

From The Control Room by BRMA President Dave Marsh

Hello fellow BRMA members, my name is Dave Marsh and I am the newly elected President of BRMA for 2024. I have been the treasurer since 2020. My first year was assistant Treasurer as Del Ballard decided to step down as Treasurer after 16 years in that position. Since that time, I have served on the Board of Directors as the Treasurer.

My background is based on serving 30 years as a full-time employee of various Hanford Contractors to include Atlantic Richfield Hanford (1974 to 1977), Rockwell Hanford Company (1977 to 1986), Westinghouse Hanford Company (1986 to 1996), DynCorp Tri-Cities (1996 to 2001), and Fluor Hanford (2001 to 2004). I retired in January of 2004 from full time employment, then returned to work at the Hanford HAMMER Training Center from April 2004 until January 2015 as a part time instructor for Radiological Safety, Root Cause Analysis, and Corrective Action Management courses. I joined the Docent ranks in the spring of 2014 and am currently the tour coordinator for the Pre-Manhattan Historical Tour and also serve as a B Reactor Docent and continue in those roles today.

I have a BA Degree in Geography and a minor in Anthropology from Central Washington State University. I have been married to my wife Ellen for 43 years and have three children, 8 grandchildren, and 4 great grandchildren. I am a lifelong resident of Richland, having only left the community for short residences in Ellensburg, and Trout Lake Washington. I am involved in our local church as a Deacon and for the past 35 years have been a sound and video technician for our worship teams.

In my support role with BRMA, I have been

involved in many of the projects over the past 5 years most notably the support to Del Ballard in the completion of the document Del began authoring in the early 2000s titled "History of the B Reactor Museum Association, and the Struggle to Save B Reactor." This document records the history and struggles that were required to save B Reactor from "Interim Stabilization" and set the facility aside as a museum. This document will be formally published

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BRMA Election Results For 2024 By Burt Pierard, BRMA Reporter

At the December 11, 2023 Membership Meeting, Officers and Committee Chairs were elected according to our By-Laws. President Robert Franklin presented a slate of nominees who had volunteered and there were no further nominees from the floor. The uncontested nominees were then approved by a unanimous vote.

Committee Chairs are:

Membership	Bob Carosina;
Products and Sales	Rick Bond;
	Burt Pierard;
Interpretive Projects	Ben Johnson;
Govt. and Commun. Re	elations,,,Maynard Plahuta;
Communications	Mark Smith.

The B Reactor Museum Assn. meets on the 2nd Monday of each month at 7 PM, in a Conference Room at the Richland Public Library, 955 Northgate Dr., Richland. Membership Meetings this quarter will be Jan. 8, Feb. 12, and Mar. 11.

Membership Report By Bob Carosino, Membership Chair

CHARITABLE CONTRIBUTION IN HONOR OF JOHN FOX

This is a Public Acknowledgement of the generous \$250 cash contribution made to BRMA by Thomas Moak, in memory of John Fox, one of our founding members who passed away this Fall.

NEW MEMBERS AND CONVERSIONS TO LIFE MEMBERSHIP

During 2023 we welcomed 5 new individual members: Stephen Larson, Mark Jensen, Gene Carbaugh, Thoa Pham, and Tom Mattis. One new Business Member also joined: Xenophile, Bibliopole & Armorer, Chronopolis. (This business also sells BRMA souvenirs at their store located at 2240 Robertson Drive, near the Hanford Visitor Center for the Manhattan Project National Historical Park.)

Several of our existing members converted to LIFE Membership (\$250). New LIFE members for 2023 were Dr. Cameron Reed, Neil Zimmerman, Lloyd Piper, Dave Marsh, Burt Pierard, and Missy Baker Thanks to all of you who support BRMA with your dues and additional charitable contributions.

2024 BRMA MEMBERSHIP DUES ARE NOW DUE

Fourteen people took advantage of the Early Renewal Period for 2024, and have already paid their dues for 2024. In addition, BRMA now has 24 LIFE Members, a group that grew by 6 members in 2023, as individuals converted to LIFE Membership.

Dupus Boomer — by Dick Donnell Contributed by Connie Estep



Ed. Note: Donnell's comment—"We all look forward to Christmas--but many of us don't look forward to it soon enough."

