



CENTRAL GEORGIA AMATEUR RADIO CLUB, INC.
P.O. Box 2585
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February 2009 Newsletter

CGARC Annual Financial Report For 2008

Prior to going into our calendar year 2008 report, I would like to recap part of 2007. During 2007 we had a major lightning strike on the 146.25/85 (WA4ORT) repeater that damaged the antenna and hard line. Club members stepped up big time and generously donated a total of \$1599 for the repairs and replacement. Because the county required a licensed contractor to work on the water tower Sheets Communications was contracted to replace the antenna and repair the hard line. Larry Sheets' crew did the work, including some labor donation because he was doing other work at the same site, for a total cost of \$1194.50 to the club. His bill allowed the club to file a claim of \$1394.50 that was paid by our insurance company. All those wonderful donations by club members and the discounted contract work resulted in an account balance of \$2864.37 at the end of the year in 2007.

Now, let's look at calendar year 2008. It was a very good year for our club. We had 12 new members join us during the year. Because some members moved away or for other reason failed to renew membership we had a net gain of 7 members giving us a total membership of 45 at the end of the year. Note that dues received and posted in a calendar year are not necessarily for dues for that year. Some money received is for the next year.

2008 starting balance: \$2864.37

Categorized Income for the year 2008

Club membership (new & renewal) dues:	\$1019.00
Club meeting Half-and-Half drawing (including donations):	\$249.50
Repeater donations:	\$173.00
VEC Testing gain (\$290 in fees - \$232 out to ARRL):	\$58.00
Profit from Heart of Georgia Hamfest snack bar:	<u>\$84.10</u>
Total income for 2008:	\$1583.60

Categorized Expenses for the year 2008:

AT&T Telephone bill (WA4ORT Repeater landline):	-\$383.02
Miscellaneous repeater repair parts (WA4ORT & NM4W):	-\$304.54
Office supplies, postage stamps, PO Box rental:	-\$143.53
Cochran repeater (NM4W) Duplexer replacement:	-\$777.00
WA4ORT Repeater Weather Reporting Equipment:	-\$1426.25
SERA Membership:	-\$20.00
Middle GA area Amateur printing & mailing:	-\$215.40
Flowers for Sam Privette WB4UHL(sk) funeral:	<u>-\$64.20</u>
Total expenditures for 2008:	-\$3333.94

2008 ending balance: \$1114.03

CGARC Monthly Financial Report For January 2009

Because some of our members are unable to attend all of our monthly meetings we will publish a club financial statement in each Newsletter issue. The club opened 2009 with a balance of \$1114.03 and closed out January with a \$1549.46 balance. The transaction summary is as follows:

Beginning Balance:	<u>\$1114.03</u>
Club membership renewal dues for 2009:	\$268.00
VEC Testing gain (\$10 in fees - \$8 out to ARRL):	\$2.00
Club meeting Half-and-Half income:	\$32.00
Repeater donations:	120.00
AT&T Telephone bill (Repeater landline):	-\$30.90
WA4ORT Repeater license renewal (through ARRL)	-\$17.30
2008 Santa Patrol Certificates and 911 Center Head Set	-\$40.09
Certified Letter mailing charge (WN5P notice):	<u>-\$5.32</u>
Ending Balance:	\$1442.42

Membership Dues Renewal

Central Georgia Amateur Radio Club had 45 members at the end of 2008. Thanks to the 33 members that have paid their dues for this year. As a reminder members should renew their membership between October 1 and January 31. If you are uncertain as to whether or not you have paid your 2009 dues, contact Bill, KC4WU, at the next meeting, by phone at 478-542-1620, or by email at KC4WU@yahoo.com.

Squelch Tails

By Mike Besemer, WM4B

Greetings everyone,

This is the first installment of what I hope will become a regular column in the CGARC newsletter. There is always information that needs to be passed along to our repeater users and questions that need to be answered, and I think this is another great way to get the word out to everyone.

The good news is that both repeaters are purring along very well. There are no issues that I'm aware of and no heavy-maintenance planned.

