Nuclear Colonialism

Nuclear Engineering 290D
University of California, Berkeley
Thursday April 8, 2021

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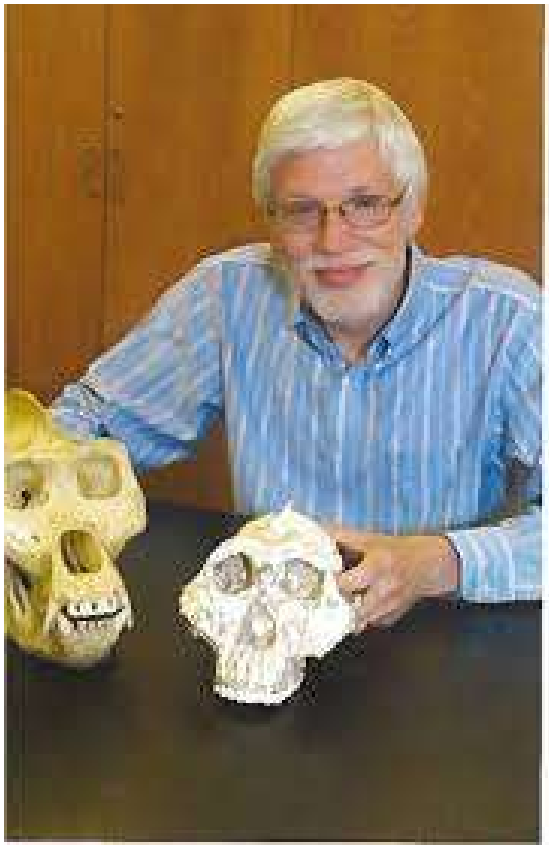
It’s a Wonderful Day for Anthropology!



Who am I?

-Anthropologist

-Gonzo Journalist

-Freelance Security Researcher & Analyst

-PhD Candidate, Anthropology, UNM

-Nuclear Weapon Abolitionist

-Twitter: @nuclearanthro

-Nuke & NATSEC Archive: https://osf.io/46sfd/

-Patreon: https://patreon.com/nuclearanthro

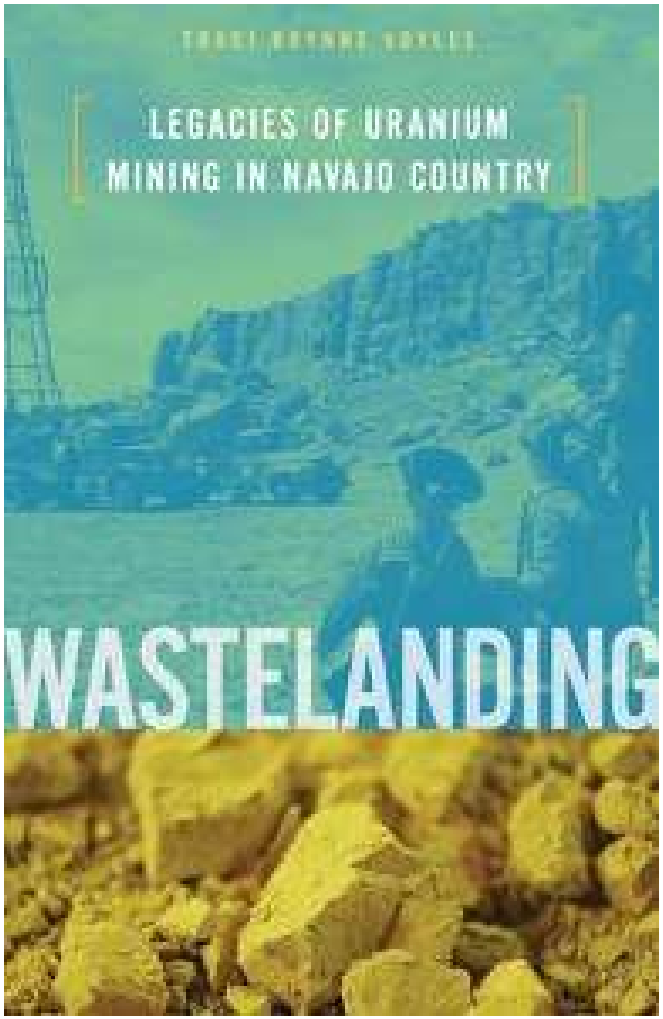
-PayPal: https://paypal.me/nuclearanthro

Acknowledgments

Special thanks today to Jake Hecla and Aaron Berliner for their flexibility and tenacity.

Thanks also to:
-My Patrons and enablers
-UNM Dept. of Anthropology
-My Advisor Dr. Rhodes
-Clouudy and Jupiter

Goals for Today



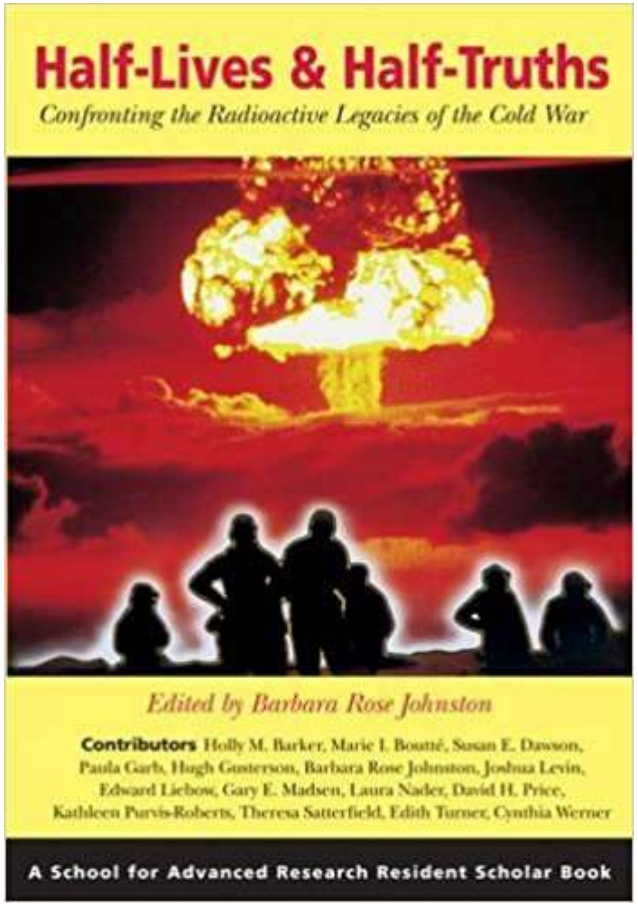
Readings

Voyles, Traci Brynne. 2015. "Introduction: Sacrificial Land." In *Wastelanding: Legacies of Uranium Mining in Navajo Country*, 1–26. University of Minnesota Press.

