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AMATEUR RADIO COMMUNICATIONS

MILAM COUNTY ARES NEWSLETTER

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Published by:
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MILAM COUNTY ARES NEWS

KD5WRO Commentary

MILAM DIGITAL ACTIVITY

The Milam Digital Repeater was installed Friday, October 25, 2013 and is working fine. The repeater is tested weekly by an exchange of messages between Georgetown and College Station.

Williamson County EOC/911 Center

I was invited to tour the new Williamson County Emergency Services Operation Center on January 9 with the WC-ARES group. I have previously toured Bell County Communication Center, Austin CTECC, and the Galveston EOC. The Williamson County EOC has several new innovations not seen in other centers. The EOC has about 28 positions for permanently assigned workers. These assignments are for Operations, Communication, Logistics, and Finance. The ARES room is next to the EOC with VHF, UHF and HF capabilities.

Fukushima Disaster

The northern Pacific coast of Japan was struck by a Richter 9.0 earthquake on the afternoon of March 11, 2011. Some 45 minutes later a severe tsunami came ashore, killing thousands of Japanese and flooding four nuclear power plants. Three of the plants are in meltdown with containment work unsuccessful over the past 2 years and 10 months. Much of this time over 300 tons of highly radioactive water has been dumped into the Pacific ocean each day. The Pacific ocean has been found to be dead up to 3000 miles from Japan. There is much fear among scientists the entire Pacific will become radioactive.

It should be noted that the New Madrid fault under the Mississippi River will probably experience a severe earthquake in coming months. There are over 20 nuclear plants along the Mississippi. A disaster of unprecedented nationwide magnitude would occur if several of these plants underwent meltdown. The Central United States could become uninhabitable.

The Fukushima tsunami disaster has been a wake up call for all of us. We would experience an unprecedented demand for emergency communications after a major earthquake along the Mississippi.

2014 Skywarn has held Monday, January 13th at the Cameron VFD meeting room. 53 participated in the 2 hours presentation from the NWS Meteorologist, Mark Fox.

Milam County ARES Thursday 7 PM
147.020 PL 123.0 Khz.
Bell County NET Thursday 8 PM 145.130 PL 123.0

STX ARES HF Net Monday at 7:30 pm on 3873 Khz.

CONTACT INFORMATION

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DESIGN OF A GROUND SYSTEM FOR YOUR ANTENNA

The effect of the ground system on antenna efficiency and vertical pattern is highly important. The number and length of radials for HF antennas is shown in Fugre 1. Note that radial length for best results should be at least 0.25 wavelength or ¼ wavelength. The solid curve represents 113 radials, which approaches a solid sheet of metal in electrical terms. Radials are made of copper or aluminum wire.

At VHF and UHF frequencies the Principals for designing the radial system remain the same as for HF. At 2 Meter frequencies (144 to 148 Mhz) a solid sheet of aluminum or copper may be used with the ¼ wavelength being a 10 inch radius from the base of the antenna. A thin sheet of aluminum or copper 20 inches x 20 inches will work great. The flat steel body of a vehicle will work fine in mobile installation but the results will be even better with a sheet of aluminum or copper under the antenna. Further reading may be found in Vertical Antenna Handbook by Capt. Paul Lee USN (Ret.) N6PL CQ Publishing 1984.

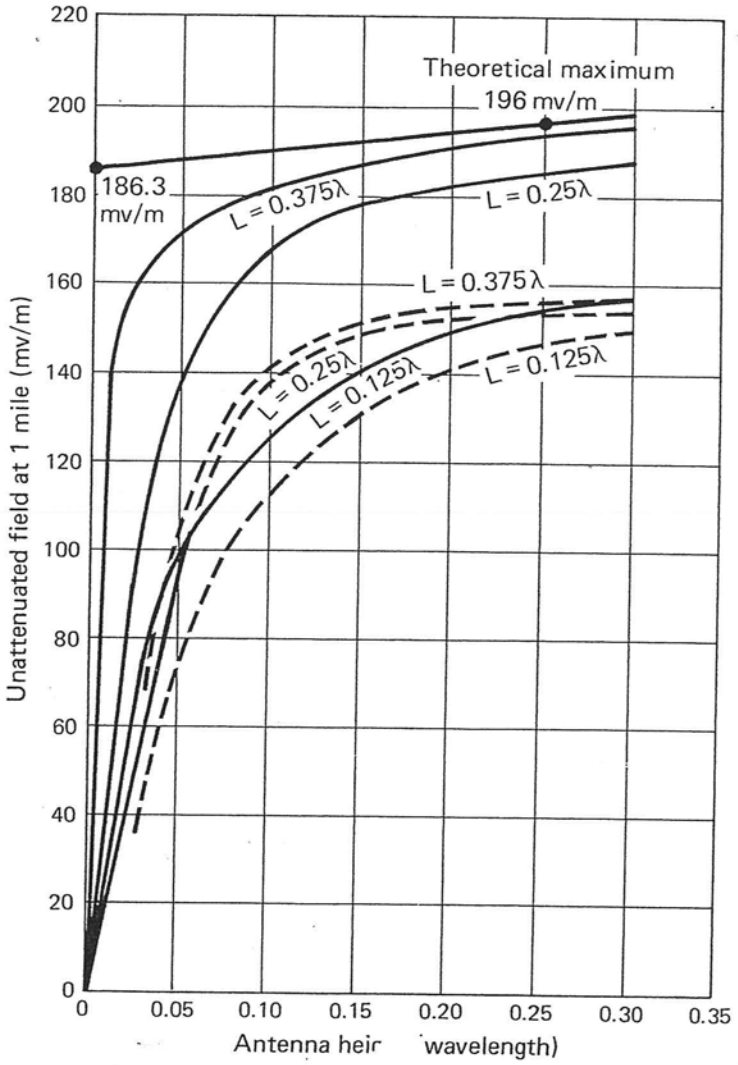

Fig. 1 —Effect upon the unattenuated field strength at one mile by varying the length of the radials. The radial lengths, L, are specified in wavelengths. Solid curves are for 113 radials and the broken curves are for 15 radials.

The next ARES Newsletter will provide more information on antennas.