

## Dallas Fort Worth International Airport



**Project name:** Indoor Wireless Coverage for Neutral Host System

**Location:** DFW International Airport  
**Address:** Procurement Department  
3122 East 30th Street  
DFW Airport, TX 75261

**Completion Date:** May 2003

**Company:** Mikom

### **Project overview**

This project utilized the BriteCell™ fiber optic RF distribution system to route wireless base station signals throughout Dallas/Fort Worth Airport. The use of single-mode fiber permitted low-powered radio signals to be distributed over long distances with minimal quality degradation. The flexible composite fiber optic/copper cable was much lighter and easier to install than traditional coaxial cable. This project made use of existing fiber to line the Terminal stations to the head end units and used composite fiber between the stations and fiber remote units.

### **ABLE solution**

ABLE installed remote BriteCell™ equipment, including the indoor enclosures for the FRUs and composite fiber connections; antennas; coaxial cable and connectors; coaxial jumper cables; splice/patch panels; power supplies; composite fiber; and fiber jumpers/pigtails.

ABLE was responsible for the following items and complied with all DFW safety and security regulations in performing this work:

- Installed conduit (EMT) for exposed composite fiber and coax in public areas of the Airport. All other media was mounted within the ceilings space using appropriate hardware (J-hooks, cable tray, etc). Composite fiber in tunnels installed in innerduct supported by existing cable tray.

- Installed cable tray between Sprint PCS compound in Business Center to underground service tunnel.
- Installed cable tray inside each concourse tunnel to each terminal access.
- Installed ½ inch coaxial cable between antenna and FRU locations. All coaxial cable connections were properly secured.
- Mounted panel and omni-directional antennas. Coaxial connection of antenna to FRU.
- Mounted FRU indoor enclosures and small enclosures for FRU connections.
- Fusion splice for fiber (2 duplex pigtails at each end of fiber run; 8 splices total per run)
- Coaxial connectors for cable runs greater than 3 ft.
- Mechanical connection for electrical conductors (butt splice, etc.)
- Mounted the BriteCell™ subracks, power supplies, and splice patch panels inside the equipment cabinets. Grounding all equipment to the existing bus bar.
- Provided Fiber- OTDR, return loss and insertion loss test data
- Provided Cable- VSWR test data.

### Product Solutions

AVAYA

