



# PEMA/OSFC/OPRS Summary Brief

# PEMA Mission

**The mission of the Pennsylvania Emergency Management Agency is to coordinate state agency response, including the Office of the State Fire Commissioner and Office of Homeland Security, to support county and local governments in the areas of civil defense, disaster mitigation and preparedness, planning, and response to and recovery from man-made or natural disasters.**

# SEOC Resources

- PEIRS/IM Tools
- Emergency Alert System
- State Radio Network
- IFLOWS System
- CLEAN
- SEVAN
- Amateur Radio
- PAWAS
- PA Star
- Email
- Fax
- HSIN
- Satellite Truck
- Voice Over IP
- NAWAS

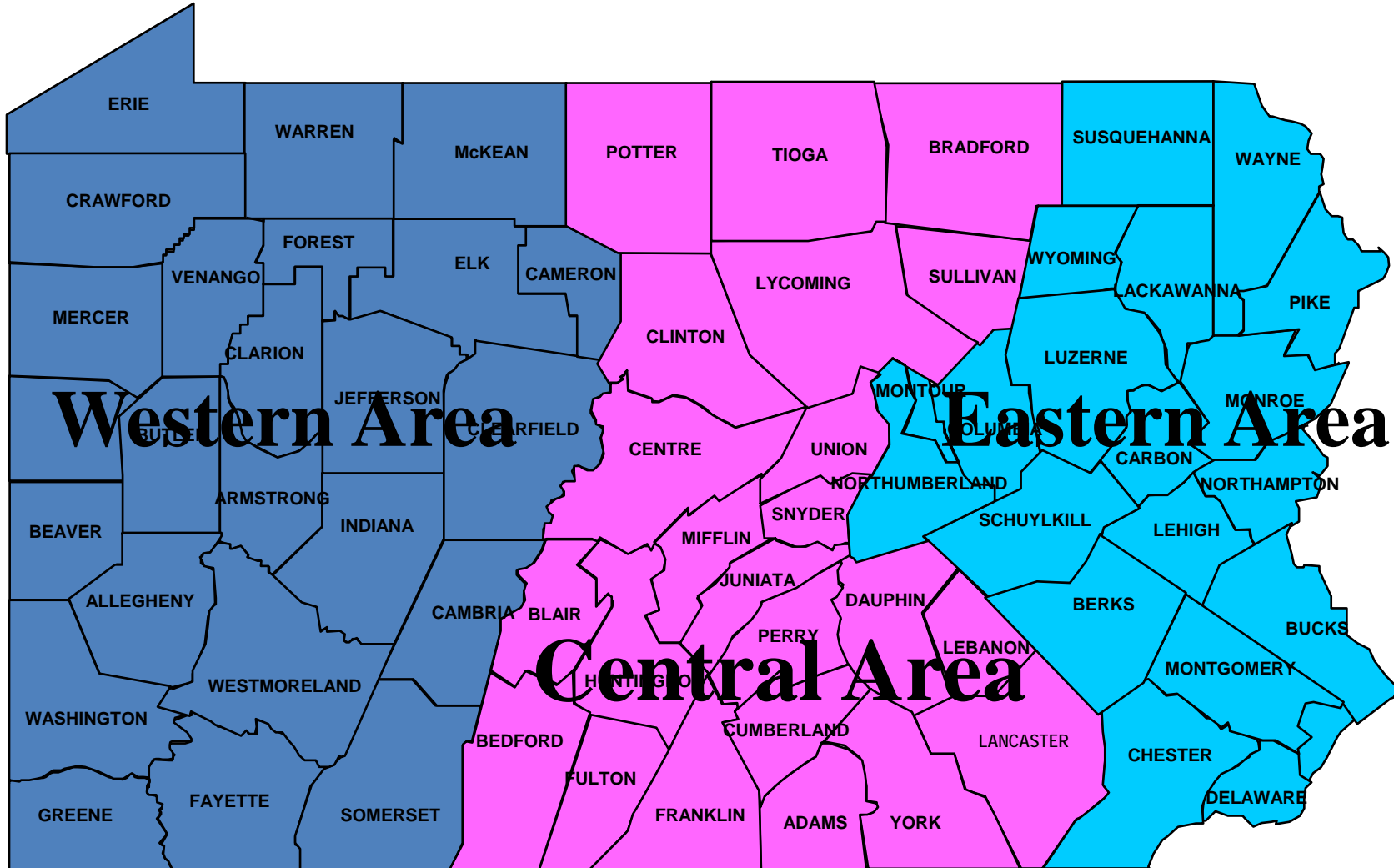
# PEMA Uplink Trucks







# PEMA Regional Offices



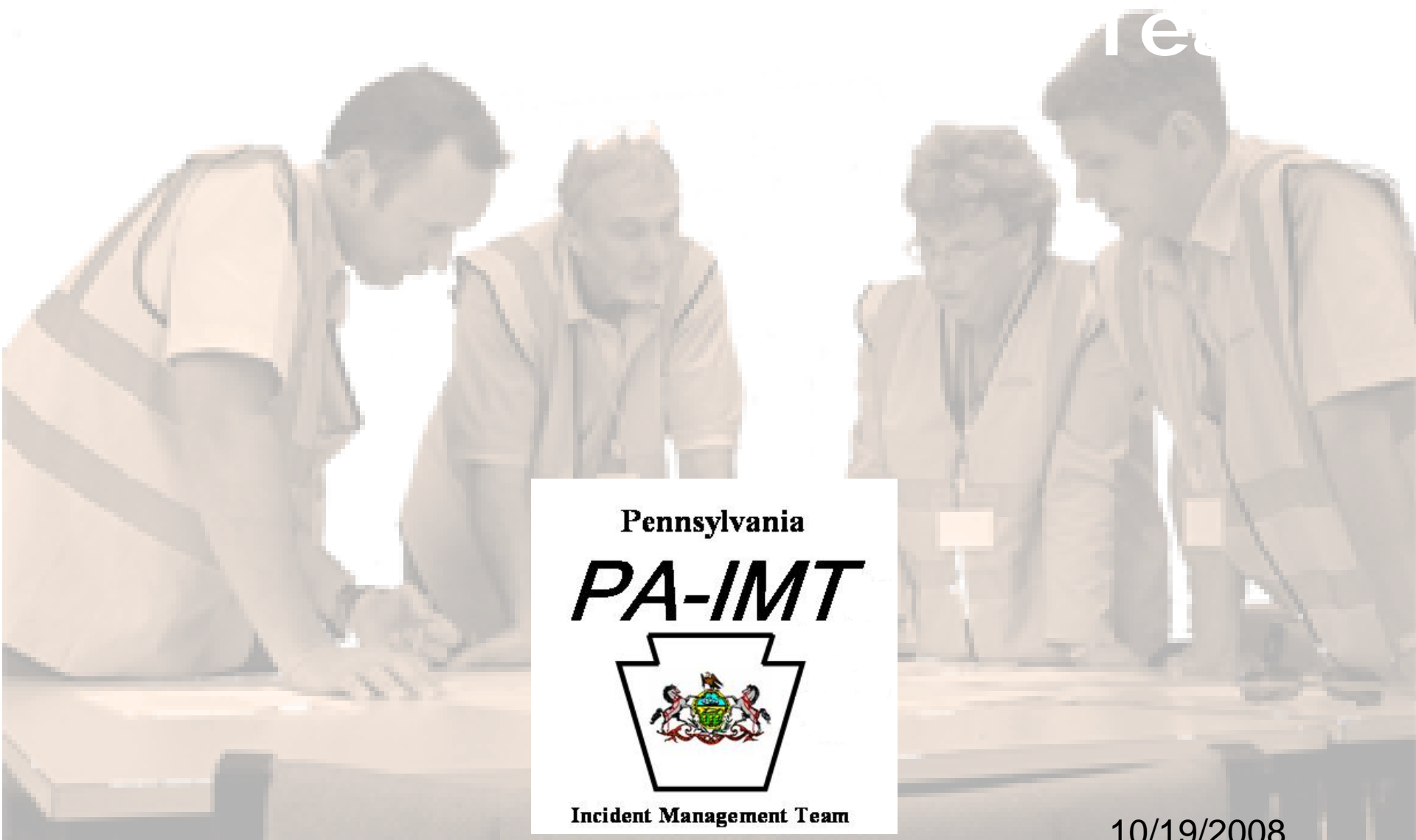
# PEMA Regional Offices

- PEMA Area Offices provide on site assistance to county commissioners, municipalities elected officials and their Emergency Management staffs during times of man-made or natural disasters.
- Assistance is provided in coordination with each of the 67 County Emergency Management Coordinators.
- Each Area Office has a small staff of Emergency Management Specialists that can provide assistance and expertise to counties before, during and after a disaster.



# PEMA Regional Offices

- Routine assistance is provided to County Emergency Management Agencies for all types of Disaster Planning, Training, Exercise Design & Development, and Professional Management Skills development.
- Area Offices work as the field extension of PEMA, coordinating with all Commonwealth Agencies, County and Municipal Government, volunteers and the private sector to assist in the prevention, preparedness, response and recovery from all types of disasters.



Team

Pennsylvania  
***PA-IMT***  
  
Incident Management Team

# What is the PA All-Hazards LMT?

- A multi-agency/multi-jurisdiction team for extended incidents, formed and managed at the State level
- It is a designated team of trained personnel from different departments, organizations, agencies, and jurisdictions within a state

# What is the PA All-Hazards LMT?

- It is activated to support management of major and/or complex incidents requiring a significant number of local, regional, and state resources, and incidents that extend into multiple operational periods or at planned mass-gathering events.

# Key Tenets

- Rapidly Deployable
- Field Sustainable
- Knowledgeable in NIMS/ICS, Emergency Management, and Disaster Field Operations

# Key Tenets

- Multi-Disciplined
- Knowledgeable in intelligence collection and analysis distribution
- Knowledgeable of the Commonwealth process for emergency management.

# Team Capabilities

- Provide assistance and situational awareness within scope of assignment.
- Facilitate the implementation of incident command and unified command
- Direct, coordinate, and support resources at the tactical level

# Team Capabilities

- Facilitate communications between field structures and the State Emergency Operations Center (SEOC)
- Provide assistance for planned events





10/19/2008



10/19/2008



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P e n n s y l v a n i a   S t a t e w i d e   R a d i o   N e t w o r k

