

THE INFO AGE MARCONIGRAPH

Volume 3, Number 1

www.infoage.org

January - April 2009

Camp Evans and InfoAge: Unique, Historic... and Full of Momentum

by Fred Carl

InfoAge President • 732-280-3000 • fred-carl@infoage.org

The People and Organizations Preserving Camp Evans at year 15

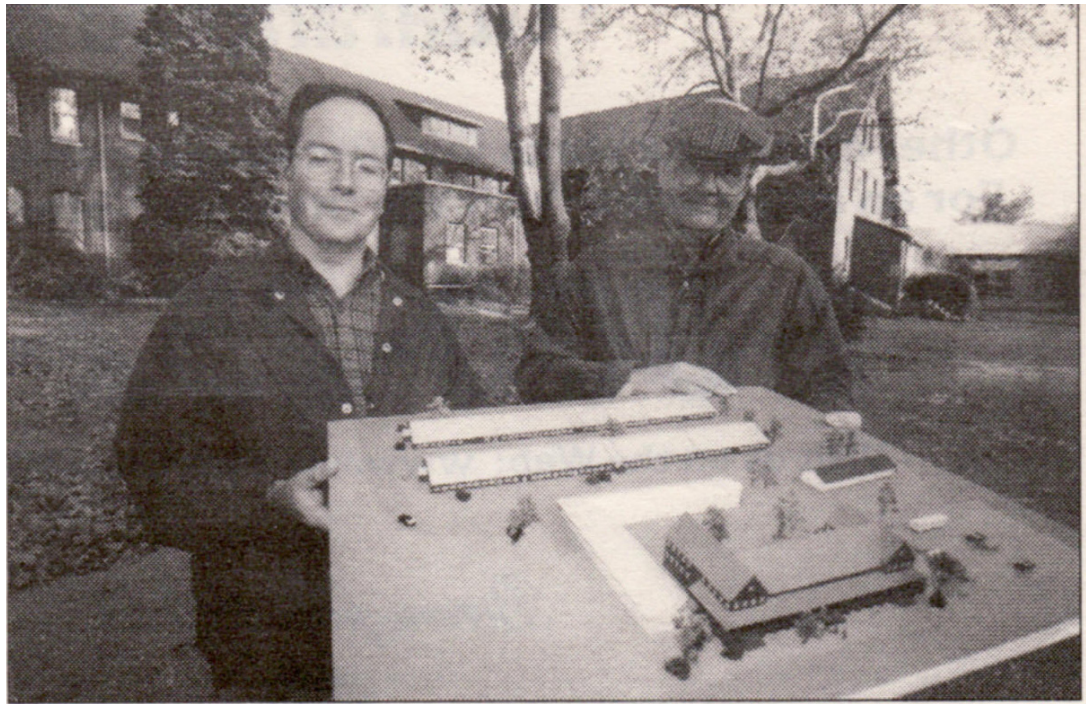
Camp Evans is a unique place with unique people working to preserve it. So unique, the site and its people have received special recognitions. In October 2008, a Congressional Study recommended the site's listing on the National Register of Historic Places be elevated to National Historic Landmark. In the history of the Information Age Camp Evans is unparalleled.

On January 16, 2009 the White House and the Advisory Council on Historic Preservation recognized the people preserving Camp Evans, the InfoAge Science-History Center, as Preserve America Stewards. The Preserve America Stewards program recognizes programs that have demonstrated a successful use of volunteer time and commitment in order to help care for our cultural heritage. InfoAge is in the first group in the nation to be so recognized.

The effort has come a long way from the day in March of 1993 when a headline in a regional newspaper announced "Evans likely to fade into oblivion." The seeds of this effort can be traced to a story that won the August 1958 award for the Reader's Digest First Persons Account contest. The story is "Colton's Baby Comes Through." The author was Dr. Harold Zahl, a pioneer and developer

of U. S. Army radar. It is Dr. Zahl's exciting account of a demonstration of a prototype of Army Radar to the Generals. The target plane pilots were way off course without knowing it. The prototype radar not only located them over the sea, miles from where they should have been, they guided them back to the airbase to a safe landing before they ran out of fuel. The Reader's Digest award encouraged Dr. Zahl to write more historical accounts of radar history. In the 1970's, while scuba divers Fred Carl and Dan Lieb were researching New Jersey shipwrecks they were diving, Fred came across Dr. Zahl's accounts of radar history with its connections to the early days of wireless communications and how Camp Evans was the WW2 home of radar.

