

THE

MODERATOR



B R E A C T O R M U S E U M A S S O C I A T I O N

April—June

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

Spring-2011

From The Control Room

by Maynard Plahuta, BRMA President

Coming from the control room is a welcome and a number of deserving thank-you notes. First, I welcome Gary White for volunteering to be BRMA's new Director of Communications. I thank Bob Potter for his valuable service in filling this key chair position in the past. Gary brings his valuable experience and strong credentials to lead BRMA's communications activities. Thanks for joining us, Gary.

Second, I thank Del Ballard and Hank Kosmata for their continued efforts toward developing a three-dimensional B Reactor Complex Model depicting all the support facilities at B. This will be extremely useful for tourists to better understand and appreciate the complexity of B Reactor operations. In discussions with National Parks staff they gave high praises for the concept of having such a model.

Thirdly, I thank Gene Woodruff, Burt Pierard and Norm Miller for their effort toward creating a graphite model of the reactor core using the actual old reactor (B, D & F) excess graphite. This model will assist tourists to better understand how a reactor works.

And lastly, I thank Terry Andre and Steve Buckingham for helping me set up and hosting the BRMA display table at Hanford's State of the Site meetings in Richland and Portland, Oregon. Thanks to all! It is this type of member participation and team effort that ensures BRMA's vitality and continued contributions to our community.

BRMA continues to support and work closely with Cindy Kelly, President of the Atomic Heritage Foundation (AHF). The recent good news is that AHF has been

(Continued on page 3)

B Reactor Tours Report

by Bob Horgos, BRMA Tour Coordinator

The Department of Energy published the scheduled Tour dates on its www.hanford.gov Web Site and announced the on-line registration date of March 8 for the Public Tours and registration date of March 15 for B Reactor Tour reservations. All seat reservations were quickly filled for both types of Tours. There are 30 individual Tours scheduled for the month of April and all seats for those are filled.

Mission Support Alliance (MSA) is responsible for the planning, scheduling, and conduct of all B Reactor Tours and for the maintenance of the B Reactor Facility. As in the 2010 season, MSA has contracted with Indian Eyes, LLC, to provide the services of B Reactor Tour Docents and to schedule their assigned dates and times. Indian Eyes employs the services of 27 Docents for the 2011 Tour season. BRMA currently has eight of those Docent positions for conducting Tours. Three of the BRMA Docents are yet to be certified prior to being scheduled to conduct Tours.

Two of those requiring certification are new BRMA Docents who are replacing two from last year who chose not to participate in 2011.

MSA had a company come to the B Reactor to take panoramic photos of the B Reactor Building interior. A new setup at B Reactor allows Docents to show those panoramic views to visitors. They include a sweeping view of the top of the reactor and of the rear face, areas that are not accessible to the general public. That system was demonstrated to all Docents during a March 30 B Reactor Familiarization Tour (see picture on Page 3).



Gary White Appointed BRMA Communication Director

The BRMA Board of Directors recently appointed Gary White to the position of Communications Director.

Gary started work at the Hanford site in 1974 as a staff photographer for Battelle. Three years later he was in the private sector managing a local communications office serving local businesses as an ad agency designing logos, producing newsletters, and taking photos. He also taught photography at CBC from 1975 thru 1978 at night classes.

He signed on for another Hanford tour in 1985, doing constituency building with statewide agricultural and labor groups, to encourage their support for all things



Hanford as a member of the Westinghouse Hanford Communications Group.

Gary left that position in 1995 due to a Reduction In Force and reopened his advertising agency, where he is again doing work within the private sector supporting their issues and promoting their business.

He has extensive knowledge of the Hanford site and we welcome his support to the BRMA.

Membership Report By Burt Pierard, Membership Chair

2011 BRMA MEMBERSHIP DUES ARE NOW DUE. Anyone who has paid and not received their 2011 Membership Card yet, should receive it with a hard copy of this issue of *The Moderator*. To send in your Renewal, Clip or Print the Form below.