To send in your renewal, the Form is below to: Hard-Copy-- Clip and Send In; E-Copy--Print, Clip and Send In.

Name:		er Application
Address:	City:	State: Zip:
Phone: (h): () E-mail:	(cell): ()(Please p	print legibly)
□ Renewal □ New □ Individual (\$20) or □ Seni □ Society/Group (\$25) Name of		10) or □ Life Member (one time — \$250 (Individual Members Only)
No goods or services were prov	tributions are Tax Deductable. (Ta ided in exchange for your contribut	
	Thank you; please n	mail this B Reactor Museum Association

Franklin's Farewell (not really) Address

by Robert Franklin, BRMA Past President

Happy New Year to you! A new year brings with it many changes, including for the BRMA a new Board and a new President! I want to use this space as my swan song, but I first want to welcome Dave Marsh, former Treasurer, as our new BRMA President for 2024! A big thank you to Dave for stepping up to lead BRMA. I also want to welcome Liza Eschbach at Treasurer and C Mark Smith as Communications – thank you for stepping up to join the board and serve BRMA! For the first time in a few years, we do not have a vacant seat on our board which is wonderful. That little feat is only possible because I'm filling two positions as Vice and Past President, so I didn't go far, but these are roles I'm happy to do to continue to serve BRMA in any way that I can.

My first term started five years ago in 2019, which seems like a lifetime ago and in some ways, it was -Imissed the June meeting that year because my son Lanis was born the night before our June meeting. I still have the card passed around at the meeting hanging up on my wall! Anyway, from what I remember in 2019 we had two big BRMA efforts. The first was the purchase of the Atomic Heritage Foundation gift inventory, a large purchase of over \$10k in goods for Rick Bond to manage and the treasurer to keep track of. The second was the BRMA contribution to the "Hanford Made" video produced by the NPS (that features our own Del Ballard and Steve Buckingham), which is shown before every B Reactor tour and available on YouTube.

2020 was of course defined by COVID (boo!) and we missed several meetings before switching to a virtual format. We made it through and in 2021 we hosted one of our first lecture series on the German Atomic Bomb Project. I'm happy that our lecture series has continued and will, I believe, for the future. I really enjoy learning about all the good work our members and guests are up to!

In 2022, BRMA provided funding to the NPS to put together the Reflection Room(s) in the old water labs out at B, taking the "garage sale" (how one museum expert referred to it as) of artifacts and providing some thoughtful interpretation and space to reflect on the momentous history and scientific/technical achievement that is B Reactor.

Lastly, in 2023, BRMA helped to fund work on the B Reactor and T Plant Virtual Tours and is currently providing subject matter expertise for the tour scripts. I'm proud that BRMA is involved in these projects and continues to prove our relevance and necessity as an organization dedicated to the B Reactor and to supporting the Manhattan Project National Historical Park.

To close I just want to thank you for reading my ramblings and for the pleasure of serving BRMA the past five years as president.

Robert Franklin

From The NPS— Ranger Updates by Becky Burghart, MPHA Hanford Site Manager

Another year is in the books. We have a lot to look forward to in 2024 and a lot to be thankful for in 2023. This past year felt like we hit our stride post-Covid and enjoyed successes on multiple fronts. Kalina skillfully led the education and outreach program this year engaging with new and familiar community partners. We collaborated with the REACH museum on many programs including the popular Junior Ranger Park Explorers program this past summer. We also participated in Pop-up Playdays with the City of Richland Parks and Recreation and co-hosted a Junior Ranger Day with Sacagawea Historic State Park in June. We also attended many STEAM and STEM nights at local schools. We collaborated with the Washington Trust for Historic Preservation to host 45 high school students from around the Pacific Northwest for a week-long residential program where students learned about many aspects of the Manhattan Project. Jen Pollard, our 2023 Teacher-Ranger-Teacher, developed a high school level nuclear chemistry lesson plan that will be a great addition to our education portal and a helpful resource for educators. Alexana Bueno served as the Latino Outreach intern for several months this past summer. She dug into researching the role of Latinos in the Manhattan Project.

In addition to a busy outreach program, we made big strides on the digital side including finishing the layout of the park website and collaborating with BRMA to develop a B Reactor virtual tour, which is targeted to go live in April. We collaborated with students at Eastern Washington University (EWU) who wrote several articles for the park website.

