



PantEX | HISTORY

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Environmental Compliance Department

Pantex Site



Pantex area consists of areas owned by DOE, and areas owned by TTU, but leased by DOE.



Site occupies approx., 18,000 acres



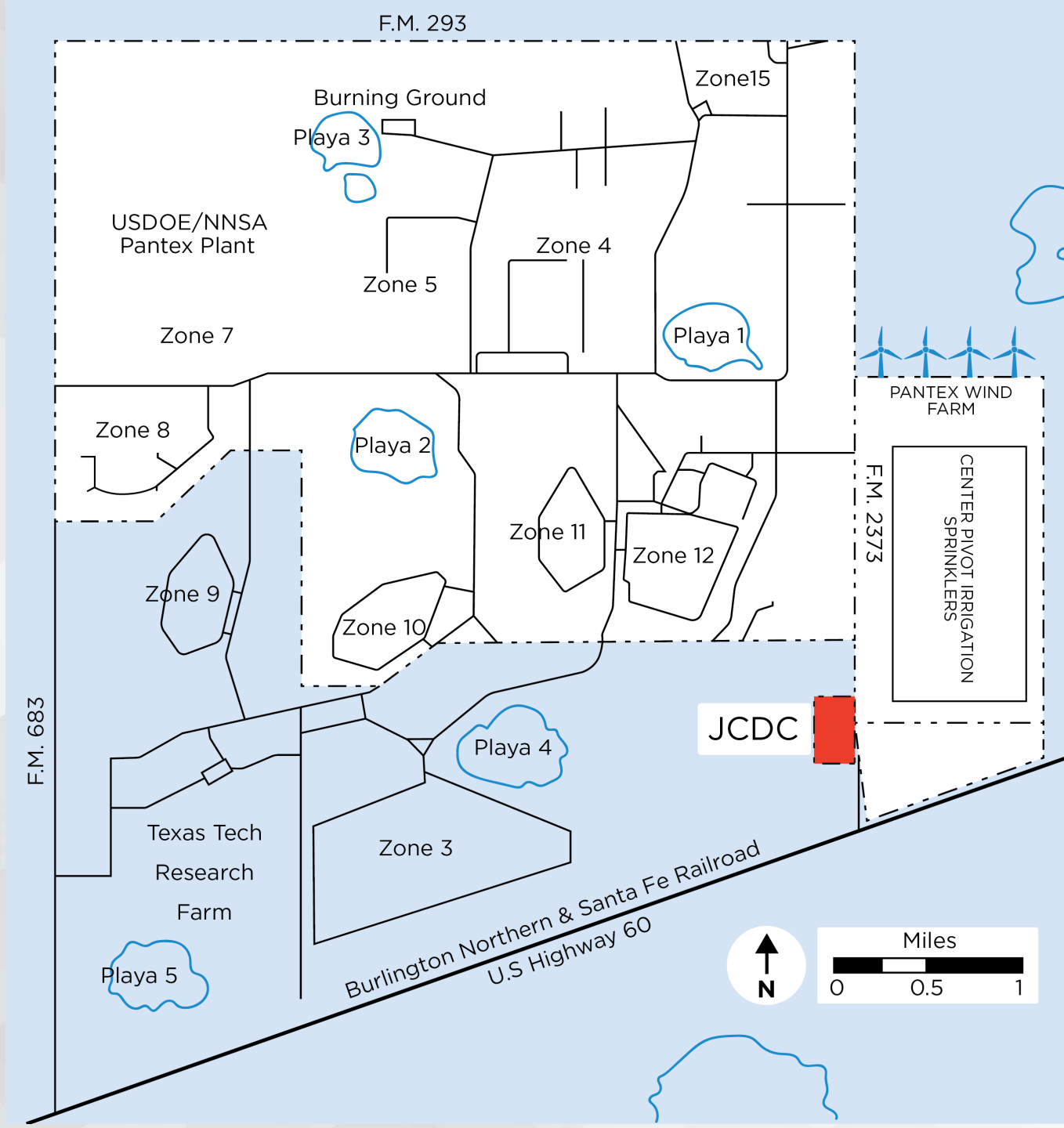
Largest Federally owned wind farm to the East, 5 turbines



