

★ DECLASSIFIED ★

INSIDE THE PINELLAS PLANT



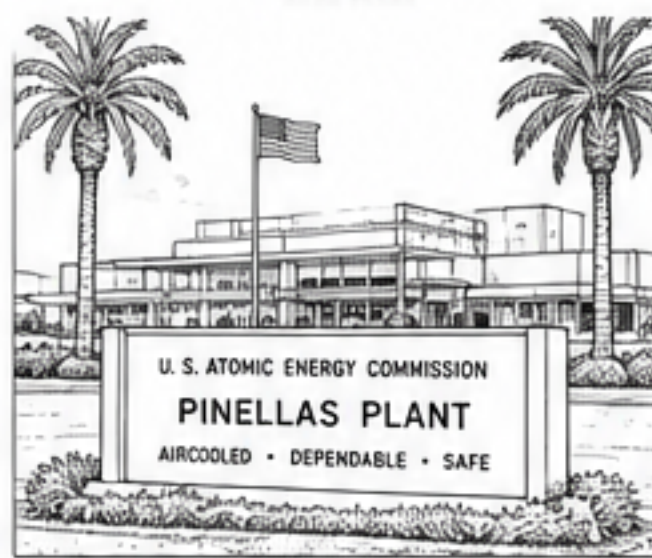
A DECLASSIFIED NUCLEAR HISTORY COLORING BOOK



REAL HISTORY. REAL PEOPLE. REAL INNOVATION.
FROM THE DECLASSIFIED RECORD.

1. THE PINELLAS PLANT

Circa 1950s



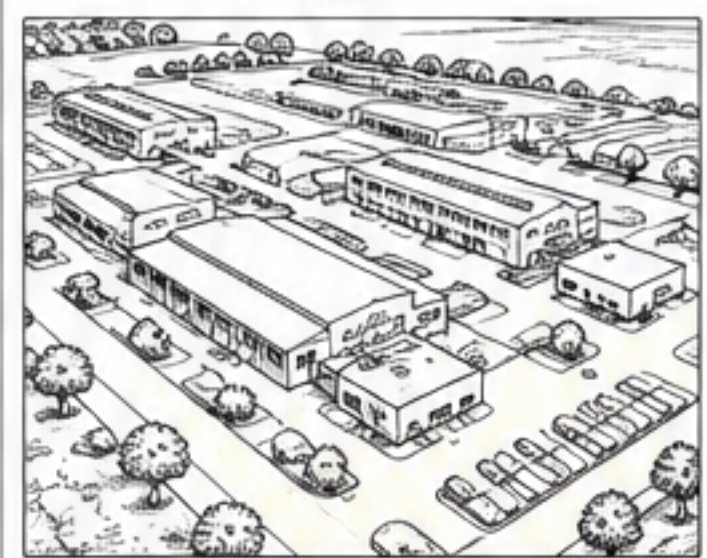
The Pinellas Plant in Largo, Florida, opened in 1953 as a component manufacturing facility for the nation's defense program.

FROM THE DECLASSIFIED RECORD:

The plant was operated by the Atomic Energy Commission.

2. AERIAL VIEW OF THE PLANT

1950s

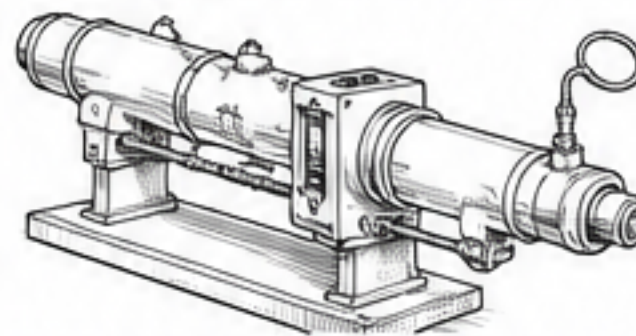


The Pinellas Plant covered more than 200 acres and included production, laboratory, and support facilities.

FROM THE DECLASSIFIED RECORD:

Major expansion occurred during the 1950s and 1960s.

5. HIGH VACUUM WORK MINIATURE ION ACCELERATOR

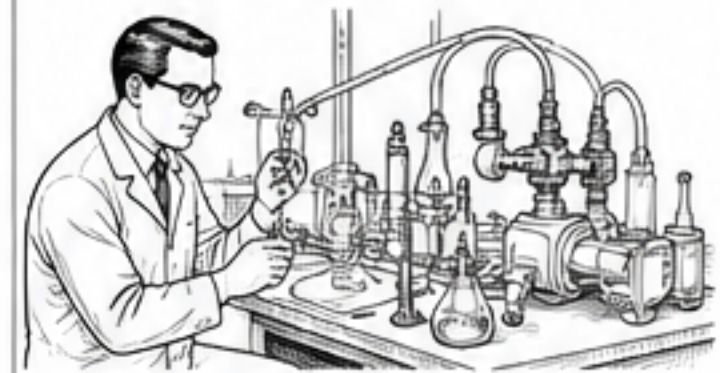


These compact accelerators used high voltage to produce deuterium-tritium neutrons in a sealed tube.

