Katie Paul | Historian
Environmental Compliance Department

Pantex Site

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

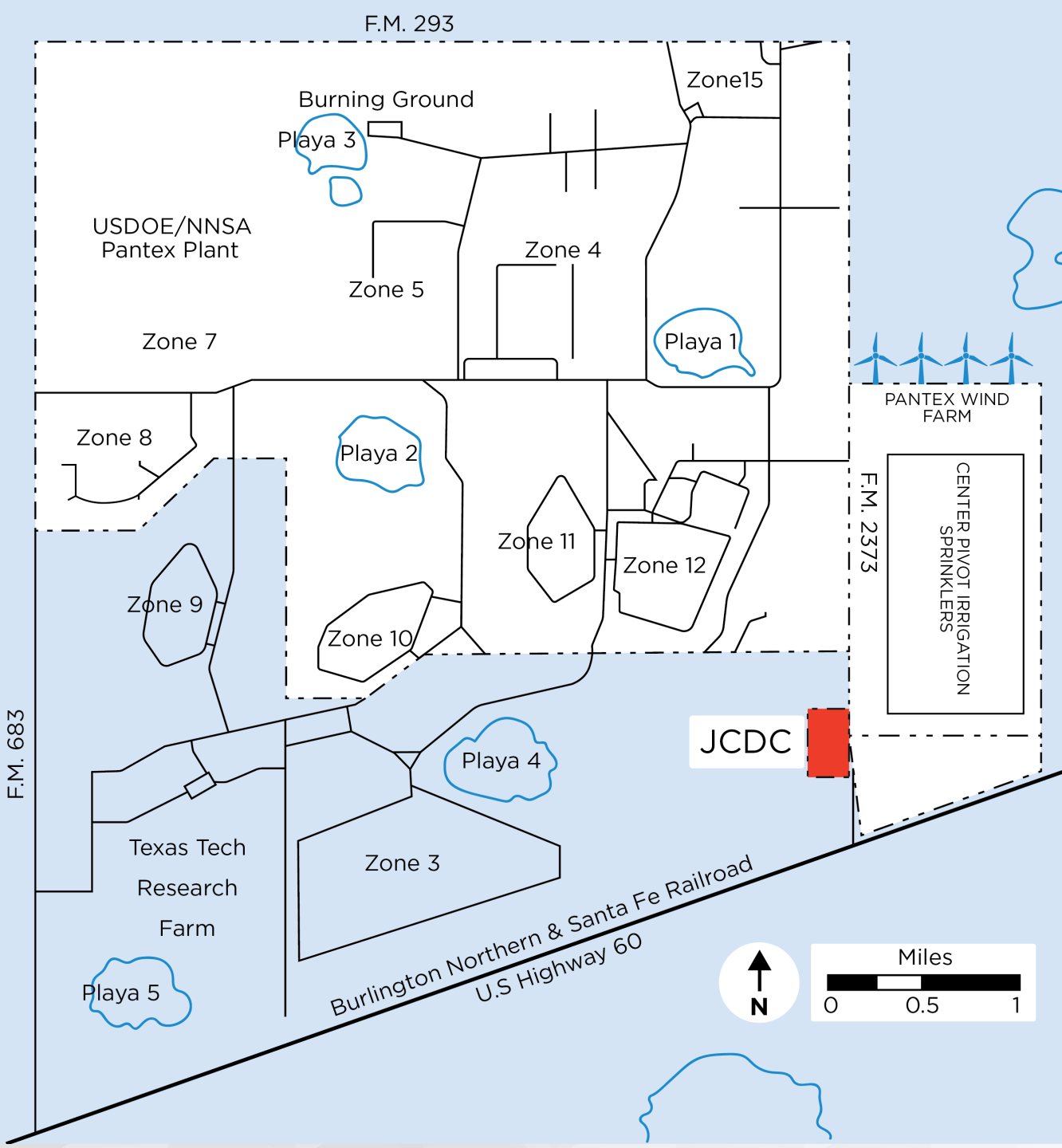
Site occupies approx., 18,000 acres