Readings

Dawson, Susan E., and Gary E. Madsen. 2007. “Uranium Mine Workers, Atomic Downwinders, and the Radiation Exposure Compensation Act (RECA): The Nuclear Legacy.” (117-144)

Nader, Laura, and Hugh Gusterson. 2007. “Nuclear Legacies: Arrogance, Secrecy, Ignorance, Lies, Silence, Suffering, Action.” (299-316)



Wastelanding: Paradise and Desert

Wastelanding: People

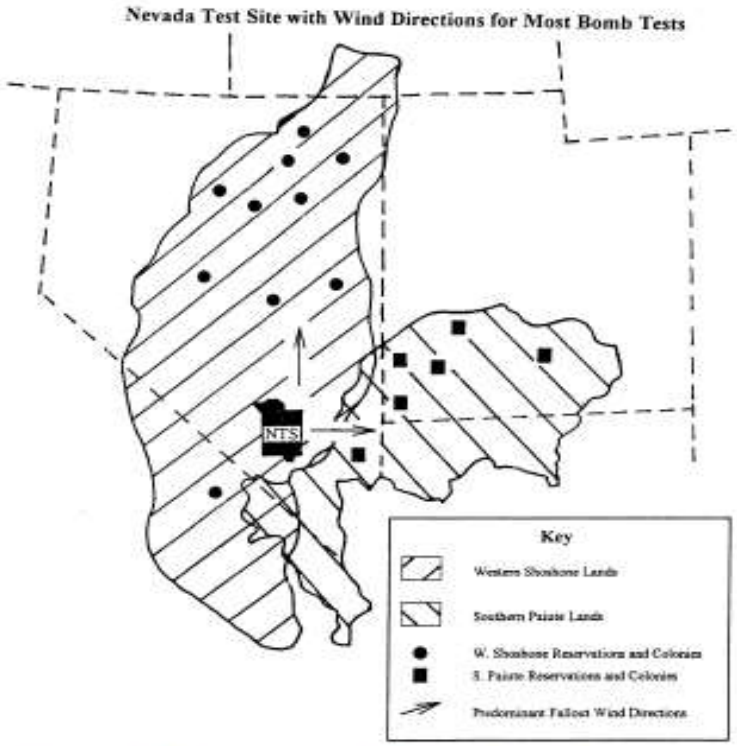


Fig. 1. Traditional lands of the Western Shoshone and Southern Paiutes. The Nevada Test Site is shown in the center; two arrows indicate the most frequent wind directions for nuclear tests, chosen to avoid transport in the direction of major southwestern cities.

Nuclear Colonialism

Promise of a golden future

Yellow uranium ore from the Colorado Plateau
is helping to bring atomic wonders to you

Long ago, Indian braves made their war paint from the colorful sandstones of the Colorado Plateau.

THEY USED URANIUM—Their brilliant yellows came from carnotite, the important uranium-bearing mineral. Early in this century, this ore supplied radium for the famous scientists, Marie and Pierre Curie, and later vanadium for special alloys and steels.

Today, this Plateau—stretching over parts of Colorado, Utah, New Mexico, and Arizona—is our chief domestic source of uranium. Here, new communities thrive; jeeps and airplanes replace the burro; Geiger counters supplant the divining rod and miner's hunch.

From hundreds of mines that are often just small tunnels in the hills, carnotite is hauled to processing mills. After the vanadium is extracted, the uranium, concentrated in the form of "yellow-cake," is shipped to atomic energy plants.

A NEW ERA BECKONS—What does atomic energy promise for you? Already radioactive isotopes are working wonders in medicine, industry, and agriculture. In atomic energy, scientists also see a vision of unknown power—which someday may heat and light your home, and propel submarines, ships, and aircraft. The Indian's war paint is on the march again—toward a golden future.

UCC TAKES AN IMPORTANT PART—The people of Union Carbide locate, mine, and refine uranium ore. They also operate for the Government the huge atomic materials plants at Oak Ridge, Tenn., and Paducah, Ky., and the Oak Ridge National Laboratory, where radioisotopes are made.

FREE: *For an illustrated story of the fascinating uranium country of the Colorado Plateau, write for the booklet "Mesa Miracle." Ask for booklet B.*

UNION CARBIDE
AND CARBON CORPORATION
30 EAST 42ND STREET UCC NEW YORK 17, N. Y.

UCC's Trade-marked Products of Alloys, Carbons, Chemicals, Gases, and Plastics include

ELECTROMET Alloys and Metals • HAYNES STELLITE Alloys • EVEREADY Flashlights and Batteries • NATIONAL Carbons
ACHESON Electrodes • PYROFAX Gas • PRESTONE and TREK Anti-Freezes • PREST-O-LITE Acetylene
BAKELITE, KRENE, and VINYLITE Resins • DYNEL Textile Fibers • LINDE Oxygen • SYNTHETIC ORGANIC CHEMICALS

-decisions oft not made locally.

-elites usually imported.

-limited spread of resources to colonized.

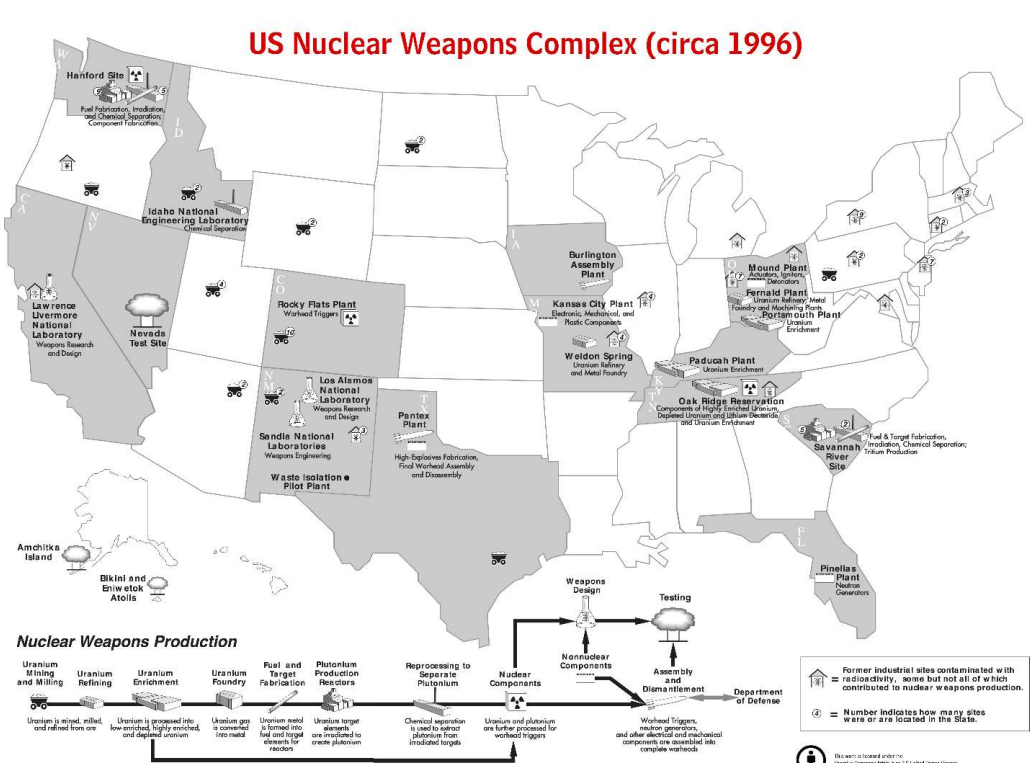
-theft & appropriation of land, resources, value, symbols, etc.

-financial dependency & lack of economic diversification.

-people and places wastelanded.

