



# United States Naval Nuclear Propulsion Program

**OPERATING NAVAL NUCLEAR PROPULSION PLANTS  
AND SHIPPING (RAIL) NAVAL SPENT FUEL  
SAFELY FOR OVER 45 YEARS**



SSGN 728  
USS Florida



CVN 69  
USS Dwight D. Eisenhower



M-140 Shipping Container

# NAVAL SPENT FUEL SHIPMENTS

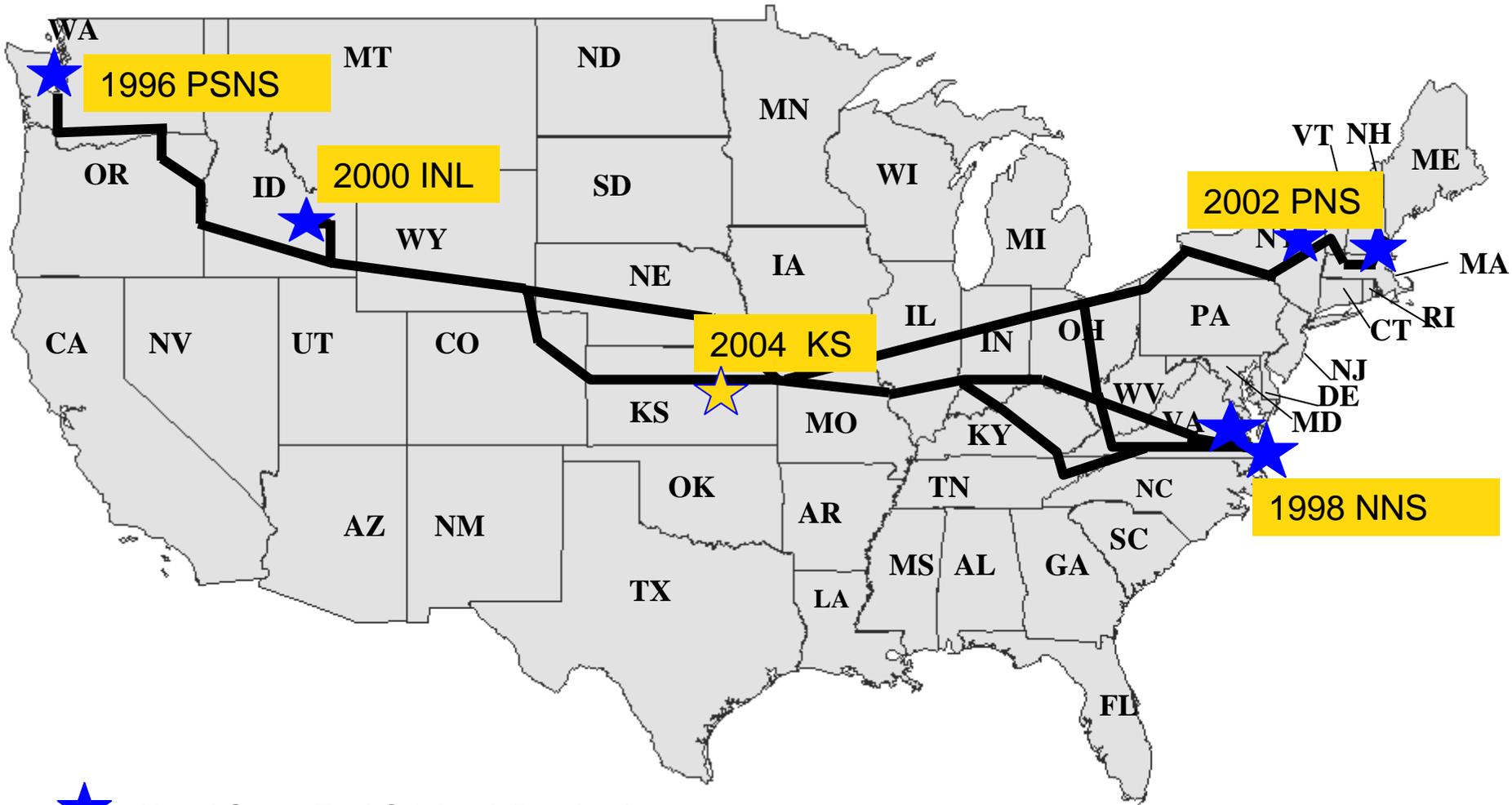
- NRC Type B packages
- Rugged fuel
- National security shipments
- Specially-trained, 24/7 escorts
- Government-owned railcars
- Location and status constantly monitored
- Escort/train crew communications