Largest Federally owned wind farm to the East, 5 turbines

40%

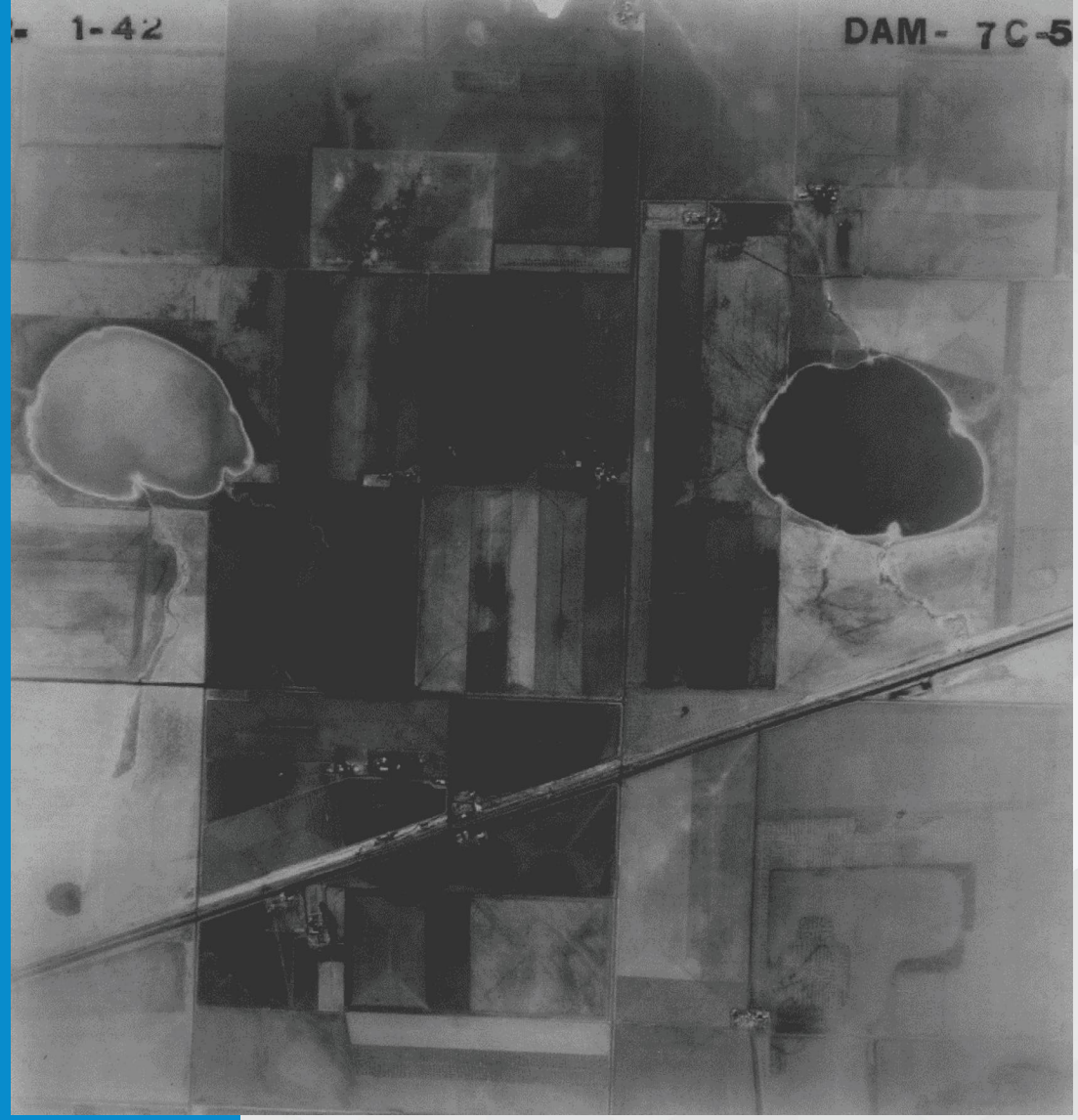
Pantex wind turbines can generate the equivalent to 40% of electricity usage.