In FY23 we had a total of 73,574 park visitors (across all three units). Visitors include folks who attended DOE tours such as the B Reactor tour to people who attended ranger programs or visited one of our visitor centers. We reached about 9.5 million (yes, million) people on social media, and we now have a total of 26,475 followers on social media (Facebook, Instagram, and Twitter). For the NPS app, 382,552 people accessed park content, and we had 631,180 unique visits to the park website in FY23.

In 2024, we will be working with EWU staff and students to develop materials about downwinders. We also have several big projects in the works with Washington State University including developing the first podcasts for the park. The podcasts will focus on sharing under-told stories of the Manhattan Project including tribal perspectives and the role of community organizations in the establishment of the park (yeah that is you BRMA).

Next year, we plan to build out the education section of our website to include more lesson plans and to share our

BRMA 2023 ANNUAL FINANCIAL REPORT 1/1/2023 through 12/22/2023 By Dave Marsh, BRMA Treasurer					
INFLOWS					
Cash Out CD (For New CD)	\$26,884.51				
2023 Donations	\$ 575.00				
2023/24 Dues	\$ 505.00				
Life Member Dues	\$ 1,500.00				
Souvenir Sales - Octopus Garden	\$ 1,534.50				
Souvenir Sales - Xenophile Bookstore	\$ 29,994.06				
Souvenir Sales - Visit Tri-Cities	\$ 118.79				
TOTAL INFLOWS		\$ 61,111.86			
OUTFLOWS					
Costs for B Reactor Virtual Tour	-\$ 3,008.22				
BRMA Website Maintenance	-\$ 1,061.33				
P.O. Box 1531	-\$ 226.00				
Appreciation Gift Cards	-\$ 372.70				
Bookstore Map-Post Cards	-\$ 64.86				
Souvenir Re-Supply	-\$16,527.12				
Souvenir Misc. Expenses	-\$ 75.01				
Souvenir Sales Storage-Atomik Prop.	-\$ 780.00	<u>-</u>			
Purchase 24 Month CD	<u>-\$ 20,100.00</u>				
TOTAL OUTFLOWS		-\$ 42,215.24			
OVERALL TOTAL		\$ 18,896.62			
SOUVENIR INVENTORY VALUE AS OF 12/23	BRMA Cost \$ 11,400,	Retail Value \$20,700			

From The Control Room

(continued from Page 1)

early in 2024 and made available to BRMA members. It has been a joy for me to work with Del and other BRMA members to take on the task of completing this document and bringing it to completion. In the process, I have learned so much about BRMA, the struggle for preservation of B Reactor and about present and former members of BRMA.

It is my pleasure to be able to serve as the new President of BRMA and I want to thank Robert Franklin for his service over the past 5 years and for his willingness to continue in the role of Vice President to help me learn the ropes.

Until next time, Dave

Ranger Updates

(continued from Page 3)

most popular hands-on activities like Dice-o-tope. For the hands-on activities, we will include directions and files like the 3-D print files of the atomic bomb models to make those resources available to educators (and others). We are currently working with the REACH Museum on an alternate field trip experience with the B Reactor being closed for the next several years.

I look forward to working with all of you in 2024 to continue sharing the many stories of the Manhattan Project. Becky

Tours Report By Dave Marsh, BRMA Reporter

Since our last report on tour attendance and number of tours conducted, attendance on tours has increased dramatically. Since the notice that the Reactor would be shut down for tours for two years (as mentioned in last quarters' Moderator), tour attendance has been near 100% of the available positions on B Reactor tours.

As you probably remember the Pre-Manhattan Historical Tours begin in May and are conducted through

the end of October. The attendance on these tours was much greater than last year, partly because of a bit of an earlier start and the impact of the closure of B Reactor for next year.

The number of tours conducted for each of the two tours (B Reactor and the Pre-Manhattan Historical) and the number of visitors for each are provided below.

Month	B Reactor Tours	Pre-Manhattan Tours	Visitors To B Reactor Tours	Visitors To Pre- Manhattan Tours
October	36	8	1220	123
November	22	0	817	0
October & No- vember Totals	58	8	2037	123
Totals for 2023 Season	332	58	12009	890

Total numbers for 2023 are: 12899 total visitors, and 390 total number of tours conducted. Similar to last season, Indian Eyes employed over 25 Docents to perform the tours. There were several new members to the Docent team and it is a good indicator of the strength of the program when new members join the ranks of the Docents.

