



# U.S. DEPARTMENT OF ENERGY



## STRATEGIC PETROLEUM RESERVE

**Emergency Communications System & Emergency  
Command Vehicle**

*J. Brad Wallace, Department of Energy*

*Tom Creaghan, DynMcDermott Petroleum Operations*

# *Strategic Petroleum Reserve*

- **World's Largest Crude Oil Reserve**  
(nation's energy insurance)

- **National Critical Infrastructure & Key Asset**

- **Respond to a National Energy Interruption or Emergency within 13 days**

- **Maintain Inventory of 700 + MMB Crude Oil**



**UNCLASSIFIED**

# *SPR Storage Sites*



*HQ in New Orleans*

# Gulf Coast Storage



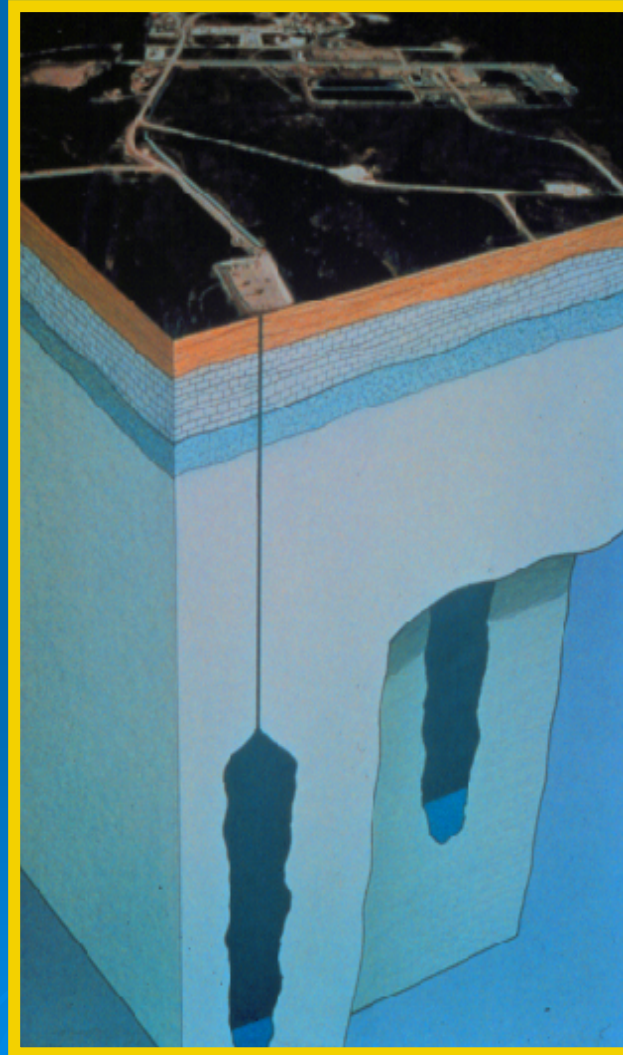
- **Concentration of Salt Domes**
    - **Secure**
    - **Economical**
    - **Low Environmental Risk**
  - **Major U.S. Refinery Area**
  - **Major Crude Oil Distribution Center**
    - **Tanker Terminals**
    - **Pipelines**
  - **Provides Maximum Flexibility for response to a wide range of Interruptions and Emergencies**
- 

