

THE

MODERATOR

B REACTOR MUSEUM ASSOCIATION

July—September

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Summer 2014

From The Control Room

by Maynard Plahuta, BRMA President

BRMA is pleased to congratulate the REACH upon its grand opening. It's great to see the wonderful new facility in operation. We wish the REACH much success and look forward to continue working together on further expansion, including Hanford and Manhattan Project displays and presentations.

Congressional legislation to establish the Manhattan Project National Historical Park appears to be moving forward. A positive bipartisan meeting several weeks ago involving the Senate Committee on Energy & Natural Resources and the House Committee on Natural Resources was a very positive advancement. The participants were Senate Chairman Mary Landrieu and ranking member Lisa Murkowski, and House Chairman Doc Hastings and ranking member Peter DeFazio. This is the first time a bipartisan meeting of the chairs and ranking co-chairs of both the Senate and House committees have met on the proposed Manhattan Project National Historical Park. This is encouraging---however, we can never be sure the Park will come to fruition until established by Congress and signed by the President. My personal assessment is that this will not happen until after the November election, but I would like to be proven wrong by positive Congressional action before then. However, I'm optimistically cautious positive action will occur during the Congressional session this year.

The Oak Ridge city historian (Ray Smith) will give a presentation of Oak Ridge's site history at the Richland City library. Ray will give the presentation on July 21st beginning at 7 p.m. This is sponsored by the Oak Ridge

and Richland DOE Offices and the Hanford History Partnership, of which BRMA is a member. Ray will be touring B Reactor while here as well as other portions of the site included in the proposed National Park. Unfortunately I will be out of town and unable to attend but I encourage all to attend if possible.

Thanks to Richard Romanelli for his efforts to get a contract in place between BRMA and the REACH to sell BRMA souvenirs at the REACH. This provides BRMA a source of additional income throughout all 12 months of the year. The vials of B Reactor graphite and boron balls are great sellers at the gift shop near B Reactor Project tour office at 2000 Logston and at the REACH facility gift shop.

Plans for the 70th anniversary of B Reactor start up are beginning to be initiated. We have full community support with a number of entities. Of course we will be working closely with Colleen Clark of RL-DOE. Others include the City of Richland, TRIDEC, the Tri-City Visitor and Convention Bureau, WSU-Tri-Cities, and the Hanford History Partnership. Please give me a call (509-946-1162) with your ideas and suggestions of events and activities to be considered, as well as your willingness to give a helping hand if needed.

BRMA thanks past RL-DOE Manager Mr. Matt McCormick for all his support to preserve B Reactor and to develop improved and expanded public tours of B. We certainly hope DOE Headquarters appoints a successor manager who will continue Matt's legacy. Likewise, hopefully Mr. Doug Shoop, acting RL-DOE Manager, will follow in Matt's footsteps.

The B Reactor Museum Assn. meets on the 2nd Monday of each month at 7 p.m. in a Conference Room at the Richland Public Library, 955 Northgate Dr., Richland
The next meeting is Monday, July 14 -7 p.m. at Richland Public Library

BRMA Charitable Contributors

Dupus Boomer—by Dick Donnell

This is a Public Acknowledgement of the generous cash contributions to BRMA. The following list covers the period, April through June, 2014.

Harold Matthias
 Lloyd Piper
 The Roger Rohrbacher Estate
 Toni Rysdam-Shorre

We're pleased to acknowledge the latest generous donors to BRMA. Thank You!



“Dandelions”
 Contributed by Connie Estep,

Membership Report

By Burt Pierard, Membership Chair

2014 BRMA MEMBERSHIP DUES ARE NOW DUE. Our paid membership is 76 people (4 New) and one Organization (Los Alamos Historical Society). Anyone who has paid and not received their 2014

Membership Card yet should receive it in a separate mailing. To send in your Renewal, the Form is on this page to Clip or Print and send in.



2014 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: \$ _____ Total Enclosed: \$ _____
 (Tax ID # 94-3142387) (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

Hanford Site Tours for 2014

Bob Horgos, Tour Coordinator

Mission Support Alliance (MSA) decided in the off-season that the B Reactor Tours should change in character so that the Tour structure will begin to accommodate the typical tour structure that is generally utilized by the National Park Service at all Park Service facilities. Basically, that change will incorporate a self-guided tour arrangement rather than a total instructional tour with B Reactor docents guiding the visitors throughout the entire B Reactor area. This change has been incorporated for all B Reactor Tours during the 2014 season.

