

Hanford a tourist attraction?

Review site history, technology by bus or by mouse

Saturday road tours popular

Deborah Dunn, FH

After the dust settles back to the road at the old Hanford townsite next Sept. 15, more than 400 visitors will have participated in Hanford's 2001 Saturday road tours.

Ten of the four-hour tours will have taken place this year, starting April 21. The most popular of Hanford's five tours, the Saturday outings, are general-interest public tours that loop around the site to provide perspective on Hanford's missions from World War II to current cleanup progress.

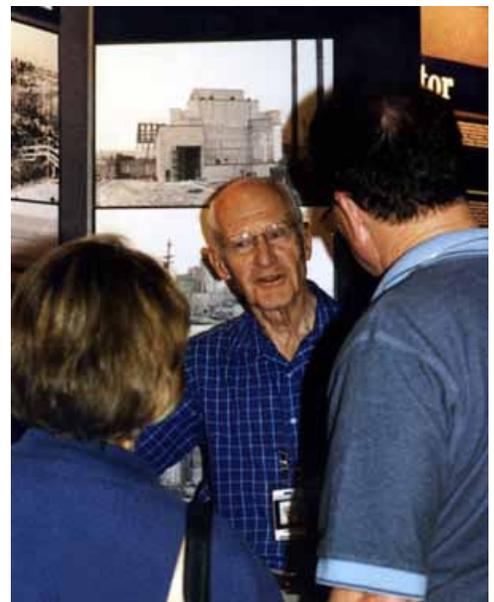
Eight of this year's tours include a visit to B Reactor, the world's first full-scale nuclear reactor. The air-conditioned bus has 45 seats available on a first-come, first-served basis to U.S. citizens who register at least three days ahead. Seasoned Hanford retirees serve as tour guides.

Steve Buckingham has been leading road tours since his 1986 retirement, after 39 years of fulfilling Hanford assignments. The assignments took him from the control labs to process chemistry, process engineering and development.

"Hanford has been my life for more than 50 years," Buckingham said. "I like it. I like the work we did and the people we worked with."

Buckingham said he frequently meets former co-workers on the tours. Tour audiences represent a mixture of age groups, but always include a few Hanford retirees. Out-of-towners account for about half of each busload.

He said the tours tend to be positive and the audiences appreciative. Visitors frequently comment that they didn't realize the full scope of Hanford's wartime mission or the complexity of the current cleanup activities.



Roger Rohrbacher provides insight about early Hanford history.

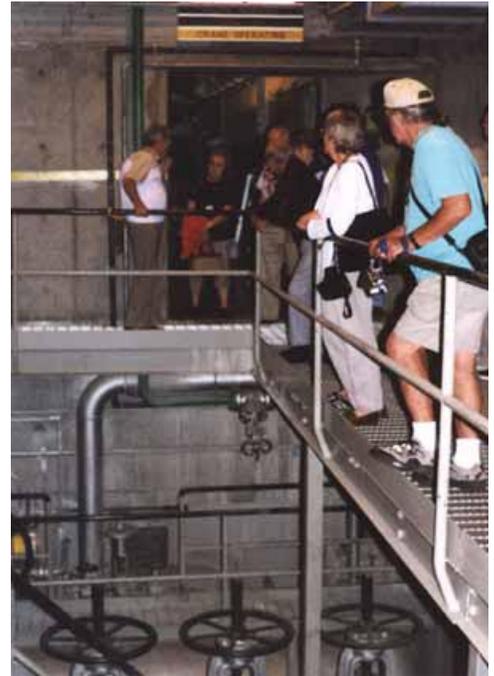
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Saturday road tours popular, cont.

"I think the more people who come to see the site, the more it will be demystified," Buckingham said. "We get a number of fan letters. If you have an interest, it's something you shouldn't miss."

As the bus rumbled between the Federal Building and the 300 Area in late June, Buckingham talked about wartime Hanford, Richland's population surge and what it was like to live in the town newly sprung from the desert.

The first stop that day was at B Reactor, courtesy of Bechtel Hanford. The reactor stop featured tour guides who had worked there and displays of early photos and tools. The bus continued to the 200 Area, where historic facilities and several cleanup projects were viewed. Finally, the bus wended its way to the old Hanford townsite where a grid of streets from the construction camp is still faintly visible in the grass. After a roadside peep at the Columbia River, the busload of tour members headed back to town, lunch and everyday life.



A tour group visits the historic B Reactor.