FROM THE DECLASSIFIED RECORD:

Thousands of units were built for military applications and research worldwide.

6. GLASS-TO-METAL &

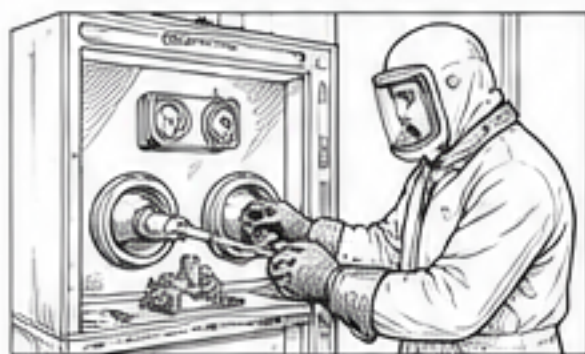


High vacuum techniques were essential for neutron tubes, detectors, and other advanced devices.

FROM THE DECLASSIFIED RECORD:

Pinellas developed unique expertise in materials and vacuum systems.

7. TRITIUM OPERATIONS



Tritium was used in neutron generators for other defense components.

FROM THE DECLASSIFIED RECORD:

Pinellas handled tritium in secure, high-hazard operations.

8. METAL TRITIDE COMPONENTS



Metal tritide stores tritium safely in a solid matrix for use in neutron-producing devices.

FROM THE DECLASSIFIED RECORD:

Pinellas developed and manufactured metal tritide components.

9. RADIATION MONITORING



Instrumentation was used to detect and measure radiation for worker safety and process control.

FROM THE DECLASSIFIED RECORD:

Radiation monitoring was critical to safe operations.

10. HEALTH PHYSICS

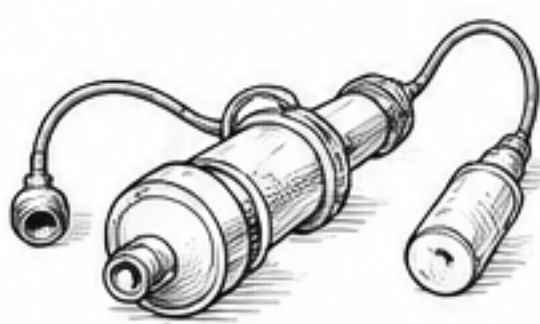


Health Physics teams protected workers, monitored exposure, and maintained safe work practices.

FROM THE DECLASSIFIED RECORD:

Worker safety was a top priority at the Pinellas Plant.

11. NEUTRON DETECTORS

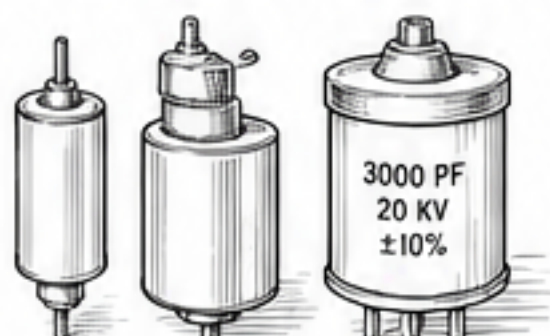


Neutron detectors from Pinellas were used in weapons systems, reactors, and scientific instruments.

FROM THE DECLASSIFIED RECORD:

Pinellas produced many types of neutron detectors and scintillation devices.

12. SPECIALTY CAPACITORS

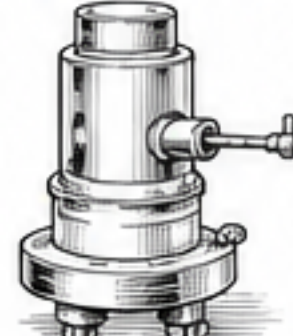


High-voltage capacitors were used in pulsed power systems and nuclear weapons testing.

FROM THE DECLASSIFIED RECORD:

Pinellas made custom capacitors to withstand extreme conditions.

13. VACUUM SWITCHES

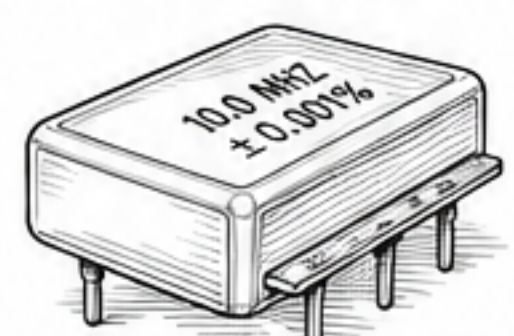


Vacuum switches controlled high voltage in timing and firing circuits with great reliability.

FROM THE DECLASSIFIED RECORD:

Pinellas was a major producer of vacuum switches.

