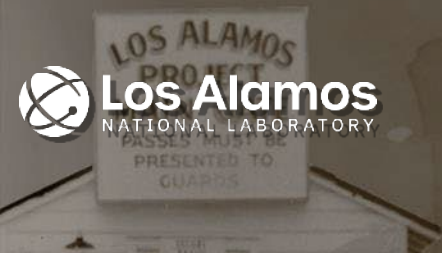


LOS ALAMOS
PROJECT
MAIN GATE
PASSES MUST BE
PRESENTED TO
GUARDS

NATIONAL SECURITY RESEARCH CENTER





The Military at Project Y

NATIONAL SECURITY
 **RESEARCH
CENTER**



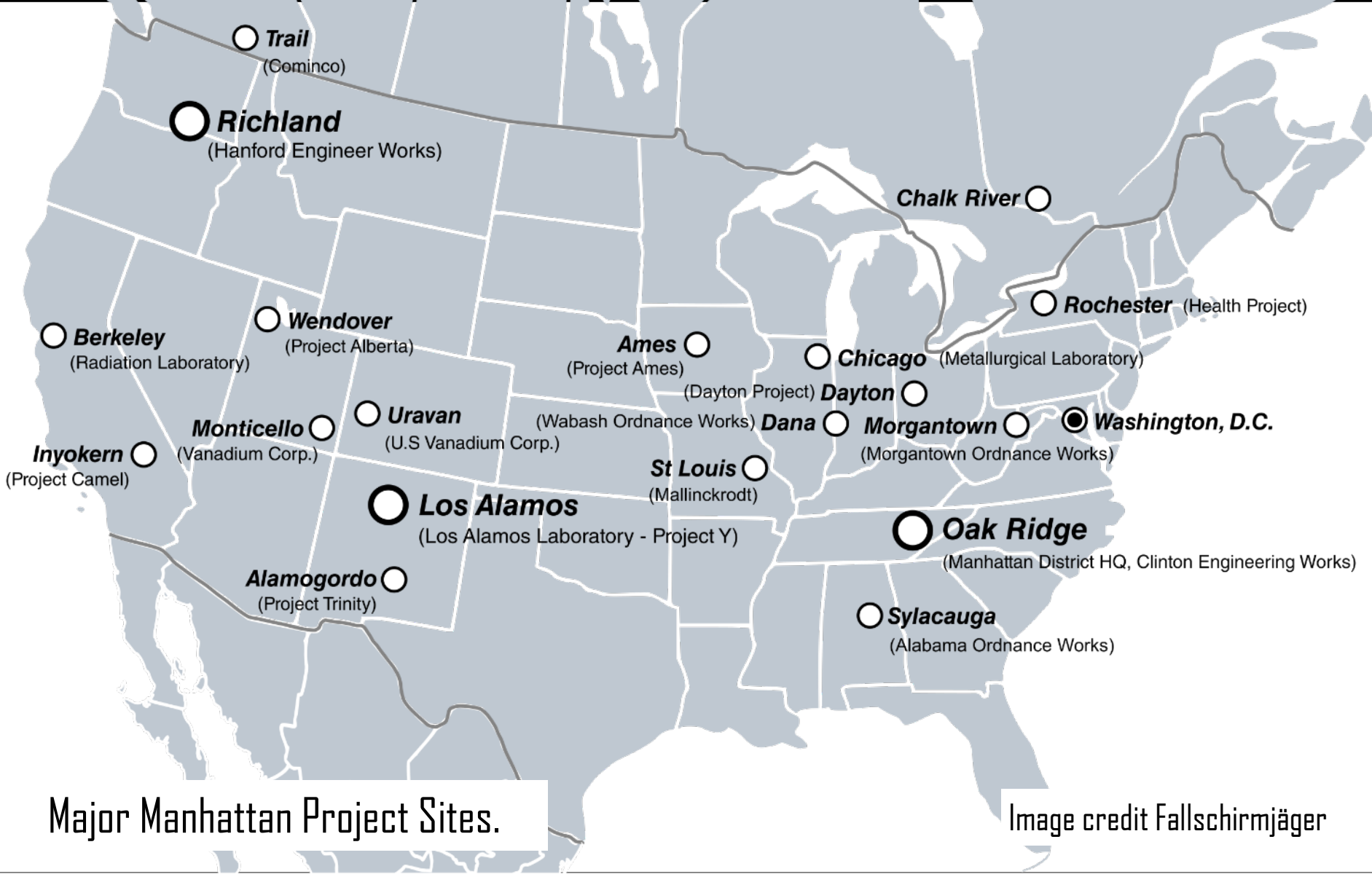
Nicholas Lewis, PhD, NSRC Historian

LA-UR-24-29779

- **Origins of Project Y/Los Alamos**
- **Nature and Extent of Military Presence**
- **Most Likely Points of Exposure**



