

Narrative of History of VOA Bethany

Imagine a time, less than 80 years ago, when your news was delivered to you once, perhaps twice a day, not 24/7 at the speed of a click or a tap. In the 1930s in America, news was gathered in a few locations nationwide and delivered to the American public, not accessed by it. It was delivered at a slower pace, too—at the speed of a plop of a daily newspaper outside your front door in the morning or during an evening radio broadcast.

In the 1930s in America, educated citizens walked to the town library to conduct research in books. They looked at maps to navigate their way around town. They subscribed to a daily newspaper and perhaps a few national magazines, and watched news reels shown before movies at the local theatre. They listened to the radio for local farm reports or tuned in in the evenings for national news and entertainment. And they took photographs one at a time, using film that was developed in a darkroom, which could take hours. There was a time lag of days, to weeks to months to a year sometimes before the latest fashion or dance craze from New York or Paris hit the smallest towns in rural Ohio. But while the 1930s may have had a longer news cycle than today, events moved just as quickly. Come back in time with us to the 1930s, when the technology of the day was radio—a time before TV, before internet, before Wi-Fi-- when only voices and sounds slaked our imaginations to create the pictures in listeners' minds that TV and video provide today. Radio truly played to the theatre of the mind.

I. 1930s Radio Technology in Germany

Adolph Hitler and his Nazi party rose to power in Germany in January, 1933. Hitler, whose speech-making was one of his primary talents, began using radio as a powerful newspeak tool through propaganda minister Joseph Goebbels.

As early as 1931, Goebbels believed that this wonderful new thing called "radio broadcasting" could become a very useful tool for the Third Reich. If he could control all of the radio broadcasting, and provided the masses with only half-truths, he could control people's minds. However, in the early 1930s radio receivers were quite expensive. A way around the high cost would be for the Third Reich to subsidize the cost of the receiver.

In 1931, radio receivers cost around \$100. The world was in a depression and the average person could not afford such a luxury item. Goebbels decided his radio for the German people should cost about one fourth of the price of an average radio.

In 1932, Hitler began manufacturing Germany's own inexpensive radio, the Volksempfänger (People's Radio), which was a simple, inexpensive, three-tube radio sold for propaganda purposes to the German people. At 75 reichsmarks, it cost about two weeks' wages for a German worker. It lacked shortwave reception, making it difficult for Germans to listen to foreign broadcasts. In this way, Hitler communicated his speeches and anti-Semitic policies to the German people. It was a crime during World War II for Germans to tune in to foreign broadcasts. The Nazis beamed shortwave propaganda broadcasts to the U.S. and Allied countries throughout the duration of the war.

(www.transdiffusion.org/radio/radiofeatures/hitlers_radio)

Various German manufacturers produced different models of the Volksempfänger over the years. However, the Volksempfänger was not a sensitive receiver. It was the Volkswagen Beetle of radios, not a Mercedes. Although it could receive both medium-wave and long-wave broadcasting frequencies, it used only three tubes. It was designed to pick up only local German radio broadcasts and only what Hitler and Goebbels wanted German citizens to hear.

In 1935, the Nazis also began a concentrated effort to broadcast many hours per day in the Spanish language to Latin America in an effort to attempt to persuade several countries to go to war with the United States. This was a diversionary tactic to distract the U.S. from watching what the Nazis were doing in Europe—which included building up its military and increasing its policy of harassing, limiting the rights of Jewish people and confiscating Jewish property. The Germans strategized that if the U.S. was involved in skirmishes in Latin America, it would be much less likely to be willing to go to war in Europe.

The Nazis broadcasting headquarters was in the city of Zeesen in east Germany, 20 miles southeast of Berlin, where the nation's first radio transmitter was launched in 1927. There were musicians, announcers, engineers and long-wave, medium-wave and short-wave transmitters and many antenna towers at Zeesen. In 1938, there were 1,000 employees of the Third Reich at Zeesen solely for the Nazi broadcasting/propaganda effort.

