Welcome!

Rich Rasmussen
Vice President for Membership Relations
Florida Hospital Association
Objectives

- Provide an understanding of what a Public Safety Bi-Directional Amplifier system is and why it is important for hospitals.
- Discuss the compliance issues for hospitals as they relate to Florida Statute 633.202.
- Describe how a plan to attain compliance can be accomplished.
Objectives

- Provide an understanding of what a Public Safety Bi-Directional Amplifier system is and why it is important for hospitals.
- Discuss the compliance issues for hospitals as they relate to Florida Statute 633.202.
- Describe how a plan to attain compliance can be accomplished.

What’s the Issue?
FS 633.202

- Requires the State Fire Marshall to adopt National Fire Protection Association’s (NFPA) Fire Prevention Code standards, including emergency communication systems.
- The statue becomes effective December 31, 2019 and will require certain hospitals to meet specific standards under NFPA for in-building, two-way radio coverage.

Today’s Webinar Provides...

- Information on how the new statute relates to Public Safety in compliance with NPFA–72, NFPA-1221, and the International Fire Code testing requirements; AND,
- what the requirements are and examine best practices to achieve compliance.
Today’s Speakers

Brian Lopez
- FCC Operator license
- FCC Technician license
- City of Miami Radio System Manager
- State of Florida Communications Chair
- BDA Guidelines for City of Miami

Craig Sells
- ERRC Sales Specialist
- ERRC Project Manager
- National Account Executive for ERRC systems
- Florida Fire College 4 Hour CEU trainer for ERRC

Richard Rodriguez
- Firefighter/Lieutenant for City of Miami Fire
- Special Assistant to the Fire Marshall
- NFPA certified Fire Plans Reviewer
- Certified Fire Inspector
- Fire Code Consultant and Technical Advisor

COMMUNICATION IN AN EMERGENCY???
Overview of New Bi-Directional Amplifier
Requirements for Hospitals

Tuesday, July 24, 2018

Florida Hospital Association 6

9/11 Over 300 Firefighters lost their lives in part due to Radio Communication Failure

Distributed Antenna System (DAS)

- A solution that distributes RF signal throughout a building, stadium or other defined area.
- Can be used to distribute any RF signal.
- RF sources can either be from the outdoor network (radio tower) or directly from base station radios.
- Typically public safety DAS are fed by a BDA using off-air signal
- NOTE: Coupling two DAS solutions together in a larger space is not recommended because they could interfere with each other
Overview of New Bi-Directional Amplifier
Requirements for Hospitals

HEAD-END EQUIPMENT ROOM (BRAIN OF THE SYSTEM)

Important requirements that a BDA system has to conform with

- Supports local AHJ’s bands
- NFPA 1, 72, 1221
- Florida Fire Prevention Code
- UL Listed
- Compliant FCC part 90
- Other requirements per AHJ.

CODES

Note: July 1, 2018 Bill CS/HB 1061
Community Association Fire and Life Safety Systems goes to Florida House of Representatives for Analysis
Hospital systems are a complex environment that require extensive engineering to develop ERRC solutions.

CHAPTER 633- Fire prevention and Control Section 202- Florida Fire Prevention Code

(18) The authority having jurisdiction shall determine the minimum radio signal strength for fire department communications in all new high-rise and existing high-rise buildings.

COMPLIANCE
New Construction and Remodeling where Certificate of Occupancy increases by 20% - Compliance required

Existing Buildings - Permit on file by December 31, 2019 and required to comply by January 1, 2022

Existing Apartment Buildings - Permit on file by December 31, 2022 and required to comply by January 1, 2025
WHAT CHANGED TO REQUIRE
PUBLIC SAFETY RADIO ENHANCEMENT

National Fire Prevention Code 1

2012 NFPA 1


A.11.10 Two-way radio communication enhancement systems provide for greater flexibility and safety for emergency responders during in-building operations.

11.10.1 In all new and existing buildings, minimum radio signal strength for fire department communications shall be maintained at a level determined by the AHJ.

11.10.2 Where required by the AHJ, two-way radio communication enhancement systems shall comply with NFPA 72. IN THE 2015 EDITION NFPA 1221 REPLACED NFPA 72.

11.10.3 Where a two-way radio communication enhancement system is required and such system, components, or equipment has a negative impact on the normal operations of the facility at which it is installed, the AHJ shall have the authority to accept an automatically activated responder system.

WHAT CHANGED TO REQUIRE
PUBLIC SAFETY RADIO ENHANCEMENT

National Fire Prevention Code 1

Code provisions changing with every cycle.
Overview of New Bi-Directional Amplifier
Requirements for Hospitals

Tuesday, July 24, 2018

Florida Hospital Association
Overview of New Bi-Directional Amplifier Requirements for Hospitals

Tuesday, July 24, 2018

Florida Hospital Association

2013 NFPA 72

2013 NFPA 72 – RES Testing

14.4.1.06 Annual Tests. Where a public safety radio enhancement system is required, it shall be the building owner’s responsibility to have all five components of the system, such as signal boosters, power supplies, and backup batteries tested at a minimum of once every 12 months. The authority having jurisdiction shall be notified in advance and shall direct annual test procedures and requirements.

A-14.4.1.06.6 Typically, annual tests require several items to be checked. Annual tests should include all procedures encompassed in 14.4.1.04. Signal boosters should be tested to ensure that the gain is the same as it was upon initial installation and acceptance. Backup batteries and power supplies should be tested under load for a period of 1 hour to verify that they will properly operate during an actual power outage. Other active components are typically checked to determine that they are operating within the manufacturer’s specifications for the intended purpose.
What is involved

• Understand the requirements
  – Meet with AHJ’s: Code and Guidelines
  – Initial Signal Strength Testing
  – Control Channel – Number of Channels
  – Tower – Donor Sites – Distance

• Understand the building construction
  – Types of wall, floor and roof
  – Understanding critical and non critical coverage areas

Grid Sheet
The BDA Process

• Find a qualified contractor to start the process.
• Preliminary survey is required to determine signal strength requirements.
  o If survey is a pass, no further action required.
  o If survey is a fail, the process for installation officially begins.
• Plans are to be submitted to the AHJ for approval.
  o Plan approved permit is issued.
• With approved permit work can commence.
• Call in for appropriate inspections.
• When all inspections pass and all appropriate documents given to the AHJ, permit is closed.

Thank you Florida Hospital Association for the opportunity to inform you of this critical life safety requirement.
Questions?

EM Education

- **July 31 – August 1** - Certified Healthcare Emergency Professional (CHEP) Preparation Course and Certification Exam

- **September 12** - Hospital Incident Command System (HICS, Ver. V)
Webinar Evaluation

• We would appreciate your feedback!!
• Web participants can stay logged in as the webinar closes to be redirected to the online survey (the link will also be provided in a follow up email).

Thank you!

John Wilgis
407-841-6230
john@fha.org