Oklahoma Horizons Series

VOICES ON THE WIND
EARLY RADIO IN OKLAHOMA

by

GENE ALLEN

VOICES ON THE WIND...

is the first comprehensive history of radio broadcasting in Oklahoma, a state that was born with the new wireless communication. Radio has a unique place in our history because it was created by its audience. The scientists and technicians who invented the method of broadcasting never envisioned it as a medium of mass entertainment and education. The people did that.

Here for the first time are Oklahoma's pioneer broadcasters, the visionaries, great and small, along with the stations they built. Some went on to greatness while others disappeared.

Here, too, are the legends: the famous soprano who was hoodwinked into making her first broadcast, the young violin player who found his bride by radio, the University of Oklahoma Student who became the state's first educational broadcaster, and the millionaire who dreamed of a giant Oklahoma station and lost his fortune trying to build it.

Perhaps you have never heard of most of them, but all contributed to the pleasure and education we receive every time we turn the dial of today's radio.

ABOUT THE AUTHOR...

Gene Allen started his radio career somewhat involuntarily in 1948 when he ran out of money while attending Oklahoma A. & M. College. He found a job at KWHW, Altus, writing copy—despite the fact that he had never written radio copy. Somehow the owner forgot to ask if he had any experience. With his bankroll replenished, Allen returned to school at A. & M., paying his tuition by writing for KSPI, Stillwater.

After graduation he moved on to WKY radio and later WKY television. His credits include a number of television documentaries, including a series on Oklahoma history which received the National Cowboy Hall of Fame and Western Heritage Center's Best Documentary Award three times. He lives in Oklahoma City where he works as a free-lance writer.

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Gene Allen

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This book is dedicated to
Virginia Allen,
whose love of Oklahoma History inspired it,
though she did not live to see it finished...

And to
Cheryl Allen,
whose unwavering faith and support
helped bring it to completion.

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This book is about the beginnings of Oklahoma's radio industry to 1965. It was not possible to cover every station and every story in detail. If I left out your favorite, I apologize.

–Gene Allen

Harold C. Stuart of Tulsa (left) and Edward L. Gaylord of Oklahoma City, leaders in the radio broadcast industry in Oklahoma for many decades, through their generous support of the Oklahoma Heritage Association and cooperation with the author made Voices on the Wind *possible.*

FOREWORD

By the time the first radio arrived at our house in 1933, the radio revolution had been sweeping the United States for eleven years. More than 16 million American families got their radios before we did, but that dampened my personal enthusiasm for the new miracle not one bit. I can still remember the day that radio arrived.

It was borne into our modest home on the shoulders of my six foot Uncle "Tiny." Tiny, who understandably preferred that nickname to his real name, "Clarence," was one of my boyhood heroes. He not only lived in the unimaginably exciting surroundings of Kansas City, but he also was a traveling salesman and drove his own car. Any visit by Uncle Tiny was a major event. His arrival on that hot August day in 1933 was about to change my life more than I could possibly imagine.

I lived with my grandparents in the little Ozark town of Neosho, Missouri, just a few miles across the border from Oklahoma. The Depression was a daily fact of our lives, and although my grandfather's $25-a-week job at the local feed mill kept most of the bills paid and our garden kept us in food, there was little left over.

It was like my uncle to be aware of such things. Whether he brought the radio as a gift for his parents or because he thought every five-year-old boy should have one, I do not know. All I know is that out of the back of his shiny Ford he produced a cardboard box, and out of that box came the radio.

It was a table model, cathedral style, so called because its wooden case was pointed at the top like a cathedral window. There was a small rectangular dial with numbers and two knobs. And that was it. But the installation was a wonderful adventure for me, my grandfather, and Uncle Tiny.

First there was a long, serious discussion about the best place for its location. Proximity to both an electric plug and a window seemed important. Finally, a location was chosen in the living room. It was necessary to attach a grounding wire that led out the window to an iron stake driven deep into the ground near the house's foundation. This was no small task in that August-baked soil. Then came the stringing of the antenna. The longer the better seemed to be the general rule my uncle followed as he climbed a rickety, wooden ladder into two nearby trees and then stretched a horizontal antenna wire between them. That wire led to a second wire that connected the antenna to the radio itself.

Finally, it was time for the magic. As Uncle Tiny turned the left knob, there was a heavy metallic clunk and the dial began to glow with a faint yellow light. Nothing ever happened inside that old radio until the dial was fully illuminated. After that, the sound came up slowly. To a five-year-old, the process took forever.

It seems strange to me now that I cannot remember what came out of that radio the first time we turned it on. It was an event of such magnitude in my life that it seems impossible I should not remember. I only recall that we sat in the hot living room cooling ourselves with glasses of grandmother's lemonade and listening. And I remember that our lives were never the same again.

That little family ceremony had been going on throughout America since 1922 as the country rushed headlong into what would later be called the Radio Age and then the Television Age and, finally, the Information Age. This had begun with the telegraph and then the telephone. But radio was different from them. With the telephone and telegraph, it was clear to everybody what the inventions would be used for. But almost none of the scientists and inventors who had a hand in developing what they called the "wireless telephone" visualized its real future.

Dr. Lee De Forest, who invented the vacuum tube, had more vision than most, but he had a terrible time finding anyone to share it. In his autobiography, he recalled that each time he tried to interest a financier in the future of the wireless he had to explain that transmitting stations would be limited to only a few locations in New York and that anyone with a receiver could listen to the conversations. De Forest remembered the interviews invariably ended with the same question: "If you can't compete with the wireless phone and you can't cover the long distances the wireless telegraph can cover, then what the hell use is it, Lee?"[1] Even the visionary De Forest was not certain in those days.

Radio broadcasting was invented by the people themselves because they liked the way it changed the way they lived.

It certainly changed the way we lived. The radio was not turned on much in the mornings around our house. There were too many chores to finish, and for me there was school. My grandmother was usually the first to listen, about midmorning, for a program that featured a pleasant sounding young woman who read recipes. There was always a stub of a pencil and a small note pad near the set for writing recipes or instructions for getting one's own decoder ring from Jack Armstrong or the Post Office Box number necessary to acquire the latest collection of gospel songs.

Inasmuch as I was lucky enough to come home for lunch, I was able to listen to a newscast while eating. For some reason I was attracted to the news long before I understood much of what was being reported. For noontime entertainment just about everybody else listened to Bob Wills and his Texas Playboys, coming live from KVOO in Tulsa. KVOO was the only Oklahoma station we could get with any regularity; it came booming into southwest Missouri.

My grandmother soon acquired an interest in a select group of afternoon soap operas, including Ma Perkins, Lorenzo Jones, and Stella Dallas. I noticed that she rarely told anyone she listened to them. It seemed to me one of those things that women always kept to their own kind along with the secret of flaky pie crust and where babies came from.

After school hours, I had my turn at controlling the radio. Of course, I followed the aerial adventures of Jimmy Allen. At a time when every young boy had his own leather flying helmet with plastic goggles, I could hardly be expected to do otherwise. There also was Jack Armstrong, who once provided me with an excellent wooden bomb sight which enabled me to destroy the entire Japanese fleet long before the Battle of Midway. And Little Orphan Annie once sent me a 10-cent pedometer which actually measured my steps and converted them into miles hiked.

Evening was the time for family listening, at least on those evenings when the programs were louder than the static. My grandmother was partial to comedy. So we listened to Eddie Cantor, Bob Hope, and all the rest of the funny people. Crime and adventure programs disturbed her, or perhaps she thought they disturbed me. At any rate, most of them were forbidden. My grandfather went to bed early and spent little time with the radio on weeknights.

My grandmother's radio rules were interesting. Anything that seemed educational was automatically approved, even when it meant staying up past my bedtime. The radio's arrival allowed grandmother to expand her personal horizons, and she shared my interest in the news. She had always been interested in politics, and radio news reports were a never-ending source of information for her. There was one fairly major exception. The voice of President Franklin D. Roosevelt was never allowed in her house. She did not understand or approve of FDR's depression policies, and no one ever convinced her that slaughtering animals or dumping grain to reduce surpluses was necessary, to say nothing of moral. So as the 1930s wore on I found I could listen to the broadcast speeches of Adolph Hitler, but if I wanted to hear Mr. Roosevelt I had to go down the street to visit my friend Don Reynolds. His parents seemed to have a different understanding of current economics.

My grandfather's possession of the radio was limited to Saturday nights. For him, the radio meant he could enjoy all the country and gospel music he wanted. That was the music of his heritage, the music of his past, and it had never been so available before. After supper on Saturday night, he would turn on the radio and carefully search through the static until he found the signal of WSM, Nashville. WSM was hundreds of miles from Neosho, so it was never an easy search. Sometimes he was doomed to disappointment by the static. But on those Saturday nights when the weather was just right and his tuning skills were at their fullest, he would settle back in his rocker and listen in complete contentment to the Grand Ole Opry. Usually he would drop off to sleep listening, and we would come in around 9 or 10 o'clock to wake him. For my grandfather, 10 P.M. was about as late as it got.

That radio kept its central place in our family through the 1930s and 1940s. It was still there when I went away to college, but when I came back four years later something had changed. The radio was still in the living room, but it had been joined by a television set. The radio was rarely turned on. To my grandparents, something was different about their radio programs which they couldn't explain.

Strangely, the television was not used much either. My grandmother watched occasionally, mostly old radio programs transposed to the new medium. She disapproved of the television soap operas, and there seemed to be no recipes to copy from the television screen.

As for my grandfather, he watched very little. There were few country music programs because country music was not fashionable yet. There were only two television stations within range anyway, and no amount of careful tuning could bring in anything more distant, even on the clearest, coldest nights when Roy Acuff and Asher and Little Jimmy and Minnie Pearl once had been heard so clearly from so far, far away.

My grandfather simply went on to bed.

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CHAPTER ONE

THE VOICES OF ANGELS AND OTHERS

As the old year of 1906 drew to a close, a great optimism was building in the Twin Territories that were to become the State of Oklahoma. The question of single statehood had been settled by Congress once and for all, and delegates from both Oklahoma and Indian Territories had been elected to a constitutional convention. By year's end, that tumultuous body had been meeting in Guthrie for several months. Many felt that the new year of 1907 would almost certainly bring Statehood for the territories and that, in turn, would unlock a great storehouse of progress and prosperity for all those who would call themselves Oklahomans.

The general optimism was shared by the rest of the United States—with good reason. The country was emerging as a true world power following the Spanish-American War. In 1906, the U.S. government reported a *surplus* in the tresury of $59 million. Although the San Francisco earthquake and fire in April had been a sobering tragedy, there were far more positive events to report. This was especially true in the new fields of electricity and communications. 1906 was the year the tantalum filament light bulb was introduced, brightening the lives of all who lived near a source of electricity.

And electricity was becoming more common. 1906 saw the first long distance high tension line put into service from Niagara, New York. The New York Central railroad began to electrify its tracks out of New York City. The commercial Pacific telegraph cable was extended from the Philippines to China and Japan.

In October that year, a young man named Lee De Forest developed the three-element vacuum tube, which he hoped would improve the reception of wireless telegraph signals. It was destined to do that and a great many other things, most of which the young man had not the slightest inkling in 1906.

In Chicago a store clerk named Max Aronson had an idea that the public might pay money to see a motion picture with a cowboy hero and was looking for an actor to play the lead. In the new year of 1907 he would abandon the search, give the part to himself, and go down in entertainment history as Bronco Billy Anderson, star of 400 "Westerns."

In the real West that was Oklahoma, there were plenty of cowboys, few if any movies, and a lot of action. Indian Territory had been building for years. Tulsa was growing into a major trading center. There was an oil well flowing 2,000 barrels a day at Sapulpa. Guthrie, expanding to fill its expected role as the capitol of all this, already had seven railroads. In the 17 years following the Run of '89, Oklahoma City had become a rail and commercial center, and some people were saying openly that it was the rightful place for the State Capitol.

The Christmas season of 1906 was the brightest yet seen in Oklahoma. Stores were filled with goods, and the food markets were bursting with every kind of delicacy for the Christmas feast, including a good supply of wild game. *The Daily Oklahoman* reported that the mistletoe crop was especially fine with trees in Wheeler Park loaded with as much as 200 pounds. Wagonloads of the greenery were brought into town and sold on street corners to decorate homes and churches, and large shipments were sent to both Denmark and Germany.[1] It may have been Oklahoma's first venture into international trade.

Christmas Eve was observed that year in much the same way it is observed today—with parties in brightly decorated homes and services in mistletoe-festooned churches. That Christmas of 1906 seems far in the past now, but the message of Christmas, the feeling of family, and even the music has not changed that much over the years. Probably most of us would have felt quite at home standing outside one of the little churches of 1906 listening to the traditional carols rising in the clear night sky.

Almost 2,000 miles away, however, an amazing event was about to take place. It was a change that would be born with the new state of Oklahoma and would forever transform the way of life of everyone in it, altering in the process even such simple and unchanging customs as Christmas Eve.

The man who would begin this transformation was Professor Reginald Fessenden, a Canadian formerly of the University of Pittsburgh, a one-time worker in Thomas Edison's New Jersey lab, and a

former employee of George Westinghouse. In 1900 he had been the first important North American scientist to experiment with wireless transmission. He worked for a time for the U.S. Weather Bureau trying to perfect a way of transmitting the human voice by wireless and had, in fact, managed to do just that. But his first system was not practical, and he had a bitter disagreement with his superiors over patent rights. He soon departed his position with the Bureau.[2]

December of 1906 found him at Brant Rock, Massachusetts, a lonely outpost on Boston's South Shore. He had built an experimental station there based on a revolutionary theory he had developed. He reasoned that wireless *voice* transmission would not follow the Marconi wireless telegraph system, which involved transmitting dots and dashes as interrupted bursts of energy, but would rather be a continuous wave on which the voice sounds would be superimposed as variations or modulations. By Christmas Eve he was ready for his first test. He had informed ships in the area by wireless Morse code of his plan and asked them to listen.

The first program began with a short speech by Fessenden followed by a phonograph recording of a woman singing Handel's "Largo." To lonely ships' operators far from home on Christmas Eve, it must have sounded like one of the angels. Professor Fessenden played a violin solo and sang another song himself. He had no illusions about the quality of his voice, but he had been unable to find anyone willing to go down in history as radio's first singer. To close the program, Fessenden read the Christmas story from the Bible and wished all who were listening a Merry Christmas.[3] The broadcast was heard as far away as Norfolk, Virginia, but it received little notice elsewhere and was not mentioned by any Oklahoma newspaper.

There were enough other diversions to keep Territorial citizens busy getting ready for the new year. In Guthrie, Secretary of State Charles Filson's household was preparing for the annual ladies open house. In Tulsa they were racing to complete the new roller skating rink, one of the finest in the Southwest. In Oklahoma City watch parties and dances were planned, and restaurants anticipated big crowds. New Year's Eve was cold, just below freezing, but with a clear sky and little wind.

The Indiahoma Club, one of the more prominent social clubs in town, had the biggest bash of the evening. It was described gently the next day in *The Daily Oklahoman* as "of the informal kind." The entertainment included an orchestra plus an impromptu wrestling demonstration by Red Wickline and Kid Parker. The paper also noted that "a substantial part of the evening was required to complete the festivities."[4]

In Tulsa, things were a bit quieter. A watch party was held at the Methodist Episcopal Church with songs and a few short talks including one on "Christianity In The Laundry Business" and another on "Opportunities For Christian Young Men In Tulsa." About 100 people gathered for the party which featured refreshments served by the young ladies of the church.[5]

Back at Brant Rock, Professor Fessenden prepared to end the old year and begin the new with another broadcast. This time he had convinced a man named Stein, of whom nothing more is known, to sing. Stein was heard up and down the Atlantic coast and as far away as the West Indies where wireless operators, who formerly had heard only the mechanical dots and dashes of Morse code, quite unexplainably heard human voices.[6]

Whether Stein could have been heard in Oklahoma City, even if there had been a radio in town, will never be known. Quite possibly the radio waves reached the Territory, but they had quite a lot of competition. A local writer noted that at midnight the air was filled with the noise of bells and whistles and observed, with some civic pride, that this was the first year these sounds of progress and industry had outnumbered the usual New Year sounds of six shooters. The Indiahoma Club by then had completed its wrestling demonstration, and members had turned their attention to the next attraction of the evening: a badger fight.

Professor Fessenden concluded by wishing his unseen audience a Happy New Year and no doubt wished himself success with his amazing new invention.

In Tulsa the members of the Methodist Episcopal Church formed a circle around the room, held hands, and sang the lovely old hymn, "Blessed Be The Tie That Binds." No doubt they felt those ties, but there was no way they could be aware of the invisible waves which were beginning to encircle them and their new state; waves which would, in only a few years, enlarge those binding ties to every part of the world.

CHAPTER TWO

THE DREAM

The grey haired old engineer had spent his entire life with radio. He had grown up with crystals and tubes, resistors and transistors, as well as some antiquated electronic components long since discarded from daily use. He was standing at the base of a transmitting tower that stretched a thousand feet into the sky. It was a beautiful spring day with fluffy white clouds barely moving on the soft breeze. The only sounds were the hum of insects and the occasional call of a bird.

"You know," he said, "if you think about it, the whole idea of radio is ridiculous. You make a sound here and somewhere out there, maybe hundreds or thousands of miles away, someone hears it. Instantly. But standing here, you'd swear nothing is happening. There's no sound, no flashing lights. Nothing. It's ridiculous."

He knew, of course, that we were being inundated by radio signals in that quiet field. There was music coming from the transmitting tower. More music along with the voices of a hundred or more announcers came from other towers near and far. There were voices of aircraft pilots, police on patrol, taxi drivers, laundry deliverymen, truck drivers, and little kids with toy CB transmitters pretending to be drivers or pilots or spacemen. In addition, there were the voices of satellites orbiting overhead sending messages about weather, computers, military secrets, personal secrets, and the positions of galaxies in relation to the universe.

If it had been possible for someone to throw a giant switch and make all those radio signals audible at once, the quiet field would have been rendered uninhabitable by the din.

Yet the old engineer was right. Even today it seems impossible to believe. Perhaps that was why the dream was so long in becoming a reality.

Radio grew out of the science of electricity. Electricity was magic enough when such men as Franklin, Volta, Faraday, Henry, Ohm, and Ampere began their work in the late 1700s and early 1800s. J.C. Maxwell of the University of Edinburgh was the first to conceive the idea that some forms of electricity could move without wires. That was in 1864, but it was only a theory and did not seem to have any practical application. Eleven years later, in 1875, Thomas Edison, while testing an electromagnet, noticed a strange kind of spark which did not seem to conform to any of the known laws of electricity and was quite indifferent to conductors or earth currents.

Edison called this spark the "etheric force," and *Scientific American* commented that it was "a new and distinct phase of force, an unstudied phase of electricity, which will rank Edison the most fortunate and eminent of scientific discoverers."[1]

The *Scientific American* was correct in so identifying Edison, but not for his discovery of "etheric force." Edison had other things on his mind. Still, the force was not easily ignored. It intruded on Edison again in 1880. That time it appeared as a black deposit inside a glass bulb with a blue light glowing from a leg of the carbon filament. He covered the lamp with tinfoil and connected one terminal to a galvanometer and another to the carbon filament. He found the current flowed between the filament inside the bulb and the foil outside. If he had not been working 18 hours a day trying to perfect a practical light bulb, he might have realized that he had just discovered the principle of the vacuum tube.[2]

Others began to investigate these invisible waves. Professor Heinrich Hertz of Germany was testing Professor Maxwell's theory when he found that, when he made an electrical spark in a certain way, it caused oscillations in the terminals. This did, indeed, cause invisible waves which would affect any conductor in a magnetic field and even more amazing, these waves went right through solid objects.[3] Professor Hertz' discovery in 1887 was the first radio transmission although no actual information was sent.

In one sense, the radio "program" already had been invented. That distinction belonged to Alexander Graham Bell, inventor of the telephone. Bell's associate, Thomas Watson, recalled that in 1887 Bell was touring the major cities of the East Coast to promote his new invention. Each program

began with a lecture by Bell explaining what the telephone was and how it worked. But the climax of the program was provided by Watson. Bell appeared on stage with one telephone at his side and other, larger models suspended over the audience on wires. The phones were all connected by a leased telegraph line to Watson's location which varied anywhere from five to 25 miles away. After Bell finished explaining how the telephone worked, he would signal Watson to begin. Watson responded with shouts of "good evening!" and "What do you think of the telephone?" and then he would sing. Professor Bell preferred rousing numbers such as "Pull For The Shore" or "Yankee Doodle," but Watson recalled that he was allowed one sentimental ballad, "Do Not Trust Him, Gentle Lady."[4]

"I always felt the artist's joy," Watson wrote, "when I heard the long applause that followed my efforts. I was encored to the limit of my repertoire and sometimes had to go through it twice." Of course, it can be argued that Watson's vocals were not really radio "programs," but the team of Bell and Watson should at least receive credit for inventing Muzak.

By 1891 interest in the mysterious "etheric force" was increasing in Europe. One of the experimenters, Professor Augusto Righi of Bologna, Italy, worked at the problem for a time with little success and finally gave up. However, his 20-year-old student, Gugliemo Marconi, continued the work and became the first to send and receive a radio signal. The first practical application conceived for such a device was communication with ships at sea. Vessels were often in distress and even more often in need of routine instructions regarding ports of call and cargo to be carried. Great Britain was the dominant seapower and in the best position of any country to benefit from the future possibilities of radio, and it was the British who sought out young Marconi. Soon, Marconi was a welcome guest of British scientists and breaking radio transmission records with regularity. By 1897 he could transmit dots and dashes 24 miles. In 1898 he sent a report of a yacht race 30 miles. In 1899 he established regular message service across the English Channel. In 1901 he was up to 200 miles, and before that year was out he had managed to transmit from Wales to Newfoundland.

On Thursday October 17, 1907, only a month before the new state of Oklahoma came into being, Marconi began daily wireless telegraph service across the Atlantic with the first message to the *New York Times*. The message, from Privy Counselor Lord Avebury read, "I trust that the introduction of the wireless will more closely unite the people of the United States and Great Britain, who seem to form one nation, though under two Governments and whose interests are really identical."[5] It was quite natural for the Privy Counselor to promote a common interest. The wireless system was a British monopoly in which ships and land stations had to be properly licensed before they were allowed to broadcast messages. And, of course, the British collected a fee.

