

Carroll History Journal

Historical Society of Carroll County, Maryland

RADIO IN 1930 CARROLL COUNTY

BY SAMUEL T. BRAINERD

The pretty ingenue in the black party dress draped her arms around the neck of the tall, handsome man who might or might not have been her father. "OH, DADDY," she exclaimed. "Use the radio to dance to? At my party? Yes, of course I know the Calverts did, New Year's Eve, but daddy—they've got a SILVER and they get gorgeous music from anywhere they want—and ours!—Oh, daddy!"

"And that," the advertisement in *The Times* of April 4, 1930, went on to say, "is just why we sell and recommend Silver-Marshall Radio." W. Carroll Eckard, at Main and Court Streets in Westminster, carried six different Silver-Marshall radios, ranging in price from \$145 to \$195, "less only tubes." "A few dollars more cost, yes—but a world of added joy in the Mastery of the Air!"

A week earlier in the same newspaper, George R. Grumbine, the radio salesman at J. Stoner Geiman at 77 West Main, had urged shoppers to buy the Majestic Model 92 right away, because on April 1 the price would increase to \$179.50. The Majestic came in an "authentic Jacobean Period design," constructed of "genuine walnut and imported lacewood." Better yet, unlike the Silver-Marshall, it came "Complete with Tubes"!

These advertisements suggest that the business of radio was going strong in 1930 Carroll County, despite the effects of the stock market crash less than six months earlier. However, based on the Consumer Price Index, \$180 in 1930 would be the equivalent of more than \$2,300 today! Could people in Carroll

«OH, DADDY»



Use the radio
to dance to?
At my party?

Yes, of course I know the Calverts did, New Year's Eve, but daddy—they've got a SILVER, and they get gorgeous music from anywhere they want—and ours!—Oh, daddy!

And that—if you must know—is
just why we sell and recommend

SM SILVER MARSHALL RADIO
EXTRAORDINARY



A few dollars more cost, yes—but a world of added joy in the Mastery of the Air!

And all because it's made right—by America's First Maker of Screen-Grid Radios.

Six beautiful models—covering the whole price range of fine radios—from \$145 to \$195. The Model 75B (Illustrated) is priced at \$158, less only tubes.

W. Carroll Eckard
MAIN AND COURT STREETS

Figure 1: Advertisement for W. Carroll Eckard, from *The Times*, April 4, 1930.

County really afford such a luxury? The answer had nationwide significance, because the U.S. Census Bureau directed its enumerators across the country to mark down for each family they counted whether or not they owned a “radio set” as of April 1, 1930.

Why did the Census Bureau want to know about radios specifically? Why not whether families owned an automobile, or a refrigerator, or had indoor plumbing? Those were relatively new technologies, too. The *Times* of April 4, 1930, agreed that “some of the questions may seem personal and foolish,” but assured its readers that the government’s purpose “is not to pry into your private or personal affairs,” but to obtain a “true index of the products and resources of the country and general conditions, that will be of great value.” The official instructions to the enumerators do not state why counting radio sets would be of value, nor do the reports published after the census give the reasons behind the question. Fortunately, we can piece together likely reasons.

A Little Radio History

Given the Census Bureau’s seemingly sudden interest in radio sets, one might think that radio had only recently been invented. In fact, radio had a long gestation, with roots that reached back more than a century to 1819, when Danish physicist Hans Christian Oersted discovered that electrical current could move a compass needle. This idea of movement at a distance, specifically the opening and closing of a switch connected by wires to an electromagnet, lay behind Samuel F. B. Morse’s telegraph and his famous coded message, “What hath

God wrought,” sent from Washington, D.C. to Baltimore in 1844.

But radio, originally known as “radiotelegraphy,” would require transmission of messages *without* wires. By 1873, the Scottish physicist James Clerk Maxwell had developed formulas that predicted the goal was attainable. Other inventors were soon able to send electrical signals across short gaps, but it was Guglielmo Marconi, an Italian engineer, who finally achieved long-distance wireless communication. His successful transmission of the coded letter “S” across the Atlantic from England to Newfoundland on December 12, 1901, is generally thought of as the birth of radio.

From then on, the usefulness of radio increased greatly, especially as a way of communicating with ships at sea. When the steamship *Republic* sank off Nantucket in 1909, over a thousand of its passengers were rescued after the ship’s radio officer sent out the CQD distress signal. It was the first time radio had saved so many lives, and the event helped spur the popularity of the new technology.

