

GASTON COUNTY AMATEUR RADIO SOCIETY

GCARS

GUIDELINES for users of the N4GAS REPEATERS 147.120 & 444.55

GENERAL:

The **N4GAS** repeaters are a duplex VHF & UHF-FM repeaters by Yaseu/Vertec. They are “open repeaters” for use by all licensed amateur radio operators. The repeaters are supported and maintained by the members of the **GASTON COUNTY AMATEUR RADIO SOCIETY (GCARS)**. The repeaters are located on Spencer Mountain, in eastern Gaston County, approximately 850 feet above sea level.

The 2m repeater (VHF) transmits (output) on 147.120 MHz and receives (input) on 147.720 MHz. And UHF (440) is 444.550 output and 449.550 receive. The 2M and 440 repeaters are Yeasu Vertex repeater with an RC-96 controller on 2 meters and an SCOM 5K on 440. Both repeaters have a power output of 20 watts and has a range of about 30 to 45 miles (Concord to Forest City to Hickory) depending upon conditions and location. The “time-out” feature will cause the repeater to turn off if the transmission time exceeds 3 minutes. During “Net” operation, it is usually switched to 5 minute timers and CW only IDer.

Even though the repeaters are open repeaters for use by any licensed amateur radio operator, the majority of the users are members of the **GCARS**. The **GCARS** meets at 7:00 P.M. on the 1st Monday of each month. The club upstairs in the Red Cross Building, 190 S. Oakland St., Gastonia, NC 28052. Visitors are invited to attend and/or join.

PACEMAKER NET:

The **GCARS** sponsors the **PACEMAKER NET**. The **PACEMAKER NET** meets each Tuesday evening at 9:00 p.m. This net is used to help operators become familiar with operating and participating in a controlled net. This net is also used to pass along any messages, bulletins, and announcements. During net operations, Net Control has priority use of the repeater, and stations not wishing to participate in the net should remain clear. Club members are encouraged to check in to the net. The GCARS also allows A.E.R.E.S to use the 2m repeater each Thursday at 7:00 p.m. for a training net. They also have priority during the net and during any actual or simulated emergency nets.

PURPOSE:

The primary purpose of the **GCARS** repeater is to communicate with other amateur stations for public service, safety, and recreational conversation. In addition, the **GCARS** repeater can also be used to promote & further the interest of amateur radio. All communications will not exceed the restrictions & limitations imposed by Section 97.113 of the FCC Rules as revised Aug. '93

REPEATER USE:

Call Sign: You must announce your call sign at the end of each transmission or series of transmissions or at least every 10 minutes during a contact; you don't have to transmit the call sign of any other station, including the one whom you are contacting. If you are in your automobile, you may add “**MOBILE**” to the end of your call sign, but not required.

To key your microphone to turn on the repeater without identifying your station is called “**kerchuncking**.” Aside from breaking FCC rules, it is poor operation practice. If you are smart enough to pass the test, please act accordingly. When you want to check out your radio to see if it works or are able to access the repeater but you don't want to have a conversation, say your call sign followed by “**TESTING**.”

Establishing Normal Contact: After first listening to ensure that the repeater is not in use, transmit (YOUR CALL SIGN) “**MONITORING**” or “**LISTENING**” to attract someone’s attention. This is similar to calling CQ on the HF bands or SSB only shorter. Calling CQ is not a common practice used on a repeater. If anyone is interested in talking, they’ll call you.

When you want to join in on an existing conversation, **transmit your call sign** during a pause between conversation, the next station in queue to transmit should acknowledge you and permit you to make a call or join the conversation. When you are calling another station, simply transmit the call sign of the station being called followed by your call sign. Once contact is established, first names are generally used. Proper language and conduct is expected while operating through the **N4GAS** repeater.

Emergencies During Existing Conversation: If you have emergency traffic to communicate and you determine that there is a conversation in process, you may interrupt during a pause between transmission by transmitting “**BREAK, BREAK**” followed by your call sign. When you are acknowledged, indicate that you have emergency traffic and proceed with that traffic. Any station hearing this “break-break” is **required** by the FCC to relinquish the repeater for the emergency.

