

QUARTZFEST*

September 2017



Don't miss it! Put next January 21st – 27th on your calendar **NOW!!!!**



Quartzfest is an annual educational 7 day amateur Radio/RV campout in the desert just south of Quartzsite Arizona

*From the
desk of our
Quartzfest©
Organizer.....*

How to contact us:

Quartzfest© Organizer

Kristyn – KR1SS

kristynweed@gmail.com

Newsletter Editor

Kristyn – KR1SS

Quartzfest© Website

www.quartzfest.org

It's our Quartzfest attendees who volunteer to take a shift or two to help out who keep things running smoothly.

Quartzfest volunteer opportunities:

- *Campfire starter/tender*
- *Welcoming tent helper*
- *Morning Coffee*
- *Seminar Hosts (introduces seminar speakers)*
- *PA system and Audio-Visual helper for seminar areas*
- *Seminar Tent set-up helpers*

If you're interested in volunteering in one of these areas, please drop a note to us at kristynweed@gmail.com

*Kristyn
Quartzfest Organizer*

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Where do we get all the stuff to give away at Quartzfest®?



KENWOOD



Hi-Q-Antennas

Plus..., KB3IFH QSL Cards, Quartzsite's Discount Solar, Big Al's Pizza, N4SVD's can of sardines...and others I know I've forgotten to mention. If I missed you, please let me know .

Remember, all of these manufacturers **donate** products to Quartzfest* for us to **give away** to you during our daily FREE prize drawings. When you're in the market for new equipment, keep these guys in mind...Steve

ABOUT** Quartzfest* takes place Annually in January on Federal BLM (Bureau of Land Management) land and is free to all who participate. Quartzfest* is not a group or organization and has no officers, members or dues. The success of Quartzfest* comes primarily from the love and dedication to both HAM Radio and RV'ing from its present and past Organizers who plan and schedule seminars, workshops and events for the gathering. Quartzfest* is financed solely thru donations which help offset our Organizers expenses. Please know that aside from donations, our Organizers do get help from many volunteers who attend...and that help is always appreciated. BLM rules do not allow groups to make a profit. In fact, we're not allowed by rules to accept one penny more in donations than actual expenses.

Quartzfest* is a 7-day long HAM/RV campout in the Arizona desert that is packed full of Amateur Radio, RV and Emergency Power Seminars and Workshops. The Focus of Quartzfest* is to provide an Amateur Radio and RV Educational Experience like no other in the world on a myriad of related topics. We hold 1-hour Seminars as well as Workshops and teach every aspect of a chosen specialty or mode of operation. During our workshops, you'll learn everything from "what is it" to troubleshooting your newly operational system. With 3 Seminars going on at the same time, Quartzfest* 2018 will offer approximately 70 Seminar/Workshop hours. During the 7 days of Quartzfest* we'll also have many craft and informational talks for the YL's and those not interested in HAM or RV Stuff.

The companies listed on this page have full knowledge that Quartzfest has no funds to purchase prizes for raffles, nor the ability to even charge for raffle tickets to buy prizes. The amazing equipment we have received from them were donated to Quartzfest because they believe strongly in the educational opportunities Quartzfest provides to the entire HAM community.

They believe in us, so, when it comes time to buy new equipment for your shack, keep them in mind. The same goes for our Media supporters. Buy and read their publications, use their websites and click on ads on their sites to help them generate revenue. **Please Support them, they support us!**

Now, Heeeeere's GORDO....



QUARTZFEST 2018 IN THE WORKS !

On our way to Idaho for Solar Totality , everyone on the repeaters were talking about QUARTZFEST - all wanted to know more about seminars , t-shirts , prizes , tent camping , movies at nightYES , they are ALL in the plans !

We are updating our WWW.QUARTZFEST.ORG web site , so give it a look for 2018 activities , and use the older 2017 activities and programs to see all the fun we had at the last one!

Improvements will be large(er) RVs positioned to be wind breaks for seminar areas , the special event station centered around Neil's , W6FOG , comms trailer and monster dipole , and a focus on NVIS from lessons learned from Houston comms last week .

We are updating the tent camping areas , coming up with new protected seminar areas , and of course , the main camp fire ring will always be hummin' from sun up to well after sun down !

Bring some firewood to add to the cause - just drop it off when you head toward the welcome tent , same location as last year !

If you want to offer a seminar , be sure and respond to Tracy for your spot !

Stay tuned - Q '18 is just around the corner !!

gordo , volunteer

HOBO Stew

I know you hate to hear this but, there's a possibility we could lose HOBO Stew. As the crew gets up in years, fewer and fewer of them come to Quartzfest. At present, it looks like Rick and Jeannie as well as Jerry will be with us this year. Jerry will only be there to teach a new crew how the HOBO Stew is prepared.

I'll have more info next month on exactly what's needed, but, at a minimum, looks like we'll need a new volunteer HOBO Stew Crew.

Stay tuned.....

Have you heard HAM's talking about Take Off Angle and don't know what in the world they're talking about?

Another term for "Take off Angle" is "Angle of Radiation" (in some circles and to the misinformed, "Angle of Radiation" may not be the "politically correct" term to use). "Take off Angle" has to do with the angle your High Frequency (HF) signal takes once it leaves your antenna to get to the Ionosphere (a layer of the earth's atmosphere that reflects radio waves back to the earth...remember this from last month?).

Remember this rule:

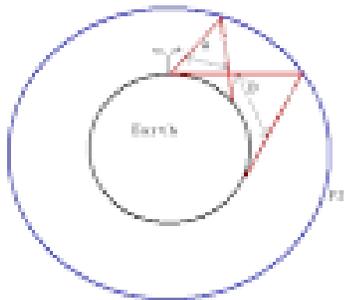
1. The **higher** your antenna, the **lower your** "angle of radiation"!
2. the **lower** your antenna, the **higher** your "angle of radiation"!