Coverage: Coverage is always an issue with any repeater system. No matter how perfect the location, a repeater will always have dead spots inside the coverage area and the footprint will never be a perfect circle. Although there's not much we can do about these problems, it does help if everyone understands that they exist. For example, Perry and Fort Valley are both low-lying areas and depending on your exact location either of these areas can be on the fringe of the coverage area. There are also areas on Hwy 247 and Hwy 96 that can be problematic. Environmental variables play a big part in how big these problem areas are. On Hwy 96 between 247 and Moody Rd., the low lying areas are much more problematic when there are leaves on the trees. Rain, fog, humidity, temperature and a lot of other factors can impact coverage as well, so keep these things in mind when using the systems. I certainly don't mind hearing from you if there's an issue with system coverage, but

keep in mind that coverage can (and does) vary greatly. To a certain extent, you can circumvent some coverage problems with power... you can always turn up the wick if you need to (You ARE complying with §97.313(a), aren't you?!). Unfortunately, increasing transmitter power doesn't help if you can't HEAR the repeater, so you're next alternative (which should actually be your FIRST alternative) is your antenna. Are you 30 miles from the repeater and using a Rubber Ducky? Is your quarter-wave antenna mounted in the bed of your pickup? Does your 1/2 mag-mount have a decent ground plane? Is your NMO mount (or SO-239 mount or 3/8" mount) corroded between the mount and the antenna? These are all things to consider if you're having coverage issues. And when you're buying gear, keep in mind that your money is best spend on antennas FIRST and power LATER. Nearly ANYTHING will beat a Rubber Ducky. A 1/2 wave or 5/8 wave will (generally) work better than a 1/4 wave. An antenna mounted high and in the clear will (generally) outperform (or at least be less directional) than one mounted on the trunk-lip or behind the pickup cab. I know this all seems pretty obvious, but sometimes the obvious eludes us.

Repeater Modes: Everyone is probably aware that the 6.85 machine has a lot of bells and whistles, but did you know the repeater also operates in a variety of modes, depending on inputs from the interconnected equipment, preset timers, control operators, and users? And did you know that (in most cases) the repeater lets the user know what mode it's in?

- The most common operating mode is 'Normal' mode. In this mode, the users will hear the two-tone increasing courtesy beep, all repeater functions are available to users, voice IDs and announcements are present, and there is no key-up delay.
- Another common operating mode is 'Anti-kerchunk' mode. This mode is initiated by a control operator on an 'as-needed' basis to mitigate problems with noise bursts and kerchunkers bringing up the repeater. In this mode, the repeater operates the same as in 'Normal' mode, except that users need to wait about 2 seconds AFTER keying the microphone before they begin to speak. The delay is only enabled when the repeater carrier is down. If you are in a roundtable and the repeater never drops, the delay is not active. There is normally no user indication that this mode is active, however if it is enabled for a long period of time the repeater hang-time may be increased.
- 'Weather' mode is triggered by an input from our WX-200 weather receiver as a response to a NOAA weather watch or warning for Houston and its surrounding counties. In this mode, the courtesy tone is changed to a Morse Code 'W' and announcements and voice IDs are inactive. You will also hear the WX-200 transmit a message every few minutes indicating what type of event triggered the entry into 'Weather' mode. This mode is also triggered by any NOAA test messages (usually broadcast around 1130 on Wednesdays). 'Weather' mode will terminate by itself when the NOAA watch/warning/test period expires.
- In 'X' mode, the WX-200 is not active in the automatic mode and therefore it will not alert users to any NOAA watches/warnings/test messages. This mode is initiated by a control operator and is intended for use when we have spotters deployed and incoming announcements may be counterproductive to the Weather Net. Voice IDs and announcements are inactive in this mode and the courtesy tone is a Morse Code 'X'. This mode will rarely be used.
- 'Net' mode is triggered by a timer within the repeater controller. It starts on Tuesday evening at 2025 and runs until 2130. In this mode, Voice IDs and announcements are inactive and the courtesy tone is a Morse Code 'N'.

- 'Power Failure' mode is used to alert users that primary power to the repeater has failed and that the system is operating off backup batteries. In this mode, Voice IDs and announcements are inactive and the courtesy tone is a Morse Code 'P'. Please minimize repeater use while it is in this mode. The repeater will reset itself to 'Normal' mode when power is restored.