The Conversation: Use normal English, avoiding CB jargon such as “**personal**” for “name,” “**come on**” for “Over” or have you “**got your ears on,**” etc. “**10-Codes**” are used for Police/Business/CB and should be avoided. “**Are you by?**” is also for CB only. Never use “**CQ**” to break in on a conversation as it is a general call for any station and is meant for an unoccupied frequency and pure “CB” when used for ‘break’ purposes. Most “Q” signals should be avoided as they are designed for ‘CW’ operation. Proper/clean language and conduct is expected while operating through the repeater. Although “CB” talk is not illegal, which do you prefer to be identified as, “a ham” or “a CBer” on the repeaters? Transmissions should be kept as short as possible and to the point; short transmissions permit more people to use the repeater. Pause between transmissions so that stations wishing to join in will be able to transmit their call sign. This also allows the repeater to reset the time-out timer. **ALWAYS** wait for the courtesy tone, both as a courtesy and to let the timer reset to avoid “talking it down.” If your conversation is longer than 20 minutes, please allow a 5 minutes break (hard to do) to let other stations access the repeater. At the end of a conversation or if no contact has been made, close by transmitting your call sign, followed by “**CLEAR**” or “**CLEAR AND LISTENING**” to make it known that others are free to take over the machine.

AUTOPATCH:

Use: The autopatch is a device that allows telephone calls to be made over the repeater. **It is for the exclusive use** of **GCARS** members in good standing only. The members are encouraged to use it regularly (once or twice a month) so that they are familiar and comfortable with its use. Practicing under routine conditions is the only way to ensure you will do it right when there’s an emergency.

The autopatch shall **NOT** be used to conduct any business or commercial affairs. It **IS ILLEGAL** to call you office to let them know you will be late for work. It can be used, however to phone home, or call other amateurs or friends when it is not convenient to use a public telephone. Please keep calls as short as possible (a 3 minute timer is activated unless 911 is dialed and will “hang you up”). Failure to follow these simple rules may result in the loss of the autopatch privileges. The autopatch can also be used to summon emergency help. 911 dials Gaston County Communications center at 704-866-3300, not normal 911.

When you want to use the autopatch, listen to ensure that the repeater is not in use. Transmit your call sign followed by “**Accessing autopatch.**” Hearing no traffic, you may proceed with your autopatch. To access the autopatch you need to transmit the autopatch access code and the phone number at the same time. The current autopatch code is:_____. When you establish a call, explain to the calling party that you are calling on the radio, that your call is not private, and they have

to wait their turn to talk, usually after you say the word “**OVER.**” Proper language and conduct is expected while using the autopatch. If you are put on hold and music comes on, you must hang up as music is illegal. The autopatch is a privilege and if not operated properly can and will be taken away.

EMERGENCY AUTOPATCH:

Certain codes have been established to simplify and accelerate using the autopatch function under emergency conditions. The use of these codes will allow you to quickly contact certain agencies during emergencies. To initiate an emergency autopatch, transmit your call sign followed by “**Accessing Emergency Autopatch,**” then enter the appropriate code. The repeater will automatically start to dial an emergency autopatch.

Autopatch access codes are confidential, for use by club members only, and are NOT to be published. You may dial numbers for non-club members if requested, but you must dial the entire number for them.

To end the autopatch contact, transmit your call sign followed by “**Terminating Autopatch on the N4GAS Repeater after third party traffic.**” and press ‘#’ button to disconnect.”

Test Features:

There are two test features in operation on the repeater.

1. S-Meter (Signal Strength)

Access this test by first announcing your call followed by the word “Testing.” Press the code _____ and release the PTT button. Repeater will respond with a relative signal report of up to ‘S9 Plus 50’ or less.

2. Tone Pad Test *Used to test your ‘Touch Tone Pad’*

Access this test by first announcing your call followed by the word “Testing.” Press the code _____ followed by up to 32 other keys before releasing the PTT. The repeater will respond by saying the keys you pressed in the order you pressed them.

CLUB BULLETINS:

From time to time the club (GCARS) will but special bulletins on the repeater and they can be accessed by first announcing your call followed by the words “Accessing bulletins.” then pressing 997 for #1 or 998 for #2 on your key pad.

Conclusion:

The amateurs who use the **N4GAS** repeater take pride in the way they operate on the repeater and of their operating practice, whether it be casual conversation, net control or emergencies. Listen to them and you will quickly learn proper operating procedures. Take pride in yourself and you amateur radio license.

The following is a list of agencies, phone numbers, and speed dial number.

Presently all are accessed through the county by dialing 911 which goes to 704-866-3300

<u>AGENCIES</u>	<u>PHONE</u>
<u>NUMBER</u>	<u>ACCESS CODE</u>

ALL LOCAL CITY POLICE

911 EMERGENCY

ALL LOCAL FIRE

HIGHWAY PATROL

GASTON COUNTY POLICE

COUNTY COMM WILL TRANSFER YOU TO THE PROPER AGENCY IF YOU MUST TALK TO THEM

OTHER

If you have any problems or questions concerning repeater guidelines, functions or activities please contact a club officer or a repeater control operator (K4GLP).