

Our own Airmail Beacon House

(As published in The Oak Ridger's Historically Speaking column on January 1, 2008)

"On April 12, 1939, a bright red Stinson Reliant plane swooped down out of the sky in Latrobe, Pennsylvania snatching a container of mail suspended on a rope between two poles. This event kicked off a unique chapter in airmail history. At that time, airmail service was restricted almost exclusively to metropolitan centers, out of reach of the majority of the country's population." The above quote comes from *Air Pick-Up* by James O'Donnell, an article published in *Enroute* Volume 9, Issue 1 January–March 2000. Rural America was about to get airmail by a most unusual delivery method!

Gordon Fee recalls just such occasions when he, at 12 years of age and living in Canonsburg, Pennsylvania, was a part of that historic airmail expansion effort. Gordon's job was to put the outgoing mail bag on the rope and hoist it up between the two poles. He also was tasked to pick up the incoming mail bag the airplane dropped and take it to the Post Office for mail distribution.

How did I learn this? What connects Oak Ridge with Canonsburg, PA or airmail? I never cease to be amazed at the new and interesting facts I learn in writing these *Historically Speaking* articles.

In November, 2007, I got an e-mail from Pat Parr, Oak Ridge National Laboratory's Oak Ridge Reservation Area Manager. She said that when TVA was clearing the right of way for an expansion of an electrical power line near ORNL an unusual small building had been discovered. She wondered if I knew anything about its history. I did not, but was sure interested. She said TVA personnel had called the building a "Beacon House."

As is my usual approach to such "unknowns" that pop up periodically in my research for *Historically Speaking*, my first thought and immediate action was to e-mail Bill Wilcox and Bill Sergeant. I have found them to be very reliable sources of accurate information about Oak Ridge's history. However, neither of them had ever heard of such small buildings on the Oak Ridge Reservation nor had they ever heard of a "Beacon House" at all.

I replied to Pat, asking to see the Beacon House. She agreed that would be a good idea and set about making it happen. She asked Ernest Ryan, of her staff, to arrange a visit to the site. She also sent a map showing the location of the building as being north of ORNL on top of the first rise of Chestnut Ridge. What a strange location. Why would such a small structure be located there in the midst of the woods? When was it built and for what purpose? The map just raised more questions than ever. I had to see that building!

Ernest and I did not get together right away, but in mid December, I got an e-mail from him asking if I still wanted to see the Beacon House. He also had been doing some research and now better understood what a Beacon House was used for and why it would have been placed on top of that ridge. I was now even more intrigued and anxious to go see for myself.

So, we travelled to the site and to my surprise, the building is in good condition, with the exception of the single door being missing and some rust on the tin roof and metal siding. I photographed the building and examined the surrounding area thoroughly. There are two concrete foundation blocks just east of the building that obviously served to support the fuel tank that powered the generator housed inside the structure.

There were also two depressions that seemed located exactly where two of the four foundations for the light tower would have stood. There is no trace of the large concrete arrow that would have likely been there as a visual indicator of the direction to the next beacon house. They were located approximately 30 miles apart, according to the information I have found on the placement of the beacon houses.

There still remains the evidence of a road down the ridge from the building. Ernest and I surmised this road was an access road from a nearby home where the family living there would have been employed to start the generator each evening and stop it each morning.

Our own Airmail Beacon House

(As published in The Oak Ridger's Historically Speaking column on January 1, 2008)

According to the Postal Museum's web site, President Franklin D. Roosevelt signed the bill into law authorizing this experimental airmail service on April 30, 1938. There were two routes opened in early 1939. The first route went from Pittsburgh to Philadelphia. The other went from Pittsburgh to Huntington, West Virginia. One reason for the support for this service was that it would bring airmail service to rural areas, such as East Tennessee, North Carolina, West Virginia and other Appalachian mountain areas.

The pilot of that first historic air pick-up flight on April 12, 1939, was Norman Rintoul. He also was the pilot on the final flight of the service on June 30, 1949. He later purchased a Stinson Reliant plane when All American Aviation upgraded its fleet in 1949 and donated it to the Smithsonian Institution. That plane is on display at the Smithsonian's Postal Museum.

Dr. Lytle Adams, dentist and inventor, formed All American Aviation. He thought the Air Pick-Up service would soon expand into both North and South America. While that was not the case, the service actually only lasted ten years, his company expanded to passenger service, dropped the air pick-up service and eventually became US Airways.

In an article published in The New York Times on Sunday, October 1, 1922, F. A. Collins wrote in, *LAND LIGHTHOUSES; Future Airways Will Be Illuminated for Nocturnal Fliers*, that he foresaw a network of lights that would serve to guide airplanes. He was right, but technology soon surpassed his vision for the future.

