

Most of the local Ham Repeaters and linking systems sorta explained. Updated 12/18
By K4HAT marlins@coastalnet.com greetings and Merry Christmas 2018 !

This list is for visitors to Dare County and Hatteras Island National Seashore including
Hyde County and Ocracoke which we consider our "service" area.

North and West

146.835 pl 131.8 UNC Columbia NC Tyrell County tower at 1200 ft area wide blow
torch.
443.300 pl 131.8 UNC Columbia NC Tyrell CERA Backbone
146.655 pl 131.8 Elizabeth City TARS
444.300 pl 131.8 Elizabeth City TARS
146.940 pl 131.8 Mamie, 425 ft just across Wright Memorial Bridge in Currituck .OBRA
444.850 DMR Mamie in Currituck County also on the NCPRN system color code 1
145.110 pl 131.8 Kill Devil Hills 200 ft OBRA Flagship (most used)
442.725 pl 131.8 UNC Columbia NC Tyrell County at 1200 ft Fessenden Backbone
(little if any hang time no courtesy tone and a suppressed below the PL ID)
146.715 pl 131.8 Englehard at 600 ft our Mainland backup
224.100 pl 131.8 Englehard same height
444.750 pl 131.8 Englehard Same height

Cape Hatteras National Seashore

145.290 pl 131.8 NASA Site, Bodie Island Fess. at 425 ft linked to 442.725 full time
444.125 pl 100.0 NASA Site, bodie Island Fess. at 425 ft All Star node
(This repeater is on a antenna that broke off in June 18, waiting for a climber !)
444.9875 DMR NASA Site, Bodie Island Fessenden, at 425 ft shares the 145.290 spot
on the tower NCPRN
444.325 pl 131.8 Rodanthe Waves and Salvo low power translator to Buxton 145.150
145.150 pl 131.8 Buxton, Fessenden Mothership linkable all over the place to everything
146.625 pl 131.8 Buxton on new DMR repeater this is on the Brandmeister system
53.010 pl 131.8 Buxton, stand alone, Fessenden six meter Echolink WX4OBX-R
442.425 pl 100.0 Buxton connected full time via IRLP 8536 to the Carolina 440 System
444.925 pl 131.8 Buxton no hang time or beep tone, Echo/IRLP node 2003, IRLP 8270
144.390 APRS Buxton, WX / Digipeater and 144.390 Buxton, W4HAT-12 APRS Igate
444.0625 DMR only 190 ft Power company tower Buxton color code 1 NCPRN system
444.225 pl 131.8 Ocracoke Fessenden translator (to 145.150 in Buxton) 25 ft

The way it's hooked up Fessenden wise..

Our first and "mother ship" repeater is 145.150 in Buxton. It's hardy. On a two hundred
mph 300 ft tower, on a great generator, high up, good antenna, Vertex Standard 100 W
into a beautiful Decibel Products DB Oh My Goodness antenna. On huge hardline.. it
was not always like this. It used to be much lower. Much less range by itself. So in order
to make it easy for low power radios all over the seashore to get to the home repeater we
put up a bunch of 5 watt, 35 ft t cross band repeaters. Hooked on one end to the 145.150

repeater in Buxton. There are still two of those, one in Ocracoke on 444.225 pl 131.8 and one in Rodanthe on 444.325 pl 131.8 this is the Jim Huskins linking System. (ask K4HAT about it.)

The 145.150 repeater has a UHF radio tied to it that serves as a link radio to two “systems” one, the Columbia Emergency Repeater system mentioned later and the other is our very own system over on 442.725 explained below. We sometimes leave “ one five” connected to the rest since there is so little activity. It can be confusing. Hopefully this spring (15) we can have two link radios so all functions will work all the time not just Columbia 443.300 on Wednesday and 442.725 the rest of the week....

We wanted a system where with minimal trouble you could talk from the Virginia Line to the North and all the way down to the core banks to the South and out pretty far west. Randy managed to convince Mike and the State to allow us to establish a backbone repeater in Columbia and from there we just “full time linked” a few of the other repeaters in our system. Bodie Island South Nags Head, (145.290), Buxton, (146.625), Ocracoke / Hyde County (146.715) .

The second channel on the 145.150 link system is to the Columbia emergency Repeater system. It’s a uhf repeater tied to other uhf repeaters scattered about the UNC TV system footprint. Right now Columbia and Williamston (443.300 and 444.250) are tied. The CERA system has another 10 repeaters tied to it on a on demand (DTMF Controlled) link system. Look at the <http://www.taars.us/> web site for data about link codes etc.

Outer Banks Repeater Association linked system.

You really don’t know this is even here. Both the 145.110 Repeater and the 146.940 Mothership repeater have a proper voting system for remote receivers to extend their range. The 145.110 repeater remote receiver is in Nags Head and the 146.940 repeater remote receiver is on Bodie Island maybe soon to be Skyco.

The 145.110 repeater also sports a frequency agile remote UHF base connection which we use on Thursday evening to connect to the Columbia Fessenden backbone on 442.725 as to establish a area wide net..