But there was plenty of "informal" activity going on in the United States. Other young men were inspired by Marconi's accomplishments, and they followed his lead, using simple, easy to obtain materials as he had done. In attics and barns they wound wires around Quaker Oats boxes, learned Morse code, and listened, listened, listened.[6] They formed wireless clubs in high schools and colleges.

For every transmitter there were dozens of receivers. Later, many of those who only listened managed to acquire enough money and experience to join those who also transmitted. They were amateurs but in the same sense as Edison and Ford had been amateurs, and many of these young men became the inventors of radio "broadcasting."

1904 was a great year for the wireless telegraph and for Oklahoma. It was the year of the St. Louis World's Fair—the first world's fair to have participation from Oklahoma. The Territorial Legislature authorized an official display. A number of local industries joined in, and many residents rode the Frisco railroad all the way to St. Louis to see the fair for themselves.

The fair featured an International Electrical Congress which was a general recapitulation of scientific progress to that time along with some supposedly informed speculation about what the future held for the new wonder, the wireless. Unfortunately, none of the participants foresaw the development, just months away, of either the vacuum tube or the crystal detector.[7]

For the average citizen there was plenty to bedazzle the eye and the mind. Wireless telegraphy equipment of that time was big, bulky, and noisy, and scientists delighted in showing off their giant transformers that "emitted an eye-searing and ear-rending spark, and various arcs and dancing light-

nings which threatened to electrocute anybody within several feet of them."[8]

While all attention was focused on St. Louis, the wireless came to Oklahoma. On February 26, 1904, the *Perkins Journal* reported that the first wireless telegraph experimental station in Oklahoma had begun operation in Guthrie. It was established by Professor Elmer Ringer, who had recently joined the Logan County High School faculty from Baker University at Baldwin, Kansas.[9]

De Forest's "Audion" vacuum tube was the most important of the new wireless telegraph developments which immediately followed the St. Louis World's Fair. It was first used by telephone companies to extend the range and quality of telephone reception. The same year, another discovery was made which would be far more important to the average citizen enthralled with radio. It was the successful end to the search for a better detector of radio waves. G.W. Pickard discovered the simple crystal detector, a device so inexpensive and widely available that it immediately made wireless reception possible for even a high school student. Pickard used a silicon detector, but boys everywhere soon found that the principle worked with all manner of junk, from old alarm clock pieces to worn out fishing tackle.[10] The best were made of silicon which, when touched in just the right way by a small metal wire, or "cat's whisker," brought forth radio waves. They were weak, to be sure, and headphones had to be used, but the crystal receiver was a thing of miracles. And most wonderful of all, it was cheap.[11]

Also in 1906, Professor Fessenden announced the perfection of a better transmitting system which used a high frequency alternator, a kind of electrical pump which pushed energy into a transmitting antenna and pulled it out again at a high rate of speed. In a report to the Smithsonian Institution, Fessenden wrote that the first tests had been completed at Brant Rock, Massachusetts.

"The reception was perfect," he wrote, "and was admitted by telephone experts to be more distinct than that over telephone lines. The sound of breathing and the slightest inflections of the voice being reproduced with the utmost fidelity."[12]

In 1907 De Forest organized a company to develop wireless telephone communications in competition with Fessenden. De Forest's first customer, the U.S. Navy, was preparing to send its fleet on a round-the-world cruise. Twenty-seven sets were hurriedly built and delivered, but the results were disappointing because there was almost no time to train operators. However, the sailors did get some entertainment from the new radios when a wireless operator named Meneratti began broadcasting daily to the fleet using phonograph records. He was undoubtedly one of the first disc jockeys.[13]

On shore in both Europe and America, experimentation with transmitting the voice by wireless continued. While it was possible to achieve the miracle, the problem of poor quality was not so easily overcome. There were no suitable microphones. Both the arc oscillator and the high frequency alternator which were used in transmitters were heavy, cumbersome and expensive.[14]

While some pioneers tried to solve the transmission and reception problems, others tried to come up with ways to get people to listen to radio. Lee De Forest proposed broadcasting from the Metropolitan Opera, and on January 10, 1910, the *New York Globe* reported, "Grand Opera by wireless telephone from the Metropolitan Opera House will be ready within a few days."[15]

On January 13, the great event took place: a live radio broadcast of Cavalleria Rusticana and Pagliacci, featuring Enrico Caruso. It was Caruso's first radio appearance—and also his last. The next radio broadcast from the Metropolitan was not until 1931. The broadcast had a mixed reception. The *New York Evening Sun* reported, "The experimental receiver at the front of the house [the Met's foyer] certainly delivered the voices like any talking machine. The more distant trials were marred by atmospheric and electrical conditions....Some notes of Destin and Caruso were picked up as far off as Newark, New Jersey."[16]

According to the *New York Press*, the voices were heard as far away as Bridgeport, Connecticut. However, "one or two scenes of the Rusticana were interrupted by a wireless operator who evidently did not like music."[17]

By 1912, because a sufficient number of citizens had managed to acquire transmitters, problems of interference began to appear. The Navy, at that time the heaviest user of wireless, urged Congress to pass the first wireless licensing law. Although designed to deal with wireless telegraphy only, this law was destined to be the only regulating force for radio broadcasting until 1927.

The law required each transmitter to be licensed. Getting a license was easy. The operator simply

applied to the Secretary of Commerce. Apparently there was no provision for refusing a license, although the operator was required to pass an examination. Each transmitter could be operated only by a licensed operator. Government and amateur transmissions were separated; amateurs were required to operate at 200 meters or above.

Some provisions of the 1912 law would cause confusion compounded by chaos when commercial broadcasting appeared, but for better or worse, it was the law. Almost as soon as the bill was signed into law by President Taft there was a rush of applications and in only a few months, almost a thousand transmitters had been licensed, including one at the University of Arkansas. By 1917 amateur broadcasters held 8,562 licenses.

For most amateurs, it was still a matter of listening to code. Not until experimenters began to understand the possibilities of De Forest's oscillating audion did practical radio speech and music become possible. In 1915 several transmitters were built utilizing the audion, and after that progress came quickly. In November 1915 Western Electric engineers broadcast music from Washington, D.C., to New York City as special entertainment for a dinner. In the fall of 1916 De Forest transmitted election returns from his station at High Bridge, New York, and Harold J. Power of Medford Hillside, Massachusetts, transmitted music occasionally in December of that year.[18]

In those last years before the United States joined in World War I, the airwaves were just beginning to carry the unusual messages that became broadcasting. An amateur who had previously been content to tap out messages in Morse code suddenly had an urge to play a phonograph record or make a speech or give the correct time or predict the weather. Somewhere else, another amateur listened and decided to join in. Some of the experimenters spoke of the great possibilities inherent in transmitting music and voice through the air, but most people looked on broadcasting as a slightly eccentric activity.[19]

There was one famous exception. In 1916, a young employee of the Marconi Company, David Sarnoff, wrote to Edward J. Nally, an executive of the company:

> I have in mind a plan which would make radio "a household utility" in the same sense as the piano or phonograph. The idea is to bring music into the house by wireless. It would seem to be entirely feasible. For example—a radio telephone transmitter with a range of say 25 to 50 miles can be installed at a fixed point where instrumental or vocal music or both are produced....The receiver can be designed in the form of a "Radio Music Box"...and can be supplied with amplifying tubes and a loudspeaking telephone all of which can be neatly mounted in one box....[20]

Sarnoff described in great detail his "Radio Music Box" idea and predicted that the first three year's sales could reach $75 million. In fact, the first three years' sales of radios reached $83 million, but no one at the Marconi Company had the vision to take advantage of Sarnoff's idea. He did that himself when he later became head of Radio Corporation of America.

Then, suddenly, everything changed. In 1917 the United States went to war with Germany. The 1912 communications law contained a clause that "in time of war or public peril or disaster" the President might close or seize any radio apparatus. He did so at once. All amateurs were immediately out of business, all commercial radio telegraph stations were taken over by the Navy, and campus wireless stations were converted to training military operators. The one nearest Oklahoma was at the University of Arkansas. Others were at Harvard and Loyola. Not many people had been thinking about radio entertainment before the war. Certainly no one thought about it once the war began.

In one sense it is ironic that the war became a blessing to the development of broadcasting. It accelerated the design and production of transmitters and receivers. Bitter patent fights had kept development suppressed before the war. In 1916 a Federal court ruled that De Forest's audion, when used as a detector of radio signals, infringed on Fleming's original glass bulb detector which was then owned by the Marconi company. That meant the audion could not be marketed in the United States without permission of Marconi. However, De Forest's three element tube, or "grid," was protected by patent, although AT&T owned that patent. To further complicate the situation, Edwin H. Armstrong had developed a new "feedback" circuit that greatly increased the performance of the audion as a detector, and he had a patent on that. Of course, it had now been discovered that the audion could generate radio waves as well as detect them, and that introduced a whole new area for dispute.

Once hostilities began, the government ordered

all parties to this legal tangle to concentrate on production and settle their disputes after the war was over.

During the war the greatest progress was made in vacuum tube design and production. Before the war, tubes were fragile and not very reliable. The Signal Corps needed rugged design and, above all, reliability. A number of manufacturers met those specifications in a surprisingly short period of time.

Tube power also increased. In 1915 engineers were working with 25-watt tubes, and a radiophone transmitter needed 500 tubes to radiate approximately one and one-half kilowatts of useful power. Two years later tube power was up to 250 watts.[21]

Then in 1918 the fighting came to an end. Before the war sending the human voice across space had been only a half-realized dream. During the war the physical means to realize that dream had been created, and thousands of young men had been trained in the ways of using those means. One of those young men would soon arrive in Oklahoma. His dream, and the dreams of thousands of others, was about to come true.

CHAPTER THREE

THE REVOLUTION BEGINS

When World War I ended on November 11, 1918, radio broadcasting was in a confused situation. When the United states entered the war, major technical breakthroughs were imminent, but all had been stopped instantly by government edict. Tremendous progress had been made during the war, but many of the young men who would have adopted the new technology were in the service. The rest were prevented from doing any broadcasting because of wartime national security regulations.

Shortly after the Armistice however, soldiers and sailors started arriving home, and those fortunate enough to have received radio training were more eager than ever to use their new electronic skills. It was fairly easy for those who only wanted to listen. Crystal sets were inexpensive, and receivers with small tubes soon became available. Before long there were thousands of eager hobbyists, including not only returned servicemen but also Boy Scouts, high school and college students, and individual amateur experimenters. One of those was the Autry family's young son Gene who had learned how to wind wire around a salt box, string a few wires, manipulate a "cat's whisker" across a crystal and thus bring the world to Tioga, Texas. In only a few short years, he would be doing much more with radio in Oklahoma.

It did not take much money or expertise to reach out and pull in a wide, unknown world. There was a lot to hear, even in 1919 and 1920. In May of 1919 the Navy sent a group of flying boats to the Azores, and messages from their radio operators were picked up all along the Atlantic coast.[1]

Lee De Forest described the mood of the time in his autobiography:

> The year 1920 takes one back to the age when the man in the block who owned a wireless set that actually worked was looked upon as a wizard second only to Edison and Steinmetz. Friends gathered in his front room and waited in rapt attention while a noisy signal was tuned in and earphones were passed around from one pair of ears to another for all to hear and wonder at. Those were the happy days when a good pair of earphones cost twelve dollars and were hard to get at that price. Individual earphones were carefully matched in order that the signal might be equal in each ear... crystal sets complete with crystal and a single earphone were offered for fifteen dollars. After each evening's operation the crystal was removed with care, tenderly washed in alcohol, and put to bed swathed in fine cotton in its own little container. Who will ever forget the sight of four to eight ranged around a table with long black cords extending in graceful loops from a "multi-connector" to each pair of earphones?[2]

De Forest responded to the mood of the time by moving to California and going into broadcasting himself. He set up a transmitter in the Humbolt building in San Francisco and began broadcasting the concerts of the California Theater's house orchestra.[3] It was easier for him. He had, after all, invented the vacuum tube and had access to his own supply although he, too, was in the midst of patent lawsuits.

For amateurs who wanted to transmit as well as receive, it was more difficult. Veterans came home to find that the transmitters they had built before the war were now hopelessly out of date because of rapid progress in vacuum tube design. But the government stopped producing the wonderful new tubes as soon as the Armistice was declared, and the various competing companies went back to their lawyers to fight over ownership rights. Transmitter tubes simply disappeared from the market. But the young radio men were a resourceful group, and one way or another, many of them managed to acquire a few of the new wonder tubes.

In Hollywood an electrical engineer named Fred Christian built a 5-watt transmitter in a back bedroom of his home and began entertaining the neighborhood with concerts. Near Stevensville, Montana, a young man set up a transmitter and invited friends in to organize a "radio orchestra." In Charlotte, North Carolina, a contractor named Fred Laxton built a transmitter in a chicken house behind his home in order to broadcast phonograph records.[4]

At almost the same time, in late 1920 or early

1921, two eager young men arrived in Oklahoma City thoroughly bitten by the wireless bug, E.C. Hull and H.S. Richards. Hull, who grew up in Niagara Falls, New York, had built his own receiver at an early age. During the war he was a radio instructor at Ft. Bedloe, at the foot of the Statue of Liberty, and served in France with the American Expeditionary Force. After his discharge he set out, apparently looking for adventure, and stopped in Oklahoma City. There he met Richards who shared his passion for radio. Richards also had been an amateur radio builder at an early age, but after the war he took a job as a traveling salesman for a large jewelry store. How they met is unknown, but they became friends and joined in a partnership to build a radio station. The key factor was that one or both men had a supply of equipment, including the precious transmitter tubes.

How they acquired the tubes is uncertain, but several radio engineers who knew Hull later said the tubes and other critical components had been stashed in a downtown bank's safe deposit vault until they could be installed in a working transmitter. It seems very likely that Oklahoma City's first radio station went on the air with a major, if unwitting, assist from the United States Army.

Whether Hull and Richards used Army parts for their station or not, the Army was very likely the first to broadcast entertainment to the state of Oklahoma. That was accomplished by a station known as DM-6 located at Post Field, Ft. Sill. At the end of World War I, Post Field was a major installation of the Army Air Corps and some of the planes there were equipped with wireless receivers. About 1919 the Army established a 5-Kilowatt transmitter at Ft. Sill, and the operators claimed to have the most complete and sensitive wireless apparatus in Oklahoma. In addition to daily messages to aircraft, DM-6 sent transmissions to Minnesota and Florida and reported picking up transmissions from Bordeaux, France, and all parts of the United States. The antenna was 300 feet long and was mounted on two 85 foot poles. But the Army flyers also had a 15-watt transmitter which apparently was used for the amusement of military operators. They played music from time to time and also talked with other operators, including Hull and Richards in Oklahoma City.

The post-war Army aviators were a colorful bunch who believed passionately in the future of aviation and with it, the future of radio. To celebrate Washington's birthday in 1921 they put together a big public air show filled with all sorts of derring-do, including mock bombings, an attempt to set a new altitude record for parachute jumping, *and* the first radio broadcast from a plane. The plan was simple. A local music store donated a wind-up Edison phonograph which was somehow mounted in the rear cockpit of an open biplane, perhaps even held on the radio operator's lap. The operator held a microphone next to the phonograph and transmitted music to the crowds below. Unfortunately on the day of the big air show, there was a mechanical problem with the plane and the concert had to be called off.[5] Never discouraged, the aviators tried again a few months later, and the citizens of Lawton were treated to music from the air, although some reported that "the roar of the engine sometimes drowned out the music."[6] That was probably an understatement considering the fact that the Edison phonograph was strictly an acoustic device with no electronic amplification, and there was as yet no way to connect the phonograph to the transmitter electronically. The wonder is that it worked at all.

Actually no one will ever know who made the first radio broadcast in Oklahoma because the whole process was so casual in the beginning. Somewhere an amateur with a transmitter got bored with talking, moved his microphone over to the living room Victrola, and played the first record he picked up. Somewhere else, another amateur with just a receiver listened with appreciation, telephoned the broadcaster, and told him his signal was loud and clear and the music was nice. But the operators at Post Field are the most probable candidates for the honor, simply because we know they were in operation in 1919 and they had the tubes.

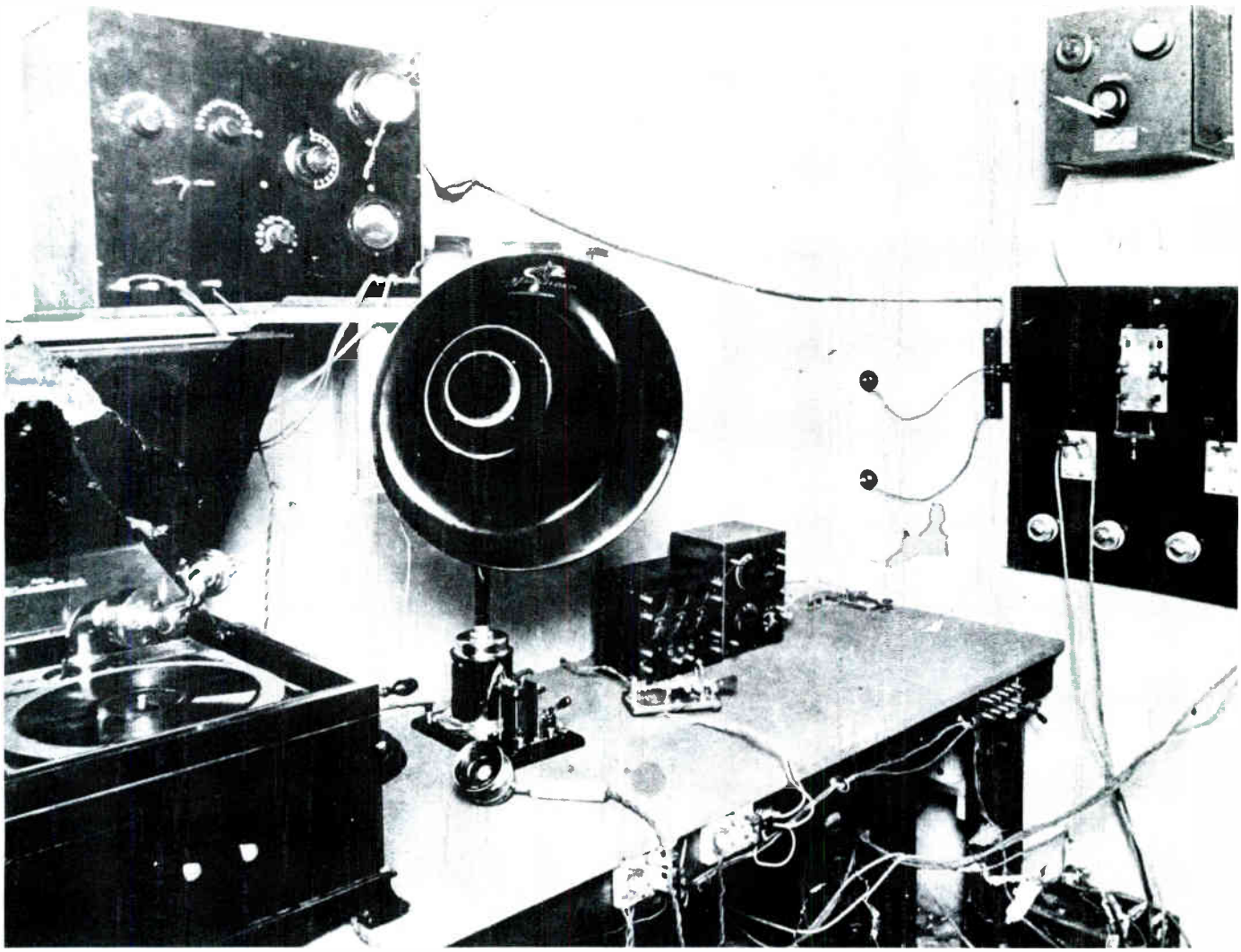
Richards and Hull were not far behind. In the spring of 1921, they formed a partnership and went on the air with call letters 5XT. The station was located in the garage of Hull's house at 1011 West Ash in Oklahoma City, near Packingtown. Photographs of the house show it was an extremely modest dwelling of frame construction. Towering over it were two wooden poles and strung between them a five-element "flat top" antenna. The living room was converted into a studio but still looked very much like a living room. The transmitter, located in the garage, was a collection of bits and pieces of wire and other components entirely built by hand. Photographs confirm what every visitor claimed: The place was a mess. But it was a mess that worked.

The "studio" of Oklahoma's first commercial radio station, 5XT, which was actually the living room of E.C. Hull's home. The photograph was taken in 1922. (Courtesy Oklahoma Publishing Company.)

Apparently Hull's and Richard's idea was to make money not by broadcasting but by manufacturing receivers. A demand was building from people who wanted to listen to the wireless but who did not want to take the time to build their own. Hull and Richards were soon in the radio manufacturing business. The larger receivers took two weeks to build and sold for $350, and the young men thought they were on to something. Soon they were getting orders for sets and parts from as far away as Dallas, and they separated their two enterprises. 5XT stayed in Packingtown while The Oklahoma Radio Shop moved into new quarters in the Liberty Bank Building downtown. The future looked unbelievably bright.[7]

Unfortunately for the new Oklahoma entrepreneurs, the radio business was about to take the first of many unexpected turns. Back in Pittsburgh a Westinghouse engineer named Frank Conrad had reopened the wireless station he had operated before the war. Like his fellow amateurs, he also started playing around with a little musical entertainment now and then, and the response he got was so enthusiastic that he announced regular programs for Wednesday and Saturday nights. Word got around, and others started looking for radio receivers. A local department store advertised some crystal sets for "ten dollars up" and quickly sold them all. The management at Westinghouse was so impressed they made Conrad's little station a division of the company, but even more important they decided there was money to be made in the manufacture of simple receiving sets.[8] That decision had major repercussions in Oklahoma. It meant there was no way Hull and Richards were going to make any money building one receiver every two weeks while giant Westinghouse factories were turning them out by the thousands every day. But there is no evidence the Oklahoma "radio boys" worried much about that. They were having too much fun with the broadcasts they were beginning to do at 5XT.

