



# NNSA SRS Overview

*Making the world a safer place*

**Doug Dearolph**

Manager, NNSA Savannah River Site Office



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# NNSA Mission Areas

## Defense Programs

Maintain a safe, secure, and reliable nuclear weapons stockpile to help ensure the security of the U.S. and its allies, deter aggression, and support international stability



*A National Ignition Facility technician examines a damage inspection instrument used to assess the optics in the target chamber.*

## Naval Reactors

Provide the U.S. Navy with safe, militarily effective nuclear propulsion systems, and ensure their continued safe and reliable operation



*Nuclear-powered submarine, VIRGINIA, returning to port following her highly successful sea trials.*

## Defense Nuclear Nonproliferation

Detect, prevent, and reverse the proliferation of weapons of mass destruction, and promote international nuclear safety



*A container with naturally occurring radioactivity processed through a radiation portal monitor as part of NNSA's Second Line of Defense Program.*

## Emergency Operations

Administer and direct the programs of the national nuclear / radiological emergency response capability to ensure availability and viability to respond to nuclear and radiological emergencies within the U.S. and abroad



*Dep Energy Sec Daniel Poneman (center) reviews Leading Nuclear Counterterrorism Assets.*

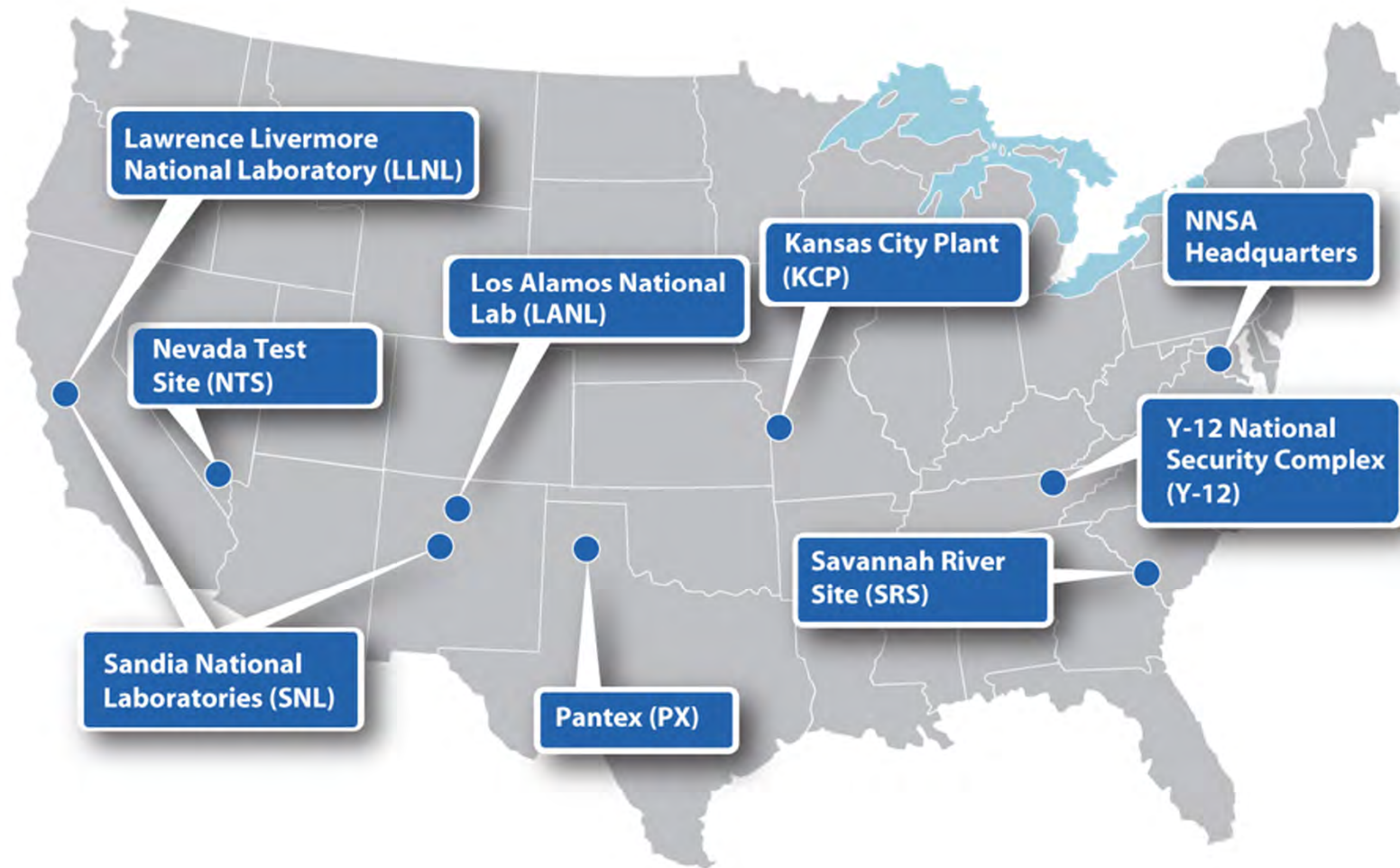


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# Nuclear Security Enterprise