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



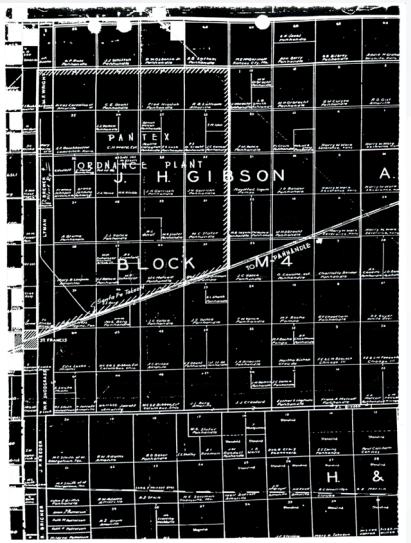
1942

Building a Conventional Weapons Load, Assembly, and Pack Plant



Building 9-20

Taken by the War Department in 1942

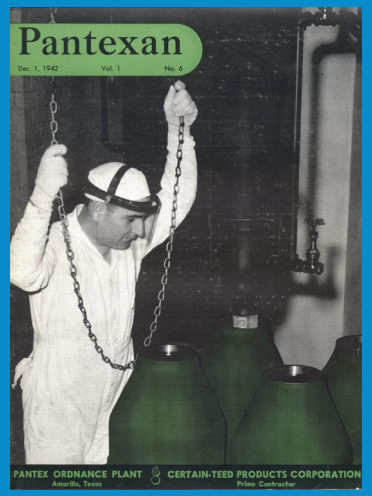


Land Map

Map of Pantex before land was taken for WWII

Certain-Teed

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



Bomb Loader Howard Hamilton

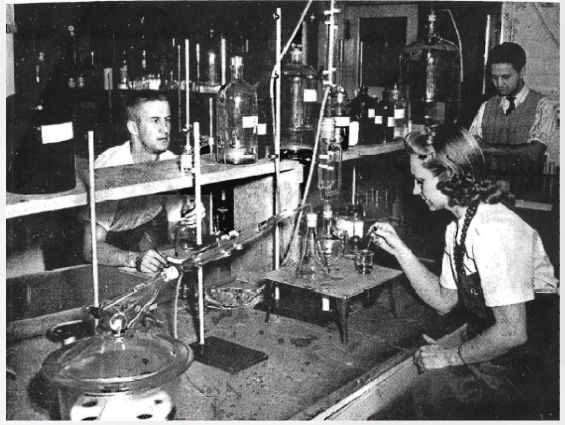
Former linotype operator for a newspaper, working in a melt load building.

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.