Hitler promoted anti-Semitic pogroms that began in the 1930s and became large scale in November 9 and 10, 1938, when thousands of Jews across the country systematically had their businesses and property destroyed and were beaten and killed by Nazis during Kristallnacht (Night of Broken Glass). Kristallnacht began Germany's implementation of its Final Solution to exterminate the Jews in concentration camps all over Europe.

(www.jewishvirtuallibrary.org/jsource/Holocaust/kristallnacht.html) In 1941, Adolph Hitler visited Zeesen and ordered that all of the Jewish inhabitants there be shot and hanged in front of the town hall. By 1945, nine million—two thirds of the European Jewish population-- had been annihilated.

(www.ushmm.org/wlc/en/article.php?ModuleId=10005161)

II. 1930s Radio Technology in the U.S.

The 1930s in the U.S. was the Golden Age of Radio, and nowhere was the age burnished more brightly than Cincinnati, Ohio. Despite the Great Depression, radio lifted the mood of the country and provided the average person with inexpensive entertainment broadcast across the country. Powel Crosley, a Cincinnati entrepreneur and radio enthusiast, who headed Crosley Broadcasting Corporation, began manufacturing a radio inexpensive enough for most Americans to afford in the 1920s, and by 1924, Crosley was the largest manufacturer of radios in the world. By 1933, 60 percent of Americans owned a radio.

At this time, most radio receivers were capable of receiving shortwave broadcasts as well as standard AM broadcasts. In June 19, 1934, the Federal Communications Commission (FCC) was formed in this country to regulate radio broadcasting. The FCC goal was to have every U.S. radio listener be able to receive radio programs from large, clear-channel, regional and local stations. Some stations would be daytime-only, some would use directional antennas, but everyone would be able to receive numerous stations without interference and without the use of shortwave frequencies.

Originally, shortwave frequencies were used mostly for coast-to-coast program relays. Network news was carried coast-to-coast using short-wave; however, it is short-wave frequencies that have the advantage of traveling great distances and propagating around the world. Medium-wave stations, such as WLW, were used primarily to serve regional geographic areas. Long wave refers to wavelengths at the lower end of the

broadcasting band and was used in the early 20th century. Most modern radio systems and devices use the shortwave band.

Crosley Broadcasting Corporation concurrently began to develop broadcasting nationwide using medium wave to encourage the sale of radios, and on April 17, 1934, Crosley's WLW, "the Nation's Station" began broadcasting with an unprecedented 500 kilowatts of power-- the largest in the world. WLW cultivated and broadcast young talent live, including Red Skelton, Doris Day, Fats Waller, Rosemary Clooney and Rod Serling. From its Cincinnati studios it developed some of the earliest "soap operas" sponsored by Procter and Gamble Company.

The 500 kilowatt experiment at WLW ended in 1939, when complaints were submitted to the Federal Communications Commission from other 50 kilowatt clear channel stations around the U.S. and Canada. These stations claimed WLW's broadcasts overpowered stations as far away as Toronto. The complaints said WLW had an unfair economic advantage because it could demand more money for its advertising commercials. Due to political pressures, WLW's license for 500 kilowatts was rescinded and the station returned to 50 kilowatts of power.

It was then that Crosley turned his attention to international broadcasting using shortwave frequencies. After 1938, only one new transmitter was licensed in the U.S., and that was WLWO in Cincinnati.

In July of 1939, WLWO, a new 50-kilowatt shortwave transmitter designed by R.J. Rockwell, Crosley's lead engineer, was placed in operation. It could broadcast news and music to Europe and Latin America. WLWO began broadcasting war news overseas as a voluntary and patriotic contribution to the war effort. From 1938 to 1944, there were really only two shortwave stations broadcasting on a regular daily schedule in multiple languages for foreign audiences: KGEI in San Francisco, and WLWO in Cincinnati. These two stations were used by the Coordinator of Inter-American Affairs (CIAA) for broadcasting official U.S. government news and information. Most of the other existing shortwave transmitters in the country had been turned off because they were not profitable. The roots of the Voice of America are these two stations. The eleven other shortwave transmitters in the U.S. were reactivated by the Office of War Information (OWI) in 1942.

