

THE

MODERATOR

B REACTOR MUSEUM ASSOCIATION

April—June

Vol. 19, Issue 2

Spring 2013

From The Control Room

by Maynard Plahuta, BRMA President

The 2013 B Reactor tour season began on April 1, 2013. We welcome and look forward to another exciting and rewarding tour season filled with large numbers of attendees. We have added several new features to the tour experience this year. Please refer to other articles in this issue regarding those additions. One covers the two new models (the graphite and 100 B Area models) that will be located at B very soon. The other covers the establishment of a gift shop. Frequently, those returning from a tour of B request or ask "where can I purchase a souvenir or memento of my tour?" I'm convinced these additions will provide a more informed and lasting tour.

Things are moving forward again toward legislation that will establish a Manhattan Project National Historical Park. On March 7, 2013, legislation was introduced in the Senate by Senator Maria Cantwell (WA) and referred to the Senate Energy and Natural Resources Committee. Co-sponsors included Senators Lamar Alexander (TN), Martin Heinrich (NM), Tom Udall (NM), and Patty Murray (WA).

Representative Doc Hastings (WA) introduced similar legislation in the House and it was referred to the House Natural Resources Committee on March 15, 2013. Co-sponsors included Charles Fleischmann (TN) and Ben Lujan (NM). If interested in reading the full text of these bills simply Google <Manhattan Project National Historical Park S 507> for the Senate bill, and the same with HR1208 for the House bill.

BRMA, along with ten other local partner organizations, formally launched a partnership to preserve the unique history of the Tri-Cities as it relates to the Hanford Site from 1907 to the present. This group is named Hanford History Partnership (HHP). This partnership organization is under the direction and auspices of Washington State University Tri-Cities. Its initial effort is to conduct oral interviews with pre-Manhattan Project residents and/or descendants of such residents.

BRMA Prepares For Merchandise Sales

Report of the BRMA Sales Committee

BRMA is preparing to begin a program of B Reactor and BRMA-related merchandise sales to the public in cooperation with two long-time Richland merchants.

The sales program was discussed at some length by BRMA's Board of Directors early in March and approved by them. The Board authorized an expenditure limit and appointed a committee of three BRMA members, consisting of Gary White, Gene



Prototype refrigerator magnet image

Woodruff, and Richard Romanelli, to work with local merchants Tom Koepnick and Debra Archer. The goal is to get the program set up and in operation in conjunction with the start of the Hanford Site and B Reactor public tour programs beginning this month.

The impetus for organizing this merchandise sales program came from Tom Koepnick, owner of a long

(Continued on page 2)

The B Reactor Museum Assn. meets on the 2nd Monday of each month at 7 p.m. in the CREHST Museum Auditorium, 95 Lee Blvd., Richland
The next meeting is Monday, April 8, 7 p.m. at CREHST

BRMA Merchandise Sales (cont'd)

(Continued from page 1)

-established Kennewick firm that procures items such as baseball caps, t-shirts, and sweatshirts that have logos or messages on them. Tom approached BRMA President Maynard Plahuta and proposed that BRMA set up a merchandise sales program as a way to provide souvenirs and keepsakes for Hanford Site visitors and raise funds for future BRMA projects.

A key part of the program involves use of office space that Debra Archer has at the 2000 Logston Bldg. Her suite of offices is situated just around the corner from the Manhattan Project B Reactor Tour Headquarters, which is the starting and ending point this year for public Hanford Site and B Reactor tours. Debra is agreeable to working with BRMA to set up a sales operation in one of her offices that is readily accessible to visitor traffic at 2000 Logston.

The members of the BRMA sales committee are starting this sales program with an assortment of items that Tom

Koepnick can procure readily and that have good prospects for being purchased by visitors. They include stainless steel tumblers, tote bags, photo magnets, medallions, caps, t-shirts sweat shirts, and USB thumb drives with historic and recent photos of B Reactor. Another sales item being explored is graphite left over from model preparation and from BRMA's supply.

To check out this new BRMA project, drive out on Hwy 240 to the Tour Headquarters on a work day from the end of April through the tour season. Any purchase you make will benefit you as well as BRMA.