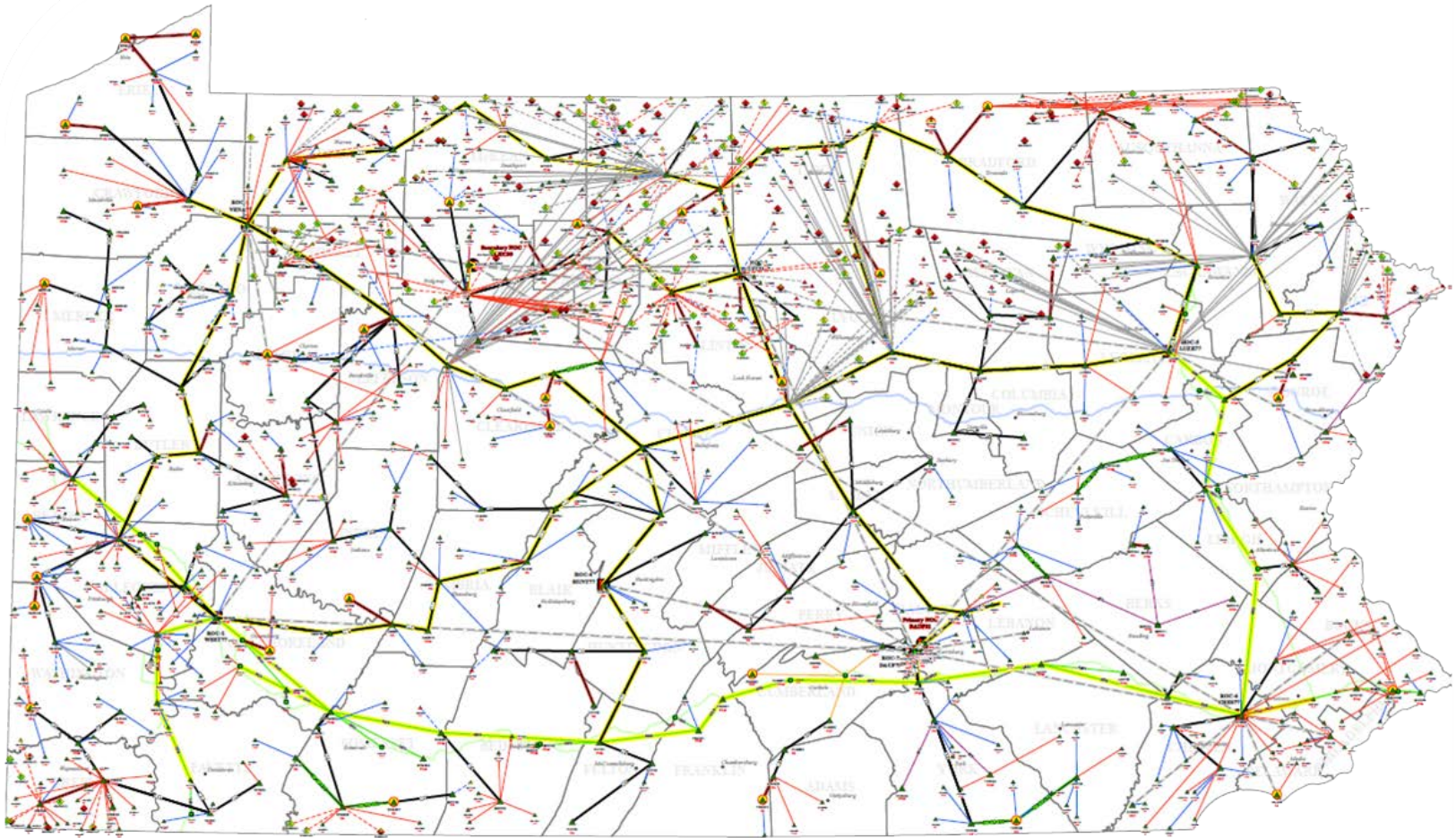
# PA-STARNET

State Radio and Interoperable Communications **May 2011**

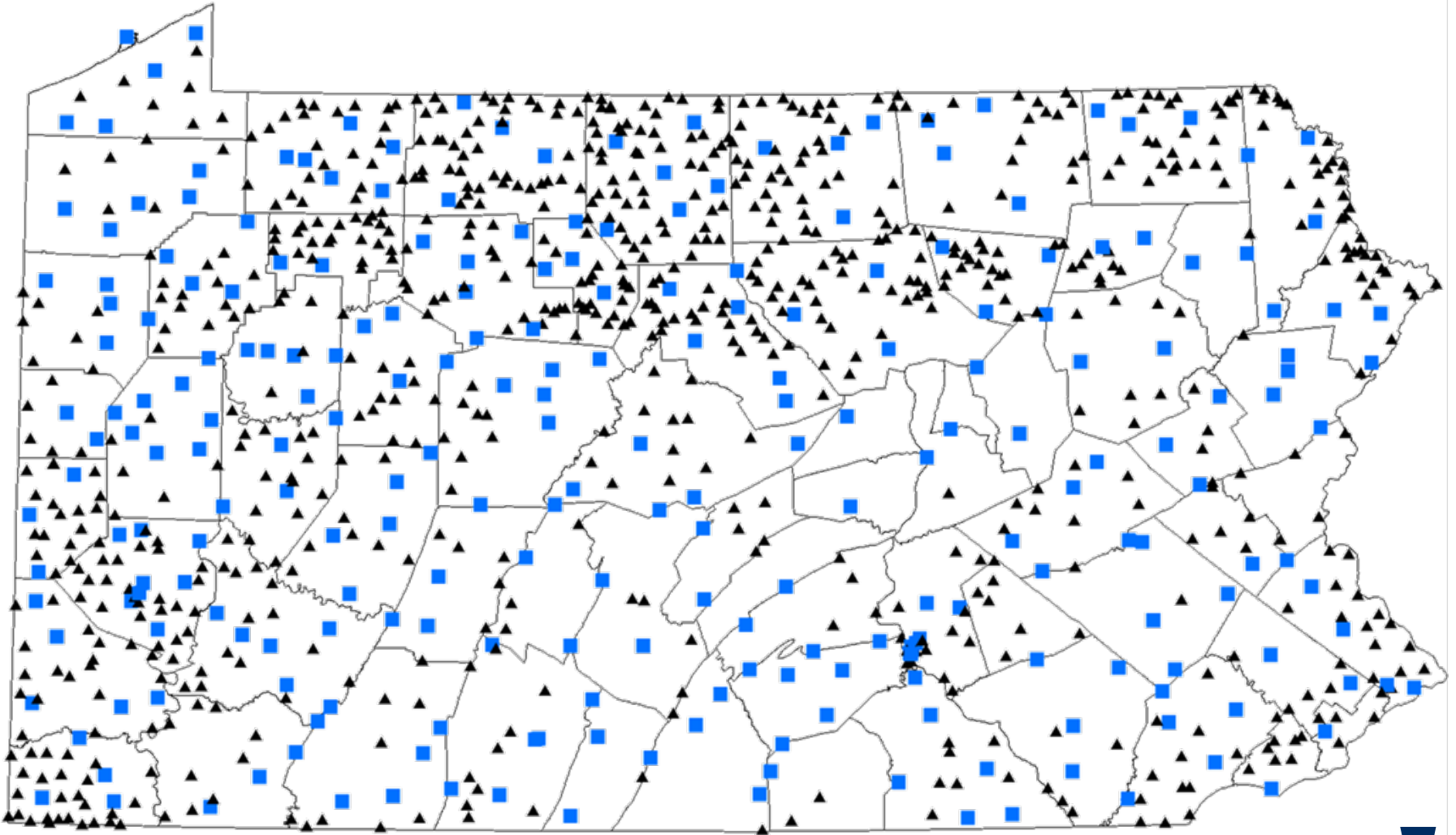
# PA STARNet

- 800 MHZ
- Multi-Case
- Trunked
- OpenSky Technology
- Mobile Based
- 95% Land Coverage Required

