



Case Study | Georgia Aquarium

Deepening Collaborative Waters: The Georgia Aquarium and MCA Elevate Communications and Incident Management with ALLY and MOTOTRBO™ Integration

OVERVIEW

Connecting Over 200 Employees Across Over 600,000 Square Feet of Operational Space and 11 Million Gallons of Water

Nestled in the heart of downtown Atlanta, the Georgia Aquarium is a vibrant aquatic haven, brimming with over ten million gallons of water and a diverse tapestry of marine life. It is a sanctuary for thousands of animals, including enchanting bottle-nose dolphins, majestic beluga whales, and the only manta rays and whale sharks housed in captivity across North America. The aquarium's offerings extend beyond its mesmerizing exhibits and educational experiences; it stands at the forefront of marine research and conservation.

With a profound commitment to the study of marine animals, both under human care and in the wild, the Georgia Aquarium has fostered global partnerships that amplify their

conservation impact. Their collaborations range from aiding SANCCOB's efforts in preserving the charismatic African penguin to joining forces with 18 academic institutions to propel research in the Yucatan and at their dedicated Conservation Field Station in Florida.

In alliance with the National Oceanic and Atmospheric Administration (NOAA), the aquarium's researchers engage in comprehensive studies of beluga whales in the remote waters of Bristol Bay, Alaska, contributing to vital ecological insights.

The sheer scope of the aquarium's initiatives and the varied nature of its operations underscore the necessity for seamless communication — a lifeline for ensuring safety and



Improving radio communications within the recreation and entertainment sector

Motorola Solutions
MotoTRBO Radios, Private
Radio Systems, and
Incident Management
Applications

Improved Clarity &
Coverage

Instant Emergency Alerts

Simplified Talk Groups

Easy Radio Management

Enhanced Wi-Fi
Capabilities for Radio
Updates

Deadspot Elimination



MotoTRBO
XPR 7550e



MotoTRBO
Capacity Max



ALLY Incident
Management

“IT’S DAY & NIGHT! The coverage went from really struggling in some areas of the building, to having constant communications. There are no dead spots; it’s constantly solid communication.” — Anthony Rivera *VP of Guest Services & Hospitality*

operational efficiency. Confronted with the limitations of a 12-year-old analog radio system struggling to keep pace with their dynamic expansion, the aquarium recognized the need for a technological evolution.

The transition to Motorola MOTOTRBO™ Capacity Plus system technology marked a significant leap forward, providing enhanced coverage, crystal-clear clarity, and advanced capabilities including emergency alerting, radio management, site linking, and over-the-air programmable updates. This upgrade not only bolstered the functionality for guest services but also empowered the marine biologists in their quest to uncover the mysteries of the deep.

CHALLENGE

The Georgia Aquarium (GA) faced significant challenges as it sought to expand and meet its ambitious goals. Its sprawling 550,000-square-foot facility, characterized by unusually thick concrete walls, extensive piping, numerous water pumps, and millions of gallons of water, presented formidable barriers to effective two-way radio communication. These structural features, essential to the facility's operation, also posed the greatest challenges for maintaining clear and reliable radio coverage.

To overcome these obstacles, GA outlined several key objectives for upgrading their communication system:

Enhanced Coverage and Capacity: The upgrade needed to extend the radio coverage across the entire facility and increase the system's capacity to accommodate a growing number of staff members.

Integration with Existing Infrastructure: It was crucial to maintain continuity by integrating the new digital system with the existing antenna infrastructure from the old analog system, ensuring a seamless transition without the need for extensive structural modifications.

Adaptation to Harsh Environments: The new equipment had to be robust enough to operate reliably within the harsh salt-water environments that characterize the aquarium's setting, necessitating the use of ruggedized and waterproof devices.

Cost-Effective Implementation: With financial prudence in mind, the aquarium sought flexible financing options that would allow them to implement these critical upgrades promptly, without compromising other operational needs.

These strategic upgrades were designed not just to keep pace with the aquarium's growth but to ensure that its teams could continue their vital work with the efficiency and safety that modern digital communication tools can provide.