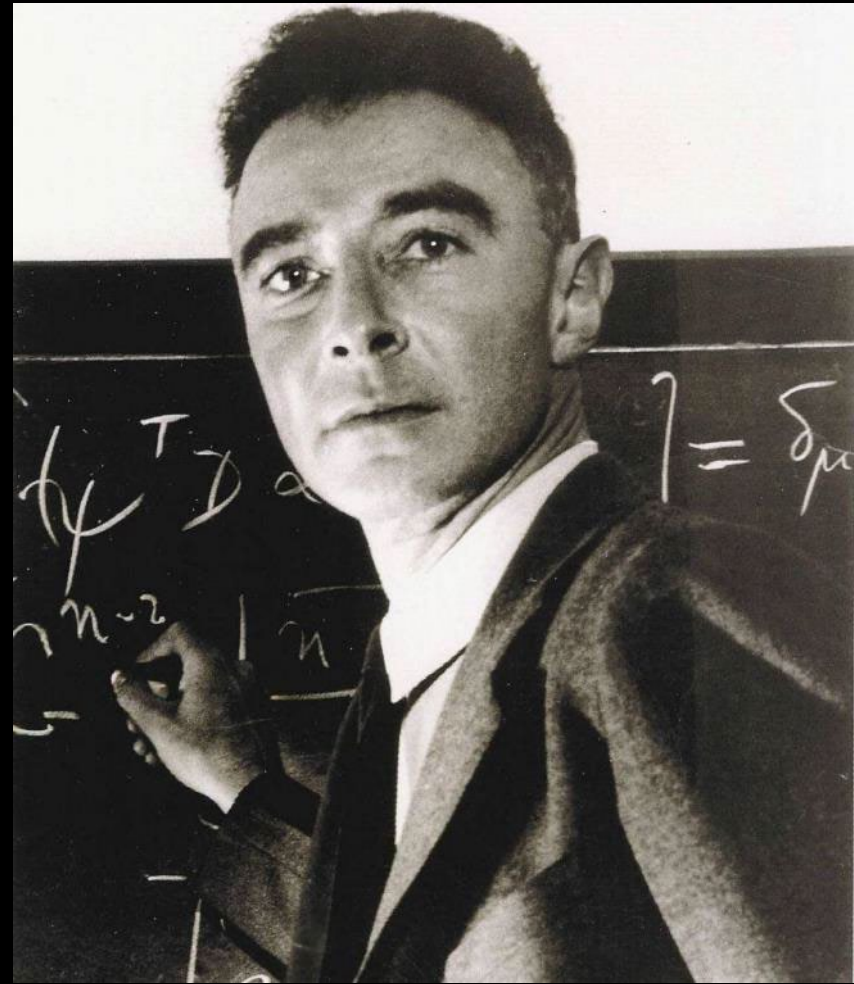
Main Hill Road with original switchbacks (middle)
and wartime bypass (right).



Major Manhattan Project Sites.

Image credit Fallschirmjäger

Leslie Groves



J. Robert Oppenheimer



Modern Los Alamos Lab
and Townsite located
on the Pajarito Plateau
Finger Mesas and
Canyons

The Origins of Project Y



Ashley Pond
before Project Y.

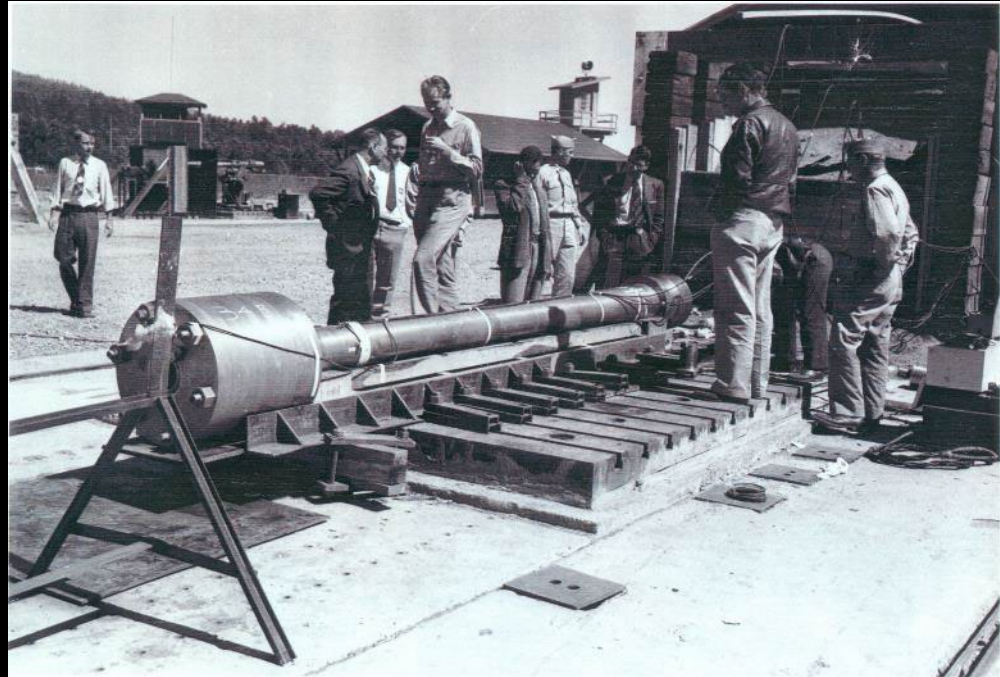


Main Technical Area
(TA-1) in 1946.



