

The New Nuclear Arms Race and U.S. Plutonium Pit Production

Presentation for

Oppenheimer's Legacy: South Carolina at Center of New Nuclear Arms Race

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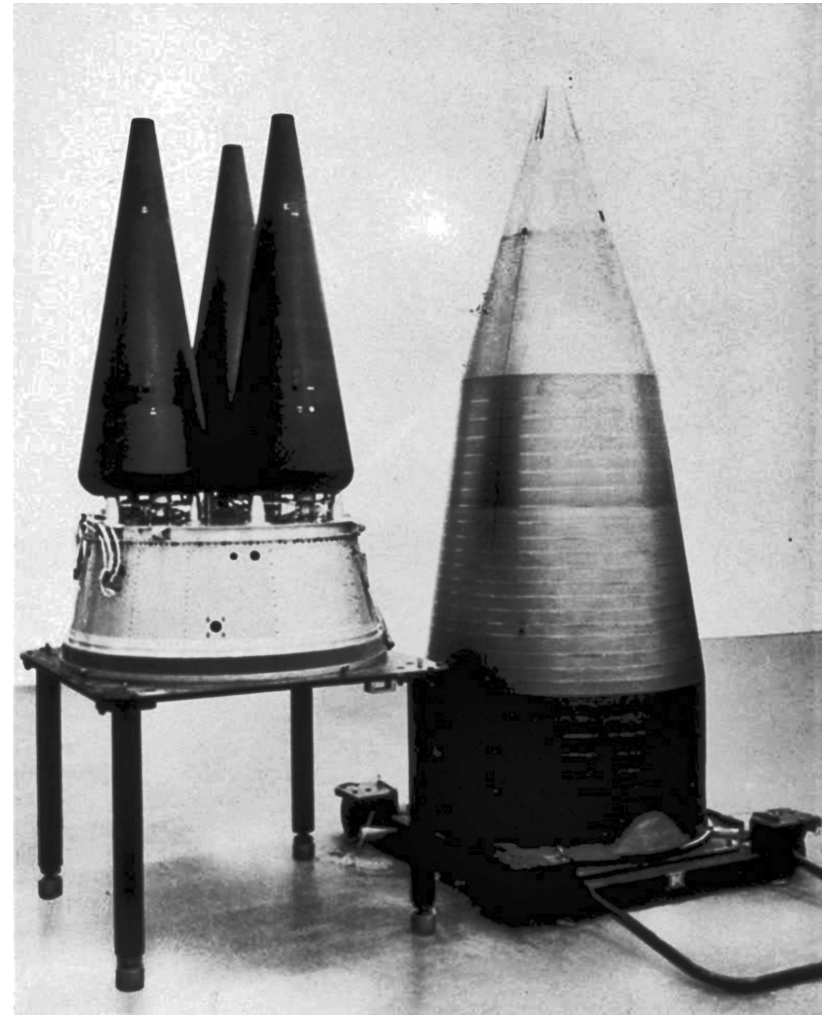
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Context for Plutonium Pit Production: U.S. \$2 Trillion “Modernization”

- New intercontinental ballistic missiles, new cruise missiles, heavy stealth bombers and submarines.
- Rebuilt warheads with new military capabilities plus completely new-design nuclear weapons.
- In short, it’s a new arms race with nuclear weapons forever!



Expanded Plutonium “Pit” Bomb Core Production

- Expanded production of plutonium “pits” is key to nuclear weapons “modernization.” A pit is the radioactive core or “trigger” of modern two-stage thermonuclear weapons.
- A plutonium pit can also be an atomic bomb by itself, as the destruction of Nagasaki showed.
- The U.S. has not had industrial-scale pit production since a 1989 FBI raid investigating environmental crimes shut down the Rocky Flats Plant near Denver.