Tote bag in "graphite" colors will have distinctive logo

Membership Report By Burt Pierard, Membership Chair

2013 BRMA MEMBERSHIP DUES ARE NOW DUE.

Our paid membership is 63 people and one Organization (Los Alamos Historical Society). Anyone who has paid and not received their 2013 Membership Card yet should receive it in a separate mailing. To renew, the Form is on this page to clip or print and send in.

This is a public acknowledgement of generous cash contributions to BRMA. The following list covers the period January through March 2013.

Elayne Brower	Cindy Kelly
Dan Carter	C. J. Mitchell
Katherine J. Ely	Richard Romanelli
Maureen Hamilton	Everett Weakley
Bob Horgos	

2013 Renewal and New Member Application

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
 Organization (\$25 up to 100 members; please add \$10 for each additional 100 members)

For Organization 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

Graphite Moved To Tri-Cities Location



Removing the pallets of graphite from the transport truck

See related graphite story and photos on p. 7



A heavy-duty fork-lift was used to move the dense graphite .



Examining the graphite are, from left, Maynard Plahuta (BRMA), Basin Disposal Manager Darrick Dietrich, and Gene Woodruff (BRMA)

Photos by Gary White

100-B Area Model Nears Completion

Reported by Hank Kosmata



The base 8-ft. X 8-ft. model layout with wiring for lights to be used for identifying individual site facilities. Lynn Ver Steeg of Lockheed-Martin is observing.



Aerial view of the B Reactor site

Lockheed-Martin is in the final stages of construction and the 8 foot by 8 foot model of the B Reactor area will be ready to place in the 105 building this month.

A primary purpose of the B Reactor area model is to show the visitor that while the enormous building they are standing in is the heart of the project and seems to be a stand-alone facility, that in fact there were dozens of other buildings and features that were essential to the operation of the B project, some of which were even larger than the reactor building. Another primary purpose of the model is to help the visitor understand the critical elements which led Colonel Mathias to select this site—the Columbia River, the power available from Grand Coulee and Bonneville, and the remote area allowing each reactor project over 300 acres for its necessary facilities.

The story the model and its video components will tell is that in order to remove the enormous amount of heat generated during the operation of the reactor a very large water source such as the Columbia was needed. Then, to further purify and reliably pump that water through the reactor a combination of a huge independent electrical power supply coupled with an on-site steam supply further backed up by high tanks and export water lines were all essential to the safe operation of the reactor.

(Continued on page 8)

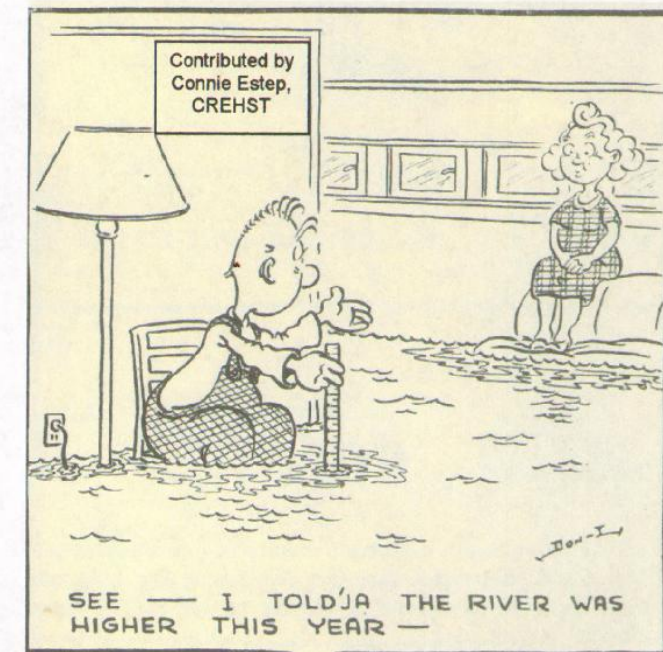


These models of B Reactor site structures have been made using 3-D printer technology. They show impressive details.