14. CRYSTAL RESONATORS

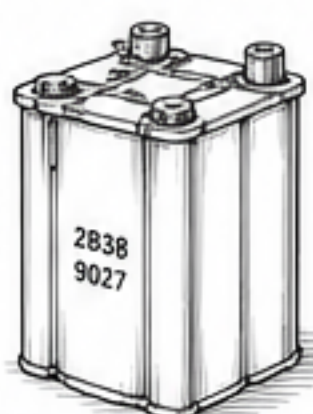


Crystal resonators provided precise frequency control for communications, guidance, and instrumentation.

FROM THE DECLASSIFIED RECORD:

High-stability resonators were built for military systems.

15. BATTERIES

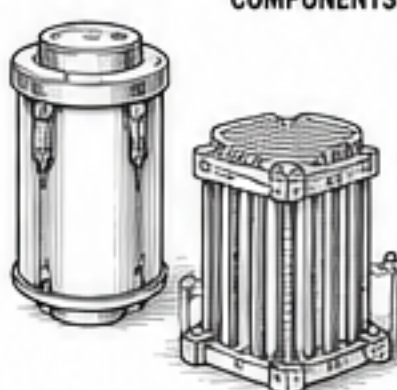


Special batteries supplied dependable power for weapons and aerospace applications.

FROM THE DECLASSIFIED RECORD:

Pinellas produced long-life, high-reliability batteries.

16. PLUTONIUM-238 & RTG COMPONENTS



Pinellas fabricated components for radioisotope thermoelectric generators using plutonium-238.

FROM THE DECLASSIFIED RECORD:

Pu-238 RTGs supplied power for space and remote systems.

17. BUILDING 400 - RTG FACILITY



Building 400 housed RTG production and testing operations.

FROM THE DECLASSIFIED RECORD:

The RTG facility was expanded in the 1960s.

18. LABORATORY WORK



Research and development laboratories supported new materials and component innovation.

FROM THE DECLASSIFIED RECORD:

Pinellas scientists advanced nuclear component technology.

19. PRODUCTION WORKERS

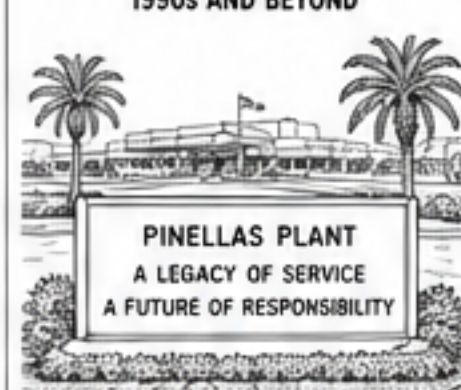


Skilled men and women built precision parts that supported national defense and space exploration.

FROM THE DECLASSIFIED RECORD:

Thousands of dedicated employees worked at Pinellas.

20. TRANSITION & CLEANUP 1990s AND BEYOND



After production ended, the site was cleaned up and prepared for future community use.

FROM THE DECLASSIFIED RECORD:

Pinellas' legacy continues as part of our nation's nuclear history.



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PINELLAS PLANT

COLORING BOOK

of

NUCLEAR WEAPONS COMPONENTS

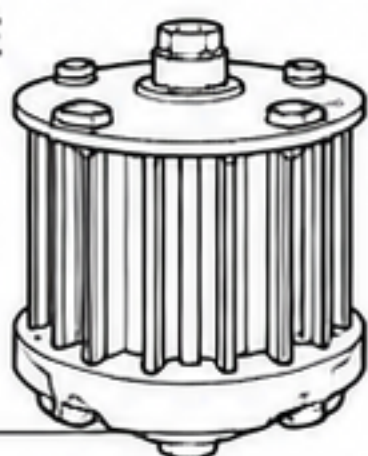


DEDICATED TO THE MEN AND WOMEN WHO
BUILT COMPONENTS THAT POWERED HISTORY

EDUCATE • REMEMBER • HONOR

3 RTG HEAT SOURCE (Pu-238)

Radioisotope Thermoelectric Generator heat source uses plutonium-238 to produce electricity for satellites, spacecraft, and remote equipment.