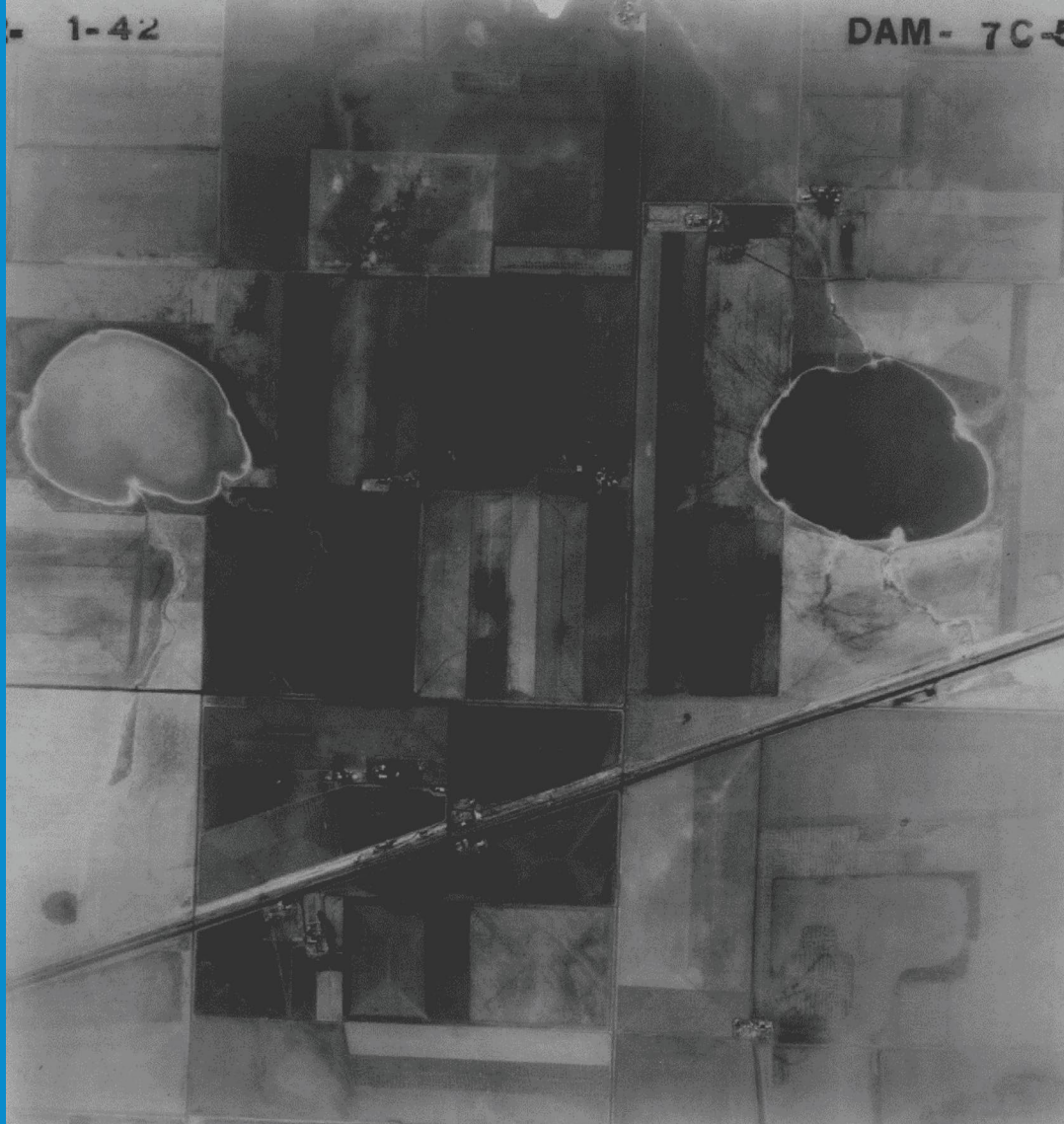
Pantex wind turbines can generate the equivalent to 40% of electricity usage.



The holding pond associated with the center pivot irrigation sprinkler system can hold 8,000,000 gallons of water.