Our paid membership to this point is 60 people. Thirty-three people who have not renewed their dues since 2008 have been dropped from our Membership List.

As a footnote to this list paring, we received a very nice note from Janet Forby Padgett, sister of one of our old-time BRMA members, Larry Forby (who last paid in 2008 and since had moved west of the mountains), that Larry was deceased. Apparently, she wanted to see the Forby name retained on our rolls, so she sent in a new Membership for herself. Thank you very much, Janet.



2011 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
 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

B Reactor Docents Prepare For 2011 Tour Season



Left to right, Richard Romanelli, Bill McCullough, Paul Vinther, Bob Smith, C.J. Mitchell, Del Ballard, Ben Johnson, Pete Mellinger, and Bob Horgos

From The Control Room (cont'd)

(Continued from page 1)

invited to submit a formal proposal to the M. J. Murdock Foundation based on a letter of inquiry AHF submitted earlier. Receiving the invitation is the first step in acquiring a grant; however, the Murdock invitation letter warns that the competition for funds is fierce and demand is great. Cindy is preparing an extensive project proposal to the Murdock Foundation which is the same foundation that provided substantial support for the excellent B Reactor Model located at B.

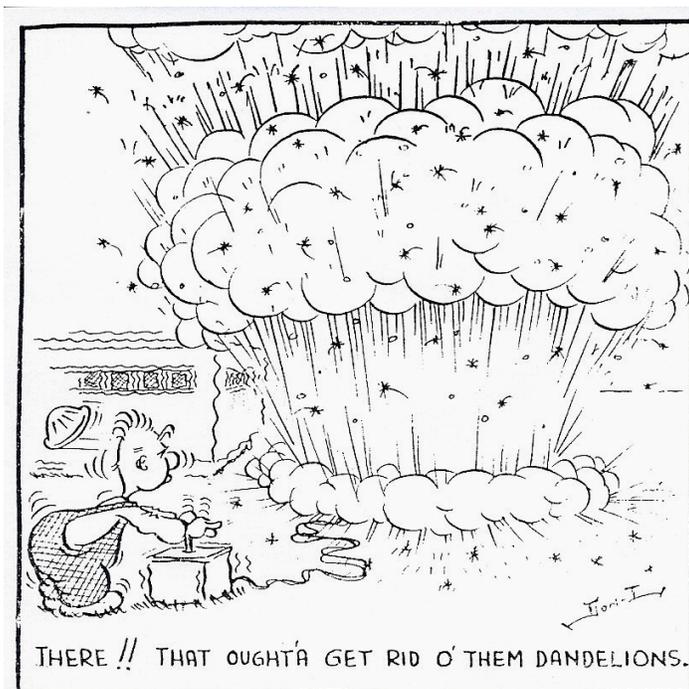
Foundation support would leverage funding from other sources (matching funds approach). Obtaining matching funds is almost a necessity to obtain the Murdock grant. At Cindy's invitation I have committed to her that I personally and BRMA will coordinate the interaction of AHF with leaders in government and corporate and nonprofit organizations in the Tri-Cities and provide advice on the project. We will work with local community leaders to secure the matching funds needed if the grant is approved.

The proposed project has four parts: (1) publication of a 60-page full-color guide to the Manhattan Project in Washington State, (2) development of 30 audio/visual vignettes on Hanford's history, (3) creation of a model of the B reactor complex, and (4) restoration of the Bruggemann warehouse. This 4th part is to preserve the building from further degradation by making "minor life safety changes" and to later fully restore the property, a historic warehouse, and create a visitors' center designed to match its unique architecture style.