-Myth of Modernity

Colonial Spatiality of NW Complex



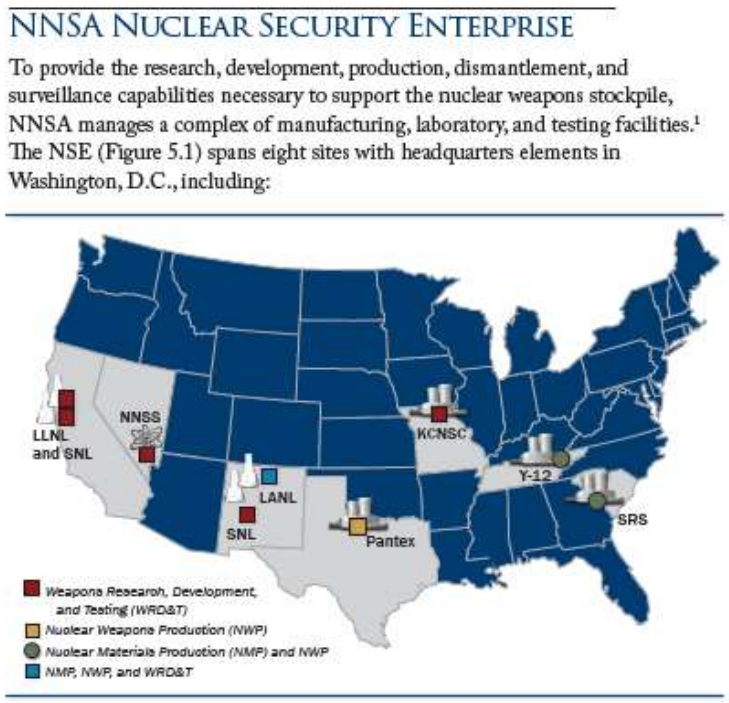


Figure 5.1 NNSA Nuclear Security Enterprise

The Nuclear Southwest: Selected Examples

Nuclear Laboratories

Los Alamos (Los Alamos, NM)
Sandia (Albuquerque, NM)
Lawrence Livermore (Livermore, CA)

"Raw Materials"

Uranium (Colorado Plateau)
Labor for mines and labs
Water (e.g., Columbia River)

Weapon Deployment & Storage

Davis-Monthan AFB (Tucson, AZ)
Kirtland AFB (Albuquerque, NM)
Kitsap Naval Base (Bangor, WA)
Walker AFB (Roswell, NM)

Production Facilities

Hanford Site (Hanford, WA)
Pantex Plant (Amarillo, TX)
Rocky Flats (Denver, CO)

Waste Disposal

Lab and facility specific sites
WIPP (Carlsbad, NM)

Test Sites

Nevada National Security Site (Las Vegas)
Tonopah Range
Salton Sea Range
White Sands Missile Range

Selected Imperial and Colonial History in the Nuclear Southwest

Los Alamos

-Pajarito Plateau part of Spanish land grant.
-Claimed by San Ildefonso.
-Inaccessible 'cultural property.'

Land and Labor

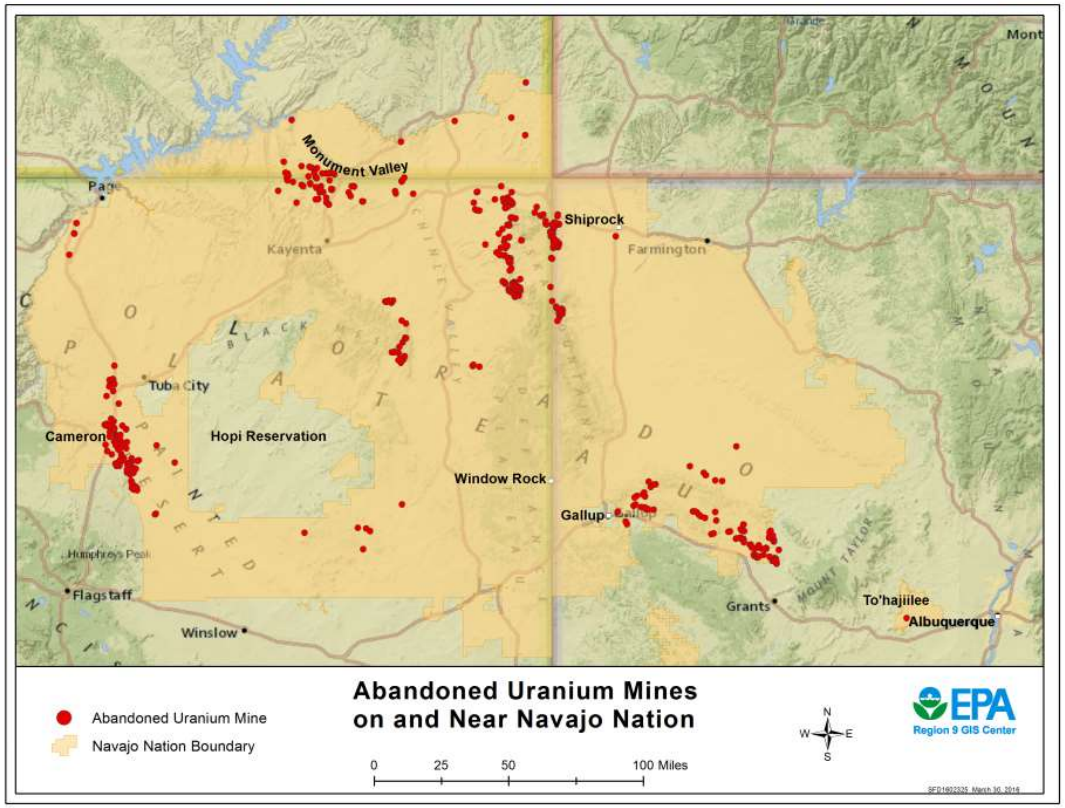
-Hanford: Yakima, Nez Perce, Wanapum, & Umatilla

-Los Alamos: San Ildefonso Pueblo

-Nevada Test Site: W. Shoshone

-Uranium Mining: Laguna Pueblo, Navajo Nation

-Labor but Little Advancement (Voyles 2015)



Los Alamos

Income

$60,746

Per capita income

more than double the amount in New Mexico: $27,230

more than 1.5 times the amount in United States: $34,103

Poverty

4.4%

Persons below poverty line

about one-quarter of the rate in New Mex 19.1%

about one-third of the rate in United Stat

Geographical mobility

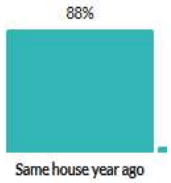
12%

Moved since previous year

about 90 percent of the rate in New Mexico: 13.3%

about 80 percent of the rate in United States: 14.2%

Population migration s



Educational attainment

97.6%

High school grad or higher

about 10 percent higher than the rate in New Mexico: 85.6%

about 10 percent higher than the rate in United States: 88%

67.4%

Bachelor's degree or higher

more than double the rate in New Mexico: 27.3%

more than double the rate in United States: 32.2%

Rio Arriba (including Santa Clara Pueblo)

1952 exhibit used in the recruitment of personnel.

