

MODULATING SIGNAL DESCRIPTION

For the STAR-6 Airborne Radar System

The STAR-6 airborne radar system transmits pulses of duration 15 to 25 microseconds at a pulse repetition frequency of about 2 kHz. All pulses are identical. The transmitted signal occupies a bandwidth of 135 MHz. The modulating signal is linear-FM; during each pulse, the instantaneous frequency sweeps linearly from 9.5375 to 9.6725 GHz. There is no significant amplitude modulation, other than a slight tapering of the rising and falling edges of the pulses.