# ***NAVAL SPENT FUEL SHIPMENT ACCIDENT EXERCISE BACKGROUND***

- **Escorted national security shipments.**
  - Exercises provide prime opportunity for outreach, shipment familiarization and emergency response planning.
- **Regional in nature**
  - 1996 Northwest (Washington/Oregon)
  - 1998 Tidewater (Virginia)
  - 2000 West (Idaho/Shosone Bannock)
  - 2002 Northeast (Maine/New Hampshire)
  - 2004 Midwest (Kansas)

# NAVAL SPENT FUEL SHIPMENT TYPICAL ROUTES



★ Naval Spent Fuel Origins & Destination

# ***NAVAL SPENT FUEL SHIPMENT ACCIDENT EXERCISE OBJECTIVES***

- **Familiarize attendees with the Naval spent fuel shipping container characteristics and shipping practices**
- **Allow attendees to observe the interaction between the NNPP escorts who accompany the spent fuel shipments and state and local responders**
- **Allow federal, state, and local agencies the opportunity to evaluate their response to a simulated accident**
- **Exercise the communications links that would be activated in an accident involving a Naval spent fuel shipment**

# **NAVAL SPENT FUEL SHIPMENT ACCIDENT EXERCISE TIMELINE**

- ***Nine months prior - Scoping Meeting***
  - *Schedule / Locations*
- ***Six months prior - Planning Meeting***
  - *Scenario / Participating organizations*
- ***Three months prior - Table Top Meeting***
  - *Refine scenario / Role play*
- ***One month prior - Walk Through Meeting***
  - *Participants only dress rehearsal*
- ***Two weeks prior - Comm link verification***
  - *Got all the right numbers?*
- ***Exercise day***
  - *Observers from throughout region*

