FCC ID: IPGWWS1 (Wireless Weather Station)

Description of the circuit functions ground system and antenna of the Texas Weather Instruments Wireless Weather Report (transmitter):

The device is a battery operated microprocessor based wireless weather monitor. A central processor receives data from serially connected subsystems and transmits it at 418 MHz to a nearby receiver. The subsystems consist of a wind sensor, a rain sensor, a lightning sensor and a combined humidity-temperature-solar sensor. The rain and lightning sensors are digital counters that communicate serially with the central processor. The wind sensor is a microprocessor-based device that measures both wind speed and direction and communicates this information serially to the central processor. The combined humidity-temperature-solar sensor also is a microprocessor-based device that uses a Digital-to-Analog converter to measure solar radiation and relative humidity directly from sensor elements. A digital temperature sensor is used to measure temperature; these parameters are combined and communicated serially to the central processor.

The antenna is Linx Technologies "WHIP" Style 1/4-Wave Antennas model ANT-418-PW-QW. The antenna ground plane consists of an aluminum plate 7.6 inches in diameter with the antenna mounted in the center. The only operator control is a three position toggle switch that is used to apply power and to signal one of two modes of data collection for the Humidity-Temperature-Solar subsystem.