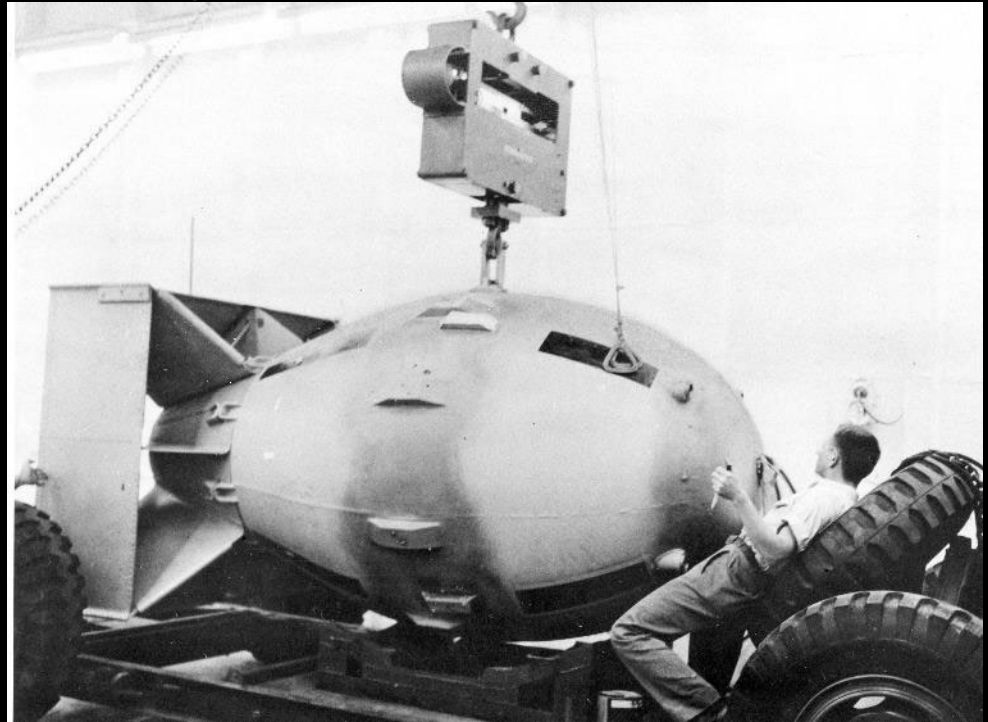


Little Boy and Thin Man





Little Boy and Fat Man



The Military Presence at Los Alamos



- **Army Corps of Engineers**
- **Intelligence and Security**
- **Military Police**



Guard transfer from Army MPs to AEC security, Oct. 1947.