And it was fun for them and for all the new broadcasters. On August 31, 1920, the *Detroit News* broadcast the Michigan primary election returns on its new station 8MK. It was probably the first real newscast.[9] On November 2 the big new



The control room of 5XT. The equipment, which was mostly homemade, was located in Hull's garage. (Courtesy Oklahoma Publishing Company.)

Westinghouse station went on the air. KDKA's signal travelled for hundreds of miles on those early, uncrowded airwaves, and when the station broadcast the Harding-Cox election returns, it created a sensation. Now the general public, not just the amateurs, was hopelessly hooked. Radio fever gripped the nation.

In Oklahoma City, Richards and Hull had done their work well. Little 5XT was no KDKA, but it was getting out amazingly well as an increasing number of letters from all parts of the United States testified. Walter Harrison, then managing editor of *The Oklahoma City Times*, wrote later "In 1921 there were three commercial stations west of the Mississippi River. One was owned by the *Detroit News*, one by the *Kansas City Star*, and the third by two electricians in a garage in Oklahoma City."[10]

Calling 5XT a "commercial" station was not exactly accurate, but it was broadcasting and the two electricians were having the time of their lives. And they were attracting the interest of a growing number of their fellow Oklahomans, including their hometown newspaper, *The Daily Oklahoman*.

The fun was just beginning.

CHAPTER FOUR

THAT WONDERFUL YEAR

On January 8, 1922, *The Daily Oklahoman* printed a syndicated column by Frank Munsey, an economics writer for the *New York Herald*, in which Munsey endeavored to predict a few of the events of 1922. "There is nothing very exciting in sight for 1922," he wrote, thereby missing his chance to announce the arrival of one of the great social and cultural changes in history.[1] 1922 was the year radio broadcasting arrived with a rush and a roar. It was a year like none other, before or since, in the history of communications.

There had been a hint of what was to come in the latter part of 1921. The KDKA experiment had been a great success, and a few other stations had followed along. The public's interest was certainly being demonstrated. Parts for radio receivers were being sold as fast as they could be stocked. It is an indication of the public interest that the *Reader's Guide to Periodical Literature* listed no articles for radio broadcasting in 1919-21, but the 1922-23 edition list ran to 10 pages.

It was an optimistic time for all parts of American society. Business was good, Wall Street was enthusiastic, and the whole idea of public broadcasting was attributed by many to the general national euphoria.

The Department of Commerce ignored the idea of broadcasting as long as it could and then in 1921 decided to create a new class of stations which would be allowed to "broadcast," or transmit programs, to large audiences as opposed to the point-to-point transmitting which had been the province of wireless stations to that time. The Department apparently felt the demand for such licenses would be very small inasmuch as it decreed that all would be placed at the same place on the dial: 360 meters, which on today's radios would be about 833 kilocycles.[2] There was one official exception. If a "broadcasting" station was transmitting official government information, such as crop or weather reports, then it could use 485 meters (618 kilocycles).

At first, it appeared the Commerce Department was right. Demand for the new station licenses was small. From January to November 1921, only five stations were approved. In December there were 23. Then came 1922. Before that year was over the astounded clerks at the Department of Commerce had licensed more than 500 stations.[3]

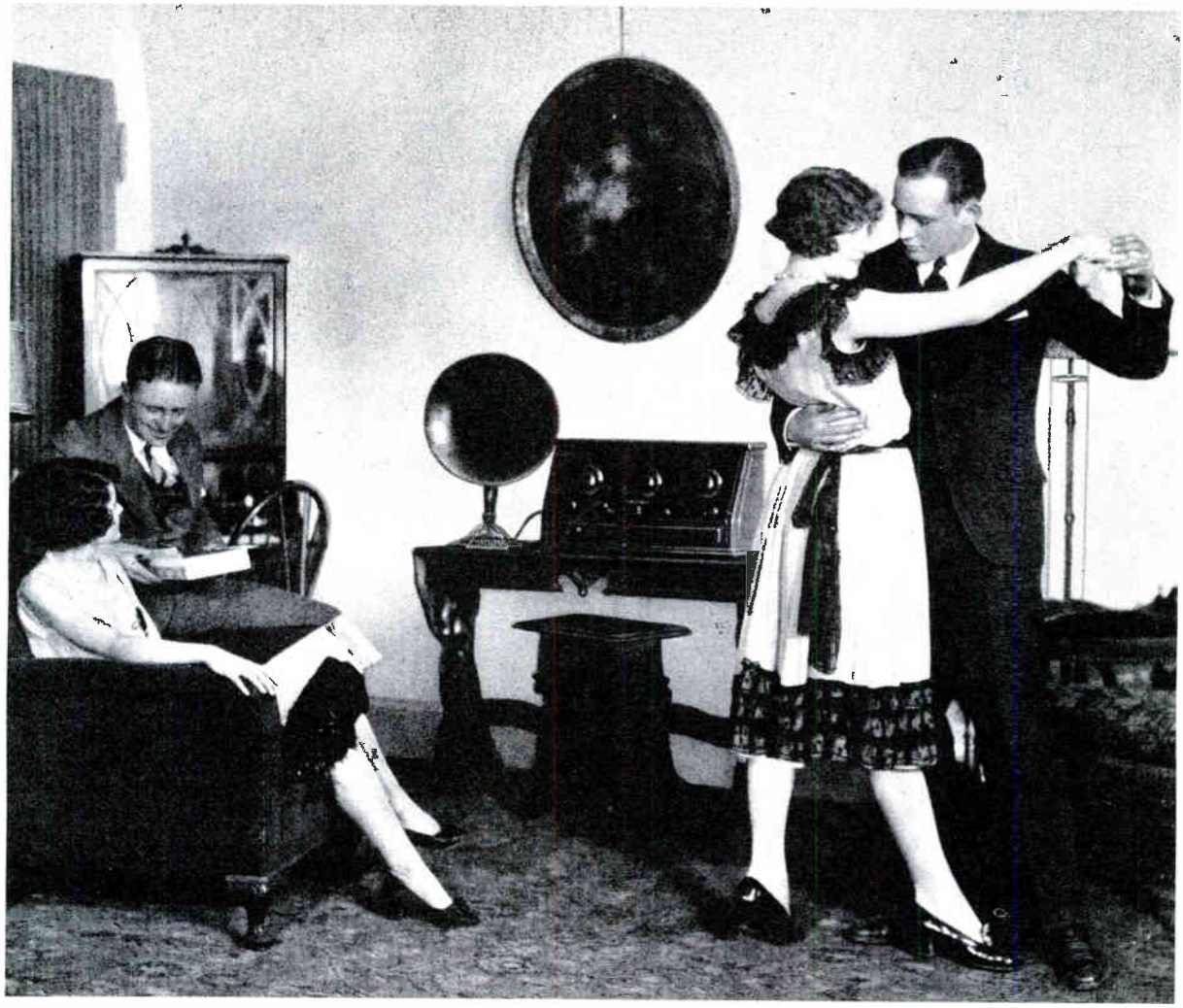
The new Secretary of Commerce was Herbert Hoover. He recalled later that in his first six months of office he licensed 320 broadcasting stations, and he made one of the great understatements of the decade when he wrote: "The [communications] law proved a very weak rudder with which to steer the development of so powerful a phenomena..."[4]

On the first day of 1922, *The Daily Oklahoman*, surveying the radio situation in Oklahoma City, found there were 30 receiving and two transmitting sets in town. One of the transmitters belonged to LeRoy Moffett at 312 1/2 N. Broadway, but it was equipped only for wireless telegraph. The other was 5XT, operated by Earl Hull and H.S. Richards. By that time 5XT had begun a series of "wireless concerts" which consisted of phonograph records played at 9 o'clock each evening, and Richards and Hull reported receiving mail from as far as 900 miles away. Their most distant listener lived in Grand Rapids, Michigan.

The *Oklahoman* reported it was possible to receive broadcasts on the new, smaller indoor antennas and, when conditions were right, even on telephones. In fact, Richards received one letter from a boy in Wichita Falls, Texas, who reported excellent reception using his bed springs.

One of the best-equipped receiving sets in Oklahoma City belonged to the Boy Scouts who had formed a radio club at Classen Junior High School. The boys had no transmitter, but First Class Scouts were allowed to practice their code on a buzzer when they were not crowded around the receiver breathlessly awaiting the next transmission.[5]

Apparently there are no surviving logs from 5XT, but a general idea of the operation can be gleaned from a log of KDKA at about the same time. The station signed on at 7:55 on a Sunday night with two test records played on an Edison phonograph. The operator—the term "announcer" was not yet



In 1925 the Stewart-Warner Company was selling radios as one way to keep young people at home and out of nightclubs. Dance orchestras were some of the most popular broadcasts.

in vogue—then read five minutes of news. This was followed by a three-minute period of silence referred to as "stand by," a throwback to the amateur broadcasting heritage of broadcasting. All amateur stations were required to listen at regular intervals for distress signals and to give everyone a chance to talk. During two hours and 30 minutes of broadcasting that Sunday night, KDKA did 24 minutes of "standing by."[6] The rest of the evening's program consisted of phonograph selections, a weather forecast, and time signals.

5XT was engaged in much the same kind of broadcasting, but Hull and Richards were even more engaged in selling radio parts and building receivers. By February they reported they were getting orders from all over the state and could not keep up with the demand. However, they were still advertising in their own way. *The Daily Oklahoman* reported: "Several nights ago the neighbors in the vicinity of The Oklahoma Radio Shop were astounded by music. It was an orchestra in Detroit...heard for a block in every direction of the shop."[7] Except for the sheer magic of it all, the partners might well have been arrested for disturbing the peace, but there is no record of anyone complaining.

The demand for parts and sets soon set off a minor crime wave. In one week in February 1922, a thousand dollars worth of radio equipment was stolen. Among the victims were the Boy Scouts at Classen Junior High who lost all of their gear. Outraged, 5XT went on the air to broadcast information about the thefts in the hope that some of the equipment could be recovered. Apparently none of it was.[8]

In March there was a new development for radio

By 1925 customers already had a variety of radio receivers from which to choose, although prices were a little steep. Buyers did not seem to care. They bought them by the thousands.

listeners in Oklahoma. *The Daily Oklahoman* began to refer to 5XT as "The *Oklahoman's* Radio Service." Apparently this was an informal arrangement through which the paper provided publicity on broadcasts and helped arrange the appearance of talent, while Hull and Richards provided the technical expertise and equipment. There is no indication that there was any financial arrangement between the station and the paper at this time.

Walter Harrison wrote that he formed an alliance with Hull and Richards without the support of his publisher, E.K. Gaylord, and managed to keep them on the air by diverting some of his "state correspondent cash" to help buy parts.[9] This may have been the case in 1921 and early 1922, but from that point on there must have been some other arrangement. The paper was running articles almost every day on the programs to be heard, and references to "The *Oklahoman's* Radio Service" would not likely have been overlooked by the publisher.

An even stronger argument for active participation by the *Oklahoman* can be inferred from the personality of E.K. Gaylord. Throughout his life he was intensely interested in new inventions and scientific achievements. It is possible that he became a participant in the decision to help 5XT although he may not yet have been convinced it would ever be a practical business proposition. In 1922 no one had found a way to make radio broadcasting profitable. In the meantime, there was no reason to ignore a new invention which had captured the hearts and minds of just about every newspaper reader in the country.

Whatever its terms, the new alliance with *The*

Daily Oklahoman quickly produced a major programming bonanza. On March 4, the *Oklahoman* announced in a front page article that on the following Wednesday 5XT would broadcast the local concert of internationally known soprano Alma Gluck. The article was enthusiastic:

> Fans both amateur and professional get your sets into working order and be in readiness to tune in Wednesday night when *The Daily Oklahoman* will broadcast from the *Oklahoman's* broadcasting station a concert by Alma Gluck, noted soprano and Efram Zimbalist, famous violinist and husband of Madame Gluck.[10]

It is important to remember that in 1922, when a radio station desired to broadcast from a remote location, it was necessary to dismantle the entire station, transmitter tower and all, and move it to the specified location. That is what Richards and Hull did for Madame Gluck. On the Sunday before the concert, they packed up their equipment and trucked it down to the First Christian Church. On the Tuesday before, they took down their two pole flat top antenna, hauled it to the church, and strung it over the top of the building. There followed a series of test broadcasts and more last-minute adjustments. It was a major logistical effort. In the meantime, the studio at 1911 Ash was flooded with telephone calls from radio owners asking questions about the concert—the time, the frequency to be used, and a multitude of other concerns. Answering the phone was a full-time occupation for one person. A drug store in Ardmore installed a receiver so its patrons could enjoy the concert. William England, a radio fan in Ponca City, prepared to entertain a large audience in his home.

Then Alma Gluck arrived in town.

That is when the enterprising broadcasters found that no one had thought to ask Madame Gluck if it would be all right to broadcast her concert. It was not all right. In fact, it was out of the question. Madame Gluck declared Wednesday afternoon that she could not think of "singing into a tin horn." Apparently she was confusing the radio microphone with a kind of reversed megaphone used in early phonograph recording. In any case, the subject was closed.

At that point, Earl Hull demonstrated the personality that was rapidly making him a radio programming legend. He quietly made "other arrangements." Madame Gluck never noticed there was a radio microphone hidden in the curtains at the side of the stage. The next day the *Oklahoman's* review of Madame Gluck's concert began with, "What you don't know won't hurt you."[11]

Taking advantage of their first big success, Hull, Richards, and *The Daily Oklahoman* announced another concert. This one would be even grander and would feature Frieda Hempel, a soprano touring the country giving her impression of Jenny Lind. The concert, to be staged at the Coliseum, meant another major move for the 5XT crew, and it would be Mrs. Hempel's first radio appearance. There was to be no repeat of the Gluck near-disaster. The *Oklahoman* reported that it "was in a position to guarantee that her concert would be sent broadcast."[12]

It was sent broadcast, but it was a disaster just the same. Heavy thunderstorms and tornados moved across Oklahoma the night of the performance. Oklahoma City had its heaviest rain in seven months, and the static was so intense that it was impossible to distinguish Mrs. Hempel's impression of Jenny Lind from the crashing thunder and crackling lightning. In a small story near the back of the paper, the *Oklahoman* described the broadcast:

> Rumblings, shrieks, wails and snapping sounds came in over the radio Monday night...instead of the beautiful clear voice of Frieda Hempel. So heavy was the air charged with electricity that it was impossible to catch a sound except the constant snapping and long, low wails. Once in a while a high clear note would ride the waves successfully in, floating over the radio, but it would have been hard to hear the roar of a cannon above the constant snapping. It was a bad night for the radio...[13]

Another reporter reviewing the concert itself mercifully said nothing at all about the radio broadcast.

There were successes. That same March, 5XT succeeded in arranging for the LaSalle Jazz Orchestra to set up in the little living room at 1911 Ash for a performance. The orchestra was appearing at the Capitol Theater and probably thought a little free advertising would not hurt. They had quite an audience. A listener in Edmond reported, "We heard the orchestra as plainly as if we had been in the same room." The operators at Ft. Sill said the music was so loud it could be heard all over Post Field. "Best music of the season came in clear and loud," was the report from Ponca City. The listeners in that town no doubt preferred popular jazz to

sopranos. At Norman and Chickasha, dancers swayed romantically to the music provided by the La Salle orchestra.[14]

In that spring of 1922 everything Hull and Richards did was a first. It was heady stuff. They began broadcasting weather reports every evening at 9 o'clock. Soon they added market reports. On Sunday, March 14, they presented their first church service. Using their experience from the Gluck concert, they broadcast from the First Christian Church where Reverend Edgar Salkeld had prepared a special sermon on "What To Believe About Hell."[15] The general subject would soon be all over the radio. On March 18 Oklahomans were able to hear Evangeline Booth, commander of the Salvation Army. She was making an appearance in Oklahoma City when Hull lured her out to the living room-studio of 5XT.

The radio craze picked up momentum. The executive council of the Ardmore Boy Scouts appropriated $1,000 for construction of a radio receiving set, which they hoped would pick up stations 2,000 miles away, and a tower and transmitter "capable of flashing messages as far as government limits will allow." They promised free concerts in the city auditorium as a public service.[16] But they were too late to be first. The enterprising citizens of Rocky in Washita County laid claim to the first municipal radio set. They were already installing it in March and said it would be one of the most powerful receivers in the state capable of hearing stations on the Atlantic coast.[17]

Garber, however, was certain it would have the largest receiving station in the state. The town took up a collection and in a few hours the residents had enough money to buy the receiver and put up a tower over their new $85,000 city hall. They also planned free concerts for large audiences in the auditorium.[18] The University of Tulsa was doing the same thing, and Tulsa high school had its own wireless club with six boys who had passed the test for licensing.

The State Board of Affairs announced it was installing a receiver in Governor James B. Robertson's reception area which would be capable of receiving all messages except those from ships, a logical exception for landlocked Oklahoma. The Board also announced the entire project was expected to cost less than $100 and that they would save the taxpayers considerable money by having the capitol electrician do the installation.[19]

Even the editorial staff of the *Oklahoman*, which had been writing about the new wonder for three months, finally got a chance to experience it. Hull called the city room on Friday night and left the phone off the hook next to his receiver. The entranced editors and reporters heard music from Detroit and Denver. Apparently even the jaded journalists were convinced, one of them reporting, "Now they want to listen in every night."[20]

For the "radio boys" of 5XT, business was too good to believe. Richards made a trip to the East Coast to buy parts for their manufacturing operation and found the situation the same everywhere. Factories could not keep up with the demand, and people were standing four and five deep at store counters to buy tubes, condensers, wire, or complete receivers. The radio "gold rush" now began to attract competition, and the March 19 *Oklahoman* contained an ad for a new radio store.

> Great news for radio fans. The radio craze is sweeping the country. Young and old alike are succumbing to the unique fascination of the wireless. Home outfits are being installed everywhere. To take care of this new tremendous demand in Oklahoma the Oklahoma Radio Company has been organized...the company has been selected as distributor for The Radio Corporation of America.[21]

On April 2, Hull and Richards celebrated their first anniversary in the radio business. There had been many changes in that first year. They now had competition in the business of making and selling radios, but they still had the only station in the state. And then that changed too.

CHAPTER FIVE

GETTING INTO THE GAME

The harried clerks at the Department of Commerce were grinding out radio broadcasting licenses as fast as they could in the spring of 1922. The process was informal, a situation brought on partly by the tremendous backlog of applications and partly by the fact that no one had any idea what the requirements should be for a radio broadcaster.

Benedict Gimbel, Jr., of Gimbel's Department Store in New York remembered that when his store decided to apply for a license it simply went to Washington and asked for it. It got it the same day. The next day it picked its call letters out of a hat.[1]

Presumably there was some one on hand in Washington to reach into the hat for stations as distant as Oklahoma. In any case, sometime in March the department issued the first two licenses for the state. Existing records do not show the exact date.[2] One license went to 5XT, which was then assigned the call letters WKY. The second went to WEH, a part of the Midland Refining Company. Midland Refining was owned by W.G. Skelly of Tulsa, a man who would soon play a large role in the development of the new media. Apparently WEH was not yet on the air, at least not as a station broadcasting entertainment. It had been operating for some time as a point-to-point station connecting the various Skelly oil operations.

The first mention of the WKY call letters came on April 2 when *The Daily Oklahoman* ran yet another article about the station. The story pointed out that a regular daily schedule had not been maintained to that time, but beginning the next day the *Oklahoman* had arranged for "nightly programs such as the ones broadcasted by Pittsburgh, Detroit and other large stations."[3] The paper said it would publish a program schedule each Sunday, but that changes might be made at the last moment and suggested that listeners tune in at 7 P.M. when that evening's program schedule would be announced.

Every day seemed to bring new ideas for the imaginative use of radio. R.A. Singletary of the Oklahoma City Chamber of Commerce Good Roads Committee thought it would be a good idea to put road information on the radio. He pointed out that while WKY was broadcasting road reports as these were received from the Weather Bureau each morning at 9 o'clock, the information was often outdated by the time it got on the air. He proposed to eliminate this delay by putting a transmitter at the Chamber's offices.[4]

Politicians were quick to recognize the possibilities of broadcasting their words to voters. Oklahoma Representative Alice Robertson, the only woman in the U.S. House of Representatives at that time, was apparently the first to try it by telephoning a speech from Washington back to her home state.[5] The Young People's League of the Democratic Clubs announced plans to broadcast a speech by Senator Elmer Thomas.[6] There is no record of whether that ever came to pass.

In mid-April WKY began broadcasting the Western League baseball scores, and almost immediately an enterprising theater manager in Cherokee started using them to promote the movies. He simply picked up the scores on his home receiver and flashed them on the screen during the first feature. He reported attendance was greatly increased.[7]

Hull now began to mine what would be an almost inexhaustible source of programming: local talent. He recruited the pupils of Miss Edith Merrick's School of Fine Arts for an evening broadcast. Among the fine arts performers was Miss Esther McRuer, "The Oklahoma Mockingbird," who whistled "The Glow Worm." The audience loved it, and the *Oklahoman* estimated that night's audience at 2,000 based on telephone call-ins.[8]

The entire choir of St. Paul's Episcopal Cathedral was brought out to the living room-studio to repeat its Easter program. According to the *Oklahoman*:

> The program is the biggest thing attempted by the Oklahoman since the establishment of their service and if the early reports from over the state regarding the program are a sample of the enthusiasm with which the program was received by the hundreds of fans it is safe to say the program was a success. Joe Holland, 13 years old, sang. His high, clear voice came over the radio as no other

> voice on any of the Oklahoman's programs has done. It was no doubt heard at the most remote station.[9]

An unanswered, but equally interesting question is how Richards and Hull managed to get the entire St. Paul's choir into that tiny living room.

Still looking for new worlds to conquer, the two broadcasters came up with the idea of putting WKY on a moving train. The *Oklahoman* backed the idea with enthusiasm, and together they persuaded the Frisco railroad to join in. On May 29, baggage car 378 was set on a siding at Oklahoma City, and Hull and Richards started transforming it into a rolling radio station. They rigged a four-wire antenna on top of the car, put in a generator, a regenerative receiving set with four stages of amplification, a loud speaker, and a 100-watt transmitter.