All Tours begin with the reserved seating bus ride from the Tour Headquarters to the reactor. Upon arrival at the reactor the visitors are given a short rest break, after which they are escorted into the front face of the reactor where they are seated. The new tour arrangement consists of the visitors being presented with an introduction video and brief discussion of the basics of the B Reactor. At the conclusion of the introduction, the visitors are presented with a Floor Plan Map of the B Reactor and then the group is split into two sub-groups. Each sub-group is taken on a walk-through tour of the reactor guided by a tour docent, one group going towards the Reactor Control Room and the other through auxiliary services portions of the reactor building. During the walk-through the docents point out the important features of the reactor that are

highlighted on their Floor Plan Map and they also are informed on the audio/visual systems that they can use when they are released for a self-guided tour. After both groups have completed their walk-through around the entire reactor, the groups are given a short free time.

During the rest break the tour docents present themselves at the front face of the reactor and in the Control Room to be available for a more detailed description of those areas. The visitors are given another Free-Time and then they alternate their location so they can get a detailed description of both locations. When both groups have had the more detailed discussion in both areas of the Reactor they are on their own for more detailed looks at the areas or equipment. During this detailed look the docents are available to answer any questions the visitors may have. When the 2-hour tour period has been completed the visitors are directed to re-enter the bus for the return trip to the Tour Headquarters. The trip to the Reactor follows a route on the west side of the Hanford Site and the return trip travels across the Hanford Site to exit along the east side of the Site.

For the first three months of the 2014 season there have been a total of 36 regularly scheduled B Reactor Tours and 31 school groups, plus other special groups of visitors.

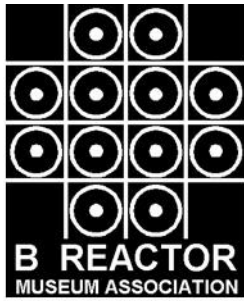
BRMA and The REACH Cooperate On Sales Program

With the official opening of The REACH on July 4, BRMA has added a second outlet for sale of our B Reactor-related merchandise.

There's a compact store situated in The REACH building at 1943 Columbia Park Trail in Richland. Prior to opening on July 4, BRMA and The REACH concluded a consignment agreement in which The REACH added to its store inventory a B Reactor photo magnet, two colors of baseball caps, graphite dust vials, shutdown pellets, and postcards. These items complement the exhibits in Gallery II at The REACH, which presents the first chapter

in the role our area has played in harnessing and deploying nuclear power. In 1945 it was in the form of a weapon that helped end World War II.





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SCRAM — ACRONYM or BACKRONYM?

By Burt Pierard, BRMA Historian

The purpose of this article is to trace the etymology of the term Scram (manual or automatic rapid shutdown of a nuclear reactor) and determine the validity of claims that the term is an acronym. Definitions of Acronym, a word derived from the initial letters of a phrase, and Backronym, a specially constructed acronym created to fit an existing word, will be used.

There is little doubt that the term Scram originated with CP-1. In fact, Leona (Woods) Marshall Libby recalled, in her 1979 book, that the term was coined by Volney Wilson, chief physicist for Instrumentation & Control of CP-1. What Wilson called “scram” rods were actually the 10-horizontal, cadmium coated, control rods. He said that the pile had “scrammed,” the rods had “scrammed” into the pile.

The “acronymists” promote some variation of Safety Control Rod Axe Man and claim it was commonly used at CP-1. This makes no sense since there was no device on CP-1 called a Safety Control Rod. The 2 (not just 1) vertical rods on CP-1 were actually Master Control Rods and officially named “Zip” Rods (designed by Walter Zinn, one of the lead designers and constructors for CP-1). One was winched up and held out by an instrument controlled solenoid. The other was the famous one tied off by a rope, tended by the Axe Man. The former was

the one that dropped prematurely just before lunch and shut down the pile on the first attempt to go critical. It was also the one that Fermi ordered “Zip in, Control Rod 12 more inches out, Zip out” when CP=1 went critical the first time. The Vertical Safety Rods did not appear on Reactor Designs until years later (a point for the “backronymists”).

My first hint that something was wrong with the Axe Man story was reviewing the 1992 BRMA Oral History VHS tape for Bill McCue, one of the original supervisors of the B Reactor Operators. The interviewer asked Bill what Scram meant, received the technical definition, and then asked about the Axe Man story. Bill laughed and said he had never heard that one but it was probably as good as any. In 1995, Bill was interviewed for the 100-B HAER report and produced the Axe Man story as a factual memory. This account was then excerpted and repeated (over my objections) in the “B Reactor: First in the World.” Bob Whiteside (brought to Hanford in 1848 to train Operators) recalls that he never heard the story until the early 1950s.

The “Smoking Gun” is produced by Wikipedia. They quote a 1981 letter from Norman Hilberry (actual Ax Man) describing his role at CP-1 Startup, “...I did not get the SCRAM story until many years after the fact...”