

The Bendix E-Beam

*News from the Bendix Radio Foundation
working for the Preservation and Presentation of the History of
the Bendix Radio Division, Bendix Communications Division, and AlliedSignal.*

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BRF Foundation Board of Directors.....*by Jerry Woodall*

A new BRF Board term of office was adopted in 2005 and Directors were elected last June. Per the 2004 revised rules, “The BRF Board shall be composed of five members elected for two year terms, two of whom shall be elected in even numbered years and three of whom shall be elected in odd numbered years.” The 2005-2006 BRF Board of Directors are: Bill Mackey (1 year), Ken Kidd (1 year), Joe McCormick (2 years), Len Bosse (2 years), and Bill Stotz (2 years).

BMI Chooses a New Executive Director.....*by Angelo DelNegro*

Roland Woodward has been named by the BMI as its new Executive Director. Mr. Woodward, a graduate of Earlham College, brings over thirty years of Museum experience to his position. Mr. Woodward was President and Director of the Chester County Historical Society located in West Chester, PA. Mr. Woodward’s experience and proven leadership makes him a welcome asset to the BMI family and BRF looks forward to supporting and working with him.

Archival Storage Facility for the BRF Collection.....*by Bill Mackey*

With the addition of the items acquired from the Raytheon / Bendix Vault (see below) our Archive is filling up fast. We have acquired two flat drawing file cabinets (one from BMI and one from Raytheon) for storing the drawings. Containers / tubes were also obtained for the rolled drawings.

The drawings are currently being indexed and sorted by size. Individual box sorting is nearing completion with boxes and their respective folders being labeled and entered into the BRF Collection Database (see below). When complete, hopefully by 1 Jan 2006, we will initiate a complete physical rearrangement of all boxes on their respective shelves to be more user friendly.

Various additional efforts are ongoing that could use more volunteers in a lot of different capacities;

- Sorting photos and negatives,
- Identifying personnel in photos,
- Compiling a master program and project list from different lists and sources,
- Compiling a master personnel list from different lists and sources,
- Sorting and identifying artifacts,

Any one who wishes to assist in any of the above efforts is most welcome to join us on any Thursday at 1414 Key Highway between 10 AM and 3:30 PM. If Thursday is not convenient, arrangements can be made to utilize the Archives on any other day(s).

Sorting all the Stuff.....*by Bill Mackey*

As mentioned above we are continuing the 'sort' process: print and audio/visual material is close to being separated into folders within the boxes; drawings are starting to be sorted and indexed; photos, negatives and artifacts have yet to be started. Please remember the BRF Collection when you or your friends have any Bendix Radio items to dispose of.

With the generous assistance of Aaron Mall we have generated a Bendix Home Radio Database which lists and identifies all home radios made by Bendix Radio. We currently are adding photos of each radio to the database. We hope to do the same for all the television sets made by Bendix Radio

Additions to the Collection.....*by Bill Mackey*

The following persons have recently contributed items for the BRF archival storage. We are continuing to look for donations of any items relating to your time at Bendix Radio, Communications, or AlliedSignal. Give us a call or send an Email. Recent Donations: W. Hedeman – Employee & Special Badges; George Wend – Radio and Record Player Model 1519; David Kehne – Radio AM Model 753WX; Robert Durling – Tech Notes on FPS85, Cobra Dane, Adaptive Tracking; J. Shagena – View Graph Projector, Microfiche Reader, Automobile Radios; Raytheon Electronic Combat Systems – Microfiche reader, File Cabinets, Step Ladder, Books, Drawings, Purchase Specs, Flat File; Phil Cowett – Radio AM – Shortwave Model 626C; Len Bosse – Various Bendix Radio Model Ads.

Raytheon / Bendix Vault Access.....*by Bill Mackey*

We requested additional access in August to the Raytheon Electronic Combat Systems Vault to locate additional drawings that were referenced in previous material we acquired from the vault. Raytheon was most cooperative and we spent an additional 2 weeks collecting additional drawings, drawing indexes, books and periodicals.