The frame that will hold the completed model

Dupus Boomer—by Dick Donnell



A Fermi Was At B Reactor Again During Granddaughter Olivia's Visit Last October



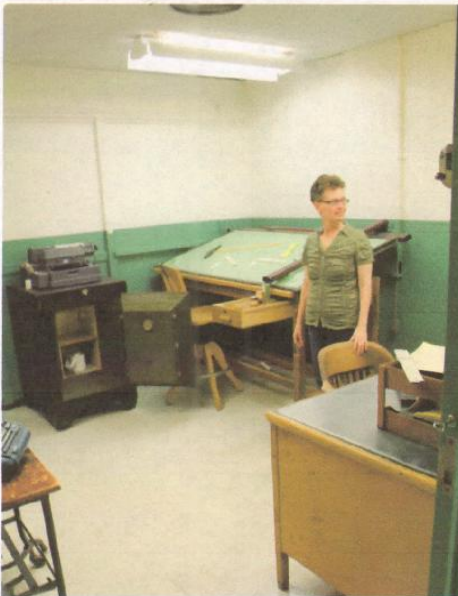
Enrico Fermi's granddaughter, Olivia Fermi, visited LIGO and B Reactor on October 9-10, 2012. She also had a public workshop at the Hanford High School Auditorium and met with students at Delta High School as part of her endeavor to encourage students interested in science, math, and engineering.

Photos by Bob Horgos, BRMA

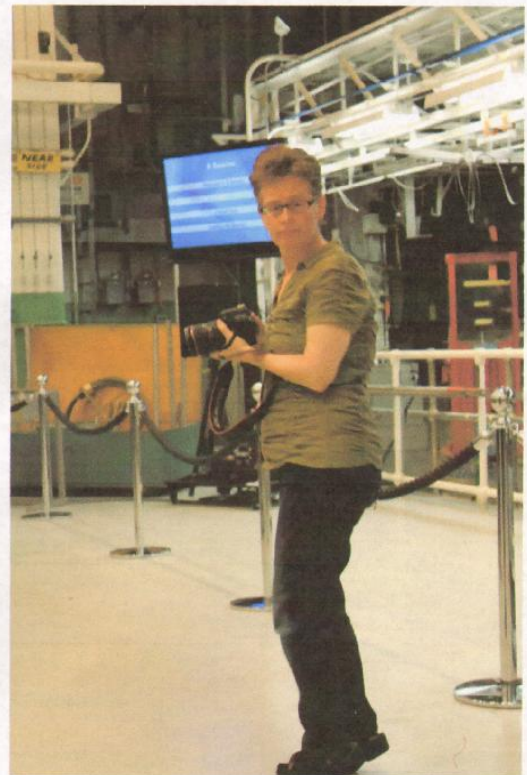


Olivia stands beside the 3/4-scale model of Enrico Fermi that once was situated at a model of CP-1 in the Smithsonian Institute. Cindy Kelly of the Atomic Heritage Foundation was instrumental in getting Enrico transferred to Hanford after learning that changes were being planned that would make him redundant at the Smithsonian.

Olivia considers herself to be a professional photographer, so she and Gary White, BRMA Communication Director, who also is a professional photographer, talked about photo possibilities at B Reactor's front face.



Olivia visited the office that her grandfather used during the loading of B Reactor and then initial start-up. Enrico also used this office during resolution of the Xenon problem.



Bob Horgos' photograph of a photographer in action capturing memories of B Reactor.

Graphite Model Promises To Be Popular Attraction

By Gene Woodruff

The year 2013 is one of transition for BRMA's "B, D, F" graphite blocks. On Jan. 30, 2013, a truck loaded with our four pallets of graphite left the old Central Stores Warehouse on Stevens Drive, destined for two stops offsite.

First, one pallet containing blocks for the display model (see the Fall 2012 *Moderator*) was off-loaded at Lockheed - Martin's shop off Hwy 240. Putting it mildly, Lynn Ver Steeg, the model designer, was a very happy recipient.