Income

$22,911

Per capita income

about 80 percent of the amount in New Mexico: $27,230

about two-thirds of the amount in United States: $34,103

Poverty

24.1%

Persons below poverty line

about 25 percent higher than the rate in I Mexico: 19.1%

more than 1.5 times the rate in United St 13.4%

Geographical mobility

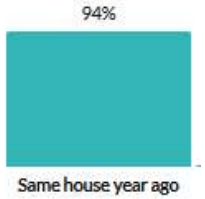
6%

Moved since previous year

about half the rate in New Mexico: 13.3%

about two-fifths of the rate in United States: 14.2%

Population migration



Educational attainment

86.4%

High school grad or higher

about the same as the rate in New Mexico: 85.6%

about the same as the rate in United States: 88%

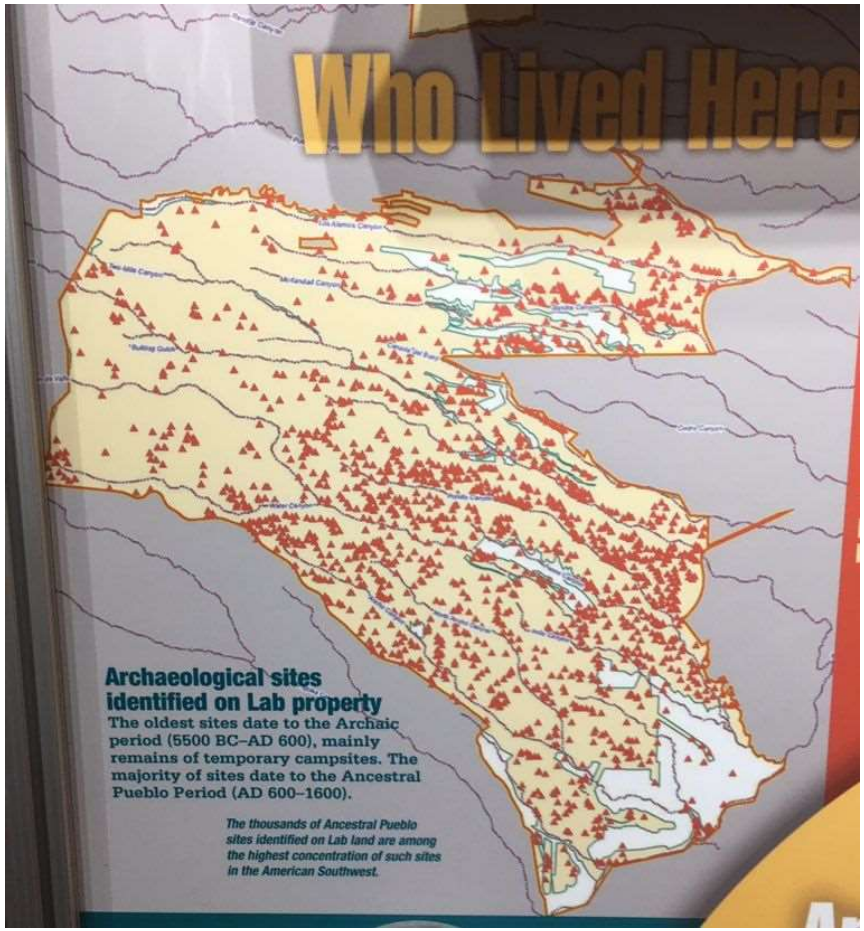
19.3%

Bachelor's degree or higher

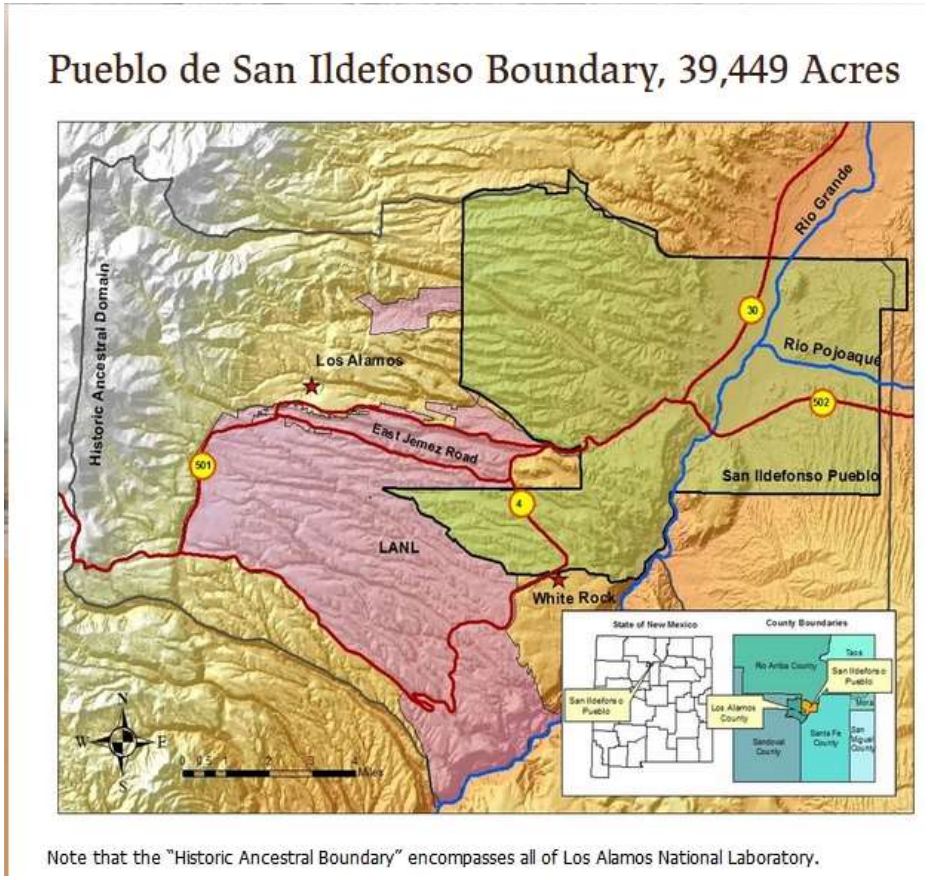
about two-thirds of the rate in New Mexico: 27.3%

about three-fifths of the rate in United States: 32.2%

Bradbury Science Museum: Our Land Now!