# Strategic Petroleum Reserve Complexes and Associated Pipelines and Terminals





# *Typical SPR Cavern*

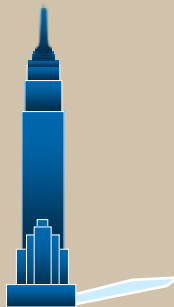


# Size Comparison

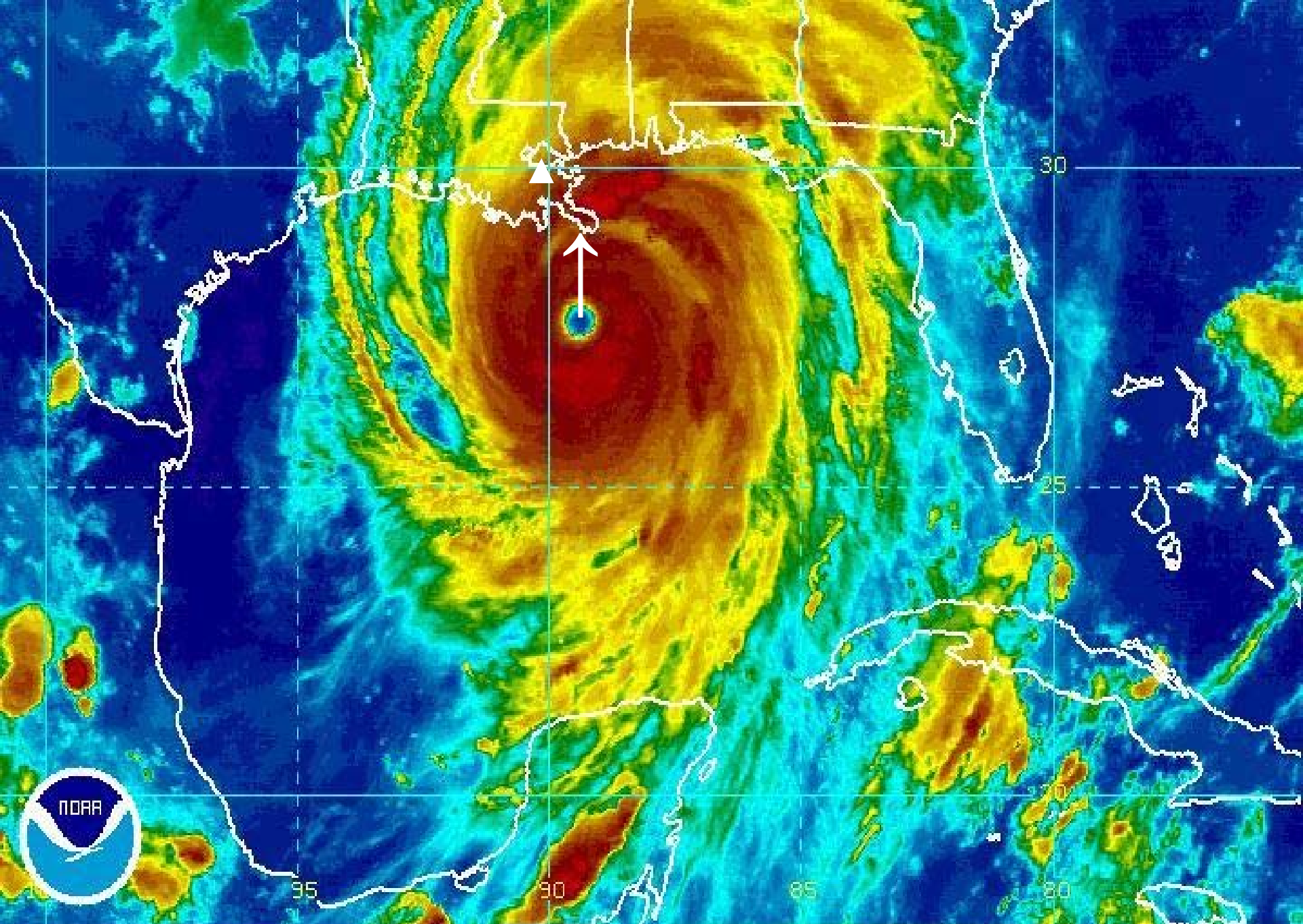
Salt Dome  
Cavity  
2,000 Feet

Empire State  
Building  
1,454 Feet

New Orleans  
Superdome  
273 Feet



UNCLASSIFIED





# Hurricane Activity is a Major Emergency Management, COOP, and Drawdown Program Driver







- During Hurricane Rita SPR operations an ECN system from RSL Nevada was utilized
- Post hurricane season FY05 the concept of using RSL ECN equipment in a mobile platform was investigated
- Over 12,000 VoIP Calls Made
- Numerous VTCs Conducted
- LOTS of bytes of data sent

