

*Low cost, high performance  
FAA approved airborne  
color weather radar...*

# **Camber** Corporation



## **WXRS**



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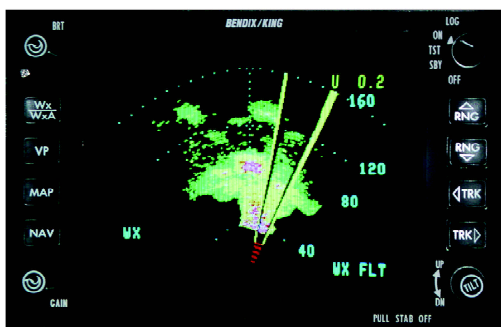
## **Color Weather Radar Simulator**

## WXRS

Stand-alone, realistic color weather radar simulation with forward looking windshear detection for aircrew training is provided at low cost and low risk with the Camber WXRS.

Using only commercially available off-the-shelf hardware, the Camber system operates on VMEbus or PCIbus multiprocessor architecture to perform its own weather and simulation processing, thus adding no burden to the flight simulation host computer.

Equally ideal for upgrading existing flight simulators or for customizing new simulators, the WXRS is inexpensive to purchase and maintain.

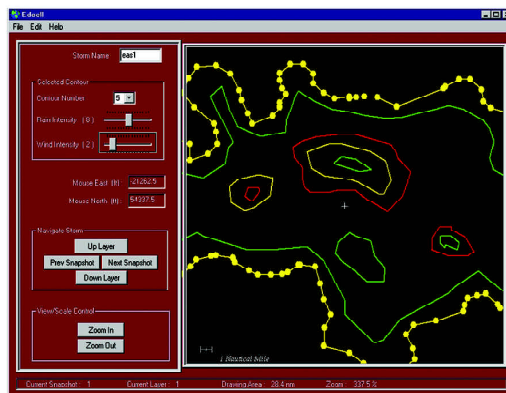


*Windshear warnings are displayed upon detection.*

Weather simulation outputs to the host computer allow generation of a full range of cues and correlation of the weather radar display with the simulator's visual system.

The WXRS interfaces directly with the display devices for realistic aircrew control of radar functions and displays. The system adheres to the ARINC-453 protocol.

Realistic growth and decay of weather patterns is simulated by the WXRS processor unit, with weather



*Realtime weather cell growth and decay can be created, modified and controlled via the weather editor.*

movement based on wind directions and velocities defined by the host computer. A comprehensive weather database editor allows the creation and modification of weather patterns, formations, and scenarios.

### Inputs from Flight Simulator Host Computer

- Aircraft position, altitude and inertial reference system data
- Weather radar control panel settings
- Instructor inputs, including windshears and microbursts
- Cloud base and top altitudes.

### Outputs to Flight Simulator Host Computer

- Turbulence and precipitation values for motion and sound cues
- Cloud locations for visual system correlation

- Windshear detection signals and alerts
- Path Attenuation Compensation (PAC) Alerts.

### Interfaces

- Host computer interfaces include DR 11-W, HSD, Ethernet, and Reflective Memory.
- Flight simulation host computers supported by these interfaces include Alliant, Concurrent/Masscomp, Data General, DEC, Encore/Gould, Harris, IBM PC/AT, Modcomp, Multibus I and II, Sun, Versabus, SGI, and VMEbus based hosts.
- Custom and nonstandard host interfaces are available from Camber for the WXRS.

### Additional Features

- True antenna azimuth, elevation pointing angles, and antenna stabilization limits are simulated by the WXRS.
- Aircrew display functional controls include on-off, transceiver select, tilt, range, gain, ground clutter suppression, stabilization, and mode select.
- Standard configuration supports two display channels, with optional drive available for a third display. Simulation of dual redundant R/T is available in all configurations.
- Optional direct interface with weather radar controls is available, bypassing host computer interface.
- Off-the-shelf system allows rapid delivery within 30-90 days.