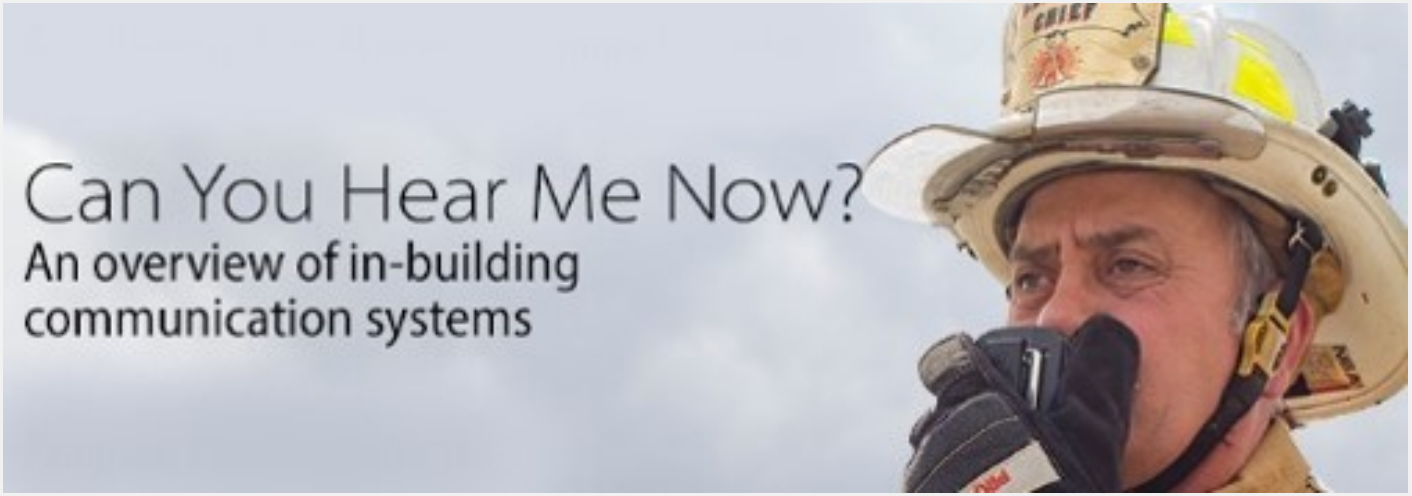
SOUTH CAROLINA STATE FIRE

OSE Facilities Directors Conference



October 17, 2019

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Emergency Responder Radio Coverage

The PROBLEM:
In-Building Radio Signal Degradation

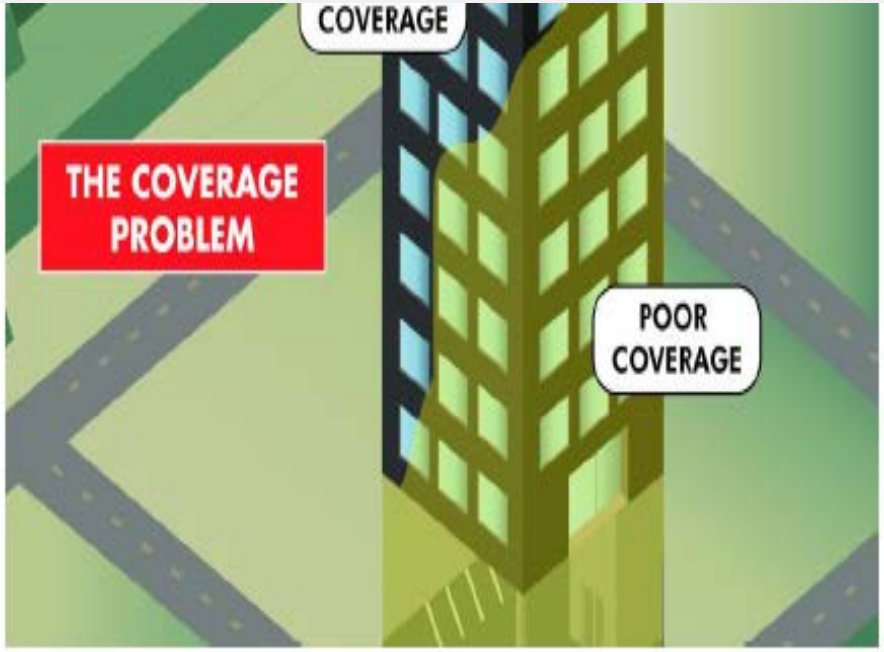
Radio signals are attenuated by:

