

June 2017



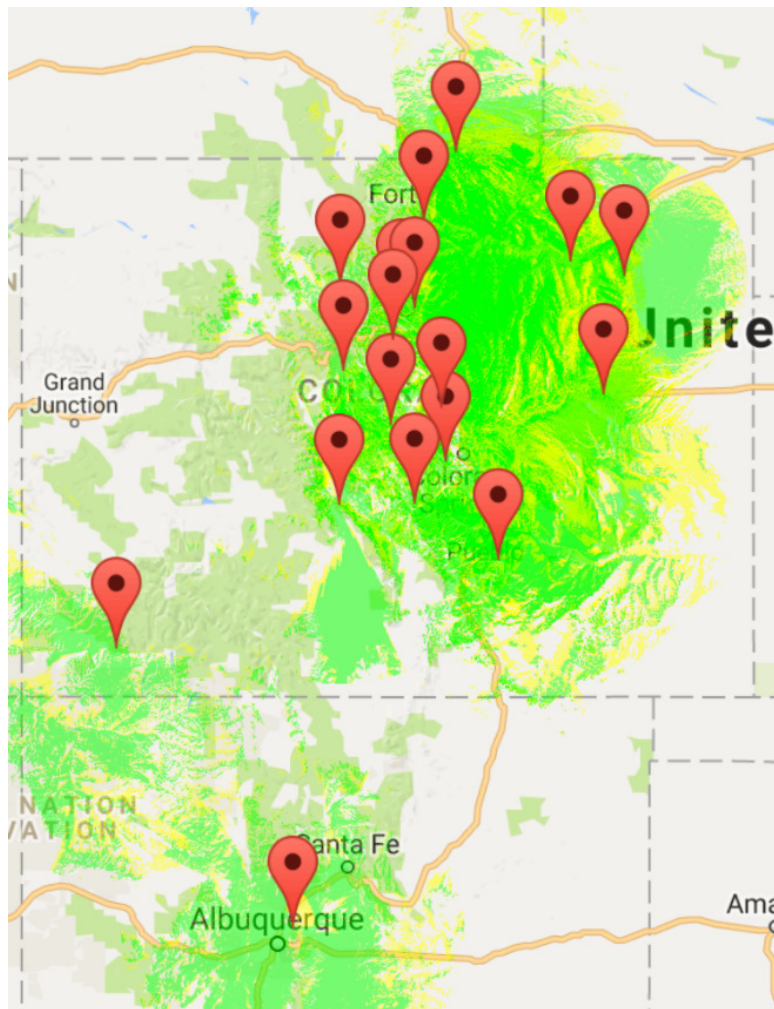
Welcome to summer! Finally!



How about this for a QTH? A REALLY TINY HOUSE?

No, it's the UHF/VHF antenna setup for Jeremy, N6JER in Rocklin CO. Jeremy was experimenting with this antenna setup from his house and thought it would setup nicely on the hillside behind the little playhouse. I think its pretty clever!

Last month in May I went on a mission trip to Gallup NM and I took the CS-800 DMR/Analog mobile on the trip. I learned how to program in some New Mexico frequencies and of course the RMHam Albuquerque (I learned too how to spell Albuquerque) Rocky Mountain DMR link was something I really was excited about using to talk back to Denver. So about the time I got to a point just east of Santa Fe on I-25 heading south I started being able to get into the Albuquerque Rocky Mountain machine, located on SanDia Peak. Most of the TV and FM's are located on this very prominent mountain NE of downtown Albuquerque. An amazing site for a ham radio repeater, but I did notice that as I was driving west on I-40, the system didn't seem to hear me past about 30 miles or so to the west on the way to Gallup. I could hear it just fine, but it couldn't hear me. I was talking to Cris W5WCA, Rich W9BNO, and Greg WB7AHO on the way down there, and then Cris and Greg on the way back a later that week and it behaved in the same manner. But the audio quality was great as you would expect. Those guys have created a great DMR system, and I was really happy with the performance of the 45 watt CSI CS-800 mobile radio. See my full review in last months issue.