## What we learned, post Katrina

- Communications
- Establishing Command and Control

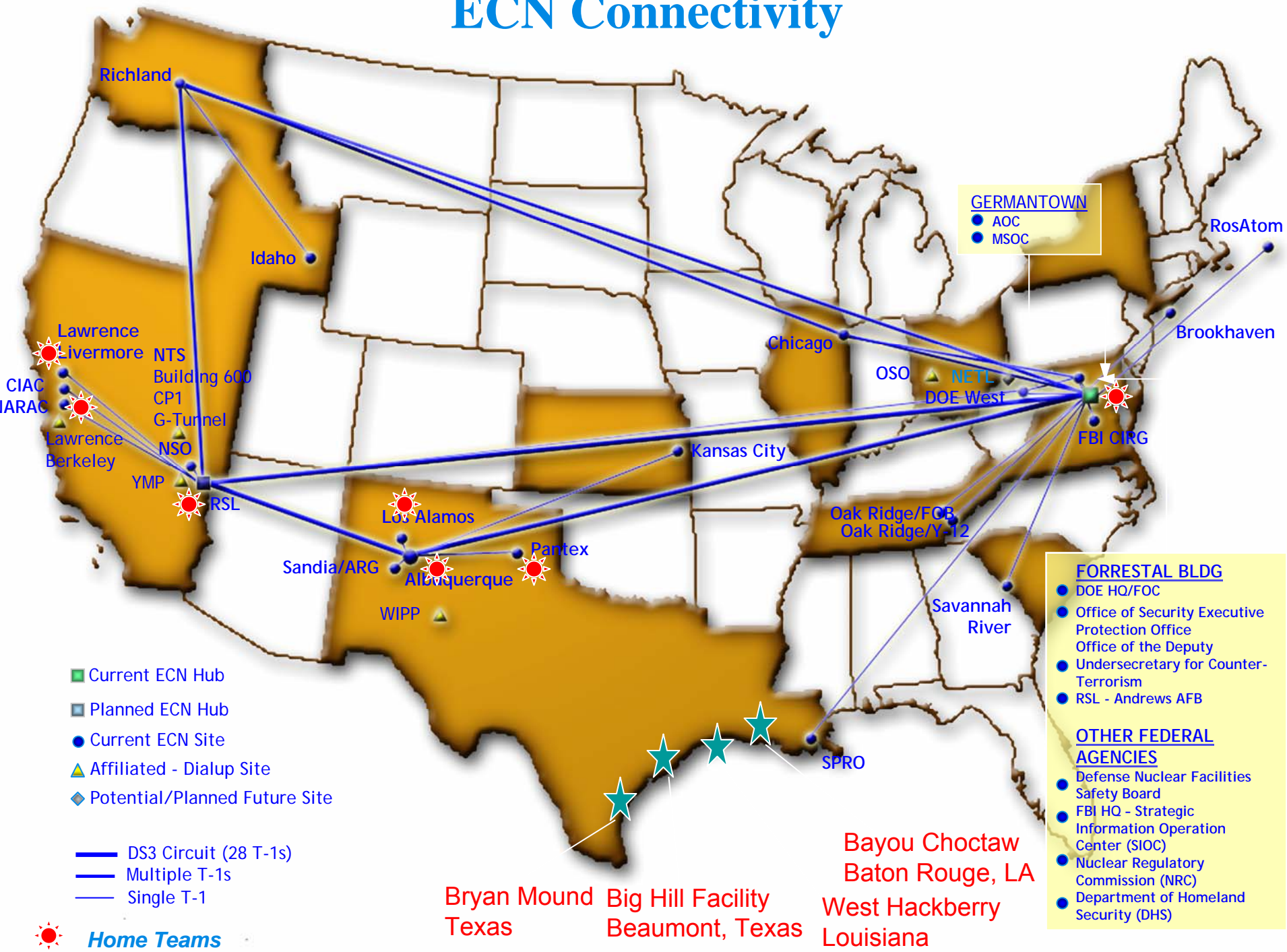
## What we ended up with;

- Reliable Communications Backbone ECN