In 1993, when the only apparent option for old Camp Evans was demolition, the history held in Camp Evans was imparted by Dr. Zahl's stories and books. The history motivated persons to save the site. Fred Carl was the most vocal. The first of many pivotal days was in March of 1995 when Fred spoke up at a public hearing, advocating a preservation plan. Michael Fitzgerald, the head of the Marconi Park Reuse Committee called Fred and asked for a plan with details of his proposal. Using the resources of the Association of Science and Technology Centers and the American Museum Association, a plan was presented to the committee. It was incorporated into the reuse plan. Three members of the reuse committee Claire French,



JEFF HUNTLEY/STAFF PHOTOGRAPHER

Fred Carl and Larry Tormey discuss plans for their InfoAge Science Center, which they hope to see develop on the Camp Evans site.

John Truhan and Joe Verruni are members of the InfoAge Board of Trustees. Michael Ruane was the Army Base Transition Coordinator who encouraged Wall to consider the plan. In 2005 Michael would become Chairman of the InfoAge Board of Trustees.

It was impossible to save the entire radar laboratory with over 50 buildings. All the Marconi Buildings and the heart of the WW2 radar laboratory were slated for preservation as the InfoAge Science History Center. The rest of the WW2 radar laboratory buildings would be demolished for a Brookdale Community College campus.

Many people and organizations would be needed to do the work of preserving this important site. Larry Tormey, Andy D'Angelo and Fred Carl incorporated InfoAge as a non-profit corporation in September of 1998, expecting the then impending transfer. Fred, Larry and Bob Judge wrote and submitted the nomination to establish the Camp Evans Historic District. Dr. Zahl's books provided a good amount of materials. They would also write the three inch thick application to the NPS for the Historic District to be transferred to Wall. A number of organizations joined the effort. The Garden State Central was the first, then OMARC, QCWA, the NJARC, the NJHDA, MTMNJ, and MARCH.

From 1993 to 2000 the Camp Evans site was in worn but in excellent condition and maintained well by the BRAC process. InfoAge only needed to make minor modifications to the buildings interiors and begin science and history education. However, in 2001 all that changed. There are a number of federal villains behind the extensive damage to the site. To save the site from complete destruction, InfoAge was given critical help by Bob McAllen and the RAB, Roger McLaughlin, Congressman Chris Smith, the National Trust for Historic Preservation's, Preservation NJ, and the members of InfoAge.

Today InfoAge enjoys the support of its members, the Wall Township Committee and Monmouth County. Gifts of funds have come from InfoAge members, Colgate-Palmolive, Harris Corp., NASA, Verizon, Wall Kiwanis, NJNG, CACI, AFCEA, the AOC, New Jersey Broadcasters Association, Monmouth County Historical Commission, New Outlook Pioneers, and the Lucent Foundation. Gifts of work from Wall Township public works, the Coast Star, Cablevision, News Channel ABC6, Professor Robert Johnson's No Short Climb, KZA Inc. of Wall.

The key to the accomplishments of InfoAge is its volunteers and the town of Wall which has enabled and supports our efforts. Organizations like AFCEA,



Recent Historic Acquisitions For The InfoAge Radar Display

by Ray Chase

New Jersey Antique Radio Club
908-757-9741 • enrpnr@erols.com

This article could also be titled “InfoAge has friends in many parts of the USA”. As background information, since Camp Evans was the home of the development of Army radar in WWII it has always been our desire to accumulate actual examples of early radar equipment for display. Unfortunately much of this equipment was lost to the scrap heap immediately after the end of WWII since it had very little practical civilian use, unlike military communications equipment that was sought after by ham radio operators who saved much of it from the trash bin. WWII radar equipment was also usually quite massive and presented unique storage and transportation problems if one wanted to save it; hence little of it was saved. Yet bits and pieces occasionally are found and hopefully if we keep our sensors well tuned we will come up with enough pieces to maybe assemble the major parts of some of those early radars that were so instrumental in our victory in WWII and display them at the site of the laboratories where they were created.