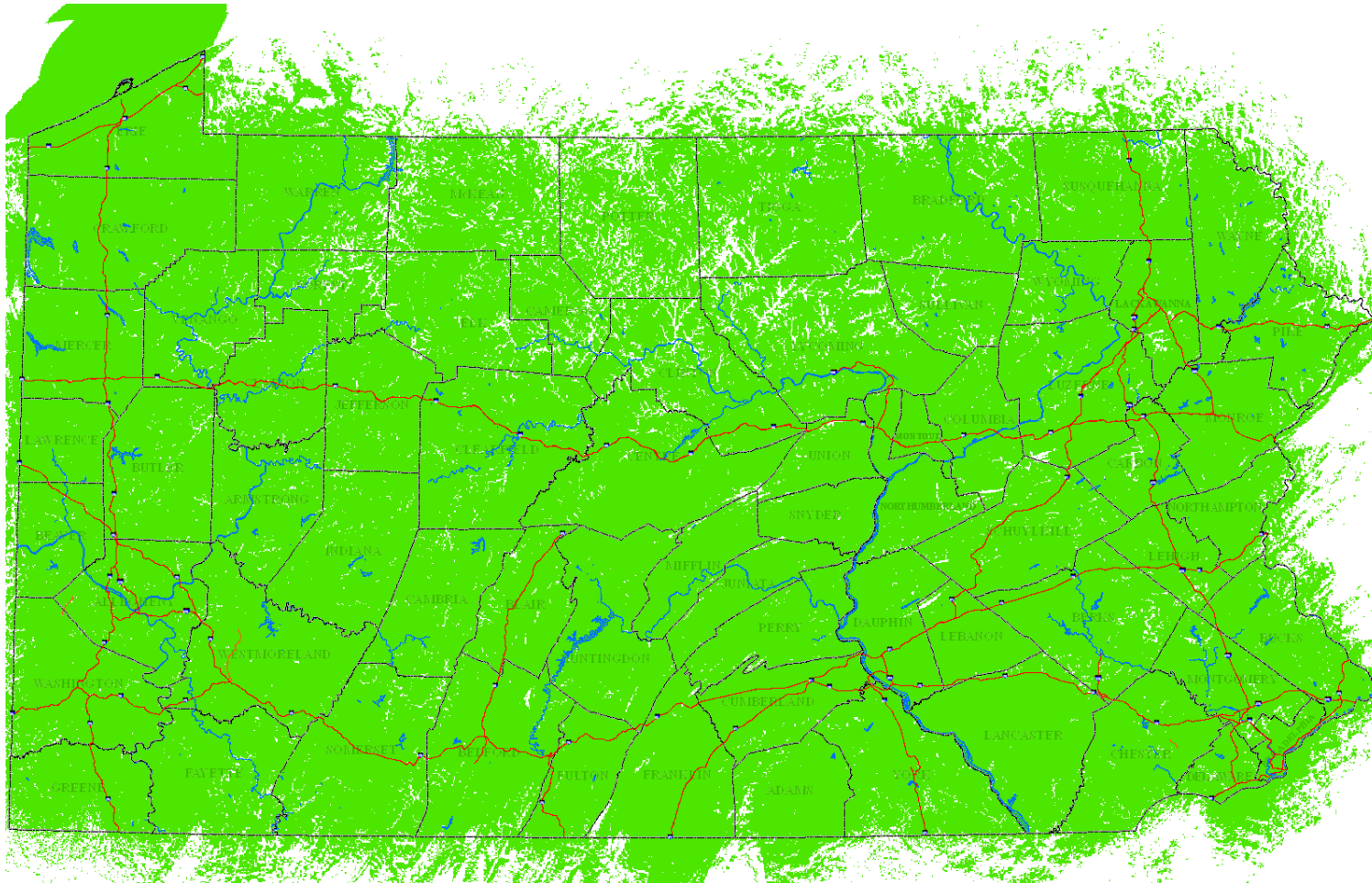
# Network Connectivity



# PA-STARNet Sites



# PA-STARNet Coverage





# Field Equipment



M-803  
Mobile Radio



SP-103  
Deskset



DTMF  
Microphone



V-TAC



P7200  
Portable Radio

# Agencies Using PA-STARNet

- Department of Transportation
- Office of Attorney General
- Department of Health
- Pennsylvania Emergency Management Agency (PEMA)
- Pennsylvania Board of Probation and Parole
- Department of Military and Veterans Affairs
  - Civil Air Patrol
- Department of Environmental Protection
- Department of Corrections
- Pennsylvania State Police
- Public Utility Commission
- Department of Agriculture
  - Office of Administration
    - Public Safety Radio Services
    - Administrative Services
  - Legislature
    - House of Representatives Security
    - Senate Security
- Department of General Services (DGS)
  - Capitol Police Department
  - Fire, Safety, Maintenance
- Pennsylvania Turnpike Commission
- Department of Conservation and Natural Resources

