



Y12 NATIONAL SECURITY COMPLEX **MAKING THE WORLD SAFER**

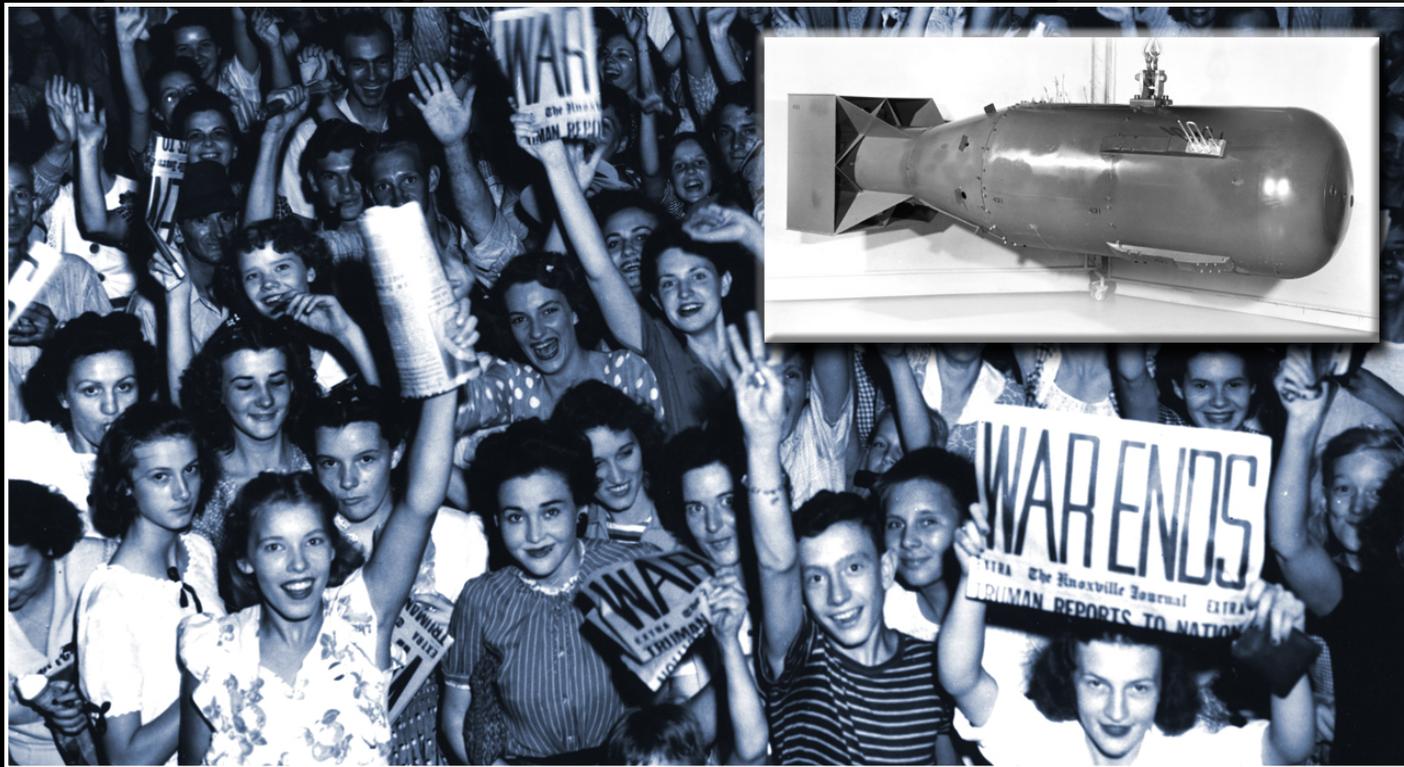
Y12 **OVERVIEW**



Robert Gee, Manager
Y-12 Emergency Management

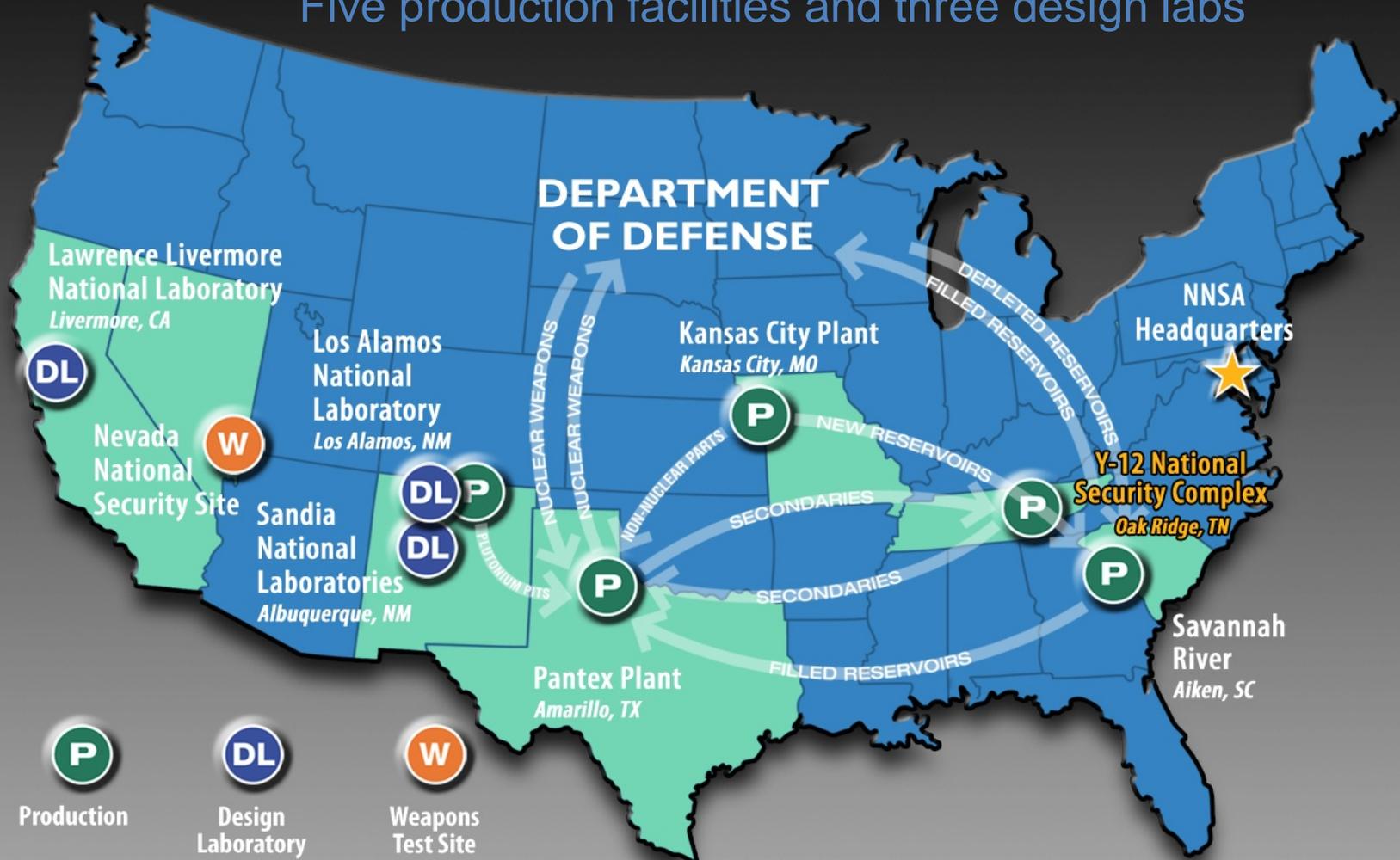
History of Uranium Expertise

- Created in 1943 as part of the Manhattan Project
- Provided the enriched uranium for “Little Boy,” the atomic bomb used to end WWII



Nuclear Security Enterprise

Five production facilities and three design labs



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Y-12 Today

- 811 acres spanning 2.5 miles, 150 high-security acres
- 7.3 million ft² of laboratory, machining, dismantlement, research and development and office areas
- 343 buildings, 13 mission-critical facilities
- 1.4 million ft² demolished

- ~4,900 B&W Y-12 employees
- ~80 NPO employees at Y-12
- ~1,900 subcontractors
- Contracts with 819 small businesses, totaling more than \$146 million in FY 2012



Y-12's Missions

- Deterrence – produce, maintain and protect essential materials and components for U.S. nuclear arsenal
- Naval Reactors – provide HEU for naval fuel
- Nuclear Nonproliferation – reduce the threat of nuclear terrorism