1942
Building a
Conventional
Weapons Load,
Assembly, and
Pack Plant



Building 9-20

Taken by the War
Department in 1942



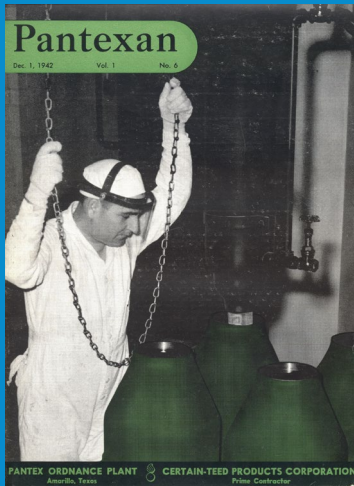
Land Map

Map of Pantex
before land was
taken for WWII



Certain-Teed

First operating contactors called “agent-operators” at the time.



Bomb Loader Howard Hamilton

Former linotype operator for a newspaper, working in a melt load building.

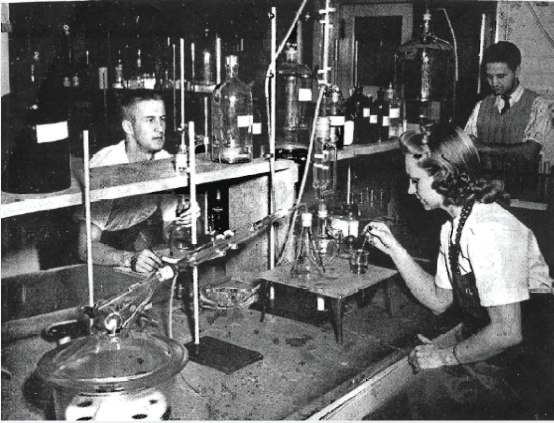
Weapon	Quantity Produced
23lb Fragmentation Bombs	1,200,000
105mm Howitzer Shells	6,000,000
250lb Bombs	116,000
500lb Bombs	1,200,000

WWII – Government Owned, Contractor Operated

First load line complete in 1942

First bomb rolled off in September 1942





WWII-Employment

At peak employment, over 5,200 people worked here and 60% of them were women



Uniform

They typically wore a bandana like Rosie the Riveter, it was a red background with white 'shell and flame' logos from the Army Ordnance Corps.



Woman Workers

5,000,000 women went to work during the war, but only 90,000 worked in ordnance occupations. Our women workers were among a very small group.



1941-1968 Amarillo Army Air Base

Pilot and mechanic training school for B-17s and B-29s during WWII.
Later opened with a missile-training wing and all-jet mechanic training courses.