- Concrete, Metal & Other Materials
- Low-E Glass
- Below-Ground Structures
- Other Obstructions
- Radio Frequency Interference

The consequence:

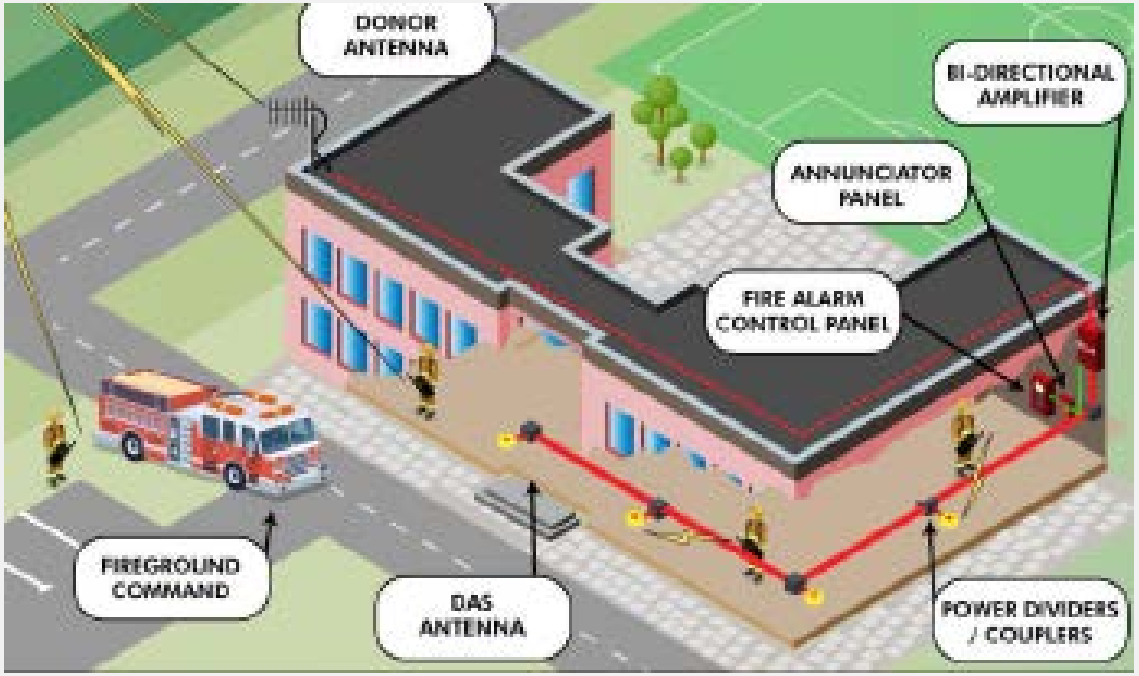
- Poor in-building Fire Fighter radio signal coverage and “dead spots”
- Emergency responders lose communications