- Emergency Command Vehicle
- Mobile Communications Trailer

## WHERE WE ARE HEADED;

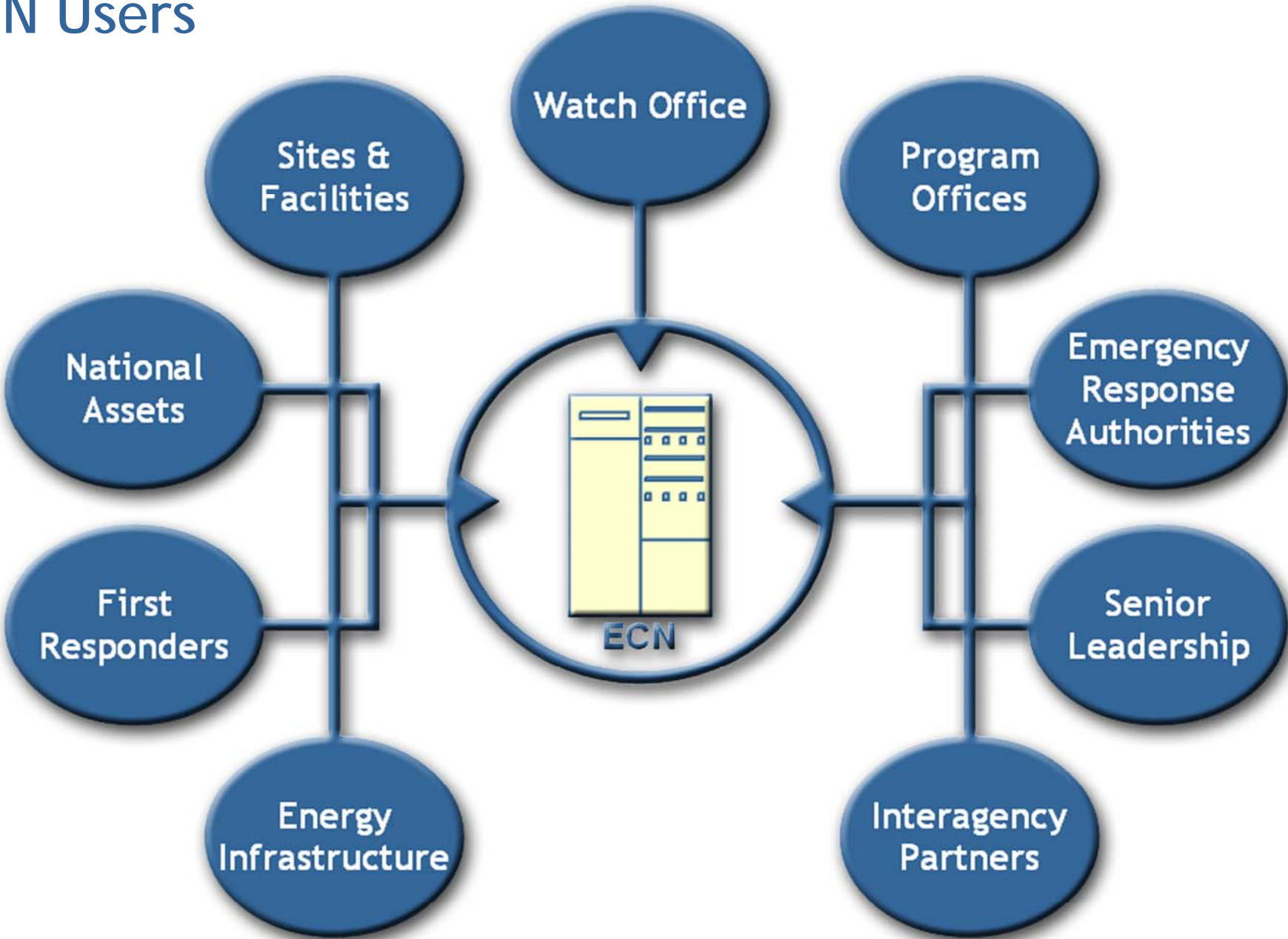
- Common Operating Picture / data and voice interoperability GIS/ECN/WEBeoc