The RMHam "Rocky Mtn" DMR linked system

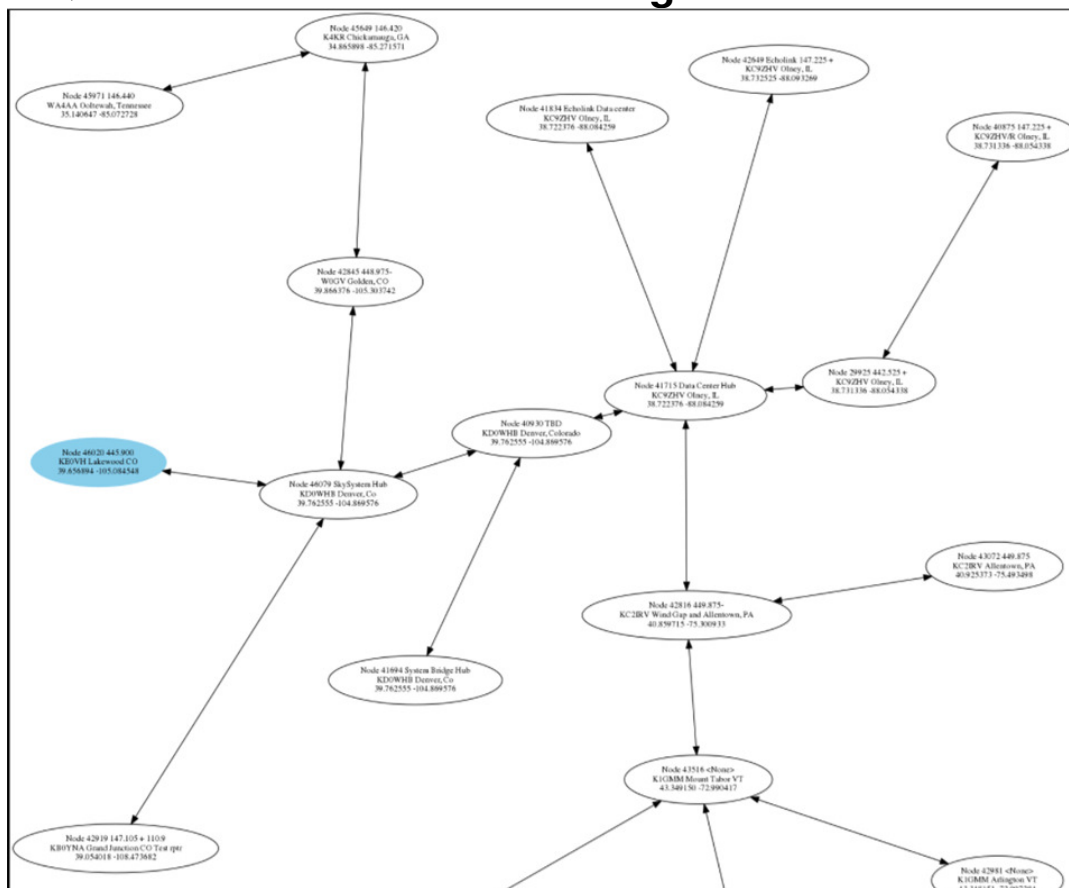
As you can see the network covers a major part of Colorado and around Albuquerque.

By the way, I would like to welcome Rich Anderson, W9BNO to the EMF Engineering family. Rich is taking over the Western Region Manager job for EMF/K-LOVE/Air1. Rich and I have known each other for many years and I was his employee back around 200 at what was then Jones Radio Networks. I am excited about being able to work with him practically daily and for the leadership, expertise, and knowledge he brings to the table. He is an expert engineer, systems integrator, networking guru, satellite guy, and is great with the people who work with and for him. I cannot wait to see all that we can accomplish with him on the team! WELCOME and QAPLA! (Klingon for **SUCCESS!**) Rich!

We are getting into a new system here in Colorado and beyond. AllStar (<https://allstarlink.org/>) is a system similar to IRLP but much more versatile, better sounding, and not so proprietary that you can't do many more things with it simply and easier with a Linux based operating system. AllStar allows many interconnect nodes (both radio and computer "hubs") to be a will connected, interconnected, disconnected and communicated thru. It can even cross mode to DMR and other digital connections thru bridges setup depending on the network node operators. Our good friend Skyler, KDØWHB has built nodes for myself, and Jeremy N6JER using the Debian Linux "DIAL" software available for free from the AllStar network. As of this writing Jeremy will be putting his node on the air from Rocklin CA so we can have connected comms just by picking up the handheld radio! KE0VH1 Allstar node, #46020 is on the air on 449.500 as a simplex node from our Lakewood K-LOVE office using a Comcast public network WiFi, and gives us instant communication connected thru the KDØWHB hub into the local WØGV repeater on 448.975 here in Denver. That hub then in turn is connected out into the world by whoever wants to connect into it. Get a look at the example of how my node is connected by going to this site: <http://stats.allstarlink.org/getstatus.cgi?46020>. With my handheld or a mobile rig getting into any node via whatever repeater I can get into any connection thru AllStar. Now some could say that this isn't "pure radio", and I supposed that's true from a certain viewpoint. It definitely isn't radio to radio like HF comms, BUT, it does allow radio communications to be facilitated thru VHF and UHF very reliably. SO, with that, I think of it as "just a long mic cable" or audio lines to a transmitter. I will be writing more about Allstar in future articles.