For all four projects we anticipate the Murdock

Dupus Boomer

The update of the "B Reactor: First In The World" (frequently referred by us as the Blue Book), and the vignettes used on the tours are in the producers' hands. We anticipate they will be available soon. In addition, MSA's new panorama video shots from atop the reactor will be used in this year's tours. Along with these new features, some recent improvements to lighting and other features will make B Reactor a better museum experience. Thus, we anticipate another successful tour season. Refer to Bob Horgos' article in this issue for more details on tours.



Graphite Committee Report

by Gene Woodruff, Chairman

In the early days at Hanford, B Reactor and its neighbors were known as “piles”, following the handle given CP-1, their predecessor, under the stands in Chicago. There was even an organization within Hanford’s General Electric Co. called Pile Technology.

That’s where this writer was first exposed to the stuff in those piles, while scribing and cutting graphite bars into samples for property measurements and irradiation tests. Our B Reactor still has a neighbor just to the south that qualifies for the title pile, though now it is remnant bars left over from constructing reactors B through N. This pile assembly is anything but orderly—helter-skelter is more fitting. See accompanying picture.

The question for some time has been, are “B-D-F” bars hidden there? If so, is there enough for models or other display uses? A brief visit in December 2010, (see “BRMA Field trip is productive”, in the Winter 2010-2011 *The Moderator*) determined that there were indeed “B-D-F” type bars present, and at the next BRMA board meeting the Graphite Committee was appointed.

In January 2011, the pile was inventoried with the following results:

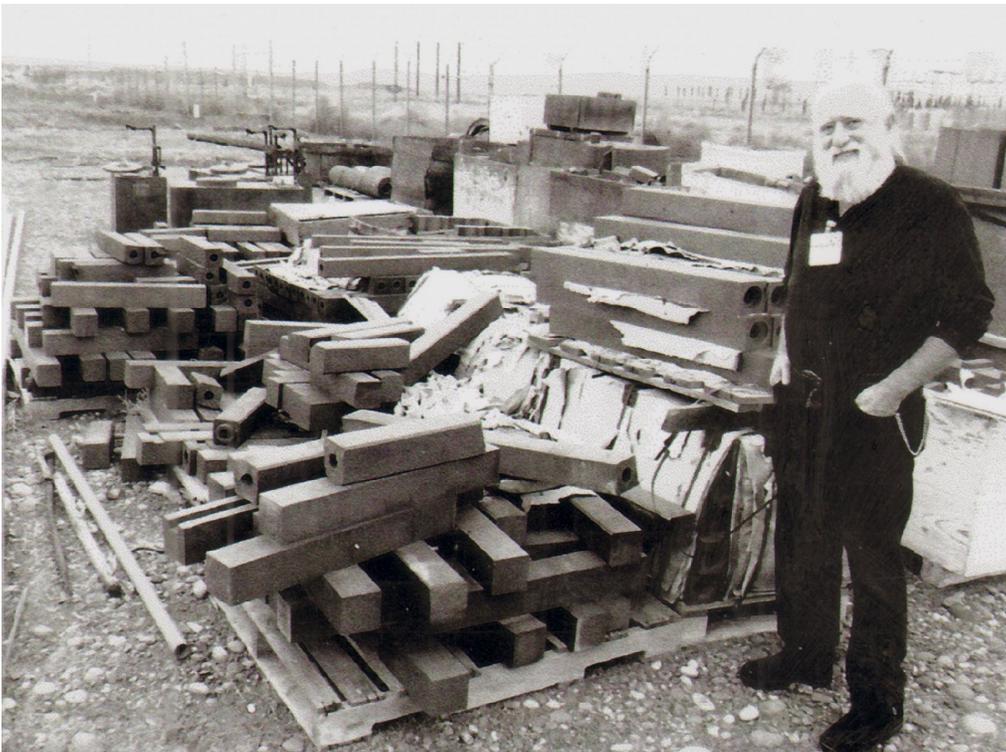
Process Tube Blocks (4 feet long)

- 3 chamfered partials less than 4 feet long.
- 10 unfinished and unchamfered, without “weep holes.”