SOLUTION

To address the communication challenges at the GA, our MCA experts recommended the Motorola MOTOTRBO™ Capacity Plus Trunking system, tailored specifically for the unique demands of the facility. The implemented system included three Motorola SLR 8000 Repeaters and 350 Motorola XPR 7550e Portable Radios, coupled with a sophisticated incident management platform. This robust setup enhanced the aquarium's operational capabilities by supporting emergency alerts, all-call announcements, radio management, and Wi-Fi enabled updates.

Enhancements included the addition of an extra talk group, allowing MCA to optimize the existing groups for improved clarity and reach among staff. This reorganization facilitated smoother transitions between groups and more direct communication with specific team members as required. Prior to deployment, MCA also ensured the renewal and update of the aquarium's FCC License to comply with regulatory standards.

A primary concern for the GA was to streamline their various operational processes into a single system. Previously, the aquarium had been managing incident reports, operational data, and lost and found logs through three disparate programs. Recognizing the need for a unified solution, MCA introduced the Ally software system.

Ally software emerged as the ideal solution, consolidating all operational data into a single, accessible database. This shift not only proved cost-effective but also significantly boosted the efficiency and productivity of the security department. With features like incident reporting and a dispatch CAD system, Ally has become an indispensable tool for daily operations, enabling the GA to seamlessly monitor and manage activities throughout the premises.

RESULTS

The transition to the new communication system at the GA was executed flawlessly by our Tucker, Georgia team. Utilizing the existing antenna infrastructure (*as the customer requested*), the team programmed and staged the Motorola MOTOTRBO™ system efficiently, ensuring a rapid overnight installation.

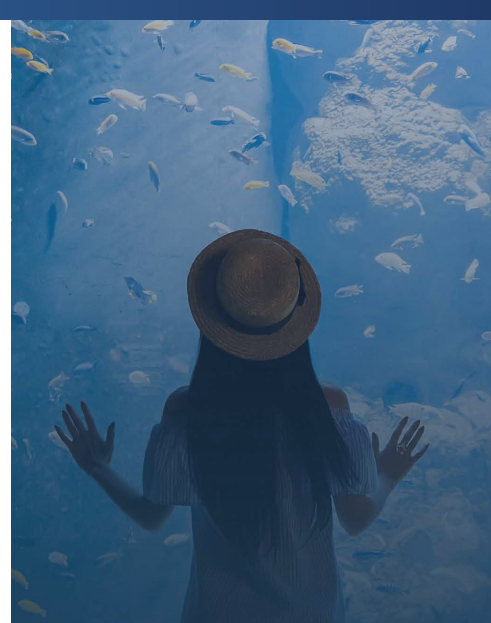
This swift changeover took place after hours, allowing the aquarium to switch from their outdated system to the advanced MOTOTRBO™ setup without experiencing any operational downtime.

Upon reopening, the staff immediately noticed the superior performance of the MOTOTRBO™ Capacity Plus system. The upgrade eradicated previous issues with clarity and coverage—eliminating dead spots, dropped calls, and static interruptions that had plagued their old system.

This enhancement is critical as the aquarium plans further expansion; the new system not only covers the current area but is also scaled to accommodate future growth and additional users seamlessly.

A Leap Forward in Safety and Security

The new system introduces an array of features that significantly boost safety and security protocols at the aquarium. Emergency alerting has been integrated into the talk-group structures, complemented by an All-Call feature that allows for the instant broadcasting of critical messages to all users. This ensures that in emergency situations, communications are transmitted swiftly and efficiently.



"I would definitely recommend Ally to other companies that have the same operational needs. Even training employees on the new system was a breeze. Little to no training was required. A cheat sheet and a little coaching on the first day made the transition simple."

Jonathan Thomas
*Manager of Safety and
Outsourced Services (MSOS)*





Streamlined Operations Across Departments

The restructuring of talk groups by MCA has allowed for a clearer delineation between Zoo and Standard Operations, facilitating smoother and more effective communication among all staff. This optimized grouping ensures that team members can quickly connect with the appropriate personnel, enhancing the efficiency of daily operations and improving safety for visitors, staff, and the aquatic inhabitants.

With these comprehensive upgrades, the Georgia Aquarium has not only enhanced its communication system but has set a new standard for operational excellence, ensuring readiness for future expansions and day-to-day reliability in communications.

