

## Case Study: Rapidly Deployable Tactical Weather Radar

**Requirement:** A sophisticated Doppler weather radar system for a US military organization that can be easily transported to virtually anywhere in the world and placed into operation quickly.

**Solution:** A re-packaged model TDR 2070-C Doppler radar.

The TDR 2070-CT is packaged into transportable cases, one for the transmitter and receiver, one for the operator workstation and displays and one for auxiliary equipment. The 2 m antenna, pedestal and 30' telescoping mast are integrated with a shipping frame that fastens to a standard type 463L air freight pallet. The entire system is shipped as one piece on an air freight pallet which can be handled by standard cargo facilities worldwide.

The system can be set up and placed in operation by a crew of two, with no additional equipment, within a few hours. The workstation can be up to 6,500' away from the transmitter/receiver during operation. The system has full lightning protection.

The end result is a sophisticated Doppler radar system with the following advantages:

- Rapid deployment to any environment
- Superior performance; simultaneous real-time Z, V and W processing and display
- Data of scientific quality and accuracy; -4 dBZ @ 200 km,  $V_{\max}=40$  m/s @ 50 km
- Superior ground clutter rejection; -40 dBc (one way) side lobes, -50 dB clutter filter
- Ease of use; simple Windows<sup>®</sup> point and click user interface controls all functions
- Based on industry standards for compatibility with a wide range of other systems