Radio telegraphy was by now an unqualified success, and many began to anticipate the next advance: radiotelephony, the wireless transmission of voice instead of code. Limited success with voice transmission dated back to 1902 but, on Christmas Eve 1906, American Reginald Fessenden succeeded in broadcasting his voice and even a musical selection to astonished shipboard radio operators in the North Atlantic. His signal was very faint, though, and more audible broadcasts were delayed until

“To the Old
Ball
Game”
With
Perfect
Reception



Are You
Considering
A New
Radio - - -
May We
Demonstrate

Figure 2: Advertisement for Brownie’s Korner, New Windsor, from *The Times*, April 4, 1930.

Fessenden's countryman, Lee De Forest, invented the triode, a vacuum tube that could greatly amplify faint signals without distortion. By 1910 De Forest had transmitted the voice of opera star Enrico Caruso over the air and six years later established his own radio station, broadcasting the news to radio hobbyists.

A number of other experimental stations run by hobbyists sprang up around the country. They didn't operate for long, because the United States government shut down all experimental stations during World War I to free the airwaves for military traffic. However, they reappeared again immediately after the war. Even so, by the time the federal census was taken in April 1920, radio stations with regular programming were still rare in the United States, and few families owned radio sets. The Census Bureau was not yet interested in obtaining an accurate count.

In August 1920, radio station WBL in Detroit began a program of regular broadcasts to the public, but the honor of being the first commercial radio station in the United States to obtain a federal license went to KDKA in Pittsburgh, which took to the air on November 2 of that year. By the following November, the Commerce Department had issued over 550 station licenses. It took time for many of those stations to begin operations, but by June 30, 1922, 378 stations were on the air.

Baltimore's first radio station was WKC, which began broadcasting on March 23, 1922. Within three months the city had two more: WCAO (still in operation today) and WEAR (now using the call letters WJZ). WNAV began in 1923, followed soon after by WCBM and WGBA.

The archives of the Historical Society of Carroll County contain at least one recollection of radio listening in those early years. Nathan Baile of New Windsor wrote on May 31, 1922: "Yesterday afternoon the Lincoln Memorial in Washington, D.C. was presented to

the nation by Ex-President Taft and was accepted in a magnificent speech by President Harding. Then the Marine Band played Star Spangled Banner. Then Dr. Radcliffe—[it] was announced—would pronounce Benediction—all of which I heard plainly as though I had been present in Washington—'ALL OVER THE RADIO' instrument at Dr. George H. Brown's home." Three months later, the employees of the Melville Woolen Company planned a "Public Radio Demonstration," which they considered a "new amusement," according to an advertisement for their fourth annual picnic in Oakland Mills.

Government Regulation

The Secretary of Commerce held the power of licensing and assigning frequencies but he had no legal power to deny a license or prosecute station owners who decided to use different frequencies. The result was mayhem. Radio stations popped into existence willy-nilly, often in areas and on frequencies where existing stations already had programming. The stations' signals interfered with each other, making it difficult for listeners to hear their chosen programs. Stations began to increase their power in an attempt to drown out the interference, but of course that just made the problem worse.

Station owners and music publishers began to clamor for federal regulations with teeth so that programming could be heard reliably, attracting more advertisers and greater audiences. By the time the 70th Congress began its session in December 1926, it was clear that regulation could be delayed no longer. On February 23, Congress passed the Radio Law of 1927, creating a Federal Radio Commission to resolve radio stations' frequency and power conflicts. In November 1928, the commission redistributed radio stations into five new radio zones, which minimized the interference.



Figure 3: Wilbur Yingling listens to his crystal set in his room at Western Maryland College in 1923. Courtesy of McDaniel College.



Figure 4: 1927 RCA Radiola 18 with horn speaker

When the Census Bureau began gearing up for 1930, this new regime of regulated stations and frequencies was only about a year old. No wonder they decided to determine the state of radio ownership. The 1930 count would serve as the baseline from which to evaluate the regulation of the broadcast industry.

Radio Ownership in Carroll County

The Census Bureau found that, as of April 1, 1930, 35 percent of Carroll County's 8,445 families owned at least one radio set, slightly behind the national average of 40 percent and a bit further behind Maryland's average of 43 percent. Among Maryland's 23 counties and one independent city, Carroll ranked ninth, behind Baltimore, Montgomery, Baltimore City, Prince Georges, Anne Arundel, Cecil, Harford, and Allegany. Except for the last named county—home to Cumberland, then Maryland's second-largest city—all of the counties ahead of Carroll clustered along the Washington-to-Philadelphia corridor. That distribution suggests that one of the main factors affecting radio ownership was location. Even though other factors also mattered (race, for example: only 11 percent of

Maryland's black families had radios), the closer a family was to the main axis of population, the more likely it was to own a radio.

