

Challenge

One of Florida's largest theme parks contacted Radio One, a leading provider of Motorola Solutions two-way radios in Florida, because its existing 900 MHz analog two-way radio system did not provide adequate coverage throughout the park. Despite well-intended enhancements to the system's infrastructure, including a Distributed Antenna System and Bi-Directional Amplifiers to increase signal strength and improve RF coverage, operations and security teams frequently encountered dropped calls and interference.

As a family-oriented theme park spanning more than 335 acres with 29 attractions including rides, animal habitats, theaters, and restaurants that draw over 4 million visitors annually, a reliable digital two-way radio communication system was critical for operational efficiency and the safety and security of both employees and guests.

The challenge the park encountered was that across several of the park's work groups, from parking attendants, security officers, guest services, facilities engineering, ride operators, janitorial staff, or administration, team members frequently encountered interruptions or lost radio signal coverage. These disruptions were particularly common in remote areas of the park such as elevators, walk-in refrigerators, or basement corridors. With more than 400 personnel assigned to over 25 different radio talk groups, all relying on consistent and reliable RF coverage, the park realized it needed to upgrade its two-way radio network.





Solution

Radio One, a Platinum Motorola Solutions partner with more than 30 years of experience providing two-way radio systems and communication technology across Florida, responded to the park's call for help. After conducting a thorough Radio Signal Strength Indicator (RSSI) study to analyze the RF requirements for strength and coverage across the 335-acre environment, Radio One recommended upgrading to a Motorola Solutions Linked Capacity Plus UHF trunking system.

This system required only two antenna sites to cover the park's vast acreage and enabled the radios to be upgraded to feature-rich MOTOTRBO digital XPR3500e portable radios. This new Linked Capacity Plus UHF trunking system eliminated the need for the previous DAS and BDA infrastructure while providing enhanced coverage even in challenging locations.



In addition, Radio One worked with the park to incorporate a new Avtec Scout™ radio dispatch console. This three-position console allows communication teams to actively monitor radio communication across the entire park, ensuring rapid, accurate response to any situation. The Avtec Scout™ console delivers a scalable architecture that supports thousands of channels and users, allowing the system to grow without costly upgrades. Dispatchers can instantly merge multiple talk paths into a single incident channel for faster, clearer coordination, while comprehensive call logging provides real-time visibility and accountability for every transmission. Its seamless integration with multiple PBX and radio platforms streamlines communications across all teams. Paired with the Eventide NexLog® DX-Series recording solution, every radio transmission is reliably captured, recorded, and archived for compliance, training, and post-incident analysis.

Result

The Radio One team, from design and engineering to installation and field services, worked closely with park personnel to deploy the new Motorola Solutions two-way radio system and Avtec Scout™ radio dispatch console efficiently and with minimal disruption. Much of the work was completed within 1-2 days after the park closed and before it reopened each morning, ensuring that guest experiences were never disrupted.

Today, the park's workgroups report their appreciation for the reliable connectivity of the new digital two-way radio solution, no matter where they are working. Radio One also provided on-site training for department heads on the new radios' functionality, as well as training for dispatch operators on the Avtec Scout™ console's features.

Since deployment, the entire communications system has been connected to an electronic backup battery power supply and emergency building power. This ensures that even during a hurricane, or other significant event that can result in a power outage the radio communication system remains operational. To further optimize performance, the park established a Service Level Agreement (SLA) with Radio One in Florida, providing support from 8 a.m. to 5 p.m., five days a week. This agreement ensures prompt

service in the event of a system failure or disruption, with a technician deployed on-site as needed.

As further validation of the park's satisfaction with the new Motorola Solutions communication system, discussions are underway to implement similar Linked Capacity Plus UHF trunking system deployments across sister park properties.

The partnership between Radio One and the theme park underscores the park's commitment to building a safer future by embracing the Motorola Solutions ecosystem, a fully integrated approach to safety, security, and communications.

The park continues to actively evaluate next-generation safety and security innovations from Motorola Solutions such as the HALO Smart Sensor to enhance guest and staff protection. In keeping with the park's long-term strategy of creating a smarter, more connected environment, careful consideration is assessed to all new and emerging technologies. Through Radio One's expertise in designing and integrating safety, security and communications ecosystem technologies, the park is adopting a foundation to explore the latest innovations available from Motorola Solutions, gain immediate operational benefits, and remain ahead of emerging security and communications challenges.

About Radio One | CSE Crosscom

Radio One is Florida's largest Motorola Solutions channel partner and is proud to announce we are now a CSE Crosscom global company, with 23 offices across 3 continents focused on being the leader in communications and security solutions. As a CSE Crosscom company, Radio One can leverage enhanced financial stability, resources, broader technical capabilities, and experience to meet and exceed all our customers' end-to-end wireless solutions.