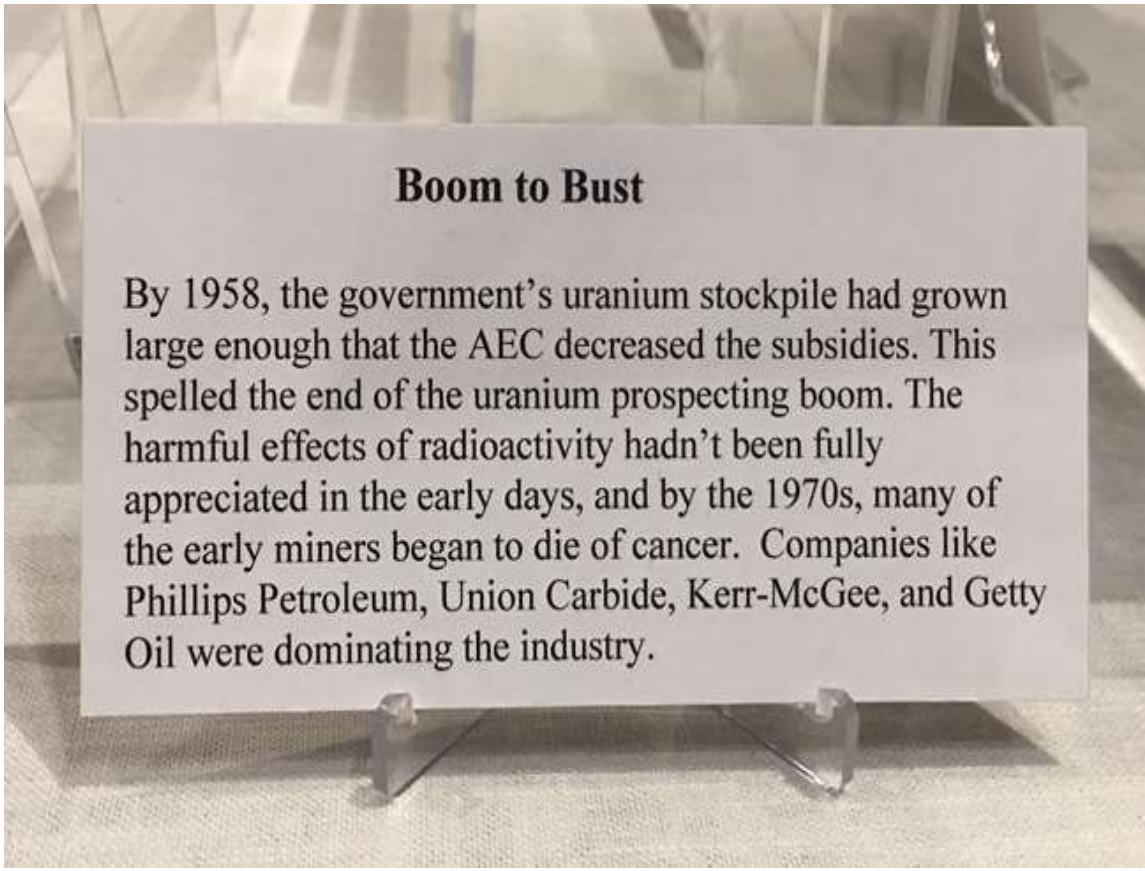
San Ildefonso: actually, our land!

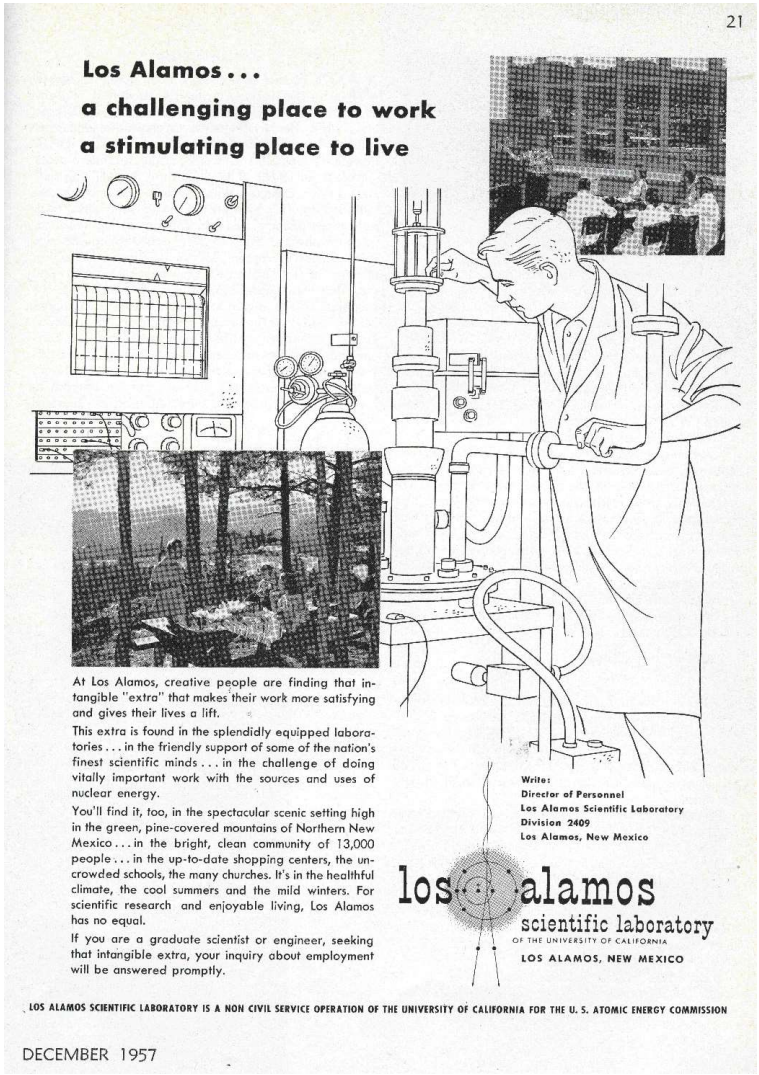


Note that the "Historic Ancestral Boundary" encompasses all of Los Alamos National Laboratory.

Nostalgia and Uranium: Ongoing Erasure

Nostalgia and Uranium: Ongoing Erasure





Making Nukes Southwestern

Settler Colonial Placemaking

1) Perform claims & connections to place.

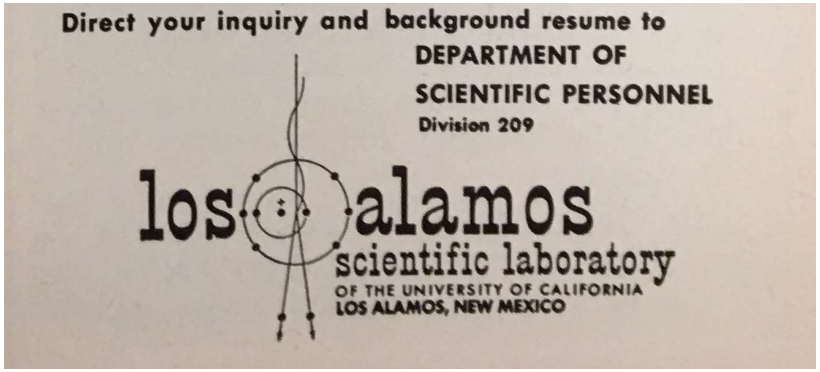
2) erase, appropriate, & make "Other" previous & other inhabitants.

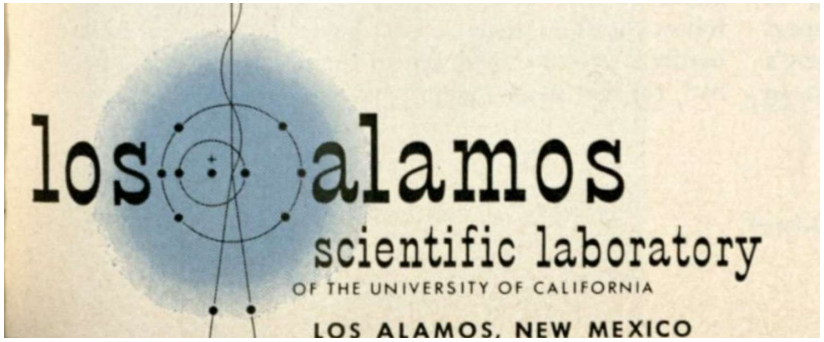
3) Progress narratives through modern/anti-modern contrasts (nature/culture).

