Coral Springs Police and Fire Radio System

Presented by:

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Coral Springs Radio System

2005

- The P25 Standard had become the adopted technology path by the Public Safety Industry.

- Coral Springs' radio system had reached its "end of life."

- Coral Springs began steps to procure new P25 compatible portable radios.

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Coral Springs Radio System

January 2013

The City of Coral Springs retained RCC Consultants, Inc. to:

- Conduct an independent assessment of the City's:
    - Public safety radio communications system
    - Operating environment and requirements

- Recommend the best solution to include:
    - Compliance with current industry standards
    - APCO Project 25 (P25)
    - Interoperability
    - Remaining out of the regional radio system

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Coral Springs Radio System

April 2013

Summary of RCC Findings:

The City of Coral Springs' Motorola Legacy 800 Trunked Radio System was 15 years old.

- In 2005 critical components had reached "end of life" and were no longer supported.

- Equipment that was no longer supported was being repaired based on "best efforts" and part availability.

- System restoration was not guaranteed and could impact service for extended periods.

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Background: 2013

Summary of RCC Findings continued:

- Because Coral Springs' radio had reached end of life, the City was concerned about Broward County's migration to P25 in the 2018 - 2020 timeframe.

- Coral Springs could maintain a stand alone radio system with interoperability with neighboring jurisdictions, while enjoying enhanced system benefits.

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System Components after 2015 Radio Upgrade:

- Radio was upgraded to a P25 Standard system, providing complete interoperability with regional system.

- Radio consoles in the Communications Center were upgraded to the P25 Standard as well.

- Enabled enhanced GPS providing for first responder safety and closest police and fire unit response.

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System Components after 2015 Radio Upgrade continued:

- Six new portable repeaters for the Fire Department were added to boost in-building coverage.

- For optimal radio coverage, Microwave loop dishes were strategically placed on three (3) radio tower locations:
  - Coral Springs
  - Margate
  - Coconut Creek

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Coral Springs Radio System

P25 Radio System Daily Activity

- New system has 83 Coral Springs talk groups, any of which can interoperate with the regional radio.

- Current Coral Springs Radio Users:
  - 1134 users on the Coral Springs P25 Radio System.
    - This includes Public Safety and Local Government
    - Fire Station Alerting System

- Daily average capacity usage of Coral Springs' P25 radio system is between 18% – 19%.

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Talk Group Assignment for Coral Springs Police:
- One (1) Law main talk group
- One (1) Law teletype talk group
- Two (2) tactical talk groups
- Sixteen (16) additional talk groups for special operations

- Bravo Shift- minimum of 15 Patrol, Detectives, Specialty Units, Command Staff = 60+ users daily.

- Alpha Shift- minimum of 15 Patrol and Specialty Units.

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Talk Group Assignment for Fire:

- One (1) Fire main talk group
- Five (5) tactical talk groups
- Six (6) additional talk groups for special operations / training

- Eight fire stations, fire administration and inspections = 50+ users daily in addition to law enforcement users.

- Note: Local government users add another 90+ users daily.

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P25 Radio System Daily Activity