A similar pattern held true within Carroll County, although it wasn't exactly proximity to Baltimore that affected radio ownership, but rather how close a family was to the Western Maryland Railroad. Thus, residents of Woolerys (39% ownership), Westminster (48%), New Windsor (49%), Union Bridge (40%), and Middleburg (43%) were considerably more likely to own radios than families in Taneytown (30%) or Mount Airy (34%). It is easy now to forget how important railroad travel was in 1930. Many residents would have taken the train to Westminster or Baltimore to shop for a radio and would have had their purchase shipped back to them by rail. Electrical power tended to follow the tracks, too, and people living nearer the railroad were more likely to have electricity in their homes. This was before the 1935 establishment of the Rural Electrification Administration, which sought to provide electrical service to the 90 percent of farms across America still without electricity. Some farmers in the more rural parts of Carroll County certainly owned battery-powered radios, but many others would have been reluctant to spend the money to keep them charged.

Radio Sets of 1930

What brands of radios did people own?

Unfortunately the census doesn't say, and this was a period of rapid change in both technology and design in the radio industry. Surely radio sets of all designs were still in use in 1930, because even the earliest sets were not very old or necessarily obsolete.

The simplest radios were crystal sets, which did not require batteries because they used the tiny voltage of the radio station's signal to power the listener's earphones (Figure 3). The signal from the antenna passed through the tuning coil and on to a crystalline mineral like galena, which removed the main carrier signal, leaving only the small—and faint—variations that represented the speech or music.

More versatile than crystal sets were radios that employed vacuum tubes to amplify the signal



Figure 5: 1929 Philco 95 Deluxe high-boy

received from the radio station. The tubes required added electricity to work, though, so radio owners had to provide storage batteries to do the job. Most considered the extra expense worth it, because the tubes generated enough amplification to power a loudspeaker. For the first time radio listening wasn't limited to a single person wearing headphones. Now a parlor full of people could hear the broadcast at the same time. By about 1927, radios that drew power from a household's electrical wiring came to dominate the market in urban areas. While battery sets remained useful in rural areas not yet wired for electricity, these so-called "all electric" radios were the state of the art.

1927 was also the high-water mark for what collectors now call "coffin"-style radios. These were long, low boxes, containing the wiring, tubes, and controls of the radio. The loudspeaker was separate and plugged into the back of the radio. Such speakers could take on a variety of shapes, but pudgy disks,

metal hoops, and horns were most common. The RCA Radiola 18 (Figure 4) was a popular model and exemplifies the style.

The conglomeration of radio, speaker, and bulky storage batteries was still unsightly, so it did not take very long for radio manufacturers to contract with wood workers to create cabinets that could house all three parts of a radio in a single, attractive piece of furniture. Initially these "console" radios took the form of high-boys, with long legs (Figure 5), low-boys, with short ones, and, finally, floor models—a style that remained popular until after World War II (Figure 6).

Shortly before the census was taken in 1930, the Philadelphia Storage Battery Company, better known as Philco, began to manufacture a "midget" radio style that became wildly popular during the first half of the 1930s. The main impetus behind these small sets was the Great Depression. Customers were no



Figure 6: 1932 Philco 112X console



Figure 7: 1930 Philco 20 Baby Grand (left) and Philco 20 Deluxe Baby Grand. Radio photographs by Sam Brainerd.

longer able to afford the large floor models offered by radio manufacturers. Compared to the \$179.50 price of the full-sized Majestic 92, the Philco 20 Baby Grand sold for only \$49.50. That price, however, did not include the seven tubes, which seems a bit like selling a car without its tires. Nevertheless, the Philco Baby Grand was enormously popular, eventually selling more than 300,000 sets and catapulting Philco from third place to first among radio manufacturers.

Today, the Baby Grand seems anything but small in comparison with our tiny solid-state radios, but in 1930 it featured a revolutionary design in which the chassis and speaker were housed in a single “beehive” or “cathedral”-shaped cabinet small enough to sit atop a table. Figure 7 shows the standard Baby Grand alongside its Deluxe sibling, also from 1930. This general design, along with a squared-off version now nicknamed the “tombstone,” are still what many think of when they imagine what a typical antique radio looked like.

Local Radio Stations in 1930

What were radio owners listening to? A notice in the April 4, 1930, Carroll County *Times* announced the upcoming schedules of Westminster’s two experimental stations. Station WEST, operating on a frequency of 1340 kilocycles (kc) in the standard broadcast band, would be on the air every Sunday at 2 P.M., featuring “local talent.” Anyone wishing to air their talent was told to write to the Studio and Program Manager of WEST by the Tuesday before the broadcast. Local acts had been performing this way on nearby radio stations for at least six years. In May 1924 the Jesters and the Powder Puffs, two performing troupes from Western Maryland College, presented a concert aired by radio station WGBA in Baltimore.