Filler Blocks (4 feet long)

- 39 chamfered for tube layers
- 42 unchamfered for cross layers.

These were mixed with K and N Reactor type blocks on four pallets and in one box. Finding several bars of different types set aside on a pallet and tagged by other interested parties prompted the idea that “B-D-F” type blocks need to be set aside and tagged for BRMA. A team of volunteer



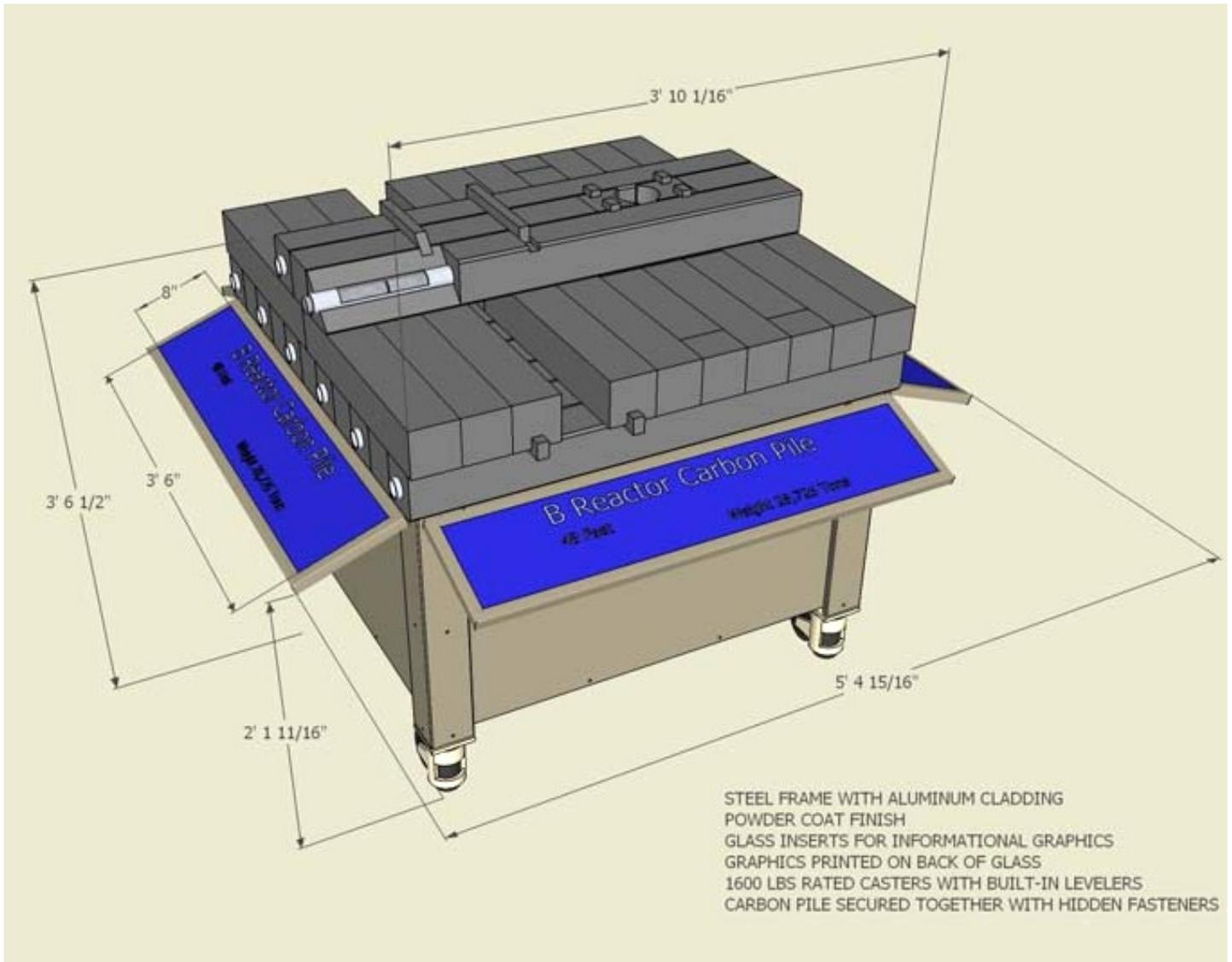
block handlers has been organized and negotiations are under way to facilitate a work party.

