

From The Control Room

by Hank Kosmata

October is a busy month at B Reactor beginning on the 10th with an opening of new exhibits. These exhibits will include the models discussed elsewhere in this newsletter, as well as numerous panels that will tell the interested visitor not only what he is seeing but varying degrees of detail depending upon the individual's interest.

BRMA has been very active in developing these models, in addition to working with Cindy Kelly and her co-workers and sub-contractors on the material for the exhibits. The unveiling will include bus tours by press and various local leaders and will culminate in a reception that evening co-hosted by BRMA and the Atomic Heritage Foundation.

Other major participants include The Richland Public Facilities District and the REACH Board. It is of course our hope that a successful

REACH facility will someday result in a cooperative endeavor whereby B Reactor could become an integral exhibit of the REACH museum.

The end of October will find four more days of public tours (October 24th and 25th and October 31st and November 1st) which will most likely fill up within a few minutes of going on line judging by past experience.

Super-active member and current Treasurer Del Ballard has put together an interesting history of the origins of BRMA as well as past officers. His account is in this issue.

Sally Ann and Bob Potter attended meetings in Washington D.C. in August dealing with historic preservation and the National Park Service studies with respect to Manhattan Project sites. Their interesting report begins below.

BRMA Representatives Attend Historic Preservation Peer Exchange Conference National Park Service Study Discussed

by Bob Potter

On August 23 and 24, Sally Ann and Bob Potter represented BRMA and the B Reactor Preservation Coalition as part of a Hanford Communities delegation at the Historic Preservation Peer Exchange Conference hosted by the Energy Communities Alliance (ECA) in Washington, D.C. The conference included representatives from Hanford, Oak Ridge, Los Alamos, Rocky Flats, Butte County/Arco, Idaho, the Atomic Heritage Foundation, and the U.S. Department of Energy

Office of History & Heritage Resources. Each organization presented an update on its historic preservation activities in promoting heritage tourism.

A highlight of the meeting was a video-conference from Denver with Carla McConnell, Director of the U.S. National Park Service (NPS) "Manhattan Project Sites Special Resource Study" of facilities at four sites - Los Alamos, Hanford, Oak Ridge, and Dayton, Ohio. In December 2006, the NPS



BRMA members preview new B Reactor model

(Continued on page 2)

BRMA Representatives Attend . . .

(Continued from page 1)

issued a preliminary evaluation of significance, suitability and feasibility of including the Manhattan Project facilities at each site in a unit of the National Park Service. In the spring of 2007, the four involved NPS Regions conducted workshops at each site to identify management options for these facilities. Each Region then prepared an evaluation of the management options identified at the workshops. In July, the four NPS Regional Directors met to discuss the management options to be addressed in the draft evaluation to be published in a NPS newsletter in the fall of 2007. The newsletter will be followed by public meetings at each site to gain public input on the management options selected and their evaluation.

It was indicated in the video-conference that the NPS Regional Directors selected only three management options to be evaluated – No Action Option (continuation of existing policies), a Local Consortium Management Option, and an NPS National Heritage Area Option. The first two of these options have no NPS involvement, and the National Heritage Area option has only minimum NPS involvement in the management of the facilities. Apparently, two additional management options that were discussed at the management

option workshops – a National Historic Site Affiliated Area of the National Park System and a Full Manhattan Project Sites National Historic Park – were rejected by the NPS Regional Directors and dropped from the evaluation. The study group is currently finalizing the draft management options evaluation for the Regional Directors to submit to Washington D.C. for approval to issue in the fall newsletter.

Following the video-conference with Ms. McConnel, it was unanimously decided by the conference attendees that deleting the two NPS management options from the evaluation was not acceptable. Cindy Kelly, President of the Atomic Heritage Foundation, agreed to work with representatives from Hanford, Oak Ridge, and Los Alamos to prepare a letter from ECA to each of the four involved Regional Directors, with copies to the appropriate Congressional Delegations, stating that the ECA strongly requests that the National Historic Site Affiliated Area and the Full National Historic Park management options be included in the study evaluation. The letter will also provide the basis for unified public input at the public meetings to be held at each site location later this year.

BRMA meets the second Monday of each month at the Richland Public Library, 7 p.m.