145.110 Kill Devil Hills, 145.290 Bodie Island, 444.325 Rodanthe, 146.625 and 145.150 in Buxton, 146.715 in Ocracoke all connected together.

The Fessenden Radio over internet links.

Echolink node 2003 K4OBX-R is linked to the 444.925 repeater in Buxton. It’s range is lower Hatteras island. It has no hang time or courtesy tone. The only way you know your on this repeater is to hear it. (send a star !)

Echolink node 2014 or K4OBX-L is connected to our UHF repeater in Columbia and therefore any repeater that is linked to. 29, 15., 715 etc. The K4OBX-L node is now located at the heavily fortified home of N4ACT, Jim in Nags Head

to cause the Echolink node to ID send the * command. (might need to hold the key down a second before hand to allow all the connections to come up...)

to establish a link to another Echolink station send the * command preceding the other stations node number. for instance to connect to the Echolink test server node number 9999 you would send *9999.

To connect to Ocean City Maryland you would send *54045 and that would connect our

system to the N3HF 443.450 repeater on the Fire Department in OC MD.

This is the same command for all Echolink stations world wide.

send the star, then the node number.

Want to find a echolink station anywhere... google it. then dial the star and node number.

presto your talking to McMurdo Station Antarctica ! (be careful of the time shift)

To take any echolink connection down hit the pound sign #

for net control operators... if you do not wish Echolink to be enabled during a net or when people connecting in a just drifting by mode, unlike say K4UOR from Shelby...

you can disable the node by sending OFF that's 633 and when you are finished your task say the net or whatever ON starts the echolink node back up.

other commands 08 ask echolink if it's connected and if it is, reports that.

09 reconnects to the last station the computer was connected to.

K4OBX-R node computer and link radio is located at the Frisco fire department in the attic.

K4OBX-L node computer and link radio is located Nags Head at N4ACT/s home.

WX4OBX-L node is suppose to be on 53.01 and at the rescue squad (maybe someday)

IRLP 8536 node computer and link radio located in FVFD attic next to Echo 2003

Were part of the Carolina 440 system here on the Island through the IRLP system and reflector 9201 our link is on the US Cell tower in Buxton, on 442.425 pl 100.0 (like the rest of their system) see Carolina 440 on the web. This node and repeater can only be controlled by web interface and not from a touch tone pad. It's intent is a constant reliable connection to the Carolina 440 system but we can transfer it to things like NASA or the emergency management reflectors or NOAA etc. There are several statewide nets here and one from Virginia.

IRLP nodes 8270 Buxton (444.925) and 8536 (444.125)

IRLP is another Radio over internet system that only connects to other repeaters but it's by far higher quality all around compared to Echolink. It's restricted to repeaters only though. Look up the list on www.irlp.net it's pretty amazing.

Commands are the same for both our nodes. Go to irlp.net for the node numbers. To connect to another IRLP station world wide, just (by touch tone) send the four digit node number. You will hear the system reply.

On the 444.125 repeater you can also ask the node the time by sending star 1 (tells you how good your getting in, it hears you, you hear it.... To hang up a connection on the IRLP system here and worldwide, send 73

There are five DMR Repeaters in our Outer Banks System. Mamie (Lower Currituck), Nags Head, Buxton and Englehard on NC PRN/s C-Bridge system . See additional information on the DMR system.

. 146.625 repeater in Buxton DMR Color Code 1 is connected to the Brandmeister network. We have static talkgroup 31377 called OBX Local and East NC 313

Brandmeister is our newest experiment bear with us.

Buxton 442.425 is usually how we stay connected to our friends in the Raleigh area we had a great old windows ATM computer that quit so the fellows out in the research triangle built a raspberry pie node for that link. But... Since we have had no luck getting our newest node (a Raspberry Pi) to work on the Carolina 440 system it's still down. Keep an ear out on 442.425 if it comes alive you will hear it.

We have another connection to the Carolina 440 system from the Bodie Navy tower on a antenna that fell off the tower. It's 444.125 pl 100.0 hz and is using a All Star node 47731 Since the antenna is down we have it down here on our South Buxton water tank AllStar is pretty neat. It's linked by all star to that network of about twenty wide area coverage repeaters right down to Wilmington where some of my kids live hi h

I see N2DYN on there now and then.i.

A few notes.....

53.01 has a new home but has not been installed yet on the South Buxton water tank at 130 ft. It might be somewhat lame till early winter when we make some minor adjustments like the 250 watt final amp and a remote receiver site.

And here's one for you.... 10.368.130 that's not Megga it's Gigga ! We have at the Hatteras Island Rescue Squad about half way up the metal self supporting tower.. a rain gutter. Check it out. It's actually a 10 Ghz beacon and it's amazing the people who have heard it. It's been here for years just like the 144.390 Digipeater for APRS running from the cell tower in Buxton check that sucker out on the APRS network WX4OBX-4 It hears a lot of crazy stations especially during band openings.

Keep tuned for more... K4HAT