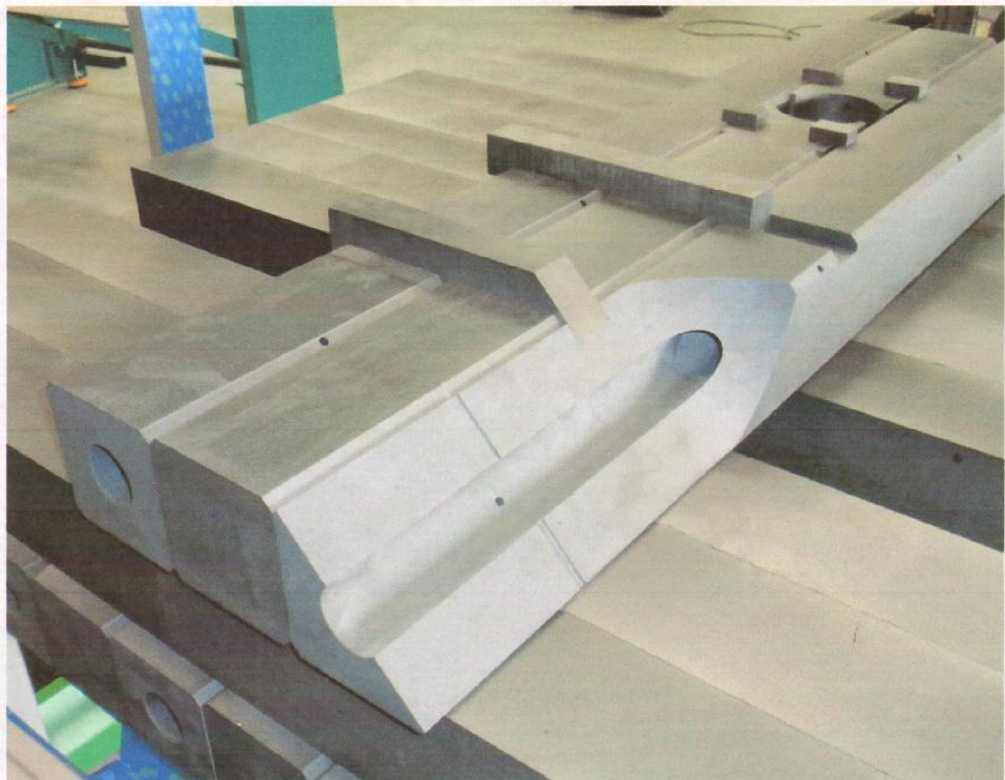
The second stop left the remaining three pallets for storage at Basin Disposal Inc. in East Pasco.

(See photos and story on page 3)

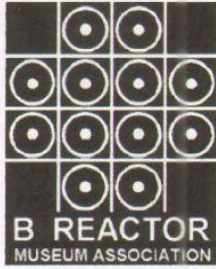
Since then, dust has been flying (and being saved) and machined blocks for the display model are now assembled on their stand. Thanks to Eric Solberg's machining skills, our simple filler block blanks were transformed into keys, keyways, intricately detailed liner blocks for the vertical safety rod channel, and a most impressive cut-away to show the internals of a tube block.

Eric's attention to detail has also removed surface blemishes imparted by years of open exposure to Hanford's weather cycles. The result is an exhibit of B Reactor core construction as shiney as it was 70 years ago.

That machining dust mentioned earlier has been collected and saved for us in anticipation of a possible souvenir market for Hanford graphite even in the finely divided state.



Close-up of model shows the detail and quality of work that are bound to be admired by viewers



PO Box 1531
Richland, WA 99352

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

100-B Aerial Model (cont'd)

(Continued from page 4-5)

A large panel in front of the model will allow the visitor to select from 20 control buttons. At each button a short description identifies the building or feature and tells its purpose and lights on the model will show the location of the feature. Lights will also show the flow of Columbia water as moves from one major feature to another and through the reactor back to the river. Below the short descriptions, a more detailed discussion of the function and significance of each feature is available for the visitor that wants this level of understanding.

In addition, vignettes will provide additional information and background items of interest with respect to the project.

The model depicts the 100-B Area as it was ready to begin operation in the fall of 1944.