# Sites

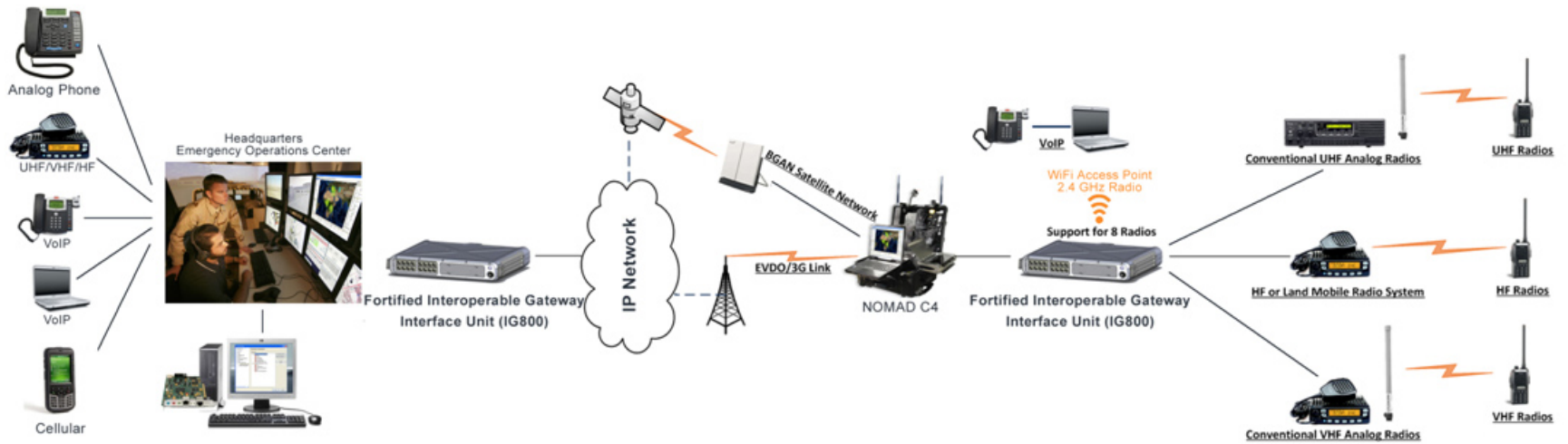


242 Towers  
generally  
180–330 feet

676 Microcells  
generally  
90 feet



# Interoperability



# Interoperability

- Profiles 14, 15 and 16 on state radios
- County Control Stations at 911 Centers
- DOH control stations at hospitals
- Cumberland County
- Dauphin County
- Lebanon County
- City of Allentown
- VHF Overlay
- UHF Overlay
- 700MHz P25 Overlay
- Philadelphia (DOJ 25 Cities, T Band, Mass Casualty Evac.)
- NJ (OH, MD, DE, WV, planned for future)
- SWIC (Mark Wrightstone) Regional exercises

# Reserved Talk Groups

## Profile 16

### Primary Reserved

1	CMD_1	9	TAC_8
2	TAC_1	10	TAC_9
3	TAC_2	11	TAC_10
4	TAC_3	12	TAC_11
5	TAC_4	13	PLAN_1
6	TAC_5	14	LOGSTC1
7	TAC_6	15	ADMN_1
8	TAC_7	16	COMMON

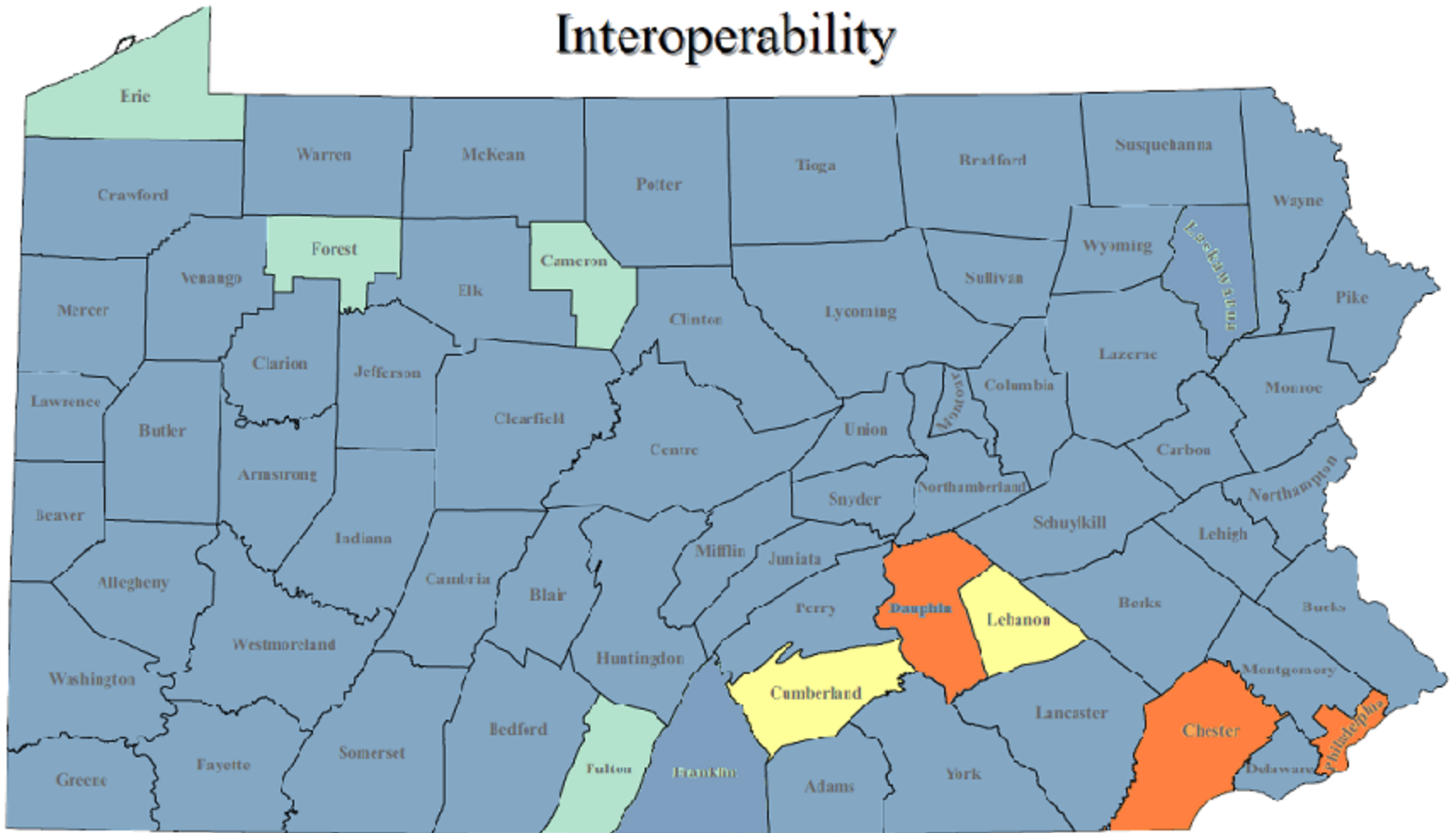
## Profile 15

### Secondary Reserved

1	CMD_2	9	TAC_19
2	TAC_12	10	TAC_20
3	TAC_13	11	TAC_21
4	TAC_14	12	TAC_22
5	TAC_15	13	PLAN_2
6	TAC_16	14	LOGSTC2
7	TAC_17	15	ADMN_2
8	TAC_18	16	COMMON

