



# Historical Electronics Museum Reflections

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Issue 1

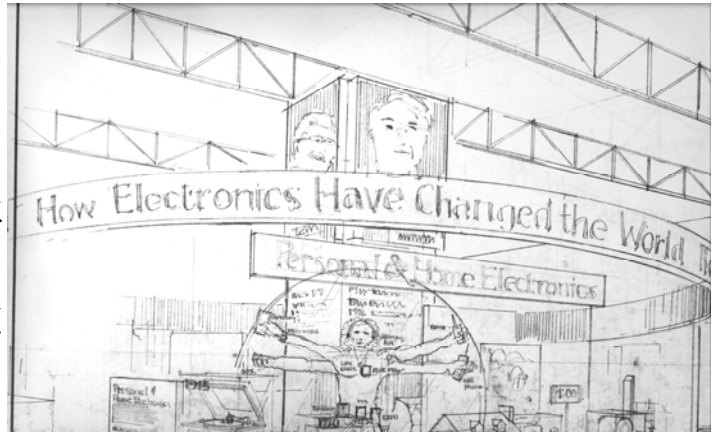
WWW.HEM-USA.ORG

Spring 2007

## Fundamentals Gallery Upgrade

- ◇ HEM hosted over 250 children and parents on *Take Our Daughters and Sons to Work Day*.
- ◇ Over 700 people attended this year's RobotFest.
- ◇ More than 450 people have taken guided tours through the museum so far this year.

The Historical Electronics Museum has launched one of its most ambitious projects. The museum received a \$27,000.00 museum enhancement grant from the State of Maryland for 2007. The grant is divided between a new introductory film for the Fundamentals Gallery, a gallery guide booklet, and most importantly, a complete redesign of the Fundamentals Gallery.



The Fundamentals Gallery has not seen a significant change for several years. As it is the first, and one of the most visited galleries, it was decided this should be the showplace gallery. The firm of Chris White Design was hired to do the design. Chris White is an experienced museum designer. His work is featured at the Naval Academy, the National Zoo, and the Chesapeake Maritime Museum. Chris came to us highly recommended by Board Member David Guiney.

With a working title of "How Electronics Changed the World" Chris along with Board members Ted Foster, Rol Anders and Steve Stitzer are completing a set of conceptual drawings. The gallery will be divided into five

major exhibit areas; fundamentals, transmitting, receiving, digital, and the history of electronics. Hands-on experiments will continue to be the highlight of the gallery, but the gallery will feature more artifacts from the museum collections, including the museum's vast tube collection. Work is set to begin on the construction drawings this summer.

The grant money combined with money the museum has set aside specifically for the gallery, just covers the design phase. Construction and implementation requires additional money. The museum is going launch a formal fundraising campaign but if you would like to contribute to this project, donations can be made in the name of the Fundamentals Gallery Upgrade. These donations will be used exclusively for the upgrade.

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# Letter from the President

This is my first letter to the membership following my election as President of the Museum, and I would like to take this opportunity to thank Steve Stitzer for the excellent job that he did for the past three years as President. It will be a “tough act to follow”. I am excited about my upcoming term as President, and I welcome input from any of the membership. My email address is [roland.anders@ngc.com](mailto:roland.anders@ngc.com) and my work telephone is 410-765-7279. Call or write any time!

I am pleased to have a great slate of officers to help me: Karl Holub as Executive Vice President, Andy Budd as Vice President, Finance and Treasurer, Walt Sutcliff returning as VP Counsel, Louis Butler as Secretary, and Steve Stitzer who has agreed to serve in the newly created position of Past President. I am also looking forward to the usual great support from the volunteer and paid staff that has proven to be a hallmark of the HEM team.

There are lots of exciting things going on at the museum. While space doesn't permit me to list all of these activities, I do want to mention a few.

