



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 446.460

(10 MINUTE BEACON)

David Keene W5DBK, editor-in-training

Fannin County Amateur Radio Club

K5FRC

Minutes for March 19, 2011

The monthly meeting was brought to order with the Pledge of Allegiance to the Flag of the United States of America.

President Mike Durbin welcomed our visitor; Michael Durbin WB5TWB, his grandson and our new Ham David W. Robinson KF5JXL. David passed his Tech exam in February and is now an official member. There were twenty-three persons present.

David Reeder made the motion to accept the minutes of the February meeting that was posted on line and Bob Tassan seconded. The motion passed.

In the absence of the Treasurer the report for February was waived until the April meeting.

Darrell Brewer KE5JHN gave an update on the non-profit status. He met with the comptroller in Sherman. We had to do an application for reinstatement a request to set aside tax forfeiture. It was a simple one page thing. Our president signed it. Darrell said he would hand carry it back over to them. The comptroller will then give us a letter that states everything is now in order. Darrell said he would then forward the package back to the Secretary of State to get everything back on track. Basically what had happened was there is a form we didn't know about that we should turn in every May which says we haven't made any money. Since we had not turned it in we were not in good standing. This fixed that. So, as Mike said, since we will be non profit, if you have anything to donate then would be the time to do it and you can write it off.

David Keene W5DBK informed everyone that the poll on Fanninhams concerning Field Day was a tie. Some want full contesting others wanting the social event like in the past. Darrell Brewer suggested a third option that we do a combination of both. After much discussion the vote ended with the majority voting for the combination. That means Mike Lindsey KE5UNY that was voted last month to be in charge of Field Day will need to appoint people to help with each aspect. No one person can do it all. David Reeder made a motion that money be taken from the club treasury to purchase food. After some discussion, that motion was amended to say that the club would pay for one catered meal, like maybe Saturday night. The motion was seconded by Mike Lindsey. Motion passed. Glenn Estes suggested that a donation box be put out to help with the food and any collected could be put back into the treasury. David Reeder volunteered to negotiate the catering and to publicize the event which is one of the requirements for the contesting portion of Field Day.

Darrell Brewer said he and Mike Lindsey had talked about asking if the County would allow us to use the old jail out on CR 4200 for Field Day this year. The air conditioning and water is still on. It has toilet facilities and a big empty parking lot. The only issue is that we would have to go before the County Commissioners to ask permission. Darrell asked for volunteers to go with

him to the next Commissioner's Court. He said he would get us on their agenda and let put it on Fanninhams for those interested.

NEW BUSINESS:

Jody Lindsey KE5GIB said she knew there were HAMS interested in club membership but could not afford the dues. She was wondering if there was some way that the club could help. She said that in times past some members had given her extra money when paying their dues and wondered if money like that could be set aside to help others. Others present suggested maybe a donation box or maybe an associate membership where that person could not vote on club matters but in all other ways would be a member for a reduced amount like maybe \$15. It was agreed that the club should be able to help those people out with the dues. A vote was not taken.

David Keene W5DBK said that he had thought of another fund raiser that might work. He suggested that since this was a "radio" club that everyone be encouraged to bring their radio to the meetings. If you don't have a radio when you walk in the door you put a dollar fine/donation in the box. Or you can check in on the way to the meeting. George Phillips KE5ERU made the motion that beginning next month, April, that you must either bring your radio or check in on the way to the meeting or pay a voluntary \$1.00 fine. Mike Lindsey KE5UNY seconded it. Kathy Brewer KE5SLG suggested that the motion be amended to use the money collected to assist those not able to afford the full payment of the dues. All agreed. The motion passed. Jody Lindsey said she would fix a jar or box for the next meeting.

Mike Durbin proposed that the club purchase about 1000 ft. of LMR400 coax for future club projects or to resale to club members at the purchase cost. The price of copper is going up every day and this investment could save the club money in the future. David Reeder WA0URJ made the motion that the club purchase approximately 1000 feet of LMR400 or its equivalent for this purpose. Mike Lindsey seconded. Motion passed. Jeff Cotner KF5HZR volunteered to check for best prices.

Mike Durbin also stated that he thought the club needed to appoint a club historian to document club activities for the future. Mike Lindsey "volunteered" Jody for the task. Jody agreed to accept the job. Patsy Avery KD5YND seconded the motion. The motion passed.