# ECN Connectivity



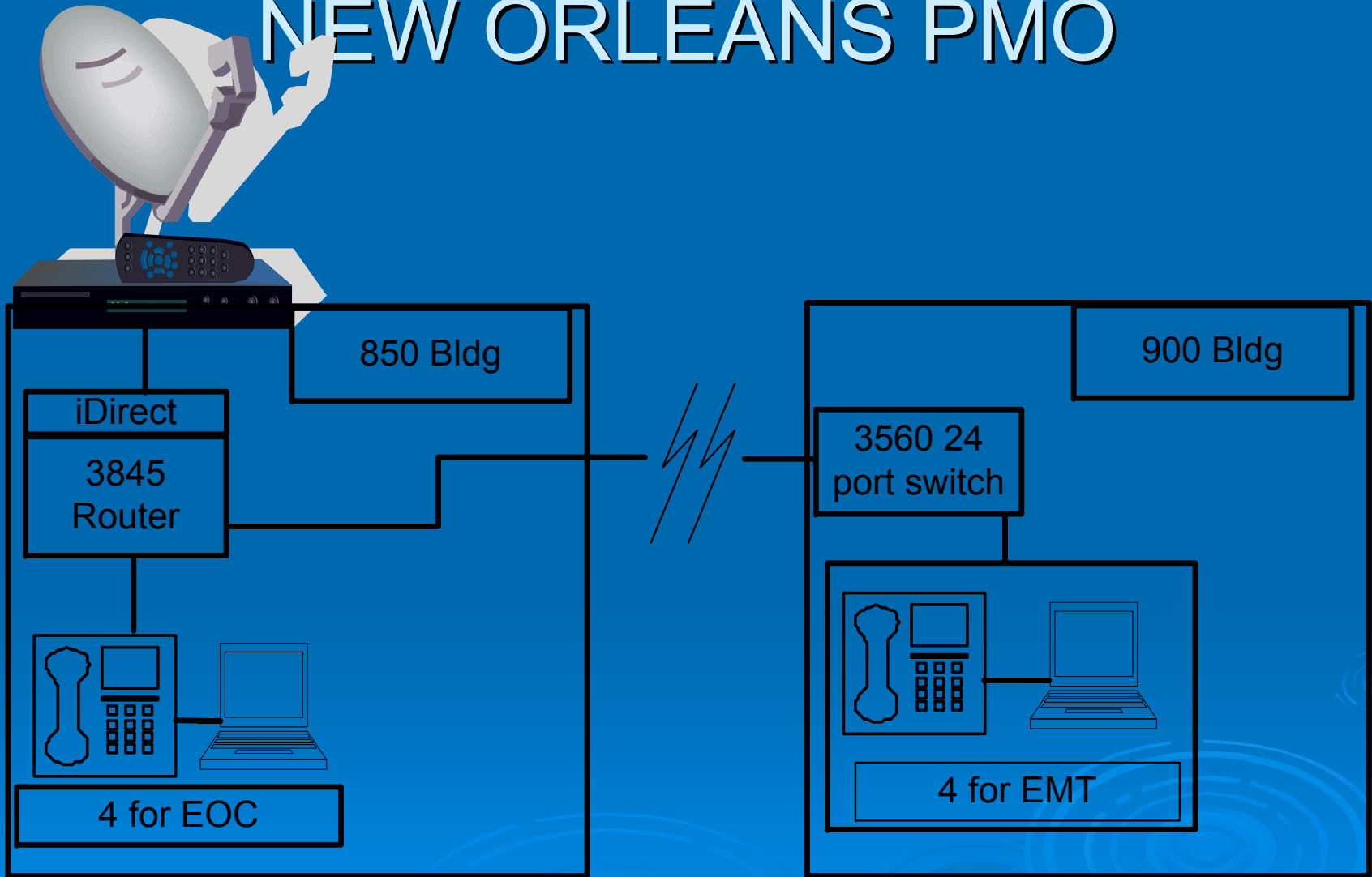


# ECN Users

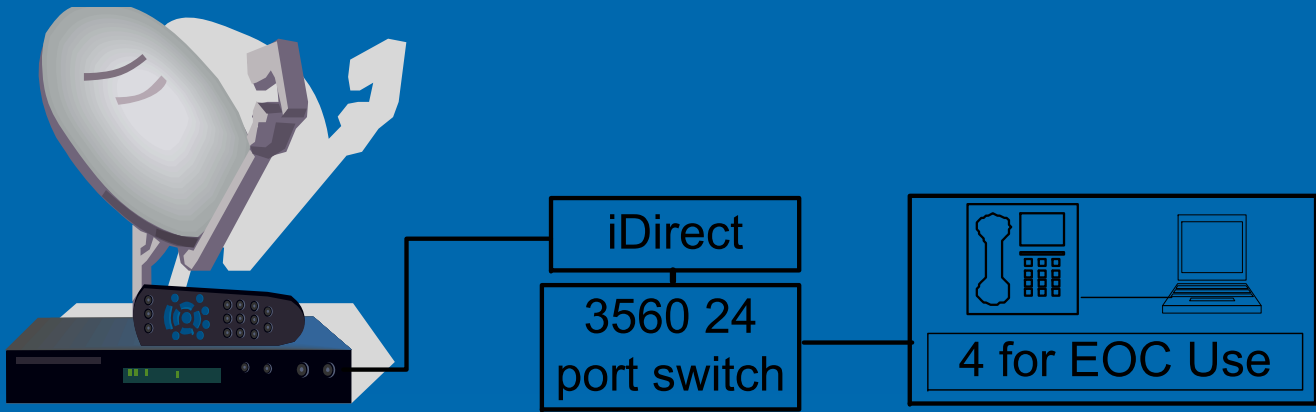




# SPR ECN NEW ORLEANS PMO



# SPR