Normal system activity is below 3000 push to talks on average at peak times.
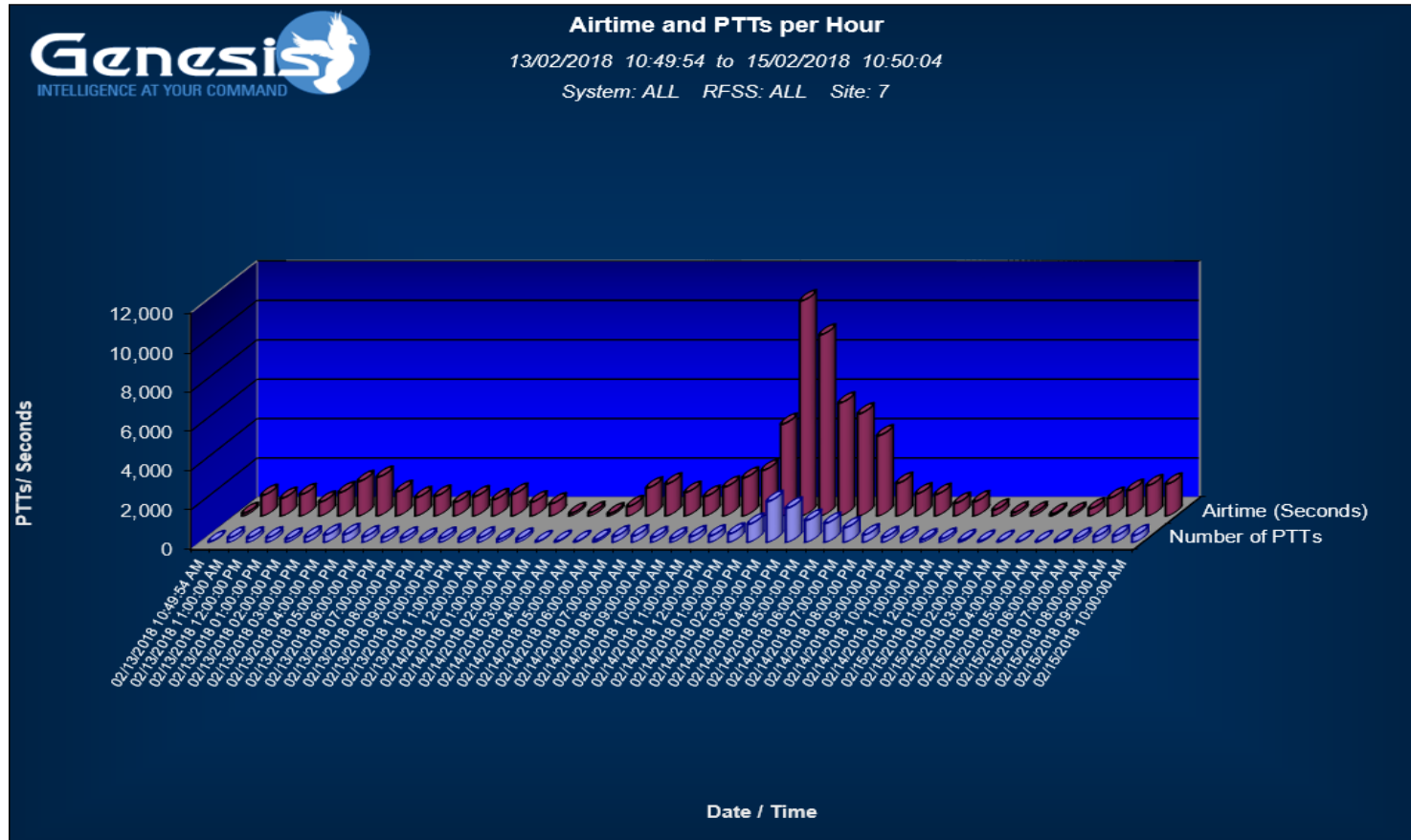
Coral Springs Radio System