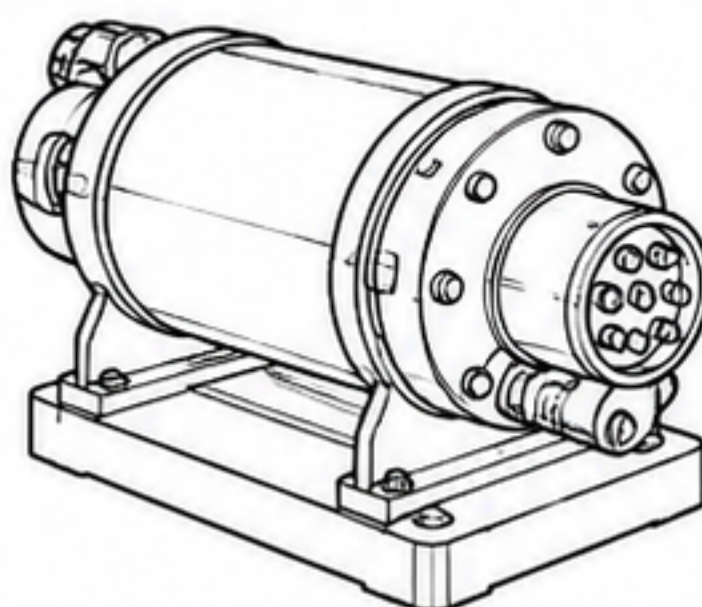


94
Pu
Plutonium
238.0

FUNCTION:
Decay heat from Pu-238 is converted to electricity. Pinellas Plant fabricated these critical space power components.

1 NEUTRON GENERATOR

Produces a burst of neutrons to initiate a nuclear device.

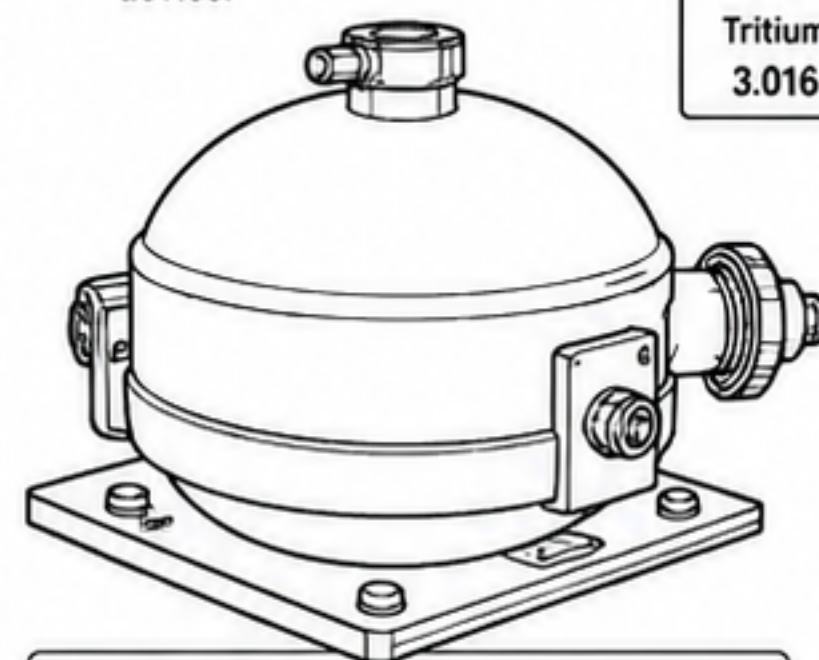


FUNCTION:
Neutrons start the nuclear reaction in the weapon. Pinellas Plant built thousands of these precision devices.

2 TRITIUM RESERVOIR

Holds tritium gas used to boost the yield of a nuclear device.

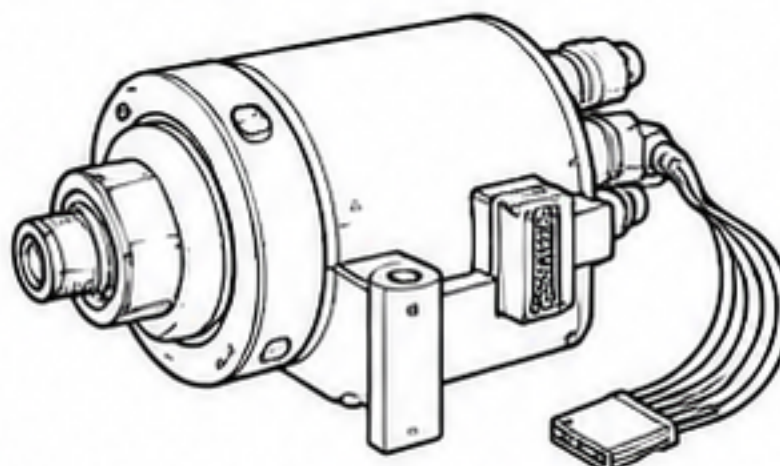
1
H
Tritium
3.016



FUNCTION:
Tritium undergoes fusion with deuterium releasing energy and neutrons. Pinellas Plant filled and tested these reservoirs.