Acquisition of Drawings from the Raytheon / Bendix Vault....*by Ken Kidd*

Examination and selection of old drawings was one of the main goals of the Foundation's access to the vault on Joppa Road, since we had permission to take possession of any old Bendix drawings we considered of historical value. During the sessions at the vault in February and March, some of the Foundation research-team members processed some of the engineering drawings by leafing through flat folders of drawings one-by-one and selecting those of interest. A fairly large quantity of drawings was taken to the Foundation's facility at the BMI at that time. Then, when arrangements were made to continue with further work at the vault in August, lists of drawing numbers were developed prior to re-visiting the vault by reviewing drawing titles on 3 x 5 release cards in the Foundation's possession. Upon returning to the vault, we then had these lists for guidance in searching through the drawing stacks. As a result of these efforts, the Foundation now has over 3600 drawings in all sizes A through E in flat files and over 700 oversized, rolled drawings of various lengths, some longer than 12 feet. Some of the oldest drawings are of historical interest simply because they are drawn on format sheets of the predecessor companies to Bendix Radio such as the Radio Research Company in Washington DC. W. P. Hilliard Company in Chicago and Jenkins and Adair in Chicago. Other early drawings are related to pre-World War II equipment such as the TA-2 transmitter and RA-1 receiver, which were later adopted directly for military use without Government specs because of their ruggedness, reliability and performance, and were built by the thousands for the war effort.

A few samples of interesting early drawings obtained by the Foundation include:

Dwg. No. 891 Radio Research Co., Inc; Washington, DC 10/5/33 Broadcast Station, Frequency Control Unit
Dwg. No. 2217 Radio Research Co., Inc; Washington, 8/3/36 Patrol Plane Direction Finder, General Arrangement
Dwg. No. 1634 W.P. Hilliard Co., Inc; Chicago 1/18/37 IF and AF Unit, Wiring Diagram
Dwg. No. 40103 Audio Research, Inc; New York City 3/2/37 A-133 Radio Compass, Schematic
Dwg. No. 9398 Bendix Radio Corporation; Chicago 10/12/37 Radio Systems Connections on KLM Lockheed 14
Dwg. No. 8221 Bendix Radio Corporation; Washington, DC 10/11/37 Remote Control Unit, Type MR-7A
Dwg. No. 9447 Bendix Radio Corporation; Baltimore, MD. 12/2/37 Outline of Type MN-5B Direction Finder
Dwg. No. 70034 Bendix Radio Corporation, Baltimore, MD. 1/7/38 Installation of radio equipment in a Martin B-10 bomber for the Argentine Air Force

Bendix Radio also produced extensive ground communications and navigation systems, which we know from drawings, not from any text references. The SCS-3 mobile (trucks) communications and direction finding system that was the complete fighter command and control system in Europe. It worked at VHF with the King George (SCR-522) VHF aircraft radio installed on almost all fighters and many bombers. This was some find and explains all the photos of Army trucks in various Bendix Radio publications. They didn't say much because it was secret. Unfortunately, all SCR-522 drawings were lost due to Bendix reusing drawing numbers.

Many of the drawings look to be of lesser interest, but include information that will be extracted from the title block and entered into our master database so we can understand and document the full scope of what Bendix Radio actually built.

The BRF Database.....*by Bill Stotz*

The work of sorting continues. We have gone through the first level of sorting, to the folder level as opposed to the document level, for 19 A/V boxes containing 227 folders, and 78 Print boxes containing 1364 folders. All this material is in the database. Another two dozen or so boxes have been sorted and the data will be entered shortly. As mentioned elsewhere in this E-Beam, we have several thousand drawings to catalog. For the time being, they have been simply listed by drawing number, but we hope to enter more detailed title block information and classify them by product line as other documents have been sorted. In addition to the A/V and Print material, we have 43 boxes of artifacts plus the contents of the Museum exhibit. We hope to be able to begin soon on the classification and recording of these. Here is a chance for any of you who like to work with "things" as opposed to paper to help us out!