Earlier this year while searching e-Bay I came across a very early Identification, Friend or Foe (IFF) BC-1072A transmitter complete with transport case. This is the transmitter that was added to the SCR-270/271 long-range search radars so as to be able to distinguish our aircraft from enemy planes. Fortunately the seller was in Bound Brook, NJ and listed it as “pick-up only”. It is about a cubic yard in size and weights over 100 pounds. After two rounds on e-Bay where it did not sell for his rather optimistic opening bid I contacted him and got it for a very reasonable price since I could pick it up immediately and pay cash. Now we already had one of these on display in the museum radar room but getting one like new in its original transit case could not be passed up. In having two, we could display one as it would be mounted in the radar van while the other has its access panels removed so its innards including the high frequency tuned lines and transmitting tubes can be shown. A sturdy table was constructed and both of these are now on display. Incidentally, I acquired the first one quite a few years ago from a collector in Massachusetts who was moving into a smaller home and

was two days from dispatching it to the local land fill.



The BC-1072 A IFF Transmitter on display

At the past August Antique Wireless Association (AWA) convention in Rochester, NY I came across a BC-1073-A IFF Control Unit in the flea market. This is the control center that goes with the above IFF Transmitter and its companion receiver (BC-1068A), which we also have in the museum. These three units plus antenna make up the Army's first complete IFF radar equipment set. Another of our members had

picked up one of these control units last year at a local ham flea but it was in pretty bad shape. Restoration was being undertaken it but it represented quite a bit of effort. This recent acquisition is in much better condition and by combining parts from the two of them we will make a better one. This piece has now been added to our radar room display.



The BC-1073-A IFF Control Unit, as found

E-Bay yielded another interesting potential find earlier in the year, this time the item was in Oregon and weighted in at over 130 pounds. It turned out to be a BC-941 Range Indicator and Receiver for the SCR-547 Range-Only radar or Elevation Angle radar. Radar being a brand new technology in WWII some operational uses for it were not well conceived. Such was the SCR-547 radar made by Western Electric that was designed to provide only range and/or elevation angle data to searchlights or antiaircraft guns while relying on optical detection to spot and

track enemy aircraft. This in spite of operating at an advanced for the time frequency at S band or 3000 Mhz. While it is acknowledged that, all things considered, radar is more accurate in range than in azimuth or elevation, radar can detect and track targets well before optical means can do so and also at night or in overcast conditions as well. Obviously this was not a well thought out device and few were produced. It was however distinctive in form having two top mounted parabolic antennas one on each side of the main unit giving it a distinctive “Mickey Mouse” look that inspired its unofficial name. See photo of one set up in Italy during WWII on the next page.



Top is the BC-941 Range Indicator to the SCR-547 Radar (Mickey Mouse)

Bottom is the BC-604 Receiver Unit for the SCR-268 Radar

The e-Bay seller indicated that he found it, complete with its original shipping case at a local garage sale and rescued it just before the end of the sale when it would have otherwise been consigned to the dumpster. Again he offered it at a very low price but “for local pickup

only”. Since this set is relatively rare, the acquisition of parts of it would be a bonus for us but how to move it across country? While the seller had several interested buyers, none could pick it up so it ended up a “no-sale”. I then contacted the buyer and he said he would donate it if we could find a way to transport it. Now it so happens that NJARC member, former New Jersey resident, head of the Tube Collectors Association (TCA) and InfoAge supporter Ludwell Sibley also lives in Oregon so I contacted him to see how close he might be to this seller. It turned out that he was about 20 minutes away from him and before I could ask, he had picked up the unit and brought it home. I informed Ludwell that we would pay for shipping of the unit to InfoAge and he said he would attempt to build a more substantial crate for it as the original military crate was in need of some repair. A few months later, another InfoAge supporter by the name of William Donzelli of Carmel, NY came into the picture. Now Will is another special person who collects all kinds of old military electronics (the bigger the better) as well as vintage computers including main frames. Will goes on an annual cross country trek to deliver or pick up deals he has made during the year and this year he was paying a visit to Ludwell in Oregon. One thing led to another and he agreed to put the receiver/indicator in his van and deliver it to me at a local East Coast ham flea. This was accomplished and the unit finally was delivered to InfoAge this summer. After some clean up and the construction of a special table to support it the unit is now on display in our radar room.