Westminster’s other experimental station, W3XAP, operated in the shortwave band and so could be picked up only on the minority of radio sets able to pick up those frequencies. The station planned to be on the air every Wednesday evening at 7:30 broadcasting “electrical transcriptions,” which were

aluminum disks, similar to records, used to distribute network programming. Their grooves wore out after a couple of plays, so they are very rare today.

Baltimore sported four radio stations in 1930: WCAO (600kc, where it remains today), WBAL (1060), WFBR (1270), and WCBM (1370). Washington added four more: WMAL (630kc, its current frequency), WRC (950), WOL (1310), and WJSV (1460). WTBO operated from Cumberland on 1420kc. Lancaster's WKJC and Harrisburg's WCOD were probably audible in Maryland, but they were on the same frequency of 1200kc, so the stations must have alternated air time, a common practice then. WGAL in Lancaster used 1310, a frequency shared by two Philadelphia stations and another from Reading. Two stations in Harrisburg shared 1430: WBAK, owned by the Pennsylvania State Police, and WHP. On good days, especially in the winter, radio owners in Carroll County probably could have heard any of Philadelphia's strongest stations.

Carroll County did not have a permanent radio station until WTTR went on the air in July 1953. But the more modern radios of 1930 would have been able to receive most nearby radio stations even in the daytime. However, during the day men were at their jobs, women were hard at work in their homes, and children were in school. The audiences for radio stations whose signals could travel only 50 or 100 miles during the day would have been too small for commercial success. It was at night, on the other hand, that radio listening really picked up. After dark, a section of the atmosphere known as the ionosphere becomes reflective of radio waves, so a station's signals can bounce off the layer and beam back down to earth many hundreds of miles away from the transmitter.

Not surprisingly, then, most radio stations limited their programming to the nighttime. The *Frederick News* published the nightly radio schedule, listing the programming of selected stations around the country. Intrepid distance listeners (they called themselves "DXers") delighted in scaring up even the faintest signals from thousands of miles away on their receivers. But most listeners would have been satisfied with more local fare.

On the night of Wednesday, April 2, 1930, the day the census began, that local fare was skimpy:

WBAL, Baltimore, 1060kc

6:00 The Merrymakers

6:30 Studio feature

WRC, Washington, 950kc

6:00 NBC Programs

However, Carroll County listeners would have had no difficulty tuning in the network flagship stations in New York: WEAf of the NBC Red Network on 660kc, WJZ of NBC Blue on 760, and WABC of the Columbia Network on 860.

What's on Tonight?

These were the programs scheduled for the evening of April 2, 1930, on WJZ:

6:00	Bernie Cummins' Orchestra
6:30	Talk by John B. Kennedy
6:35	Bernie Cummins' Orchestra
6:45	Literary Digest Poll
7:00	Pepsodent Program – Amos 'n' Andy
7:15	Rise of the Goldbergs
7:30	Rhythmic Ripples
8:00	The Yeast Foamers
8:30	Sylvania Foresters
9:00	Romany Road
9:30	Cuckoo – Burlesque skit
10:00	Lew White, organ recital
10:30	St. Regis – Lopez Orchestra
11:00	Slumber music: Ensemble
11:30	Pepsodent program - Amos 'n' Andy
11:45	Literary Digest Poll
12:00	Phil Spitalny's Orchestra

Because radio programs were not permanently recorded in those days, we will probably never know what the Yeast Foamers had to offer their public, but other shows presented a mix of music, literature, and comedy. "Amos 'n' Andy" was particularly influential. Less than a year old, it was so popular that radio stations created many other similar

comedy shows to attract listeners. Today's situation comedies on television are the direct descendants of "Amos 'n' Andy."

The popularity of radio continued to grow unabated, despite the economic depression. In 1940, more than twice as many households as in 1930—27.5 million—owned a radio. The Census Bureau no longer felt the need to include the question in the sixteenth decennial census. Radios were everywhere.

A Final Request

This issue of the *Carroll History Journal* is unusual in that it deals with a subject within the memory of living people. The author would enjoy hearing from the *Journal's* readers about any memories they might have of the early days of radio. Please contact the Historical Society at hsc@hsc.org.



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Figure 8: In Westminster, Frounfelters sold home appliances including radios, phonographs, lights, and refrigerators. This image shows G.E. Miller in the store on Liberty Street about 1927. Historical Society of Carroll County collection.

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