- In 'Link' mode, the repeater is linked via a Remote Base (RF Link) to the 5.11 repeater in Cochran. This mode is initiated by any repeater user. In this mode, Voice IDs and announcements on both repeaters are inactive, users will hear the courtesy tone on both repeaters, and the courtesy tone is a Morse Code 'L'. The Morse Code 'L' helps differentiate 'Link' mode from normal Echolink operation. NOTE: This mode is not yet implemented.

- In addition to the above modes, there are two other indicators that repeater users should be aware of. These are a courtesy tone of a Morse Code 'K' or a Morse Code 'T'. These tones indicate that the backup repeater is active. When the backup repeater is active, users will not have access to any ancillary repeater functions. (Autopatch, weather conditions, NOAA weather radio, weather warnings, link). Also, the coverage area may be impacted..

Repeater Ancillary Functions: All repeater ancillary functions are available to all repeater users (with the exception of the autopatch, which is limited to club members.) A list of codes needed to activate these functions can be found on the CGARC website (<http://members.cox.net/cgarc>) on the 'Repeater 146.85' page.

Okay... that's it for this month (and probably WAY more than anybody bargained for). In the meantime, if you have questions about anything I've written above or have other questions or ideas for topics, please post them to the CGARC Yahoo Group using the subject line 'Ask the Repeater Dude'. If you're not a member, you can join by going to the CGARC website and signing up. If you want to remain anonymous, email me directly at WM4B@arrl.net.

73 and may all your signals be full quieting

Mike
WM4B

Foxhunt anyone?

The first Fox Hunt for 2009 is set for Saturday evening, March 7 (Rain date – March 14). Participants should contact Preston Morgan, WR4PM, (email presmor@yahoo.com or phone 731-2871) or Bill Atkins, KC4WU, (email kc4wu@yahoo.com or phone 542-1620) to sign up or to get more information. KC4WU will be the first Fox (since he will probably never win a Fox Hunt) and will start transmitting promptly at 1900 hours. All "hunters" should gather at the Goodwill Trailer in the south parking lot of the Galleria Mall in Centerville. Initial communications and control will be on the 146.25/85 repeater and the Fox will announce the Hunt frequency (typically, 146.55 mhz or 146.58 mhz) and the Fox call sign.

For everyone participating we have set the following rules for the first Fox Hunt. As hunts continue the group may wish to or need to change the rules.

- (1) At least one member of a hunting team must be a licensed ham.
- (2) The winner of the Fox Hunt (the first to find the Fox) becomes the "Fox" for the next hunt. In the event the winner cannot make the next hunt, the second place winner will fill in.
- (3) The Fox transmission site must be on public ground. (i.e. parking lot, city park, alley)
- (4) The Fox should locate their transmission site and stay at that site throughout the hunt.
- (5) Once the Fox starts transmitting they shall not change their antenna, output power, or frequency.
- (6) The Fox should start and end each transmission with their station call sign.
- (7) The Fox should transmit continuously for 30 seconds and then silent for five (5) minutes. Announcements made by the Fox should be repeated from time to time as hunters may miss transmissions while using feed line attenuators or rotating beams.
- (8) After 30 minutes the Fox may start giving hints as to their location. These hints can be cryptic but NOT misleading. Examples: "I'm sitting on a pine cone" (near a pine tree), "I see a Health Spa Ad Sign" (near a bill board)... etc.
- (9) After one hour the Fox may announce and transmit for longer than 30 seconds and decrease the wait time between transmissions. The purpose of this is to expedite the conclusion of the hunt.
- (10) As hunters locate the Fox, the Fox must log the time and announce such on the next transmit cycle.
- (11) Under normal conditions the hunt will conclude at 2100 hours, or after 2 hours of hunting. If there is no winner after 2 hours the hunt may be continued until there is one.
- (12) The current Fox will decide and announce the after-hunt meeting place and will buy the first place winner's coffee.

Get those portable 2-meter beams and feed line attenuators ready and start practicing. A good suggestion is to establish your team with at least one other member. You can use your wife, child or friend. They do not have to be licensed if you are. It works much better and safer if you have a driver and a beam holder / signal reader. Safety is a very important part of the game. Do not speed and do not try holding or moving a beam while trying to drive your car or truck. See you in the bushes.

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