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Buckingham anecdotes, Hanford trivia

- In the early years, entire Richland neighborhoods consisted of identically built houses with bare yards and the same kind of paint. One night-shift worker invariably ambled into the wrong house after work. His wife finally put a pot of geraniums on the step to guide him.
- During winter, workers got onto the bus in the dark and came home in the dark. "Sometimes I had to look in my lunch pail to tell if I was coming or going," Buckingham said.
- Pacific Northwest National Laboratory has one of the 10 largest computers in the world.
- Rattlesnake Mountain, at 3,600 feet of altitude, is the highest mountain in the United States without trees.
- Energy Northwest supplies 10 percent of the Bonneville Power Administration's electricity.
- Canada and Russia supply medical isotopes to the United States.
- B Reactor was built in 14 months.
- The local soil contains minerals called zeolites that exchange ions, thus retarding the migration of contamination.
- At the peak of Hanford construction, the camp near the Hanford townsite had 55,000 people, making it the largest trailer park in the world.
- The second four-lane highway in eastern Washington was built between the construction camp and the work sites.
- Schools operated in three shifts to accommodate all the children and parental work schedules.
- No workers died from exposure to radiation. There was a serious accident due to a glovebox chemical explosion that caused gross contamination of a worker by americium. Kadlec Hospital removed 85 percent of the radiation and the worker lived into his 80s.
- People who worked here for a long time are on a registry and receive health information.

Saturday road tours popular, cont.

Ray Wonacott had driven in from Ellensburg to take the tour. "I've worked at about every place at Hanford, including the Federal Building," he said. Wonacott worked at other DOE sites, including Oak Ridge and many of America's nuclear energy plants.

Wonacott said the B Reactor control room seemed quaint compared to modern nuclear power plants that are 10 times bigger. He said he enjoyed learning about the upcoming vitrification plant and was impressed with the organization and thoroughness evident at the cleanup projects.

"I'd take the tour again," he concluded.

For more information about the Saturday road tour program, visit <http://www.hanford.gov/tours/index.cfm> . ♦

'Tour' the Hanford Site from the comfort of your home

Connie Eckard, FH

There's nothing quite like it anywhere else in the Department of Energy complex.

Now, if a person wants to take a tour of the Hanford Site, all the individual needs is access to the Internet. The "tour bus" leaves any time the individual wants it to go.

DOE and its Hanford Site contractors offer several tours of the site, the most popular of which is the Saturday road tour conducted by Fluor Hanford. But now people can enjoy a virtual tour any day of the week, and they can take the tour from wherever in the world they might be.

"The Hanford Tours Web page is online at www.hanford.gov," said Guy Schein of the DOE Richland Operations Office of Intergovernmental, Public and Institutional Affairs. "Just select the 'bus' icon on the Web page and you're on your way."

The virtual tour is designed for those who don't have time to personally explore the vast expanse of the site. The tour has more than an hour of material, including 23 different "stops" with 19 of the stops having at least one video. (See page 6.)

Each stop along the virtual tour offers current information on Hanford cleanup progress, some Hanford history and short video clips of significant locations. The tour includes areas of interest such as the Pacific Northwest National Laboratory, the old Hanford and White Bluffs townsites, 100 Area reactor sites, the 200 East and West Areas, and the Volpentest HAMMER Training and Education Center.



White Bluffs Motor Company operated by Fred Gilhuly

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'Tour' the Hanford Site from the comfort of your home, cont.

Why this tour?

The idea of developing a virtual tour of the Hanford Site evolved with Schein last year. "A tour of Hanford is really essential to reporters covering Hanford," he said. "For many, the virtual tour offers the first opportunity to see things at Hanford first-hand. Also, for those who are planning to visit Hanford, the virtual tour allows them to focus their visits."

Mary Goldie, also with the Office of Intergovernmental, Public and Institutional Affairs, acknowledged that there also was a financial reason Schein was able to push the program and get it done.

"We did the virtual tour because dollars are tight and there are a lot of people who don't have an opportunity to visit the site because of where they live," said Goldie. "We also hope this tour stimulates a curiosity in the local community to encourage people to take the time to physically visit the Hanford Site to see what we do. Our employees are proud of their work and like to show it to others."



Rattlesnake Mountain

Schein worked with the video people at Lockheed Martin Services, including Web project lead Cindy Moody-Brock, to get the right video clips to support the tour segments. Moody-Brock said video specialists Rochelle Olson and Nick Murphy of the LMSI Video Production Center were a great help providing footage "so people can see more than a plain-Jane photo."

The Web site is popular with everyone from techies to eighth-graders who have an assignment to complete, according to Moody-Brock. "We get questions about Hanford from high school and college students who want to know history or they want photos or video or want to know what a cell looks like," she said. "Our intent is for this Web site to cover several of these areas."

Easy to use

Moody-Brock said it took about a month to get the site up on the World Wide Web. Goldie and Schein felt lucky to have Tina Scott of LMSI designing the site because Scott had worked with them before and knew where to access photos. "The hardest part, though, is the content," said Moody-Brock.

Most of the content came from the tour scripts used for years in conducting tours. Goldie, with the help of her contractor counterparts, updates the



the Volpentest HAMMER Training and Education Center

The virtual tour, cont.