The *Oklahoman* sent its new "radio editor." The Frisco sent its chief of telegraph and his assistant, and on May 30, the car was attached to passenger train number 9 which then pulled out for Quannah, Texas. The *Oklahoman* had a graphic description of the trip in the next day's paper:

> Upon leaving Oklahoma City, passengers were invited to the car and a musical program was furnished for their entertainment. One couple danced to the clear distinct music gathered from the ether. At Mustang a severe electrical storm was encountered but signals were received and little static encountered. In fact the music came in to loud that it almost drowned out the static...The only trouble experienced during the entire trip was at Cement when the antenna would have failed to clear a water tank spout but for the quick work of the brakeman who rode on top of the car and protected the antenna. At every station along the line radio fans who had heard of the coming of the car gathered at the station to see it.[10]

Throughout the trip messages were sent between the train, the army station at Ft. Sill, and WKY in Oklahoma City. On the return trip, the weather was better. The railway officials aboard practiced sending train orders to Frisco headquarters in St. Louis, and the passengers once again enjoyed the music "so clear and loud that it was almost impossible to remain comfortably in the car."[11] WKY claimed a world record for distance broadcast from a moving train.

While Richards and Hull were occupied with radio-on-a-train, the Commerce Department authorized two more stations in Oklahoma: WDAV, assigned to the *Muskogee Daily Phoenix*, and WGAF, owned by the Goller Radio Service in Tulsa. WGAF was actually the second station in Tulsa because sometime in May WEH had started broadcasting entertainment in addition to its original task of providing communications for Midland Refining Company. The first public mention of this activity appeared in a front page article in the *Tulsa World* on June 1, 1922:

> Further proof of the success of the Midland Refining Company-*Tulsa World* broadcasting station, WEH, came to light Thursday night when eight young couples at the home of William G. Skelly, president of Skelly Oil Company, danced to music sent out by the Midland-World radio station. The dance numbers were from records just released by the Victor Talking Machine Company....[12]

After the group enjoyed their radio dance, Mrs. Skelly drove to the studios, which were located in the Unity Building, and spoke to her guests still at the party. The article noted that the music program "brought in its usual flock of telephone calls, some from as far as 400 miles away." The wording definitely suggests that WEH had been broadcasting before June 1, but there is no way to set the exact date.

WEH was as different from WKY as it could possibly be. Its studios were spacious and well decorated. It had not one but two Victrolas. A radio engineer had been imported from California to design the station, which proudly boasted a 500-watt transmitter. Photographs published in the *Tulsa World* show a facility with every wire in place, quite unlike the jumbled installation in Hull's garage in Oklahoma City. The exact arrangement between the *Tulsa World* and WEH is not known, but apparently it was similar to the one between WKY and *The Daily Oklahoman*, although the *World* never devoted as much space to WEH as the *Oklahoman* did to WKY.

The Friday after Mrs. Skelly's radio dance, WEH got into sports broadcasting. As the *World* put it:

> Tonight the Midland-World broadcasting station will broadcast the developments of the world championship wrestling contest between Ed Strangler Lewis, the world champion, and Cliff Binckley, challenger for the title that takes place at McNulty Park.[13]

The wording leaves open the question of whether

WEH did a live broadcast of the match. If so, it was probably the first sports broadcast in Oklahoma. But the phrase, "broadcast the developments," suggests the station was relaying a telephone report from the scene. In any case, it was a first inasmuch as WKY was not yet doing sports.

The WEH programs were picked up in Okmulgee, and soon the *Okmulgee Daily Democrat* announced that, before long, there would be a station in that city, too. The Donaldson Radio Company, following the lead of WKY, planned to manufacture and distribute radio sets. The company's owner, W.K. Donaldson, had just arrived in Okmulgee. Like Earl Hull, he had learned radio in the Army. Earnest C. Lambert of Okmulgee remembered later how he helped the young man get started, "He had the know how and ability but no capital. We furnished him rooms for a workshop and studio and he built his station on the west side of the Council House."[14]

Donaldson bought most of his equipment from Western Electric in Kansas City and began making test broadcasts, mostly at night when reception was best. He soon heard from all over the United States plus Havana, Mexico City, and Calgary, Canada.

Donaldson developed a unique plan for getting money for his station. He asked the Okmulgee Board of City Commissioners for financial help in building the station. In return, the city would have use of the station for fire, police, and other emergency messages. The council proposed to equip police officers with "wrist detectors" so they could receive the emergency messages, thus predating Dick Tracy's wrist radio by at least 20 years. The council also proposed a "radio net for rogues" to help catch criminals.[15] No doubt, it was a great temptation for the commissioners. Towns with their own radio station had special "class" in 1922, right up there with Oklahoma City, Tulsa, Philadelphia, and New York. But for some reason, the commissioners did not act quickly. It was November before WPAC got its license from the Department of Commerce.

Yale, Oklahoma, was another little town that entered the "radio game" early. The craze was set off there by a Mr. Scherer, owner of the Yale Telephone Company. One evening in April 1922 he invited the publisher of the Yale *Democrat* to his house to experience this new wonder. The result was an article in the paper describing the evening's entertainment:

> ...We listened for some time to musical selections from different places, among them station KDKA, Westinghouse Electrical Company in East Pittsburgh, Pennsylvania, WM [sic] in Detroit, WOH, Indianapolis. Scherer and Joe Nelson have been working on this new outfit for some time and for the past week or ten days have been very busy getting rid of a number of handicaps which were bothering them. Their work was crowned with success Wednesday night and from now on whenever the atmospheric conditions will permit they will receive from the air every night. Anyone wishing to hear this wonderful invention can do so by calling Scherer at his home and finding out whether or not he is receiving anything at the time and you will be welcome to come and listen if there is anything to hear....[16]

Yale citizens were not shy about accepting Scherer's invitation. The next week the *Democrat* reported that more than 50 people showed up to listen. There was a lot of static that night though, and some of the stations could not be received clearly. Nevertheless, it was an amazing experience. The group laughed at the broadcast from Denver, which the editor described as "comical" and "weird."

> ...Several times during the talk of the operator he would say "Hold it awhile, my telephone is ringing and I have no one to answer it." Another time we could hear him tell someone to answer the phone for him. Then we heard him give a message to some person in Phoenix. To one who is not acquainted with this science the concerts and other reports coming through the air from great distances such as Pittsburgh and Denver is the most wonderful thing and almost unbelievable.[17]

It was not long before Scherer realized that unless he found a more public place to demonstrate the new radio, his fellow citizens would overrun his home. So he arranged to take the radio to a Yale Chamber of Commerce meeting at the Elk Hotel. Some helpful friends rigged an antenna on top of the hotel, and Scherer telephoned Oklahoma City to request that an official of the Oklahoma City Chamber speak to the Yale Chamber over WKY. As usual, Hull and Richards thought the idea was great, and at exactly 1:00 o'clock on April 21 J. P. Owens in Oklahoma City made a speech to the assembled group at Yale. The editor of the *Democrat* reported that there was unusually good attendance, but unfortunately the static was so bad that it was impossible to hear most of the speech. However, Miss Hamilton of the Yale Telephone Company was on

Oklahoma National Guardsmen learn about radio at Fort Sill in 1922. Their instructor was Earl Hull, owner and operator of WKY, who also recruited most of the men for the new radio unit. (Courtesy Mrs. Earl Hull.)

hand taking shorthand notes, and she must have had exceptionally good hearing. When the broadcast was over, she was able to tell the gentlemen of the Yale Chamber of Commerce what they had just heard.[18]

The next week an ad in the *Democrat* announced the local phone company was now selling "a complete line of radio apparatus, vacuum tubes and supplies." In July the Department of Commerce listed Yale, Oklahoma, as the proud home of a new radio broadcasting station: WHAT.

The radio craze swept on. A new dance was invented, something called "The Radio Drift." Young ladies of the "Entre Nous Club" announced plans for a "radio dance," the first in Oklahoma City. It was to be held in the ballroom of the Huckins Hotel where couples would dance to music broadcast from WKY. Party favors in the shapes of little tubes, variocouplers, magna voxes (speakers), and so forth were planned to complement the novel affair.[19]

There was even romance. It began with a broadcast over WKY by Frank Bird's orchestra. Bird, who announced all the numbers, looked squarely into the unemotional chasm of the microphone and said that the next number would be "Love Here Is My Heart." In a Gainesville, Texas, drug store Miss Dolly Smithson was listening with a group of friends. "I don't know why," she confessed later, "but right away I fell in love with that voice. I knew the moment I heard his voice that I had met my fate and then came the strains of his violin floating through the ether and down through the magna vox of the station and that was enough for me."[20]

A few weeks later when Frank and Dolly were married in Oklahoma City, Frank told an *Oklahoman* reporter that he was sold on the value of the radio and would be happy to play any time a station wanted him.

It was a wonderful era, but problems were beginning to appear. The growing number of stations

caused interference. In June someone started jamming WKY's programs. Whether it was intentional or just a careless amateur practicing his code was not known, but the problem was serious enough that Hull offered a $10 reward for apprehension of the culprit. Apparently no one collected the reward.

There were also competitors. The Oklahoma Electric Supply Company at 324 West Main, with no broadcasting station of its own, ran an ad promoting WDAF, the new $30,000 station of the Kansas City Star.

About June 1, *The Daily Oklahoman* announced it was ending its series of concerts for the summer. However, on June 17 the paper announced that because the public demand was so great, the service would be continued, beginning with a concert by the Deep River Jazz Orchestra which had just opened an engagement at the Spring Lake Pavilion after appearing at the Hotel Muehlebach in Kansas City.[21]

Earl Hull, always on the alert for dramatic uses for radio, saw a new one when he was commissioned a lieutenant in the Oklahoma National Guard. Soon thereafter he announced the formation of a radio unit. His usual enthusiasm was evident in the newspaper article:

> Oklahoma...is full of radio operators many of whom have not had the chance to learn all they want about the game. Many of them have not had the opportunity to study nor the books at hand for their rapid development. The chance for men and boys interested in wireless telephony work has presented itself.[22]

Hull recruited about 60 young men and served as one of their instructors at the Ft. Sill encampment. They were part of a large maneuver which involved infantry, artillery, and aircraft—all receiving orders from Washington, D.C., by wireless. He even arranged for an evening's entertainment to be broadcast from WKY to the troops. But the program, which featured the Harmony Saxophone Quartet, was broadcast in the middle of another summer thunderstorm and apparently never heard by the soldiers.

In Cement, Oklahoma, the local high school envisioned yet another use for radio. The school planned to purchase a receiver so the commercial class could take down news and weather reports as well as market information. The students would make mimeographed copies which they would distribute on their way home from school each afternoon. Farmers living in the area were reported to be elated at the prospect of putting radio to practical use for their benefit, and school officials felt that the project would amount to the publication of an afternoon newspaper.[23]

In July the government granted a license to Scherer and the Yale phone company for station WHAT. Another license for WKAK, went to the *Okfuskee County News* in Okemah.

Back in April the *News* had come out with a blistering editorial, "Beware Of The Wireless Fakirs." The editor warned that it would not be long before con artists would offer "all kind of alluring propositions identified with the manufacture and operation of wireless telephone outfits." Widows and poor folks might be swindled. "Cupidity is a dangerous leader," the editor advised, "follow Old General Conservatism and be safe."[24] By July, however, it was evident there had been some new thinking at the paper:

> The *Okfuskee County News* is installing a radiophone broadcasting station in the phonograph booth at the Crystal Drug Store.... Everybody in the county having a receiving set will be able to get interesting news "hot" out of the air.... A complete line of receiving apparatus is carried in stock at the News office.[25]

In Oklahoma City, WKY was preparing for a new fall season, and the *Oklahoman* reported:

> ...Although there has been a little slowness during the hot and static weather, fall promises a lineup which has not been equalled before.... Wednesday night Miss Edith Johnson, editorial writer for *The Daily Oklahoman*, will broadcast her editorial which will appear in the *Oklahoman* Thursday morning. Thus fans will have a chance to hear it in advance and then check the accuracy of the reproduction powers of their sets the following day.[26]

September brought a record crop of new stations—more than any one month previously. WOAA, owned by Dr. Walter Hardy of Ardmore, was licensed as was WNAD, Norman; KFCB, Oklahoma City: and WLAL, Tulsa.

WLAL was licensed to Naylor Electric Company at 2nd and Boulder in downtown Tulsa. The owner, Sim Naylor, was one of the more unusual members of the early broadcasting fraternity in Oklahoma. He had been born in Bradford, England, the son of a church organist. He inherited his father's musical ability, but when he arrived in Oklahoma,

Indian Territory, and settled in Tulsa he was working as an electrician. Nevertheless, he kept a lifelong interest in music. He was a fine singer, organized a chorus, and was active in the First Christian Church. He also made certain that his little daughter, Dorothy, started piano lessons almost as soon as she entered school. Naylor was selling radio parts out of his electrical shop when he decided that having his own station would be an ideal way to combine an electrician's trade with his musical ability. Dorothy remembered that the station was in a room about 12 x 14 feet in the electric shop. There were heavy brown drapes on all four walls, a piano, and in the middle of the room a microphone. Operating hours for the station were erratic, but Dorothy remembered that any afternoon she stopped by the shop after school her father would lead her into the room, turn on the transmitter, and announce proudly that "little Dorothy Naylor will now play the piano for you." It was clear to Dorothy that, as far as her father was concerned, those were command performances.[27]

In September there was more interference for the broadcasters, bringing another blast from Hull. He said there were 200 receiving sets in Oklahoma City being harassed by unknown amateurs using the airwaves to send a jumble of code, electronic shrieks, and howls, and he called for action:

> Drastic measures should be taken by the radio fans of Oklahoma City to eliminate such pests for the radio game. There are certain ways of getting to fellows of this kind and they can be brought to time if the fans will band together and start a radio war on the fellows who are trying to kill the radio game with their methods.[28]

Apparently the many amateur broadcasters felt the entertainment stations were taking over space that rightfully belonged to them. At the same time, a tremendous number of new stations, all operating on the same wavelength, were making the situation more confusing by the day. Hull did not know it, but the worst was yet to come.

In small town America, none of that mattered much yet. There were too many immediate overriding benefits from radio. WKY was now signing on at 9:30 in the morning with complete market quotations, information never before available to farmers so rapidly. Every station gave Naval Observatory time signals, a service which seems minor today, but before radio the only source for the time was a pocket watch, the mantle clock, or, in town, a factory whistle. Railroads, which depended on accurate timekeeping for safe operations, had a strict standard for the watches their employees carried and allowed only licensed jewelry stores to repair those watches. Suddenly the national time standard, the Naval Observatory, was as close as the nearest radio. It made a definite change in American life.

J.B. Bolen of Bessie, Oklahoma, made a small change of his own in the fall of 1922. Bolen, who managed the Bessie telephone exchange, added a new service for his subscribers. He simply tuned in his office radio, connected the speaker to the telephone system, and thereby made radio service available to all his customers whether they had their own set or not. That makes Bolen the first cable operator in Oklahoma—although it was radio he offered, not television.[29]

Another station, WMAB, went on the air in Oklahoma City on October 1. It was owned principally by the Radio Supply Company and operated by National Radio Company, two wholesale radio supply houses. According to the first announcement, WMAB's 200-watt transmitter was being built by part-owner George Gabus. The first month the station did not operate on a regular schedule, but one of its owners had big plans:

> "We are only experimenting now," said A.J. McMahon, president of Radio Supply, "but we expect to get into the broadcasting game right in the very near future. We want to get lined up with the other stations and arrange our programs so that they will not interfere and I think that this can be done. The game is a big one and the big ones are going to stay in it and by getting together everyone can work without interference."[30]

McMahon's plans sound grand, and his appraisal of the situation was interesting. However, although WMAB appeared in *The Daily Oklahoman's* listing of stations for months, Department of Commerce records do not indicate that a license was ever granted to those call letters in Oklahoma.

November was the month the ladies of the Chandler Round Table Club discovered radio and enjoyed their own special concert. Radio was the topic for their monthly meeting, but rather than just talking about it they became participants. One member, Mrs. R.B. Erwin, journeyed to Oklahoma City to enlist the aid of E.C. Hull. He made her a radio star on the spot, and back in Chandler the

Round Table Club listened as she sang several songs. The *Lincoln County News* reported, "These were especially enjoyed by the ladies although WKY was, at times, interrupted by another broadcaster sending football scores."[31]

Also in November, WKY and *The Daily Oklahoman* announced the station would broadcast up-to-the-minute election returns. Unfortunately, they soon discovered that the by-laws of the Associated Press did not allow the broadcast of returns before publication. Newspaper publishers were becoming wary of the new media interloper. The problem was overcome by utilizing returns from Universal News Service and from early editions of the paper as they went on the streets and, apparently by another, slightly more unique method. It had been traditional to post returns on large screens at the Oklahoman office. It was decided that this could be interpreted as "publishing," and "scouts" were employed to read the returns off the screens and telephone them to the WKY studios. The election broadcast, the first in Oklahoma, was a huge success, the *Oklahoman* reporting that more than 10,000 people listened. These reports continued until nearly 3:00 o'clock Wednesday morning with a flood of appreciative telegrams and phone calls logged in at the station. Among them was a report from W.R. Sieg, an Edmond druggist, who said 500 people listened to the returns in front of his store.[32]

The last Oklahoma station to begin transmitting in 1922 was WPAC, licensed to the Donaldson Radio Company of Okmulgee. Okmulgee's first big, live radio program aired the evening of November 17 when WPAC sponsored a concert from the Yale Theater. The large audience swelled with civic pride when the announcer began the show by saying, "WPAC in Okmulgee, where the oil flows and the gas blows!"[33]

The interference, of course, became worse by the day. Each new radio receiver owner wanted to experience not only the music from WKY or WEH but also to reach out across the country and find legendary stations KDKA, KYW, and WWJ. This was difficult enough with good weather and a good receiver, but when a local station was broadcasting it was impossible. Remember, all stations were on the same wave length. To help citizens satisfy their yearning for distant reception, stations began a policy of shutting down one night a week.[34]

In Oklahoma, WKY announced a silent night policy on November 12. In the future the station would broadcast only four nights a week, "giving its fans a chance to tune in on the programs broadcast by the Kansas City Star and other big stations."[35] Two weeks later the station announced it was cutting back to three nights a week.

As Christmas 1922 approached, WKY listed a series of musical programs climaxing on Christmas Eve with a reading of "A Visit From St. Nicholas" by Mrs. Delma Gormley Robey. For the first time little Oklahomans could fall asleep not only with visions of sugarplums but also with the sounds of Christmas as well. It was quite a Christmas present.

On December 27 the glorious year came to an inglorious end when a transformer burned out in the WKY transmitter, and the station went silent. It was the first time electrical trouble had taken the magic signal off the air, and it proved to be an omen of radio's basic problem. Broadcasting, for all its fun and games, had yet to find a way to pay its own way. The money to buy replacement transformers and all the other equipment would become even scarcer in the months ahead. Still, 1922 had been a tremendously exciting year for everybody who had anything to do with the radio game.

CHAPTER SIX

A TALE OF TWO STATIONS

In 1923 reality began to intrude on Oklahoma broadcasters and listeners alike. Twelve stations had been licensed in Oklahoma by the Department of Commerce in 1922. Four more were added in 1923. But nationwide, approximately 1,000 stations shared one frequency, and listeners were quickly becoming disgusted with the interference.

The Department of Commerce did have a plan. It proposed that all stations should be divided into two groups: Class B and Class A. Class B stations were identified as those which had "high power, good programming and good engineering" (meaning they had good, clear sound). They would be allowed to broadcast on the 300 meter band. Class A stations were identified as those which were smaller with a more local audience. They were to be licensed to operate on the 200 meter band. Unfortunately the 1912 Communications Act did not allow the Department of Commerce to enforce any of these assignments. It merely gave the power to suggest. Broadcasters were responsible for working out the details through local time-sharing agreements. For a time though, the plan actually worked.[1]

In April 1923 the department approved licenses for KFGD, owned by the Chickasha Radio and Electric Company, and KFHC at the University of Oklahoma in Norman. In a short time, KFGD was acquired by the Oklahoma College For Women [see Chapter 8]. KFHC is something of a mystery. It apparently disappeared without a trace. The University of Oklahoma later became the licensee for WNAD, but the origin and fate of KFHC is unknown. It may have been a station operated for a time by the Department of Electrical Engineering for purposes of experimentation.

In July 1923, KFJK was licensed to the Delano Radio and Electric Company of Bristow. It did not last long either. But KFJF, licensed at the same time to National Radio Manufacturing Company of Oklahoma City, was another matter. KFJF was the first serious competition for WKY in Oklahoma City, and the two stations carried on a bitter rivalry through most of the 1920s.

National Radio Manufacturing Company had been one of the two firms involved with WMAB, the 1922 station which never received a Department of Commerce license. Probably KFJF was the same station, simply appearing with new call letters after a formal application. George Gabus, the engineer mentioned in earlier news accounts as the builder of WMAB, was also involved in the construction of KFJF.

Although KFJF was licensed in July 1923, it did not begin regular programming until January 18, 1924. *The Daily Oklahoman* gave the new station a long inaugural story:

> The station at 406 N. Harvey Street has been broadcasting phonograph music heard in several states as far east as New Jersey for several months. Its system has been so perfected that listeners cannot distinguish between phonograph music and that of the artists in person, they declare. Friday night the Centenary Methodist Church Orchestra and the Marshall and Harper ladies quartette will broadcast a program. On Tuesday evening...a program by Ralph Rose, an 11 year old violin soloist; Mrs. Vera Binkle, pianist, and Charles Huey, 10 years old, whistler....[2]

The station, however, had immediate problems that could not be whistled away. KFJF had been assigned a frequency of 252 meters, which management considered too low. The owners decided to attack the problem by writing to Oklahoma Senator J.W. Harrell. In September 1924 Senator Harrell wrote to Secretary of Commerce Herbert Hoover:

> My Dear Mr. Hoover: I am asking a personal favor, one that I feel will meet with your hearty approval unless serious objections confront you on the subject. Many, many of my constituents in Oklahoma bought radio sets which cannot be tuned down to meet the wave length of our popular broadcasting station in Oklahoma, ie., KFJF, now operated on 252 meters... .This station is cooperating with both the state and national committees in connection with the use of their station in the interest of reelecting President Coolidge and W.B. Pine for U.S. Senator, and having these facts before me and further information that the raising

> of their wavelength from 252 to 320 meters will in no way inconvenience or annoy any other station I ask, if necessary, that you stretch a point and have the wave lengths of 320 meters assigned as per the above. This favor will be appreciated by my self, my constituents and help fulfill our campaign interests. Most cordially yours, J.W. Harrell.[3]

Secretary Hoover replied that 320 meters was reserved for Class B stations, and KFJF was not in that class. However, he offered to allow a slight upward change to 286 meters.[4]

Whether this attempted political end run around the regulations was the cause is not known, but it is clear in the surviving correspondence that the regional regulators of the Department of Commerce radio group were not pleased with the operation and management of KFJF. Supervision of Oklahoma stations rested with a district office in New Orleans administered by Theodore Deiler. Deiler was to spend a lot of time on KFJF in the 1920s.