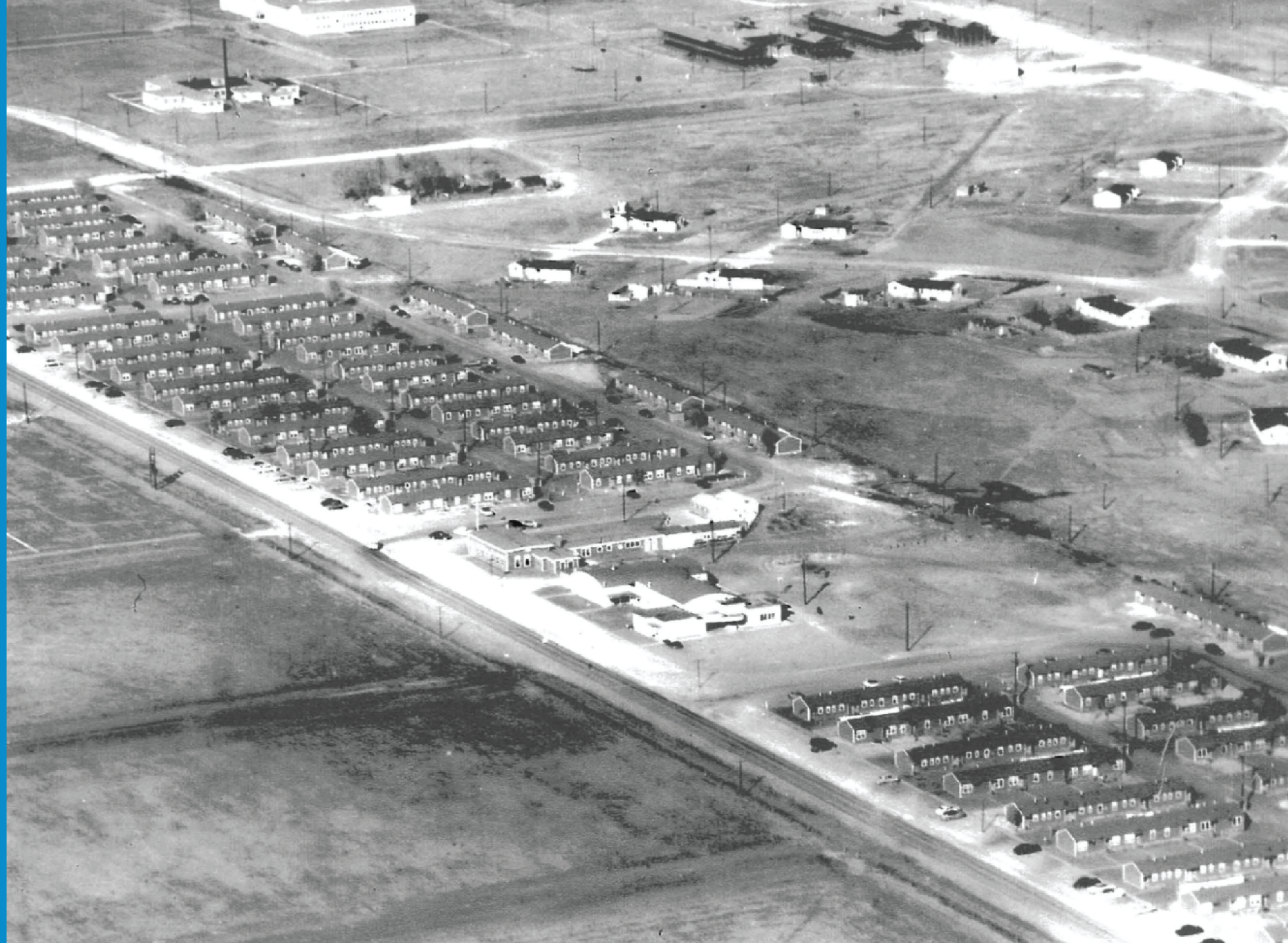
Later opened with a missile-training wing and all-jet mechanic training courses.

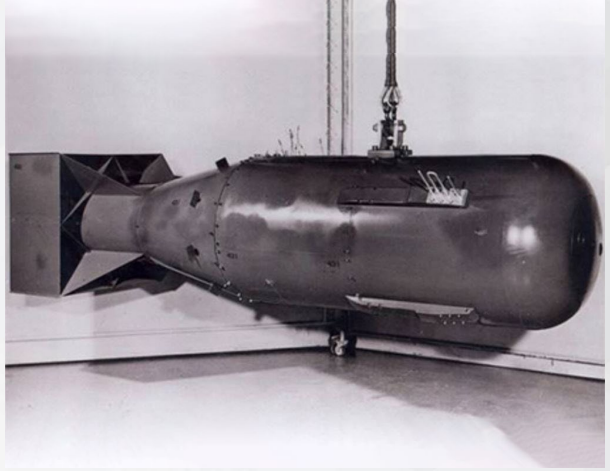
PANTEX

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.





