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Central Missouri Radio Association, P.O. Box 283, Columbia, MO 65205

AMATEUR RADIO SERVING THE PUBLIC

November 1996

DINNER MEETING

Our Holiday Dinner Meeting will be held on December 10th at 7:00 pm at Golden Corral. This is the usual Tuesday night time, but just in a different place. The club will probably discuss officers for next year as well as some other business. This is a good chance to see people in a less formal setting than at the regular meetings, and also enjoy some good food with them. See You There!!!!

WEATHER SPOTTER TRAINING

According to my latest information, a representative of the US Weather Service from St. Louis will be coming to the November meeting to give weather spotter's training. The meeting will be held November the 12th at Boone Hospital Cafeteria Room B as usual, at 7:00 pm. This is a fairly long presentation, so we will waive the business part of the meeting. It has been a long time since spotter training has been given here, so the trainer will give the full course.

JAMBOREE ON THE AIR

The Jamboree on the Air, an operating event for Cub and Boy Scouts, was held recently under Mike Baker's, NØLBA callsign. Several local scouts got a chance to make contacts using packet, 2 meter FM, and 20 meter SSB. Ray, KBØIRV, had his packet station up and running with his usual wit. Jim Lawler, WYØB, helped man the SSB station by which contacts were made with other JOTA groups in other parts of the country. I'm glad that we had the chance to introduce some of the local young people to the fascinating world of amateur radio.

PROPAGATION PRIMER (PART 3)

This month I will explain about the geomagnetic field and how it shapes HF propagation. The earth has a magnetic field surrounding it, with poles at roughly the north and south poles. The existence of this field makes it possible to use a compass in most parts of the world to find your bearings, and it also influences the propagation of radio waves of all frequencies. Disturbances in the field can wipe out HF

propagation in the higher bands. This is referred to as a geomagnetic storm, and can cause radio activity to have to be shifted down to the lower (6 MHz and below) parts of the spectrum. Disturbances of this type are also associated with increased auroral activity, which can actually enhance VHF propagation. Contacts have been made on 2 meter CW over 2000 miles by propagation along the boundaries of an aurora. Aurora imparts a characteristic flutter to the signal, making SSB work very difficult. This flutter can also be heard in HF signals propagating over the pole, such as 20 meter propagation into the Russian states and northern Europe.

The state of the magnetic field is quantified by the K and A indices, which are available on WWV at 18 and 45 minutes past the hour, and also on various World Wide Web sites. The K index ranges from 1 to 4, with 1 being quiet (no disturbance) to 4 being very disturbed. The A index gives the same information, but ranges from 1 to 9 or higher. High K indices lower the MUF (see part 1) and can negate favorable sunspot counts. For example, a K index of 3 combined with a solar flux in the mid 80's (ordinarily giving an MUF in the 22-25 MHz range), can knock the MUF down below 14 MHz. Fortunately, these disturbances are fairly short lived, only lasting a day or so. Happy DXing -- de AAØUJ

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Support CMRA!!!
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