4 SAFE AND ARM DEVICE (S&A)

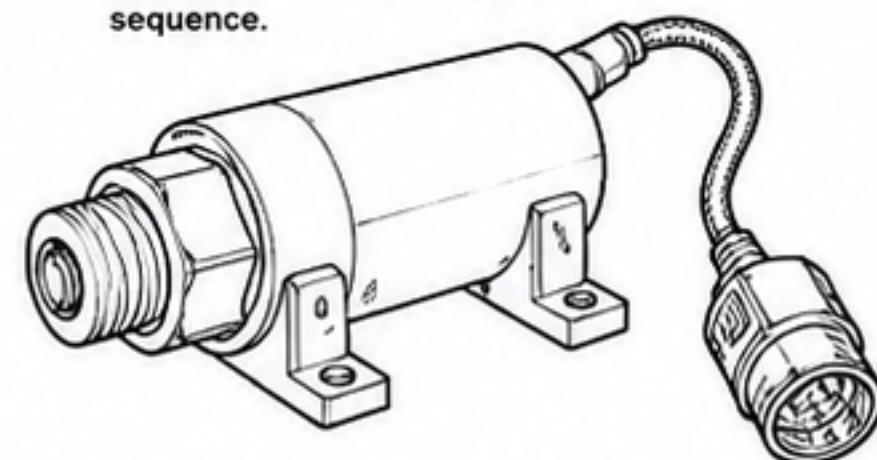
Ensures the weapon is safe to handle, transport, and store. Allows arming only when commanded.



FUNCTION:
Prevents accidental detonation. Pinellas Plant produced thousands of S&A devices.

5 FIRING SET (EXPLOSIVE ACTUATOR)

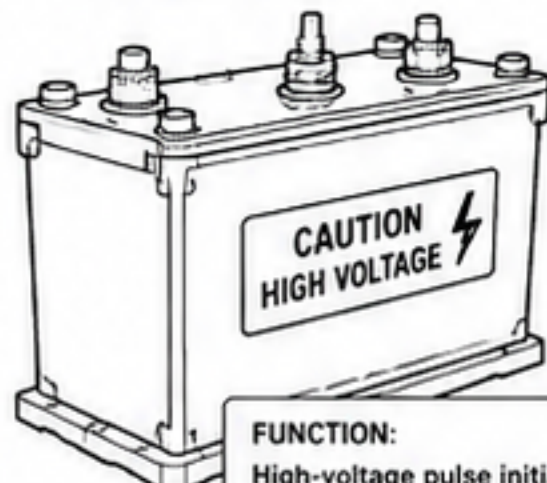
Provides a precisely timed explosive function to start the weapon sequence.



FUNCTION:
Delivers an electrical signal that fires the detonator. Built at Pinellas Plant to exacting standards.

6 CAPACITOR DISCHARGE UNIT

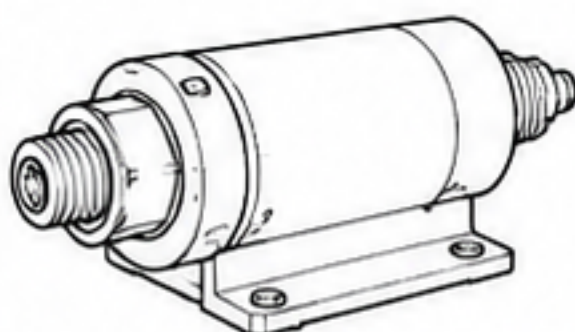
Stores electrical energy and releases it in a pulse to power the neutron generator.



FUNCTION:
High-voltage pulse initiates the neutron generator. Pinellas Plant assembled thousands of CDUs.

7 VACUUM SWITCH

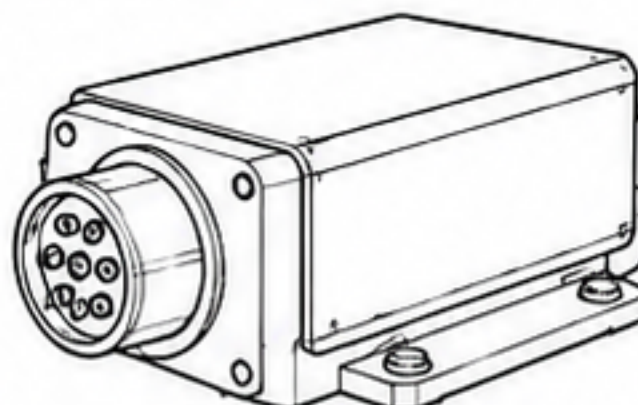
A high-reliability switch that controls the flow of electrical power in the firing sequence.



FUNCTION:
Opens and closes circuits in microseconds. Pinellas Plant manufactured precision vacuum switches.

8 DETECTOR / DIAGNOSTIC UNIT

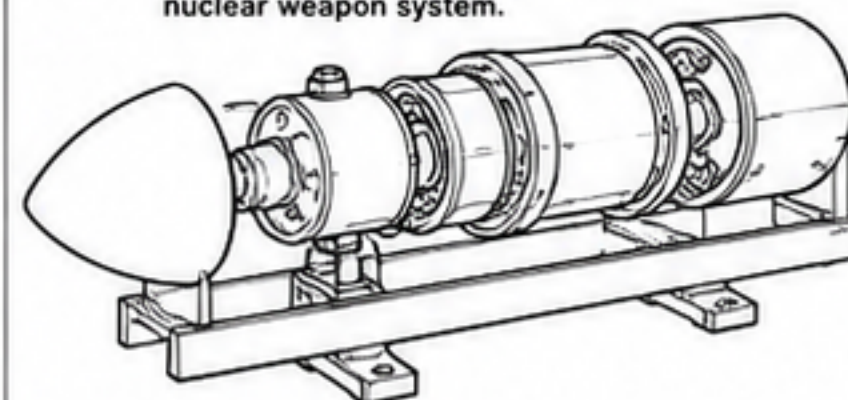
Monitors the performance of the device and provides test data.



