

# Atomic City: Secret No Longer

In Los Alamos, exhibits tell the story of the world's most dangerous weapon

STORY & PHOTOGRAPHY BY KIT BERNARDI

ur teenage son Will runs his hand across the 10-foot-long, canary yellow replica of an atomic bomb that weighed 10,800 pounds. The plump, round, plutonium-fueled device was given the code name "Fat Man," for obvious reasons. The actual Fat Man destroyed Nagasaki, Japan, on Aug. 9, 1945. Little Boy, a slimmer bomb triggered by enriched uranium, had leveled Hiroshima a few days before that.

The models of the two bombs that launched us into the Nuclear Age can be seen — and unlike the real, radioactive items, touched — at the Bradbury Science Museum in Los Alamos, N.M., famously known as Atomic City.

During World War II, scientists at the isolated, clandestine laboratory complex atop the volcanic Pajarito Plateau in the Jemez Mountains designed and built the world's first nuclear weapons as part of the historic Manhattan Project. (The city of Los Alamos itself was built after World War II, to support the people who worked at the lab.)

Will was impressed by the vast amount of humanpowered, scientific intelligence and coordination that went into

creating the bomb, building it, transporting it and using it to end the war. My aspiring physicist found himself inspired by the amount of work done under so much pressure, accomplished by really smart people working together.

Because we were in Santa Fe on a family vacation, the Rio Grande separating that artsy town from science-oriented Los Alamos like the fissure >

#### Statues of Manhattan

Project leaders Leslie Groves Jr. and J. Robert Oppenheimer are on display at the Bradbury Science Museum.



between right and left brains, we drove my son 45 minutes northwest of Santa Fe to the "town that never was" so that he could explore the New Mexico segment of the Manhattan Project National Historical Park (nps.gov/mapr), added to the list of national parks in 2015. (The other two sections are in Tennessee and Washington; see sidebar for more details.)

Visitors are greeted by sculptures of the Manhattan Project's co-leaders, Brig. Gen. Leslie Groves Jr. of the U.S. Army Corps of Engineers and J. Robert Oppenheimer, a theoretical physicist from the University of California-Berkeley. The complex today is now downtown Los Alamos, and encompasses 16 sites associated with atomic history, all within a walkable 1-mile radius.

We visited the nucleus of the Atomic City community — Ashley Pond, a small body of water named after the founder (whose name really was Ashley Pond) of the exclusive Los Alamos Ranch School for boys, the original tenant of the land. Attracted by its off-the-beaten-path location and the roads already built to support the school, the government acquired Pond's property in 1943 and transformed it into the top-secret Manhattan Project headquarters.

Los Alamos rapidly became a science boomtown; its population exploded to 8,000 scientists, support staff, members of the military and their families, most living in barracks-style housing and Quonset huts. Most of these buildings have long since been demolished, but along a street still called Bathtub Row, you can see the somewhat plusher homes — the only ones in town with bathtubs at the time — built as faculty housing for Pond's school (Oppenheimer lived in one). Most are now private homes closed to the public.

One of them, however, is open: the former home of scientist Hans Bethe — a Protestant of Jewish descent who left Germany in 1933 and eventually came to work on the Manhattan Project — which displays the Nobel Prize won by Manhattan Project scientist Frederick >



◆ Exhibits
detail how the
Los Alamos
National
Laboratory
keeps track of
the U.S. nuclear
stockpile.



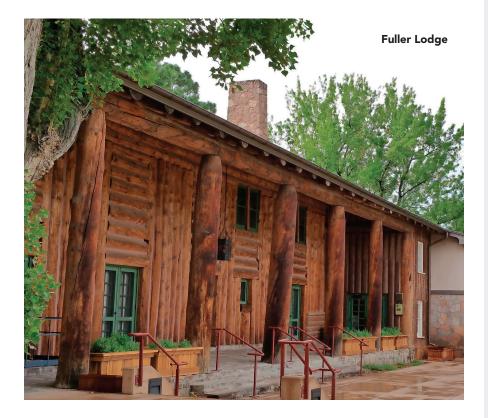
◆ Replica
of Fat Man,
the atomic
bomb
dropped on
Nagasaki.



◆ Cottages like this one on Bathtub Row were the homes of the Manhattan Project's lead scientists.



◀ The Bradbury Science Museum is named for Norris Bradbury, who followed Oppenheimer as director of the Los Alamos lab.



Reines for his work on neutrinos and a new exhibit on the Cold War.

A few blocks away, the **Los Alamos History Museum** (losalamoshistory.org), located in what was once the school's infirmary, served during the war as guest quarters, especially for Groves, who was based in Washington, D.C. Next door, rustic Fuller Lodge, made of nearly 800 wooden logs, was first the school's dining hall, and then a social center for the atomic scientists.

Amid the nuclear-history remnants sits the remains of an ancestral Pueblo dwelling built from blocks of volcanic ash, and a cabin built by homesteaders in 1913 out on the plateau; it was moved downtown in 1984. The contrast of ancient, pioneer and nuclear-age history all preserved in buildings so close to one another made me realize how much and how quickly our world has changed, yet how across centuries we've shared in making this land our home.

"The park tells important stories about sacrifices people made to create revolutionary science and develop secret cities as part of a massive wartime effort," says Charles Strickfaden, the Manhattan Project National Historical Park-Los Alamos site manager.