San Francisco Chronicle — FINAL
THE CITY'S ONLY HOME-OWNED NEWSPAPER
FOUNDED 1865—VOL. CLXI, NO. 23 CCCCAAA SAN FRANCISCO, TUESDAY, AUG. 7, 1945 DAILY 5 CENTS, SUNDAY 15 CENTS

Japan Hit By Atom Bomb---Mightiest Weapon in History!

Tokyo Admits Heavy Damage

New Epoch in Science, War

Single Missile Dropped---More Force Than 2000 B-29 Raid; Capitulation May Be Hastened

Japs Cancel Rail Service Near Target

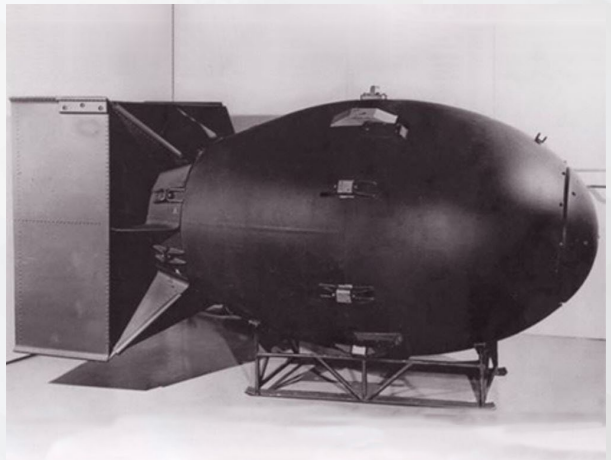
'Basic Power of Universe' Harnessed in Secret Tests; Truman Reveals the Story

WASHINGTON, Aug. 6—The most terrible destructive force ever harnessed by man—atomic energy—is now being loosed upon the Japanese by the United States bombers. The Japanese face a threat of utter destruction, and their capitulation may be greatly speeded up.

Existence of the great new weapon was announced personally by President Truman in a statement issued through the White House at 8 a. m., Pacific war time. He said the first atomic bomb, invented and perfected in the United States, had been dropped on the Japanese army base at Hiroshima 16 hours before. That one bomb alone carried a wallop more violent than 2000 B-29 Superfortresses normally carrying an enemy city, using old-type TNT bombs.

Multiply This by Two Thousand!

20,000 TONS OF TNT—The easiest way for the imagination to grasp the meaning of the new atomic bomb's power is to compare it with other bombs. It packs a punch equivalent to 20,000 of the monster British "grand slam" block-buster pictured above. The new bomb explodes with a greater force than 40,000,000 pounds of TNT. A single atomic bomb has the wallop equal to that of 2000 Superforts fully loaded with their present cargoes of destruction. Size of the new bomb has not been announced, except that "the explosive charge is exceedingly small."



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

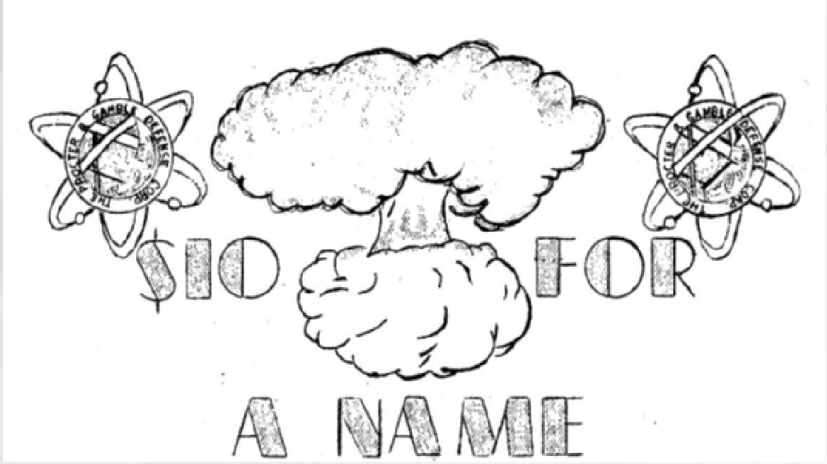
1947- S. 8,000 acres to Texas Tech University for agricultural experiment station
1949 – N. 8,000 acres to Texas Tech University