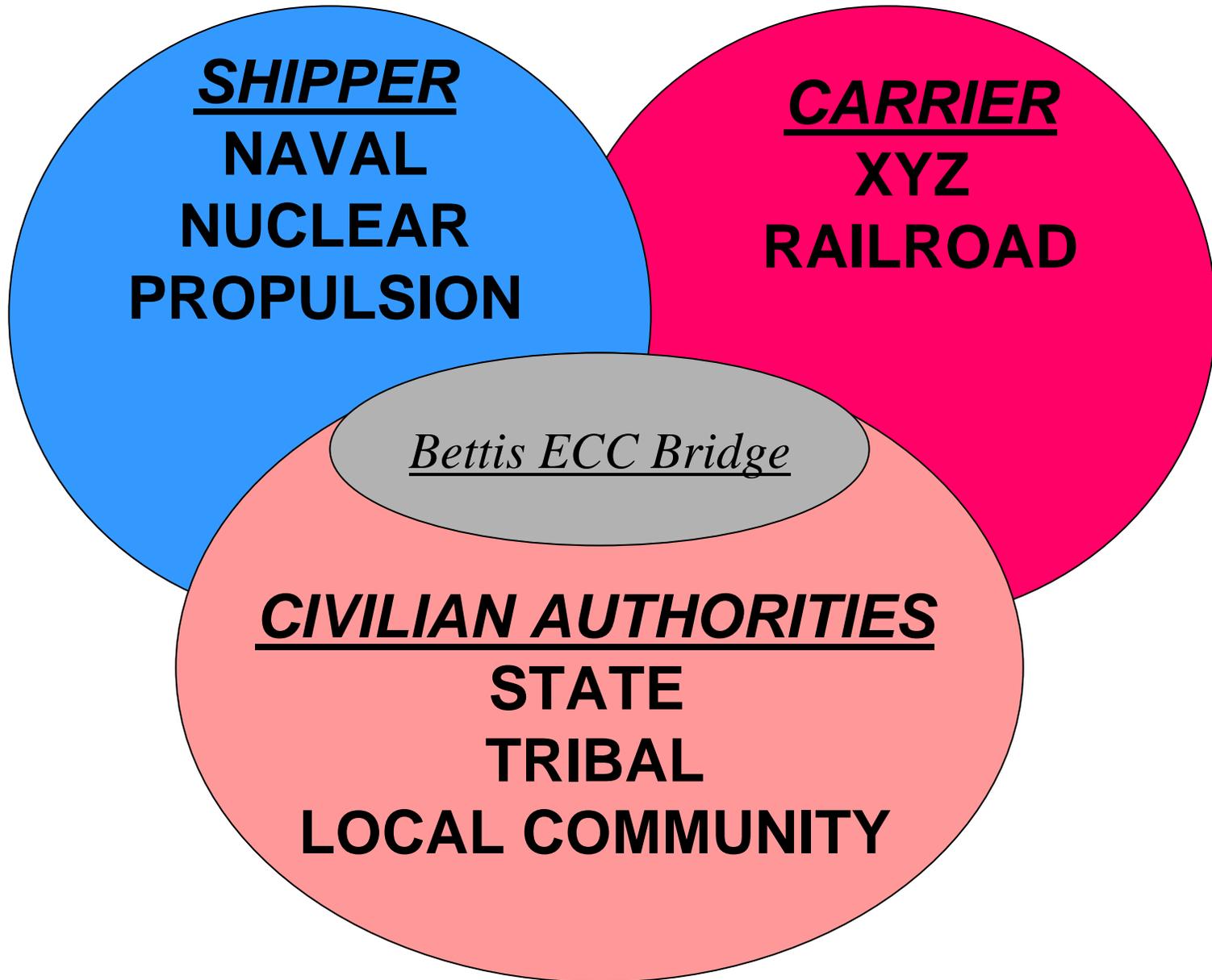
# **NAVAL SPENT FUEL SHIPMENT ACCIDENT EXERCISE SCENARIO**