Ted Foster, Gallery Lead for Fundamentals, is working with our excellent consultant, Chris White, along with Mike Simons and me to upgrade and revamp the Fundamentals Gallery. The board and staff want this to be the “flagship” gallery leading the way for future upgrades of other galleries. We are still early in the planning, but the theme will most likely center on “How Electronics Changed the World”; and the gallery will provide an introduction to the rest of the museum as well as maintaining and improving our popular fundamentals hands-on exhibits.

## Historical Electronics Museum Mission

*Our mission is to educate, inspire, and excite the interest of students and the general public. We carry it out by presenting to them our electronics heritage through the collection, preservation, and display of significant artifacts and literature and the commemoration of the creativity and dedication of pioneers and all workers in the field of electronics. We focus on electronics developed for the defense of our country, the technologies that made them possible, and the commercial products derived from them.*

*“Dedicated to the thousands who devoted their careers to advancing electronics technology.”*

## Bendix Radio Exhibit

Visitors to HEM are generally surprised at the size of the galleries and at the number of objects on display. What visitors *don't* see are the multitudes of objects held in storage that number into the thousands. In 2006 alone, there were 116 accessions to the museum's

collections. Accessions ranged from radio receivers to paintings to vacuum tubes to magnetrons and many more.

Alongside our permanent exhibits, we have a rotating gallery to showcase objects or exhibits on loan to

the museum. Currently we have an exhibit on the history of Bendix Radio provided by the Bendix Radio Foundation at the BMI. This exhibit will be switched over the summer so be sure to check out this and our upcoming rotating exhibits!

**Letter from the President** *(Continued from page 2.)*

We have plans to seek corporate and other funding for the upgrade once we get our initial planning completed. Any ideas the membership may have for sources of funds would be greatly appreciated.

As Steve pointed out in the last newsletter, we have been working through the Governance Museum Assessment Program (MAP) run by the American Association of Museums (AAM). This activity has already fostered a number of important changes in the way the museum is doing business—perhaps most significantly that we are now operating from a detailed annual plan which provides a planning tool for all of the major museum activities. The governance assessment reached its climax in mid-March with a visit from assessors appointed by the AAM. This visit will provide us important feedback.

The Wurzburg WW2 German Radar Antenna project continues to progress well, and we should soon be breaking ground on our lawn for its installation. Mike, Bob Dwight, and the rest of the committee have been working hard to make this significant addition to our outdoor displays a reality.

At the December Board meeting, the staff presented an excellent plan to the board for a small museum store to be located at the entrance. The board is very excited about this new venture, which provides both educational and financial opportunities for the museum, and we will be studying the possibilities and operational requirements further.

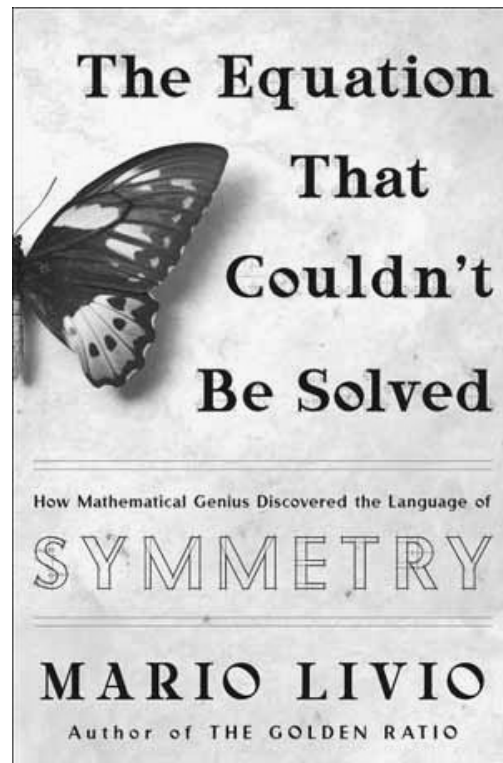
In the area of educational outreach, our Young Engineers and Scientists Seminars Program continues to be very popular and successful. Ted Foster has chaired these activities to provide an exposure to engineering and science for top high school juniors and seniors. From 76 to 136 students attended the sessions which included a design competition with cash scholarship awards. We are also enjoying the Mario Livio Lecture, “The Equation That Couldn’t Be Solved”, on May 3rd at the museum, in conjunction with the Anne Arundel Tech Council and The Baltimore Tech Council. Dr. Livio, a renowned author of science books, is Chief Scientist of the Hubble Space Telescope Institute at Johns Hopkins University.

