

June Club Presentation

Rocky Mountain Ham / NCARC Backbone and Interference handling
James Cizek

From NCARC President

Joe Hawley KDØTYU

This has been a tough time for us all with everyone stuck in the house and even if you could go out where would you go most things are closed. But as things slowly opened, I would like you to know that NCARC is there to help you with any of your amateur radio needs. we pride ourselves on our Elmer group and our Monday night TechNet, so you have not taken advantage of either of these please send us an email or login to our Monday night TechNet and ask questions. Please remember that there is no question that is stupid. Most questions that seems immaterial to you someone else wants the answers but are afraid to ask so join in and have some fun and more importantly get things fixed.

the board of directors or keeping a close eye on the Golden Corral and various other places that we may try to have meetings with restrictions. as of right now I have no more information that what you have right now, but I am in close contact with all possible venues and restrictions. I would like to thank each one of you for your support all the way through this pandemic. feel free to anytime to email any one of us with questions or

Buckhorn Mtn NCARC Repeater Site



Public Affairs Office

Dave Winnett WØDDZ

YouTube

Views(last 28 days): 5,400
Watch Time (last 28 days): 1,100
Subscribers: 1,106
New Subs (last 28 days): 69

Facebook

Members: 306
New Members: 23

Live Stream Equipment

Still working on compiling a list of needed equipment.

Buckhorn Rebuild



Technical Report

James Cizek KIØKN

Horsetooth-

The 145.115 repeater is currently down. The entire hardware stack will be removed from the mountain on Friday, June 12th for a rebuild similar to Buckhorn. A set of temporary 447.275 and 145.115 repeaters, as well as network backbone equipment will be installed to maintain those services while work is performed. The APRS digipeater, as well as the voting receivers for the Buckhorn repeaters that are located at Horsetooth will be unavailable during the rebuild time. When the system is put back on the mountain in a few days, everything will have been tuned, rebuilt, and should be performing better than ever. The new 145.115 repeater will also be placed there at that time.

Buckhorn-

The rebuilt rack was placed 2 weeks ago, The UHF and VHF systems are operating great and I've received reports of significant improvement. Next round there will be to put the new antennas up once PVREA has the new tower in place (currently slated for July). The 224.840 machine was completely rebuilt, tuned and placed back on the mountain. Everything was replaced with new cabling, new duplexer, and all new connectors. It still doesn't work. More to come on that.

Budweiser-

The WIRES-X node for the Budweiser repeater had been working for several weeks, then stopped again. I found the PC that runs the WIRES-X software had crashed. Upon rebooting, the exact same error I was fighting before I sent the HRI-200 interface to Yaesu to fix started happening again, it sees the serial port and can't find the Audio interface. I am looking at the possibility of moving that setup to an MMDVM board and a Linux server instead of using Yaesu's HRI-200 and Windows software, both of which are incredibly unstable and unreliable.

Greeley-

The Greeley site dropped off the digital backbone entirely a few days ago. I cannot reach the site via either microwave path. I have had no reports, so do not know if the repeater is also down. I suspect a major power issue happened there and a fuse/circuit breaker is tripped taking the entire site down. I will make a trip there to inspect (assuming I am allowed on campus with the Covid restrictions) to repair as soon as Horsetooth is complete.

Rattlesnake-

The rack full (10!!) of voting receivers (Affectionately named the "Voter Hotel") has been being worked on feverishly by K2AD in preparation of placing LOTS of receivers at the very, very RF quiet Rattlesnake site. This will go in fairly soon, as well as the new coax entry panel that was purchased to get cables in and out of the enclosure without drilling it full of holes. Once this is in, the permanent antenna mounts will be completed.

The Winlink node there broke again, I think we fell victim to a well known bug with KPC3+ TNC's that run in KISS mode. I have the Winlink node on the bench and am looking to replace the TNC with something else.

I am also investigating moving the Winlink node to Horsetooth (if we can successfully duplex it onto the same antenna as the APRS node). This will remove all TX RF from Rattlesnake (except in case of breakdown/emergency where we could fire up a backup transmitter) keeping this site super quiet for receive!