Anne Vargus and Julie O'Neill continue in the roles of Tour Coordinator and Program Technical Representative (respectively), and they are very much appreciated by the tour program and BRMA for the continued work they do in keeping the program running smoothly.

Since the 2023 season will be different in that no B Reactor tours will be conducted, the winter will be spent working with Anne, Julie, the National Park Service and the Department of Energy to determine how tours will be conducted next year and what changes may be necessary due to the closure of B Reactor. BRMA continues to work with all participants and other Docents to brainstorm what might be next year. The Winter Moderator hopefully will contain tour information based on planning during the off season relative to potential changes for the upcoming tour season.

At the National Park Committee meeting held on November 30th, both the Department of Energy (DOE) and the National Park Service (NPS) presented compelling reports on the 2023 Tour Season for the Manhattan Project National Park Sites. The DOE's report highlighted significant achievements, including a total of 13,000 visitors, marking the second-highest attendance since the park's inception in 2016. Notably, visitors from every county in Washington State, with only four exceptions, and 53 different countries contributed to the diverse attendance. The visitor center experienced a notable increase, with the attendance of 3,800 individuals not participating in the tour but exploring the center—a figure that doubled since 2019. Furthermore, the announcement of B Reactor closure for renovation resulted in a swift booking of nearly every available tour spot within two days.

On the NPS front, the combined statistics for all three Manhattan Project National Historical Park (MAPR) sites revealed a robust season with nearly 43,000 total visitors. This encompassed 16,432 formal tour attendees and 242 special event visitors. The NPS distributed 2,800 junior ranger books, engaged with 430 student visitors, and reached an additional 1,100 students through in-school teaching. The Park's online presence was notable, with 600,000 visits to the MAPR NPS website and a steady increase in app, website, and social media interactions following the release of the Oppenheimer movie. Impressively, the app recorded 382,000 uses, including 1,600 offline instances. The top four cities accessing NPS content were Seattle, Nashville, Albuquerque, and Phoenix. On Facebook, the NPS reached an impressive 9.5 million people, marking a 15,000-follower increase from 2022.

Dick Groves Visits Richland by Dave Marsh, BRMA Reporter

On November 1, I was invited to attend a dinner gathering at Lulu's Restaurant in Richland to meet with Dick Groves, Leslie Linke, Matt Mullins, Ralph Graves and Don Sorenson to discuss what Dick calls "The Big Three".

Introductions for those in attendance are:

Dick Groves has made several trips to the Tri-Cities as part of the research he is doing on a story about the Manhattan Project sites and personnel. Dick is the Grandson of General Leslie R. Groves, the commander for the Army Corps of Engineers for the Manhattan Project during World War II.

From Oak Ridge – Matt Mullins. Matt is the Director of Marketing and Communications for the American Museum of Science and Energy Foundation - which operates two museums, the American Museum of Science and Energy and the K -25 History Center. He has a background in network and cable television. He reports that he's currently developing "a statewide marketing campaign encompassing print and digital tiers, a very cool podcast with an amazing guest list, web and social media... a virtual classroom placing AMSE educators anywhere a classroom meets and an extensive media catalog." (Reading that, I'm thankful he has time to join us.) From Los Alamos – Leslie Linke. Leslie was born and raised in Los Alamos, and worked for the Los Alamos National Laboratory for 38 years. Upon retirement, she volunteered as a docent and tour guide for the Los Alamos History Museum. She heads the Financial Committee for the Society's Board. They're currently raising money to renovate the Oppenheimer House, whose interiors you'll have seen in the new "Oppenheimer" movie.

From Hanford - myself and Don Sorenson, who is well known in the BRMA circles. We were joined by a long time family friend of Dick Groves, Ralph Graves. Ralph is the former District Commander for the Seattle Army Corps of Engineers District. Ralph is currently a Civil Engineering Senior Advisor in the Seattle area.

It turns out that Robert Franklin was not available to meet that evening due to other commitments, so he asked if I would sit in for BRMA and I gladly accepted. The 6 of us gathered for dinner and Dick began to share his vision for more integration and sharing between the three major sites of the Manhattan Project National Historical Park. The three being Hanford, WA; Los Alamos, NM; and Oak Ridge, TN.