These Beacon Houses as foreseen by Collins were located approximately 30 miles apart. They were powerful lights. There were also base lights to allow the pilots to see the numbers on the roofs and the giant concrete arrows showing the way. The main lights pointed straight up so as to not shine in the pilot's eyes. Many rotated to be more noticeable by the pilots. Often a mirror was used as the motion device with the light shining horizontally into the mirror that reflected it upward.

The following timeline of the history of aviation may help put our Beacon House into better perspective.

On December 17, 1903, Orville Wright in Kitty Hawk, North Carolina, made the first powered flight of 120 feet and stayed aloft for 12 seconds. Powered air travel began.

Then on February 7, 1911, Fred Wiseman made the first official airmail flight of 14 miles from Petaluma to Santa Rosa, California. It took two days to complete.

Next on May 15, 1918, the Army Air Corps carried the first regularly scheduled airmail between Washington, DC, Philadelphia and New York City for the US postal service. Lt. George Boyle, pilot of this first air mail flight from Washington, DC and Philadelphia lost his way and was forced to land at Waldorf, Maryland. He again tried to get to Philadelphia and again lost his way. He was denied a third attempt.

On August 12, 1918, the United States Post Office took control of the nation's airmail service hiring pilots, purchasing aircraft and mapping out routes. And August 21, 1924, marked the first transcontinental flight from San Francisco to New York with the portion from Chicago to Cleveland being flown over the new lighted airways. Here is where the history of Beacon Houses such as ours began.

On September 8, 1920, the first transcontinental airmail service was established with airplanes being used to fly the mail by day and trains used to transport the mail by night. The elapsed time from coast to coast was 76 hours.

On February 2, 1925, Congress passed the first Air Mail Act or Kelly Bill for commercial aviation to provide airmail service through airmail contracts. And on February 19, 1934, the Army Air Corps took over airmail services after congress accused the postal service of favoritism in contracting out the service.

Our own Airmail Beacon House

(As published in The Oak Ridger's Historically Speaking column on January 1, 2008)

By April 12, 1939, when air mail service was expanded into the rural areas of Appalachia, our Beacon House was likely a part of a much larger effort to light the airways for night flights of these courageous pilots who flew in all kinds of weather to "deliver the mail."

So, by the time of the Manhattan Project in Oak Ridge, the Beacon House on Chestnut Ridge in all probability had been in existence for some time, may have even been in regular operation and had likely been operating for a number of years. What happened to it when the Army moved in? Was it already out of service? Was it maintained by the Army – unlikely as Bill Sergeant knew nothing of it.

Did it just get lost in the transfer of land and buildings for the Manhattan Project? Obviously, I have more questions than answers. I am going to seek to find it on Don Raby's photographic record of structures here before the Manhattan Project.

The Beacon House was NOT torn down as were other buildings. Was that just because it was remotely located and not in the way of anything the Army wanted to do during the Manhattan Project era? Or, was it still functioning as an airway light in the early 1940's. Remember, the expanded airmail service using the lighted airways did not stop until 1949.

I do feel that this "Beacon House" located near ORNL may well be the ONLY such structure remaining intact for miles around. It surely may just be the ONLY ONE IN TENNESSEE! I am told there is a "Beacon House Restaurant" near Dickson, TN. However, there is no evidence of the Beacon House for which it is named, only the knowledge that there was once such a beacon house located nearby.

Vhf Omni-directional Radio range or VOR began to be widely used in the 1950's using vacuum tube technology and by the 1960's when solid state electronics allowed reduced maintenance and increased reliability, VOR became the primary navigational system for the airways. Airmail delivery soon returned and has continued to function as a primary method for quick delivery over long distances.

Most all of the beacon houses of the early era of aviation are now long gone and were soon forgotten. But we in Oak Ridge have an excellent example of a site that contained a generator building, still has the footers for the fuel tank and the remaining evidence of two depressions where two of the four footers were located that supported the tower on which the light was installed to get it elevated over the surrounding trees.

This structure is being submitted to the National Register of Historic Places, and rightly so. It is truly a piece of aviation history that is unusual and may well be the only such structure left in our state or even surrounding states. The unique situation of the Manhattan Project created an isolation that preserved the structure for future generations to appreciate. It should be preserved and even restored.

Our own Airmail Beacon House

(As published in The Oak Ridger's Historically Speaking column on January 1, 2008)



Historic Beacon House located just north of ORNL in TVA's electrical power line right of way



Interior of Beacon House showing concrete footers on which the generator sat that powered the airway light