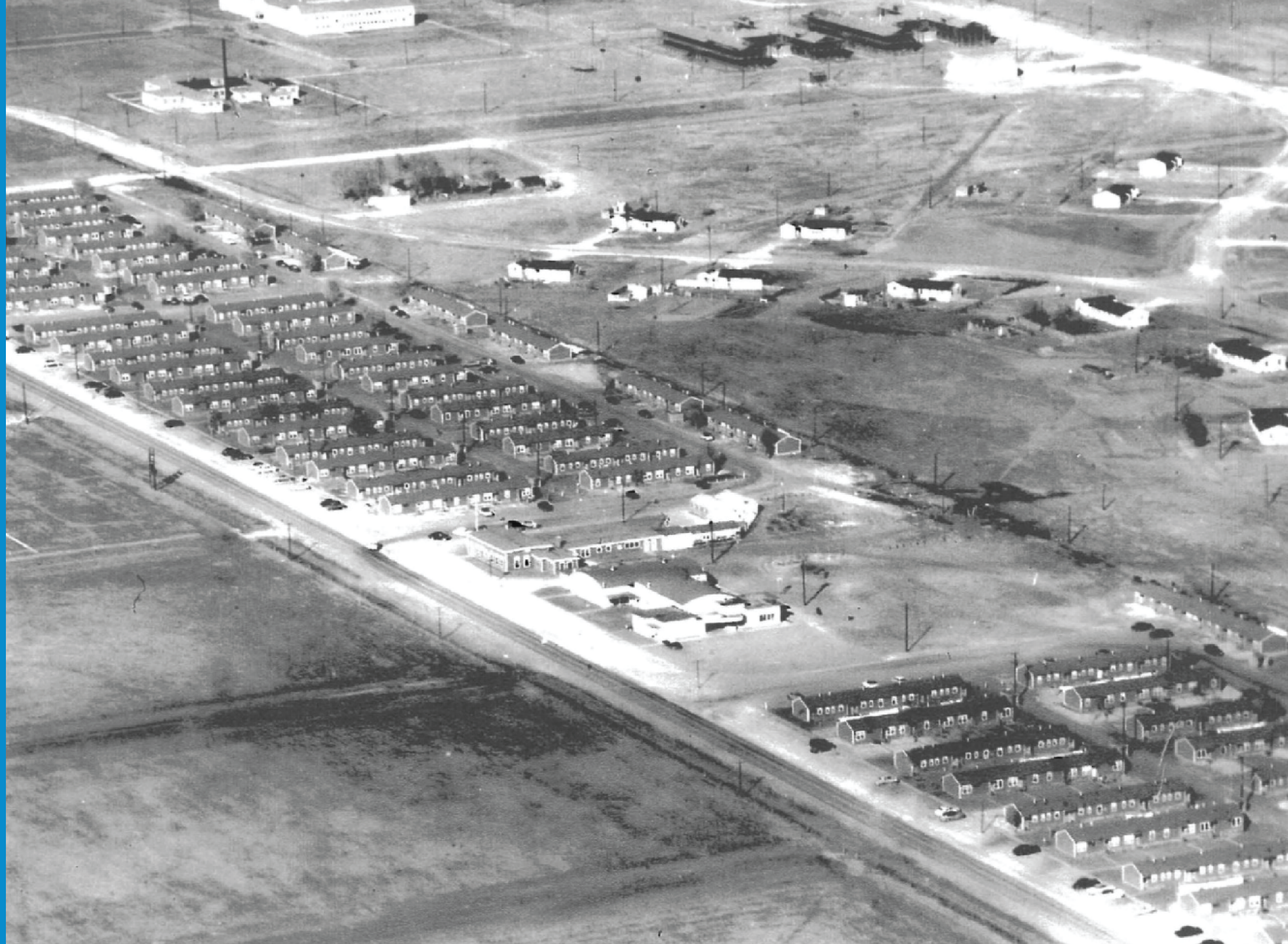
1943-1968

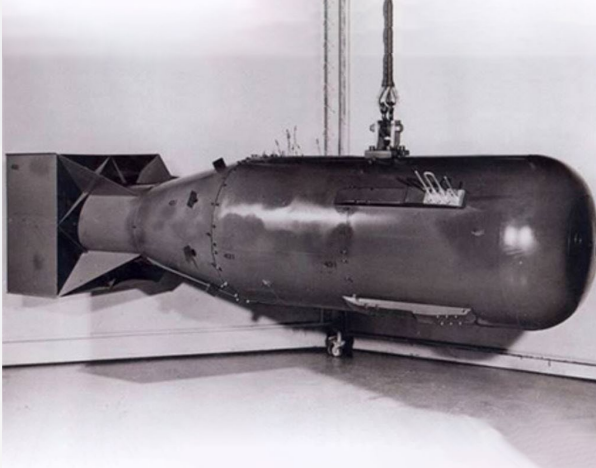
Pantex Village

Was a community built for people who worked at the plant.



- Homes and buildings were made of pre-fabricated materials
- The site was operated until 1968 when the buildings were auctioned off.



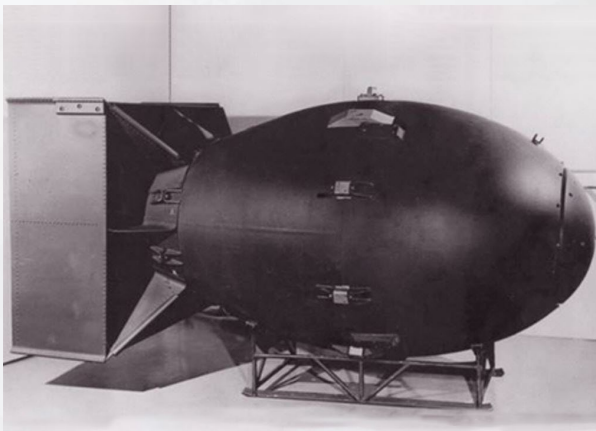


1945 – End of World War II

“Little Boy” was the first atomic weapon used in warfare. Dropped over Hiroshima, Japan on August 6th, 1945. Replicas can be seen at Y-12 and the National Museum of Nuclear Science & History.