More park sites on the Los Alamos National Laboratory (LANL) property will open to the public >



1943

Los Alamos Ranch School was turned into the Manhattan Project headquarters



8,000+

Scientists, support staff and military members populated the new boomtown



16

Different sites are located on the Los Alamos property, all within a walkable 1-mile area

## ONE PARK, THREE PLACES

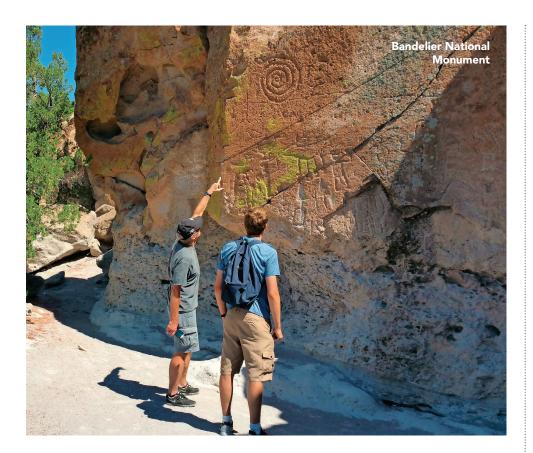
The secret Manhattan Project operated in three locations, including Los Alamos; each played an important part in developing an atomic bomb before Nazi Germany and the Russians accomplished the task. Collectively, those sites in New Mexico, Washington and Tennessee comprise the Manhattan Project National Historic Park.

At the 600-square-mile Hanford site in south-central Washington, the Hanford Engineer Works complex employed 51,000 workers to create plutonium for the device used in July 1945 for the Trinity test, the first test of a nuclear weapon, and for Fat Man, the bomb dropped on Nagasaki less than a month later. You can take a free, guided bus tour of the B-Reactor National Historic Landmark, which produced the plutonium for the two bombs, between mid-April and mid-November. Register in advance. ▶ 2000 Logston Blvd., Richland, Wash.; 509-376-1647; nps.gov/ mapr/hanford.htm

The military and administrative headquarters for the Manhattan Project was the Oak Ridge Reservation in Tennessee, home to 75,000 people. The site's reactors engaged in experimental plutonium production and made enriched uranium for the Little Boy bomb dropped on Hiroshima. Guided three-hour bus tours run March through November. The tour fee is included in admission to the American Museum of Science and Energy: \$5 adults, \$3 children (must be 10).

► 300 S. Tulane Ave., Oak Ridge, Tenn.; 865-576-6767; nps.gov/ mapr/oakridge.htm

— Kit Bernardi



The park tells important stories about sacrifices people made."

— CHARLES STRICKFADEN, SITE MANAGER in the near future.

Postwar buildings also help tell the story of the bomb. The **Bradbury Science Museum** (lanl.gov/museum), which opened in 1953, features a history gallery that showcases the science of the Manhattan Project, the Russian espionage that endangered it and the bombs that led to the Japanese surrender and the end of World War II. A separate defense gallery focuses on new technologies and how the current lab works to maintain the safety of the nation's aging nuclear weapons; a film on how the weapons stockpile is monitored is particularly compelling.

The Tech Lab has kids' activity stations. Scientist volunteers lead visitors in hands-on experiments explaining scientific theories and applications, such as mapping the spread of disease through social media and how supercomputers work. The research gallery features the current LANL scientists' cutting-edge, cross-disciplinary

work on Arctic climate change, biofuels, sustainability, air travel safety and nanotechnology.

Georgia Strickfaden, owner-operator of **Atomic City Tours** (atomiccitytours. com) — her father helped build the postwar lab; she and Charles don't think they're related — took us to the alpine Pajarito Mountain ski area to look down at the town and restricted LANL complex.

"The mesas the lab sprawls across were once inhabited by ancient peoples," Georgia says, "then by homesteaders, and now scientists shaping our future." That's code for the rest is history. ■

### NON-NUCLEAR ACTIVITIES NEAR LOS ALAMOS

### Santa Fe Balloons

Legendary pilot Johnny Lewis and his crew take visitors on 60-minute flights at dawn above Las Barrancas for unobstructed views of untouched, highdesert beauty from May to October. Reservations required.

► 505-699-7555; santafeballoons.com

#### Bandelier National Monument

Encompassing 33,000 acres of rugged wilderness, includes a paved trail that takes hikers through the 11,000-year-old ancestral Pueblo people's cliffside community in Frijoles Canyon. The Tsankawi Village Trail, an easy 1.5-mile loop with three ladders, takes visitors to the remains of the ancestral Tewa Pueblo homes, built of volcanic ash and adobe. Also visible: petroglyphs dating to the 1400s. Vehicle admission fee charged; access to the park's most popular areas during the summer is by shuttle bus

▶ 15 Entrance Road; 505-672-3861; nps.gov/band

#### Valles Caldera National Preserve

The nation's newest national preserve, contains one of the world's largest calderas, a circular depression formed by a volcanic eruption 1.25 million years ago that's 13 miles in diameter. Elk wander inside the caldera; also inside the preserve are prehistoric sites, historic ranch cabins and mountain meadows laced with meandering streams.

▶ 575-829-4100; nps.gov/