2008 Renewal and New Member Application

I want to help preserve the history of the B Reactor. Below is my application with payment for annual membership or renewal in the B Reactor Museum Association.

Name: _____ Date: _____

Address: _____ City: _____ State: ____ Zip: _____

Phone: (h): (____) _____ (w): (____) _____ MSIN address: _____
(current Hanford employees)

E-mail: _____

Individual (\$20) or Senior (age 65+) or Student (\$10) and New or Renewal
 Group (\$25 up to 100 members; please add \$10 for each additional 100 members)

For Group Membership, Official Representative: _____

Additional tax deductible contribution: \$ _____
(Tax ID # 94-3142387)

Total Enclosed: \$ _____
(Please make check out to BRMA)

Thank you; please mail this application with payment to:

B Reactor Museum Association
PO Box 1531
Richland, WA 99352

The B Reactor models



Closeup of pile cutaway



B Reactor model with pile cutaway

On Monday, October 01, 2007, members of BRMA were able to see the final results of the physical model that has been constructed by Lockheed. The model will be transported out to the reactor this week and will be ready for the activities of October 10, and of course subsequent tours of the reactor. The details of the graphite stack, the shields, the movable control and safety rods, and the reactor piping systems are outstanding and will surely be a great help to future visitors who now will be able to see and understand what is behind that very impressive front face. The model makers were particularly painstaking in machining small blocks of model material to meet the exacting requirements of a portion of the moderator block and really bring out how intricate and complicated this assembly actually is. The model includes a number of LED points that will light up to allow a guide or later a docent to demonstrate the

critical components of the reactor.

BRMA has provided the technical direction for the construction of the model and has agreed to co-sponsor the cost of the model along with the Atomic Heritage Foundation.

The second model, the virtual model by Meier Associates, is also in final form and portions of the graphics have been provided to Cindy Kelly and her sub-contractors to be included in their preparation of various exhibits that are being developed under her direction with funds from the Murdock trust as well as funds earmarked for B Reactor work by Doc Hastings. BRMA has provided technical direction and guidance on this model dating back to almost two years now from the initial concept. The output from Meier will be available on DVD format and can be used in PowerPoint presentations using our lap top and projector equipment.



Lockheed's B Reactor model makers



One of the Meier Model graphics

B Reactor Article In *USA Today* Last Month

Nuclear reactor a tourist hot spot

By Rick Hampson, USA TODAY

RICHLAND, Wash. — The sight of it rising from the sagebrush — hulking, gray, sinister — evokes an era of top secrets and spies, when a mysterious concoction being brewed out here in the desert would change the world. Or maybe destroy it.

B Reactor looks like what it is: a weapon of war. It was the world's first production-scale nuclear reactor, source of plutonium for the first atomic bomb and tritium for the first hydrogen bomb.

And now, a tourist attraction.

In an attempt to capitalize on the shuttered reactor's role in nuclear weapons development and the Cold War, people here want to open it to regular public bus tours.

There's plenty of demand. When B Reactor is opened on occasion to visitors (U.S. citizens only), slots fill up online in about a minute. Russ Staska, who snared a ticket for a tour in June, compares it to "hitting the lottery."

The reactor was built in just 11 months during World War II. It's the oldest of nine reactors on the government's Hanford nuclear site, created in 1943 when a judge confiscated an area half the size of Rhode Island. He gave the residents some money, no explanation and 30 days to move.

The other decommissioned reactors have been or will be fenced off and sealed while radiation in their cores slowly decays.

The National Park Service is considering

whether B Reactor should be preserved as a museum. It's part of a study of facilities built for the Manhattan Project, the crash wartime effort to harness the power of the atom before Hitler did. Some others are at Los Alamos, N.M., where the first atomic bomb was assembled and test-detonated in 1945, and Oak Ridge, Tenn., which produced the enriched uranium used in the A-bomb dropped on Hiroshima.