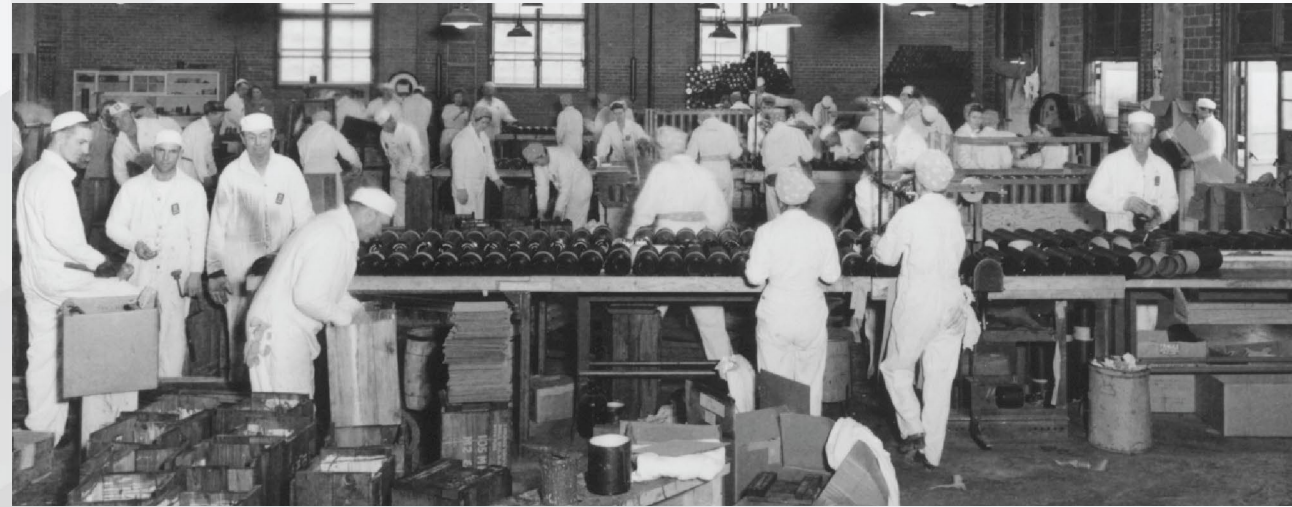


“Fat Man” was the second atomic weapon used in warfare. Dropped over Nagasaki, Japan on August 9th, 1945. Pantex is home to a Mark III Fat Man type bomb case.



It did not take atomic weapons to make man want peace. But the atomic bomb was the turn of the screw. The atomic bomb made the prospect of future war unendurable. It has led us up those last few steps to the mountain pass; and beyond there is a different country.
J. ROBERT OPPENHEIMER

August 15, 1945
Pantex Closed





1947-1949 Texas Tech University

August 04,
1959



WAR ASSETS ADMINISTRATION

1947- S. 8,000 acres to Texas Tech University for agricultural experiment station

