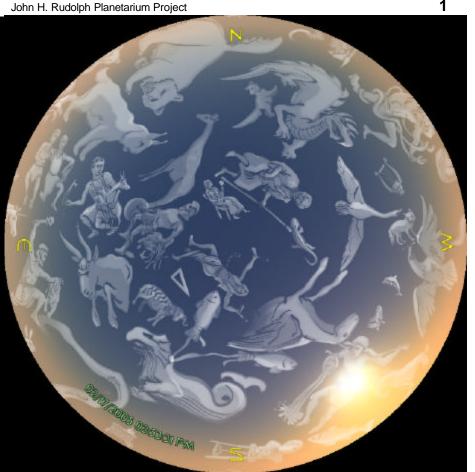
# Reach for the Stars!

The Battle Point Astronomical Association Presents

The John H. Rudolph **Planetarium Project** 2006



Digitarium Alpha Projector planetarium image of the constellations from Greek and Roman Mythology

#### The Take Off — A Dream Is Launched at Last!



The late John Rudolph envisioned a planetarium in the Edwin E. Ritchie Observatory from the very beginning and included the idea in the Battle Point Astronomical Association (BPAA) Charter. He saw the planetarium as an effective teaching tool particularly for children, but for anyone interested the kind of introductory exposure to astronomy possible through exciting and informative planetarium shows. Rudolph said it best:

We believe that the Ed Ritchie telescope coupled with planetarium presentations is an outstanding teaching combination. We hope that some young people will be inspired by the experience we can offer to take up scientific pursuits and contribute to our knowledge of the universe during the course of their lifetime. At minimum, a

student who is exposed to the knowledge we can dramatically impart will have more appreciation for the miracle which surrounds us, and will be much better equipped to live and succeed in this remarkable time of the greater exploration of our universe.

Memorial to a remarkable man: Since the day John Rudolph arrived as a starry-eyed young architect fresh from New Jersey and Princeton University, creating a planetarium was almost the only thing he didn't accomplish during his fifty-year sojourn serving the Bainbridge community. Rudolph was one of those rare people with astronomical ideas and the gumption to go after them, so his contributions to Bainbridge Island were legion. They included everything from spearheading the creation of our first public library, to the transformation of Battle Point Park itself from an abandoned military installation to the beautiful park it is today — complete with a unique haven for amateur astronomers that Rudolph and scores of volunteers built out of a derelict Army radio facility — the Edwin E. Ritchie Observatory.

It's no wonder that, after Rudolph passed away, his friends and fellow astronomers decided to realize his dream of a planetarium for him; and the **John H. Rudolph Planetarium Project** was born.

**Just one little hitch:** When Rudolph designed the BPAA meeting room in 1994, he included specifications for an inhouse dome for planetarium shows. However, in all these years there has been no suitable planetarium projector on the market. The available projectors were either:

- far too expensive for a small community,
- too unwieldy for portable shows in public schools
- not sophisticated enough educationally

But, to BPAA's delight, everything changed in 2003 when Digitalis Education Systems, Inc. of Bremerton developed a reasonably priced, educationally rich and versatile, highly portable planetarium system. With the availability of this unique new system, John Rudolph's final dream is now within reach. All that is needed is funding support from the Bainbridge community.



John Rudolph's original architectural model for the observatory complete with a planetarium in the meeting room.

# The John H. Rudolph Planetarium Project Plan

#### **Project Mission**

Through exciting and informative planetarium programming, it is BPAA's hope to inspire budding astronomers of all ages to reach for the stars!

#### Statement of Intent

The Battle Point Astronomical Association will purchase and present a versatile and portable planetarium system composed of state-of-the-art equipment with accompanying programming. A team of BPAA docents will be trained to conduct planetarium programs both in public schools and at the Ritchie Observatory in Battle Point Park on Bainbridge Island. It will be affordable programming suitable for the grade school, middle school and high school environment and for adult astronomers as well. The Ritchie Observatory will be modestly remodeled to include an astronomy display area in the lobby and a custom-designed semi-permanent dome in the present meeting room for in-house planetarium shows.

To fulfill this intention, the BPAA will carry out a fundraising campaign, purchase equipment, train docents, do minor remodeling, and initiate planetarium shows — all as financing becomes available.