FUNCTION:
Provides vital feedback to verify readiness and performance. Built at Pinellas Plant.

9 WEAPONS COMPONENT ASSEMBLY

Many precision components work together as part of a complete nuclear weapon system.

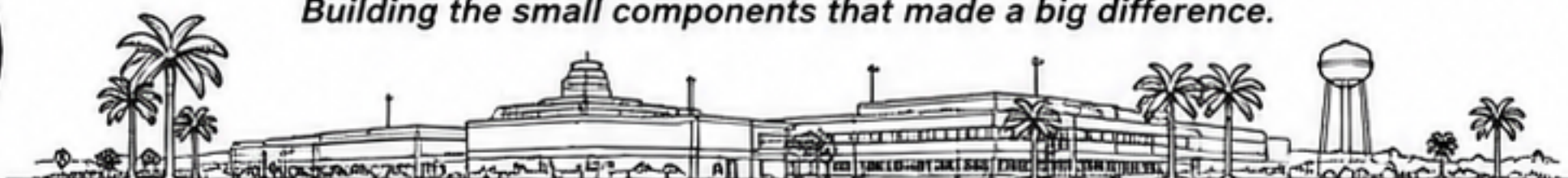


MISSION:
Pinellas Plant delivered quality, reliability, and precision in support of national security for over 30 years.



PRECISION • RELIABILITY • SERVICE

Building the small components that made a big difference.



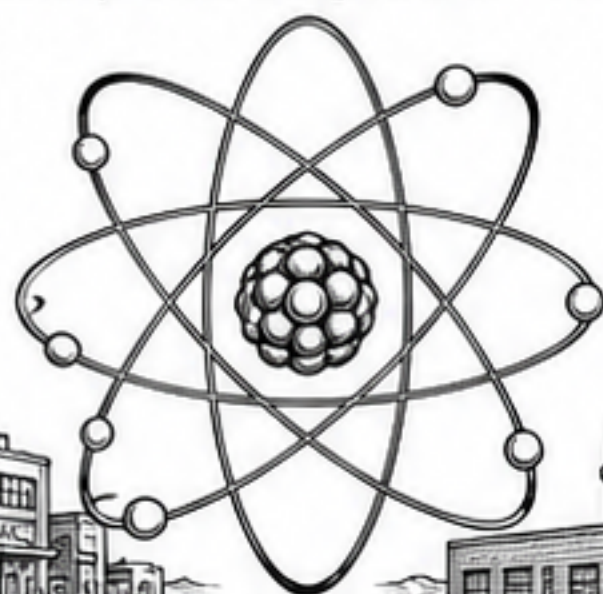
REMEMBERING THE PAST
TO UNDERSTAND
OUR FUTURE



