarctic station DP0GVN/1 it showed a solar panel voltage of 3.88v and an altitude of 45,735 ft. temp of 42F and speed of 74mph.

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**RUMBLE**