#### The Planetarium

**The Digitalis Alpha Projector:** This fisheye-lens, electronic projector is an ideal instrument for state-of-the art planetarium shows both in the Ritchie Observatory meeting room and in schools and other venues. At 32 pounds, the projector is highly portable. The Digitalis Alpha runs a sophisticated software program called Stellarium that includes stunning Hubble photographs and allows for program development — an exciting



option for astronomers interested in program design. Also, Digitalis includes a set of excellent pre-designed planetarium shows.

**The Dome:** The target dome size would fit a classroom of children, their teacher, chaperones, and the presenter, totaling about thirty-five people. BPAA has chosen two domes:



- Digitalis offers a portable, fabric, 16' dome, weighing about 35 pounds, inflated by a fan weighing under 30 pounds. This dome would be excellent for traveling planetarium shows particularly in schools.
- 2. A semi-permanent dome will be constructed in the Ritchie Observatory meeting room for inhouse shows.

**Docents**: BPAA will require informed astronomer docents to run planetarium shows. There are already twelve BPAA members excited about volunteering to present onsite planetarium shows. Ease of handling the Digitalis system makes training very doable for docents and possibly interested school teachers. Also, some of BPAA's senior members are no longer able to climb the

observatory stairs to lead telescope tours. Given that planetarium shows would be on the ground floor, they could be a venue for once-active members to continue sharing their years of experience and knowledge.

#### **Potential Audiences for the Planetarium**

- Bainbridge public school children and beyond: BISD curriculum administrator Faith Chapel expressed definite interest in BPAA's potential planetarium program being offered to Bainbridge school children. Ms. Chapel felt either a traveling show coming to the school or a field trip to the observatory would be an excellent adjunct to the new astronomy curriculum. It is possible that an economical planetarium show would be used widely throughout Kitsap county and even farther afield on the peninsula.
- Special groups such as Scouts, 4-H, etc.: These groups visit the observatory now and would in all likelihood enjoy planetarium shows as well as the telescope tour.
- **BPAA** astronomers: The planetarium could be a teaching/learning tool, and a programming adventure for BPAA members.
- **Astronomy Class:** The planetarium could be used by Paul Middents, professor of Astronomy for Olympic College, in teaching the BPAA astronomy courses on Bainbridge Island.
- **Teachers:** Teachers are required to continually educate themselves, keeping current in their professions. BPAA planetarium shows could help them meet their educational requirements.
- **General public attending Star Parties and Astronomy Day:** Planetarium shows could run during the various public events BPAA now holds at the observatory.
- **Students of Celestial Navigation:** This audience was suggested to Planetarium Committee members, but we have not yet had an opportunity to investigate whether they could use the planetarium.

#### **Fundraising Plan**

**Halfway There Already:** To date, BPAA has received \$11,000 in donations toward the planetarium and has been granted \$6,000 more by the Park Foundation. To raise the total of \$35,000, we need only \$18,000 more. The purchase list is simple. Besides the equipment described above, a minor space remodel and the construction of the in-house dome — appropriate chairs are the only other need. (See **Addendum One** for the detailed project budget.) The following fundraising efforts will be made to reach the budgeted target:

- **Fundraising Events:** A few well chosen events that are associated with John Rudolph in the community's mind will be held during the project fundraising period.
- A Telephone Campaign: A team will be created to telephone community members asking for donations.
- Pursuing Potential Grantors and Fundraising Partners: Kiwanis, Rotary, Bainbridge Island Community Endowment Fund, and other local granting agencies are being approached.

Project Time Frame: January, 2006 to June, 2006.

**More than fundraising:** This campaign is about more than simply raising funds. It is being carefully planned and presented to the community to accomplish several purposes:

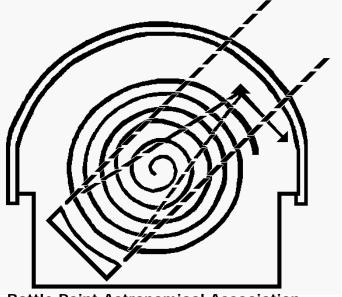
- Building community excitement and ownership for the planetarium, which builds our audience
- Exciting interest in astronomy
- Raising the necessary funds
- Interesting potential volunteers
- Giving the community a chance to both celebrate John Rudolph and his many contributions to this community, and to contribute to his vision.

#### Touch Down!

The **John H. Rudolph Planetarium** is a dream that has been long in the making, but at last its time has come! The Battle Point Astronomical Association hopes that this project proposal will:

- inspire grantors and donors to assist us to help budding astronomers reach for the stars, and to
- join us in honoring one of the remarkable men who shaped Bainbridge Island into the wonderful community it is today.