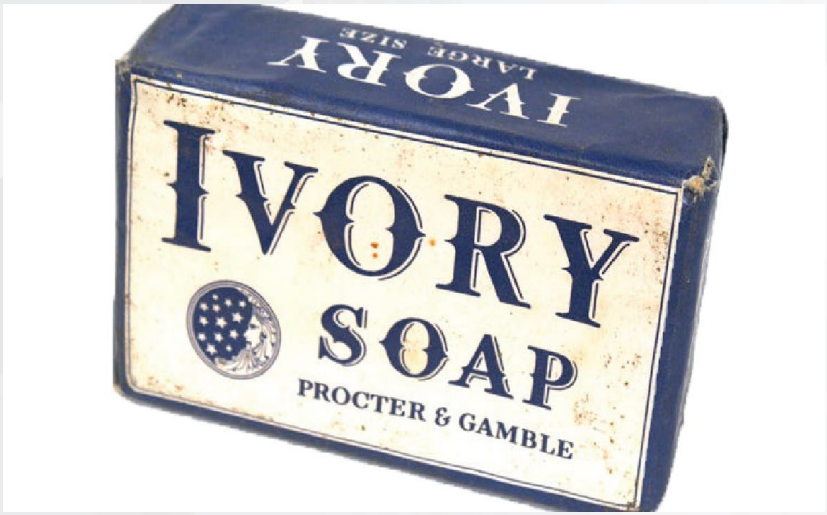
- Recapture clause
- Pantech Research Farm established 1955

