EMERGENCY RESPONDER/PUBLIC SAFETY RADIO ENHANCEMENT SYSTEMS

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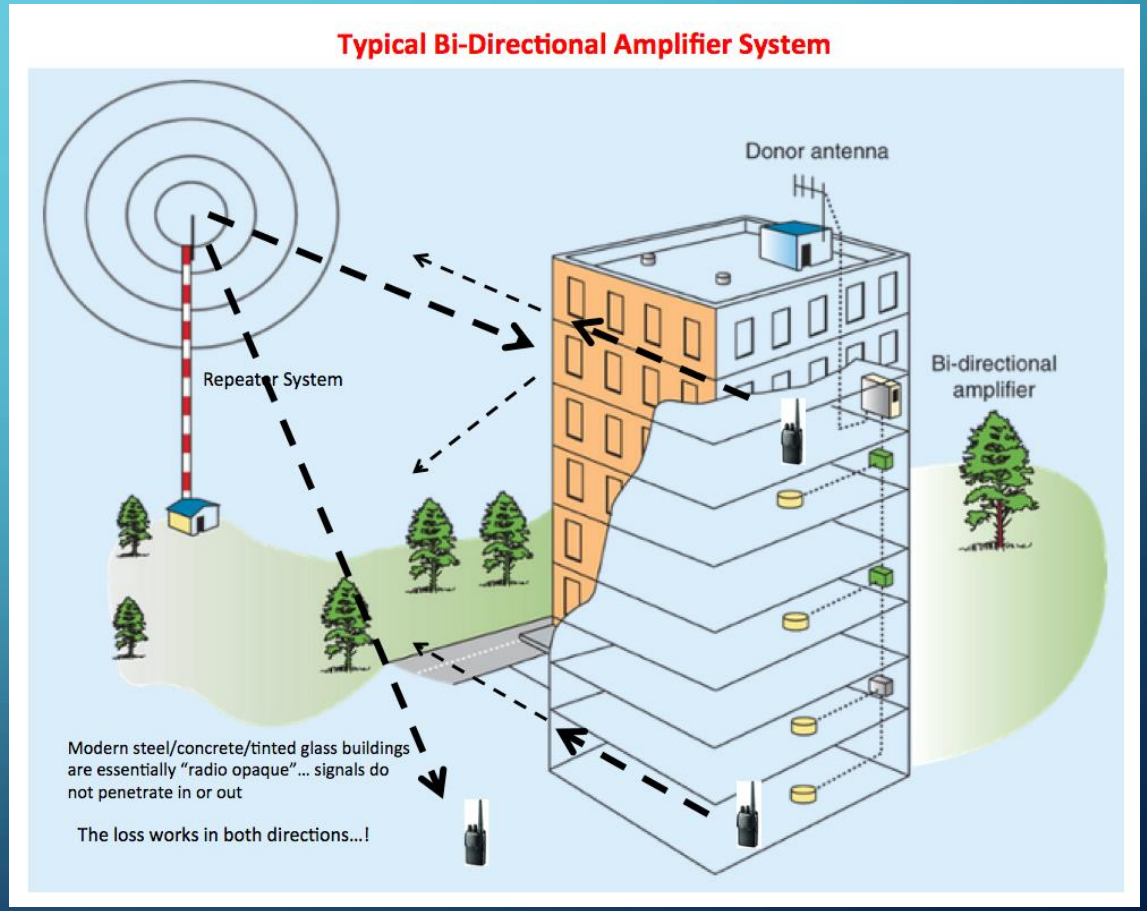
WHAT IS DAS/BDA

- Distributed Antenna System (DAS)
- Bi-Directional Amplifier (BDA)

A BDA and DAS bring outside radio signals into and out of structures

Additional info available at:

www.npstc.org/inBuilding.jsp



WHERE IS IT NEEDED?

- A DAS/BDA system is required in all new:
  - High rise buildings
  - Building more than five stories, 50,000 ft², or basement are more than 10,000 ft²
    - Must have emergency responder radio coverage system or wired fire communications system
  - Existing high rise buildings without wired communication system or approved radio coverage

SFD Client Assistance Memo (CAM) #5123-Emergency Responder/Public Safety Radio Enhancement Systems
http://www.seattle.gov/fire/FMO/firecode/cam/5123CAM%20RadioSystems.pdf

For information on wired fire department communication system, see SFD CAM #5122
www.seattle.gov/fire/FMO/firecode/cam/5122CAM%20WiredSystems.pdf

HOW DO I GET IT INSTALLED?

- Program is managed by Seattle IT & SFD
- Request for Authorization Form (allow 30 days for review)
- Design & Installation
  - SDCI Electrical Permit needed
- COORDINATE WITH SEATTLE IT BEFORE TURNING ON SYSTEM!! (206-386-1213)
- Loaner ‘test radios’ can be checked-out from Seattle IT (206-386-1213)
- SFD testing (206-386-1443)

Request for Authorization Form:

http://www.seattle.gov/fire/fmo/firecode/cam/BDA-DAS%20Installation%20Authorization%20Request.pdf

SIGNAL STRENGTH TESTING

- Acceptable coverage-90% signal strength of all areas on each floor of the building
  - Minimum signal strength of -95 dBm
- Critical Areas-99% signal strength
  - Fire command center(s), the fire pump room(s), interior exit stairways, exit passageways, elevator lobbies, standpipe cabinets, sprinkler sectional valve locations, and other areas required by the fire code official, shall be provided with 99 percent floor area radio coverage

SEATTLE INFORMATION TECHNOLOGY DEPARTMENT CONCERNS

- System must meet FCC and local technical requirements
- System must be installed to 'do no harm' to the wide-area public safety radio system
- Testing at commissioning must include two key activities:
  - Coordinate with the Seattle IT Communications Shop so we can observe impact to regional radio system
  - Perform indoor/outdoor isolation test to verify that system has minimal potential to cause harmful interference
- ***Passing*** these tests constitutes approval to leave the BDA system in an ***activated condition***

INTERFERENCE

- Remember, in addition to meeting the requirements of Seattle Fire and SDCI, you are receiving permission from City of Seattle as the FCC licensee to carry our signal
- If you carry the signal without City permission, you are violating FCC Rule and are subject to fines of:
  - $18,936 for each day of a continuing violation
  - A statutory maximum of $142,021 for a single act or failure to act
- And if you cause harmful interference, either willfully or accidentally, you are putting the safety of first responders at risk

QUESTIONS