# Reach for the Stars!



**Battle Point Astronomical Association** 

# **Addendum One**

## John H. Rudolph Planetarium Project Budget

#### **Basic Equipment/Space Needs:**

<ul> <li>Digitalis Projector and accessories</li> <li>Digitalis Portable Dome: 16'</li> <li>Replacement lamp</li> <li>Tax at 8.6%</li> <li>Shipping</li> <li>Chairs</li> <li>Built-in, removable meeting room dome</li> <li>Digitalis Planetarium Programs</li> <li>Stellarium Planetarium software</li> <li>Limited remodel of observatory space</li> <li>Total Budget:</li> </ul> Already Raised: <ul> <li>BPAA planetarium donations received to date</li> <li>Granted by the Park Foundation</li> <li>Total:</li> </ul>	\$4,650.00\$400.00\$1,916.00\$1,54.90\$3,200.00\$3,500.00(free)\$3,429.10\$35,000.00(\$11,000.00)(\$6,000.00)
Total Budget:Already Raised:	\$17,000.00
Total yet to be Raised:	\$18,000.00

#### **How to Donate**

All checks may be made out to Battle Point Astronomical Association or BPAA. BPAA is a 501(c)(3) Tax-Exempt Organization, and any contributions to it are tax deductible to the fullest extent of the law. Donations may be mailed to:

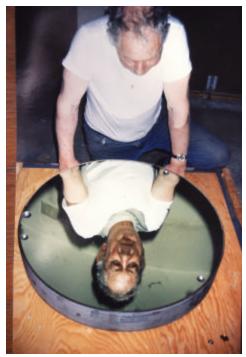
**Battle Point Astronomical Association** 

P. O. Box 10914 Bainbridge Island, WA 98110

Other giving options: BPAA has arranged for the receipt of gifts made and paid by credit card — either Visa or Mastercard. Donors may simply furnish BPAA with complete donor name & address, card type (Visa or Mastercard), card number, expiration date, and the amount of the gift. Donors may phone in this information to (206) 842-9152, send it to BPAA in writing, or request a form from us that can be filled out with the above information and returned to us. Further giving options, such as appreciated stock, can be arranged upon request.

# Addendum Two

## A Little History Puts the Planetarium Project in Perspective



Ed Ritchie grinds the telescope mirror.

Battle Point Astronomical Association started at a breakfast meeting in the former Dougal's Restaurant in 1993. John Rudolph was the park architect for Battle Point and knew that Bainbridge Island Parks and Recreation District (BPIRD) was considering demolishing the park's Helix Building. The concrete building was a former Army radio station during World War II and was past its prime. Rudolph, Ed Ritchie, and Mac Gardiner decided to transform the derelict building into an observatory for amateur astronomers instead. In one day, they wrote up their ideas and presented a polished proposal to BPIRD the next evening. It was accepted and Battle Point Astronomical Association (BPAA) was born.

Mac Gardiner raised funds and secured the donation from Boeing of a 27 ½ inch surplus Star Wars mirror suitable for a telescope. Ed Ritchie designed and built a grinder for the mirror, shaped it, and then designed and built the telescope to house it. Rudolph did the architecture and supervised the remodel of the building and construction of the telescope dome. Finally, in 1997, the telescope was installed in the dome. The Edwin E. Ritchie Observatory was in operation at last, **sporting the largest public access telescope in the Pacific Northwest.** 

Since its opening, BPAA has offered a galaxy of programs and events to pique the interest of astronomers, young and old. The association holds monthly star parties, gives lectures about the universe, and offers

astronomy courses. Their annual Astronomy Day event attracts scores of families from all over the county and beyond. During the day, attendees enjoy the Solar System Walk around the park — accompanied by an informative robot engineered by the teens in BPAA's robot class taught by James Vaughan.

At night, BPAA members set up for the public a variety of outdoor public viewing telescopes trained on planets, stars, and the moon. While indoors, intrepid astronomers climb the spiral staircase for a chance to view distant celestial objects through the Ed Ritchie Telescope.

From the beginning, John Rudolph envisioned a planetarium in the observatory meeting room. He saw it as the perfect educational tool to round out BPAA's offerings, especially to school children. However, no affordable projector of the quality BPAA members wanted was available on the market — until now!

With the development of a cutting-edge, economical electronic projector by Digitalis Education Systems, Inc, BPAA has begun fundraising for a planetarium system.

With the help and generosity of Bainbridge Islanders, John Rudolph's vision will soon be a reality!



Edwin E. Ritchie Observatory at Battle Point Park