Boom in 'nuclear tourism'

The study reflects a growing interest in "nuclear tourism," whose devotees make the rounds of installations such as the Park Service's Minuteman missile silo in South Dakota. "Cold War history is hot stuff," says Michele Gerber, Hanford site historian and a member of the local Committee to Save B Reactor. Still, B Reactor is an unusual candidate for preservation and visits for at least two reasons:

- **It helped produce the most deadly weapons in history.** That includes the A-bomb dropped on Nagasaki, which killed up to 70,000 civilians. "Using nuclear material for weapons presents a lot of controversial, moral issues," says Keith Dunbar, a Park Service planner. "I'm not saying that everything that happened here was good," Gerber says. "But even if you believe it was a horrible thing, you still have to marvel at the engineering, that something so complex was built in so little time. ... If you tear down history, you'll forget it."
- **It's on the most polluted site in North America.** B-Reactor is safe to visit — the Department of Energy says there's no airborne radiation and no chance of exposure as long as visitors stay behind the ropes.

Hanford generated the largest single collection of nuclear waste outside the Soviet Union. About 440 billion gallons of contaminated liquid were intentionally dumped into the parched soil, leaving an 80-square-mile plume of contaminated ground water. In addition, 53 million gallons of highly radioactive waste are stored in 177 underground tanks, some of which leak.

The drive to preserve B Reactor is part of an attempt to create a viable future for Richland and its neighboring Columbia River communities of Pasco and Kennewick, known as the Tri-Cities.

The Manhattan Project transformed Richland

(Continued on page 5)

2007 BRMA Leadership

Officers:

President: Hank Kosmata
Vice President: Norm Miller
Secretary: Steve Buckingham
Treasurer: Del Ballard

Chairs:

History & Artifacts: Burt Pierard
Membership: Mel Finkbeiner
Tour Coordinator: Maynard Plahuta
Government Relations: Bob Bowersock
Property & Facilities: Del Ballard
Public Relations: (Open)
Moderator Editor: Richard Romanelli

B Reactor Article . . .

(Continued from page 4)

from a sleepy agricultural settlement to a construction camp of 50,000. After the war, it evolved into a centrally planned, government-built community of engineers, technicians and managers — "an atomic age utopia," gushed *Time* magazine in 1949.

B Reactor closed in 1968, and by the late '80s so had all Hanford's weapons reactors. The local economy has continued to thrive, however, thanks to a soil and water cleanup on which the government spends \$2 billion yearly, supporting about 12,000 full-time jobs.

Even so, the Hanford cleanup can't last forever. "How do we diversify ourselves from an artificial economy?" asks Carl Adrian, president of the Tri-City Development Council, which promotes the area. One answer is tourism.

Kris Watkins, head of the visitors' bureau, says visitors could combine a visit to B Reactor with a dinner cruise on the Columbia or a tour of nearby wineries. Gerber says B Reactor tourism is vital to the image of the Tri-Cities.

"We want to become a full part of Washington state," she says. "We want to be a center of Cold War studies."

An eerie atmosphere

The Cold War seems tangible indeed on a

tour of B Reactor, starting with the moment the huge steel entry door slides shut behind you with a clang you feel in your chest.

There's the control room where the first large-scale nuclear reaction took place a few minutes before midnight, Sept. 26, 1944. There's the drafting table where the physics Nobel laureate Enrico Fermi, using nothing but a slide rule and graph paper, worked for three straight days to get the reactor up to speed.

There's the old safe that held orders from Washington, a reminder that secrecy was paramount. Plutonium was "product." Uranium was "base metal." Fermi was "Mr. Farmer." Nobody talked shop, even with their families, unless they wanted a visit from the FBI.

Above all, there's the five-story loading chamber. Visitors enter the room and stare at the reactor's huge front face, studded with tubes for 2,004 fuel rods, each of which could vary in diameter by only 0.003 of an inch.

"I like to watch people's faces when they come into this room," Gerber says. "You can't capture this feeling with a model in a museum. You need to walk in here and see something that transformed our world."

B Reactor Tours

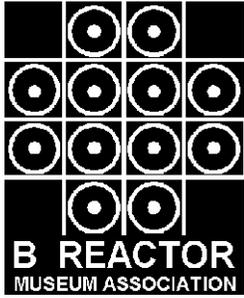
by Maynard Plahuta, Tour Coordinator

The first set of the traditional Hanford Site Tours were held on September 5th and 6th 2007. Eight BRMA guides toured three groups each day for a total of approximately 240 people. Again these tours were well received and enjoyed by the "tourists." As usual the tour schedules filled up very quickly. Fortunately, the public will have several more opportunities for tours yet this fall. The Department of Energy has scheduled two more sets of tours to held October 24th and 25th, and again on October 31st and November 1st.