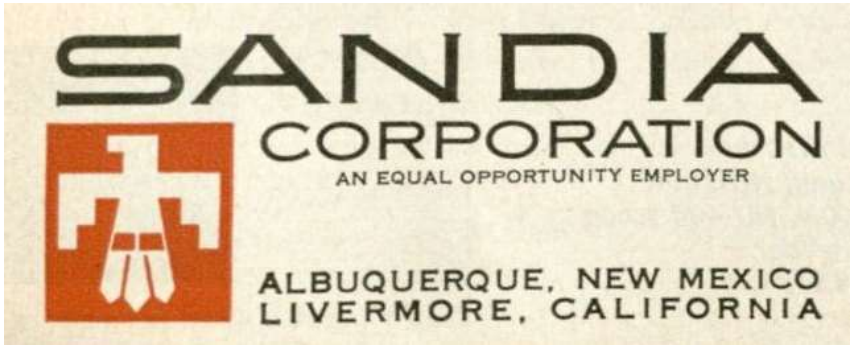
Trinity Site: All Hail the Atomic Age!

"Trinity site is where the first atomic bomb was tested at 5:29:45 a.m. Mountain War Time on July 16, 1945. The 19-kiloton explosion not only led to a quick end to the war in the Pacific but also ushered the world into the atomic age. All life on Earth has been touch by the event, which took place here" (WSMR 2016).

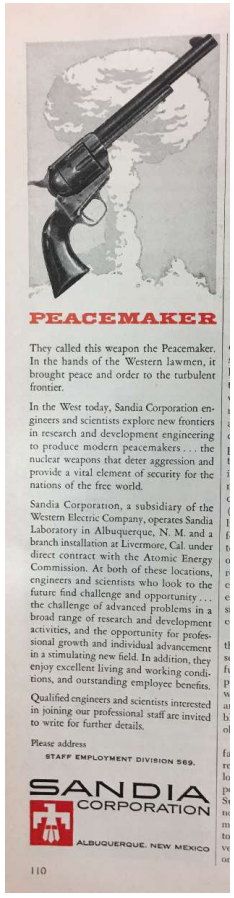
Placemaking: Logos







Sandia & Western Nuclear Imaginaries



PEACEMAKER

They called this weapon the Peacemaker. In the hands of the Western lawmen, it brought peace and order to the turbulent frontier.

In the West today, Sandia Corporation engineers and scientists explore new frontiers in research and development engineering to produce modern peacemakers . . . the nuclear weapons that deter aggression and provide a vital element of security for the nations of the free world.

Sandia Corporation, a subsidiary of the Western Electric Company, operates Sandia Laboratory in Albuquerque, N. M. and a branch installation at Livermore, Cal. under direct contract with the Atomic Energy Commission. At both of these locations, engineers and scientists who look to the future find challenge and opportunity . . . the challenge of advanced problems in a broad range of research and development activities, and the opportunity for professional growth and individual advancement in a stimulating new field. In addition, they enjoy excellent living and working conditions, and outstanding employee benefits.

Qualified engineers and scientists interested in joining our professional staff are invited to write for further details.

Please address
STAFF EMPLOYMENT DIVISION 569.

SANDIA CORPORATION
ALBUQUERQUE, NEW MEXICO

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NO SECOND BEST

When an aggressor threatens, you can't be second best.

That's the way it is in our business, too.

Our business is design and development of nuclear weapons—weapons that stop potential aggressors and defend our freedom.

And in this kind of work, either you're best, or you're nothing.

We can't afford to settle for less than the best—ever.

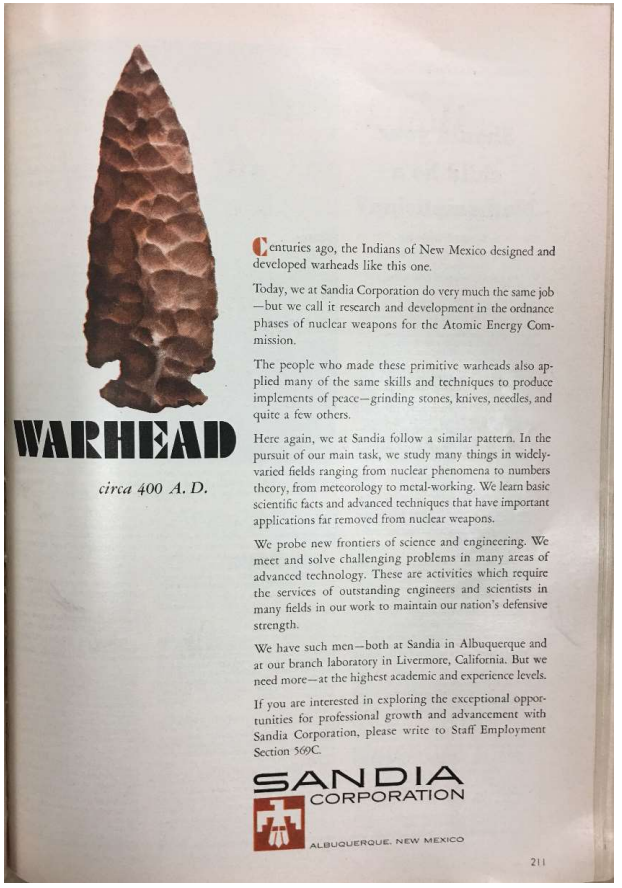
That applies to our engineers and scientists, too. As our job and its importance grows, we need more capable scientists. To those who qualify, we offer exciting opportunities for professional growth and individual advancement. Engineers, physicists, mathematicians, and other scientists are needed in a broad range of specialized fields.

We offer attractive living, too. In Albuquerque, a fine climate and a blending of ancient and modern cultures provide pressure-free, relaxed, pleasant living. The University of New Mexico, located here, provides opportunity to earn advanced degrees under a Sandia-sponsored educational aids program. Varied recreational activities are nearby and homes for rent or purchase are available.

MORE INFORMATION about Sandia Corporation, the work we do, and the opportunities now available are contained in our illustrated brochure. For your copy, please write Staff Employment Division 559.

SANDIA CORPORATION
ALBUQUERQUE, NEW MEXICO

SEPTEMBER 1957



WARHEAD

circa 400 A. D.

Centuries ago, the Indians of New Mexico designed and developed warheads like this one.

Today, we at Sandia Corporation do very much the same job—but we call it research and development in the ordnance phases of nuclear weapons for the Atomic Energy Commission.

The people who made these primitive warheads also applied many of the same skills and techniques to produce implements of peace—grinding stones, knives, needles, and quite a few others.

Here again, we at Sandia follow a similar pattern. In the pursuit of our main task, we study many things in widely-varied fields ranging from nuclear phenomena to numbers theory, from meteorology to metal-working. We learn basic scientific facts and advanced techniques that have important applications far removed from nuclear weapons.

We probe new frontiers of science and engineering. We meet and solve challenging problems in many areas of advanced technology. These are activities which require the services of outstanding engineers and scientists in many fields in our work to maintain our nation's defensive strength.

We have such men—both at Sandia in Albuquerque and at our branch laboratory in Livermore, California. But we need more—at the highest academic and experience levels.