The HEM Amateur Radio Club continues to be very active, conducting a regular on-the-air meeting for Northrop Grumman Employees across the country each Wednesday at 3 PM Eastern Time on 14.270 MHz. If you are a radio ham, join them! Last year, the club also conducted successful on-the-air special events commemorating D-Day and Pearl Harbor by contacting stations around the world and issuing a special commemorative certificate for any station who talked to the museum during those special periods. All told, the HEMARC station W3HEM made over 5,500 contacts with amateurs worldwide last year. Thanks to the operators of W3HEM for publicizing our museum!

As you can see, things are really happening at the Museum—attendance is up, exhibits are improving, new educational events are being launched—see you at the Museum!

The Board and I look forward to a great 2007 with you!

Rol Anders  
roland.anders@ngc.com  
410-765-7279



## HEM Volunteers to the Rescue

Over the winter the Collections Manager of the Baltimore Museum of Industry called and asked if HEM volunteers could repair an old TV to use in an exhibit. Of course we have supreme confidence in our volunteer staff so, sight unseen, we assured the BMI that our volunteers could fix anything. Danyelle brought us the set and Chuck Angel and Phil Hock took a look at it and said—"We can't fix

that!" The CT was cracked so the set really was not repairable. Instead Chuck and Phil suggested Danyelle buy a new set and they would swap out the chassis. No one would be the wiser. Their scheme worked perfectly. The new/old set will be on display this summer at the BMI in a new exhibit, "Paint the Town" about the Baltimore paint industry. Thanks again to Chuck and Phil for their ingenuity.



## Rebecca Glasby named Assistant Director

Though Rebecca is new to the position of Assistant Director, she has been working at HEM since August 2006 as the Registrar, before taking on the new position in March. Rebecca is a 2006 graduate from the University of Mary Washington in Fredericksburg, VA with a BA in Historic Preser-

vation and a concentration in Museum Studies. As the Registrar, Rebecca worked closely with the collections while learning the basics of accessioning, processing and maintaining the objects catalogue files. Though her interests lean more to history and music she has eagerly picked up the ba-

sics of electronics and the technical objects held by the museum. As the new Assistant Director, Rebecca will continue her duties as the Registrar, as well as taking a more active role in program planning, exhibit planning and design and any other challenges that come along!

## Education & Outreach Director

Vedet Coleman recently joined the HEM staff in the newly created position of Education and Outreach Director. Vedet has an array of education and museum experience with ties to Educational Testing Service, the Reginald F. Lewis Museum of Maryland African American History and Culture, the Carter

G. Woodson House and the National Museum of Women in the Arts. Vedet holds a BA in History from Virginia State University and a MA in US History with a concentration in Public History from Howard University. She is trained in both education and curatorial work. Vedet plans to increase

HEM's volunteer, intern and docent enrollment as well as implementing a host of education programs to increase the museum's ties to the community, i.e. recruitment of mentors, forging school-museum relationships, scholarships and a host of lecture series. Please join us in welcoming Vedet to our staff.

# New and Returning Members

*We would like to welcome the following new and returning members of the Historical Electronics Museum,*

## Life Member

William Semenuk\*\*

## Supporting Members

David J. Beck  
 David Boyd  
 Frank M. Butler  
 Kernan Chaisson  
 John N. Entzminger  
 C. A. Fowler  
 R. James Fritsch  
 William R. Gretsches  
 James D. Hendry  
 Arthur T. Henshall  
 Sandy Keiser\*  
 Joyce Currie Little  
 Edgar H. Parker  
 James Russell\*  
 Joseph C. Ryan  
 Michael A. Simons\*  
 Allan L. Spencer  
 Robert Stratbucker  
 Ralph Strong  
 C. M. Weems  
 William F. Zoller

