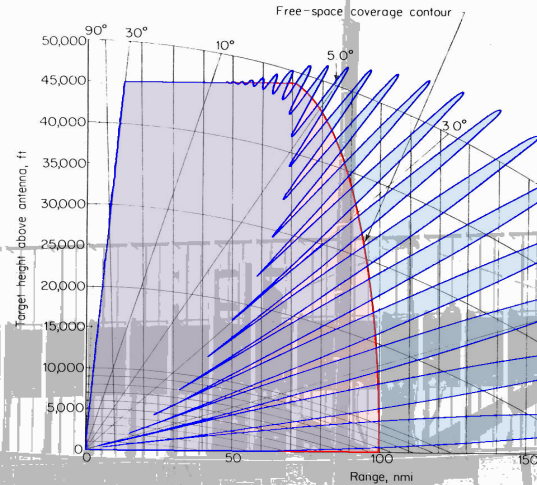




Scan me

- Introduction to radars: overview and examples
- Fundamentals of a simple pulse-radar system: simple radar equation, signals, range measurement, resolution, components
- Antennas in radar systems: parameters, reflector and array antennas
- Radar equation: detection and noise, matched filter, integration, RCS, propagation effects
- CW radar: Doppler-effect, duplexer, frequency down-conversion
- Pulse Doppler radar: coherency, signal processing, clutter
- FMCW radar: principle, waveform generation, range-Doppler coupling, FMICW system
- Pulse compression: waveform design, ambiguity function, reason for pulse compression, analog and digital,
- High resolution systems: methods for high range resolution, impulse radar principle, SAR
- Secondary radar: principle, sidelobe problem, codes
- Further topics: adaptive systems, parameter estimation, decorrelation time, multistatic and passive systems, short-wave radar, tracking

Introduction to Radarsystems

