



Case Study: Community

WORLD TRADE CENTER

SITUATION:

The Port Authority of New York and New Jersey's reconstruction of the World Trade Center (WTC) complex is underway with ambitious plans for five new skyscrapers, a memorial park and museum, a new transportation hub, a retail complex and a performing arts center. The safety and security of the construction and planning team are paramount. Therefore, in September of 2008 ATI Systems of East Boston, MA was awarded the contract to provide an emergency warning system on the construction site. The ATI system will provide audible alerts and intelligible voice commands through its outdoor speaker system. In case of any hazardous event, weather-related or man-made emergency that requires an evacuation or relocation from the various construction zones within the site, the ATI system will immediately notify the construction and planning team.

SOLUTION:

ATI Systems designed and manufactured a complete system and installation is now underway. The system design is based on the company's proprietary acoustic model which will ensure sound audibility and voice intelligibility throughout the entire construction site with minimum echo and reflection. Sound will be projected into the site from the perimeter rather than from the center outward, to achieve a minimal amount of sound disruption to the neighboring community. The mass notification system meets all applicable code and standard requirements and has field-proven reliability. Its user-friendly software interface will be operated by the Port Authority police and authorized staff to ensure the safety of the WTC construction community through each phase of the reconstruction project, which is expected to continue through 2013. Once the construction is completed, the ATI system can be expanded to interface with other emergency notification solutions, such as text messaging and desktop alerting, to continue to ensure the safety of the WTC complex in both outdoor and indoor locations.

The System includes:

- A portable Control Station for activating, controlling and monitoring the alerting units with fully functional tone alert, and live and pre-recorded voice messaging capabilities
- A secondary portable backup unit
- A flexible, wireless radio frequency communication system suitable for the dynamic nature of construction at the site
- Three High Power Speaker Stations with 1600 watts of continuous audio output power and six Outdoor Speaker Units with 400 watts of continuous audio output power. All speaker units are positioned at the perimeter of the WTC and will project sound into the site in different directions. The location and quantity of these units can be expanded to meet any future site requirements
- System supervision including speaker failure, connectivity failure from the Control Station to the speakers, power failure, battery failure or any other problem that would prevent the System or any of its components from operating
- A rechargeable 24-hour battery backup for all field equipment in case of AC power loss

ABOUT ATI SYSTEMS:

Acoustic Technology, Inc. (ATI Systems) designs, manufactures and installs reliable emergency warning and notification systems for the Campus, Community, Industrial and Military markets. Incorporated in Massachusetts in 1981, ATI Systems developed an innovative wireless system that provides audible and visual warnings via a simple and compact hardware design, user-friendly software and the latest advances in communication methods, including radio frequency, IP Ethernet and satellite technology. Through acoustic design and modeling, ATI Systems ensures proper sound coverage and superior voice intelligibility in both outdoor and indoor areas to ensure the safety of communities worldwide. To learn more about ATI Systems, visit <http://www.atisystem.com>.



ATI Systems Installation at the World Trade Center