THE ATOMIC AGE

A NUCLEAR HISTORY COLORING BOOK

*People. Science. Discovery.
A History That Shaped Our World.*

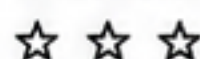


LEARN • REMEMBER • INSPIRE

EDUCATIONAL • HISTORICAL • INSPIRING

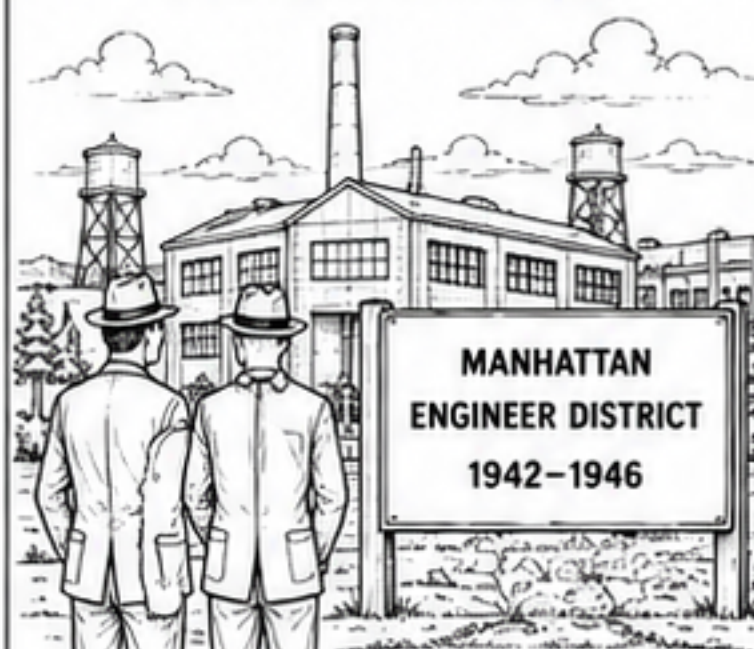


For All Ages



25 PAGES OF HISTORY TO COLOR!

1. THE MANHATTAN PROJECT



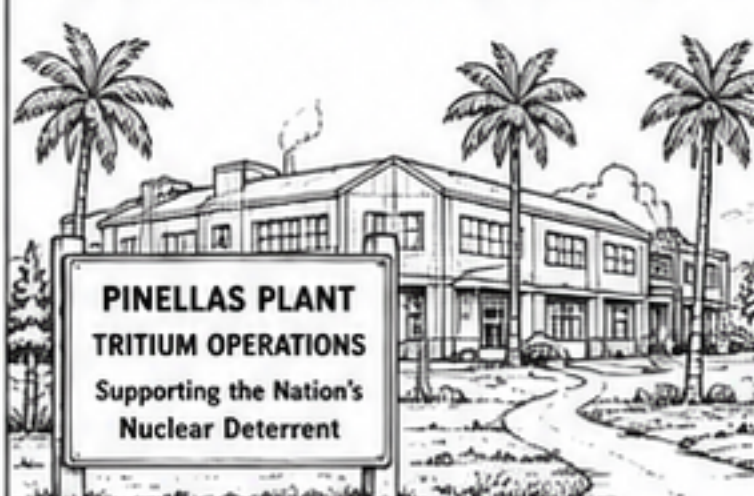
A national effort that brought together thousands of scientists, engineers, and workers to achieve the extraordinary.

2. TRINITY TEST



On July 16, 1945, the world's first nuclear test was conducted at Trinity Site, New Mexico.

3. PINELLAS TRITIUM OPERATIONS



Producing tritium and tritium components to support the nation's nuclear weapons program and energy research.

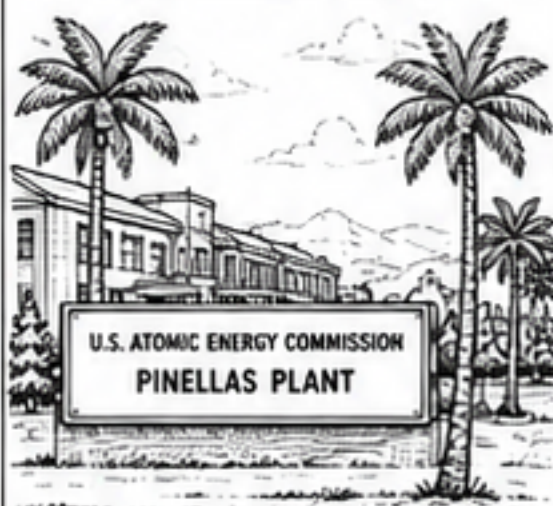
4. LOS ALAMOS LABORATORY



In the mountains of New Mexico, scientists worked in secrecy to unlock the power of the atom.

A JOURNEY THROUGH SCIENCE, SERVICE, AND THE ATOMIC AGE

5. PINELLAS PLANT



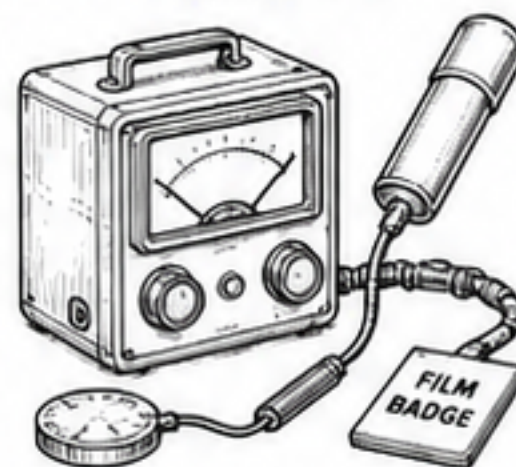
In Florida, the Pinellas Plant handled tritium and other materials in support of national defense.

6. HEALTH PHYSICS WORKER



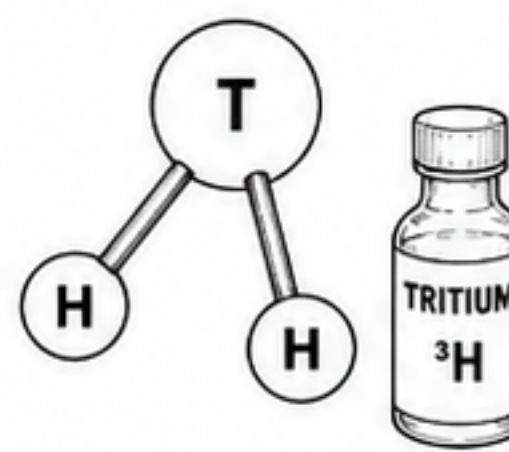
Health Physics professionals protected workers and the public through monitoring, training, and care.