In late 1924, KFJF decided to improve its programming by picking up some of the more popular distant stations and re-broadcasting them. In December the station received a letter from Deiler:

> This office is in receipt of complaints regarding your attempt at re-broadcasting. We do not believe you should attempt this until you have perfected your equipment...One report in particular states that on the night of December 27, 1924, you attempted to relay WLS, Chicago with the result that it was very badly mutilated.... We presume that you have secured permission from the station that you re-broadcast....[5]

At the same time, Dudley Shaw, president of National Radio Manufacturing Company, the owner of KFJF, tried to eliminate the competition from WKY. Shaw made a trip to Washington, D.C., where he hoped to see Secretary Hoover and present several letters, supposedly volunteered by Oklahoma City business firms. In one, W.H. Stout of Southwest Electric Company complained "on the manner in which station WKY of this city is operated, as when they are broadcasting it is practically impossible for the average set to receive out-of-town stations."[6]

Other letters were written by the manager of Harbour-Longmire's radio department, by the First Baptist Church of Oklahoma City, and the manager of Kroh Music Company, who felt that "Mr. Shaw understands the situation thoroughly and is capable of presenting the matter fully."[7]

Records do not indicate whether or not Shaw saw Secretary Hoover, but he told the acting commissioner of radio that the purpose of his visit had nothing to do with complaints against WKY. However, he said, when the people of Oklahoma City heard he was going to Washington, they insisted that he hand-carry the letters.[8]

When Earl Hull, co-owner of WKY, heard about Shaw's efforts, he fired off a letter to Deiler:

> It seems to be the same old story all over again and there is no use going into details telling you what I think about it.... I believe in the saying "if you give a cow enough rope it will hang itself." WKY is appreciated by thousands of folks of the state of Oklahoma and I can send you proof of that by giving you our letter file....These complaints have not been based on any technical information. I dare to make the statement that they have been based upon selfish commercialism and have been solicited. This station is being operated according to the law, the Radio Commission and the Golden Rule as I know them and investigation will bear me out in that....[9]

The entire dispute was routed to Deiler's desk in New Orleans, and on October 27 he reported to Washington:

> There has always been the intensest [sic] business rivalry which has extended almost to personal hatred between these two firms, and we have had on several occasions been forced to come between them when charges and counter charges were filed. Shaw has always adopted an attitude of antagonism toward all others including amateurs. WKY is installed properly and on our numerous visits to Oklahoma City we have noted nothing irregular nor heard of irregular operations except from Mr. Shaw and his following....[10]

Nevertheless, Deiler sent Radio Inspector du Treil to Oklahoma City to check once again and then wrote Washington:

> The [du Treil report]...requires very little comment and expresses a condition which has been evident in Oklahoma City for several years, in other words an instance of jealousy between Gabus of the National Radio Manufacturing Company and the owners of WKY, with the exception that well over three quarters of the trouble rests with Mr. Gabus.[11]

Inspector du Treil's report concluded, almost wearily:

Earl Hull testing a new type of remote radio transmitter. Hull was the first Oklahoma broadcaster to do a remote broadcast. (Courtesy Oklahoma Publishing Company.)

> The management of WKY radio assured me that they would transfer to Class A and operate on 272 meters within the next two weeks. In my estimation this will remove the majority of complaints against WKY except that the two stations will not be able to broadcast church services simultaneously on Sunday mornings, thus opening a new field for complaint.[12]

Hull and Richards had troubles of their own at WKY, most of them involving money. They had plenty of company, for many stations around the country were in financial difficulty. The Oklahoma Radio Shop, which had been their main source of income, was being squeezed from two sides. Locally other wholesalers were now selling radio parts, and nationally the major manufacturers were turning out completed sets faster and cheaper than the two Oklahomans could ever hope to do. In April 1925 the Oklahoma Radio Shop went bankrupt. At that point the 100-watt WKY transmitter was taken over by a Mr. McKay, who had a financial interest in it. The transmitter was put into storage, and WKY was off the air. On June 1 Richards and Hull were back on the air with another 100-watt transmitter built by Hull. The station, which operated from the Braniff Building in Oklahoma City, was owned jointly by Hull, Richards, and Southwestern Light and Power Company. Apparently Southwestern used it part of the time for point-to-point communication with their offices.[13]

The WKY owners struggled to get back into full operation. Hull, using Southwestern Light and Power stationery, wrote to Deiler in New Orleans that he was making progress:

> WKY has been organized as a company and will have as directors some of the well known businessmen of this city. We will also have complete support of the local press. This action was taken to get a station in Oklahoma City on the air that will broadcast programs of a nature that will be accepted by the public. The other local station [no doubt he meant KFJF although he did not say so] has made such a mess of things that people here are complaining. We hope to profit by their experience in this line.[14]

At the end of 1925 Hull and Richards turned the transmitter over to Southwestern Light & Power, and with yet another duplicate built by Hull moved back to their original location at 1911 Ash. Richards said they moved because of "poor transmission conditions" on the Braniff building.[15] A few weeks later they had problems involving patent rights to part of their transmitter, probably the tubes. In March 1926 they managed to get their old, original 100-watt transmitter back and were once again operating where they started out, in Hull's living room.[16]

Dudley Shaw, observing the mounting financial problems at WKY, saw another chance to get rid of

his opponents. In December, 1925, he wrote Senator Harrell again:

> My Dear Senator; When I said goodbye to Secretary Hoover at the conclusion of the radio conference he very graciously asked if there was anything he could do for KFJF and there being nothing to ask for I expressed my appreciation and thanks. Quite recently, my negotiations for finances to enlarge our station to 1500 watts and also to equip a first class studio have been greatly embarrassed by curbstone reports to the effect that the parties that had one time operated station WKY...were going back on the air in the very near future.[17]

Shaw complained to the senator that WKY had been off the air for months at a time and wondered why the station had not lost its license. The senator contacted the Radio Bureau which bucked the complaint to Deiler, and he once again dispatched Inspector du Treil to Oklahoma City. The inspector found that, in fact, there had been no regular WKY programming for as long as six months, but he thought Hull and Richards were acting in good faith and ought to be given a little more time to get the station going again. He continued:

> I called on Mr. Shaw...while in Oklahoma City. He expressed some vexation on finding out that station WKY intended to go back on the air, inasmuch as he had made certain financial arrangements with the understanding that his was to be the only station of importance in Oklahoma City, hence his letter to Senator Harrell, with whom Mr. Shaw claims close friendship.[18]

Hull and Richards were allowed to continue their uphill struggle to find a way to make WKY financially solvent. They certainly had no reason to complain about their treatment at the hands of the Federal Radio Commission.

Meanwhile, Dudley Shaw was partly distracted by a new, even more unwelcome development. KFJF became the first station in the history of broadcasting to be sued for libel. The suit resulted from a broadcast made by the Rev. Lincoln McConnell, a preacher whose sermons "had the fire of evangelistic fervor." His KFJF sermon was entitled "The Octopus" and referred to the liquor industry. Unfortunately, he also referred to Undersheriff Friff of Oklahoma County apparently in equally unflattering terms. *Radio Digest* magazine reported that KFJF's reception was fine that night, and the Rev. McConnell's sermon was heard "far and wide." Undersheriff Friff sued the minister for $75,000 and KFJF for $20,000.[19] Washington wrote to Deiler in New Orleans who wrote several letters to the Oklahoma County Attorney, but according to the records available Deiler never received a reply. The outcome of the suit is unknown.[20]

Deiler might be forgiven for not pursuing the libel case. His region was under constant pressure to monitor the increasing number of stations, and he had problems everywhere. Oklahoma City was, if not typical, certainly interesting. In June 1924 the Commerce Department licensed two more stations in Oklahoma City: KFQJ, to be operated by the Harbour-Longmire Furniture Company, and KFQR, to be operated by Walter Ellis. But someone complained to Washington, and in October Deiler received a letter from the Radio Bureau saying it had been informed Harbour-Longmire did not own a station and never had. Acting Commissioner Tyrer of the Bureau rather archly suggested to Deiler, "You should inform the owner that licenses are not issued except where stations exist."[21]

Deiler apparently went to Oklahoma City personally this time and found that there was, indeed, no equipment at Harbour-Longmire. But shortly after he returned to New Orleans, he received another letter from the store informing him the equipment had been installed, so he once again recommended the station be licensed—only to find a few weeks later that there had been a major misunderstanding. He described it to the Acting Commissioner:

> Harbour-Longmire said they had no present intention of installing a broadcasting station. Mr. Longmire further apologized for the trouble and confusion caused the department by his former employee R. Rex Renee who acted contrary to Mr. Longmire's wishes in connection with applying for the broadcasting license.[22]

Then there was the matter of Walter Ellis and KFQR. Washington complained to the New Orleans office that it had been informed the owner of KFQR was a high school boy. Deiler investigated once again and reported that, yes, Walter Ellis was in high school:

> He wrote us his program was arranged not to conflict with other existing stations programs and as all other legal requirements were met, we were forced to recommend license. Mr. Ellis is 20 years old. The Bureau is respectfully asked if there is any age limit for broadcast station owners.[23]

There was no age limit, of course, which the Acting Commissioner confirmed, and in November 1924 Deiler reported that he had inspected Walter Ellis' station and found him complying with the law in every respect. The high school student's plan was to "broadcast football games, baseball games and the like for the benefit of the amateurs."[24] Unfortunately there is no record of how well he succeeded.

In Tulsa, after struggling with WLAL for two years, Sim Naylor decided to give up. He told the radio editor of the *Tulsa World* that he had found the radio business to be "a thankless task without the slightest amount of fair remuneration." He blamed a "lack of cooperation" on the part of civic bodies of the city for the failure but was not specific. Whether he had been looking to city government for financing or to local businesses for advertising is not known. He noted there had been considerable criticism of WLAL and decided "to let the critics try it awhile." He concluded, "We have hopes that some day Tulsa will have a station equal if not superior to any station in the country as we are thoroughly sold on broadcasting as a means of advertising the 'oil capital of the world.'"

Naylor had often told friends that WLAL stood for "We Laugh A Little." No doubt the two years of radio had been a lot of fun, but on May 14, 1924, the laughter stopped, and WLAL, which had been one of the first stations to go on the air, became one of the first to go off.[25]

CHAPTER SEVEN

RADIO ROLLESTONE

Among the thousands of Oklahomans captivated by the magic of radio in the early 1920s was E.H. Rollestone of Bristow. Rollestone, a young oil millionaire, investor, and civic leader, was looking for new worlds to conquer when the radio craze hit Oklahoma. His first venture was purchase of Etherical Radio Studios, Inc., which at that time was the largest distributor of radios in the nation. Then he announced that Bristow would have its own station, one large enough to make his town a household word from coast to coast.

It is easy to imagine how such a dream could have captured the imagination of this young man so generously endowed with energy, optimism, and money. To be able to broadcast the name of Bristow and, of course, Rollestone instantaneously across the entire nation to an eager audience of millions was something not even the great publishers of New York, Chicago, and San Francisco were able to do. It was a dream that an ordinary man would have found hard to resist. For E.H. Rollestone it was impossible to resist.

Rollestone was a man who liked to live with style. He had all the traits of a civic leader and community builder, but along with them were definite overtones of P.T. Barnum. He made no small plans. With his vision of a great national voice emanating from Bristow, Oklahoma, he began constructing his radio station. The studios were on the mezzanine of the Roland Hotel, which he also owned. He put two towers on top of the building and bought a 500-watt transmitter—all for a reported investment of $30,000. He then hired well-known announcer "Swan" Johnson from Cleveland, Ohio. Johnson's voice was described as "familiar to many radiophans [sic] as it is deep pitched and reproduces very well on the radio."[1]

Rollestone understood from the beginning that Bristow was not large enough to be the entertainment capital of Oklahoma and that programming for his station would have to come from elsewhere. But he reasoned that the number of stations in the state would have to limited, and not every town would be able to have its own transmitter. The interference problem made that clear already. Why not build a station that would be connected to many towns by telephone lines, one that would draw talent from a wide geographical area? His experience as a community leader in Bristow must have told him that he would find enthusiastic allies in every Chamber of Commerce. He was right, and from the beginning his dream was of a great, centrally located radio station that would be the voice of Oklahoma. However, he apparently did not use those words at first.

By mid-1924 Rollestone's dream seemed about to come true. He notified the Department of Commerce that he had started construction of a station at Bristow. The letter also said that two smaller 100-watt stations were being built, one for Tulsa and one for Oklahoma City.[2] In January 1925 the New Orleans District Office made an on-site inspection and recommended the station be licensed. In a letter to Washington, District Manager Deiler noted the station expected to draw talent from both Oklahoma City and Tulsa and would eventually have studios in both cities. Programming standards were to be high. Deiler was told that "no mechanically operated musical instruments were to be used."[3] That same month the Department of Commerce granted the license, and assigned call letters KFRU. Roy Griffin, the first station manager, said the letters stood for "Kind Friends Remember Us."[4]

The station made its first test broadcast on Sunday, January 12, at midnight and received telephone calls and letters from all over the United States confirming that it had been heard. Two nights later KFRU was opened formally with a banquet for 700 people in the Bristow Club.[5] The station was an instant success not only with Oklahomans, but also with people outside the state. Staff members claimed KFRU was the number one station in the country during its first three years of operation. The claim will never be confirmed, of course, but there is no doubt that thousands of people tuned in to listen to the new voice out of Oklahoma.

Part of this interest undoubtedly was the use of the home-grown talent that performed every night. Crowds filled the Roland Hotel lobby to watch the

broadcasts. Young Gene Lyons, who was destined to spend a life-long career at WKY as an engineer, hitch-hiked all the way from his home near Pawnee just to watch one of the broadcasts. Rollestone had designed the studio with large windows on all sides so visitors could see as well as hear the performances. KFRU may well have been the first station in the country to broadcast to live audiences, but as with so many early radio claims there is no way of being absolutely certain. For Gene Lyons it was a great adventure, and he never lost the mental picture of the crowd pressing against the studio windows in stifling heat with the noise of the transmitting equipment in his ears.[6]

Dorothy Naylor treasured a different memory of KFRU. After her father closed WLAL, he often travelled to Bristow to sing on the radio with a barbershop quartet. Dorothy, then in grade school, was drafted to play piano for the group. She never forgot the crowds and the excitement of being heard all across the nation. She remembered Rollestone, his gracious manners, and the way he exuded confidence and enthusiasm.

But Dorothy's most lasting memory of KFRU had nothing to do with microphones or music. One evening after a broadcast, because of an approaching storm, there was serious question whether Dorothy and her father would be able to drive back to Tulsa safely. Rollestone and his wife insisted they spend the night with them. The Rollestone house may not have been a mansion but it certainly seemed like one to Dorothy. When bedtime came, she was taken upstairs to the guest bedroom. On the big, fluffy bed Mrs. Rollestone had laid out a selection of beautiful nightgowns for Dorothy's choice. Being on the radio was exciting, but it could not compare to gracious living like that—at least not to little Dorothy Naylor! [7]

Rollestone was a natural promoter who brought a constant stream of talent, mostly amateur, to perform at the station. On February 2, 1925, he broadcast the first radio program devoted entirely to the oil business. The entertainment included "oil field songs and ditties" plus short talks by various industry leaders. Most of the participants came from the Okmulgee area, where local citizens were so enthusiastic they formed a delegation of 75 to 100 people who, in the event of bad weather, were prepared to form a caravan of "light cars with chains" to get through the snow and ice.[8] An estimated 5,000 people tried to tune in the program in Okmulgee. The local Okmulgee station set up one receiver in the Parkinson Hotel lobby. There was another in the Gill Company Building plus one in the central fire station—and all locations were reportedly crowded with people eager to be a part of the wonderful new entertainment. Unfortunately, reception conditions in Oklahoma was not good that night, but when congratulatory telegrams began arriving from all over the country, as well as from Mexico and Canada, everyone decided the effort was worthwhile.[9]

To promote listenership Rollestone instituted a "derby night." The first listener to call in or send a telegram from out-of-state received a brown derby hat. Derbies also went to the first 10 Oklahomans to report hearing the station.[10]

KFRU was one of the first stations to realize there was an audience for country music. Perhaps it was because of its small town location or the large number of amateur performers, but an unusual number of country and western musicians began their careers there. One of the most colorful was Jimmie Wilson and his Catfish String Band. This unusual musical group began each program the same way: "This is Jimmie Wilson broadcasting from Andrew Jackson Johnson's farm down on the banks of Polecat Creek." A skillet of hot grease from the Roland Hotel kitchen was placed near the microphone, and as water was dropped in it Wilson would call out, "Hear those catfish fry!" According to Guy Logsdon of Tulsa University, the band was a real radio pioneer:

> It was the first in the nation to broadcast outdoor animal sounds such as bird calls, wild animal cries, and cat fights—all part of having fun with music. In fact, Wilson claimed that they were the first entertainers to use any sound effects. They were the first to stage a "radiothon"—the forerunner of the telethon when they played for 12 continuous hours to raise $40,000 for the families of miners killed in a disaster near Wilburton.[11]

Another well known country-western group which broadcast on KFRU was Otto Gray and his Oklahoma Cowboys, one of the first such groups to tour nationally. The Cowboys, who drove a fleet of Cadillacs complete with longhorn hood ornaments, played to sellout crowds from Oklahoma to New York City.[12]

Although KFRU was an unqualified success as far as its audience was concerned, owner Rollestone became increasingly unhappy with the general progress of the radio industry. As an ever-increas-

One of the earliest musical groups on Oklahoma radio was Jimmie Wilson's Catfish String Band. Jimmie Wilson is seated in the center. The band was broadcasting regularly on KVOO when this picture was made (about 1930), but before that they had become nationally famous on KFRU in Bristow. (Courtesy Archives and Manuscripts Division, Oklahoma Historical Society.)

ing number of new stations crowded in and diminished his national coverage, he looked for a way out. As early as February 1925 he complained to the broadcasting commissioner about having to share 760 kilocycles with WOAI in San Antonio and petitioned unsuccessfully for 1010 kilocycles.[13]

In March a Mr. Booth, identified as manager of KFRU, decided to take a more folksy approach in a letter to the Department of Commerce:

> Gentlemen: Knowing that you are interested in each and every one of your radio stations I thought that you would like to know something of the progress at KFRU in Bristow. We are this week installing at the agricultural college in Stillwater a Western Electric remote control equipment [sic] which is costing us about $4,000. When this is completed A&M College will be put on the air one evening each week furnishing KFRU with a wide variety of education and musical entertainment. [Note: The $4,000 came from A&M, not KFRU.] We are sure this is going to be a wonderful addition to our station. We also have two more remote control equipments sold which are being shipped at the present time. One of them to go to Tulsa and the other to Oklahoma City. The chamber of commerce in Tulsa are [sic] going to demand at least two evenings each week and Oklahoma City will also like to have two evenings. But under our present time schedule with WOAI at San Antonio we have only four evenings per week which as you can see with our present arrangement is not enough.
>
> The Southern Radio Company at San Antonio advises us that they are constructing a 5,000 watt station also and that you have advised them that they are to share time with us and [WOAI] and they demand six hours which we now have. This is going to work a great hardship on us.... We think

> you should allow us to have all the time on the air it is possible to allot to us. In fact, if it is possible, we think we should have one wave length to ourselves without having to split time ... wish you to consider this and advise us accordingly.[14]

The Commissioner of Radio wrote back to inform Mr. Booth that time-sharing arrangements were up to the stations involved, and the commission did not take any part in it. Booth was much relieved, answering:

> We have yours of the 24th and note with interest that it is not the present policy of your department to take the initiative to arrange a division of time, and is not your intention to require any two stations now using the same wave length to enter into a three way division. We are very well pleased with the present arrangement which requires us to split time with WOAI.[15]

However, WOAI then went to a higher powered transmitter and started interfering with KFRU's reception.

KFRU's problem was only one example of the national problem of radio interference. Listeners everywhere were frustrated by stations occupying the same frequency. Following a ruling by the Attorney General of the United States early in the summer of 1926 that the Federal Radio Commission did not have the authority to limit the power of radio stations, the problem grew worse.

Many listeners wrote irate letters to the FRC, including one from J.M. Walton of Paducah, Kentucky:

> Gentlemen: Tonight I tuned in a special program from KFRU in Bristow, Oklahoma celebrating their first six months broadcasting and heard from them that some other station was interfering. Tuned in the other station which was WOAI San Antonio, both on exactly the same wave length. And beg to enclose copy of joint letter which I am sending both stations. Trusting this will be of some service in the cause.[16]

Walton's letter to KFRU and WOAI has been lost, but no doubt it was not complimentary. The radio audience was in an ugly mood.

Rollestone struggled with the problems of interference and finances through the summer of 1925 and concluded that with only 500 watts of transmitter power there was no way he could compete with larger stations. In characteristic fashion, he made a drastic decision: he abruptly sold KFRU to Stephens College at Columbia, Missouri, and began a campaign to build a "super power broadcasting station" for Oklahoma.

