## SEPTEMBER 2018

#### AMATEUR RADIO COMMUNICATIONS

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# MILAM COUNTY ARES NEWSLETTER

# Volume 11 Issue 9

# MILAM COUNTY ARES NEWS



Stuart Wolfe – KF5NIX, Milam County Amateur Radio Emergency Coordinator

In this month, we will discuss various types of antennas and their applications for use in Amateur Radio Emergency Services. Now there are many different types of antennas, but we will only discuss 4 types in this newsletter. Some antennas

may require the use of either an internal or external antenna tuner. So please read the instructions of your antenna prior to purchase.

The first one we will cover is the vertical antenna. They come in a variety of sizes depending on the bands required. Their signal is more like a spherical radiation pattern if looked at from above. They use the atmosphere for their propagation. One example is a Cushcraft R9 vertical antenna, is has many bands and may require the use of an automatic antenna tuner. Each band is very broad, so you can only get one sweet spot per band with the rest of the band having an elevated SWR.

One of the next types is a favorite of DX'ers to use, it is a beam antenna. It is one of the most used antennas for hams who are trying to work all states, or to just talk to someone and eliminate most of the noise from neighboring hams on the same band. Their signal is like a beam pointed in a specific direction. Unlike the vertical which receives equally in all directions, a beam hears very well in only one direction (the direction it is pointed). Of course, with beams, the more elements in the beam, the more the gain you have. So keep that in mind when purchasing your next beam.

The next antenna is one I use regularly, the dipole, which uses ground waves. Both legs of this dipole are equal distance from the center conductor. The dipole hears best not from the end of each leg, but from between the legs. If your legs run N-S, then it radiates E-W. If your legs run E-W, then it radiates N-S. You can hear from either end of the legs, but not nearly as good as from inbetween. The object is to try to tune your dipole as close to the part of the band you wish to work most, with a slight increase in SWR on either side. Some use an antenna tuner to help tune to other parts of the band if the SWR are too high for their radio.

Next is the long wire antenna, which is still widely used around the world today. This is just a very long wire that is feed on one end. Usually hams use the theory that they will make their wire long enough to cover all the bands they wish to use. If they plan on using 80m, then they make the long wire as long as they would make and 80m antenna, so if they only wish to use 40m, 30m, 20m, 17m, etc... then they would make the wire as long as the longest band they ever wish to use. They also have to use an antenna tuner with this antenna since so many bands are going to be used on one antenna.

I hope this helps in picking out your next antenna, or if it helps you eliminate an antenna for your next purchase. This hobby is very expensive, so it helps to save money in any direction you can.

If you plan on buying an antenna tuner, pay very close attention to the highest SWR it can tune. Some will only tune a maximum SWR, which may not help you very much. Other's will tune a very high SWR. But if you have tuned your antenna already to a fairly low SWR, then your antenna tuner will not have to work as hard, and it will last a lot longer.

Also if you wish to have something put in one of the newsletters, send it to me at **KF5NIX@ARRL.NET** and I will find a way to put it in.

If you have not done so yet, go to the ARRLSTX depot site listed below. <u>http://</u> <u>www.arrlstxvps.org/vault\_area/vault\_gateway/site\_gateway/vault\_gateway.php</u> 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 as well as other forms at the Milam County Ares website: <u>http://milamcountyares.weebly.com/</u>

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 CLASSES & TESTING

The Milam Amateur Radio is looking to see how many individuals would be interested in taking either the Technician or General class for either license. If you, or someone you know is interested in either class please contact Stuart Wolfe – KF5NIX at <u>KF5NIX@ARRL.NET</u>. If we get enough to do either class, or both classes the Milam ARC will also hold an ARRL testing session in Rockdale, TX.

If you would like to take either class, and would like to purchase the study books from ARRL, the 2 instructors can order the books at a discount. Milam ARC is trying to not only get people interested in the hobby, but to also offer classes and test sessions in Milam County so people do not have to drive so far just to test for a license. Thank you,

Stuart Wolfe – KF5NIX