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# Defense Program Mission



Directed Stockpile Work



Mini-TCAP Experimental Unit

Research, Development:  
Engineering, Science  
and Technology

*“To provide the nation a safe, secure, and effective nuclear weapons stockpile without underground testing”*



Infrastructure for the Enterprise



Safe and Secure Transportation



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# Nuclear Nonproliferation Program Mission

Conduct Cutting-Edge  
Research and Development



*To reduce the global nuclear threat by detecting, securing, safeguarding, disposing and controlling nuclear and radiological material worldwide, as well as promoting the responsible application of nuclear technology and science*

Secure Russian Nuclear  
Weapons Material



Eliminate Weapons-Usable  
Material



Secure Civil Nuclear and Radiological  
Materials Worldwide



Detect and Deter Illicit  
International Nuclear Transfers



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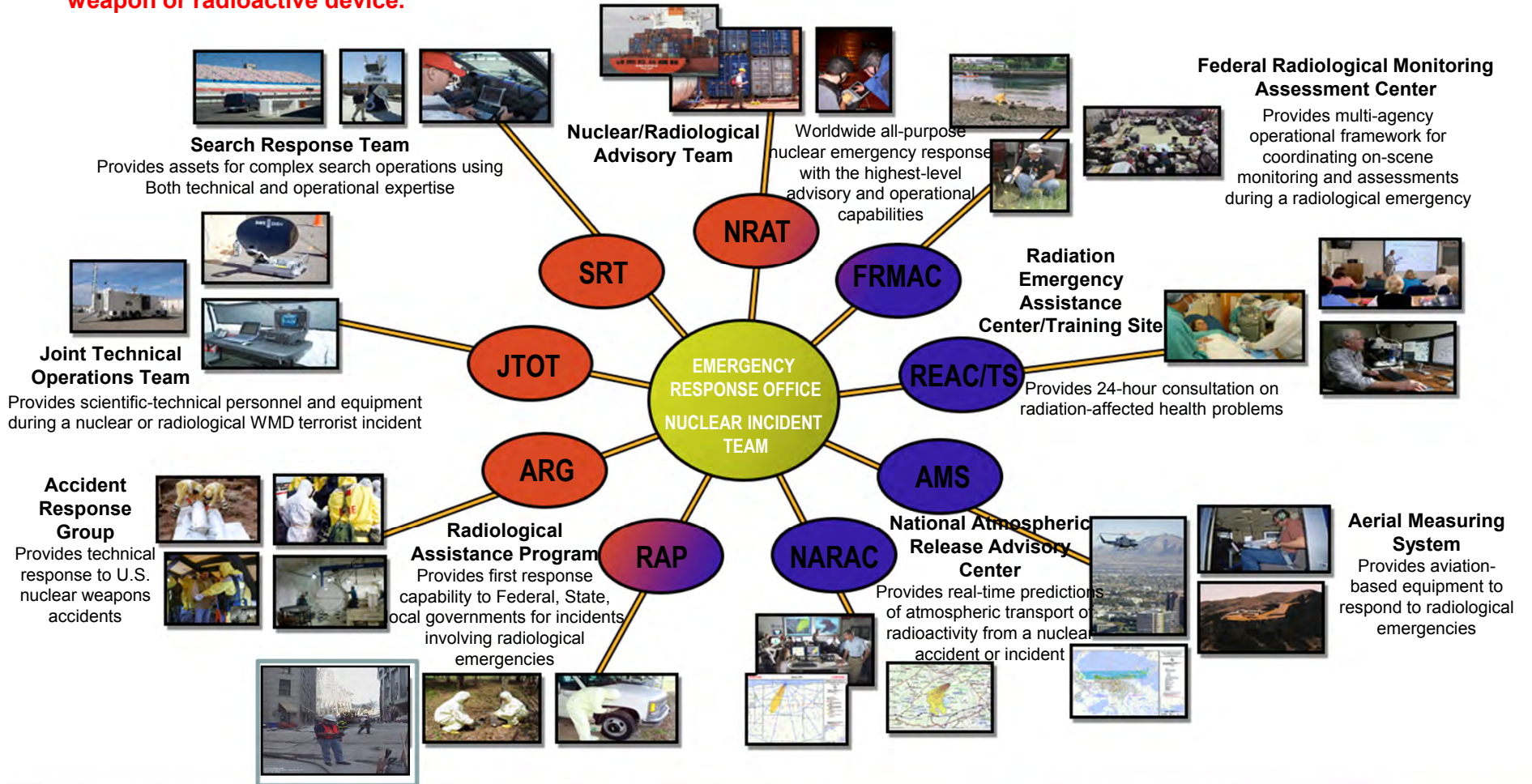


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# Emergency Response

**Crisis Response:**  
Identification, characterization, rendering safe, and final disposition of any nuclear weapon or radioactive device.