On September 18, 1925, he called a "Radio Conference" in the Blue Room of the State Capitol. Chairman of the conference was J.F. Owens, acting president of the Oklahoma Chamber of Commerce. Participants included Ed Overholser of Oklahoma City, Ward Franklin of Ardmore, C.M. Sarchet of Ponca City, Dr. Bradford Knapp, president of Oklahoma A & M College, and Dr. W.B. Bizzell, president of the University of Oklahoma—a prestigious group of state leaders. Rollestone explained his dream: a 5,000-watt station which would cost $100,000 to build and $10,000 a month to operate. Like KFRU the new station would be located in some central community and be tied to various cities by telephone lines. Rollestone estimated that although there were perhaps 50,000 radio owners in Oklahoma at the time, it would not be possible to raise the necessary money from them. Instead, he suggested that a kind of voluntary tax of 50 cents for each radio sold to be paid by radio wholesalers and dealers. After all, Rollestone reasoned, they would be the first to benefit from a super-power station operating in the state.[17]

After several meetings were held by the group, the dealers announced at the end of September that they were willing to support the proposed station up to $40,000 a year for operations and would do their best to promote it through the 600 dealers in the state.[18] The agreement was a tribute to Rollestone's powers of persuasion and his vision of radio's future in Oklahoma, but the sums promised were only a fraction of his estimated yearly operations costs and did nothing to raise money for initial construction.

A well-organized state-wide campaign to raise construction money for Rollestone's dream soon followed the conference. Roy Griffin, the former manager of KFRU who became campaign manager, proposed in a letter to all the Chambers of Commerce in Oklahoma that the citizens give the station to themselves as a New Year's gift:

> We think this will be a most wonderful New Year's gift to ourselves. The power plant and equipment will be located on the outskirts of Bristow and there will be remote control studios in Oklahoma City and Tulsa and in other cities yet to be decided. The radio dealer in your town and yourself [sic] will be expected to form the organization for your particular community. Memberships will be solicited on a minimum basis of ten dollars but

for the Lord's sake if anyone wants to give more please accept it.[19]

A news release announcing that the campaign would take place during "Voice of Oklahoma Week," was one of the earliest records of the use of that term. A few days later, the new station was being publicly identified as KVOO in another wildly enthusiastic news release from its campaign headquarters:

> Reports are pouring into headquarters of the voice of Oklahoma campaign here indicating that the radio fans of the state will finish the drive to establish a super power broadcasting station in a single day. The campaign opens Monday and all signs point to at least 15,000 Radiophans buying memberships in the nonprofit corporation on the first day.... The towers and power plant will be located on a hill west of Bristow, far removed from trolley and electric wires and other interferences but the main studios will be in Tulsa and Oklahoma City....[20]

Full-page ads were published in all major daily papers in the state, 100,000 folders were distributed, and proposed editorials were sent to state newspapers. A.D. Peabody, secretary of the Voice of Oklahoma Board of Trustees, urged local radio dealers to have a word with their ministers to suggest that they speak a kindly word for the campaign on Sunday "for naturally our Sunday programs are given over entirely to various churches."[21]

Unfortunately the citizens did not fund the super-power station in a single day as predicated. A news release a few days later said contributions were pouring in but gave no dollar total. On October 23 the campaign committee said it had $25,000 on hand and voted to extend the drive until November 1 "and possibly longer."[22]

Eventually, when it became clear the money could not be raised from the general public, Rollestone persuaded some of his wealthy friends to donate $15,000 each and with that money began construction. His new station, he said, would be 5,000 watts, certainly enough power to hold its own in the free-for-all that was developing in the unregulated ether. In January 1926 the call letters were changed to "KVOO, The Voice of Oklahoma," and on June 23 the new station went on the air with studios in Bristow and Tulsa.

Because of a shortage of funds, it was smaller than expected with only 1,000 watts, but for a time KVOO was on the air 24 hours a day. Ownership of the station was also transferred to a new entity, Southwestern Sales Corporation, with Rollestone as head. There was still no firm financial base for KVOO, and while the dual studios did a lot for programming, the station's balance sheet continued to show monthly losses. The Tulsa programming caused the Tulsa Chamber of Commerce to become interested in Rollestone's efforts, as he had predicted, and a group of civic-minded citizens, including W.G. Skelly, began negotiations to buy the station. Eventually, they were successful, and on September 13, 1927, KVOO was officially moved to Tulsa. Apparently Rollestone continued at the station in some capacity. However, KVOO was as big a financial liability in Tulsa as it had been in Bristow, and all of the backers except Skelly decided to get out. The "Voice of Oklahoma" was in deep trouble.

On April 2, 1928, an inspector from the New Orleans office of the FRC paid a visit to the station's transmitter. His report was not encouraging.

> The transmitter is in very good condition but it is temporarily installed in a metal building of poor construction. The location is subject to high winds and considerable dust and sand which can easily seep through the impractically constructed building. A permanent building for the apparatus was under construction but due to the fact that the chief owner of the station, Mr. Rollestone, is apparently financially embarrassed, work has been discontinued.... Mr. Rollestone was not in Tulsa at the time of the writer's visit and could not be consulted direct. The writer was informed that various suits were pending against this company because of their financial embarrassment.[23]

On June 28, when it was clear that KVOO could go on no longer, W.G. Skelly bought the entire stock of the parent corporation. E.H. Rollestone had expended his seemingly endless store of energy and optimism along with his personal fortune in pursuit of the dream of a great national radio voice for Oklahoma. The dream had been sound, for under Skelly's management KVOO became all that Rollestone had hoped—and more. Perhaps that was the final bitter irony for the founder of "The Voice of Oklahoma." On June 24, 1930, in severe financial difficulties and deserted by his wife, Rollestone locked the door to his room at the Wells Hotel in Tulsa, put a pistol to his head, and committed suicide. He was only 36 years old.

CHAPTER EIGHT

READING, WRITING, 'RITHMETIC, AND RADIO

Of all those who saw great things for the future of radio in 1922, none were more visionary than the nation's educators. The popular press of the day was filled with predictions by college professors and presidents about the way radio would revolutionize education. In Oklahoma, however, the educational broadcasting pioneer was not a college professor or president but a junior electrical engineering student at the University of Oklahoma.

Maurice Prescott arrived in Norman in June 1921 and found the town already excited about radio. Antennae of various shapes and sizes were starting to sprout from back yards, including everything from a converted clothes line to a 50-foot heart-shaped contraption suspended on a 65-foot steel-and-wood tower. Prescott started with a code station operated from his basement at 426 West Eufaula Street. He used an obsolete Ford spark coil to send a signal that sometimes went as far as three-quarters of a mile. And like most young radio enthusiasts of the day, he kept working, learning, and improving his rig. In a few months he was sending and receiving as far as 1,000 miles and was an assistant division manager of the American Radio Relay League, the national organization of amateur radio operators.[1]

Early in 1922 Prescott converted his equipment to voice transmission and received an experimental license for station 5ZG, a 100-watt unit he designed and built himself. Although his efforts were ignored by the university, he managed to put the school in the record books anyway. In March, OU became the second university in the country to broadcast news, just after the University of Wisconsin. Prescott worked out an arrangement with the student newspaper, the *Oklahoma Daily*, to furnish news every Tuesday, Thursday, and Saturday evenings. This was broadcast to 5XT, the Oklahoma City station, which then re-broadcast it to the world.[2]

That summer Prescott attracted some additional support for his new station. O.W. Walter, a professor of electrical engineering at OU, and Noble Hilsmeyer, owner of the Pioneer Pharmacy, became part of his broadcast team and helped Prescott apply for one of the new broadcasting licenses. On September 26 the license was granted, and Norman had a new radio station: call letters WNAD, power 100 watts authorized, unlimited operating hours on 360 meters. The call letters gave the station a certain air of respectability, but it was still operating from Prescott's basement. The fine arts department of the University joined the new broadcasters, and musical recitals by both faculty and students were a regular feature.

In October, Prescott, Hillsmeyer, and Professor Walter had another idea, one which would become a tradition at OU. They stretched a telephone wire from the stadium to Prescott's basement, and on October 4 they broadcast the first football game in Oklahoma, a contest between OU and Central Teachers College at Edmond. The broadcast crew consisted of Prescott, announcer; Professor Walter, sports announcer; and Hilsmeyer, program manager. The broadcast, according to *The Daily Oklahoman*, "gave the listener the realistic atmosphere which comes from hearing: 'Pass Morrison to Marsh, complete for ten yards, or line smash through center, failed.'"[3]

These football broadcasts—the first in the Missouri Valley Conference—led to another journalistic first for WNAD. On November 11 the station was broadcasting the homecoming game between OU and Missouri when a portion of the bleachers collapsed, injuring six spectators and trapping some under the wreckage. The WNAD announcers described the scene as ambulances and physicians arrived and the injured were carried from the field. It must have been a real test of announcing ability because the game continued without pause while the victims were rescued. It was the first on-the-scene news broadcast in Oklahoma.[4]

WNAD operated through the winter of 1922-23, but in May 1923 a transmitter tube failed and the station went off the air. Prescott had no money for a replacement, but by that time OU officials were

A vocal soloist performing in one of the WNAD studios on the campus of the University of Oklahoma. (Courtesy Western History Collection, University of Oklahoma Library.)

beginning to realize the station might be an asset to the University. On May 18 the license was reissued to the University of Oklahoma, and WNAD became part of the equipment of the electrical engineering laboratory. Professor Walter began the task of repairing and improving the transmitter, and Prescott stayed on as chief operator until his senior year when he had to choose between playing with radio and studying for graduation. He chose studying, but he left behind a remarkable pioneering record in radio.

Throughout 1924 WNAD went through a dizzying series of frequency and power changes mandated by the Federal Radio Commission, which was trying to solve the interference problem. By the end of the year the station was operating on 1180 kilocycles and had moved up to 500 watts of power. In September 1925 the station moved to improved studios in the old engineering laboratory. The facilities were built by the students, with young men from engineering working on the broadcast equipment and young ladies from home economics sewing drapes for the studio walls. The studio design had one or two minor flaws. The studio was too small for a piano, so a hole was cut in the wall in order for singers inside to hear the piano outside. What effect this had on the broadcast or the performers is unknown.

Apparently the students all had a lot of fun, which was just as well inasmuch as there was little money in it for anyone. The electrical engineering department was paying about $200 a year for operating expenses, and the student operators were making 15 cents an hour in addition to receiving credit in their engineering courses.[5] Willard Darrow, assistant professor of violin, was named program director, and one of his staff announcers was Carl Albert, future Speaker of the United States House of Representatives.

Homer Heck was an OU law student in 1931 when someone at the station asked if he would be in charge of radio drama. He figured that no one on the staff knew any more about radio drama than he did—

which was very little—so he took the job. It changed his life forever. He forgot about a career in law, went on to become manager of WNAD, and later had a successful career with the New York advertising firm of Foote, Cone & Belding. Whatever experience or inexperience the staff had seemed not to matter, and reports of fine reception continued to come in from all parts of the United States and Canada.[6]

Ninety miles to the north at Oklahoma A. & M. College, all these developments were not lost on President Bradford Knapp. By all rights, A. & M. should have had the first educational station in the state because it was the Land Grant college and responsible for state-wide extension programs. There had been a lot of talk about a station, but there was a general shortage of money in the budget. In 1924 President Knapp thought he saw a way out of the dilemma and described his idea to Ardmore attorney Silas Egly:

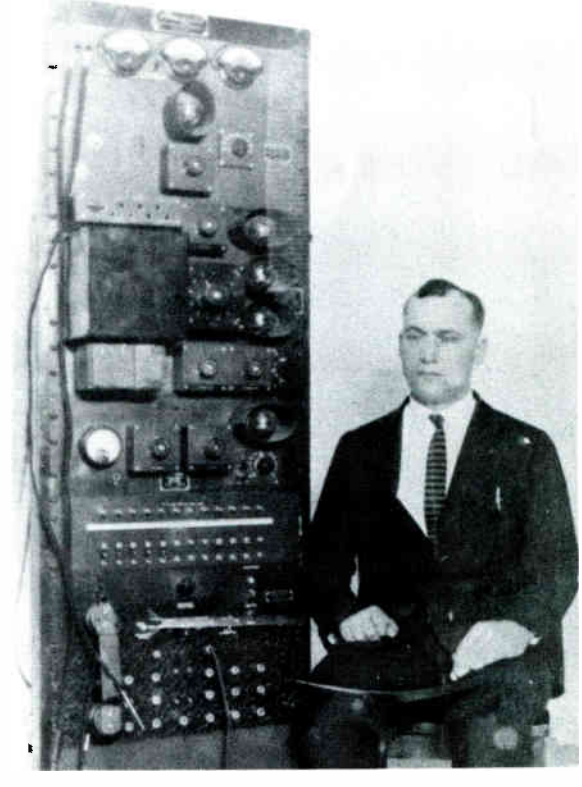
> Originally I had included it [the station] in the budget to the legislature. Subsequently, however, the splendid broadcasting station at Bristow [KFRU] was put in and, I presume, will be a continuing station. I am now negotiating with them to see if we can make arrangements to broadcast through their station, which I think will be more economical than to have a station at the college. I believe we can do this with an outlay of between $4,000 and $5,000 and if the college were to construct a broadcasting station here it would cost in the neighborhood of $25,000 to $30,000. I hope before long to complete the arrangements so that we shall have this institution in position to broadcast information for the benefit of the people.[7]

President Knapp sent a copy of his letter to the manager of KFRU at Bristow but apparently did not receive a reply. A few days later he wrote directly asking if KFRU would be interested in a two-hour program each week and whether there would be a charge for such a broadcast.[8] At some point early in 1925 an agreement was worked out, although the correspondence is missing. Dr. Knapp was invited to speak on KFRU at 7 P.M. on February 23, and the county extension agent at Hugo wrote to tell him all was in readiness:

> We are having public radio sets arranged at each of our community centers and the farmers are being invited in to get the lecture.... We are indeed glad of this opportunity for our farmers to hear you speak. We are especially interested in them hearing you because of the common sense simplicity in your lectures, making it possible for farmers to get the full meaning of your assertions, whether or not they are educated.[9]

By early spring, A. & M. College had worked out a more elaborate arrangement with KFRU, and it looked as though President Knapp's plan to get into radio with a minimum investment was going to pay off. The college constructed a remote studio in the basement of the auditorium and equipped it with the necessary control equipment, spending some $4,000 for the project. At the same time KFRU was telling the Federal Radio Commission that it had invested the $4,000 at Stillwater in the interest of better programming. President Knapp appointed J.C. Kositzky, professor of electrical engineering, to operate the new facility and announced:

> The dedicatory program will be radiocasted on the night of Monday, April 13, 1925 beginning at 6:30 and extending as late as the people care to



Professor E.J. Kozitzky and Oklahoma A.&M. College's first radio broadcast studio, located in what now is the basement of the OSU auditorium. The photograph was taken about 1923. (Courtesy OSU Library.)

> listen. It will consist of short addresses by the Hon. M.E. Trapp, Governor of Oklahoma; Hon. J.A. Whitehurst, President of the State Board of Agriculture; ... entertaining features by the college musical societies including the famous A. & M. College Band. Regular programs will be broadcasted each week....These will always be of the highest class, both entertaining and educational.[10]

The programs were sent to KFRU on telephone lines, first from the college auditorium to the Stillwater railroad depot and then by Western Union lines to Bristow. Programs were frequently interrupted by loud buzzes and other static and by the sound of telephones ringing, even by the voices of telephone operators asking "Number please."[11]

Nevertheless, the programs continued until school was out in May, and plans were made to start broadcasting again in September. President Knapp sent a memo to the faculty appointing Professor Kositzky as technical supervisor, with Professor Martin in charge of the music and making the agricultural extension division responsible for the information to be broadcast. But when September arrived, they discovered the telephone wires had been pulled out of the campus studio. President Knapp wrote a very unhappy letter to E.H. Rollestone at KFRU:

> I have been checking up on the matter of the telephone company coming here and removing the wires from our broadcasting station. The telephone company at my request has traced the matter back and the order was made by Mr. Griffin of your company. Now, we don't understand this at all. I am still anxious to cooperate with your company but we have our investment in this equipment and we are ready to begin broadcasting right now.... What we want to know is: When can we begin? And we would like to know that quite definitely. It will be necessary to reinstall the wires, a perfectly unnecessary expense either to ourselves or to your company before we can begin.... I should very much indeed like to receive from your company some definite statement regarding its policy and its programs so that this institution may not be just shoved aside and ousted out of this situation. This is said in utmost friendliness for we have had fine cooperation in the past, but we are getting extremely anxious about the present.[12]

KFRU was having its own problems, and there is no record of a reply to President Knapp's letter. However, KFJF in Oklahoma City was willing to carry the A. & M. College broadcasts, and the change was made while negotiations continued with the Bristow station. The OSU Presidential Papers collection contains a number of cards from listeners who heard the A. & M. College band in a radio concert on November 9, 1925. Some listeners wrote from as far as Chicago and the Black Hills of South Dakota to express their appreciation.

The debacle with KFRU convinced President Knapp that the college would, after all, be better off with its own station. On December 5 he wrote to Theodore Deiler, Supervisor of Radio at New Orleans, to put the application process in motion:

> I am writing to ask for an assignment of wave length and call for a Class A station at this institution. We should like this call to be KOAM. We plan to be ready to go on the air by Christmas. If there are any blanks which we should fill out I should be glad for you to send them to us, but in the meantime, we wish to speak for the assignment and the call.[13]

It was Deiler's unhappy duty to inform President Knapp that he was too late. There were no more frequencies available, and no new stations were being authorized. Dr. Knapp wrote back invoking Secretary of Commerce Hoover:

> I desire to call your attention to the fact that at a conference with Hoover recently, special mention was made of the need for...educational institutions. I want to urge the fact that you have given licenses to commercial concerns whose chief end is advertising, while this institution which has large sources of knowledge of interest to the most fundamental business in support of this nation has no place on the air, except by commercial arrangement with an established station.[14]

Deiler was unmoved, and a later reply from the Acting Secretary of Commerce in Washington was the same: there were no new frequencies available and no hope for the future.

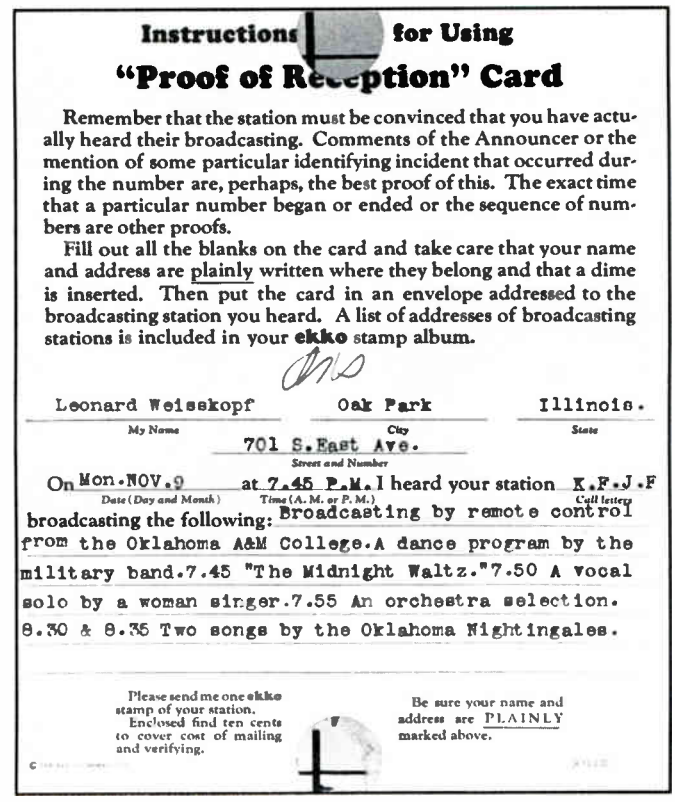
On December 31, 1925, President Knapp wrote once more to E.H. Rollestone:

> I have been very much disturbed and considerably anxious about the progress of our radio work. Almost a year ago we took up with you folks over there at Bristow the matter of broadcasting through that station and dug up some money and put a little over $4,000 in a remote control set outfit and then put some more money into an improvised studio. We worked along in very happy cooperation with

you folks last spring and were looking forward to a fine season this year. All our people were cocked and primed and feeling very full of enthusiasm for the radio plans. We just thought we had beat the rest of the institutions in this state to that, by following your good advise [sic]. Then one day you sold your equipment and started a big campaign for funds for a superpower station to be known as KVOO and though we were a little disturbed we did what we could as public officers to help you. We hear your station on the air every now and then. The University [OU] went ahead and prefected [sic] a station and came out with a lot of publicity about a 9 hour a day program. Meantime the Oklahoma College For Women comes out also with a lot of publicity regarding their station and poor old A. & M. sits here with $5,000 worth of equipment as silent as it can be, just waiting. I am constrained to believe that we have waited too long....[15]

The Bristow station may not have had much interest in educational programs at that point, but as radio began to develop President Knapp found there was one thing it *was* interested in: football. In September 1926 Roy Griffin, the manager of KVOO, wrote to ask for exclusive broadcast rights to all A. & M. games. The college granted the request at no charge. Griffin then suggested a noon hour farmer's program, and that, too, was started. No doubt President Knapp felt it was better than nothing, but it must have rankled him to know that the Department of Agriculture "Farm Flashes," produced especially for Land Grant schools like A. & M., had to be broadcast by the University of Oklahoma.

The United States Department of Agriculture had discovered radio along with everyone else and had appointed Sam Pickard chief of radio services. He concluded that the best way to get information to farmers by radio was to dramatize it. To do that, he hired a staff of "highly specialized feature writers to brighten up subject matter."[16] The department offered several scripts, among them a weekly "Letter To Dad" in which "a son at college writes an interesting letter home each week telling the folks some of the high spots in his study of agriculture, which he believes might well be put into practice on the old home place."[17] Even more fascinating was a weekly script called "Autobiographies Of Infamous Bugs And Rodents." Pickard described it as: "A weekly 10 minute talk about pests that are bothering now as told by the insects and rodents themselves."[18] It is interesting to speculate how this



Instructions for Using

"Proof of Reception" Card

Remember that the station must be convinced that you have actually heard their broadcasting. Comments of the Announcer or the mention of some particular identifying incident that occurred during the number are, perhaps, the best proof of this. The exact time that a particular number began or ended or the sequence of numbers are other proofs.