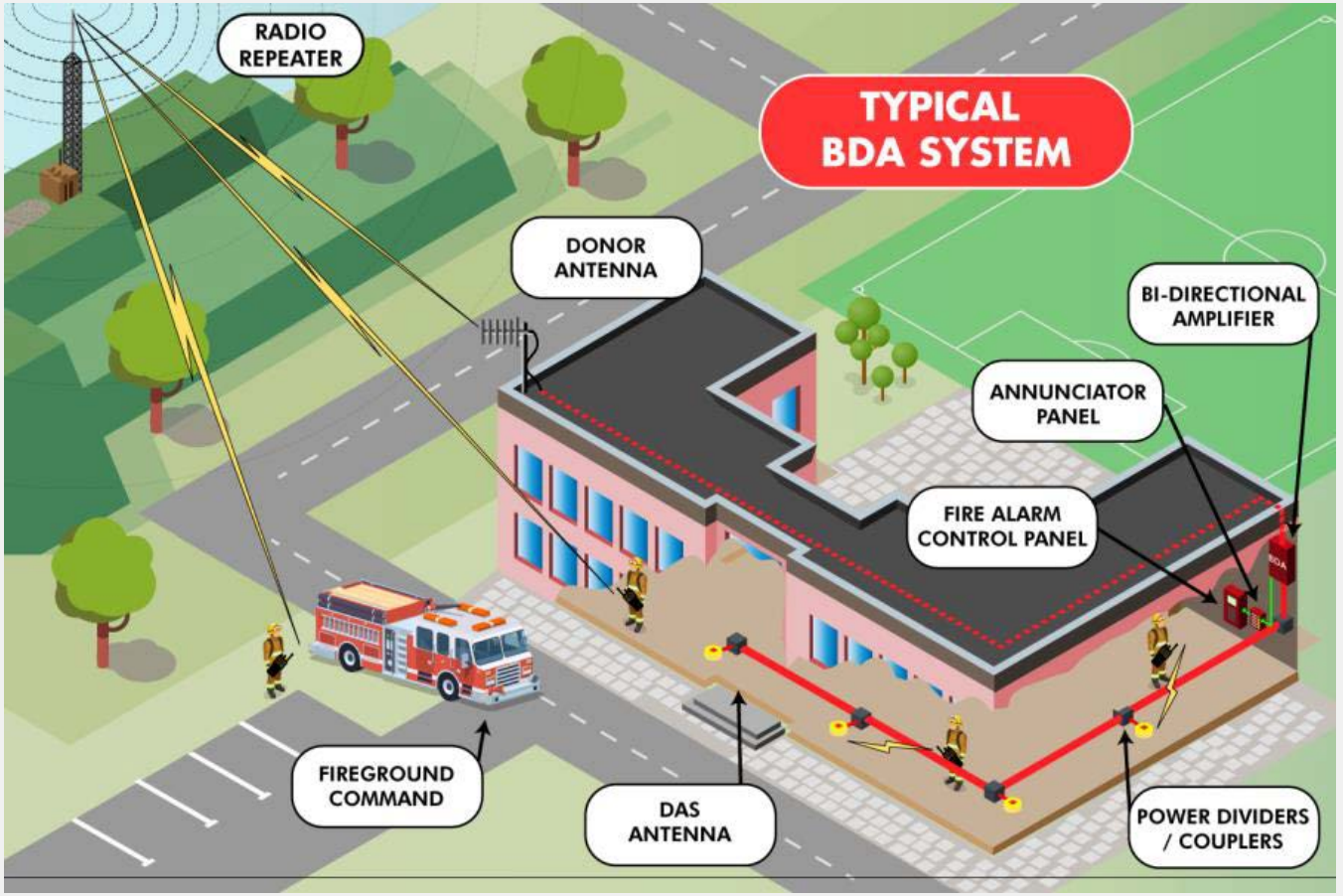
The PROBLEM:
Lack of radio signals in portions of the building.