Efforts to identify what controls may apply to BRMA’s using graphite bars has uncovered extensive effort in this regard that occurred in 2001 under the direction of then-BRMA President Gene Weiskopf. Correspondence approving the transfer of 327 tons of graphite to BRMA (for use in models or sample sales) has been uncovered but the search continues for evidence that BRMA actually signed a letter accepting the conditions for transfer of the nuclear graphite (including return to DOE of any unused pieces), which is on the Nuclear Suppliers Group Trigger List. The 327 tons were located in several Hanford areas and it appears unlikely all those tons are now collected in B Reactor’s neighboring pile.

Several ideas for using graphite bars in models or displays have been discussed with the Lockheed Group (constructor of the existing cut-away model), currently developing a table-scale model of the complete 100-B Reactor complex. Their considerable experience in modeling B Reactor’s graphite from original drawings has led to enthusiasm for the prospect of working with full-scale bars.

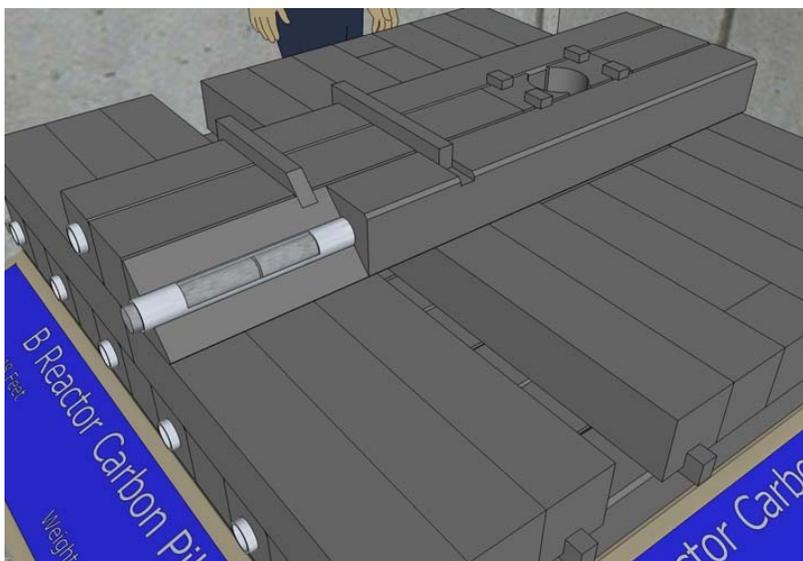
A general sketch of the model we are pursuing is shown on Page 5 of this issue of *The Moderator*. The plan is to fabricate replica portions of a horizontal control rod and a vertical safety control rod (with associated nipples and mounting hardware), if original equipment is not

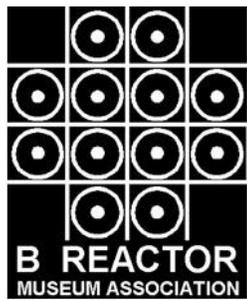
available, for installation in the slot and hole, respectively. Also the title will be corrected to “graphite” instead of “carbon.”



Artist's concept of proposed model to be fabricated and placed in B Reactor. The model would show a typical section of graphite layering

in the "B-D-F" reactors and would be constructed of actual graphite blocks situated in various Hanford Site locations, including B Reactor. The close-up at left shows more detail of the complex graphite fabrication and the position of process tubes in the graphite matrix.





PO Box 1531
Richland, WA 99352

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