Fill out all the blanks on the card and take care that your name and address are plainly written where they belong and that a dime is inserted. Then put the card in an envelope addressed to the broadcasting station you heard. A list of addresses of broadcasting stations is included in your **ekko** stamp album.

Leonard Weiskopf (My Name) Oak Park (City) Illinois. (State)

701 S.East Ave. (Street and Number)

On Mon.NOV.9 (Date (Day and Month)) at 7.45 P.M. (Time (A. M. or P. M.)) I heard your station K.F.J.F (Call letters) broadcasting the following: Broadcasting by remote control from the Oklahoma A&M College.A dance program by the military band.7.45 "The Midnight Waltz."7.50 A vocal solo by a woman singer.7.55 An orchestra selection. 8.30 & 8.35 Two songs by the Oklahoma Nightingales.

Please send me one ekko stamp of your station. Enclosed find ten cents to cover cost of mailing and verifying.

Be sure your name and address are PLAINLY marked above.

Early-day listeners often sent in "proof of reception" cards to stations. This was a holdover from the amateur radio operators who collected such cards. This one was received at KFJF, Oklahoma City, following a broadcast from Oklahoma A.&M. College. (Courtesy OSU Library.)

material must have been received on the OU campus in 1926.

Although President Knapp was unable to secure the broadcasting station he wanted, he did have another kind of campus station to contend with. This was an experimental transmitter operated by engineering students who had formed a broadcasting club known as Alpha Sigma Delta. This group ran afoul of Professor Kositzky who complained to President Knapp:

> The Alpha Sigma Delta boys maintain a buzzer type battery charger in the auditorium, which when in operation makes radio reception within a considerable distance of the auditorium impossible. Consequently, it was impossible to keep a close check on today's program. It is against government radio rules for anyone to maintain a device which interferes with radio reception. I have at former times requested that they discontinue the use of same without avail.[19]

Dr. Knapp had been having his own problems

OU President George Cross and legendary OU football coach Benny Owens during an early WNAD broadcast. (Courtesy Western History Collection, University of Oklahoma Library.)

listening to the radio at home and took the occasion to gently lay down the law to the students:

> There have been a number of complaints coming to me regarding the radio work of station 5QD operated by the radio fraternity.... I have had a little experience with your station myself though I have never said anything about it. My experience is that you come on the air and cannot be tuned out...all the way from 250 meters to 500 meters....Recently several people from town have telephoned to me and seriously objected.... I think that there will be no objection in case your work can be done either in the daytime or after the usual bed time at night.[20]

The only other college to do radio broadcasting in the early years was Oklahoma College for Women at Chickasha. In 1924 it purchased KFGD which had been originally built by Chickasha Electric Company and operated on 1190 kilocycles with a power of 50 watts. The students and faculty of the College immediately began a series of educational programs with science students using the equipment as a kind of laboratory in electronics. In 1925 the station was authorized a power increase to 200 watts and the call letters were changed to KOCW. According to a press release the new letters stood for "Kum To Oklahoma College For Women." Presumably the English department was not consulted about the slogan. For the next few years the station was shifted from one frequency to another and authorized a variety of power outputs until finally, in 1930, the Federal Radio Commission required equipment improvements that would have cost $25,000. OCW did not have the money and on July 15, 1931, the station was silenced. In October it was sold to J.T. Griffin who moved it to Tulsa where it became the second station in that city: KTUL.[21]

The early years set the pattern of educational radio in Oklahoma for decades. WNAD was oper-

ated proudly by the University of Oklahoma and served as both a training ground for young broadcasters and an innovator in programming. One of the station's more unusual programs was "Indians For Indians," which ran 30 minutes each week. The program was a volunteer effort produced by Indians and featured only Indian performers. By the mid 1940s producer Don Whistler estimated the audience at about 75,000, including many Indian school students where teachers turned the program on in the classroom. According to Whistler, the Indians took a very independent attitude toward their white listeners:

> Fact is, if you listen, it's your own hard luck, because you won't know what it is all about. One man said: "I enjoyed your program but why didn't you explain what those songs were?" When we announce on the radio it is going to be a Flag Song the Indians know what that is. Our radio audience doesn't have to be explained to and if you were listening and didn't understand that, it is your hard luck.[22]

That sort of independent spirit persisted at WNAD until 1965 when the station was sold to a commercial operator. The call letters were changed as part of the license transfer. A. & M. College continued to broadcast over telephone lines to KVOO, and W.G. Skelly, who had a lifelong dedication to programming for farm and youth audiences, saw to it that the finest quality lines were available to carry the programs. Unlike the students at OU, A. & M. students had no opportunity to study radio broadcasting. A small announce booth and control room were maintained on campus at one place or another to provide farm programming for KVOO and, from time to time, other Oklahoma stations, but that was all.

Finally in 1950, a small group of students organized under Professor John Woodworth, who taught the only broadcast course on campus, and set out to build their own student station. They borrowed $500 from the student senate, recruited electronics students to build the necessary equipment and, when the school could find no suitable quarters for them, took over the fourth floor of ancient Williams Hall. They had to clean out several inches of pigeon droppings and put up their own studio walls, but they succeeded and eventually went on the air as KVRO, which stood for "Varsity Radio Organization." Unlike most educational radio stations, KVRO sold advertising, and students filled every staff position from station manager to sales manager to disc jockey to janitor. It was specifically designed to train future employees for Oklahoma stations.

In the beginning KVRO was an AM "wired wireless" station, which meant the signal was supposed to be heard only a short distance from the antenna. To provide coverage, the students ran an antenna wire on trees, buildings, and telephone poles throughout the campus area. This kind of station did not have to follow the stringent FCC engineering rules that applied to ordinary AM or FM stations. In theory "wired wireless" stations worked as they were supposed to. In practice the students found it was difficult to keep the long antenna wire intact and to keep the station's signal restricted to the campus. At one point they were inadvertently putting a stronger signal into Pawnee, Oklahoma, than KOMA with its 50,000 watts.[23] By 1960 the staff was thinking about giving up on "wired wireless" and moving to FM.

In the end, however, Oklahoma State University became the dominant voice in Oklahoma educational radio with the construction of a new FM station. With OU's WNAD off the air, replaced with a low power, limited range FM, OSU's 100,000-watt high quality FM station covered more of the state than any other educational institution, and during the 1950s KOSU and KWGS at Tulsa University were the only educational radio outlets in Oklahoma (the birth and growth of both stations is detailed in Chapter 14).

CHAPTER NINE

IN THE SOUP

The first 10 years of radio's existence in the United States, especially in Oklahoma, was a kind of primordial soup. Radio had become an industry expanding at an amazing rate, but few could find any sense of direction in the expansion. By 1925 there were an estimated 4.5 million homes with radios and 571 stations serving them. Five years later, in 1930, 16.7 million families owned radios, and 618 stations attempted to reach into their homes.[1] The public was having a wonderful time listening when the pervasive interference was not driving them to distraction, and manufacturers and retailers were having a wonderful time selling receivers—but the radio stations were not doing well. Few of the broadcasters had found any way to make money with their new miracle.

It was no different in Oklahoma. The early stations, WKY, WLAL, KFJF and KFRU, were sometimes on the air and sometimes off the air for extended periods of time. They appeared and reappeared under varying ownerships with various financial arrangements. Owners changed studio locations frequently, all the time trying to find the magic formula that would make them rich.

At the same time, there was a constant stream of new stations going on the air undaunted by the precarious financial condition of the pioneers. In October 1924 the Federal Radio Commission issued a license to Lieutenant James Boland at Fort Sill for KFRM. In May 1925, Ponca City got its first station, WIBJ, a "portable" station that soon became WBBZ. The KVOO call letters were approved in October 1925, and in December of that year KFXR in Oklahoma City was approved. In 1926, KGFF was authorized for Alva; even tiny Picher was granted a station in January 1927 thanks to Dr. D.L. Connell, who asked for and received call letters KGGF.[2]

In Oklahoma City, Earl Hull and WKY were still in a battle with perennial rival KFJF. After surviving several years of near bankruptcy, Hull in 1927 also had to take on the Federal Radio Commission. The FRC announced yet another frequency reallocation in May of that year, and when Hull read about it in his morning paper he fired off a typical to-the-point telegram to the Commission:

> Press advises show kilocycles separation between WKY and KFJF reduced to 60 kilocycles. Previous experience at this short separation with KFJF in center of city with 750 watts and our transmitter moved 5 miles from town proved insufficient for WKY to be heard locally. If we cannot retain city coverage it spells loss of most toll accounts and would require moving transmitter back to city to exist. Trust press report is in error....[3]

Whether it was an error or not, the problem was worked out. The telegram is more interesting because it is the first official record of WKY's adopting a policy of selling commercials: "toll accounts" was a phrase originated by AT&T and referred to what we now call spot announcements.

When Hull reapplied for a license two months later, he listed two studio locations, the old studio at the Shrine Auditorium and another in the basement of the Huckins Hotel. He also reported that WKY was now hooked up by telephone lines to WBAP, Fort Worth, as well as KFDM and KPRC, Houston.[4]

Regardless of the "toll accounts," Hull was not making any money. As late as January 1929 he told the FRC that "total annual net income exclusive of expenses for talent was $2,400," but he listed average talent expenses as $50 per month, or $2,400 per year. His payroll was $165 per week. He was on the air from 10 a.m. till noon and from 3 p.m. till 10 p.m.[5]

Over at KFJF, the problem of making money was on the way to solution. Someone there knew how to sell, and by 1929 the station told the FRC it was making $50,000 a year net. But the prosperity had a price: it disgusted at least some of the audience, a large portion of which was not yet inoculated to non-stop commercials. E.G. Brumley of Oklahoma City was one of those who wrote the Commission:

> Gentlemen: We have a radio station in Oklahoma City whose call letters are KFJF.... They consume most of the time that they are on the air soliciting orders for overalls, paint, auto parts and flivvers. In fact, they make a first class nuisance of themselves continuously. Is there not some relief to be had from this station?[6]

Mr. Brumley was joined in his complaints by W.A. Shipman, also of Oklahoma City:

> To Commission: WKY, Oklahoma City station, most from the Lee Huckins Hotel, have [sic] good programs but go all over the dial. *All Over.* KFJF is considered by the majority of persons I have met and conversed with *A Nuisance.* They have never, when I have had them on the air, give more than two or three numbers before they either read orders they have received for everything from paint to raincoats, automobiles or batteries. They then put in considerable time telling the audience what they have to sell....[7]

Of course, the management at KFJF saw the situation entirely differently. When they applied for renewal of their license in 1927, they proposed to continue broadcasting official government market wire services from the Department of Agriculture, special Thursday night broadcasts by the U.S. Civil Service Commission, United States Weather Bureau forecasts, regular meetings of the Oklahoma City Junior Chamber of Commerce, and three Sunday church services, to say nothing of regular Saturday night broadcasts of the American Legion frolics.[8]

Commission members in Washington must have been impressed by the programming. But back in Oklahoma City, the regional inspector was not so impressed with what he found when he came to call:

> On March 30, 1928, the writer inspected the broad-

KFJF's studio in the Security Building, downtown Oklahoma City, probably about 1930. The station was especially proud of its elaborate pipe organ. Shortly after this photograph was taken, the station was sold to a group of Texas investors and the call letters changed to KOMA. (Courtesy Archives and Manuscripts Division, Oklahoma Historical Society.)

> casting station...KFJF. The present installation is composite equipment and from appearance it is not taken very much care of and located right on the ground floor on the street and is covered with dust.... A homemade meter is used to maintain frequency. At the time of the writer's visit the station was being used also as a dog kennel with a sign on the door "Dogs For Sale" and was in an unkempt and untidy condition. This is in line with the general operation of the station according to what knowledge we have been able to gather from reliable sources.[9]

The inspector went on to say that the owners were trying to sell stock to buy a 5,000-watt transmitter and planned to move to a new location five miles east of Oklahoma City. He also reported, "We have heard from various sources that the owners of this station have no financial backing and are entirely dependent on the sale of stock." In the fall of 1928 KFJF management moved its transmitter to Nicoma Park, and FRC inspector came calling once again, later reporting:

> The writer inspected the broadcasting station KFJF. This station recently moved 14 miles into the country in an easterly direction from Oklahoma City. This office has no record of a license being issued at this address, but a construction permit has been issued covering removal of the station nine miles east of the city. The apparatus presently consists of very hastily thrown together equipment.... A very nice one story building has been constructed which will house the station apparatus. Two old oil well towers which have been repainted are being used for the antenna.... Very elaborate studios are maintained on the fourth floor of the Security building at Main and Harvey Streets in Oklahoma City. We have always had numerous complaints of broadness concerning this transmitter but their removal into the country should help in this respect.[10]

Matters gradually improved at the KFJF transmitter. A new operator was hired, and he set about practically rebuilding the equipment. Unfortunately he neglected to get a construction permit from the Commission, but when the New Orleans inspector came around again he was so relieved at the improvement that he pleaded with Washington to overlook this problem and issue the permit as soon as possible.[11]

In Tulsa, matters were much the same. After Sim Naylor shut down WLAL in 1924, he started looking for a likely new owner. Because he had been broadcasting Sunday church services, that seemed a likely place to start; before long he had a promising candidate in Brother Burkhart of the Loyal Men's Bible Class of the First Christian Church.

On September 22 1924, Brother Burkhart informed the church board that Naylor was willing to sell WLAL for $1,000 and that a church license would cost $100; he urged the church to "get some action on this." Action there was. On December 15 Brother Burkhart reported they had gotten the purchase price down to $500, and a deposit of $60 had been paid.[12]

Mr. H.B. Gale also read a letter from the man in Detroit emphasizing the value of a radio station to a city. Dr. Hill then explained that Mr. and Mrs. Alvin Johnson had offered an electric automobile to the church and suggested that this be accepted, sold and the proceeds applied against the purchase price of the station. Motion to this effect was carried.[13] Apparently WLAL was the first radio station ever purchased with the proceeds from a used electric automobile.

The church was optimistic about its new acquisition. A Mr. Veale of the radio committee reported the government license was going to cost only $1 instead of the estimated $100, and that electric current for the transmitter should not cost more than $1.50 per month. By February 16 Brother Burkhart was able to report the station was nearly ready for broadcasting, and Brother Gale told the board that it was now worth $10,000, "valued from the standpoint of what a new station of the same size would cost."[14] The board was so grateful that it passed a motion of appreciation to all who had contributed to the installation of the station.

The *Christian Standard*, a publication of the Christian Church, carried an article on the Tulsa church's achievement, announcing, "The men's club of the First Church, Tulsa, became the first in Oklahoma to install its own radio broadcasting station. The Bible class lessons of the Loyal Men's Class will be broadcast every Sunday morning, although the women's class will use it occasionally, it was announced."

The article went on to explain that one of the broadcasting features would be the formation of a "radio bible school class." Officers declared they expected to have a "radio class" of 2,500 who would not otherwise attend church services.

Thus the church launched bravely into the world

of broadcasting—for about three months. Then it was discovered some of the financial projections had been slightly off the mark. On May 18 Brother Burkhart advised the board that WLAL was some $1,200 in debt without any definite plans for paying same. This must have been something of a shock for Board members. In any case, "It was suggested that the whole matter be settled at the next Board meeting."[15]

About this time into the lobby of the First Christian Church wandered an unlikely pair of visitors, even by the brash standards of the booming oil capital of the world. They were Elmer Wavering and Bill Lear. Wavering was a teenager and Lear not much older. They had arrived in Tulsa from Quincy, Illinois, where they had become radio "experts"—building radios in a basement and selling them through an auto supply store. That sort of activity became too boring for the adventurers, and they had headed for Tulsa where Lear's father lived.

Tulsa was exciting enough for anyone in the 1920s. An oil boom was in full swing, and flares from refineries and wells lit the horizon in every direction. Oil men were making fortunes overnight, and business was booming. The two eager youngsters felt right at home. They moved into a small apartment at 1010 S. Detroit close to the First Christian Church and spent their days and nights going from one adventure to another. Lear was interested in airplanes at the time, and they spent hours hanging around the Tulsa airport talking with pilots and mechanics and people like Walter Beech of Beechcraft Aviation. They bought a wooden biplane kit and actually built it in the yard behind their apartment, to the dismay of their neighbors. They could not fly it because they were not licensed, but they talked a local pilot into taking it up.

At the same time, they were taking night classes at Central High School, but they were continually looking for new worlds to conquer. Someone told them there was a radio station in the First Christian Church, so they just walked in to look around. While looking, they met the minister who was also looking—desperately trying to find someone to run the station inasmuch as the only person who knew anything about radio or WLAL had just resigned. When Lear finished describing his own amazing knowledge of radio, the minister offered him the job on the spot.

Wavering remembered that the station was primitive, even by 1920s standards. There was a big, open Tesla coil about one foot in diameter that was used for tuning, a homemade crystal, and a flat top antenna. The station was supposed to broadcast only on Sundays, but the boys found that restriction to be impossibly dull. They were soon recruiting their talented classmates at Central High to come over and put on impromptu "test" programs at night. If anyone at First Christian objected, they kept quiet; and Wavering recalled one of the elders told him privately that he thought the programs were "pretty good."

But even the power of being "broadcasting executives" wore out after a few weeks, and the dynamic duo left. Although they eventually went their separate ways, they carried their experiences at WLAL with them. Lear went on to an amazing career inventing and building electronic devices for aviation, including radio navigation instruments and an auto-pilot. His most famous project was designing and building the Lear Jet. Wavering could not get radio out of his blood, eventually becoming president of Motorola, one of the true giants of the industry and the company that built the first automobile radio.[16]

WLAL had no such good fortune in its future. About the time the boys left, the church board was trying to decide what to do with the station. All agreed that it could be a powerful instrument for spreading the Gospel, but it was clear expenses had been underestimated and it was beyond the financial power of the church to continue. The Board hoped to get $2,000 for the station, but that proved impossible. Finally, on February 15, 1926, it was sold to W & E Electric Company for the amount of the accumulated debts. The church did retain the right to broadcast one Sunday night service each week without charge. However, inasmuch as there is no record that the Federal Radio Commission ever approved the new ownership, even that final attempt at spreading the Word by radio probably failed.[17] WLAL simply disappeared from sight.

There were other oil booms underway in Oklahoma in the 1920s, one of them in Ponca City. C.L. Carrell of Chicago, who made his living as a theatrical booking agent, was attracted by the expanding economy. He came up with a unique idea: he acquired several radio station licenses known as "portables" and moved them around from town to town, using them as a kind of electronic barker for his theaters. He told the Commission that his stations were designed for communities that had no

permanent broadcasting facilities. Each portable station had equipment for three studios—one was placed at the transmitter site, one on the stage of the local theater, and one at the community hall or newspaper office. The stations sold commercial time and promoted Carrell's theatrical acts. In 1928, Carrell's portable stations were operating at Ponca City, Joplin, Missouri, Topeka, Kansas, and Sheboygan, Wisconsin.

When he applied for license renewal on May 19, 1928, the FRC informed him that licenses of the portable class were being discontinued, and if he wished to continue in the broadcasting business he would have to locate permanently.[18] Carrell replied that he had been putting on "programs of such merit that the community [Ponca City] is very anxious that we locate permanently," and he promptly settled down with call letters of WBBZ. His other properties were WHBL at Sheboygan, WIBW at Topeka, and WMBH at Joplin. The story of Carrell and his portable stations solves a mystery in the broadcasting industry. Only the very earliest stations west of the Mississippi had "W" call letters; the deluge of license applications had forced the FRC to split the country in half in 1923 with "W" calls east of the Mississippi and "K" calls west. Carrell's portable stations had been licensed to Chicago, and all had "W" call letters. The FRC retained the letters even after it placed the stations in their permanent locations long after their original decision to use "K' call letters in their new homes.

Things were tougher in Alva, Oklahoma, where there was no oil boom to lubricate the sales of commercials. Nevertheless, Earl Hampshire decided to try his hand at station ownership. On December 10, 1926, the FRC awarded him a license at his address in the Beagle Apartments. On January 1, 1927, the New Orleans office certified that Hampshire's station was ready for operation with call letters KGFF. However, Hampshire did not last long. Two years later, Joe McKinney, an FRC inspector from Dallas, came by for a visit. He was not pleased, reporting:

> The transmitter and associated apparatus at station KGFF are in extremely poor condition. No spare transmitting tubes are available and the tubes now in use must be operated at about 60 percent of their normal rating in order to keep them from breaking down entirely. The transmitter is direct crystal controlled, the crystal being mounted between two metal plates with its edges exposed. A pistol cartridge has been placed on the upper crystal electrode in order to keep the upper electrode from vibrating, or walking off, the crystal. No attempt at temperature control has been made....The apparatus is wired in haywire fashion and practically all equipment is thoroughly covered with dust.[19]

Perhaps Mr. McKinney's report was the final straw. A few months later Hampshire sold KGFF to D.R. Wallace of Oklahoma City. Wallace, who had $6,000 invested in the station, soon sold it to the Shawnee newspaper. The next inspector found the station at 9th and Bell streets in Shawnee and was pleased to report that "things have improved quite a bit."[20]

D.R. Wallace was one of the early entrepreneurs in Oklahoma radio. He had been a radio operator in the Navy and opened the Wallace Radio Institute in 1925 in Oklahoma City. In 1926 the institute was located at 13th and Broadway, and Wallace was urging young men to "learn radio in your spare time and prepare now to make big money."[21]

Wallace had entertained some ideas along that line himself, and in addition to running the institute,, also applied for a station license. On August 14, 1926, he wrote to the New Orleans office of the FRC that he was ready to go on the air and requested call letters WRI. "However," he wrote, "if it will delay our application please give us whatever letters you have available...."[22] What the FRC had available was KGCB, which seemed to suit Wallace for a while.