P25 Radio Coverage Map

Radio coverage allows Coral Springs' system to interoperate with the County's
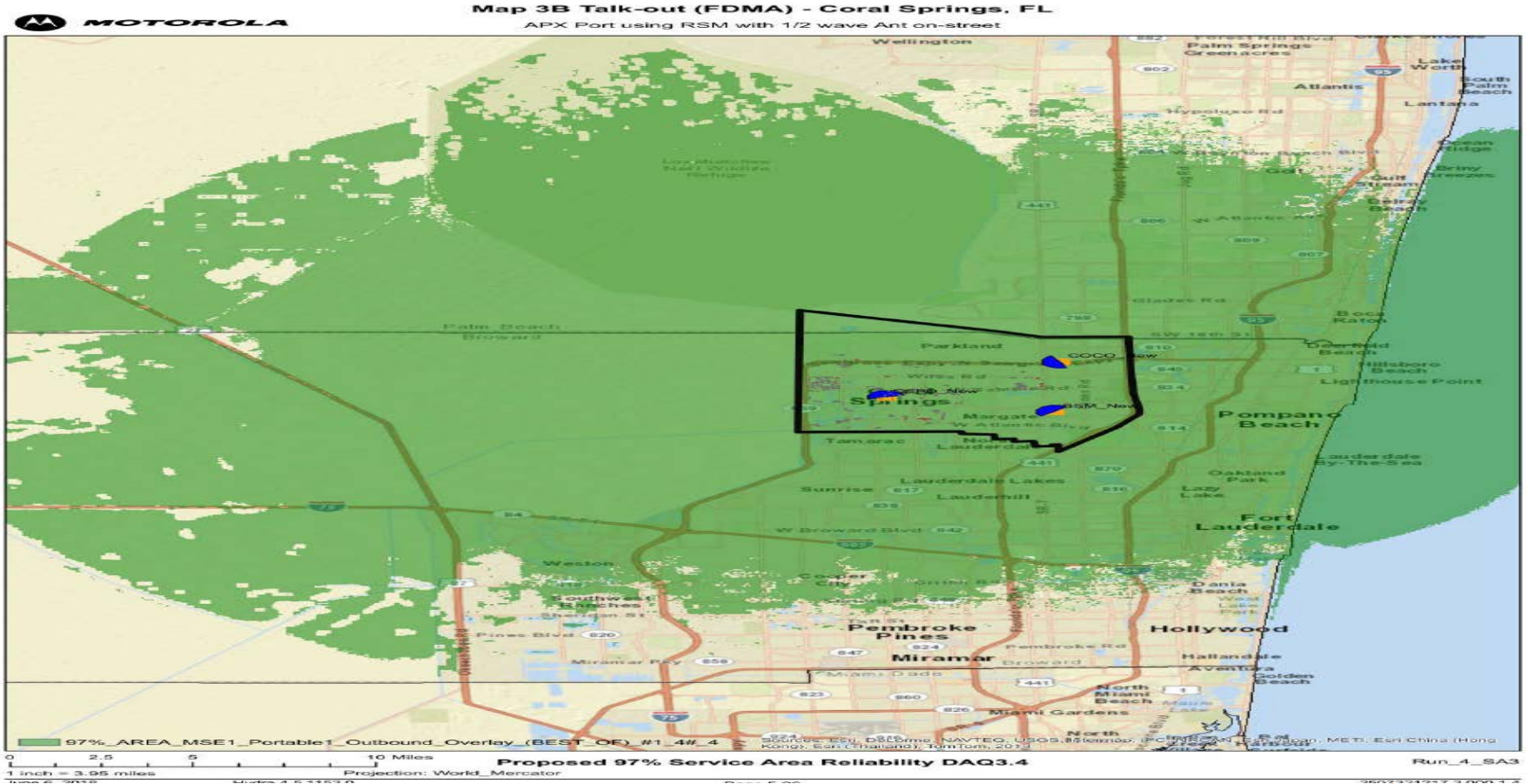
Coral Springs Radio System

Our P25 radio is interoperable with the County's via patching, a common industry practice.

- A ***Patch Group*** is a group of linked talk groups that allows radio users to communicate with each other while on separate radio systems.

- Think of a patch as a three way conference call.

- When radio talk groups are patched, all patched users can hear all radio traffic and transmit across both systems.

- On Feb 14- Channel 14Joint OPS2 was available- Not practical to ask all responding units to manipulate their radios to find the channel. Patching is the easiest solution.

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Patching Radios: Dispatcher Console Screen

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Industry standard is for the host agency to initiate the Patch Groups

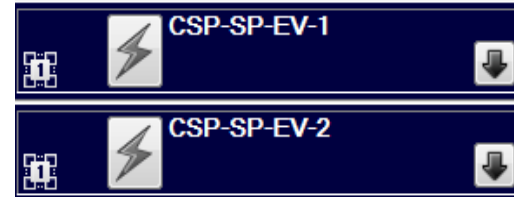| Msel 3	Patch 2	Patch 3
Patch 1	Police	Msel 2