If you are interested in exploring the exceptional opportunities for professional growth and advancement with Sandia Corporation, please write to Staff Employment Section 569C.

SANDIA CORPORATION
ALBUQUERQUE, NEW MEXICO

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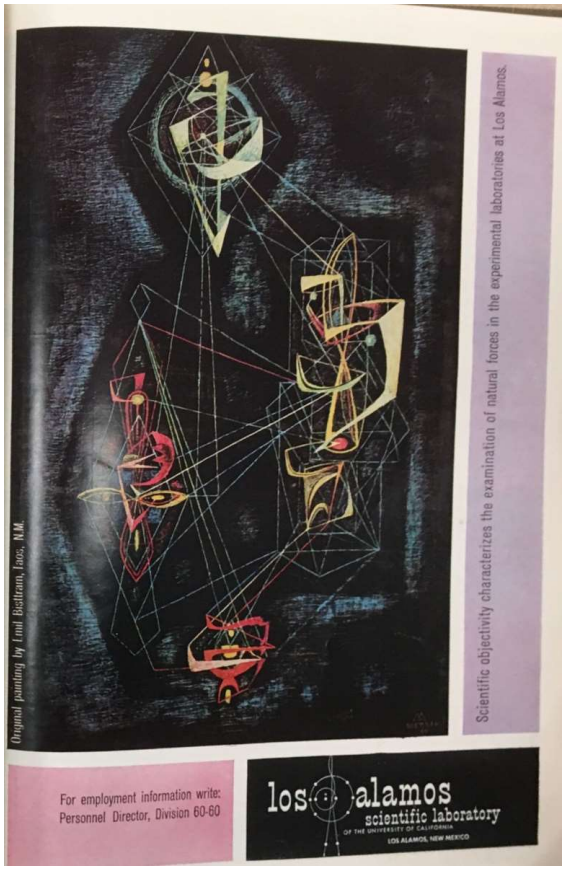
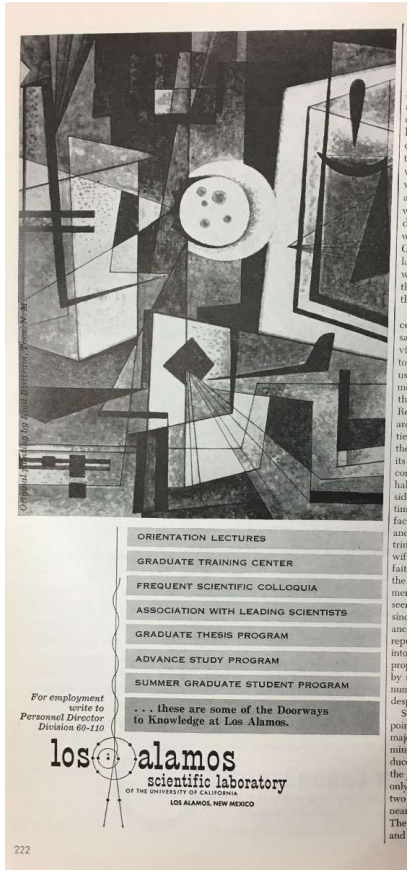
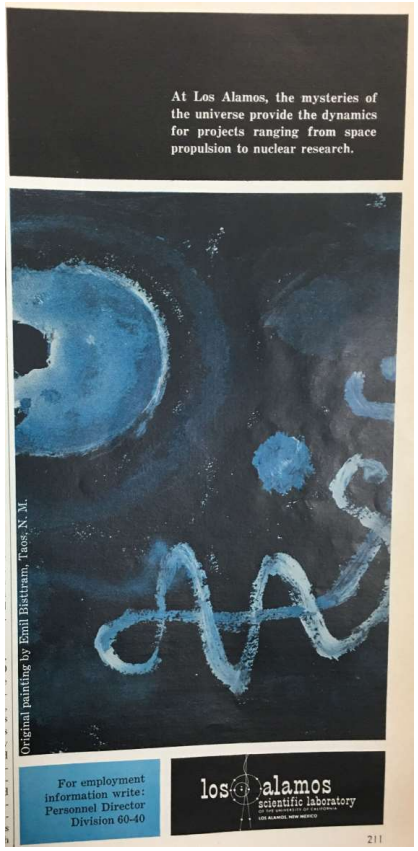
Emil Bistram