ECN STENNIS

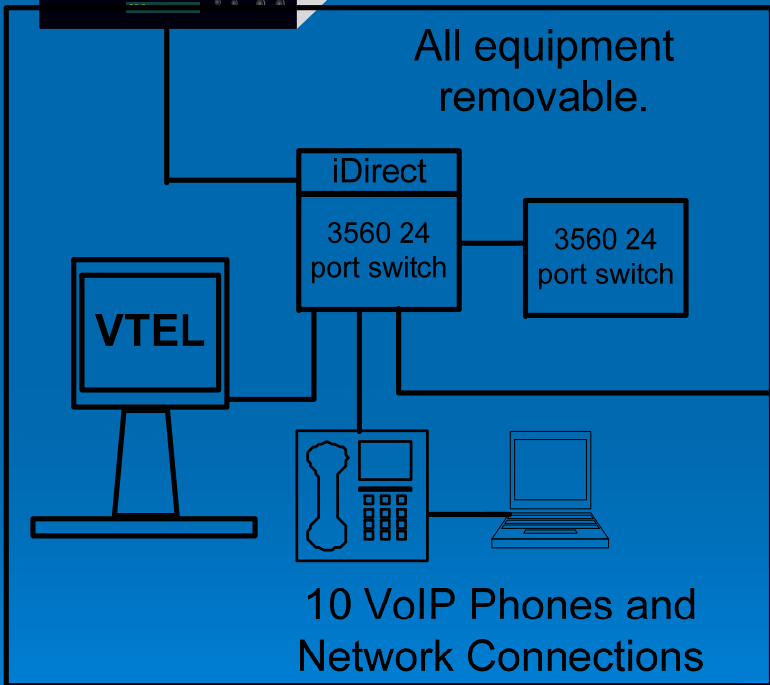


# SPR ECN BIG RED

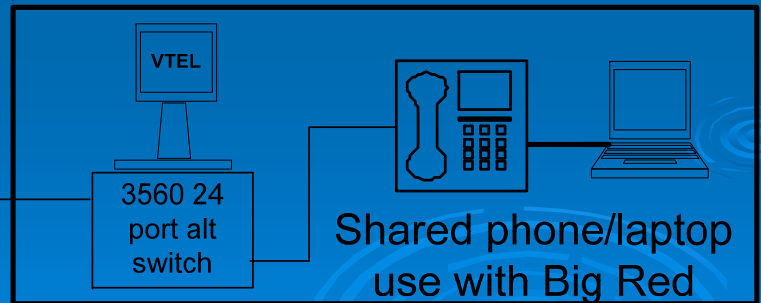
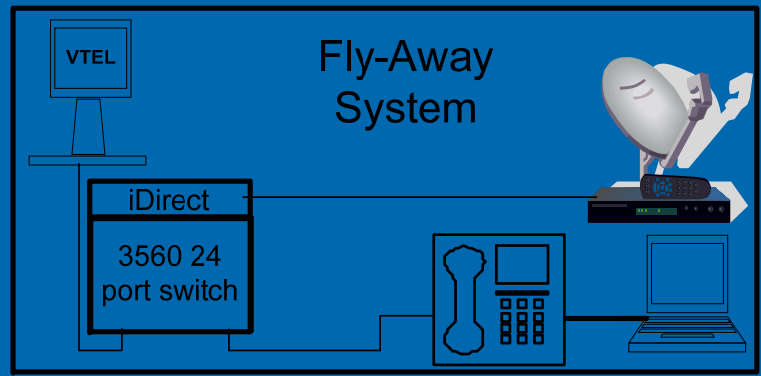