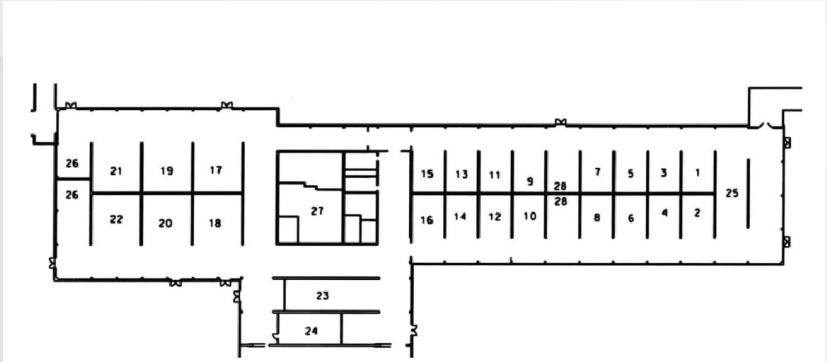
1951 AEC Reclaims Pantex

- High Explosives (HE) fabrication
- Zone 12
- Common-wall Bays

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

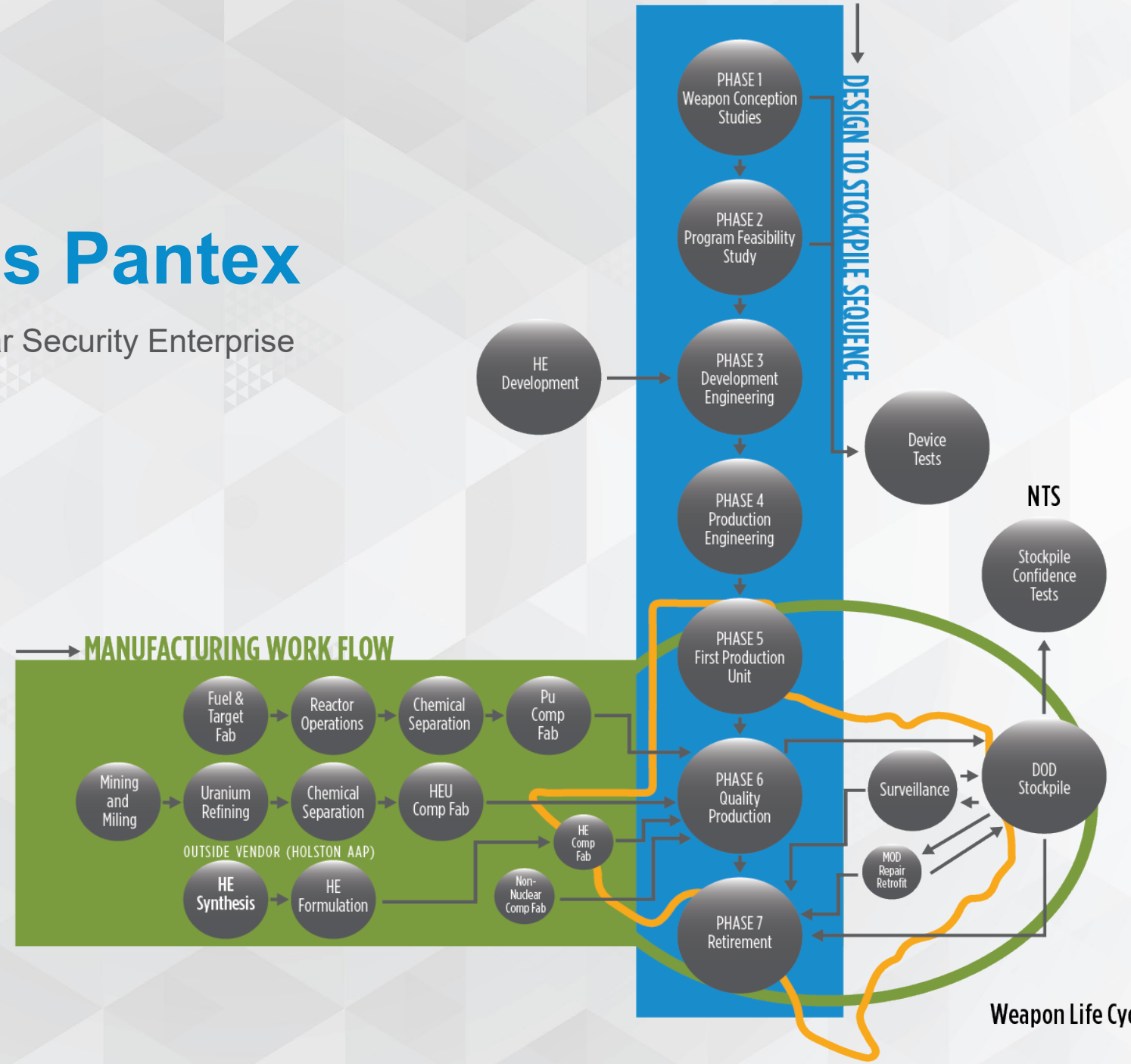






1951- AEC Reclaims Pantex

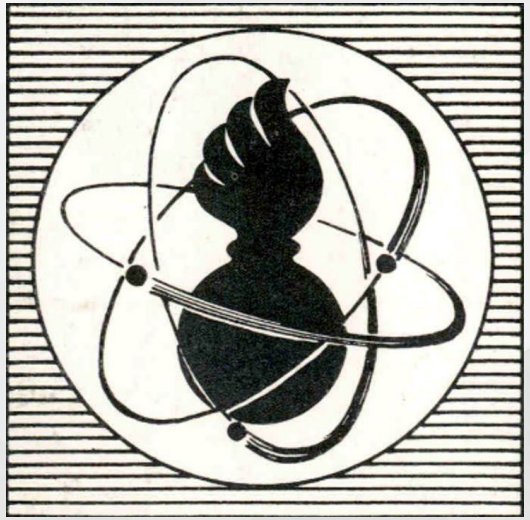
Pantex Plant's primary role within the Nuclear Security Enterprise is outlined in the shape of Texas



VOLUME 4 – ISSUE 18

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. Proctor & 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

1960
New Mission

High Explosives Development

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

1963

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