The two photos above are of Leslie, Matt and Dave at B Reactor and T-Plant. Dick called this the "Big 3", referring to Leslie, Matt and Dave as representatives of the three sites.

We three look forward to opportunities to collaborate and share information that brings the 3 legs of the Manhattan Project National Historical Park together telling our own stories but linking those stories to the other two sites. As the winter progresses, undoubtedly there will be more information shared about this collaboration.

From Our Gift Shop By Rick Bond, BRMA Products and Sales

Because the word got out in September that the MAPR-B Reactor tours were not going to run for the next two years the tours this past October and November were full right up until the end. The packed tours translated into many visitors shopping at the gift shop right up until the end of the season. When the tours ended our sales really slowed down but hopefully they picked up in December due to Christmas shopping (the numbers are not in yet). Please remember that just because the tours have ended, Xenophile Books and our gift shop are open year round. Please continue to support both causes by shopping in the off season. Steve Woolfolk and/or Brian Sheldon will generally be there from around 10 am until 4:30 pm Monday through Saturday. BRMA would like to extend our most gracious appreciation to Steve and Brian for their generous support of our gift shop this past year.

Gift shop sales were GREAT this year – about 3 times last year's sales. Granted sales were down in 2022 due to COVID restrictions, but still they were more than twice our best year's sales before COVID. Total sales for the year were almost \$30,000 and we made a profit of almost 60% of our total sales. Considering that our shop is not in the MAPR Visitor's Center but is located about two blocks away (2240 Robertson Drive –about two blocks away from the MAPR Visitor's Center), many of our guests did make the extra effort and the sales reflect it. BRMA can't thank the docents and the Visitor's Center staff enough for talking up our gift shop and directing visitors to it.

In addition to our Xenophile Books gift shop sales we continue to have great support from The Octopus' Garden which is located in Uptown Richland (1327 George Washington Way, Richland). Total sales at The Octopus' Garden were about \$1,500. We also did a few hundred dollars in sales at the Tri-City Visitor's Center. BRMA can't thank these businesses enough for their continued support and we encourage our members to support them.

Others I would like to thank for their support of the gift shop are Jan Jones for ordering and displaying the jewelry we sell at the gift shop, Bill Turner (Bill Turner Woodworks if you have any small woodworking or restoration projects) for making the B Reactor clocks, Robert Franklin and the Hanford History Project for donating Geiger Counters and ring dosimeters for sale in the gift shop, Debbie Burnet for product support, and Teri Andre for advertising and product support.

Last but not least I would like to thank those of you that continue to support BRMA and our local national park by shopping at and supporting the individuals and shops mentioned above. Please stop by any or all of the locations and check out all the amazing items they offer. Don't forget to tell them BRMA sent you. I also want to thank Digital Image in Richland, Mutant Printing and Promotions and Atomic Screen Printing in Kennewick for their continued support of MAPR, BRMA, and our gift shop.

BRMA was formed in 1990 to advocate for the preservation of the B Reactor as a "museum" and now our primary mission is to support our local unit of MAPR – the B Reactor. As a non-profit organization with an all-volunteer staff our time and resources are limited, and it is through the gift shop proceeds that we funded interpretative projects at the reactor for the last 15+ years and will continue to do so in the future.

Dave Visits Oak Ridge By Dave Marsh, BRMA Reporter

October is the time to travel to the east coast to see the fall colors and this fall was no exception. BRMA treasurer, Dave Marsh traveled with wife Ellen to take in the fall colors from Tennessee to Maine during the month of October and since we were able plan the trip somewhat in advance of our travels Dave was able to schedule a visit to Oak Ridge Tennessee and participate in several activities while there.

The first was to schedule a bus tour through the American Museum of Science and Energy. The private museum is located in the city of Oak Ridge and conducts guided tours throughout the year to various locations that are part of the Manhattan Project National Historical Park. The logo for the tours is shown below as well as a photo of the entrance to the museum.





