



THE REPEATER

*Welcome to the monthly
Newsletter publication of the
Fannin County Amateur Radio Club*



K5FRC Repeaters

(100HZ tone on output of all repeaters)

145.470 (No tone) IRLP 3602 ECHOLINK 143902

145.130 (No tone)

443.750 (No tone) IRLP 7901 ECHOLINK 554534

Digital SSTV 446.125

(10 MINUTE BEACON)

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Fannin County Amateur Radio Club

K5FRC

Minutes for July 16, 2011

The meeting was called to order by Vice President David Keene W5DBK leading the club in the Pledge of Allegiance to the Flag of the United States of America.

David expressed the club's appreciation to Bill Purcell KF5GJY for his monetary donation to the club to help with Field Day 2011 expenses and to the Fannin County Commissioners for allowing us to use the vacated jail facility for our Field Day activities this year. On behalf of the FCARC, the secretary was asked to send a note of "Thanks" to both.

David also informed the club that he had closed the bank account at Legend Bank that was opened for use with PayPal. This account was opened for anyone desiring to order the picture DVDs from the Bike Rally either on the web or just not having the cash with them at the rally. Since it had not been used it was not necessary to keep the account open. The \$100 the club used to open this account, the \$250 donation from Bill Purcell, and the refund money from Marsh insurance that was deposited into this account by mistake will be deposited into the regular club account.

At the June meeting the club Mike Durbin, our club trustee and president, shared the need to purchase new cavities for the 145.130 repeater. A set of cavities were located and purchased for a very reasonable price. If the club wants to proceed with that project David asked for a motion from the club to reimburse the purchase price of \$400. David Reeder WA0RUJ made the motion and Jody Lindsey KE5GIB seconded. Motion passed.

David explained that if the club wants to get that repeater up and running there is also more work that needs to be done. Among other things we need to replace the fiberglass antenna that was damaged during the storm with the same type antenna that is on the VA tower. Due to the size of the antenna this may require professional help. After more discussion and explanations David Keene called for a motion that the club leaves it up to the trustee's discretion to upgrade the North Tower, both repeaters, using full commercial grade hardware. David Reeder made the motion and Mike Lindsey KD5UNY seconded. Motion passed.

David Keene told us about an ARRL sponsored insurance company that offers a million dollars worth of liability insurance for \$200 a year. If we are going to continue to have outdoor activities and do antenna work this is something we need to consider or hire the antenna work done. It would be hard to find anyone to do that work for \$200. Members can go to the ARRL web site and follow the links to find out more. David called for a motion to investigate more about the coverage. Will it cover the bike rally since we only assist and are not sponsoring it?

Jody Lindsey KE5GIB made the motion to research more before making a final decision. Darrell Brewer KE5JHN seconded. Motion passed.

David Keene shared that Doug Mentzer has gotten him interested in Winlink 2000 and all its possibilities for Fannin County. It has been out about ten years. There are two versions, one for HF and one for VHF. Everyone agreed that we should check it out for our use here. It is abbreviated WL2K. Go to winlink.org for more information.

Mark Hetherington KF5KUW expressed his appreciation of the time and effort spent by Mike Durbin K5MJD, club trustee, in the work he does for FCARC. Mike is always willing to share with anyone that doesn't know something and wants to learn, has a question, or needs help. Mark suggested that a committee be formed to help take some of that load off Mike and assist him in this work. David Keene called for a motion that a committee be formed to investigate to find a way to off load some of the pressures placed on Mike Durbin. When asked by David if he was willing to chair such a committee, Mark agreed to be the chairman and select three other committee members to work with him. Mike Lindsey made the motion and Roy Railes seconded it. The motion passed.

David stated that in the process of trying to form a 501-c-3, Glen Warnstaff, the gentleman we hired to assist us has suggested some very specific items that need to be added our club Constitution. While in the process of making these changes there are some other ambiguous wording and other changes that have been voted on the past that were not written into the document that needed to be added or re- worded. David asked Kathy Brewer KE5SLG, club secretary, to present and explain the changes.

During discussion several motions were made and approved.

A motion was made by Jody Lindsey to continue the offer of a free one year membership to any individual taking their initial exam with the FCARC examiners. The new member would pay the prorated dues for the remainder of the year in which they tested and receive the following year free. This motion was seconded by Mike Lindsey. Motion carried.

Jody Lindsey made the motion that the club fiscal year and the membership year be from January 1 thru December 31. It was mentioned that it is recommended that the dues be paid at the Christmas Party but if not paid by December 31 that person will no longer be considered a voting member and cannot hold office. Mike Lindsey seconded the motion and it passed.

Mark Hetherington had made the suggestion that the minutes be posted on line at least fifteen days before the meeting. David Reeder made the motion that minutes be posted seven days before the meeting. Jody Lindsey seconded. Motion passed.

