## CASE STUDY



0
After this first BDA install, maintenance people were so happy that they personally reached out to thank us. School administrators ended up requesting additional funding specifically for BDA for the school district.

Brian Blakey, SET for Four Feathers Alarm LLC.

## Allen Independent School District Allen, TX


#### Abstract

ABOUT In August 2018, the Allen Independent School District (ISD) in Collin County completed a $\$ 97$ million new-build High School project to house their rapidly growing student population. The campus spread across 6.2 acres, and featured a 314,000 SQFT facility accommodating approximately 1900 students and staff. As part of the new-build construction, a robust NOTIFIER fire safety system was integrated throughout the campus. An ONYX ${ }^{\circledR}$ Series NFS2-3030 intelligent fire alarm control panel with Digital Voice Command was placed at the centrally located office.

To ensure maximum safety for students and staff, school officials required that a best-in-class ERCES Life Safety system be incorporated to ensure 100\% radio frequency coverage for First Responders.


CHALLENGE Due to lack of awareness, Collin County had not implemented national fire code requirements stating that all newbuild structures incorporate Bi-Directional Amplifiers (BDA) as part of a comprehensive ERCES system. However, the City of Allen made the decision to require full code compliance. Building officials attempted to source UL listed BDA technology, but, without much prior experience with life safety systems, they were unsuccessful in identifying a certified fire and life safety integrator or code compliant product. Four Feathers Alarm LLC, a NOTIFIER authorized and certified Engineered Systems Distributor (ESD), was hired to design and install a comprehensive BDA Life Safety System.

SOLUTION The NOTIFIER Class B Bi-Directional Amplifier (BDA) System was chosen for its comprehensive code compliancy and seamless integration with the ONYXWorks fire system. This solution provided:
, A state-of-the-art, seamlessly integrated fire and life safety system
, An NFP72 and UL2524 compliant emergency radio enhancement system
, $100 \%$ coverage for first responder radio communications
, Fast installation of BDA to meet key milestones
, Superior education and service from best-in-class local distributor


## UL Compliant Product Choice by Certified Life Safety Expert

As one of the first certified BDA fire and life safety integrators, Four Feathers Alarm was an obvious choice for the Allen Independent School District. Using ibwave heat map testing, Four Feathers Alarm identified key areas of radio signal interference. They chose the NOTIFIER 700/800 MHz BDA system, which could canvas the large 6.2-acre campus and seamlessly integrate with the existing NFS2 3030 fire alarm control panel. BDA is a signal boosting solution designed to enhance in-building radio frequency (RF) signal coverage for public safety radio. The high gain, high power band-selective signal booster integrates directly into any NOTIFIER FACP through the built-in addressable monitor module. NOTIFIER BDA meets all public safety frequency band ranges to provide reliable two-way radio signal coverage inside buildings, tunnels and other structures. This system is both UL2524 and NFPA 71/1221 compliant, which helps ensure that county and state code requirements are met.

## The First BDA Life Safety System in the State of Texas

Four Feathers Alarm placed the BDA module in the second floor IT room, close to roof access. Using creative design and strategic placement, they were able to create robust radio signal coverage with only five signal-boosting antennae. The donor antenna was placed on top of the school building, and aligned with the closest radio tower, approximately one mile away. Implementation was completed in less than two weeks, and with significant cost savings to the school district. This project represented the first BDA life safety system installation in the State of Texas.

## BDA Installation Facilitates Request for Additional Funding

"When we first arrived on campus, school safety personnel did not have viable radio coverage, which made their jobs exponentially more challenging," states Brian Blakey, Senior Engineer Technician for Four Feathers Alarm.
"Fifteen minutes after we turned on the BDA system, all radios were working. The police officer assigned to the school was even able to receive calls inside of his office, which had never happened before," he continues.

As a result of the pilot BDA installation and their strong relationship with school officials, Four Feathers was able to secure a 5-year maintenance and monitoring contract for the entire school district. In addition, school administrators have requested an additional one million dollar bond specifically for Bi-Directional Amplifiers throughout the school district. Four Feathers is currently finalizing the second Texas-based BDA installation, and has secured additional BDA projects.

## NOTIFIER

12 Clintonville Road
Northford CT 06472
203.484.7161
www.notifier.com
©2019 NOTIFIER by Honeywell International Inc. All rights reserved. Unauthorized use of this document is strictly prohibited.