## Family Members

George C. Ashman  
 Thomas Ballard  
 Elbert L. Cole  
 Ernest C. Farkas  
 Charles Francis  
 Donald C. Friedmann  
 Robert A. Gardenghi  
 Philip S. Hacker  
 Bruce L. Havlicsek  
 Karl Holub  
 Robert Laura\*  
 Stanley Lebar  
 John W. McCarty  
 James H. Mims  
 Ron Schroer  
 Jane Seibert\*  
 Mr. & Mrs. William Thompson  
 Emmett B. Wheeler

\*New Members

\*\* New Life Member

## Individual Members

Charles L. Blair  
 Frank P. Brelsford\*  
 Weston G. Bruner  
 Arthur G. Buckingham  
 Bruce Carpenter  
 Hank Caruso  
 Russell C. Coile  
 John Cross  
 David B. Dobson  
 Roy Dodd  
 Steven E. Fick  
 Constance Finney  
 Ted Foster  
 Douglas A. Gwyn  
 George W. Massing  
 James McGuinness  
 Gordon M. Melby  
 William H. Melton  
 Edward C. Niehenke  
 D. A. Nimick  
 Albert Nims  
 Michael Pobat  
 Joseph E. Pratt  
 Ralph Albers\*  
 Robert J. Stryjewski  
 David C. Williams  
 Joseph A. Zamoyta

## Re-enlistment Ceremony



On an unseasonably warm day in March, Air Force Sgt. Jonathan Paulk chose the Historical Electronics Museum as the setting for his reenlistment ceremony. Sgt. Paulk is a member of the 29th Intelligence Squadron based at Fort George G. Meade. This is Sgt. Paulk's third enlistment.

## More Visitors to HEM

We are flush with visitors this spring. The museum staff and volunteers put together a hugely successful program for Take Our Daughters and Sons to Work Day. Over 250 kids and parents were treated to demonstrations of mag-

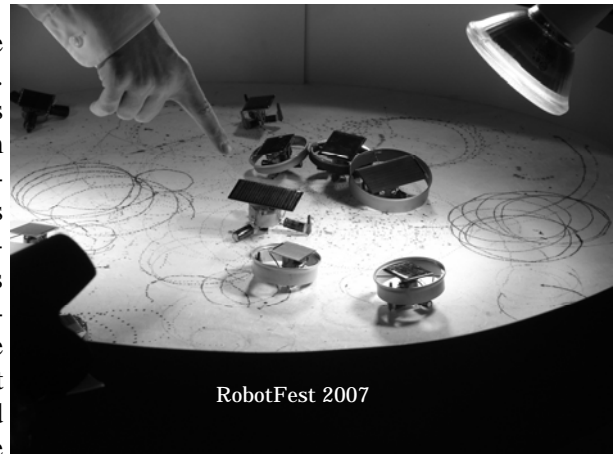


Infra-red display—Take Our Daughters and Sons to Work Day

netism, static electricity, microwave energy and more. The kids took home museum information and new

cool kid's guide to the museum galleries. Three days later robots invaded the museum for the annual RobotFest. The robots ranged from the powerful to the sublime as military and law enforcement robots range around the parking lot and tiny solar powered robots created intricate drawings in the Space Gallery. Approximately 700 robot enthusiasts streamed through the museum.

At the beginning of May the museum hosted Dr. Mario Livio. Dr. Livio, an award winning astrophysicist and author, presented his thoughts on group theory and the role of symmetry in nature. A



RobotFest 2007

crowd of approximately 80 listened to Dr. Livio's talk, which was offered free to HEM members. In addition to the special events, over 400 people were booked to tour the museum from the end of March through May. The largest number of tours anyone can remember.

## Wurzburg Update

Seven months of permitting problems disappeared in a puff of bureaucratic smoke in April when the county announced that

a permit is not needed after all to install the Wurzburg. Ralph Strong and Mike Simons are checking back with the vendors

to confirm estimates for the landscaping and mount construction. We hope to break ground in the first week of June.

