MILAM COUNTY ARES NEWSLETTER

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MILAM COUNTY ARES NEWS

Stuart Wolfe – KF5NIX, Milam County Amateur Radio Emergency Coordinator

When we set about upgrading the Cameron repeater to a new Yaesu repeater we knew that it was a big step. And with big steps, also comes learning curves with such a new piece of technology. One of the first things we have to clear up is the difference between Yaesu System Fusion and WIRES-X.

Yaesu System Fusion is a digital mode built into your radios and the Yaesu repeaters that requires nothing else to function on its own. As long as the repeater has power, either commercial or backup in any way it will always be able to operate in analog or Fusion with no outside help.

WIRES-X is software that utilizes the internet to connect other users using the WIRES-X software, other Yaesu System Fusion radios, or other devices. There are several ways you can use this software, directly connected to Fusion radios, or via RF, or directly to repeaters. What this software allows you to do is make your local repeater now accessible to the entire world via the internet. That means if your radio is connected with this software it transmits through this software to the internet. If you have a repeater connected to it, it not only transmits locally, analog or digitally, but also transmits over the internet if you were in digital mode while transmitting. This is where we have been testing a device for the Cameron repeater. If we can get this setup we will have our own digital room called Milam Co ARES that is allotted to only our Cameron repeater. And if connected the way we are hoping for it means that it will be on backup power just like the repeater, and since the internet is on the same backup power we would always be online, with not only the repeater, but with the WIRES-X software too.

This achieves two things; it not only makes the Cameron repeater a complete digital repeater but also gives Milam Co a way to communicate with the outside world in the event of a disaster, even if they can't hit our repeater. Think about the previous statement, even if they can't hit our repeater. That will be the first time Milam County can say we will never be cut off from the surrounding counties, or other states, or even the rest of the country. They just need to access any repeater that is connected to WIRES-X anywhere, and switch rooms to our room and they will instantly be connected to our repeater in our Milam Co Ares room. And for those that are wondering, yes we still have the Digipeater connected on the repeater as well. We are trying to open up our county for several different ways to communicate. Amateur radio in Milam County just upped our game, and we have barely even scratched the surface of what we can do. As of this newsletter we are already looking into two other modes and networks to connect to our three repeaters in Milam County.

The Cameron repeater, which is a Yaesu System Fusion repeater, will receive both analog and digital signals. That means it will still operate normally with regular analog radios, and it will also operate with newer Yaesu radios that have System Fusion built in. This repeater does a really cool thing; whichever mode it hears last, is the mode it retransmits. So if someone is in Fusion mode talking to someone else in Fusion mode the repeater will stay in that mode unless/until it hears an analog signal. At that time the repeater automatically changes to analog mode when it transmits the analog signal. If you as an operator have your Fusion radio setup for AMS (Automatic Mode Select) your radio will automatically switch to the mode the repeater is transmitting, you need to do nothing; your radio will switch itself automatically to the mode the repeater is transmitting.

There are at least 2 digital modes on these radio's, DN, and VW. The first mode I will discuss is DN, it will send out the GPS stats for distance along with your callsign. The repeater does not send out your GPS coordinates, it just sends out distance in miles to the station you are talking to on the repeater. The DN mode splits the signal so it can send out your voice signal along with the data. It gives your voice a little bit of a tiny sound. But the signal is very clear, and without any hiss or background noise.

The second mode is VW, or Voice Wide mode. This mode only sends out your callsign and your voice. The milage/distance between operators is not sent out. Since it uses the whole bandwidth for this signal, your voice sounds more like your normal voice, but with still with a little bit of a tiny sound.

One of the reasons most users stay in DN mode is because that is the only mode you can send messages, and photos with from one radio to another. More on that in the next newsletter.

When I was referring to being in AMS (Automatic Mode Select), for most of the Yaesu radio's this means that you will see a FM in red on your display with a red bar above the FM. On certain radio's the red bar above the FM will flash, like on the FTM100 -D. On the FTM400-XDR the red bar does not flash. If you wish to change modes simply press the button with the letter D with the letter X on it to cycle through the modes. I suggest reading your manual to figure out which modes it has and which order they are in.

We will go over Fusion modes in further detail in later newsletters as more users get used to the new repeater. I also want to thank Susan Reinders for all of her hard work and wish her nothing but happiness in her future endeavors. And I want to congratulate Bryan Burns as Susan's replacement. I look forward to working with him in the future!! And also look forward to him getting his Amateur Radio License!!

If there is a topic you wish discussed in a newsletter, send it to me at **KF5NIX@ARRL.NET**

If you have not done so yet, go to the ARRLSTX depot site listed below. **http://www.arrlstxvps.org/vault_area/ vault_gateway/site_gateway/vault_gateway.php** There are several items listed on the workbook there that many of you have already accomplished in the past, just use your best guess as to the date and I will approve them.

If you complete any of the online courses send me a copy of the certificate so we can have it on file in case of an emergency so we know who we can call on.

You can get your workbook, the newsletters, or other forms at the Milam County ARES website: **http://milamcountyares.weebly.com/**

Thank you,

Stuart Wolfe – KF5NIX – EC Milam County – 512-660-9954

Rockdale – 146.760 – PL – 123, Milam ARC weekly net – Monday nights at 8:00 P.M. The members also voted to move the Milam County Ares net to Monday nights, at 7:00 P.M. Most felt that having the ARES net on the same night as the Milam Amateur Radio Club's net may increase the sign-ins for both nets as well as free up the rest of the week.

Cameron – 147.020 – PL – 123, Milam County ARES net – **Monday nights at 7:00 P.M.**

Davilla – 147.000 – PL – 123, Milam ARC nets – Last Monday of each month held here. **Milam ARES 2 Meter Data Repeater** 145.030 Mhz This repeater is a simplex repeater with store and resend software in the modem at the transceiver. This call sign is CAMRLY. The repeater is on the Milam County Communication Tower and uses the same antenna as the 147.020 repeater. That antenna is a db224 with 6db gain. It is approximately 150 feet AGL.

AMATEUR RADIO LICENSE TESTING DATES:
Saturday, December 7, 2019
Saturday, February 1, 2020
Saturday, April 4, 2020
All testing sites are conducted at the Rockdale Chamber of Commerce
Located at 1203 West Cameron Street, Rockdale, TX 76567
Starting time: 10:00 A. M.
Walk-Ins Welcome.