Why is this important to know? If your intent in HF communications is to talk to stations in distant lands (DXing), you'll want, optimally, a low "take off angle". To get this low "angle of radiation", you'll want to mount your antenna a 1/2 wavelength or higher above the ground (to calculate a half wavelength for your antenna, divide 468 by your antenna's resonant frequency...in MHz). This height will allow your signal to travel just above the earth's horizon to the ionosphere which is 90 to 240 miles above the earth before it's reflected by the electrical density of the ionosphere's "F" Layer" back to earth (remember?). The distance your signal will travel with this "low angle of radiation" can easily be 1500 miles or

more depending on your operating frequency, time of day and where we are in the sunspot cycle.

For antennas mounted lower than $\frac{1}{2}$ wavelength above ground, you'll have a higher angle of radiation but you'll still have fairly good operating results.

If your intent is to communicate shorter distances, you'll want to mount your antenna closer to the ground. A good example of this is the "Nearly Vertical Incidence Skywave" or "NVIS" antenna. NVIS antennas are frequently used by HAM's participating in "emergency" radio communications or the Military in tactical radio operations. The idea behind the NVIS is to send your radio signal, as its name states, "Nearly Vertically". To do this, you can mount your antenna as close as $1/20$ wavelength above the ground. In this configuration, your signal will travel almost straight up to the ionosphere, and return straight (shower) back down to the earth. Communications with a NVIS antenna can range from a few miles up to 500 miles. (NVIS will be well covered during this coming Quartzfest in a workshop by Dave K1AN).



You'll see in the above graph, the inside circle signifies the earth and the blue circle, the ionosphere. The left red lines, at the earth, signify both low take off angle and high take off angle. There are 2 peaks of the red lines. The first...on the left, signifies a high take off angle. The red peak on the right signifies a low take off angle. Notice that the red lines that signify take off angle, the low angle of radiation signal transmits about twice as far as the high angle of radiation.

Now, this doesn't mean that a low angle signal will talk farther, it's just that a low angle signal doesn't have to work as hard. High angle signals are able in some cases to reach just as far but thru "multi-hop" (remember multi-hop from last month's newsletter?).

Quartzfest© Seminars — by Kristyn KR1SS

Question - Is information provided in Quartzfest seminars useful in day to day life?

Answer - Only if you apply the information you're given!



I know you're wondering what on earth I mean by that? Well, I learned the hard way that during the few seminars I've been able to attend, one, I should have acted on. You see, Gordo (that's Gordon West WB6NOA) presented a seminar at Quartzfest© and it was titled appropriately, "Finding Fido and Furball".

During Gordo's talk, he told us about the need to keep our pets safe, especially our cats. In typical Gordo fashion, he not only told us that we can buy collars that have transmitters attached, he also demonstrated to us how we can use a receiver and a direction-finding antenna to find our lost pets.

Of all the seminars given at Quartzfest©, why am I singling this one out? 'Cause I lost my cat a month ago and didn't have a clue where to find him. I had my trailer heater blower motor replaced at the shop, dropped the dogs off at the groomer, went to an appointment at the VA, picked up the dogs, and hit Wal-Mart for a new tire on the truck.

All this stuff I had to take care of before my departure the next morning for Ohio. I pulled in to a Yuma truck stop for the night after leaving Wal-Mart and noticed Sam, my cat, wasn't screaming at me to give him his can of Friskies. You can imagine the thoughts that went thru my head. Where was he. I searched the trailer high and low...every nook and cranny, but no Sam. CRAP!! He was gone!

In came the slides, dogs in the truck and off we went to retrace the days steps. VA..I called for him but didn't hear his meow. Wal-Mart, no meow. PetSmart parking lot....no meow. Back to the shop where night time security let me in. I walked the yard calling Sam...nothing heard. DOUBLE CRAP!! I had no idea where he got out. If I sat in one place waiting for him..would it be the right place? If not, would I have missed him if he came looking for me because I guessed wrong on where he'd be? The next morning I dropped by the VA who shares their building with the BLM and spoke with the ranger on duty. Nothing seen, nothing heard. I ran back to Wal-Mart...again, nothing heard. Last stop was the shop where, knowing they're cat lovers, I ask the shop owner and the shop's service writer to keep an eye out for Sam while I was gone.

Keep an eye out they did and the following Monday morning I received a phone call from my mechanic, Charlie and the service writer Bob. Both Bob and Charlie informed me that Sam wandered in the shop but didn't look good. They gave Sam water and food, Les, the shop's owner, bought a litter box, litter, bowls and food...and Charlie, the mechanic, took Sam home until my return. That evening, Charlie called..and sent me a text message which included a picture of Sam in front of a bowl of water...he didn't look good at all.

The next morning as I was leaving Cincinnati, I received another call from Charlie..this one wasn't good. Sam didn't make it thru the night. Triple CRAP! Had I only taken Gordo's seminar to heart and purchased critter DF'ing equipment, Sam, my buddy, would still be laying in my lap fighting for space with my computer keyboard, he'd be driving me crazy at feeding time, he's be cuddled up to my chest in bed at night and if I have another fire in the coach, he may be the one to warn me again. These things can't happen now though...if I'd only heeded Gordo's info.

If your feline buddy travels with you in your coach or trailer, don't let your buddy end up like mine. Take steps to safeguard her or him. They depend on us as their protectors...even though they know that they rule us, we're responsible for their safety.

Farewell until we see each other again

73,

***Kristyn – KR1SS
Quartzfest Organizer***