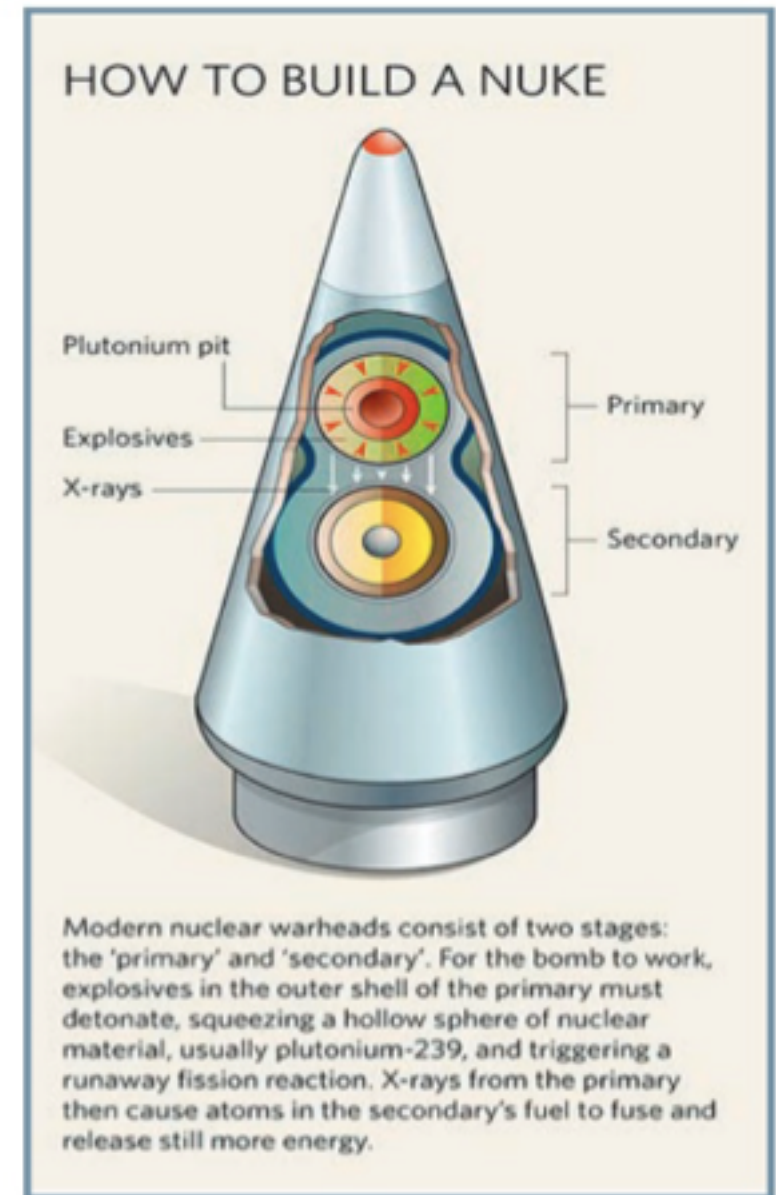


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National Nuclear Security Administration Plans

- 30 or more plutonium pits per year at the Los Alamos National Laboratory by 2026.
(~\$15 billion in direct and indirect upgrades)
- 50 or more pits per year at the Savannah River Site in South Carolina by 2036 (originally 2030).
(>\$20 billion including sunk MOX costs)
- Biden's budget \$2.77 billion in FY 2024 .
- Cost greater than \$60 billion over 30 years.

Expanded Plutonium Pit Production Is Unnecessary

- No production is scheduled to maintain the safety and reliability of the *existing* nuclear stockpile. Instead it is for new-design nuclear weapons.
- A 2006 independent study concluded pits last at least a century. 2012 Livermore Lab: Pu >150 years.
- At least 15,000 existing pits are stored at the Pantex Plant near Amarillo, Texas.
- Future pits will be modified, possibly raising reliability issues, thereby degrading national security and/or prompting resumed testing.

Programmatic Problems

- The Department of Energy has been on the Government Accountability Office’s “High Risk List” for project mismanagement since 1991.
- Title of GAO January 2023 report says it all:
NNSA Does Not Have a Comprehensive Schedule or Cost Estimate for Pit Production Capability
- Congress has noted NNSA’s “apparent lack of focus on advancing knowledge regarding pit and plutonium aging...” (Results not expected until 2030)

Programmatic Problems (cont.)

- The Waste Isolation Pilot Plant in southern New Mexico is currently the world's only deep geologic radioactive waste dump.
- NNSA claims that more than half of WIPP's future capacity will be for pit production wastes.
- WIPP is already oversubscribed, in part because of SRS's "excess" plutonium.
- New Mexico is exerting greater control over WIPP. This may be expanded pit production's "Achilles heel."

Suggested Goals

- Eliminate requirement for 80 pits per year.
- Stop plutonium pit production at SRS. Do not expand pit production at Los Alamos Lab (already authorized for 20 pits per year).
- Cut "Plutonium Modernization" funding.
- Get new pit aging study.
- Support a programmatic EIS on expanded plutonium pit production (last one was in 2008).
- Support Tom.

LANL Central Mission

Central Mission of Los Alamos National Laboratory



Burnt Madonna at Nagasaki Cathedral



New Approaches Needed



On 78th bombing anniversary, Bishops of Santa Fe, Seattle, Hiroshima and Nagasaki sign formal partnership to work on nuclear disarmament.

- Given failure of the NonProliferation Treaty, explicit support for the Treaty on the Prohibition of Nuclear Weapons (which the Vatican was the first to ratify).
- Call for concrete progress by 80th anniversaries (August 2025).

We Need to Build a Movement

- We are getting creamed politically ever since Obama took office.
- Logic, lawsuits, common sense, the facts don't seem to work.
- In the 1980's a million person march in Central Park and *The Day After* turned Reagan into an abolitionist.
- To move politicians, we need a movement behind us. Maybe *Oppenheimer* is a start.