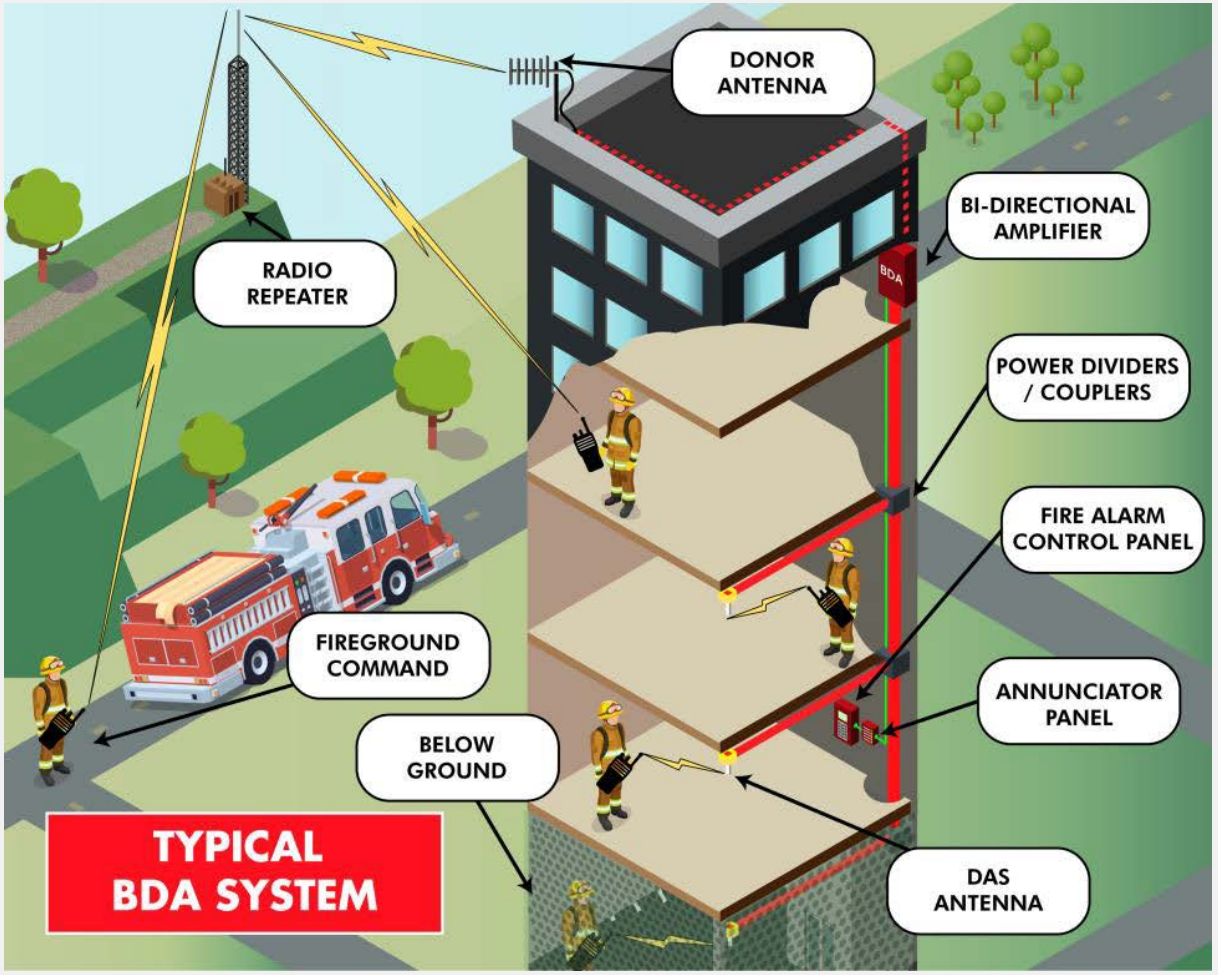


The SOLUTION:

Distributed Antenna System (DAS). A network of spatially separated antenna nodes connected to a common source via a transport medium that provides wireless service within a structure.




RADIO REPEATER
TYPICAL BDA SYSTEM
DONOR ANTENNA
BI-DIRECTIONAL AMPLIFIER
ANNUNCIATOR PANEL
FIRE ALARM CONTROL PANEL
FIREGROUND COMMAND
DAS ANTENNA
POWER DIVIDERS / COUPLERS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BELOW GROUND
DAS ANTENNA
TYPICAL BDA SYSTEM