The SCR-547 "Mickey Mouse" Radar in Italy during WWII

Our final recent acquisition appeared in the on-line reflector of the Military Radio Collectors Association (MRCA) and was located in Oak Ridge, TN. Along with some more mundane items was a BC-604 receiver that is part of the SCR-268 Searchlight Radar, the Army's first radar set. It appeared to be in excellent internal condition and the seller suggested that it really should go to a museum. The SCR-268 used two of these receivers; one for elevation and one for azimuth and we already had acquired two for the museum but one of them was not in great condition so I contacted the seller and finally negotiated a price. But first I had to find a way to get it here as it is in a heavy steel case and weights over 80 pounds. (It seems nothing the Army made in WWII was light and compact unless it went in an airplane). Fortunately NJARC member and

past president Jim Wartenby now lives in Hot Springs, Ark. and I knew that he takes an annual trip to NJ to visit relatives. I contacted him in time just before his trip this summer and he graciously agreed to stop at Tennessee to pick it up. It has now been added to the radar room in the museum and we can now display two units as they would be mounted on the radar while the third one is displayed out of its case so the innards can be seen. An added benefit accrued as some very hard to find latches were removed from the extra case to replace missing ones on another early communications set that I am in the process of restoring.

While Jim and his wife were in the area I toured them through our entire museum complex and were most impressed with what we have accomplished. Jim previously worked for RCA and like most of

us has a collection of stuff. He has the added advantage of having a small warehouse in Tennessee that contains some unusual and one-of-a-kind artifacts a few of which that he hints may come our way on his next annual visit.

So one can lament that so much historically relevant WWII radar equipment was lost to the scrap heap in the years following the end of hostilities probably due to its being so large and heavy and possessed no relevant direct civilian use. On the other hand, bits and pieces still show up here and there and by keeping our sensors active and through the good graces of our scattered friends we are able to rescue some of them and bring them home to the place from which they were originally developed.

Amateur Radio

Who We Are

When access to the public telephone network failed during 911, amateurs were on the scene to support fire, police and Red Cross activities with needed communications regarding health and welfare.

Ron Olender

President • OMARC

732-367-3179Wa2hzt@aol.com

There are approximately 650,000 radio amateurs in the U.S. and almost 2 million worldwide. I have been in this hobby for almost 50 years and it amazes me that so few people have ever heard of amateur radio or know what amateur radio operators do. Amateur radio has been around since the early part of the 20th century and has contributed much to the current state of the art. Our namesake at Infoage is Guglielmo Marconi, considered by many to be the father of radio and the first radio amateur.

If I had to sum it up in one phrase, I would say that amateur radio operators are “Ambassadors of Good Will.” We have radio acquaintances in all parts of the world because when we transmit our radio signals they have no boundaries. We never know who will answer us. It may be the amateur around the corner or it may be the amateur half way around the world. We may never meet the person we talk to but then again we may speak to that same person dozen of times over the years. Amateurs come from all walks of life, they are both male and female and they can be of any age. In order for us to transmit a radio signal, we must pass a written test before the Federal Communications Commission will grant us a license. Getting a license is pretty easy as manuals are available as study guides. So what else do we do besides communicate for fun with other amateurs around the world? Well, there are two other aspects of the hobby that are important. One is service to the community and the other is to provide communications in emergency situations. In serving the community, amateurs provide communications

when requested for such events as foot races, bicycle races, parades, walks for charities, etc. They set up various communication stations along the route and report anything that requires attention to officials who are in charge of the event. All these activities are done on a voluntary basis with no monetary compensation.

As to emergency communications, amateurs or “hams” as they are affectionately known are usually the first ones on the scene to provide needed communications in times of natural disasters such as hurricanes, floods, tornados, etc. When access to the public telephone network failed during 911, amateurs were on the scene to support fire, police and Red Cross activities with needed communications regarding health and welfare. We as a club (OMARC) are very fortunate to have a point of presence at building 9116, near the large radar dish on Marconi Road. We are very proud to be a support organization for Infoage. We give public demonstrations when called upon to tell what the hobby is all about and we also give radio classes when the need arises for those who wish to join our ranks. We not only extol the virtues of amateur radio but we also inform the public about project Diana and Marconi. Project Diana proved that the earth’s ionosphere could be penetrated with a radio signal which opened the way for space communications. Marconi’s involvement back in 1914 was in creating a radio receiving station as part of his network of stations that encircled the earth. As you can tell, our club is a pretty active group of amateurs. We usually have our doors open to the public on Sunday afternoons from 1 until 4 pm. So if you’re passing by and the gate is open, please stop in to say hello. The guys there will be glad to show you around and answer any questions you may have.

Continued from page 2.

AOC, IEEE, NJNG, New Outlook Pioneers and the Boy Scouts have sent many volunteers. They have helped tremendously. The InfoAge members who volunteer, some for years, have used know-how, creativity, and plain hard work to make the difference. They paint, repair, set up exhibits, give tours, care for the buildings and grounds, as well as research and preserve Camp Evans history. In short, all the things needed to save this historic site.