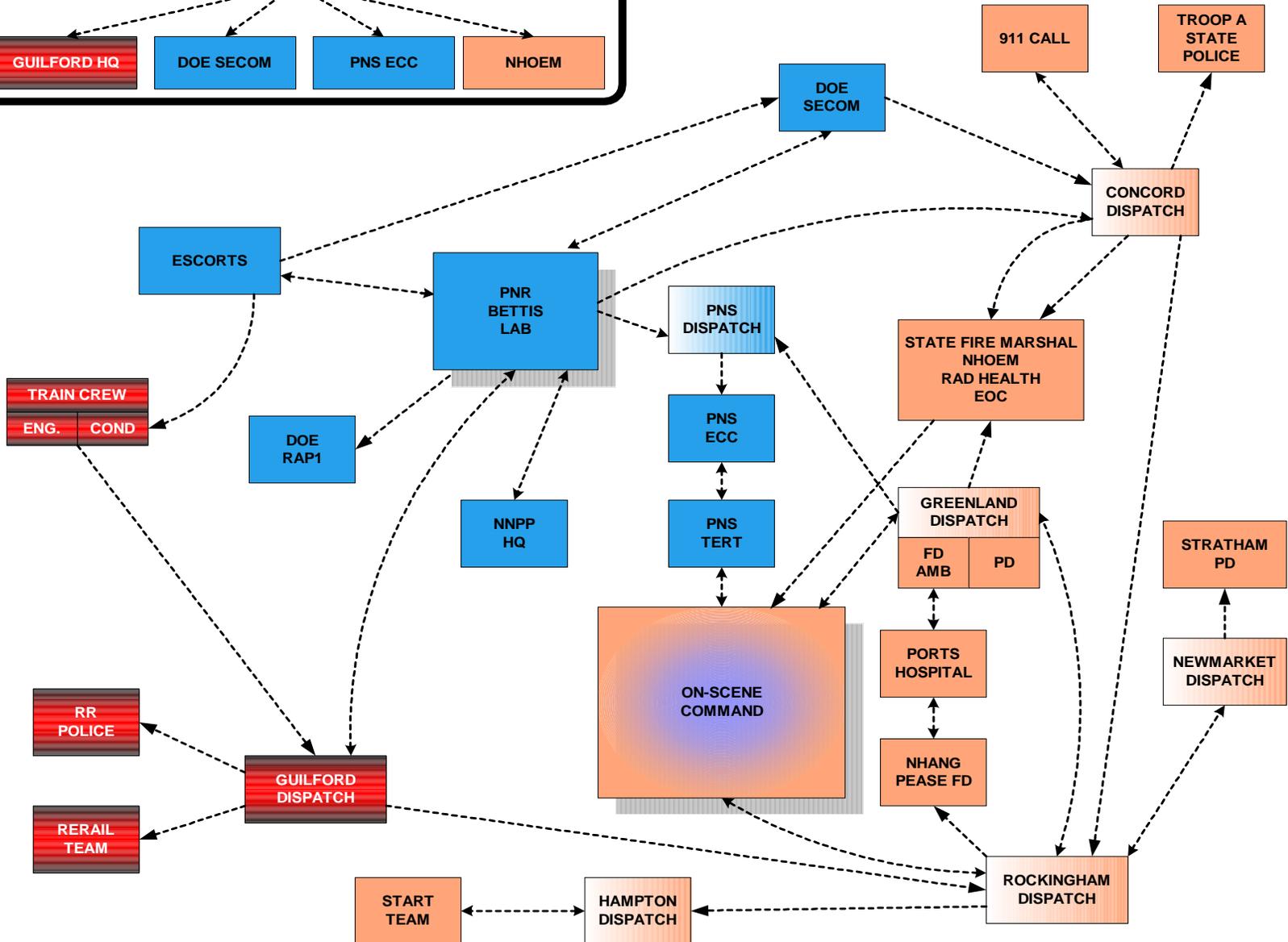
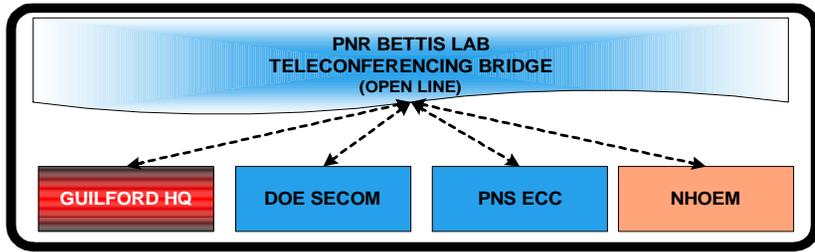
- *Use real M-140 container(s) (empty)*
- *Road crossing accident*
- *Driver and/or passenger in truck - injured*
- *Radiation concern from train crew*
- *Motorist calls locals*
- *Nearby residents come to scene & show concern*
- *Local Police/Fire assume Incident Command*
- *News media at scene (role players)*
- *NNPP TERT/DOE RAP at scene - radiological surveys*
- *State RAD Health at scene - radiological surveys*
- *Radiological condition normal – rerail – exercise ends!*

# ***NAVAL SPENT FUEL SHIPMENT ACCIDENT EXERCISE CONCLUSIONS***

- 
- **Cooperative and professional escorts.**
  - **Coordinated (shipper/carrier/civilian authorities) response is critical.**
  - **Naval spent fuel shipments are safe.**

# COMMUNICATION LINKS





# COMMUNICATION LINKS