Auto-Locate Dish

Stand-Alone Off-Site Location

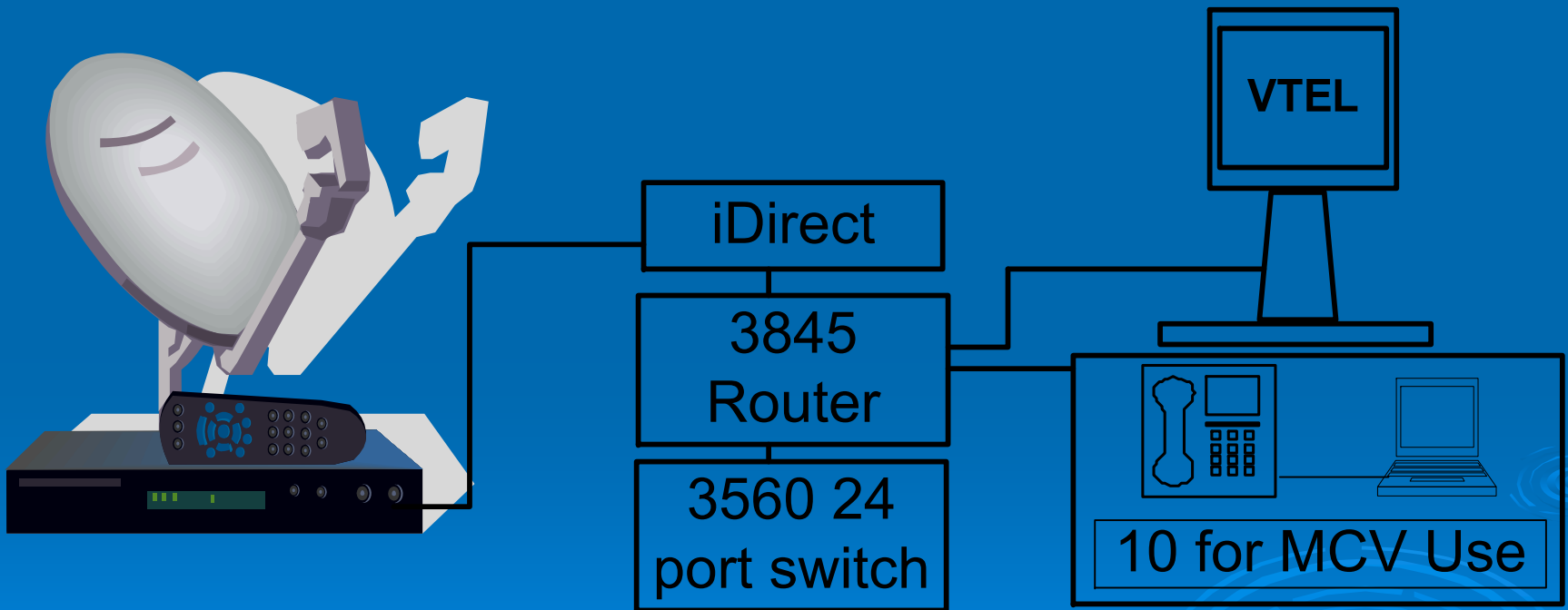


or



Remote Bldg. Location

# ECN ECV





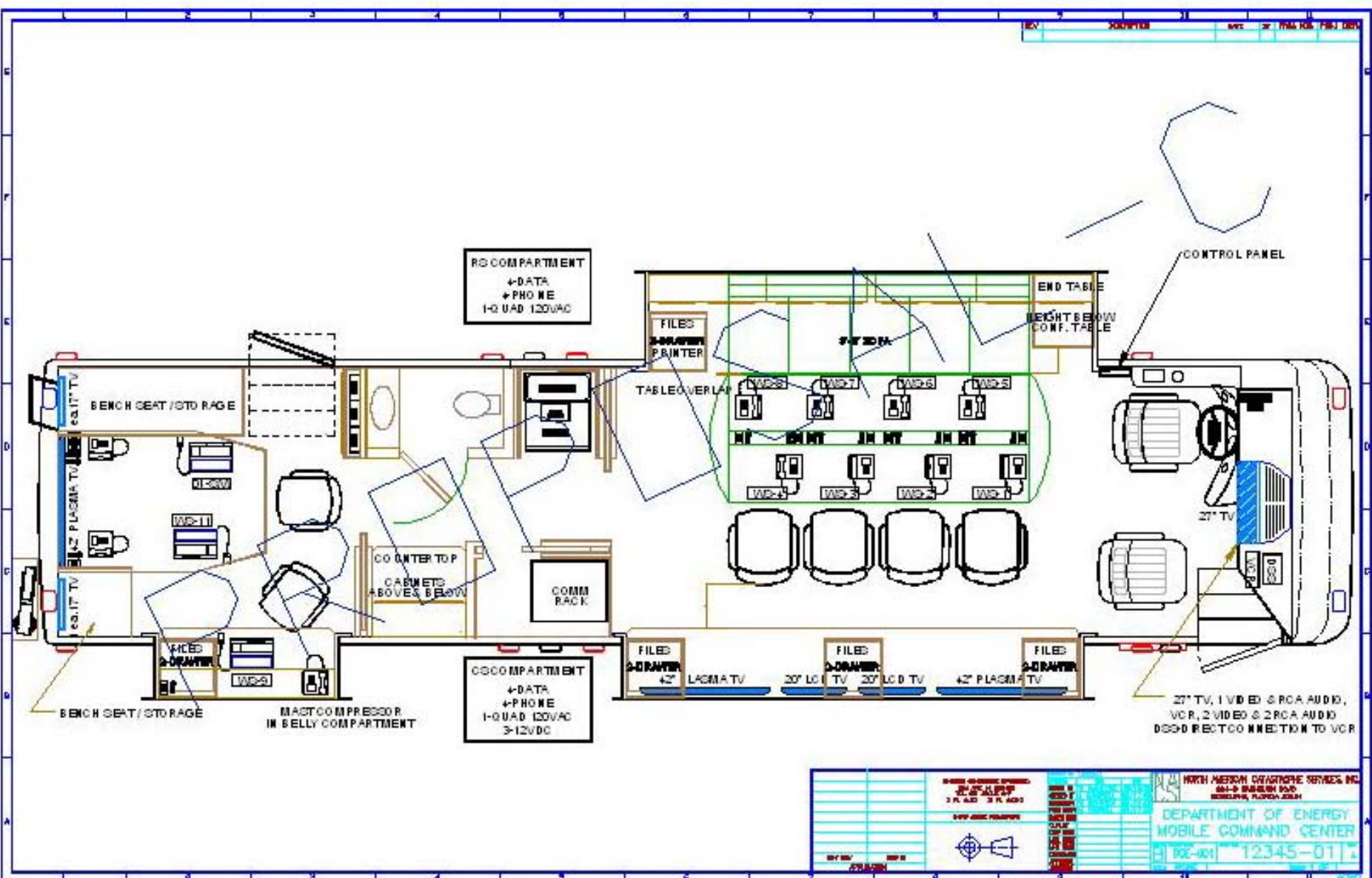
# Emergency Command Vehicle



## Requirements:

- Requirements based on vehicle usage were defined by DOE and DM Emergency Management and Security staff, modified after initial briefing from Katrina / Rita – post storm assessment. (COOP / Business Continuity / Mission)
- Vehicle is dual use, DOE and DM, and designed to accommodate eight executives for briefings/meetings in off site locations, and as a mobile public information work center and press briefing facility.