# County Interconnect

## Interoperability



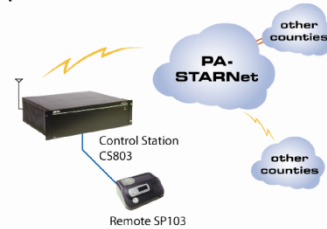
# 4 Ways to Connect

2007 Commonwealth of Pennsylvania  
Statewide Interoperability Summit

## 4 Ways to Connect

for interoperability on the PA-STARNet system

### Option 1 - Stand-alone control station



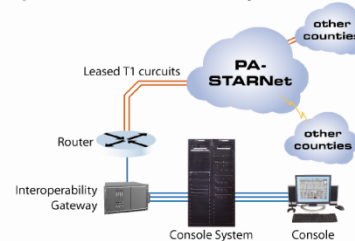
- Considerations:
- Only one active talk group at a time
  - Competes for RF timeslot availability (queues if in busy area)
  - RF coverage class constraints
  - Limited access at communications centers consoles
  - Low cost, or no cost, to county

### Option 2 - Integrated control station



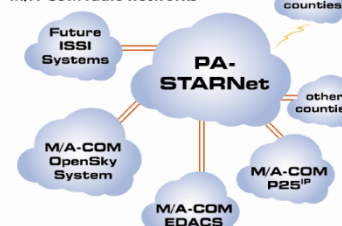
- Considerations:
- Only one active talk group at a time
  - Competes for RF timeslot availability (queues if in busy area)
  - RF coverage class constraints
  - Accessible at communications centers consoles
  - Difficult to identify caller when scanning multiple talk groups

### Option 3 - NetworkFirst Gateway



- Considerations:
- Supports more than one active talk group
  - Not limited by RF coverage classes
  - Accessible at communications centers consoles
  - Incurs recurring connectivity costs to PA-STARNet

### Option 4 - Internetworking of M/A-COM radio networks



- Considerations:
- Full features between different radio networks
  - Supports more than one active talk group
  - Not limited by RF coverage classes
  - Accessible at communications centers consoles
  - Incurs recurring connectivity costs to PA-STARNet

