



# Historical Electronics Museum Reflections

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Summer 2007

## Over the Horizon

As we wait for the arrival of the Wurzburg, museum members may be thinking, "What's next?" Volunteer Tom Wildenberg, who spends part of his time at the U.S. Navy yard, used his contacts to locate another possible addition to our growing collection of radar antennas. The Navy has in storage the XAF radar antenna. We are currently negotiating with the Navy to acquire the radar. The XAF was one of the first radars to be deployed on an

U.S. Navy ship.

Working closely with the Naval Research Laboratory, the XAF was built by RCA and



XAF on the USS New York, 1938-39

deployed on the battleship New York in 1938. Operating at 200 MHz, the

XAF was able to detect aircraft at 100 miles. From its work with the XAF, RCA developed the CXAM radar, of which 20 sets were built and deployed on various battleships, aircraft carriers, cruisers and a seaplane tender. The CXAM served throughout WWII.

I have only seen pictures of the XAF in storage, which is in pieces, but it appears to be in the neighborhood of 20 feet square. It consists of a steel yoke that holds two parallel girders strung with sets of vertical and horizontal wires, hence the name flying bed spring. As per the policy of the Navy, objects can only be loaned; however, loans can be renewed over a number of years if the object is being properly archived. The Navy would like to see the XAF restored and maintained as an outdoor exhibit as a stipulation of the loan. If we are able to acquire the XAF it would become a stellar addition to our collection of historic radar antennas.

Besides hunting down radar antennas

the museum staff and volunteers have been busy this summer. The redesign of the Fundamentals Gallery is proceeding. We have moved from the conceptual phase to the preparation of construction drawings. Changes are occurring or will occur in the Underseas gallery and the EO gallery. The museum hosted our first ever program for 8-10 year olds in August to great success. The YESS program resumes in October and plans are underway for additional kids programming. Coming in the fall, look for our new gallery guide booklet, a fall speaker to talk about the history of NOAA, and maybe even a new museum logo.

I look forward to seeing all of you in the museum this fall.

Mike Simons

## Wurzburg Update

As of this writing the antenna has yet to arrive. Through perseverance and a bit of sweat, we have the mount up and ready to go. Ralph Strong is completing an outdoor display to accompany the antenna. Our latest contact with the movers suggests the Wurzburg will be here some time before the end of November. Once we have a firm date, the museum will announce an unveiling event.



## Fall Lecture

The Historical Electronics Museum will present a talk by Captain Albert E. (Skip) Theberge, NOAA Corps (ret.) on the History of Ocean Mapping on November 1, 2007.

Ocean mapping systems have undergone revolutionary changes ranging from hemp rope sounding in the mid-Nineteenth Century to autonomous robotic vehicles equipped with multi-beam acoustic sounding systems today. Concurrent with the evolution of sounding instrumentation, there has been an equally impressive improvement in the ability of ocean mappers to georeference sounding data ranging from celestial navigation and dead reckoning through the evolution of electronic navigation systems to the Global Positioning System of today. The evolution of the combined sounding/navigation ocean mapping systems will be traced from a user's perspective as the nature of the seafloor is discovered and many related discoveries and inven-

tions were made over the past century and a half. These related discoveries and inventions include the deep sound channel, magnetic striping on the seafloor, and even the radio sonobuoy. Along the way the theory of plate tectonics was developed as a direct result of seafloor mapping. Contributions of the United States Coast and Geodetic Survey, a forerunner of today's NOAA, to ocean mapping will be high-lighted as this is the 200th Anniversary year of its founding under President Thomas Jefferson in 1807.

Captain Theberge is a graduate of the Colorado School of Mines and Naval Postgraduate School. He spent 27 years in NOAA Corps involved in mapping, charting, and surveying projects. He commanded two NOAA survey ships and a number of survey field parties. He headed NOAA's Exclusive Economic Zone Mapping Project. Since 1995 he has been affiliated with the NOAA Cen-

tral Library and has conducted research on many aspects of the history of oceanography and seafloor mapping. He is a member of the Advisory Committee for Undersea Feature Names of the United States Board on Geographic Names and a member of its international counterpart, the Sub-committee for Undersea Feature Names of the International Hydrographic Organization/Intergovernmental Oceanographic Commission General Bathymetric Chart of the Oceans.

The talk will begin at 6pm with light refreshments at 5:30pm. Admission is free for Museum members.



## Mission Statement

*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."*

# Pioneer Camp

HEM offered our first Pioneer Camp for children ages 8 through 10 from 10 a.m. to 2 p.m. this summer. The camp consisted of two sessions, "Out of this World Astronomy" on Aug. 14 and "Magnet Mayhem and Pizza Party" on Aug. 15. We registered a total of 60 campers, recruited new volunteers, obtained sponsorship from HobbyTown USA in Glen Burnie and guest speaker Elizabeth Warner from the University of Maryland came to give a presentation on constellations for the children.



As the newly hired education and outreach director I wanted to implement a series of programs that would help forge relationships with children within our immediate and surrounding communities and Pioneer Camp is one of the first. During the "Magnet Mayhem and Pizza Party," campers learned how to identify magnets in the museum, learned more about how they work, and why magnets are important to our daily lives. Our 2007 Pioneer Camp could not have been a success without our wonderful staff. I would be remiss not to mention Mike Simons, Becky Glasby, Anne Mech, and our summer intern Shakia Gullette, and VSR Naomi Moore, for helping with the preparation of Pioneer Camp. Volunteers Tom Ballard, Mike Cross and John McCarty graciously conducted demonstrations for

Magnet Mayhem Day, our newly acquired volunteers Sherry Harper, Joan Blanco



and Nichelle Green took on roles as group leaders and crowd controllers! Also, special thanks to Roland Anders for taking time from his busy schedule to come and support Pioneer Camp and to all of the board members for approving the event. Pioneer Camp could not have been a success without all of you!

# Oral History Project

It is our pleasure to announce the Historical Electronics Museum was awarded an Enhancement Challenge Grant Of \$20,000.00 for fiscal year 2008. The grant was approved by the Department of Planning and the Maryland Historical Trust. Grant monies are to be used to conduct an oral history project. Approximately 40 pioneers of the defense electronics industry in Maryland are going to be interviewed over the course of a year. The museum is working with the IEEE History Center, who will be conducting the actual interviews. The interviews will take place over several sessions during the course of 2008 and will focus on pioneering work of the individuals being interviewed and on the beginnings of the defense electronics industry in Maryland. Transcripts will be posted on the HEM and IEEE websites. Museum volunteers Ralph Strong and Al Spencer are compiling a list of names of potential interviewees. If you have suggestions please feel free to contact the museum.



Westinghouse Kiosk at Friendship International Airport, circa 1955

**HISTORICAL ELECTRONICS MUSEUM**

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

TEL: (410) 765-0230  
FAX: (410) 765-0240  
E-mail: hemuseum@verizon.net  
Web Site: http://www.hem-usa.org

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**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)**

**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, Inc.*