The Military Presence at Los Alamos



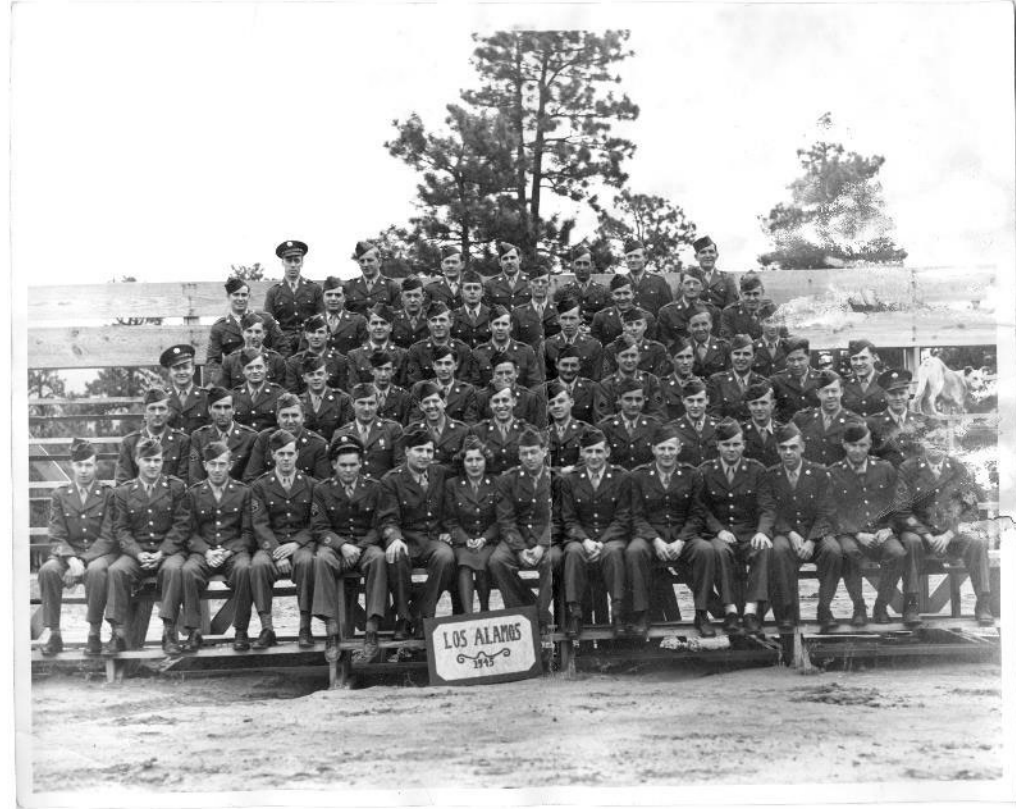
- **Women's Army Corps (WACs)**



The Military Presence at Los Alamos



- **Special Engineer Detachment (SEDs)**



The Military Presence at Los Alamos



- Civilian and military personnel worked together closely in most technical efforts at Project Y



Los Alamos machinists, 1945



Emilio Segrè's (front left) P-5 Radioactivity Group

Health at Project Y

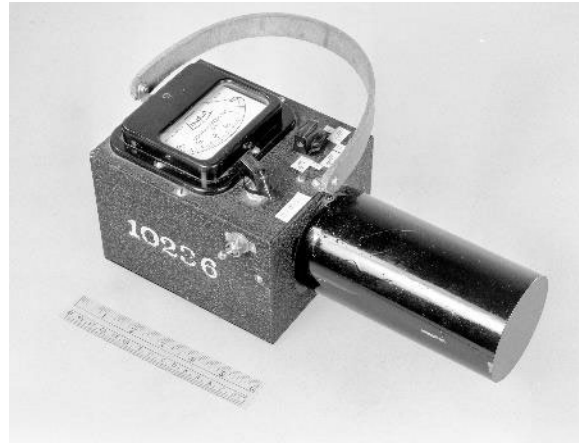
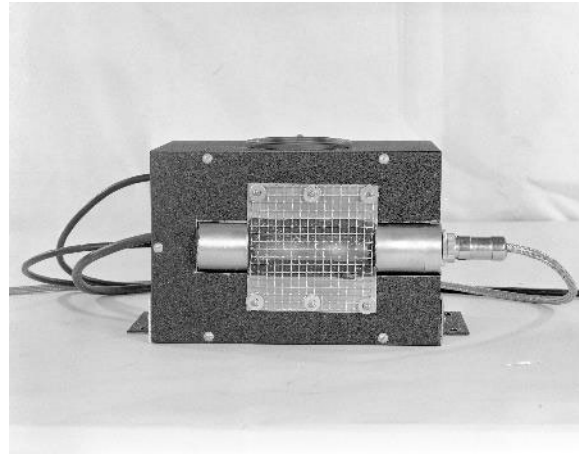


Dr. Louis Hempelmann,
first leader of the
Los Alamos Health Group.



Dr. James Nolan,
Chief Medical Officer
at Los Alamos.