David Reeder made the motion to remove the wording "FCARC reserves the right to refuse membership to persons not beneficial to the club." David Keene reminded everyone that the bylaws would be accepted upon completion as a unit with any changes included at that time. Kathy said that John Skotnik has an answer for that one and that is part of why he is at the meeting.

Kathy introduced John Skotnik KE5VYS. John is an attorney and the City Judge for Bonham. John has a lot of advice for us.

Some of John's words of advice:

Get rid of the word "Constitution". The IRS likes "bylaws". Remember you are not a club anymore, you are a non-profit organization. As a non-profit organization the books are subject to inspection by anyone that climbs these stairs. You have to open them up. You have no choice. It is not advisable to read the minutes out loud in a meeting. The minutes are an approval item, like paying the bills. Government agencies get the minutes three days (72 hours) ahead of time. I make a motion to approve the minutes except.....Vote on it and move on.

The most important thing we got to deal with right now is get these bylaws right and attach to the 1023 to send to the IRS. Things I noticed right off the bat is the words, "right to refuse membership" have got to go. There is a standard two paragraphs that will make the IRS happy. Check the box that says "I want expedited consideration." Clarify who is a voting member. Darrell is going to get the Articles of Incorporation for me. There is no quorum established. Two or three members could show up and disband the club. The paragraph about club disbandment recommended by Mr. Warnstaff refers to a Court of Common Pleas is very good and strait out of the IRS book but we don't have one of those. Change that to "the appropriate court".

You need to adopt a conflict of interest policy separate from the Bylaws. You need a policy to cover "no shirt, no shoes, no service" which is basically about two paragraphs that says, "We are not going to discriminate. You can also have in your bylaws a way to get rid of officers and a way to get rid of members, but if someone comes here and starts a problem ask them one time to leave, when they don't call the police. Disorderly conduct is a class C misdemeanor. The VA police send them to my court. If that don't do the charge can be class A, disruption of a public meeting.

I am telling you right now, if you send this in with these bylaws it is going to come back to you after they have sat on it for months. Let's clean it up now. I will be glad to work with Kathy to get this done.

Mark Hetherington expressed that he feels we really need to define a quorum. Do we want a set number or a percentage of the membership? There was much discussion for the possible definition. David Keene said that Kathy would explore the options and set the number that would be incorporated into the document and discussed later.

David Keene called for a motion to table the discussion until the next meeting and ask Kathy to put together another version with the changes that have been discussed. Darrell Brewer made the motion. David Reeder seconded. Motion passed.

David Keene, since he had forgotten at the beginning of the meeting, asked for a motion to approve the minutes of the June meeting as they were posted on the club web site, k5frc.org. Mike Lindsey made the motion and seconded by Doug Mentzer K7DAM. Motion passed.

We have no treasurer's report.

Since there was a \$500 cap set for Field Day expenses for Saturday and Sunday and that cap had not been exceeded Mike Lindsey KD5UNY made the motion that the club reimburse Jeff Cotner \$42.05 for the money he spent for the Friday night hamburger and hot dog supper for Field Day since the expected donations to cover that meal had not been received. Mark Hetherington seconded. The motion passed.

David Reeder made the motion to adjourn. Doug Mentzer seconded. Motion passed.

Kathy Brewer KE5SLG

Secretary

Check Your Baluns

Recently I decided to check my Carolina Windom after it did not load “like it used to”. I found 1 questionable PL-259 and 1 balun full of water. This version of Carolina Windom uses an “isolation” balun on the bottom of the “down leg” and a 4:1 balun between the down leg and the radiating leads. The isolation balun is 1:1 so I put a nominal 50 ohm resistor on the output of the balun and checked the SWR with an antenna analyzer. The balun read over 3:1 when it should have been 1:1. I opened the balun (with a hacksaw), dried it out and rechecked it. It still measured 3:1. Based on this reading, I ordered new baluns for both locations. The top balun is a 4:1 so as a check, I connected a 200 ohm (actually 4X 50 ohms in series) across the balun output and checked the SWR. It measured a correct 1:1 SWR.

The top balun is a 4:1 balun. This the most common value you will see. The impedance ratio of a transformer is equal to the square of the turns ratio. This says that the 4:1 balun has a 2:1 turns ratio ($2^2 = 4$). The usual core is a toroid and the turns on a toroid are counted as the number of times a wire passes through the center hole. Since it is not practical to have a turn go “half way through the hole”, you will always see baluns in values such as 1:1, 4:1, and 9:1.

Baluns are used to help match the impedance of a transmitter (usually 50 ohms) to an antenna. Common resonant values range from 50 to 300 ohms, depending on the type of antenna. In addition to the impedance matching, a balun is also use to match an unbalanced device (such as a transmitter and or a piece of coax) to a balanced load (such as a dipole antenna). Thus the name **BAL**ance to **UN**balanced.

Dave Keene
W5DBK