CSU- Though not an official NCARC owned site, it's a collaborative site between CSUARC and NCARC. The 449.850 is off-air being repaired. Should have that back on soon too!

A new microwave link is being placed at Horsetooth to upgrade a very "on the edge" link we currently have between Horsetooth and Firestone. This link carries the traffic for the 447.275<->447.750 repeater link, as well as the DMR link between Horsetooth/Buckhorn and Boulder repeaters. The link is being upgraded to a high power 5ghz link. It will be in place about the same time as the Horsetooth repeater rebuild finishing up (next few days).

Interference-

We've had a few days of egregious interference again. A quick reminder to please do your best to ignore and not acknowledge the jammer. Please use the new link "Report Interference" found on the NCARC front web page at the top to report anything you hear to us. We continue to work with the FCC on this case.

ARRL Field Day

Greg Ella NØEMP

The NCARC 2020 Field Day is still a go for the weekend of June 27th and 28th. This year we are holding Field Day on Larimer County property at the county fairgrounds, AKA "The Ranch" We have 2 acres reserved at the far Northwest corner, North of the North end of Arena Circle.

We are paying a daily rental fee for this event. Therefore, Friday night setup will not be available. We can enter the property and begin setup on

Saturday morning June 27th at 0600 local time. We need to be packed up and gone by 1800 local time on Sunday, June 28th.

Larimer County required a health plan for this event. A plan has been submitted and approved.

It was emailed to the membership on the morning of June 10th 2020. Currently, attendance at public events is limited to 50 people. Based upon past attendance, this restriction should not impact our event.

Due to ongoing Larimer County operations related to the Covid-19 pandemic, access to The Ranch may be controlled during our event. There are two entrances to The Ranch off of

Fairgrounds Avenue (County Road 5). If the gate to the North Entrance is open and access through there is allowed during our event, this is the best way into our area. If that gate is closed, please use the main entrance. Please cooperate with any entrance controls or check points.

Our location this year is within the controlled airspace of the Northern Colorado Regional Airport (KFNL). For this reason, drones can not be flown at our event this year.

If you plan to operate at this year's NCARC Field Day, please review the operating rules, available on the ARRL web site under

"Field Day". Please note that only one operator can be operating per mode on each band at any time. For instance, we can have one SSB Voice operator and one operator on an approved digital mode on 20 Meters, at a time. I am counting on the operators to coordinate this among themselves, I do not want to have to become the "Frequency Police".

Please keep detailed logs of your contacts, including mode and your power source (solar, battery, generator), and get them to me as soon as possible after the event.

If there are any issues during the event, please contact me directly. If I am not on site, you can call me at 925-321-7994.

Treasurers Report

Darren Kalmbach KCØZIE



Northern Colorado Amateur Radio Club

<http://ncarc.net> P.O. Box 272956 Fort Collins, CO 80527-2956

Treasurer's Report For May, 2020

Account Balances:

Account	Checking	Raffle	Savings	PayPal	WWV	Total
Beginning Balance	\$2,676	\$2,081	\$2,099	\$9,730	\$663	\$17,250
Deposits	\$255	\$0	\$0	\$136	\$0	\$391
Transfers	\$3,000	\$0	\$0	-\$3,000	\$0	\$0
Withdrawals	\$3,864	\$0	\$0	\$5	\$0	\$3,868
Ending Balance	\$2,068	\$2,081	\$2,099	\$6,861	\$663	\$13,773
Outstanding Items	\$0	\$0	\$0	\$0	\$0	\$0
Net Balance	\$2,068	\$2,081	\$2,099	\$6,861	\$663	\$13,773
Net Change	-\$609	\$0	\$0	-\$2,869	\$0	-\$3,477

Expenses: Storage, 3yr Hosting, Buck E Antennas/Racks, RR Entry Panel
Revenue: Memberships

Membership Activity:

For May, 2020: 233 Members (3 new)

For May, 2019: 235 Members