The KEØVH Allstar node 46020 being built on the workbench.



A look at nodes connected on a certain day. The bottom two, not visible in this picture, are connected to the UK!



The KE0VH AllStar node in the rack operating with a re-frequencied re-purposed Motorola Maxtrax radio as the simplex repeater radio.

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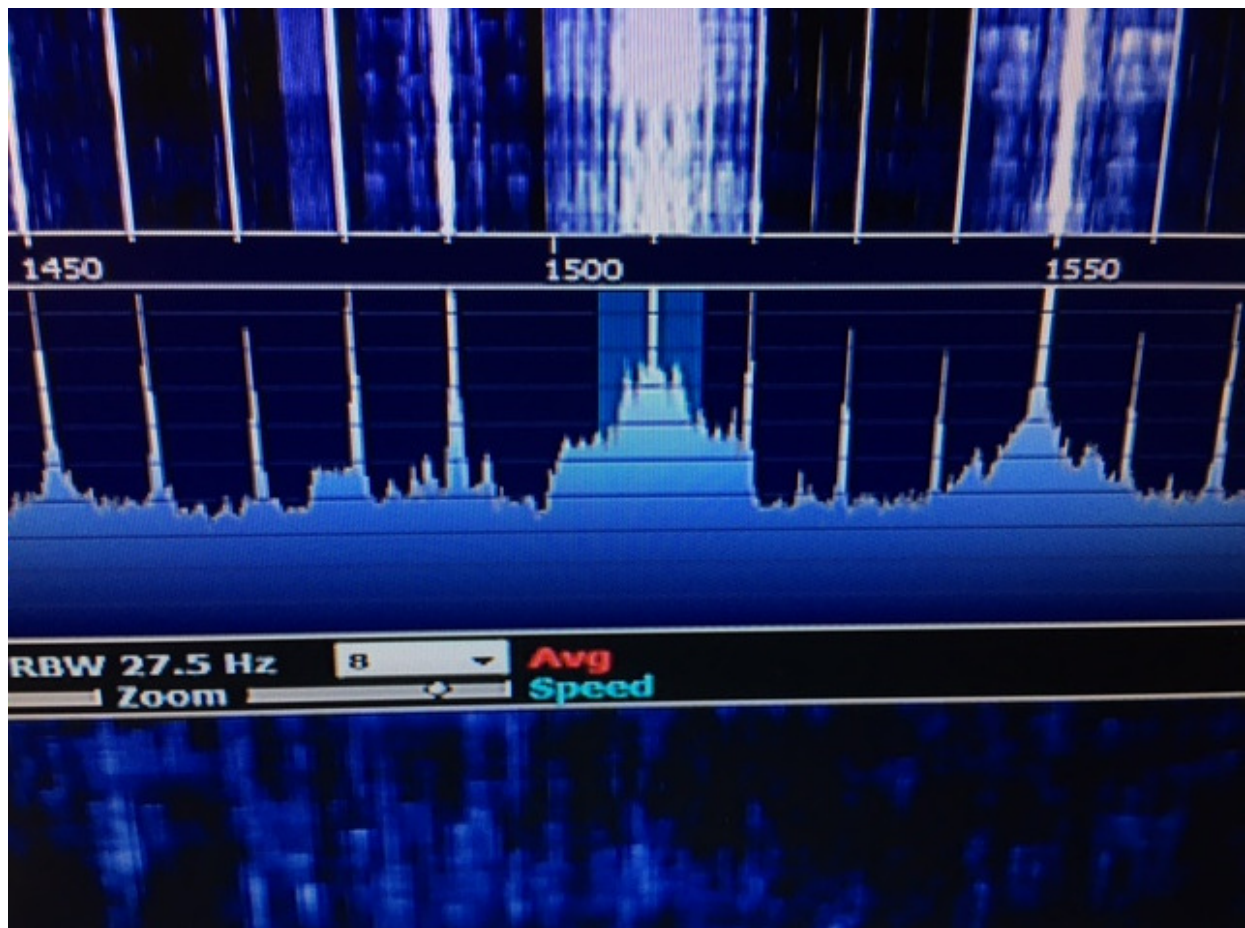


Another upgrade to the KE0VH Hamshack in June. The latest version of the RTL-SDR USB dongle. You can see one at:
https://smile.amazon.com/gp/product/B0129EBDS2/ref=oh_aui_detailpage_o00_s00?ie=UTF8&psc=1