The tour lasts about 3.5 hours and is narrated by a volunteer of the museum and visits three primary sites: The Y-12 Facility, Oak Ridge National Laboratory and the K-25 History Center. The second leg of the tour was scheduled to travel to the X-10 Reactor (the precursor for B Reactor), but due to a delay at the security checkpoint for our bus and the fact that there is some Decommissioning activities taking place adjacent to the X -10 building we were not able to get close to this historic reactor. This was a major disappointment for Dave because of the ties between X-10 and B Reactor, but the tour was very informative and enjoyable. As one can imagine, the differences in the tour programs between Hanford and Oak Ridge, as well as the presence of the actual museum which contains many exhibits associated with Oak Ridge history and continued work for the Department of Energy. We enjoyed the narration and the opportunity to see most of the site that is accessible to the public.

Following the bus tour, Ellen and I had made arrangements to meet with National Park Service representatives at the park headquarters one of the original Elementary schools in Oak Ridge. The Elementary school is now identified as the Children's Museum of Oak Ridge. We were able to meet up with NPS employee Matt Klein, whom Dave had been working with on the B Reactor Virtual Tour video preparation. Dave and Ellen also met another NPS Employee Ean Wilder and the Park Superintendent, Nicki Nicholous for a brief introduction. Dave and Ellen were then escorted by Matt and Ean to see many of the historic sites in Oak Ridge. A walk through of the Children's Museum where the NPS staff have offices. Nicki provided Dave with a large packet of information relative to the Oak Ridge leg of the Manhattan Project National Historical Park and local National Parks. Nicki serves as the Superintendent for several National parks located near Oak Ridge. Following our discussion with Nicki, Dave and Ellen were escorted to the Friendship Bell (See photo below), The Guest House where many of the Manhattan Project staff stayed during the early phases of the Manhattan Project. We also visited the Oak Ridge Iconic Manhattan Project Army Chapel (no photo). It was also interesting to see many references to Atomic Energy throughout Oak Ridge (See Photos below) and the similarity to the city of Richland and their Atomic Heritage. We were treated as very important guests during our visit and we look forward to completing the Manhattan Project site tours with a trip to Los Alamos in the spring.

Oak Ridge Pics (continued from Page 8)



International Friendship Bell



"Secret City Acadamy"



Oak Ridge High School Atomic Symbol

The Octopus' Garden

"We have fun stuff!"

Books, incense, toys, Gnomes, socks, candles, buttons, bobble-heads, lunch boxes, t-shirts, games, cards funky home décor, keychains, rubber chickens, posters, and oh, so much more.

1327 George Washington Way Uptown Richland 509-946-0077

"Of *Critical* Concern" A Special BRMA Presentation By Dave Marsh, BRMA Reporter

The Public Meeting for BRMA was held on Monday December 11 at the Richland Library. We were very pleased to have one of our members, Mark Jensen, present a history of Criticality events from around the world. Mark has had a special interest in Criticality events ever since his assignment as a Reactor Operator at N Reactor and subsequent work in the Criticality Safety Group for Hanford Contractors. Mark has over 30 years working on the Hanford Site and it was a pleasure to have him share some of that experience with us. Mark described and shared details of criticality accidents of special historical concern from 1945 to the present. We had about 30 attendees at the presentation, which was part of our regular monthly Mark described the investigations of meeting. causes and consequences of two Cold War era Hanford accidents and the 1999 criticality accident at the JCO Fabrication Plant in Japan. Mark also provided a "scorecard" of the total known number of criticality accidents with a breakdown of Mark provided detailed facilities worldwide. information relative to the extremely small amounts of active material (Plutonium or Enriched Uranium) which was actually fissioned during many of these events which demonstrates the tremendous amount of energy involved in nuclear fission. BRMA is very fortunate to have members that have such varied backgrounds and are willing to share their information with BRMA and the public.

If any of our members or readers have topics they wish to present at future BRMA meetings, please contact us at the email address at the end of this copy of the Moderator.

Xenophile Bibliopole &

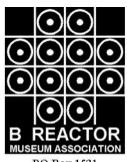
Armorer Chronopolis

So Much More Than A Used Book Store

Collectible Science Fiction, Movie Posters, Movie Memorabilia, Retro Futuristic Toys, Games and Action Figures. We also boast a Mini Museum dedicated to Hanford and the Manhattan Project.

2240 Robertson Dr, Rich. (Horn Rapids Indust. Pk) 509-375-7505





PO Box 1531 Richland, WA 99352

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