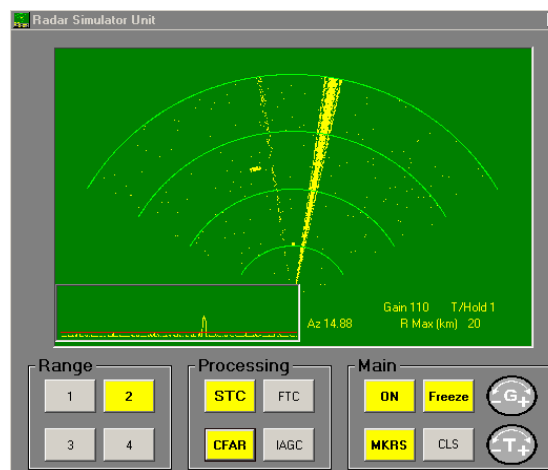
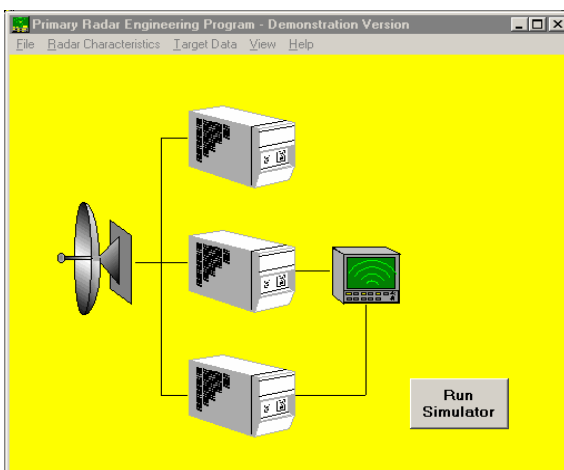




PREP2



Primary Radar Engineering Program



'Innovation and Design, from a Radar/EW Engineer, with many years of Instructor experience'
'Paddy' (Pete) Forrest
Author of 'Electronic Warfare'

What is PREP ? 'The Radar CBT Solution!'

PREP is a PC based, pulse radar software simulator, designed to assist with Operator training, to teach radar Students, for use by radar Engineers, and EW instructors.

A key feature of **PREP** is the integral **Electronic Warfare** capability.

PREP uses CBT to enable users to vary radar parameters, and then observe the effect on the near real-time simulated radar screens.

PREP uses standard displays and signal processing techniques, which help to familiarize users with typical, modern pulse radar systems.

Synchronizer/Exciter	
Frequency	100MHz to 50GHz
Pulse Width	100ps to 1ms
PRF	10Hz to 50kHz
Pulse Compression Coding	Linear FM or Barker Coding (up to 13 Bits)
Control & Display Unit	
Display Formats	PPI or B-Sweep with additional A-Scope
Number of ranges	Four Variable
Maximum Range	1m to 500km
Display Options	Range Markers, Freeze, Clear Screen
Receiver	
Receiver Gain	30 to 150dB, Linear or Logarithmic
Video Threshold	0.1 to 10V
Receiver Noise Factor	1 to 50
Receiver Temperature	150 to 400 Kelvin
Signal Processing	FTC, IAGC, CFAR, STC
Transmitter	
Peak Power	1mW to 1MW (-30 to +60dBW)
Antenna	
Antenna Type	Parabola, Cassegrain, Phased Array
Antenna Dimensions	1cm to 100m in Azimuth and Elevation
Scan Width	1 to 120 degrees in Azimuth
Scan Type	Mechanical or Electronic
Scan Speed	1 to 120 degrees per Second
Plumbing Loss	0.01 to 20 dB
Antenna Radiation Pattern Plots	2D and 3D with Redraw
Targets, Noise Jammer and Repeater	
RCS (m ²)	0.0001 to 100
Range	0.01m to 500km
Bearing	-60 to +60 degrees in Azimuth
Jamming	CW Noise, On-board or Off-board
Target 1 Repeater	1, 2, or 3 Repeats / Delay .1μsec to 30μsec / Gain -60dB to +60dB
Noise ERP	1μ W to 1kW
Bandwidth	10kHz to 2GHz
Range	0.01m to 500km
Bearing	-60 to +60 degrees in Azimuth
Chaff	
Weight	0.01 to 9999 grams
Range	0.01m to 500km
Width, Depth, Height	1 to 10000m
Bearing	-60 to +60 degrees in Azimuth
*****The Electronic 'Blake' Chart and Maximum Range Plot*****	