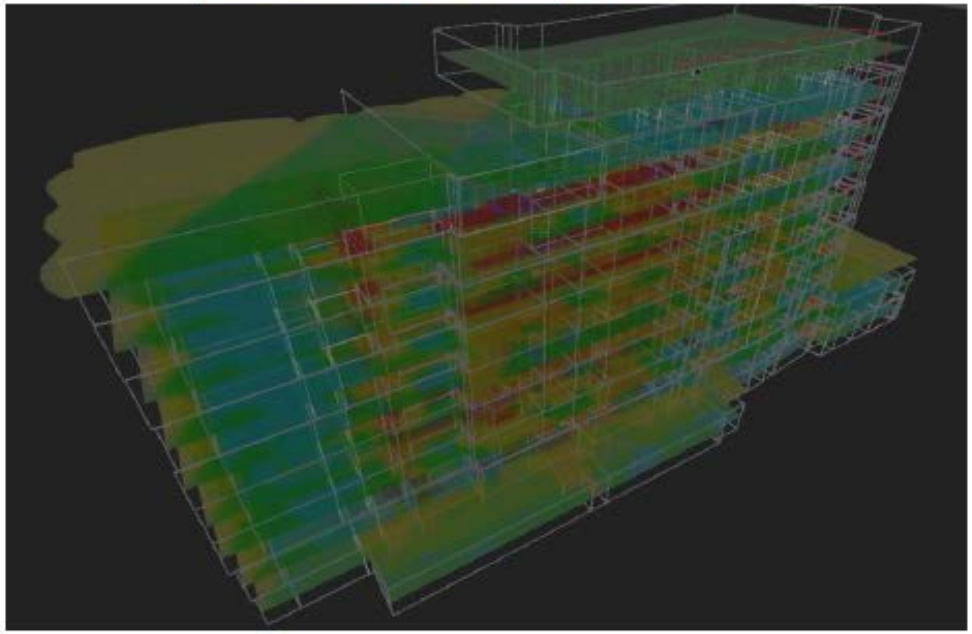

EMERGENCY RESPONDER RADIO BDA
AC POWER NORMAL
AC POWER LOSS
BDA TROUBLE
ANTENNA TROUBLE
BATTERY CHARGER TROUBLE
BATTERY LOW
NOTIFIER
by Honeywell

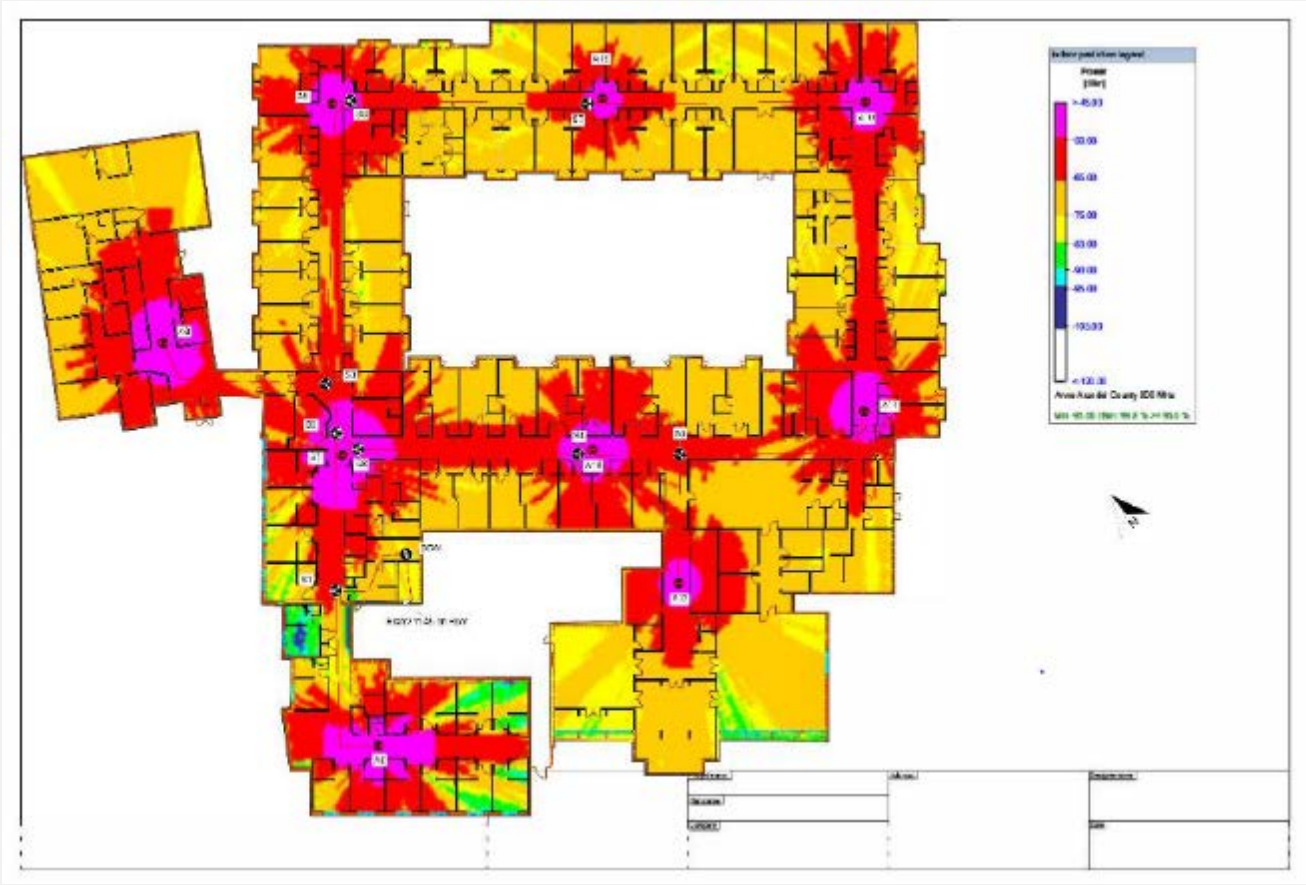
WHAT? WHERE? HOW? WHEN?