Select Patch Group Screen and click

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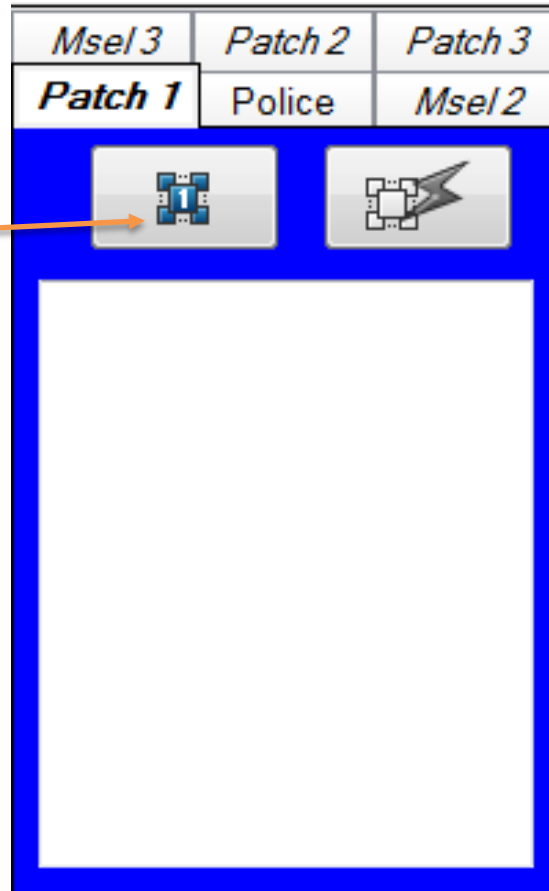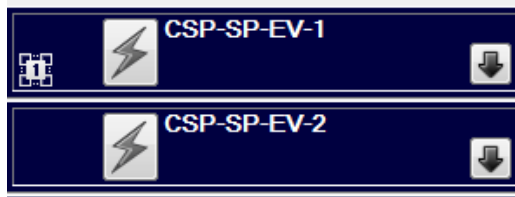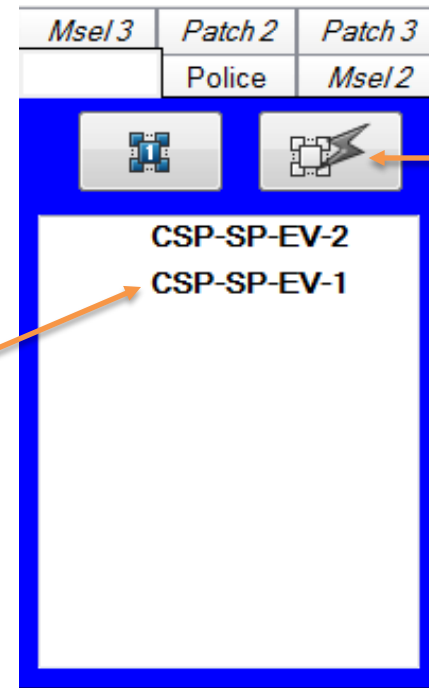
Coral Springs Radio System

Patching Radios: Dispatcher Radio Screen

To patch, a dispatcher selects the desired talk groups
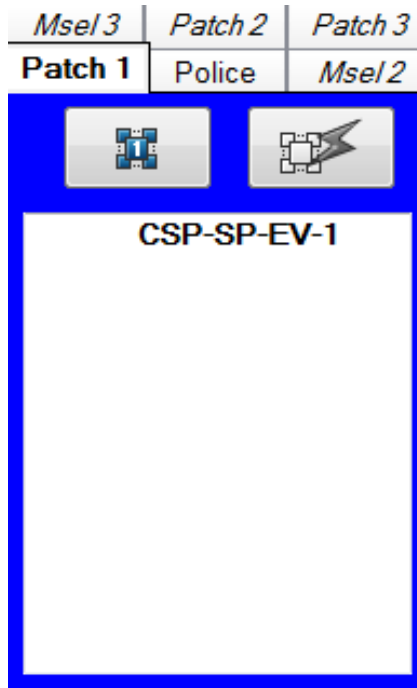
When you are selecting the talk groups you desire to patch, the patch screen will update

Click for dispatcher to communicate with the First Responders. Dispatcher then engages multi-select feature to talk

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Questions?

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