## Birthday Celebration



On March 27, 2007, Jim Dwight, John Dwight, and Bob Dwight, Jr., visited the Historical Electronics Museum as part of a "birthday week" being celebrated by museum founder Bob Dwight's family on the occasion of his 85th birthday.



Jim, John & Bob with their father, Robert L. Dwight

# HEMARC NEWS

## *From the Museum's Amateur Radio Station Club*

The year-end major Historical Electronics Museum Amateur Radio Club (HEMARC) activity for 2006 was the annual special event station commemorating the December 7, 1941 invasion of Pearl Harbor and the radar that detected the invading aircraft. This is an event in which all amateurs world wide are invited to contact our museum station under the special call W2W. All stations requesting a special confirmation for the contact are issued a certificate. This year the certificate featured a picture of the Maryland bridge that was dedicated as a memorial to the servicemen that perished in the Pearl Harbor attack. Over 2,345 contacts were made which included every state in the US. Over 1,000 were with foreign countries. This event is announced in the major amateur radio magazines and many stations look forward to chatting with W2W every year. All posted confirmations include a Museum brochure.

The ham club provided the equipment test table at the Foundation for Amateur Radio hamfest in September and sold surplus books and hardware for the benefit of the Museum. Uwe Kulms DF2IR, the Rhode & Schwartz technical representative in the US was the star of the show with demonstrations and precise measurements of many radio items for their buyers. Uwe was an active member and brought much credit to the club and the Museum. He returned to his native

Germany to a senior technical position in R&S Engineering. At the December meeting HEMARC presented him with a life membership and an engraved plaque for his den.

The Boy Scout 'Woodsmoke' gathering in the park at Crownsville was supported by several HEMARC members. The amateur radio station was part of the national Boy Scout Jamboree On The Air. The stations was sponsored by HEMARC member Gary Mauler and attended by members Fred Heath, Rol Anders and Jim Nowotarski. Over a hundred Boy Scouts experienced the art of amateur radio and many talked to similar stations in other parts of the country.



**HEMARC member Fred Heath guides a Boy Scout through his first experience on the air.**

## YESS Report

The Young Engineers and Scientists Seminars (YESS) for high school students completed its fifth year in 2006. The project-based program helped students understand the engineering method — the way engineers perform their jobs. The program is funded through a grant from the Northrop Grumman Corp. Planning has already begun for the 2007 series. Be sure to read the full report on last year's sessions enclosed with this newsletter.

**HISTORICAL ELECTRONICS MUSEUM**

P.O. BOX 1693, MS 4015  
BALTIMORE, MD 21203

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Web Site: http://www.hem-usa.org

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**FOUNDER**

*Robert L. Dwight*

**DIRECTORS**

*Roland A. Anders  
David J. Beck  
Dorothy Brown  
Andre Budd  
Louis P. Butler  
M. Constance Finney  
Ted M. Foster  
James R. Fritsch  
Mark A. Gaertner  
Victor J. Grams  
William R. Gretsch  
David J. Guiney  
Karl J. Holub  
Steven N. Stitzer  
Walter G. Sutcliff*

**ADMISSION IS FREE!  
OPEN TO THE PUBLIC**

*The museum's mailing address is:*  
**Historical Electronics  
Museum  
P.O. Box 1693, MS 4015  
Baltimore, MD 21203**

*The museum's location is:*  
**1745 W. Nursery Road  
Linthicum, MD 21090  
(Next to the Marriott Hotel)**

*The museum hours are:*  
**Monday through Friday  
9 a.m. to 3 p.m.  
Saturdays  
10 a.m. to 2 p.m.  
(and other hours by  
appointment)**

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**Historical Electronics Museum  
Membership Application**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State/Zip \_\_\_\_\_  
Phone \_\_\_\_\_  
Email \_\_\_\_\_

- Please check one:
- Student \$15
  - Individual \$25
  - Family \$30
  - Supporting \$100
  - Life \$1000

*Please make checks payable to Historical Electronics Museum,*