REPEATER UPDATE:

The 13 repeater is up and is working fine but, we have some antenna work to do to make the transmit as good as the receive. Everything at the North Tower is backed up by an emergency power generator. The 13 has the 450 link to RAILS which is also up and working. We were going to put a beam up for RAILS but it doesn't appear that we need to; the 150 foot high gain antenna is working fine. The other repeater, the 450 machine, is linked to Echo Link and IRLP so the weather service can also come in to us on the 450 link. The 145.47 machine on the VA building gives us diversity for bad weather. The building being a hospital is also backed up with emergency power so we are pretty protected power wise. The .47 repeater has IRLP and Echo

Link as well. It also has a phone patch even though with cell phones it hasn't been used much, it is still there. We have three ways the weather service can get us. We probably have more diversity for emergency communications than most counties.

When you come up on RAILS you are talking to about five or six repeaters in North Texas you need to be careful not to tie up all those repeaters just chatting. So to just listen and chat among yourselves you can bring up RAILS on the 13 machine in the listen only mode, 61. To bring it up full and be able to talk to them use 62, and to turn it OFF and turn it into a local only repeater use 63. BE sure to return it to the monitor mode, 61, when you are finished. The default is OFF, 63. In the unlikely case of a power failure it will reset to OFF, 63. Mike said he would post these codes on the Fanninhams Yahoo group.

Tower work needs to be scheduled for a day when the weather and wind is good. We have the antenna and the bracket. A ground crew is necessary due to the weight and size of the stand-off bracket. Mike will put it out on Fanninhams when the weather is forecast to be cooperative. You don't have to be tower climbers; a lot of ground help is needed. It may be in the evening since the time change it doesn't get dark so early.

One other thing on the repeaters, we now have a sixteen bay 450 commercial antenna tuned to 2 meters available to the club that Mike was able to trade a set of 450 cavities for. The antenna weighs approximately forty pounds and is twenty-eight feet long and we are going to put it at 300 feet. This is going to take a lot of crew and all the right equipment and safety belts. We have the rope and the ability; we just need to get the time. This will be an all day project.

A work day is also needed at the VA. There are new guy line stances to put on the tower and the antenna at the HF station need to be fixed. These projects can be done even if it is windy. Mike said he would put a project list on Fanninhams and see who would volunteer to coordinate each project.

Mike shared the document "Cloud Cowboy" that he has posted on our club web page in PDF format and can be printed out. It gives some tips that would help us when reporting to the weather service during a storm. It also has a map at the back so we can give coordinates instead of the name of a community or location that might not be familiar to them; the contact there can easily check and know exactly where you are referring to. Example: the southwest corner of C1. This map will also help our net controller. This document also references minimum reporting criteria. When the National Weather Service is up we need to follow this procedure. Another point brought up by the weather service is that we don't have assigned locations for our watchers. David Keene suggested that when checking into the net we make a practice of giving our location using this map.

Mike Lindsey KD5UNY made the motion to adjourn. David Keene W5DBK seconded. All were in favor.

The meeting adjourned to a training class on proper grounding by Glenn Estes N5UPA. He said he planned to post this power point presentation on the club web site for those that missed it or those that need to refer back later.

Secretary – Kathy Brewer KE5SLG

=====

What's in a "Touch tone pad"?

Most of us are used to using a "touch tone" key pad on a telephone which was introduced for phone use by AT&T in 1963. However, touch tone pads, or DTMF pads have become an everyday item with many uses beyond a telephone. Amateurs will typically use a touch tone keypad for such tasks as activating repeaters, controlling repeaters, accessing IRLP or Echolink connections, and making autopatch calls.

When a key is pressed, two carefully controlled tones are produced simultaneously, thus the name, DT meaning "dual tone" and MF meaning "multi frequency". The tones are divided into 2 groups, a "low" group and a "high" group. These groups are arranged as in the following table:

	1209 Hz	1336 Hz	1477 Hz	1633 Hz
697 Hz	1	2	3	A
770 Hz	4	5	6	B
852 Hz	7	8	9	C
941 Hz	*	0	#	D

When a key is pressed, one tone from the high group and one tone from the low group is sent. For example, if a "5" key is pressed, a 1336 Hz tone and a 770 Hz tone is sent. The phone pad only has 12 keys while most modern ham rigs use all 16 pairs to include the A thru D functions. The tones were carefully chosen so that no tone is a harmonic of another which decreases the chance of a decoding error. Another way in which errors are reduced is that the tones are sent with less deviation than the voice signals to reduce distortion. The voice is set for a maximum deviation of 5 KHz while the tones are usually set to a maximum deviation of 3.33 Hz. If you listen carefully to a properly adjusted radio signal, you can tell that any tones sent sound a little quieter than the voice.

That is more than you wanted to know about touch tone pads!!