In July of 1940, WLWO power was increased to 75 kilowatts, making it the most powerful shortwave transmitter in the country. There was a problem, though: as radio waves were transmitted across large distances, they lost

power. Rhombic antennas, a fairly inexpensive antenna to construct, lost 35 percent of their power just in the antenna alone. Crosley engineers William Alberts and George Friedrich Leydorf improved the antenna design to make it nearly 100 percent efficient. Their creation was called the re-entrant rhombic antenna, which was expensive to operate.

Two small reentrant rhombic antennas were built on WLW property in Mason to prove the concept would work, with the older of the two rhombics aimed at Europe. The antennas were installed on *Everybody's Farm* in Mason, a working farm where WLW broadcast daily agricultural programs -- with two antennas focused on the U.S., two on Europe, two on Latin America. Four more reentrant rhombic antennas would later be installed. The technology Crosley engineers developed was so unique it was classified information during World War II.

III. 1930s Political Events in the Asian Theatre

Meanwhile, Japan was suffering from its most turbulent political decade since the 1860s. In the 1930s, two prime ministers were assassinated or fatally wounded, two other prominent public figures were murdered and two military coups were aborted. Then the Japanese army seized Manchuria and withdrew from the League of Nations, declaring war on China in 1937. Political parties were dissolved as totalitarianism took a foothold on the country. Japan entered into an alliance with Germany and Italy in 1940, and began the slide into war with Britain and the United States. Japanese shortwave radio was used to broadcast anti-European propaganda to Southeast Asia before 1941.

IV. Cincinnati's Growing Role in Overseas Radio Transmission

The United States government was aware of Germany's and Japan's propaganda efforts, but decided truth was ultimately a more powerful tool than lies. It formed its national communications strategy in response to the need for people in closed and war-torn countries for reliable news.

In July of 1939, WLWO, a new 50-kilowatt shortwave transmitter designed by R.J. Rockwell, Crosley's lead designers, was put into operation. It could broadcast news and music to Europe and Latin America. WLWO began broadcasting war news overseas as a voluntary and patriotic contribution to the war effort.

By mid-1939, WLWO in Cincinnati was transmitting broadcasts overseas: German, French, Spanish, and Portuguese. Italian was added in 1941. WLWO, however, was not alone in this patriotic effort. A small number of other American shortwave broadcast transmitters were in operation nationwide at this time: NBC, CBS, General Electric, Westinghouse, Associated Broadcasters, Worldwide Broadcasting Foundation and the WCAU Broadcasting Company.

In 1940, U.S. Coordinator of Information William Donovan arranged a deal to allow KGEI, a 10,000 watt, General Electric-owned station in Belmont, Calif., near San Francisco, and WLWO in Cincinnati to broadcast official U.S. government news and information in exchange for commercials from Firestone Tire and Rubber, Planters Peanuts and Pepsi-Cola Companies. A teletype was installed at KGEI behind a locked door and announcers were instructed to read the copy provided from the COI exactly, with no insertions or deletions.

In mid-1941, President Franklin Delano Roosevelt established the U.S. Foreign Information Service (FIS) and named speechwriter and playwright Robert Sherwood as its first director. Driven by his belief in the power of ideas and the need to communicate America's views abroad, Sherwood rented space for his headquarters in New York City, recruited a staff of journalists, and began producing material for broadcast to Europe by privately-owned American shortwave stations.

The Foreign Information Service was prevented under its regulations from purchasing broadcast time for U.S. government news and information on these stations. The isolationist Congress of the 1930s, under strong pressure from the National Association of Broadcasters and other private broadcasting entities, had prohibited the U.S. government from conducting any direct broadcasting activities, either domestic or international, so the U.S. government did not compete with commercial broadcasting companies.

The U.S. government could not legally broadcast its official views to the peoples and governments of the world.

V. World War II Begins

Many Americans wanted no part of war in Europe or elsewhere. President Roosevelt promised to keep the U.S. out of the growing conflicts overseas during the 1940 Presidential Campaign, largely in response to pressure

from Republican Presidential Candidate Wendell Wilkie, who was trying to win isolationist votes.