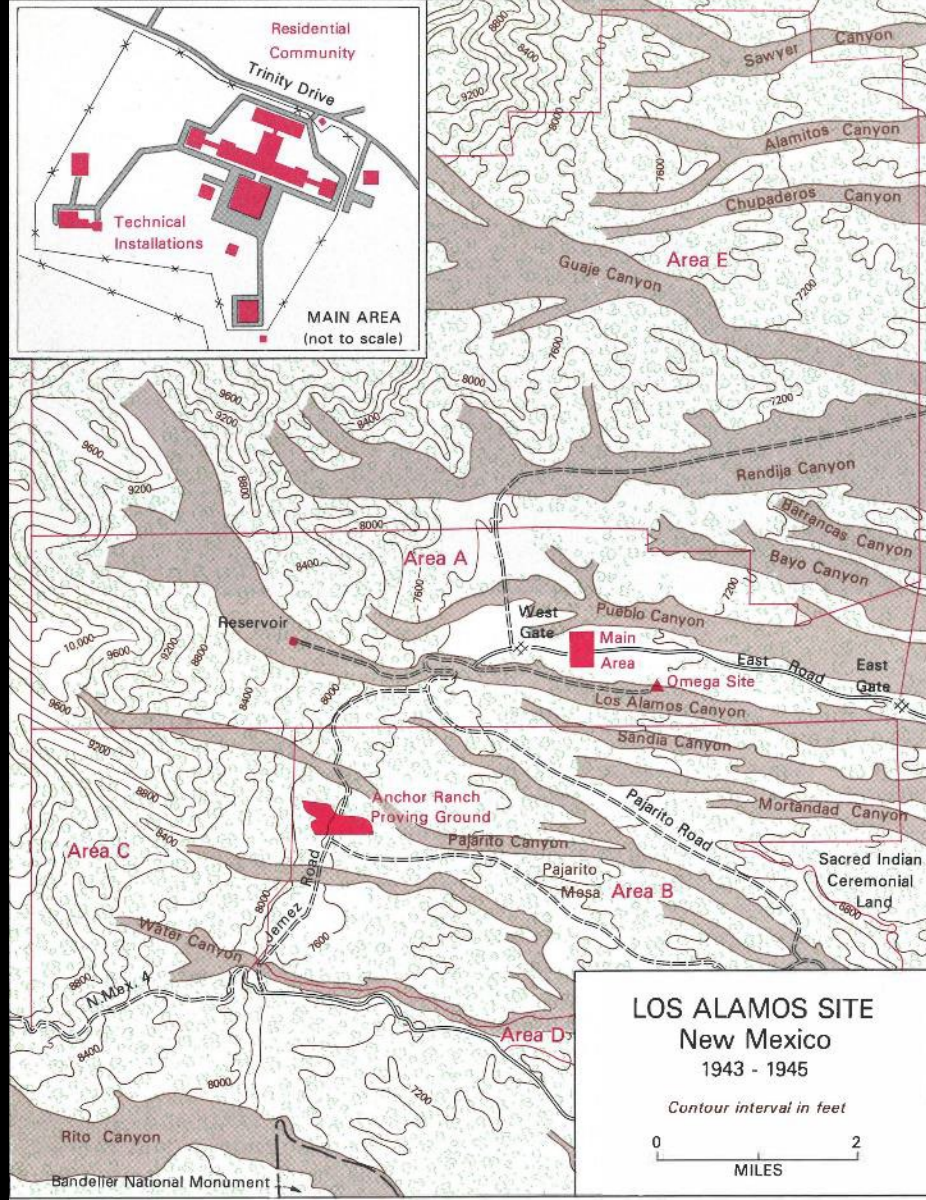
Health at Project Y



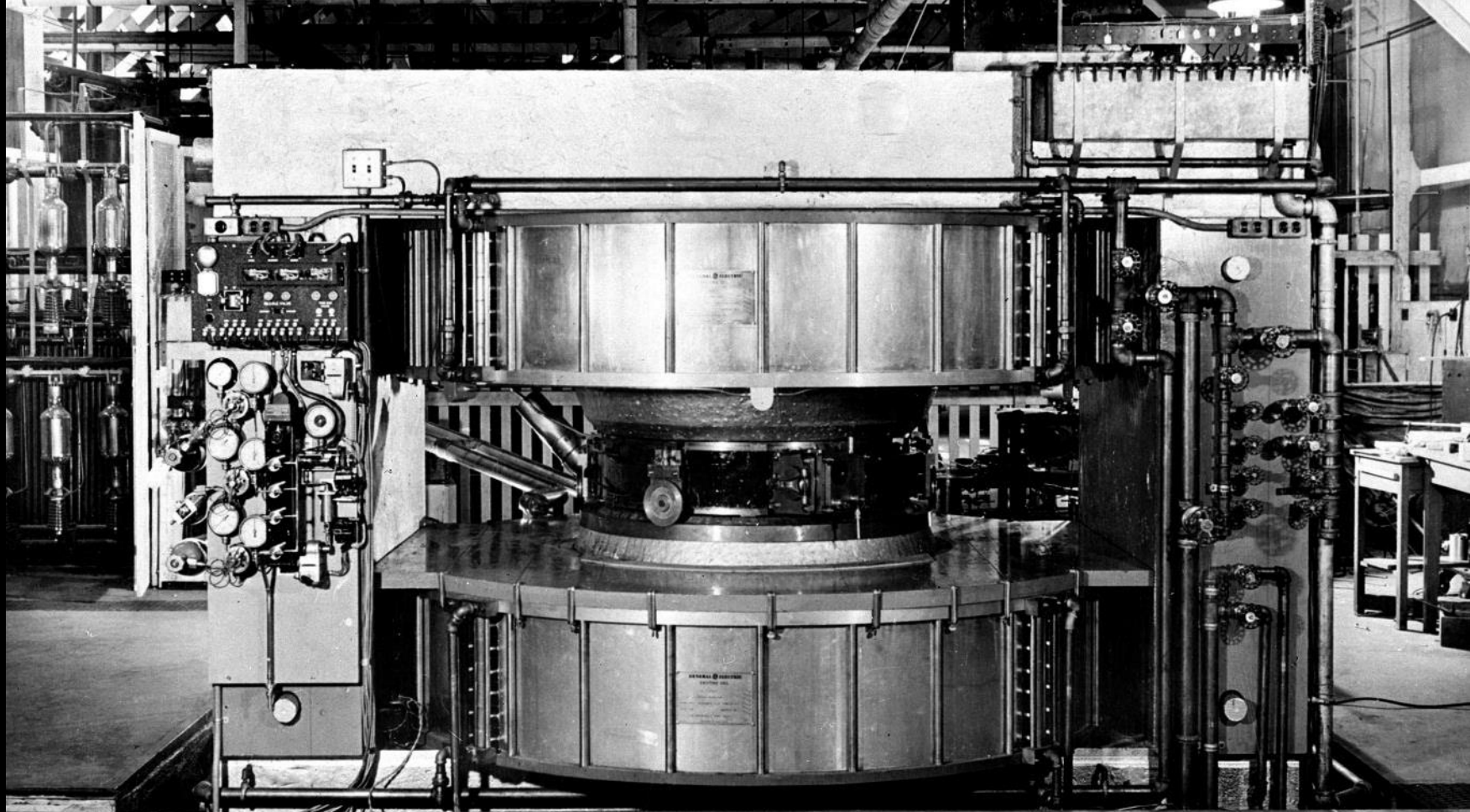
Portable radiation detectors at
Los Alamos



Early postwar
Los Alamos hospital.