Sustain a Safe, Secure and Effective Nuclear Arsenal

- Materials processing and recycling
- Accounting for materials
- Component manufacturing
- Testing, evaluating and providing quality assurance
- Disassembling, dismantling and disposing of materials
- Packing and placing in storage





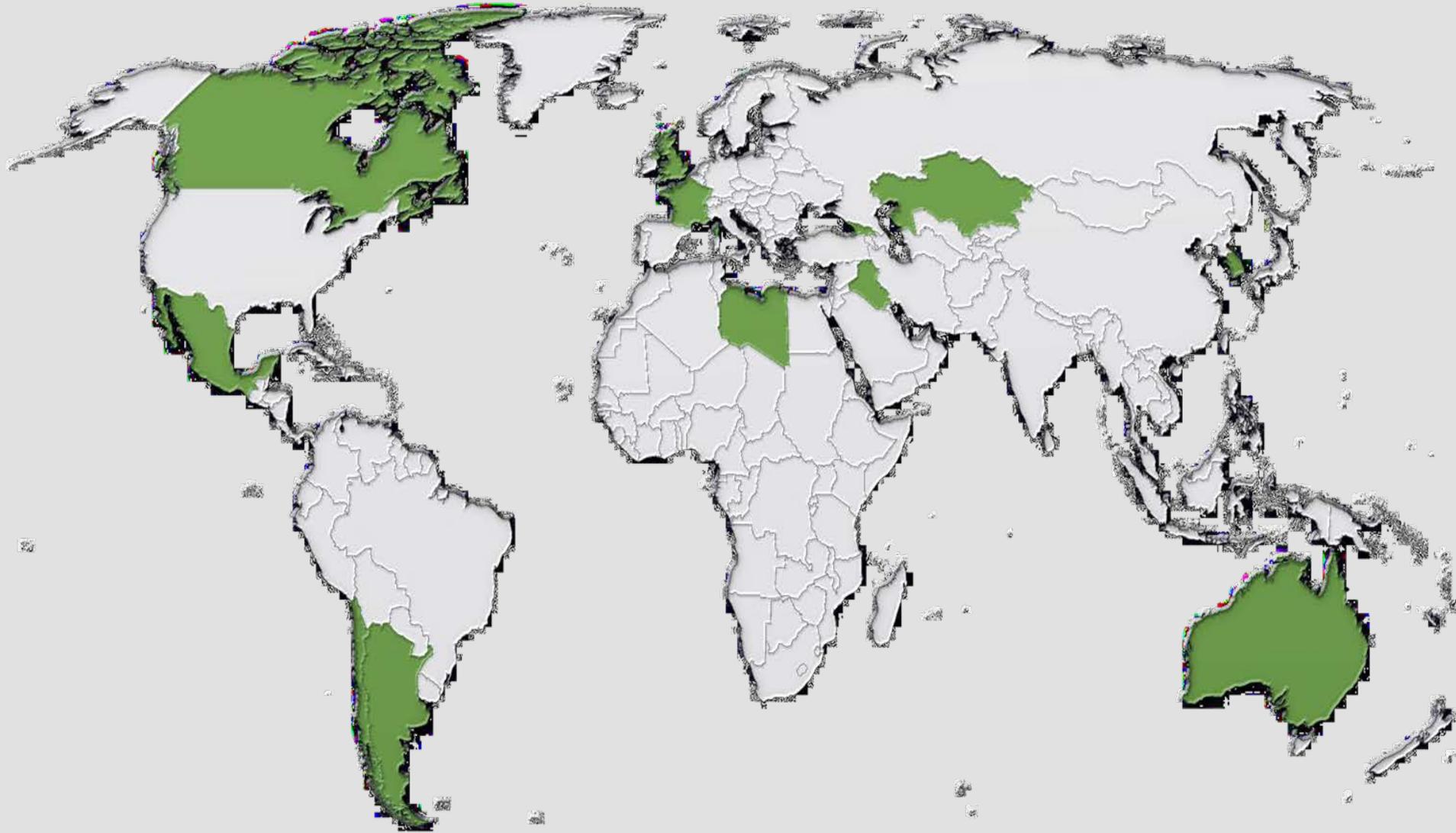
Supply the U.S. Nuclear Navy

Y-12 is the reliable supplier of highly enriched uranium

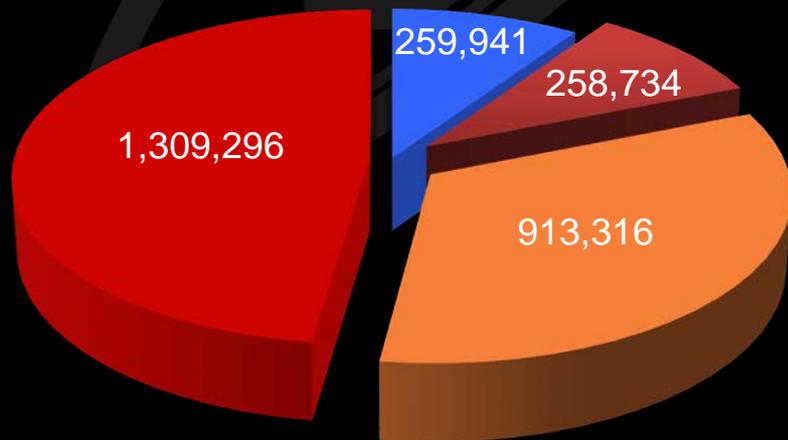
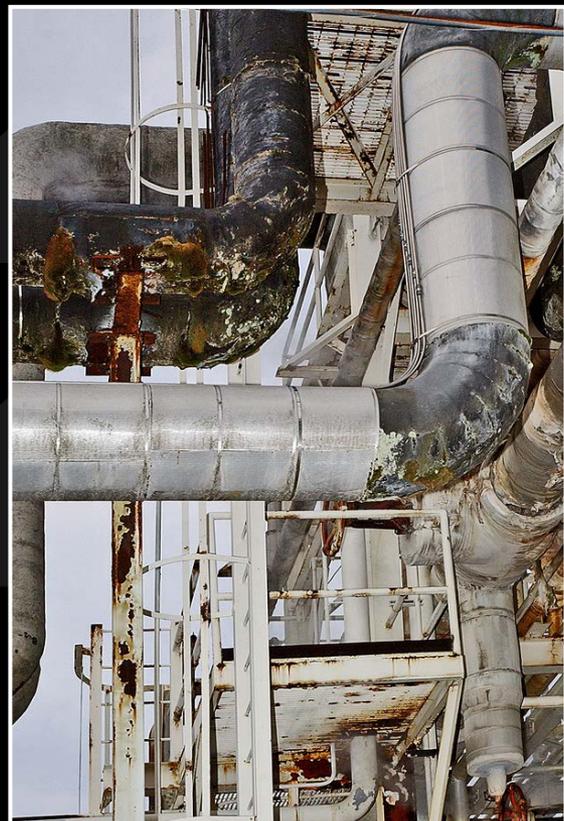
- Navy's current annual requirement is more than 3.7 MTU
- MOA between Defense Programs and Naval Reactors requires HEU through 2050



Recover and Secure Nuclear Material



Transformation—Why It's Important



- 0-39 YEARS
- 40-49 YEARS
- 50-59 YEARS
- 60-65 YEARS

VALUES IN FT²

Transform the Site: Completed Facilities

Highly Enriched Uranium Materials Facility



New Hope Center



Jack Case Center

Transform the Site: Future Facilities

Uranium Processing Facility



Consolidated Manufacturing Complex



Emergency Operations and Response Facility



Y-12 Transformation—Vital to Future

“Without an ability to produce uranium components, any plan to sustain the stockpile, as well as support for our Navy nuclear propulsion, will come to a halt. This would have a significant impact, not just on the weapons program, but in dealing with nuclear dangers of many kinds.”

— Nuclear Posture Review 2010

Hazardous Materials

Chemical	Radioactive
Acetic Acid	Uranium
Acetonitrile	
Beryllium/Beryllium oxide	
Hydrogen fluoride	
Lithium compounds	
Methyl chloroform	
Nitric Acid	
Potassium hydroxide	
Sodium hydroxide	
Sulfuric acid	
Tributyl phosphate	
Uranium	

Emergency Response Assets



Fire Department



Emergency Medical Services



Protective Force



PSS/Emergency Control Center



Technical Support Center



Emergency Operations Center



Media Center/JIC

Mutual Aid Entry Process

- Mutual aid resources are directed to a secondary staging location
 - East – New Hope Center
 - West – as directed
- Fire Officer and Security meet responding resources at secondary staging location
- Briefing provided
- Escort to primary staging



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