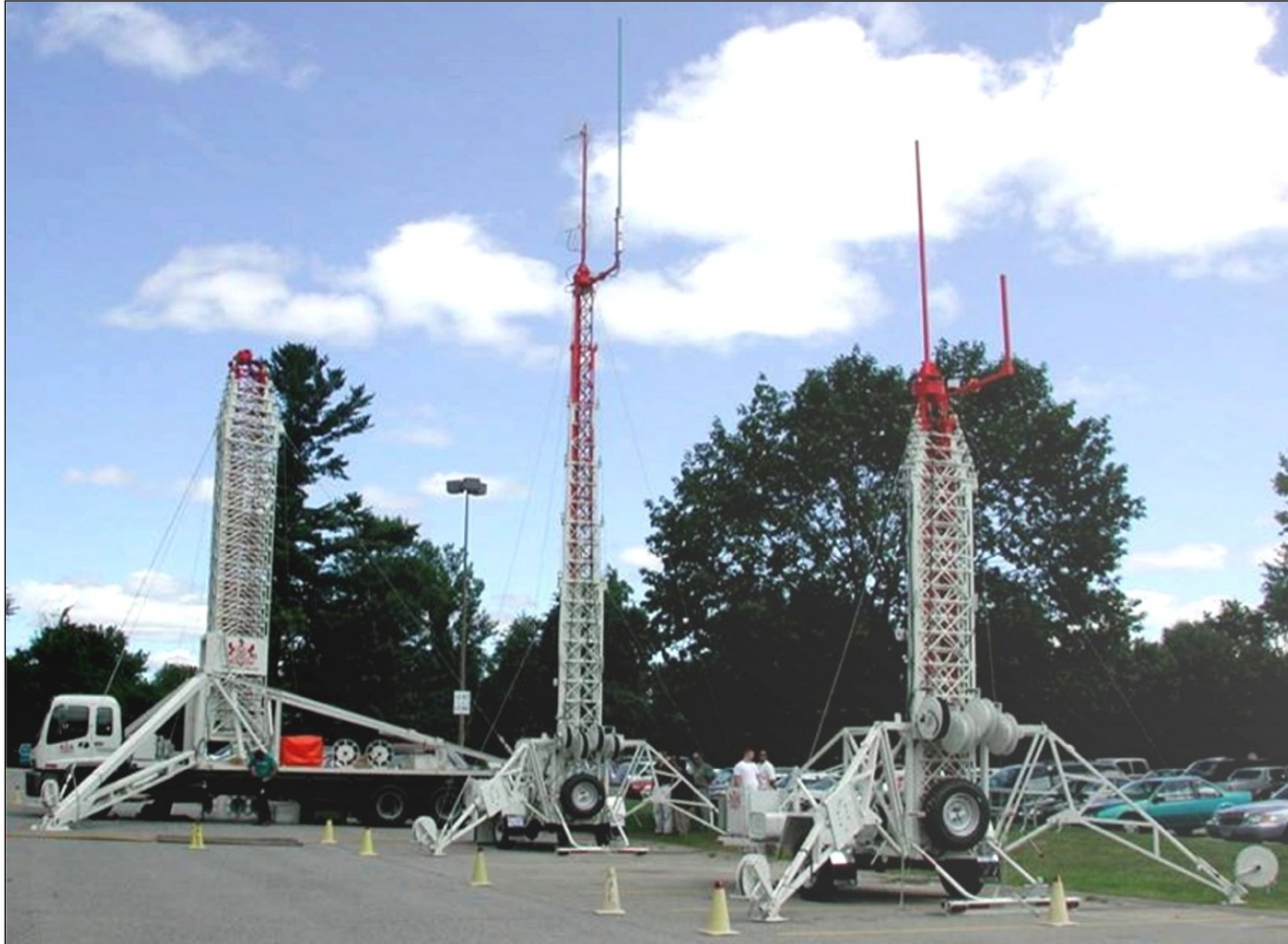




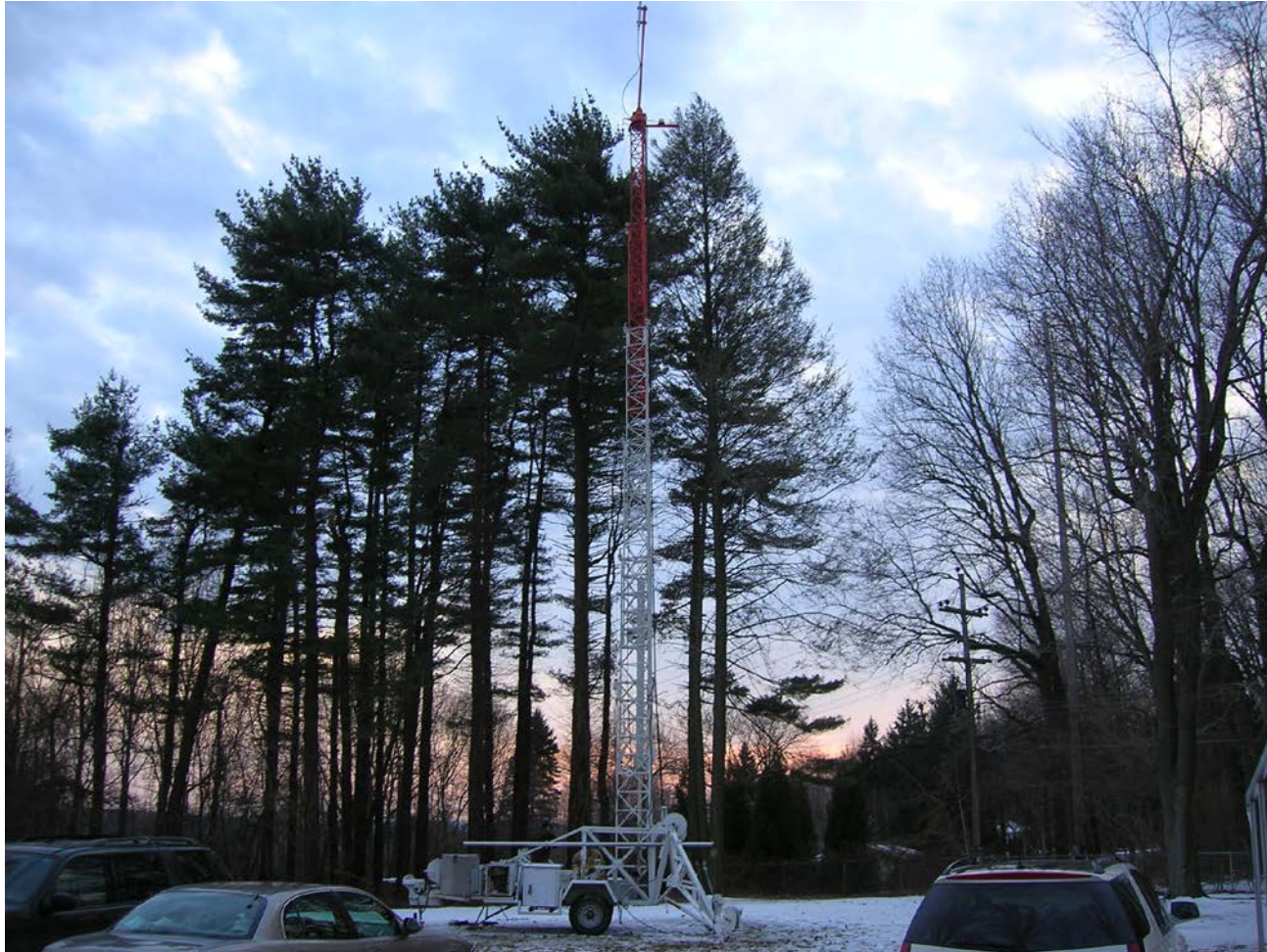
# Tactical Support



# Cell on Wheels (COW)



# 22.5 Meter COW



# 40 Meter COW



40 Meter COW

# Networking COW



Networked via  
Microwave shot

# Steel Castle Uproar 2009

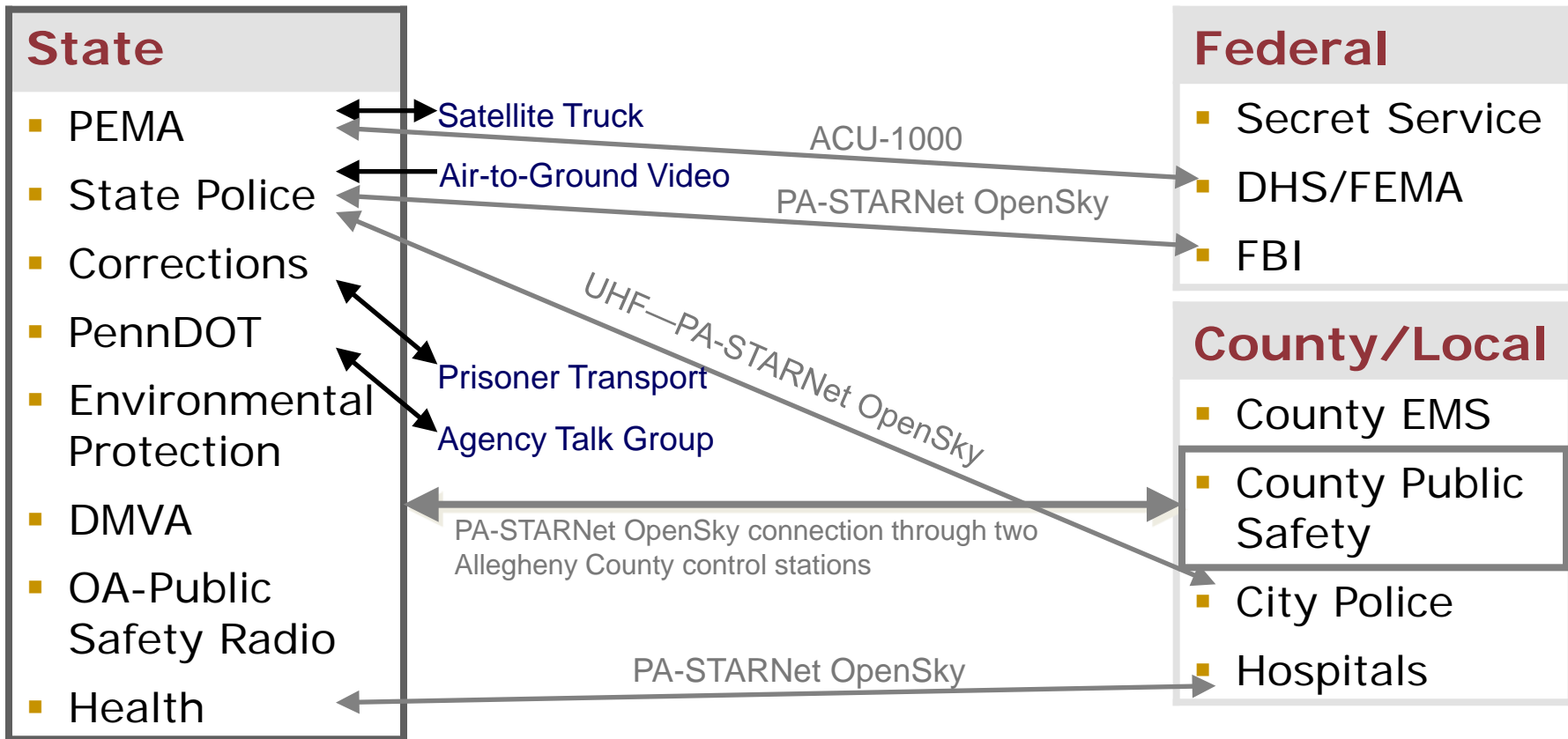


Steel Castle  
Uproar  
Exercise

Moundsville  
Prison in  
Moundsville,  
WV.

# Communications Overview

PA-STARNet Global Talk Groups



## Command Post

Multi-Agency Command Center (MACC)

Operations Support Unit (OSU)

# Partner Agencies – PEMA



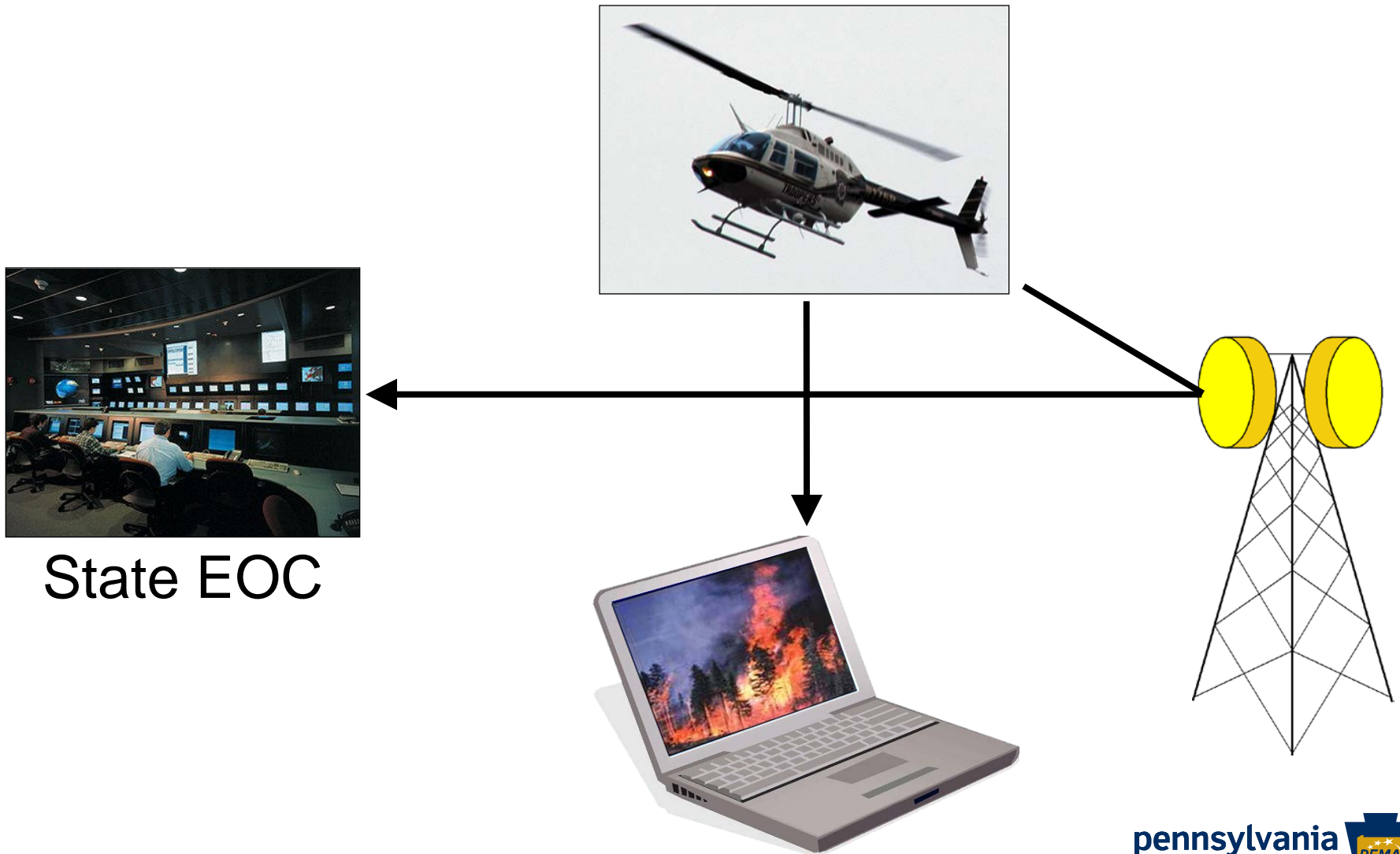


# Partner Agencies - PSP



Utilized PSP  
MARIS van to  
patch UHF to  
OpenSky

# Other Uses – Aviation Video



State EOC

# Other Uses – Mobile Data



# ▶ Maintenance Challenges...



# Maintenance Challenges...



statewide coverage  
voice and data



## Contact Us

Find phone numbers and e-mail addresses for OA-Public Safety Radio staff and business functions.



## Get Help

Find answers to common questions, how-to guides and other support resources.



## Find a Map

Explore maps showing coverage, county efforts to limit rad

Radio Highlights

Quick Links

Key Documents

### [Office of Administration Management Directive 245.15](#)

Pennsylvania Statewide Radio Network and Office of Public Safety Radio Services, 7/24/2

### [Overview and Fact Sheet](#) (Adobe PDF, 128KB)

PA-STARNet history, technology, use, and development status

### [Statewide Communications Interoperability Plan \(SCIP\)](#) (Adobe PDF, 12MB)

Pennsylvania interoperability plan, Version 1.1 3/2008

### [PA-STARNet Interoperability SOP](#) (Adobe PDF, 1.4MB)

Standard Operating Procedures for interoperable use of PA-STARNet resources, Version 5

# Questions?