Map from Vincent C. Jones, *Manhattan: The Army and the Atomic Bomb*, p. 330.

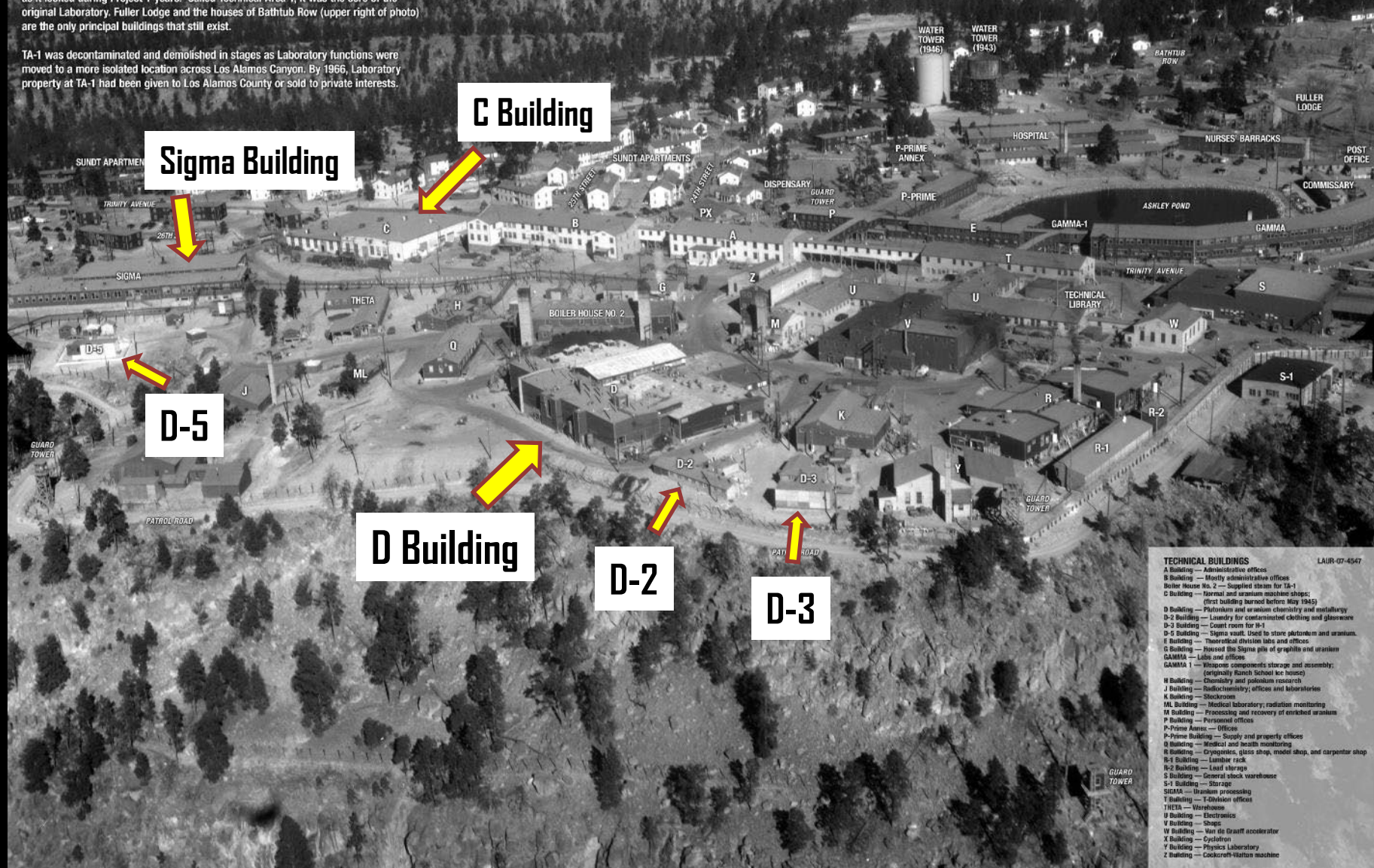


Harvard Cyclotron

IM-9:6142

This photo, taken on December 4, 1946, depicts what is now the center of Los Alamos as it looked during Project Y years. Called Technical Area 1, it was the core of the original Laboratory. Fuller Lodge and the houses of Bathtub Row (upper right of photo) are the only principal buildings that still exist.

TA-1 was decontaminated and demolished in stages as Laboratory functions were moved to a more isolated location across Los Alamos Canyon. By 1966, Laboratory property at TA-1 had been given to Los Alamos County or sold to private interests.