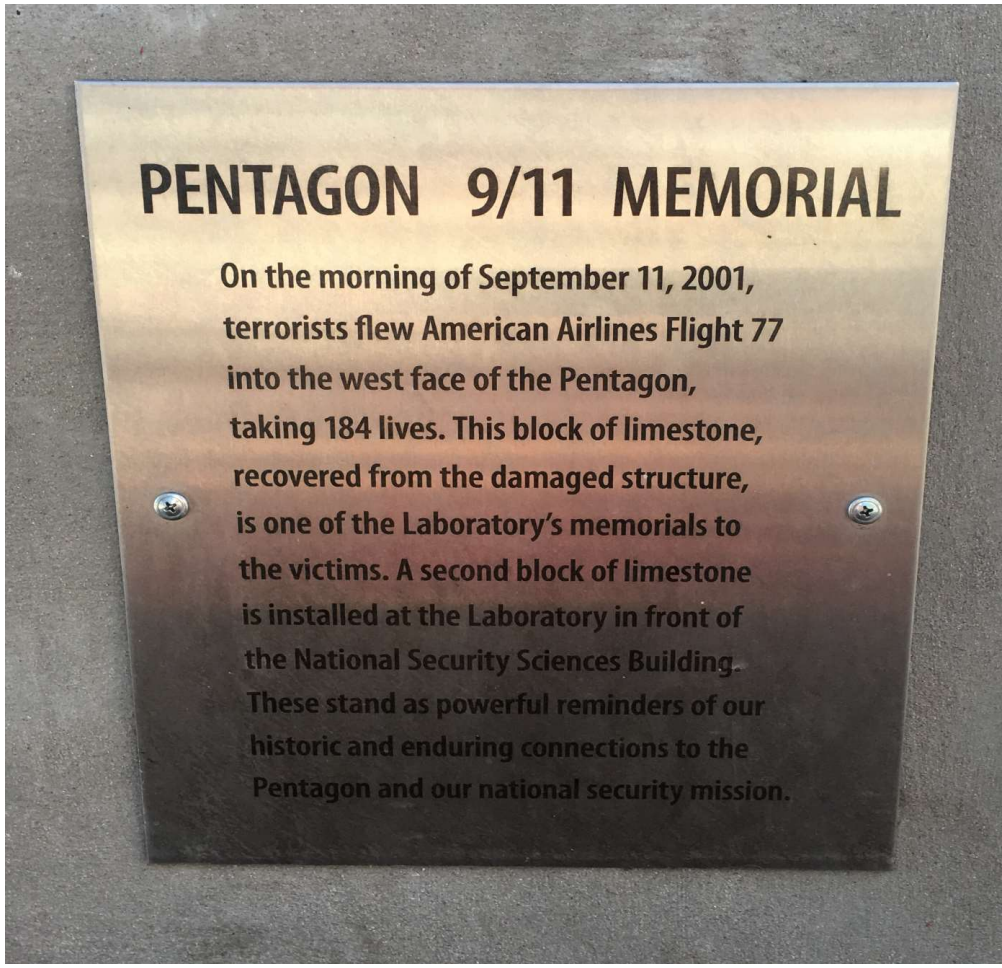




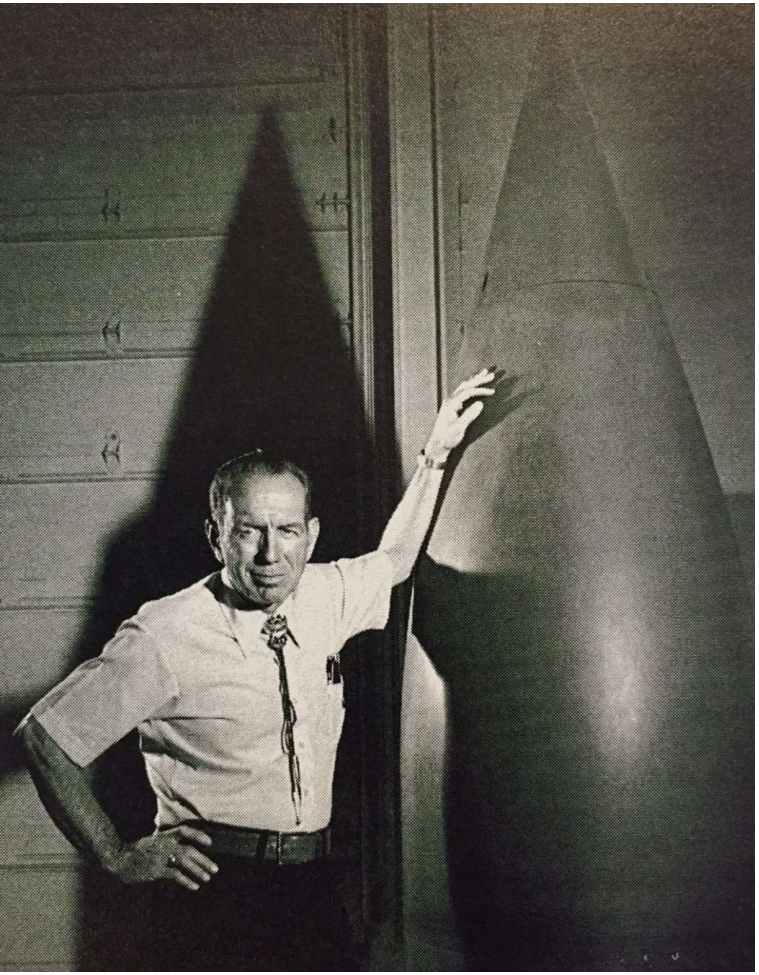


Nukes: From the Cold War to the War on Terror and Beyond

Mellibuns 2009: "The Berlin Wall"



Obstreperous Nuclear Tourism: On (Not) Patting the Bomb



Al Fite, Sandia, with Mk 7/Corporal (Furman 1990: 416).

Alternate Modes of Engagement

We Put it There

HOW DOES THE POWER GET INTO THE BOMB?

Uranium itself isn't enough. Preparing it for the bomb's A-power takes vast quantities of *electric* power. So do the planes, tanks and other huge Defense production jobs. On top of this, homes, farms and businesses are using twice as much electricity as before World War II. Will the electric companies develop enough power? The answer is YES!

As much electric power as Detroit uses will be needed by one A-bomb factory now nearing completion. Another new A-bomb project will use twice that much. Electric light and power companies are now building a giant power plant for one of these, and are ready to build a plant for the other — faster than the federal government could — *and without one cent of your tax money!*

New plants double U. S. power. The map pinpoints the new electric power plants and plant additions built by the nation's electric companies just since World War II. They give each American *twice* as much electricity as he had then. In spite of this, the people pushing for socialized electricity still talk "power shortages" as an excuse for getting government deeper into the electric business.

10 MILES FROM AN A-BOMB. *Picture taken a few minutes after an A-bomb test at Frenchman's Flat, Nevada. Note the top of the mushroom-shaped cloud is still rising.*

←**Battlefield in the struggle against socialism.** On the Niagara River, five local electric companies are ready to build a big new plant to develop additional electric power. But the job is being held up by those who want government to build the plant — even though that would take longer and cost Americans $350 million in taxes. Similar delays hold up new power at Hell's Canyon, Idaho, Roanoke Rapids, N. C., and Kings River, Calif. — wasting time, money and power. America's electric companies can provide this power — without one cent of tax money — *and without the threat of government monopoly or socialism!*

These facts are heartening proof that the experience and sound business management of the country's hundreds of electric companies are ready and able to meet the nation's biggest power needs. America's ELECTRIC LIGHT AND POWER COMPANIES*.

*Names on request from this magazine

• "MEET CORLISS ARCHER"—ABC—Fridays—9:30 P. M., Eastern Time.

Novemeber 1952

Questions?

My Conclusion:

We built them.

We can take them apart.

We can #LickTheBomb

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Conclusion: So What?

1) How we think and talk about nuclear weapons influences what we do with them.

2) Understanding how we make meaning about, around, & through nuclear technology can enable us to more effectively act to reduce nuclear risk.

3) Themes of nuclear lab ads resonate in contemporary debates and discussions.

Conclusion: So What?

-Official nuclear weapon heritage sites are a major source of information and interaction with nuclear topics for Americans.

-Museums do social work: they help to define the bounds and nature of citizenship and State obligations (Duncan 1995).

-Museums work to order the world. Official US NW sites present a democratically corrosive nuclear mythology.

-Official NW heritage in the US obscures & erases past, present, and future nuclear harms as well as anti-nuclear weapon, peace, and centrist activist movements.

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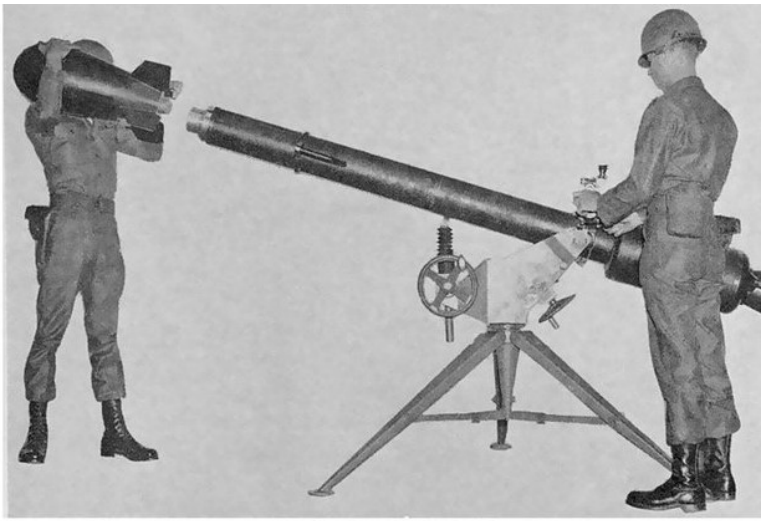
Davy Crockett

m. Only such information on the weight of the assembled Davy Crockett weapon as revealed by observation of the physical handling. *Note should be taken of the great importance of safeguarding the yield of the Davy Crockett.* (60-3)



Mounting the Warhead

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