Looking Forward

The Georgia Aquarium team is enthusiastic about the advanced capabilities and potential applications their upgraded MOTOTRBO™ system can support. This future-ready system brings several benefits designed to enhance safety and accommodate the aquarium's growth.

Advanced Radio Management

A key feature now available to the aquarium is advanced Radio Management. This tool is essential for managing the fleet of 350 portable radios and repeaters. It provides continuous monitoring and generates regular reports on the status of each device, including battery life and programming updates, ensuring the communication system remains optimal.

Expansive Site-Linking

As the aquarium's research department grows and new partnerships are forged, the need for expanded communication becomes crucial. The MOTOTRBO™ Capacity Plus system is equipped to facilitate site-linking across multiple facilities, enhancing the aquarium's global reach. This allows seamless communication not just within the main Atlanta location but also connects staff at the Conservation Field Station in Marineland, Florida, and any other future facilities. The system ensures robust, push-to-talk voice communication across all locations, enabling effective coordination and collaboration.

Innovative Indoor GPS Capabilities

Looking ahead, the implementation of Indoor GPS tracking represents a significant leap in operational efficiency and safety. This technology is particularly beneficial for monitoring staff interactions with large or potentially aggressive marine animals. It also streamlines the dispatching of personnel for guest services, animal care, and maintenance issues, ensuring that staff can respond swiftly and accurately to various needs throughout the facility.

These forward-looking technologies not only prepare the Georgia Aquarium for future expansion but also solidify its commitment to maintaining a safe, efficient, and connected environment for both staff and marine life.



"The ability to update all our radios via Wi-Fi is going to be huge for us; versus the old way of literally having each radio come down one-by-one and plugging each one in individually to program them."

Jonathan Thomas
MSOS

Future-Ready Innovations

The implementation of the MOTOTRBO™ Capacity Plus system has revolutionized communication at the Georgia Aquarium, not only enhancing current operations but also paving the way for future growth and expanded research capabilities. With this advanced system in place, communication barriers that once could have impeded critical work have been dismantled.

Now equipped with cutting-edge technology, the aquarium's communication infrastructure is set to bolster productivity and streamline operations. This enhancement means quicker response times and more efficient daily activities, leading to heightened safety for both staff and the diverse species residing at the aquarium. As the Georgia Aquarium continues to expand its facilities and research initiatives, the robust features of the MOTOTRBO™ system will play a pivotal role in supporting these developments, ensuring that the aquarium remains a leader in marine conservation and education.

A Proud Partner of Marine Conservation

At MCA, we are proud to be in an ongoing partnership with the Georgia Aquarium. We wholeheartedly support their commitment to the research and preservation of aquatic life and their habitats. In recognition of the vital work the aquarium is doing for our oceanic ecosystems, Motorola has contributed a \$10,000 donation to support their efforts.

If you're interested in supporting or learning more about the Georgia Aquarium, whether through a visit, volunteering, or donations, please visit their website at: www.georgiaaquarium.org. Join us in making a positive impact on marine conservation and education.

We are the trusted advisor for a safe, secure, and efficient workplace.

"It was not only about selling us a product but helping us fill in the whole game plan; how we were going to install it, maintain it and grow it; all of these things were important to us. We were looking for a true partner, and we found that in MCA." — Anthony Rivera



About MCA

MCA is one of the largest and most trusted technology integrators in the United States, offering world-class voice, data, and security solutions that enhance the quality, safety, and productivity of customers, operations, and lives.

More than 65,000 customers trust MCA to provide carefully researched solutions for a safe, secure, and more efficient workplace. As your trusted advisor, we reduce the time and effort needed to research, install, and maintain the right solutions to make your workplace better.

Our team of certified professionals across the United States delivers a full suite of reliable technologies with a service-first approach. The MCA advantage is our extensive service portfolio to support the solution life-cycle from start to finish.

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The MCA logo is displayed in a large, white, sans-serif font. The letter 'C' is stylized with a blue circular graphic element inside it, consisting of concentric arcs and dots, resembling a network or signal pattern. The background of the entire page is a dark blue gradient with abstract, glowing white and light blue geometric patterns, including a complex network of lines and dots in the upper right corner and wavy, wireframe-like structures on the left and bottom.