TECHNICAL BUILDINGS LAUR-07-457

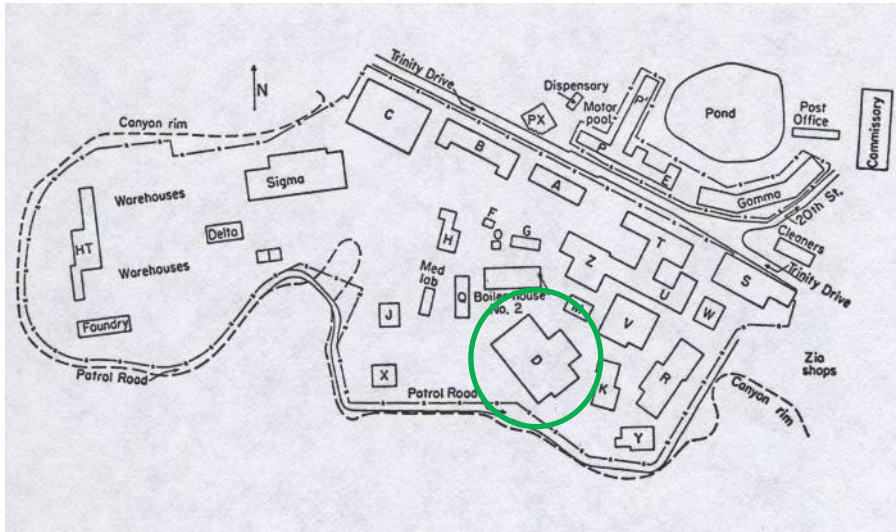
A Building — Administrative offices
 B Building — Chiefly administrative offices
 Boiler House No. 2 — Supplied steam for TA-1
 C Building — Thermal and uranium machine shops; (first building burned before May 1945)
 D Building — Plutonium and uranium chemistry and metallurgy
 D-2 Building — Laundry for contaminated clothing and gloves
 D-3 Building — Count room for R-1
 D-5 Building — Sigma vault. Used to store plutonium and uranium.
 E Building — Theoretical division labs and offices
 F Building — Housed the Sigma pile of graphite and uranium
 GAMMA — Labs and offices
 GAMMA 1 — Weapons components storage and assembly; (originally Ranch School ice house)
 H Building — Chemistry and plutonium research
 J Building — Radiochemistry; offices and laboratories
 K Building — Stockroom
 ML Building — Medical laboratory; radiation monitoring
 M Building — Processing and recovery of enriched uranium
 P Building — Personnel offices
 P-Prime Annex — Office
 P-Prime Building — Supply and property offices
 Q Building — Medical and health monitoring
 R Building — Cryogenics, glass shop, model shop, and carpenter shop
 R-1 Building — Lumber rack
 R-2 Building — Lead storage
 S Building — General stock warehouse
 S-1 Building — Storage
 SIGMA — Uranium processing
 T Building — T-division offices
 THCA — Warehouse
 U Building — Electronics
 V Building — Shops
 W Building — Van de Graaff accelerator
 X Building — Cyclotron
 Y Building — Physics Laboratory
 Z Building — Cockcroft-Walton machine

Sources of Exposure at Los Alamos



- Nuclear Material Processing, Machining, and Recovery

Wartime TA-1, map Hoddeson, et al. *Critical Assembly*, 64



D Building in TA-1



DP-Site (TA-21)
after World War II.

Sources of Exposure at Los Alamos



- **Radioactive Lanthanum (RaLa) explosive tests (1944-1961)**



Wartime "remote handling" of a kilocurie source of radiolanthanum for RaLa testing, Bayo Canyon (TA-10)