**Consequence Management:**  
Respond to and mitigate the effects of nuclear and radiological incidents.



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# NNSA SRS Facilities

## Defense Programs: Tritium Complex



- Tritium Supply
- Nuclear Stockpile Maintenance
- Nuclear Stockpile Evaluation
- Helium-3 Recovery

## Nuclear Nonproliferation: MOX & WSB Projects



- Convert weapons-grade plutonium to mixed oxide fuel
- use in commercial nuclear reactors
- makes it unsuitable for use in nuclear weapons

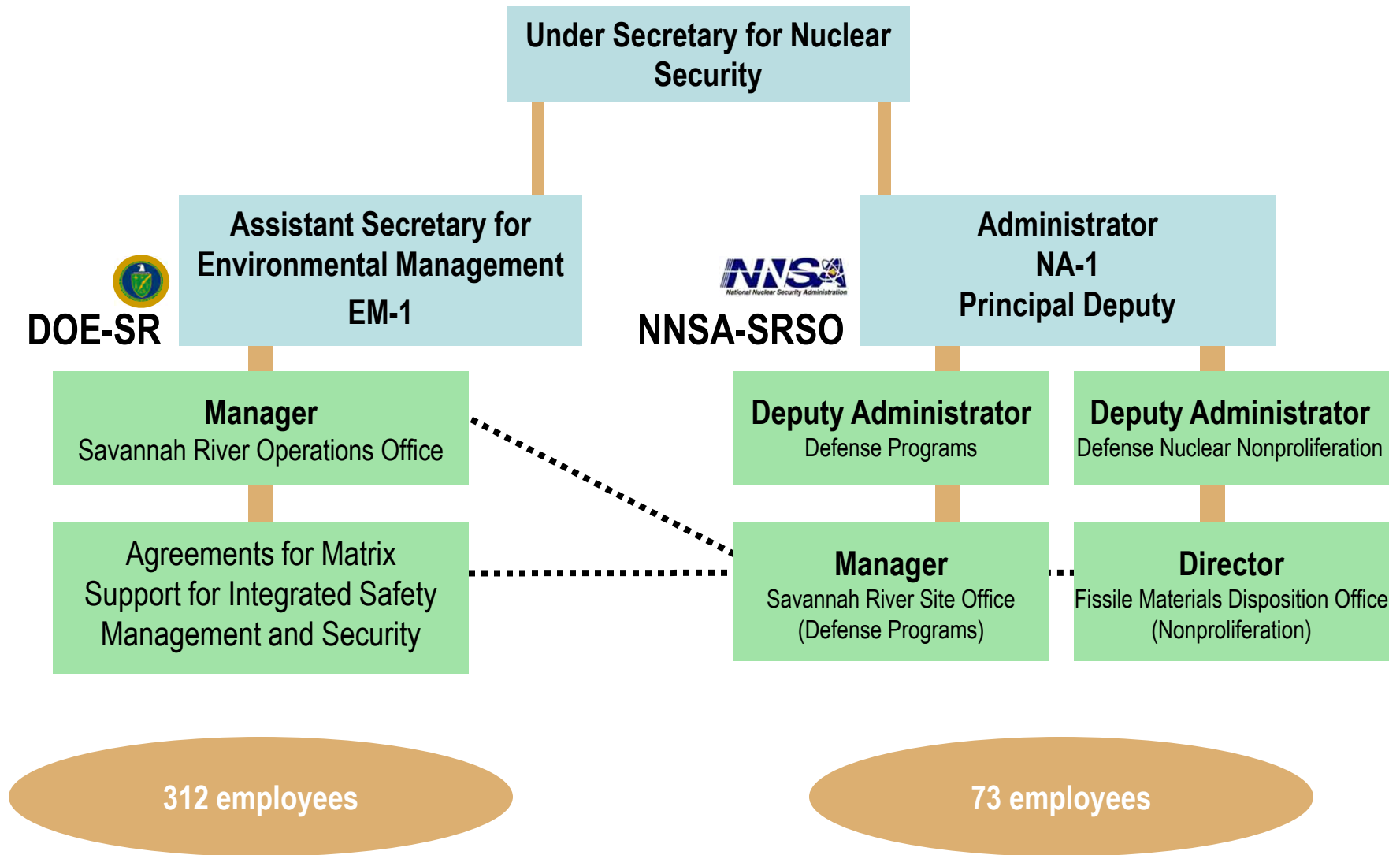


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# SRS Federal Organization



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