Then, on Dec. 7, 1941, everything changed. The Japanese attacked the U.S. naval base at Pearl Harbor, stunning the nation and the world. Four of eight U.S. battleships at Pearl Harbor were sunk and 3,684 servicemen's lives were lost. It was the single largest loss of life in one day in U.S. history. With FDR proclaiming December 7 a "day of infamy," the United States declared war on Japan on December 8. It only took days for the Japan's Axis Allies, Germany and Italy, to declare war on the U.S. By the end of December 11, the United States was officially embroiled in every corner of the war.

At this time, Germany had 68 shortwave transmitters, Japan had 42 and the U.S. had only 13. After Pearl Harbor, the Foreign Information Service moved into high gear and theatrical producer, author and director John Houseman took charge of FIS radio operations in New York.

On December 15, 1941, just eight days after Pearl Harbor, the federal government leased KGEI from General Electric, making it the first international station under direct government control.

In 1942, the Coordinator of Information was split into two agencies: covert operations came under the Office of Strategic Services (OSS), America's World War II-period strategic intelligence, and propaganda operations were transferred to the Office of War Information (OWI). The OSS went on to become the CIA under the direction of New York attorney William Donovan.

President Roosevelt called an emergency meeting of the Board of War Communications in Washington in January, 1942, asking the nation's major broadcasters to help. NBC, CBS and WLW were among the broadcasters present. Licensees of shortwave radio stations and equipment manufacturers, along with the FCC, Office of War Information, Coordinator of Inter-American Affairs and the State Department attended. During a break in the meeting, James Shouse, president of the Crosley Broadcasting Corporation, called R.J. Rockwell, vice president and director of Crosley engineering, in Cincinnati and asked if he could build a 200-kilowatt transmitter. "I don't know," said Rockwell, "but I will sure give it a hell of a try."

WLW engineers came home from that meeting with a one-page contract to acquire another shortwave transmitter and design and construct four larger

and more efficient antennas to better serve Europe and South America. A 50-kilowatt shortwave radio frequency section was obtained from RCA in Camden, New Jersey, and a power supply and modulator was found at KFAB in Lincoln, Nebraska. This was assembled as a composite transmitter and licensed as WLWK. This was built at WLW's Mason site, less than a mile from what later became the VOA-Bethany station.

As result of that meeting, NBC built what later became the VOA-Dixon transmitting station; CBS built what became the VOA-Delano station, and Crosley built what became VOA-Bethany station. All three later began important VOA transmitters and were used for the next fifty years.

Design and construction of six 200-kilowatt transmitters and 24 high-efficiency directional antennas began on 625 acres of Tylersville Road farmland just west of WLW in West Chester (then Union Township and part of the Bethany phone exchange).

The site was selected because it was safe from coastal attack and had excellent access to electric power.

Powel Crosley rented an old candy factory on the south side of Central Parkway between Elm and Race streets in downtown Cincinnati as project headquarters. One year later, each of the six transmitters was operating on six different frequencies at full power of 200 kilowatts. News was transmitted to Europe, the Mediterranean; Africa and South America.

Two small reentrant rhombic antennas were built on the WLW property in Mason to prove that the concept would work. To begin broadcasting shortly thereafter, construction started on four new reentrant rhombic antennas on *Everybody's Farm* property across from Tylersville Road in Mason. This property contained a working farm and radio studio from which WLW broadcast daily agricultural programs. The land was also owned by Crosley Broadcasting. Low frequency (25 to 49 meters) and a high frequency (13 to 25 meters) antennas were constructed and aimed at Europe and Latin America. The technology Crosley engineers developed was so unique, it was classified information during World War II.

VI. The Voice of America

In February of 1942, the U.S. Office of War Information leased selected commercial shortwave stations. On Feb. 23, 1942, broadcasters, managers and support staff at WLWO and WLW took the night train from Cincinnati to

New York and were involved in the first Voice of America broadcasts on Feb. 24, 1942. Three WLWO broadcasters, Robert Bauer (German), Georgio Padovano (Italian) and Edward Beck (French) became longtime VOA radio announcers.