Available information will determine accuracy of design, schedule and budget.

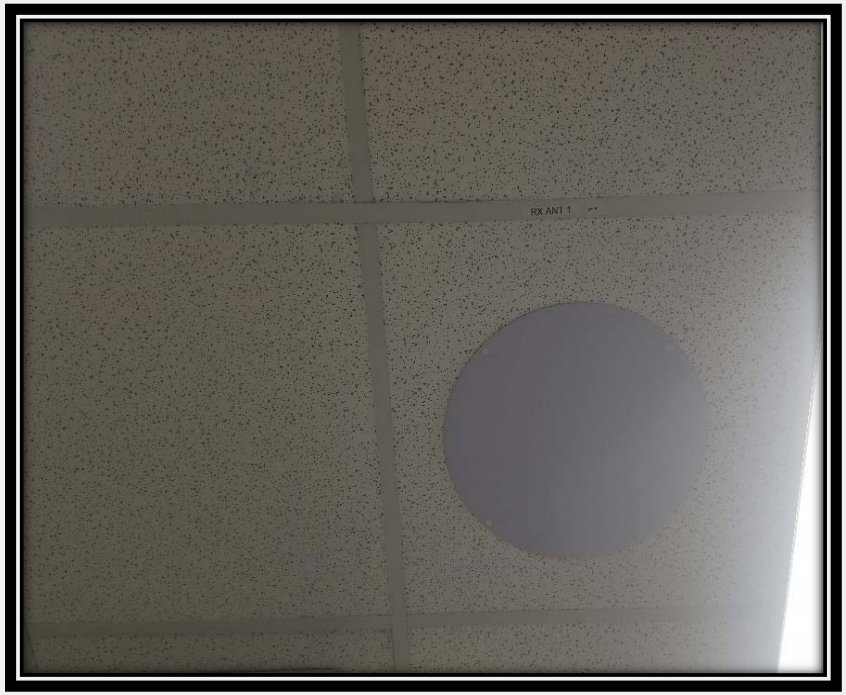
IB-Wave Design

- Benefits of IB-Wave Modeling
  - Signal Prediction for new construction.
  - Design layout for installers.
  - Submittal documentation for AHJ's and A&E's.






PSU O
BDA O



Interior antenna coverage


Transmit


Receive

FAQ’s about Fire Alarm Systems

What happens when copper phone lines go away?

When do I have to bring my existing fire alarm up to current code?

Fire and Life Safety in Your Facilities

What should I do now?

- Remember, the public is not aware of risks and potential for harm that exists in your facilities. They expect that you are providing a safe environment for them.

- Don’t do your job to keep from being in trouble. Do your job because it’s the right thing to do.

Fire and Life Safety in Your Facilities

What should I do now?

- Remember one little lie can cost the world a treasure.