It is excellent to be recognized by the White House and the Advisory Council on Historic Preservation. The reward is knowing a unique historic site – a national landmark – is being saved and given a unique mission as a science-history center that will benefit future generations as it honors those who helped win WW2 by making advancements in electronics.

Preserving Camp Evans at year 15 and InfoAge at year 10

Although the economy may be slow, thanks to our members, our volunteers and our supporters, InfoAge is enjoying our best level of contributions and our highest level of volunteerism. All our bills are paid to date and we have no debt. Our momentum is building. We have enjoyed our best year of progress. We have passed the fifteenth year in our quest to preserve historic Camp Evans by giving it a future as a Science-History Center. This year we passed our tenth year as a not-for-profit corporation. In a short time we are expecting the transfer of the main portion of the Camp Evans Historic District. With this transfer comes the heart of the WW2 and cold war radar laboratory. This transfer holds many challenges to rehabilitate the space needed to host exhibits and programs.

We are well positioned to do this valuable work that will benefit future generations. We can take pride in our accomplishments. Of the seven buildings transferred to us, we have restored six to service. We have replaced the roofs, installed new heat and added air conditioning to five buildings. Not a single building had working plumbing, now all but one does. We restored nine restrooms. We have repainted the exterior of all WW2 and satellite era buildings. And, there is more...

We have expanded our creative and work capability by creating an archive, a library, a print and digital media workroom, a radio/computer repair shop, a submerged artifact cleaning room, and many offices and meeting rooms. We have created six spaces which can

accommodate an entire class of student visitors or a large workshop. We have a hands on radio science room. We have filled twelve rooms with exhibits and artifacts. We have dedicated volunteers who maintain our 20 acres of grounds. And, there is more...

We host many events, a few examples are The Mid-Atlantic Retro Computing Hobbyists (MARCH) Vintage Computer Festival, Al Klase's Crystal Radio Seminar, the New Jersey Historical Divers Association's (NJHDA) Shipwreck Symposium, many IEEE Technical Talks hosted by Dru Reynolds, Mike Ruane's Wall of Honor, Nels Warren's Haunted Hotel, Bob Judge's Holiday Train Display, and Mike Golub's Very Marconi Christmas. And, there is more...

In the history of the Information Age, Camp Evans is a unique place. Recently a Congressional Study has recommended the site's listing on the National Register of Historic Places be elevated to National Historic Landmark. This distinction is for the WW2 era home front contributions to the Allied victory. And, there is more...

We, the volunteers of InfoAge and member organizations, are a unique consortium. Our work to improve the future by preserving the past is already paying positive dividends to the community. We have come a long way from the Day in March of 1993 when a headline in a regional newspaper announced "Evans likely to fade into oblivion."

As we begin this new and expanded phase of growth, we can take pride as we complete the projects we have underway. We will put improved procedures in place to help handle our growing number of visitors. We can feel confident as we modify our 2002 NPS approved plan on how to rehabilitate the new space that the transfer will actually occur this year.

To meet the challenges of eight more buildings with floor space of 120,000-square-feet we will need more funds and more volunteers. We will continue to draw upon the WW2 spirit of "We Can Do It." We have produced amazing results with very little money. There is no reason we can not continue. We can transform more of Camp Evans into a place that improves the future by preserving and honoring the past. The future needs us now more than ever to continue this good work.



InfoAge

Science/History Center
at Camp Evans, Wall, NJ

Information Age Science and History Center, Inc.
2201 Marconi Road • Wall • NJ • 07719

732-280-3000 • www.infoage.org

NONPROFIT ORG
US POSTAGE
PERMIT NO. 37
BELMAR, NJ
07719



The Newsletter of InfoAge

Inside this issue...

- Camp Evans and InfoAge
- Recent Historic Acquisitions
- Amateur Radio: Who We Are

2009 Calendar of Events

February 14

The History of Radio
• 1-3 PM

March 14

How Your Cell Phone Works
• 1-3 PM

April 11

The History & Development
of Radar
• 1-3 PM

May 9

How the Internet Works
• 1-3 PM

June 6

Board of Trustees
Wall of Honor Reception
• Call for ticket prices and reservations

June 13

Introduction to Electronic Warfare
• 1-3 PM

June 20

MTMNJ 3rd Annual car Show
• Rain Date June 27th

June 27

NJARC Crystal Set Seminar
• Call for more information

Call 732-280-3000 for more information.