Martin Museum Visit.....*by Guil Vogt*

Most of you are aware that during WWII Bendix Radio built large quantities of avionics equipment for use in the war effort. Some of this equipment, both commercial and military units, was shipped directly to the Martin Aircraft Co. in Middle River, MD for installation in their production aircraft. With thought in mind (and because some of us are airplane buffs) several members of BRF have visited the Martin Aviation Museum to view the aircraft and memorabilia. In addition to the Martin memorabilia, we found that they have six or eight pieces of Bendix equipment, which was manufactured in that era. In fact, we have now visited several times and on each occasion have been shown additional Bendix equipment. We routinely document and photograph these items and plan to keep a record of these "off site" Bendix artifacts.

The Martin Museum has plans for expansion and may well become the museum for all Maryland aviation history as part of state and county plans for developing the Middle River area with the soon to be opened RT43 extension to Eastern Avenue. Feasibility studies for a larger future museum are being considered by the Martin folks. Should this expansion occur, BRF members with a particular interest in avionics and aviation have been asked to assist in planning for the avionics exhibits.

Cash Donations Needed.....*by Bill Scott*

Here it is now over 3 years that our Bendix Radio Exhibit, *Communications Before Star Trek, Bendix Radio, Six Decades in Baltimore*, was first opened on August 28, 2002 as a temporary BMI exhibit and it still remains as an outstanding exhibit at the Baltimore Museum of Industry. If you haven't seen the exhibit yet you still have time to take a short, enjoyable visit. Parking is plentiful and free. Your membership in the BRF/BMI provides you with free admission to the BMI.

As the year 2005 is coming to a close, now is a good time to consider additional tax deductible donations to your favorite non-profit organization(s). We hope you will place Bendix Radio Foundation (Baltimore Museum of Industry) at the top of your year end donation list. It is only thru donations from people like you that we are able to purchase material and special equipment needed by the BRF Volunteers to maintain the exhibit, collect Bendix related documentation, record the information into a database, answer inquiries about Bendix people and products, and generally improve the operations of the Bendix Archival Storage room at the BMI.

Make your tax deductible donation check payable to **Baltimore Museum of Industry**

Be sure "**Bendix Radio Foundation**" is placed on the "*For*" line of your check.

Mail your check to: **Orlando DeFelice, 1216 Malbay Dr., Lutherville, MD 21093**

Did You Know?.....*by Angelo DelNegro*

In 1937 Bendix Radio developed an Aircraft Approach System (GCA - Ground Control Array) that was later installed and operational at eight major airports around the country. For more information come visit "your" BRF archives at the Baltimore Museum of Industry.

Visit to Elton Oakes.....*by Guil Vogt*

In the last issue of the E-Beam, February 2005, we reported on a visit to Elton Oakes. We are sorry to have to report that Elton Oakes died on August 29th at the age of 98 years.

Web Site Activity.....*by Bill Mackey* <http://home.comcast.net/~bendixradio>

Unfortunately our web site activity has not moved forward as expected due to heavy workload with our 'pro-bono' volunteer. If anyone would like to assist in doing a web page for the BRF Collection we would really appreciate the effort.

Museum and BRF Membership and the BRF Mailing List.....*by Bill Scott*

The 2005 joint BRF and BMI Museum Membership totals 172 persons: 37 Family Memberships and 98 Individual Memberships. Our mailing list consists of over 1500 names of former Bendix Radio, Communications, and AlliedSignal in Baltimore employees or friends. If your mailing address or email address should change, please send that information to Bill Scott. We are sure there are others who should be included in our mailing list. If you know of someone who would or might like to receive future issues of this newsletter please provide his or her name, address, telephone number, and email (if available) to our Membership Secretary, Bill Scott. Thanks for your help in getting the word out!

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