1949 – N. 8,000 acres to Texas Tech University



Recapture clause



Pantech
Research Farm
established 1955

1951 AEC Reclaims Pantex



High Explosives (HE)
fabrication

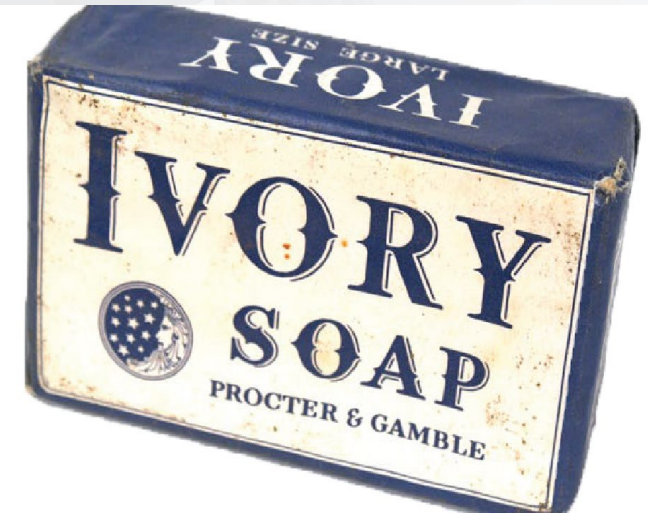


Zone 12



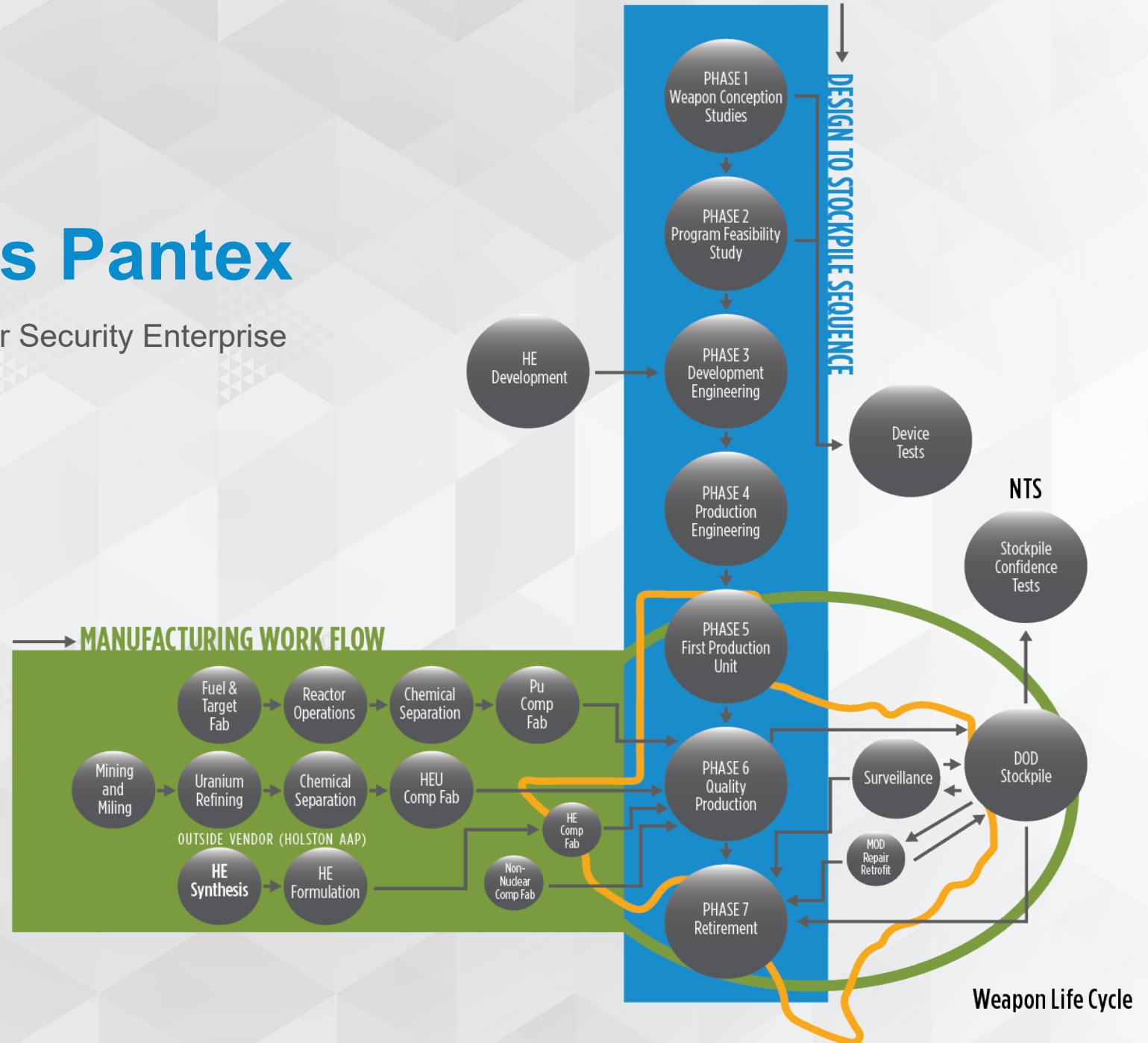
Common-wall Bays

- Melt/Cast HE process
- Procter & Gamble Defense Corporation



1951- AEC Reclaims Pantex

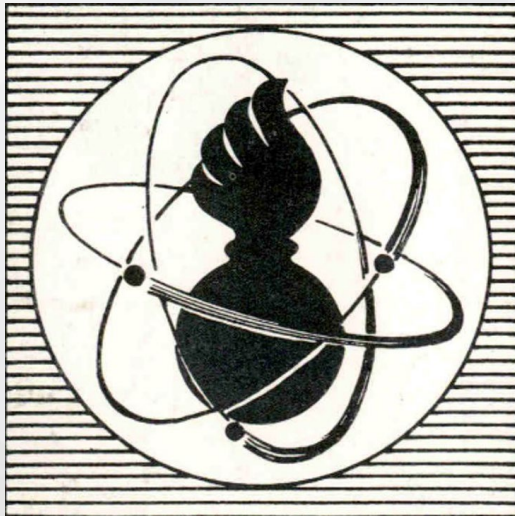
Pantex Plant's primary role within the Nuclear Security Enterprise is outlined in the shape of Texas



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P&G To Give Up Contract

May 14, Maj. F. H. Wilson, Jr., Commander, Pantex Ordnance Plant, officially announced that the Procter & Gamble Company had asked the Ordnance Corps to relieve them of their Pantex responsibilities on Sept. 30, or as soon thereafter as practicable in order to assure a smooth transfer between contractors.



1956

New Contractor

In 1956, a new weapon design (sealed pit) made its way to the production sites that meant for the first time Pantex would have nuclear material onsite. Procter & Gamble asked to be relieved of their contract in 1956. The AEC asked Mason & Hanger (the contractor of the Burlington Iowa, AEC site) to take over the contract.

Gravel Gerties

Designed to minimize spread of nuclear material in the unlikely event of an accidental High Explosives detonation

CONSTRUCTED FROM 1956-1958

- This design consisted of a cell or a large work room and staging area
- With both HE and nuclear materials in the cell, in the event of an accidental HE detonation, the gravel Gertie was designed to vent gases and fall in on itself