For the first time ever the upcoming tours will include the use of our recently completed models. The B Reactor physical cut-away model and the virtual video model/displays will be a significant addition to the tours. Obviously we will be "tweaking" our presentations and working to make

more improvements with the use of these added features. On Tuesday, Sept. 25, Hank Kosmata, Burt Pierard and I met with Colleen French (DOE) and Todd Nelson (Washington Closure) for a preliminary discussion on how to incorporate the models into the Tours, and other Tour issues such as scheduling (we will still have to live with the long gap between Tours 1 & 2 each day for the upcoming Tours). These models and displays are bringing us closer to reaching our goal of being a full fledged museum.

BRMA, with the help of guide Bob Whiteside, had the opportunity to provide a tour for approximately 20 representatives of the Nez Perce Indian nation on September 13th. It is reported they thoroughly enjoyed the tour and found it very informative. Great job Bob!



PO Box 1531
 Richland, WA 99352

<http://www.b-reactor.org>
info@b-reactor.org

BRMA Origin And Historical Notes

by Del Ballard

The origin of the BRMA organization dates back to 1990 when members of the Tri-Cities Technical Council foresaw the benefits of long term preservation of the world's first production reactor, the Hanford B Reactor. A committee was formed for the purpose of developing a path forward on how that may be made to happen. The outgrowth of that was our current non-profit corporation known as the B Reactor Museum Association. The dates of some of the necessary and important steps for definition of the organization include: 1st draft of our

By-Laws -November 12, 1990; Articles of Incorporation filed, and the Certificate of Incorporation by WA. State, January 22, 1991; the initial IRS Ruling as non-profit 501 (c)(3) organization August 21, 1991.

Over the past two decades the organization, and the path to achievement of our original goal has experienced many successes and some disappointments. BRMA has been a focal point in garnishing the support of the community, our legislators, regional and national historical interests, and others in championing the goal to see that B Reactor is

preserved. We have not yet made long-term preservation a certainty, but with the work now under way, and the accomplishments to date, how can we fail?

Following is a listing of past and present officers of BRMA. Complete records of Committee chairs are not readily available. The untold work and results provided by the officers, committee chairs, and other members of the organization are to be recognized and commended.

| | President | Vice Pres. | Secretary | Treasurer |
|------|--------------------------------|-------------------|--------------------|-------------------|
| 1991 | Tom Beardon | Jim Stoffels | Del Ballard | Gary Fetterolf |
| 1992 | Don Sandberg | Jim Stoffels | Del Ballard | Gary Fetterolf |
| 1993 | Fran Berting | Jim Stoffels | Del Ballard | |
| 1994 | Fran Berting/Gerry W | Jim Stoffels | Del Ballard | |
| 1995 | Gerry Woodcock | Jim Stoffels | Pam Novac | Roger Rohrbacher |
| 1996 | Gerry Woodcock | Jim Stoffels | Pam Novac | Roger Rohrbacher |
| 1997 | Gerry Wookcock | Jim Stoffels | Pam Novac | Roger Carpenter |
| 1998 | Lyle Wilhelmi | Jim Stoffels | Pam Novac | Roger Carpenter |
| 1999 | Lyle Wilhelmi | Jim Stoffels | Gene Weisskopf | Roger Carpenter |
| 2000 | Gene Weisskopf | Jim Stoffels | Madeleine Brown | Joe Hedges |
| 2001 | Gene Weisskopf | Jim Stoffels | Madeleine Brown | Warren Sevier |
| 2002 | Gene(Resigned)/Madeleine Brown | | Betty Gullely | Warren Sevier |
| 2003 | Del Ballard | Hank Kosmata | M. Brown(Resigned) | Warren Sevier |
| 2004 | Del Ballard | Hank Kosmata | | Warren Sevier/DLB |
| 2005 | Michele Gerber | Hank Kosmata | Norm Miller | Del Ballard |
| 2006 | Kosmata -acting | Hank Kosmata | Bob Smith | Del Ballard |
| 2007 | Hank Kosmata | Norm Miller | Steve Buckingham | Del Ballard |