4. The historic production and chemical research functions are described in the 300 Area segment along with current economic development. There is a 30-second video on the 300 Area and a 40-second audio on the area's Treated Effluent Disposal Facility.
5. The 400 Area segment focuses on the background and 10-year operation of the Fast Flux Test Facility. The 51-second video also acknowledges the DOE decision being considered for FFTF's future.
6. The Energy Northwest segment describes the state's only operating commercial power plant.
7. The advanced scientific Laser Interferometer Gravitational Wave Observatory is designed for measuring gravity waves at extremely tiny levels. The segment leaves no wonder why people refer to the facility simply as LIGO.
8. An historical overview of the Hanford townsite area includes a 2:16 video. Nothing of the town remains except the shell of the Hanford High School, which was built in 1916.
9. The former production reactors in the 100 Area are found on six of the virtual tour options. Again, the reactor segments are in the sequence in which they would be seen on a Saturday road tour. The F Reactor is the first on the tour and is described on a 36-second video. This and each of the other reactor segments includes a 46-second video on the nine 100 Area reactors.
10. The segment and the 49-second video on the White Bluffs townsite raises a question about the still-standing bank building. Whatever happened to the loot from the robbery of the White Bluffs bank? And there's no mention that White Bluffs had sidewalks, but Hanford did not.
11. H Reactor was part of Hanford's first Cold War expansion. Shut down in 1965, the reactor is scheduled for safe storage in 2005. There is a 49-second video on H Reactor and the 46-second video on the nine 100 Area reactors.
12. The DR Reactor was built as a replacement for D Reactor, which scientists thought was going to fail. The D Reactor's problems were fixed and the two reactors operated side-by-side for more than a decade. A 1:12 video on the two reactors accompanies the 46-second video on the nine 100 Area reactors.
13. N Reactor had dual purposes in producing both plutonium for defense and steam for generating electricity. A 1:09 video includes the 1963 dedication by President Kennedy and is accompanied by the 46-second video on the nine 100 Area reactors.
14. The K East and K West reactors are the location of current removal of highly radioactive spent nuclear fuel.
- 15B. B Reactor was the first reactor built on the Hanford Site, and also the first full-size reactor in the world. The reactor is listed on the National Register of Historic Places. A 46-second video on B Reactor accompanies the 46-second video on the nine 100 Area reactors.

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The virtual tour, cont.

- 15C.** The original size of C Reactor was reduced by 81 percent when it was placed in “safe storage” condition to shield the reactor core for 75 years. A 1:18 video on safe storage accompanies the 46-second video on the nine 100 Area reactors.
- 16.** Gable Mountain is a basalt outcropping adjacent to the state’s second four-lane highway, which was built to move workers to and from the Hanford construction camp in the 1940s.
- 17.** The 200 Area is where fuel irradiated in the old production reactors was chemically processed to separate and recover plutonium for use in nuclear weapons. The virtual tour segment on the 200 West Area includes 11 separate videos. The videos provide glimpses of the central plateau (1:09), Cross-Site Transfer Line (0:33), Plutonium Finishing Plant (1:04), Hanford tank farms (1:25), SY Tank Farm (0:25), Tank SY-101 (0:54), T Plant (1:08), the Waste Receiving and Processing facility (1:20), the first transuranic waste shipment (6:21), the Waste Sampling and Characterization Facility (0:26) and U Plant (0:47).
- 18.** The Environmental Restoration Disposal Facility is receiving 3,000 tons a day of contaminated soils and materials being excavated from sites along the Columbia River. The segment on ERDF includes a one-minute video.
- 19.** The virtual tour of the 200 East Area includes eight videos. The videos include B Plant (1:02), the Effluent Treatment Facility (0:41), the Plutonium Uranium Extraction facility (1:08), the Waste Encapsulation and Storage Facility (0:47) and the 242-A Evaporator (0:55). There also are repeats of the central plateau (1:09), Cross-Site Transfer Line (0:33) and Hanford tank farms (1:25) videos from the 200 West segment.
- 20.** US Ecology operates a commercial low-level radioactive waste disposal site on 100 acres of the Hanford Site that is leased to the State of Washington and subleased to the company. Waste is received from hospitals, research facilities and industries in the Pacific Northwest.
- 21.** Rattlesnake Mountain is 3,600 feet high and has two observatories at the top, where the wind has been recorded at 150 miles an hour. It is no wonder there are no trees up there. The 1:18 video features arid lands and shub steppe.
- 22.** The 80-acre Volpentest HAMMER Training and Education Center serves as a training complex for workers and emergency responders for many federal, state, county and city agencies. The 1:01 video describes offers “training as real as it gets.”

Any of these 23 segments offers a quick look at what is to be found at the Hanford Site. Together, they provide a succinct overview. ♦