- Suspended above the work room are tons and tons of gravel, soil, and other materials that allow the venting of gasses from the HE detonation and the containment of nuclear materials
- This video is a confidence test at the Nevada Test site conducted in 1982





Zone
11 and 12
1959

High Explosives Development

- *Melt / cast to press / machine*
- *Driver for lighter and smaller*



1963

1960
New Mission





1970

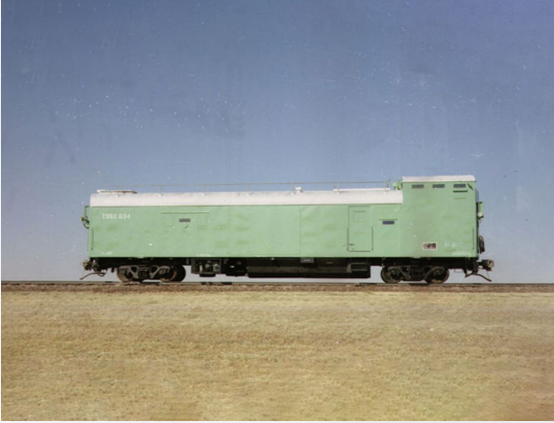
Separated bay design

- Common-wall bays used since 1951
- Isolated or separated bay design created in 1970

1975-AEC Consolidation

AEC Portion of Burlington Plant Closed





The White Train

1951-1976 – Rail Only

1976-1987 – Rail and Trailer

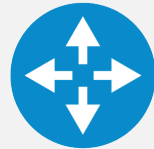
1987-Present – Trailer Only

Post Cold War



Expansion/Creation of Environmental and Safety Programs

- Reasons: Rocky Flats
- Audits and Tiger Team Report
- Need for more funding to ES&H activities and to hire more ES&H professionals



Nuclear Weapons Dismantlement

- President Bush's speech on unilateral dismantlement



End of the Cold War

- What will the Nuclear Weapons Complex look like?



Environmental Policy – P2 C2

- Protect the environment
- Prevent Pollution
- Compliance with environmental regulations
- Continual improvement



Pantex | QUESTIONS

*Pan***TEX**

The logo features the word "Pantex" in a stylized font. "Pan" is in red italics, and "TEX" is in blue bold uppercase letters. A small red star is positioned above the 'T', and a grey swoosh curves around the 'E' and 'X'. A thin grey horizontal line is located below the text.