

About Cielo Networks™

Cielo Networks™ is a rapidly growing U.S. company that provides the telecommunications market with high performance scalable capacity licensed band point-to-point digital microwave radio solutions with outstanding IP/TDM/IP+TDM payload flexibility. We bring our deep industry experience, a uniquely efficient business model, and long term relationships with selected best in class and U.S. based component technology subcontractors together to provide fully integrated radio systems with outstanding performance proven in years of volume deployments worldwide. Our combination of advanced system features, high operational reliability, market-leading cost-effectiveness, and a proactive and responsive support relationship provide our customers with superior total value in microwave networking.

The Customer

The Mississippi State Wireless Communications Commission (WCC) was founded in 1972 by the state legislature to ensure critical personnel have effective communications services available in emergency situations. The legislation specifically directed the Commission to implement a statewide wireless communications system for state and local governments that enables interoperability between various wireless communications technologies. The Commission was further tasked with the responsibility for approving all wireless communication purchases within the state and for setting forth rules and regulations governing these purchases.



Mississippi Wireless Integrated Network

The Mississippi Wireless Integrated Network (MSWIN) was initiated by the WCC after Hurricane Katrina as a means for officials, emergency personnel, etc. to have the capability to communicate across the state during and after major catastrophic events, that history has shown to have disrupted normal communications methods. This alternative network was to be the backbone for all emergency and contingency operations in the state. A major part of the MSWIN network is an FCC licensed digital microwave network that acts as the backbone for all other communication equipment.ms.

7/7/2011

Situation

With the explosion of the Deep Water Horizon oil rig in the Gulf of Mexico in late April 2010 and subsequent oil spill disaster, the largest environmental disaster in the United States, the Mississippi Wireless Communications Commission decided to expand the existing MSWIN system offshore to provide a coverage area that would support other state and federal recovery efforts. The extension of the MSWIN system would allow the state of Mississippi to fully participate in the monitoring, containment and clean-up of the oil spill disaster in both state and federal waters.

Response

The Mississippi Wireless Communications Commission, Towers of Mississippi and Cielo Networks deployed a two hop relay system that provided T-1 backhaul services for the state's LMR network. Both links were FCC licensed 11 GHz, 50 mbps plus 2T1 point to point systems. One of the links was deployed from the Mississippi gulf coast to Horn Island, 11 miles off the main coastline. The second relay was deployed from Horn Island to SR-1, a Pegasus type platform used by the Department of Defense (Air Force & Navy) for aerial combat maneuvers. This second relay allowed the MSWIN network to be extended more than 30 miles offshore. The LMR coverage area gained by this extension reached well into the major disaster oil spill areas.

From the time of notification, Towers of Mississippi and Cielo Networks were able to stage, ship, install and deploy the requested network in approximately 200 hours. This included obtaining an FCC license and turning up the network in arduous and hazardous sea conditions. Upon completion of the initial deployment, the Wireless Communications Commission was able to monitor all recovery efforts back at the state headquarters in Jackson, Mississippi, over 200 miles from the oil spill area.