The Voice of America beamed its first broadcast to Europe via BBC transmitters from rented studios in New York City. The first live broadcast to Germany, called *Stimmen aus Amerika* ("Voices from America")... was introduced by "The Battle Hymn of the Republic" and included the pledge. : "Today, and every day from now on, we will be with you from America to talk about the war. . . . The news may be good or bad for us – We will always tell you the truth. "John Houseman, the first VOA director, later recalled those first broadcasts: "We went on the air...with no name, out of a cramped studio, on borrowed transmitters, with absolutely no direction from anyone as to what we should broadcast other than the truth."

From the beginning, VOA promised to tell its listeners the truth, regardless of whether the news was good or bad. "In reality, we had little choice. Inevitably the news that the Voice of America would carry to the world in the first half of 1942 was almost all bad," recalled Houseman. "Only thus could we establish a reputation for honesty which we hoped would pay off on that distant but inevitable day when we would start reporting our own invasions and victories."

By November 1, 1942, the U.S. government had leased virtually every shortwave transmitter in the country except WRUL in Illinois. The OWI ultimately seized WRUL by executive order. All transmitter sites were off limits to the public and protected by armed guards, for they were considered essential national infrastructure.

The first German VOA programs accompanied broadcasts in French, Italian, and English. By June 1942, VOA was growing rapidly and had a new organizational home — the Office of War Information (OWI). Twenty-three transmitters had been constructed and 27 language services were on the air in January, 1943 by the time the Allied summit took place in Casablanca. (VOA News.org History)

In the summer of 1944, the VOA Bethany facility occupied approximately one square mile of land in southeastern Butler County. The transmitter building contained about 35,000 square feet with a two-story administrative office section on the front and a single-story transmitter hall. There was a guard tower with three additional stories on the front of the building. There

were three complete transmitters on the east side and three “slave” radio frequency power amplifiers on the west side, making the plant capable of operating on six frequencies with three separate programs simultaneously. All transmitters used water-cooled power tubes with fan-coil heat exchangers.

A complete antenna switching matrix allowed any of the six RF power amplifiers to be connected to any of the 22 output ports. There were 19 rhombic antennas from 45 degrees to 100 degrees to cover Europe and Africa and five antennas aimed 168 degrees for Latin America. There were two additional antenna switches in the field to make use of all 24 antennas. All of the rhombic antennas were of the re-entrant type.

By 1944, VOA broadcast hundreds of hours of programming in more than forty languages.

In July of 1944, the Office of War Information began transmitting accurate, objective and comprehensive war news from VOA-Bethany. Adolph Hitler soon afterward began to refer to VOA-Bethany as “those Cincinnati liars.”

In December, 1944 the VOA-Bethany was testing components when the Battle of the Bulge broke out. The normal work schedule was about 12 hours a day, but when there was a major military offensive such as the Battle of the Bulge or the invasion of Normandy VOA-Bethany employees were here 24 hours a day.

The battle lasted from Dec. 16, 1944 to Jan. 25, 1945. During that time, VOA-Bethany went to full power 24 hours a day; none of the employees went home at night and some slept on the floor during the battle. WLWO employee Clyde Haehnle remembered sleeping in the VOA-Bethany basement for more than 30 days.

VOA-Bethany was now the loudest voice in the world—and its international shortwave transmitter remained the most powerful throughout WW II. Clifford Durr, FCC chairman, called these high-powered rhombic reentrant antennas the “siege guns of radio.”

VII. World War II Ends and the Cold War Begins

In 1945, with the end of the world war in Europe and Japan, the Office of War Information was abolished and VOA-Bethany taken over by the U.S. State Department. VOA-Bethany became part of the newly-created U.S.

Information Agency in 1953. The Crosley Broadcasting Corporation operated VOA-Bethany for the government until 1963, when the federal government assumed direct control. At its peak, VOA Bethany had three transmitters broadcasting 250 kilowatts, three with 175 kilowatts and two with 50 kilowatts of power.