# SPR MOBILE COMMUNICATIONS TRAILER (MCT) (BIG RED)

- Mobile Communications Trailer (MCT) shall be deployed to support the Strategic Petroleum Reserve (SPR) sites communications infrastructure during emergency situations and for Security / Emergency Management Training Exercises

**VIDEO/AUDIO INPUTS**

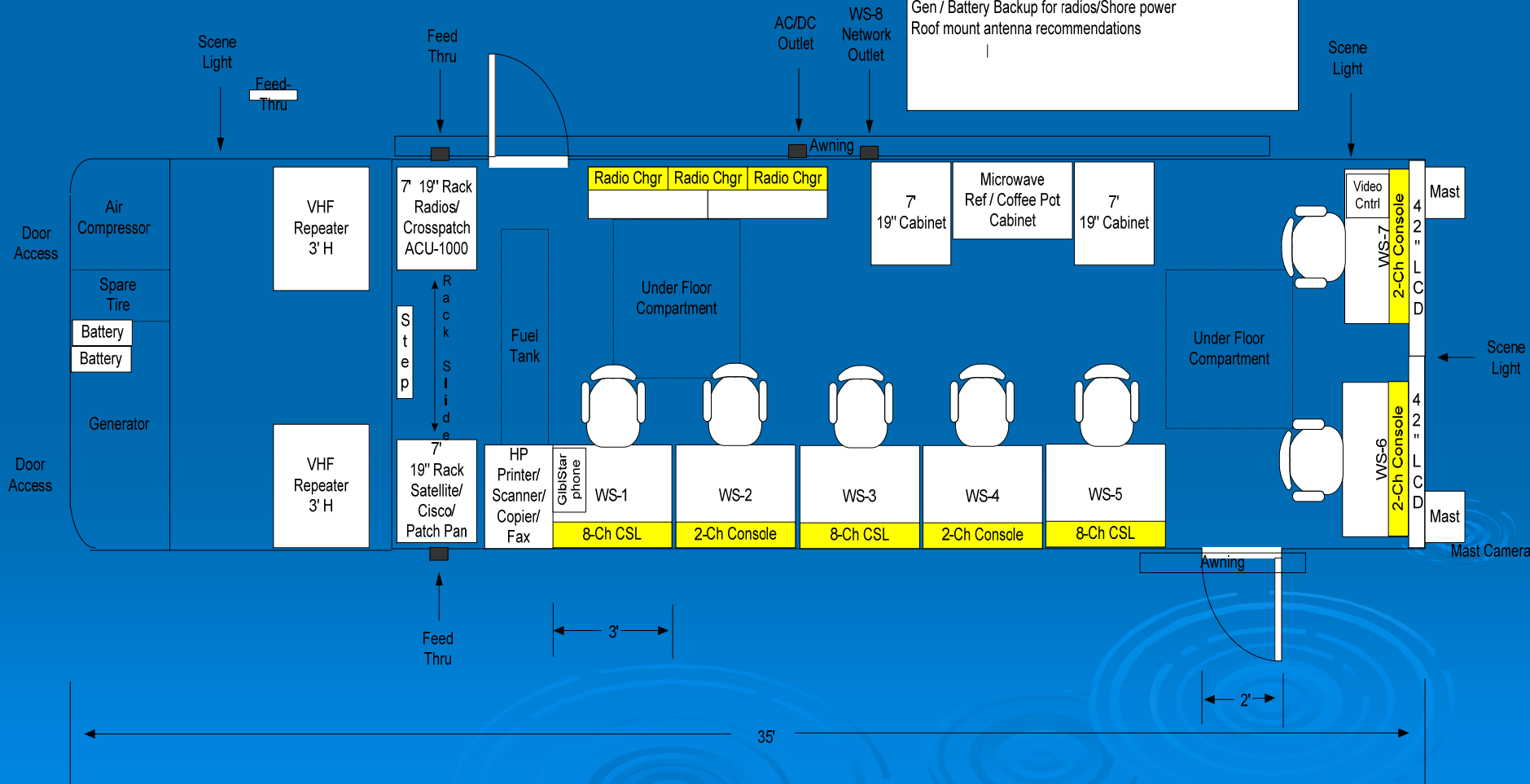
Tactical Tandberg  
 Vicon PT-Color Camera  
 DVD/VHS Recorder  
 1PC for WebEOC  
 1 DSS (Direct TV)

Inputs could be designated to each LCD such as:

DSS and Tandberg switched to roadside LCD

Rear trailer PC (WebEOC), camera, and DVD/VHS to curbside on other LCD  
 DVD used for recording from camera

35' 3-Axle Red 5<sup>th</sup> Wheel Trailer,  
 7 day 24 hr programmable timer for radio chargers  
 Out side RJ-45 jacks & Cable feed through door for interconnect  
 Radio Consoles Wall Mounted  
 Newmar 70 amp 12vdc pwr supply  
 Rack mount UPS for Sat / Cisco Equipment.  
 Gen / Battery Backup for radios/Shore power  
 Roof mount antenna recommendations



# NOW ON DISPLAY





**THANK YOU FOR YOUR ATTENTION!**