RaLa test preparation in Bayo Canyon, 1947



Sources of Exposure at Los Alamos



- **Omega Site (TA-2)**



Water Boiler
(first enriched-
uranium reactor),
1944



Omega Site (TA-2)
circa 1950

Sources of Exposure at Los Alamos



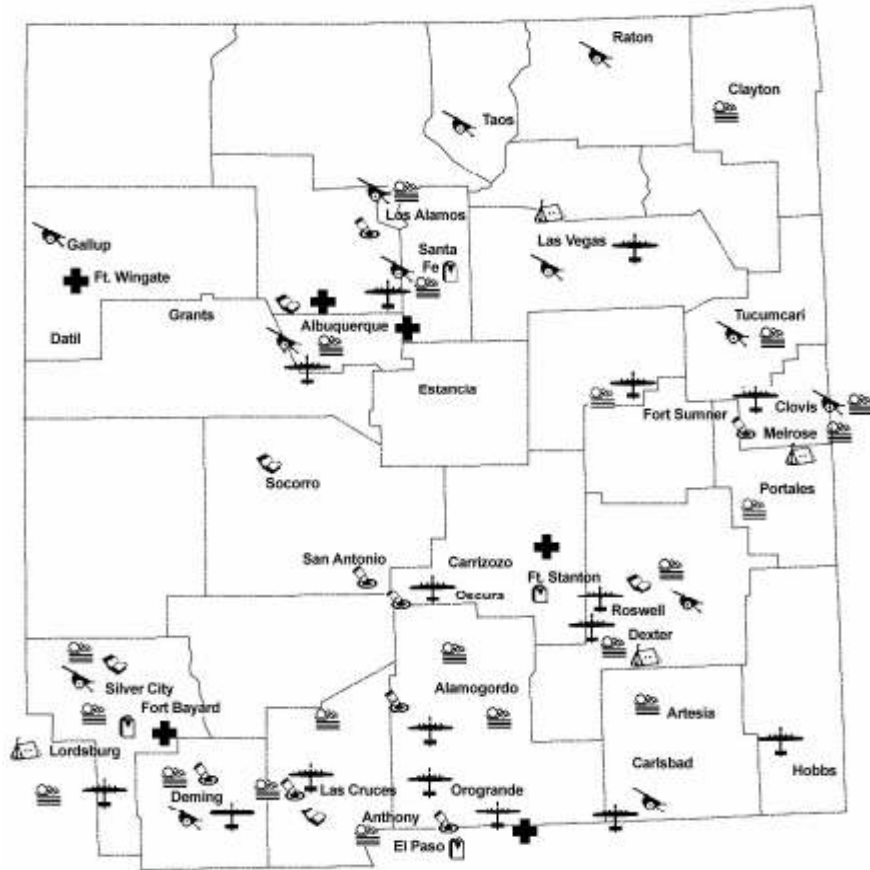
- **Explosives Casting, Machining, and Testing**



One of multiple explosives firing sites, 1945

Explosives Casting Building at S-Site (TA-16)

Other Military Installations in the Region



New Mexican Military Facilities of WORLD WAR II

Major Air Bases	8
Dispersal Bases	5
Bombing and Gunnery Ranges	13
Army Hospitals	4
Camps	2
National Cemeteries	3
POW Camps	3
Branch POW Camps	19
National Guard Armories	11
Colleges & Universities	7
Specialized Military Locations	7

Map and chart from
*World War II from a New
Mexican Perspective*,
pp. 14 & 17.



Bibliography



- Bederson, Benjamin. SEDs at Los Alamos: A Personal Memoir. In *Physics in Perspective* 3 (2001): 52-72.
- Chambers, Marjorie Bell. "Technically Sweet Los Alamos: The Development of a Federally Sponsored Scientific Community." PhD diss., University of New Mexico, 1974.
- City of Albuquerque. "World War II Era from a New Mexican Perspective."
<https://www.cabq.gov/parksandrecreation/parks/veterans-memorial-park/documents/WWIIEraFromANewMexicanPerspective.pdf> [Accessed 9/9/2024]
- Hacker, Barton C. *The Dragon's Tail: Radiation Safety in the Manhattan Project, 1942-1946*. Berkeley, CA: University of California Press, 1987.
- Hawkins, David. *Project Y: The Los Alamos Story, Part I: Toward Trinity*. Edith C. Truslow and Ralph Carlisle Smith, *Project Y: The Los Alamos Story, Part II: Beyond Trinity*. San Francisco: Tomash Publishers, 1988.
- Hewlett, Richard G. and Oscar E. Anderson, Jr. *The New World: A History of the Atomic Energy Commission, Volume I, 1939-1946*. University Park: Pennsylvania State University Press, 1962.

Bibliography



- Hewlett, Richard G. and Francis Duncan. *Atomic Shield: A History of the United States Atomic Energy Commission, Volume II, 1947-1952*. U.S. Atomic Energy Commission, 1972.
- Hoddeson, Lillian, Paul W. Henriksen, Roger A. Meade, and Catherine Westfall. *Critical Assembly: A Technical History of Los Alamos during The Oppenheimer Years, 1943-1945*. Cambridge [England]: Cambridge University Press, 1993.
- Jones, Vincent C. *Manhattan: The Army and the Atomic Bomb*. Center of Military History, United States Army: Washington DC, 1985.
- Truslow, Edith C. "Manhattan District History: Nonscientific Aspects of Los Alamos Project Y, 1942 through 1946." Los Alamos Scientific Laboratory, LA-5200 (March 1973).
- Westwick, Peter J. *The National Labs: Science in an American System, 1947-1974*. Cambridge, MA: Harvard University Press, 2003.
- Widner, Thomas. "Final Report of the Los Alamos Historical Document Retrieval and Assessment (LAHDRA) Project." Centers for Disease Control and Prevention (CDC), 2010: <https://stacks.cdc.gov/view/cdc/131522>

Other Resources



- Radiation Safety Journal *Health Physics* Manhattan Project search:
<https://journals.lww.com/health-physics/pages/results.aspx?txtKeywords=%22manhattan+project%22>
- Department of Energy CEDR Epidemiologic Databases LAHDRA document search:
<https://oriseapps.ornl.gov/cedr/cdc-lahdra.aspx>
- Department of Energy Office of Scientific and Technical Information search engine:
<https://www.osti.gov/>