



# RADAR AND ANTENNAS

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### ACROSS

- 4 The repeated switching of frequencies during radio transmission (2 words)
- 9 A measure of how an electric field affects, and is affected by, a dielectric medium
- 14 Radar system that uses the apparent shift in frequency of an incident wave to measure presence and velocity of a target (2 words)
- 15 Automatic Waveform Generator
- 16 Linear frequency sweep
- 17 Voltage Standing Wave Ratio
- 18 The ratio of operating to non-operating time for a device (2 words)
- 19 Variation in magnitude of a waveform

20 90 degrees out of phase

22 Quadrature Phase Shift Key modulation

24 PAE (3 words)

### DOWN

- 1 Joint Tactical Radio System
- 2 DGS (3 words)
- 3 Type of distributed element filter with band-stop (notch) characteristics
- 5 Improvised Explosive Device
- 6 The vector ratio of voltage to current, the reciprocal of admittance
- 7 Next generation system for the warfighter which will enable networked sensors (3 words)
- 8 Type of polarization when the plane of polarization rotates

in a corkscrew pattern making one complete revolution during each wavelength

10 An unbalanced transmission line structure consisting of a ground plane, the dielectric material of the printed circuit board and a narrow strip on the top side of the circuit board

11 The ratio between the amplitude of the output signal of a device or circuit compared to the amplitude of its input signal (2 words)

12 The geometric shape of one period of an electric signal when it is plotted versus time

13 Energy at integral multiples of the frequency of the fundamental signal

21 Direct Digital Synthesis

23 Digital Signal Processor