7. RADIATION MONITORING INSTRUMENTS



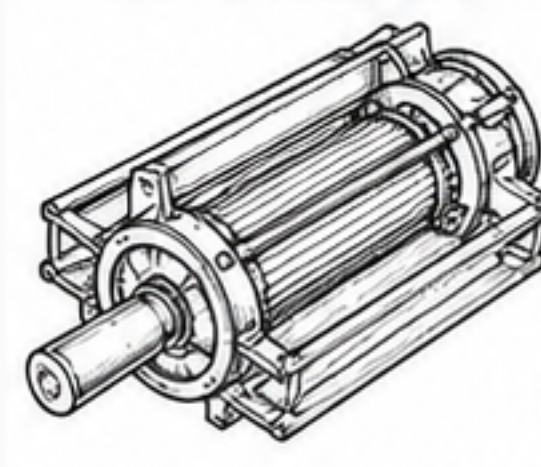
From Geiger counters to film badges, these tools helped measure and reduce radiation exposure.

8. TRITIUM SCIENCE



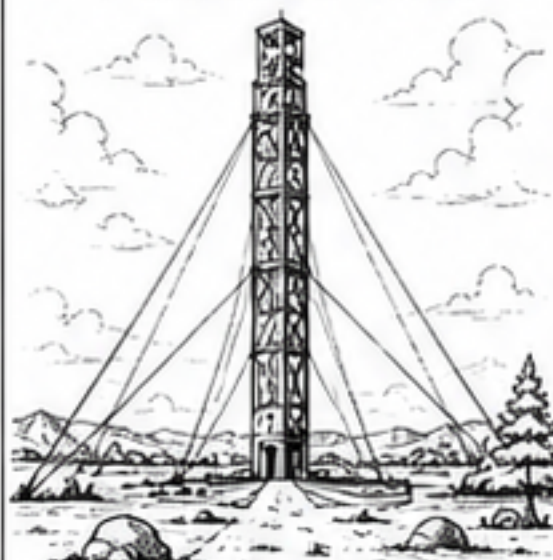
Tritium is a unique form of hydrogen used in thermonuclear weapons and scientific research.

9. RADIOISOTOPE THERMOELECTRIC GENERATOR



RTGs use the heat from decaying plutonium-238 to generate electricity for space missions.

10. NUCLEAR TEST TOWER



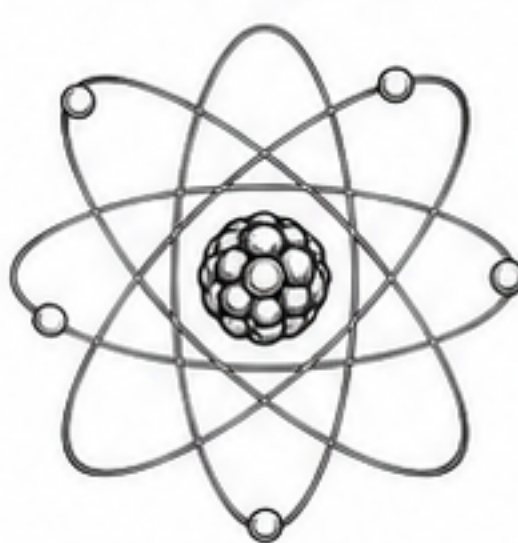
Underground tests in the desert helped scientists study effects and improve safety and design.

11. PROTECTIVE EQUIPMENT



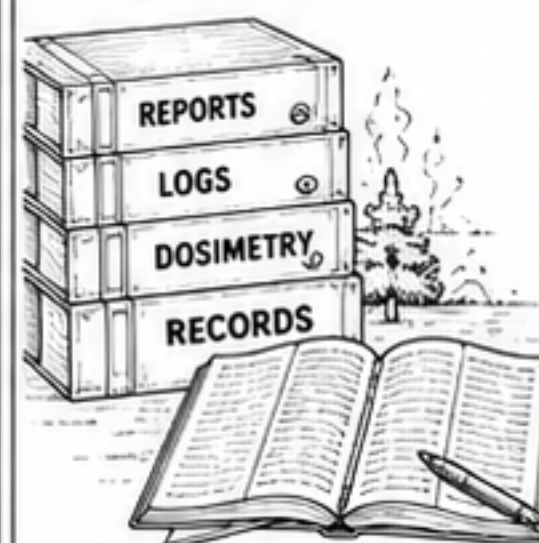
Protective clothing and equipment helped workers stay safe in radiological environments.

12. ATOMIC STRUCTURE



Atoms are the building blocks of matter. Understanding them changed the world.

13. ARCHIVES AND RECORDS



Records preserve the past and support our commitment to truth, safety, and future generations.

14. A LEGACY OF PEACEFUL USES



Nuclear science has advanced medicine, energy, research, and space exploration—for a better future.



Remember the past. Honor those who served. Learn from history. Build a better tomorrow.



This coloring book is for educational and historical purposes.