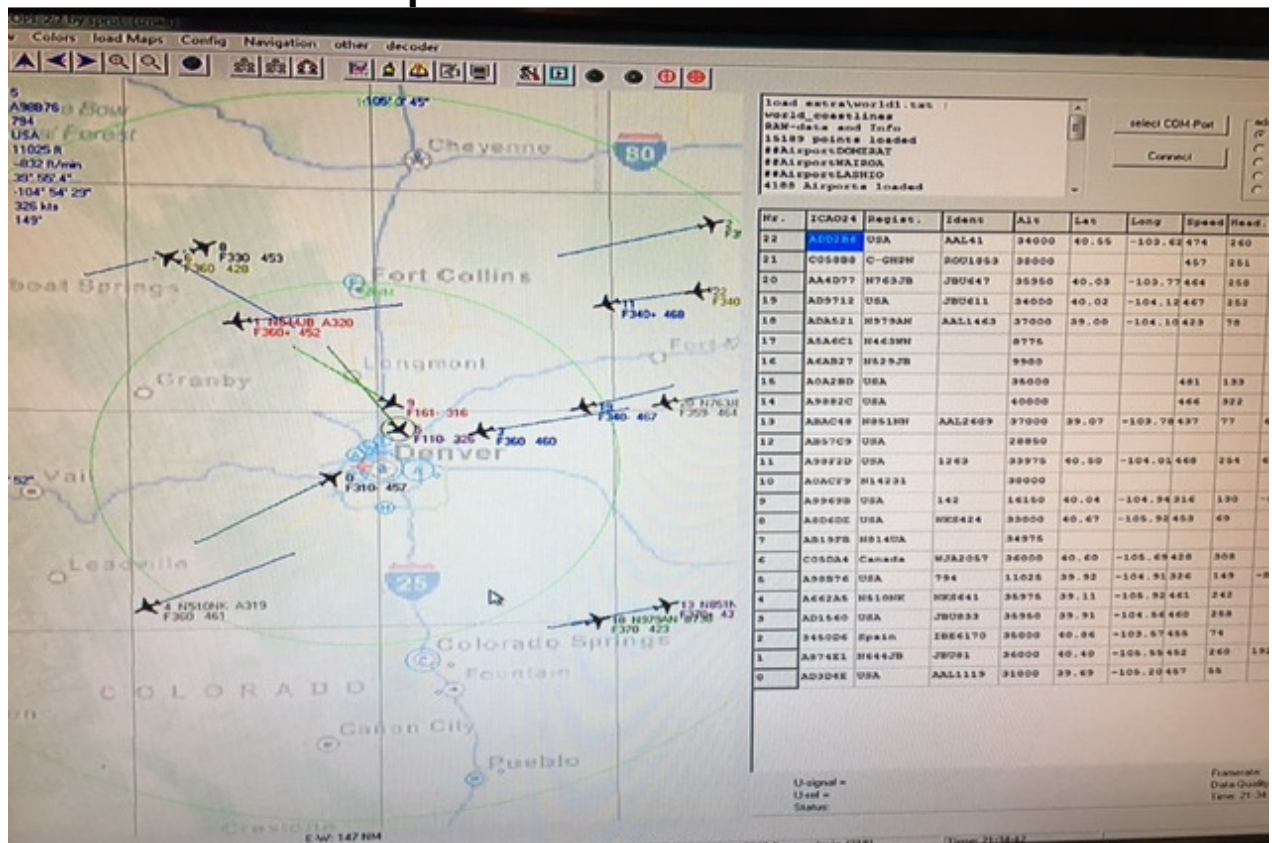
This dongle can tune 500 khz to 1.7 gig with 3.2 Mhz of bandwidth. Easy to interface with your computer thru USB and connect to any antenna with an SMA male to any adapter also available at Amazon. As I have written in the past you can use the free SDR Sharp software and HDSDR to control and use the dongle to provide a visual interface making a powerful software defined radio for only \$20. Many have even used these to create a frequency display for radios such as a Kenwood TS-2000 and more. Check out a lot of uses, software, and so many things available and to learn more go to: <http://www.rtl-sdr.com/>. ADSB aircraft “radar” is even do-able as I have written about in the past. And for \$20? I can’t even have imagined this sort of thing growing up listening to radio! ☺



HDSDR Sharp using the new dongle receiving 1510 am in Denver



A closer look at the spectrum at 1510 kHz in the HDSDR software



Tracking aircraft with the ADSB software included in the SDR Sharp (AirSpy) software

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I will be adding more to my website archives here soon.

Or see the complete archives at:

<http://www.smpte-sbe48.org/wp/>

AND

**Don't forget the SBE Chapter 73' Of The Air
IRLP (and Echolink) Hamnet, every MONDAY EVENING
At 7pm Mountain time (9pm Eastern) for radio discussions, both
Broadcast engineering and amateur radio.**

**Details on how to
join are at <http://www.ke0vh.com/net/net.html>. I hope
You will be able to join us and share your engineering and
Ham exploits! 73' es God Be With You!**

