

**St. Charles Parish Sheriff deploys AIRAYA  
WirelessGRID™ Multipoint System for Network****Customer Profile****Public Safety Challenges in Hurricane Country**

High-speed IP-based services between central public safety communication facilities and remote locations can be very challenging where weather is unpredictable and sometimes unforgiving. In such locations, public safety officials are challenged with using innovative technology to provide reliable communications between remote facilities.

St. Charles Parish, with a population of 42,437 people, in southern Louisiana is located in such an area. No matter what the conditions, the Parish Sheriff's Office of over 358 full-time men and women are dedicated to providing the highest quality law enforcement service in order to enhance community safety, to protect life and property, and to reduce crime.

Cary Armand, Information Technology Coordinator for St. Charles Parish Sheriffs Office (SCSO) is responsible for maintaining the SCSO network and application servers. Cary was faced with the challenge of keeping St. Charles Parish operable following the most devastating disaster ever to hit the county. The St. Charles Parish Sheriffs Office chose to implement a wireless solution by deploying AIRAYA's WirelessGRID™ bridges for its IP communication system between central and remote office locations.

**System Architecture and Deployment**

The St. Charles Parish Sheriffs Office is utilizing AIRAYA WirelessGRID™ bridges with 5, 10, 20, and 40 MHz wide channels, providing four multipoint wireless links between central and remote locations, with aggregate system capacity averaging 75 Mbps. Two outdoor subscriber units were installed per base station and SCSO found that the radios were extremely easy to configure and install. The original deployment was cut over into service on March 07, 2006.

**Conclusion**

Since the initial deployment, SCSO has had no problems, resulting in zero downtime for the remote locations. "During initial testing we experienced no problems", said Cary Armand, IT Coordinator for the St. Charles Parish Sheriffs Office. "We contacted AIRAYA's technical support on two occasions during initial testing for general questions and guidance, and have been impressed with AIRAYA's excellent service and technical expertise" he stated.

Mr. Armand goes on to say that "SCSO's infrastructure of AIRAYA product have been in service and running successfully for over 9 months and we're very satisfied with AIRAYA's products, service and technical support".

"AIRAYA's products were very affordable and their exclusive bridge protocol and proprietary transmission mask provided the additional layers of security we required for our network. I would indeed recommend AIRAYA's WirelessGRID™ bridges to others looking for a low cost, exceptional product that offers ease of installation, low maintenance, security, and excellent range & throughput".

### **The AIRAYA advantage: Why AIRAYA?**

In public safety implementations, WirelessGRID™ bridges are typically deployed in the licensed 4.9 GHz frequency band. WirelessGRID™ bridges are FCC Part 90 certified for high power radio operation; support multiple co-located base stations for higher system capacity; and support 5, 10, 15 and 20 MHz wide channels in 4.9 GHz for greater interference immunity. In addition, all public safety models of the WirelessGRID can operate in the 5.3 GHz and 5.8 GHz frequency bands, providing maximum utility and flexibility. Embedded AES encryption, AIRAYA's exclusive bridge protocol and a proprietary transmission mask provide multiple layers of security for public safety and commercial networks.

The types of services actively being utilized across WirelessGRID™ public safety networks include video surveillance and location monitoring, TDM and VoIP voice, and many types of other IP data. AIRAYA WirelessGRID™ bridges provide a proven, timely and cost-effective alternative to xDSL and satellite IP networks, as well as competing wireless solutions.

### **About the City of St. Charles Parish, Louisiana**

St. Charles Parish was one of the original 19 civil parishes of the Orleans territory. The community was named in honor of Saint Charles Borromeo, who died in 1584.

Laced by swamps, bayous and lakes, and bisected by the Mississippi River, St. Charles Parish is a natural for water sports of any kind, from fishing to water skiing to boat riding. Seafood is a mainstay at parish fairs and festivals, including the Louisiana Catfish Festival in Des Allemands, Boutte's Alligator Festival and the Destrehan Plantation Fall Festival.

### **About AIRAYA**

AIRAYA develops and markets fast and affordable high performance 4.9GHz to 5.8GHz and 2.2GHz to 2.5GHz outdoor wireless multipoint and backhaul (point-to-point) equipment for the broadband wireless access market. In addition, the AIRAYA developed bridge family is fully integrated into T1 and E1 links for wireless point to point deployment and into multipoint wireless video camera systems for outdoor installations

AIRAYA's public safety and homeland security products are recognized worldwide for their ease of installation, reliability, and high performance. Current public safety and homeland security applications include site monitoring and video surveillance, IP and TDM voice services, and IP data networks between 2 or more locations.

With more than 7000 installations in more than 50 countries worldwide, AIRAYA products are available through a network of North American and International distributors and resellers.

**For more information:**

Please contact AIRAYA or an AIRAYA authorized partner.



18449 Technology Drive Morgan Hill, CA 95037  
Toll-free: 866-224-7292 • Tel: 408-776-2846  
Fax: 408-776-3339 • Email: [info@airaya.com](mailto:info@airaya.com)