In 1951, three huge steel towers were erected in the center of VOA-Bethany property to support two bays of curtain antennas. The north bay was oriented toward Europe and the south bay toward Algiers and Tangiers in north Africa for relay to the Iron Curtain countries. The USS Courier was anchored in the Mediterranean and relayed broadcasts behind the Iron Curtain.

Ironically, Sen. Joseph McCarthy, notorious for his accusations against Communists in the federal government, delayed the project when he accused the VOA of harboring Communist sympathizers. Robert Bauer, who had worked as a German language announcer in 1941 at WLWO and was now chief of the VOA European Division in Washington, D.C., testified at the McCarthy hearings and defended the VOA in 1953 against charges that its *Eye of the Eagle* soap opera in Latin America included communist sympathies. After his testimony, the McCarthy attacks stopped and the project was completed.

At its height, during World War II and the Cold War, the VOA broadcast news in 52 languages. Today, it broadcasts in 45 languages and reaches 171.6 million people weekly worldwide.

VIII. Time and Technology March On

As time passed, communications technology changed and so did the way people received news. People began watching television news in the 50s and short wave radio was eventually supplanted by satellite transmission. Today, our news arrives from many sources: print metropolitan daily and community newspapers; radio; digital news websites; television; and cell phones. The Voice of America, operated under the aegis of the Broadcasting Board of Governors, is now multimedia: it embraces not only radio, but satellite transmission of VOA television shows; internet, and mobile communications, including social media to inform and entertain people in countries with totalitarian governments or in countries divided by conflict and war. Shortwave radio transmissions are much less frequent, but are still used in at-risk areas of the world without reliable media access. Today, the VOA has the largest integrated digital audio system in the world and

transmits in 45 languages around the world, reaching 164 million people each week. VOA programs are delivered on satellite, shortwave, FM radio, medium wave, streaming audio and a worldwide network of 1,200 affiliate stations.

Today, the VOA operates shortwave radio transmitters and antenna farms at just one site in the U.S. close to Greenville, North Carolina.

IX. The VOA-Bethany Station Closes

In November of 1994, the VOA-Bethany was decommissioned and closed because of changing technology. In 1997, its towers were brought down and the property was given to the community. West Chester received nearly 500 acres and the historic VOA building. Twenty five acres were sold by the federal government and became the Voice of America Shopping Center. Miami University received 25 acres for the development of a regional learning center. West Chester Township later awarded Metro Parks of Butler County nearly 500 acres for development of recreational facilities for the community's benefit and retained the VOA-Bethany building and surrounding 20 acres for restoration and development of the National VOA Museum of Broadcasting.

X. The VOA Today

Today the Voice of America broadcasts news in 45 languages to a global audience, reaching 171.6 million people a week. It upholds the highest journalistic standards of accuracy, balance, comprehensiveness and objectivity, which are mandated by the VOA Charter. The VOA does not speak for the U.S. Government and reporters accept no treatment or assistance from U.S. Government officials or agencies. VOA News and programming is vigorously sourced and verified. A minimum of two independent sources is required before any news writers, background writer or stringer may broadcast as fact in any language.

XI. The National VOA Museum of Broadcasting is Created

"Tell the truth and let the world decide." This simple eight-word sentence captures the very essence of the Voice of America. It was the guiding

principle when it was founded more than 70 years ago and it serves today as the core mission of the National VOA Museum of Broadcasting. The can-do pioneering spirit of journalists and engineers of the 1940s made VOA a powerful voice of truth and fact during a time of propaganda, hate mongering and lies.

Using the innovative technology of the time, engineers based in Cincinnati designed and built a radio transmission facility thought impossible by their peers. Today that facility remains located on a 20-plus acre parcel in West Chester, Ohio. The façade of the classic, Art Deco style building is restored and the interior being constructed as a museum highlighting the important accomplishments both yesterday and today on the VOA as well as the rich heritage of broadcast programming innovation in southwest Ohio. The museum also holds one of the most complete inventories of radios and wireless equipment dating back to the Marconi era.

Over the next three years, with the financial support of the public and private sector, the National VOA Museum of Broadcasting will become a reality and serve as a tribute to using technology to spread the message of freedom and democracy worldwide.