The FRC was somewhat surprised two years later to find KGCB had been sold to Champlin Refining Company and was operating in Enid. The inspector wrote:

> According to the records of this office, this station has not been licensed to operate at Enid, but has been issued a construction permit covering removal from Oklahoma City. The station however is now in full operation and is rendering programs at Enid. The apparatus is located in the city auditorium of Enid. From information we are able to gather the station is endorsed by the city officials as well as Chamber of Commerce.... According to our information the building is furnished free to the owners of the station. Actual maintenance however is from the sale of advertising time and seems to be very successful at the present time.[23]

Perhaps it was, but a follow up report showed

The musical group in this photograph is unknown, but the station was KGFG (Keep Going For God), owned at the time by an Oklahoma City church. Later it became KTOK. (Courtesy Archives and Manuscripts Division, Oklahoma Historical Society.)

the station lost "something in excess of $30,000 in 1929," concluding that Champlin "apparently maintains the station principally as a means of promoting good will and advertising the products of the refining company." KGCB did have its standards though. A better business committee passed on all forms of advertising, and no advertising "of a questionable nature" was permitted. Price quoting was out of the question. And the call letters KGCB were interpreted to mean "Keep Growing City Beautiful."[24] However, soon after that KGCB was sold to the Enid Publishing Company, and the call letters were changed to KCRC.

In the mid-1920s two more stations were allocated to Oklahoma City. The first was KFXR, licensed in December 1925 to the Classen Film Finishing Company, owned by businessman G.W. Classen. Two years later, the station had studios at 1708 West 35th Street in Oklahoma City and was selling commercial time. But it was now licensed to AT&T; at least that was what its license renewal application said. Although AT&T was putting together a network of stations at the time, there is no record that the KFXR license was ever formally transferred. Perhaps Classen had simply worked out a lease.[25]

Whatever the arrangement, it did not last long. Two months later, on June 27, 1927, a license transfer application was made on behalf of the Exchange Baptist Church, 1305 South Pennsylvania, Oklahoma City. The official correspondence of the FRC makes it clear that this transfer was

approved, but there is no record of the approval in its files.

KFXR was the only station owned by the Baptists in Oklahoma, and they launched a major effort to make it a success. The studios were moved to the tabernacle where three revivals a year were broadcast. Each were two weeks or more in length and were on the air for two hours each night. In 1930 the church invested $5,000 in a rebuilt transmitter and new studio, and Hale Davis, chairman of the radio committee, wrote the Commission, "We have employed a fine musician, former supervisor of music in the Oklahoma City public schools, as program director who is helping us work out a comprehensive music program that will appeal and serve all classes of the public."[26]

But being a religious station did not protect KFXR from the problems afflicting all other stations. In a letter to the Commission, Hale pleaded "that relief be given from crosstalk from station KGFG, also using the call letters KOBC which...is spreading so badly that our programs have been entirely spoiled the last few days."[27] He went on to offer a spirit of cooperation and asked for the Commission's advice on what could be done. It seemed a reasonable request, couched in a Christian tone, which might have been expected of one church station seeking to gently correct another church station's transgressions.

KGFG, which reportedly stood for "Keep Going For God," was the second Oklahoma City station licensed in the mid-1920s. It received approval in January 1927 and was assigned to the Oklahoma City Full Gospel Church, although other correspondence in Commission files shows it licensed to the Faith Tabernacle Association at 2nd and Western, William Kitchen, pastor. KGFG was destined to generate a lot of confusion along with its programs. On September 15, 1928, an FRC inspector found the station to be operating at 1110 2nd Street although records showed it should have been at 737 East 9th. The inspector further noted, "The purpose of this station is to broadcast services held at the Faith Tabernacle although some phonograph records are played from the studio near the equipment (transmitter) and some...is also broadcasted from the very ordinarily equipped studio...." He grudgingly admitted that "This station appears to be run in compliance with the law."[28]

In 1930, the owners were provided a grander vision of what might be done with the station. A Mr. E.B. Dye convinced them to let him operate the station during the week with Faith Tabernacle operating it, appropriately, on Sundays. He signed a contract to that effect, promising to pay the Tabernacle 38 percent of the gross income with a minimum of $7 per hour. In order to make certain there was no confusion between the broadcasting of God and Mammon, the owners asked for dual call letters: KGFG for the tabernacle and KOBC for Dye. And without waiting for a reply to their request, they charged ahead.[29]

Over at KFJF, R.M. Shaw was infuriated and fired off a letter to the FRC with none of the conciliatory language of the KFXR Baptists. Shaw complained bitterly that KGFG was completely covering KFJF, so much so that he could not hear his station in its own studios. He complained that KGFG and Dye were illegally using the KOBC call letters and then he complained, "...Mr. Dye who has taken over KGFG is of the high pressure type, dropping in here from somewhere and has hypnotized the officers of the Faith Tabernacle and has convinced them that he can secure anything he wants from the Commission."[30] It was clear that somebody, probably Dye, had miscalculated, and KGFG quickly wrote the Commission an apology:

> Dear Sir: Relative to your inquiry as to the actions of this station regarding the use of call letters KOBC will say that these letters were used but twice and then not maliciously but by uninformed advertisers with whom contracts were signed, who were making their own announcements not knowing that the Radio Commission had not granted the change. However, as soon as the studio manager heard the announcements he immediately informed them of the mistake and it was made no more. We had hoped to have approval of the contemplated change...before that time but after receiving a wire forbidding us to use call letters KOBC we were content to wait for further action.[31]

That action never came, Dye soon disappeared from the scene, and a later inspector reported the station was now entirely religious with no commercial programming. He found the station to be operating in a satisfactory manner, but noted, in some confusion:

> The main studios of this station could not be located and the operator advised that the main studio which is shown on the license to be at 612 West 5th Street is no longer in use and that the

programs of this station originate mainly from the various churches and religious tabernacles.[32]

KGFG was not destined to "Keep Going For God" much longer and was soon sold. In its new incarnation as KTOK it was a much more respectable and successful member of the Oklahoma City broadcasting community.

What was it like to work for one of those early radio stations? Wakefield Holley, chief announcer for WKY for many years, remembered his early years in the business. The studios were invariably primitive, the equipment almost always homemade and worn out. Programming consisted of a large stack of scratched phonograph records. The announcer was instructed to play from the top of the stack to the bottom without regard for the type of music. It was not unusual for the first selection to be a fox trot, the next an operatic selection, and the next a Sousa march. There were commercials, but because most of the business involved trade-outs there was little cash flow. If the owner broadcast a series of commercials for a local night club, he often collected by taking his friends out for a night on the town. Wakefield developed his own system for quickly assessing the quality of a station. He simply looked out the back door toward the base of the antenna. The FRC required that hourly readings be taken from meters located at the tower. The operator at a well-run station soon wore a path from the back door to the meters. Engineers at poorly run stations simply overlooked this inconvenience. Starting as a young, inexperienced announcer, Wakefield found his view out the back door was almost invariably an unbroken sea of weeds.[33]

CHAPTER TEN

MAKING MONEY THE OLD FASHIONED WAY

The Idea that was to provide radio's financial salvation came rather early, specifically on August 28, 1922, at 5 P.M. But it took most of the rest of the decade for the Idea to spread throughout the infant industry and to begin to pay its ever-mounting bills. The Idea came out of station WEAF in New York City. WEAF was owned by the American Telephone and Telegraph Company and, like all other radio stations, was struggling to find a path to financial solvency. But WEAF's management had been trained in the telephone industry and looked at the world with telephone logic. In the telephone world if you wished to speak to a person at a distance, you went into a telephone booth, deposited the required number of coins, and were permitted to speak for the appropriate amount of time. At WEAF it seemed only logical to create a "radio booth" and charge those who wished to speak to others at a distance.

So it was that on August 28, 1922, at 5 P.M. an announcer stepped into the WEAF booth and spoke the following words, which were not exactly immortal but probably should be carved in stone or bronze somewhere, considering all that has followed:

> This afternoon the radio audience is to be addressed by Mr. Blackwell of the Queensboro Corporation, who through arrangements made by the Griffin Radio Service, Inc. will say a few words concerning Nathaniel Hawthorne and the desirability of fostering the helpful community spirit and the healthful, unconfined home life that were Hawthorne ideals. Ladies and Gentlemen: Mr. Blackwell.

Blackwell was there to sell apartments, which he did, and the country's first radio commercial was born. During the following weeks the station sold four more afternoon talks about Nathanial Hawthorne at $50 apiece and one evening talk at $100. In September, Tidewater Oil Company and the American Express Company rented WEAF's booth, and total station revenues for the two months reached $550.[1]

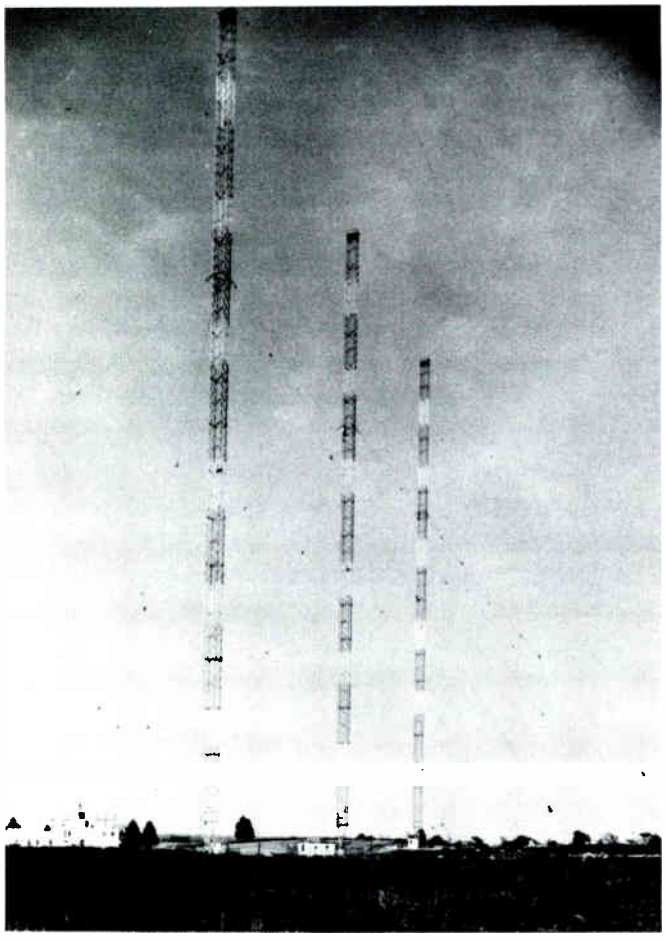
At first even New York stations avoided the path to the telephone/radio "booth," but before long WEAF was using its income to improve its signal and its programming and competing stations were forced to start selling time, too. This development was viewed with editorial alarm by most of the nation's newspapers. Approximately 100 dailies had set up their own stations in the first two or three years, but they were not interested in having them become competitors for advertising dollars. Almost all newspaper-owned stations followed the same format: put on good shows and advertise the paper.[2] *The Kansas City Star* and its station WDAF offered advertisers a combination rate for newspaper ads and radio commercials purchased as a package, but few advertisers were interested and other stations failed to follow the *Star's* lead.

WHB, another Kansas City station, thought it had a better idea. It invited listeners to send money for imaginary seats in an "invisible theater" of radio. $10 entitled the donor to a box seat, and the prices scaled down to $1, which allowed the listener to sit in the invisible gallery. WHB raised $3,000 with this scheme, but it was not the answer to radio's growing financial problems in the 1920s (although many public radio and television stations manage quite well today on similar promotions).[3] In Oklahoma, E.H. Rollestone was asking listeners to remember that KFRU meant "Kind Friends Remember Us," but not enough were remembering sufficiently to pay the bills.

On December 4, 1923, WEAF broke out of its "booth" mentality once and for all and broadcast the first major variety show on radio, "The Eveready Hour." It was also the first program to be known by the sponsor's name, a trend that was soon to accelerate. The program, which had plenty of production money and its own advertising agency, gave a whole new meaning to the word "variety." Early programs included such talent as a minstrel act, a concert orchestra, an announcer reading poems by Earnest Thompson Seton, and Yap's Hawaiian ensemble. The sponsor also paid Will Rogers $1,000 for a single program, a new record at the time. Rogers

was a big hit on the East Coast, but his Oklahoma neighbors were unable to enjoy the show because networks had not yet moved west of the Mississippi.

But the *Idea* of radio advertising had arrived in Oklahoma. There is no record of who spent the first radio advertising dollar in the state. Earl Hull referred to his "toll accounts" in correspondence with the Federal Radio Commission, and the KFJF files contain numerous irate letters from listeners complaining about an excessive number of commercials. In 1928, KVOO, WKY, and KFJF were reporting sales of about $6,000 per month but were losing money because of poor management and past debts. That should not be surprising because the radio pioneers like Earl Hull and E.H. Rollestone were visionaries, not sales managers. Salesmanship was not one of their accomplishments. But selling and good business management was exactly what was needed if Oklahoma radio was to progress. Then, in the summer of 1928, as though some kind of financial critical mass had been achieved, the two leading stations in Oklahoma received that influx of management.



KVOO's three towers and transmitter buildings on East 11th Street in Tulsa were one of the first steps in the station's modernization after it was purchased by W.G. Skelly. The towers were a landmark to thousands of motorists passing nearby on Highway 66. (Courtesy KVOO.)

In June, W.G. Skelly bought KVOO, and one month later E.K. Gaylord bought WKY.

KVOO's studio and transmitter had been poorly maintained, and Skelly wasted no time in getting new equipment on order while petitioning the FRC for more transmitter power and a better frequency. KVOO then was sharing time with WAPI in Birmingham and had to sign off at 9 P.M. to make room for the Alabama station. In September an FRC inspector called on Skelly and then reported to Washington:

> The station has now been bought outright by Mr. Skelly...who informed the writer that he paid 50,000 dollars for the station. This office has no record of this transaction. Mr. Skelly appears to be very disturbed over the fact that this station was allocated only 1,000 watts on what he termed a very poor frequency, namely 560 kilocycles. Mr. Skelly seems to be under the impression that he has not been treated satisfactorily by the Radio Commission.[4]

The inspector had no way of knowing that the Federal Radio Commission and then the Federal Communications Commission would spend the next 10 years hearing from Skelly. By the time he was finished, KVOO would have its own frequency, 50,000 watts of power, and nighttime operating hours. Skelly could be a determined man, a fact the inspector recognized when he noted, "...The station is at present under excellent management and an effort is being made to put it on a self supporting basis by the sale of program time. This station appears to be very popular and is in a very rich section of the country."

Skelly appointed a new general manager, H.A. Hutchinson. KVOO soon had a new 5,000-watt transmitter east of town on Highway 66 and new studios in the basement of the Wright Building in downtown Tulsa. The Wright Building studios were "comfortably and modernly furnished" with a rehearsal room, control room, music library, three general offices, a men's smoking room, and a "daintily furnished ladies lounge."[5]

By 1930 the station listed 30 different music groups

performing live, including its own 13-member staff orchestra and what was surely the only American Indian radio soprano soloist: Princess Pakanli Daisy Maude Underwood. KVOO broadcast not only from the new studios but also from 21 different remote locations, the most distant of which was the campus of A. & M. College at Stillwater. Four evenings a week the station presented the music of Hal Pratt and his Recording Orchestra live from the 16th floor of the Mayo Hotel.[6] It was not surprising that KVOO was soon out of the financial doldrums and making money.

In Oklahoma City Earl Hull had come to the end of his financial rope. He had been trying to sell WKY for months, perhaps years, to no avail. He had little to offer except his broadcast license and call letters. WKY had been losing money from the beginning. Hull had approached publisher E.K. Gaylord before, but while Gaylord was intrigued by the possibilities of radio he had always felt there was a lot of money to be lost in the new medium before there was any to be made. In July 1928 Hull tried one more time. By then a couple of things had changed. National radio advertising in 1928 amounted to $20 million, a four-fold increase from 1927. It was not much compared to newspaper's national total of $760 million, but it was a sure sign of better things to come.

The other new development was a hole in the ground in south Oklahoma City known as ITIO Number One. The drillers had gone far enough by July to know that Oklahoma City would at last get in on the Oklahoma oil boom with all that meant for the local economy. Gaylord was vacationing in Europe when he received Hull's offer to sell. He cabled his acceptance and bought WKY for $5,000.[7]

Like W.G. Skelly, his first priority was to improve WKY's physical plant. To do that he called Jack Lovell, a young engineer working for Skelly's industrial communications unit in Tulsa. Lovell had never heard of Gaylord or the Oklahoma Publishing Company, so he inquired among some of his friends at the Tulsa papers. They assured him that *The Daily Oklahoman* was a "first class outfit," so on the strength of that he accepted the job and headed for Oklahoma City. When he arrived at the WKY studios in the basement of the Huckins hotel, he almost went into shock. The studio equipment was, as he put it, "strictly haywired," and the transmitter at the original stockyards location was barely on the air. He had not spent much time in Oklahoma City before he realized the situation was hopeless and concluded that he had made a terrible mistake in leaving a perfectly good job in Tulsa for the junk heap known as WKY. In desperation, he signed on as radio operator of a banana boat soon to depart from the Gulf coast. Before the boat could leave, however, he met the young woman who would become his wife and decided that she was worth staying in Oklahoma City for, even if WKY was not. He stayed on for 59 years, most of them as chief engineer.[8]

Gaylord assigned day-to-day operating responsibilities of the station to his business manager, Edgar Bell. Bell started by junking the existing studio and transmitter and starting over. The New Orleans inspector for the FRC found a lot of changes when he came to call in September 1928.

> This station has recently been purchased by *The Daily Oklahoman*, a newspaper of Oklahoma City, and equipment will be replaced by a 1,000 watt Radio Corporation of America crystal controlled transmitter and will be located about 6 miles from the business section of Oklahoma City in a westerly direction. A studio is being built in the newspaper building.... It appears that the new owners of the station will spare no expense to install high class equipment and to render first class service to Oklahoma City. The new owners are very well financially able to maintain a high class station.[9]

However financially able, the new owner was not interested in continuing the station's $6,000 monthly loss indefinitely. Along with improvements in the electronics, WKY immediately began an improvement in sales. *Broadcast Advertising* reported on an early success story in an interview with WKY salesman James Clark. According to Clark, *The Daily Oklahoman* carried a column by O.O. McIntyre in the summer of 1929 in which McIntyre noted that nothing made a man look cooler in hot weather than a blue and white polka dot tie. Clark read the item and immediately called the leading department store. Inside an hour, according to Clark, every clerk in the store was wearing a blue and white polka dot tie, a window display had been set up, and the columnist's words were on the air in commercials for the store. That was Friday. By Saturday night, Clark reported, "Every man in town had a tie of this variety and the store had none." The magazine concluded that, once again, "broadcasting had emptied the shelves and filled the cash register."[10]

WKY's radio cook "Aunt Susan" stirring up a new dish for her radio audience. Cooking programs were one of the earliest successful program formats for daytime radio. (Courtesy Oklahoma Publishing Company.)

New uses for radio were found every day and were limited only by the imaginations of the participants. When a southwestern convention of physicians was convened in Oklahoma City, Steffens Dairy asked WKY to produce a one-act play for the doctors extolling the virtues of pasteurized milk. WKY's commercial writer E.C. Sutton was assigned to write the script while actress Eleanor Caughron and staff artist Harold Hirschi played the "speaking parts." There is no record of how well the cause of pasteurization was advanced by this early radio drama.[11]

Because about half the average household budget went for food, the radio sales departments looked for ways to tap that lucrative market. *The Daily Oklahoman* had already started such an effort in 1920 when it hired an Oklahoma A. & M. College home economics instructor, Susan Abercrombie, to write a food column under the name "Aunt Susan." The name was retained even after the original Aunt Susan departed; several other women wrote under that name over the years. When radio came along, Aunt Susan was given additional duties at WKY. She had a regular spot on the schedule talking about cooking and entertaining and giving recipes. The advertising department built an annual "food show" around her. Once a year she gave a cooking school at the stock yards coliseum which drew such enormous crowds that editor Walter Harrison described it as "a madhouse."

At one point Aunt Susan was sent to Europe aboard the new French liner *Normandie*, gathering

ocean liner recipes as she went, and then managed to get into the kitchen at Buckingham Palace departing with, among other things, Queen Mary's favorite recipe for strawberry souffle. Aunt Susan's listeners loved it and so did her sponsors, who were lined up waiting their turn to convert their money into radio commercials.

Soon radio salesmen were everywhere. It was logical to find them working the department stores. After all, radio was becoming a true mass merchandising medium. But the case of Makins Sand and Gravel Company must have taken a special kind of salesmanship. Somehow, one of WKY's salesmen sold the Makins company on its own live radio program featuring an orchestra called the Makins Melody Mixers and commercials stressing the scientific accuracy and uniform quality of Makins concrete. The radio merchandisers than convinced the company to paint its trucks bright yellow and call them Makins Big Yellow Mixers. In reporting all this, *Broadcast Advertising* said thought was being given to the next year's campaign and the possibility of "telling the audience a little something about the romance of sand and gravel."[12]

The next step was obvious: WKY began a daily 15-minute program for Kerr Drygoods Company which featured no entertainment, just commercials. *Radio News* said, "Wise ones said such a program wouldn't have an audience but dollars and cents results prove otherwise. Sponsors say if women will read a newspaper ad consisting of nothing but merchandise chatter they'll listen to a radio program along the same lines. The show will go on indefinitely."[13]

It is little wonder that both KVOO and WKY were soon healthy stations, quickly expanding into the decade of the 1930s which would be for all radio the true Golden Age.

CHAPTER ELEVEN

THE NEW RESPECTABILITY

The United States ended the "Roaring Twenties" with a financial hangover called the Great Depression that lasted for a decade—except for radio. This upstart industry responded to the country's financial hard times by going on an unprecedented growing spree. By the end of 1929 the Federal Radio Commission had managed to bring order to the radio spectrum, and the number of stations had stabilized at 608. The networks were growing and getting an ever increasing share of advertising dollars. By the end of 1930 the Census Bureau reported there were 12 million homes with radio receivers. Almost half the country was "listening in."[1]

The two most successful stations in Oklahoma were clearly KVOO and WKY. Both were solidly established with adequate capital; both were building experienced staffs and expanding and improving their studios and transmitters.

WKY actually started its expansion in 1928 when it abandoned the Huckins Hotel basement studio and all its equipment and constructed two modern studios in the Plaza Court Building at Northwest 10th and Walker. The original stockyards transmitter site was also abandoned much to the relief of the engineers who hated the smell almost as much as they hated the antiquated equipment, and a new 1,000-watt transmitter was installed in a specially constructed building west of Oklahoma City on Northwest 39th Street.

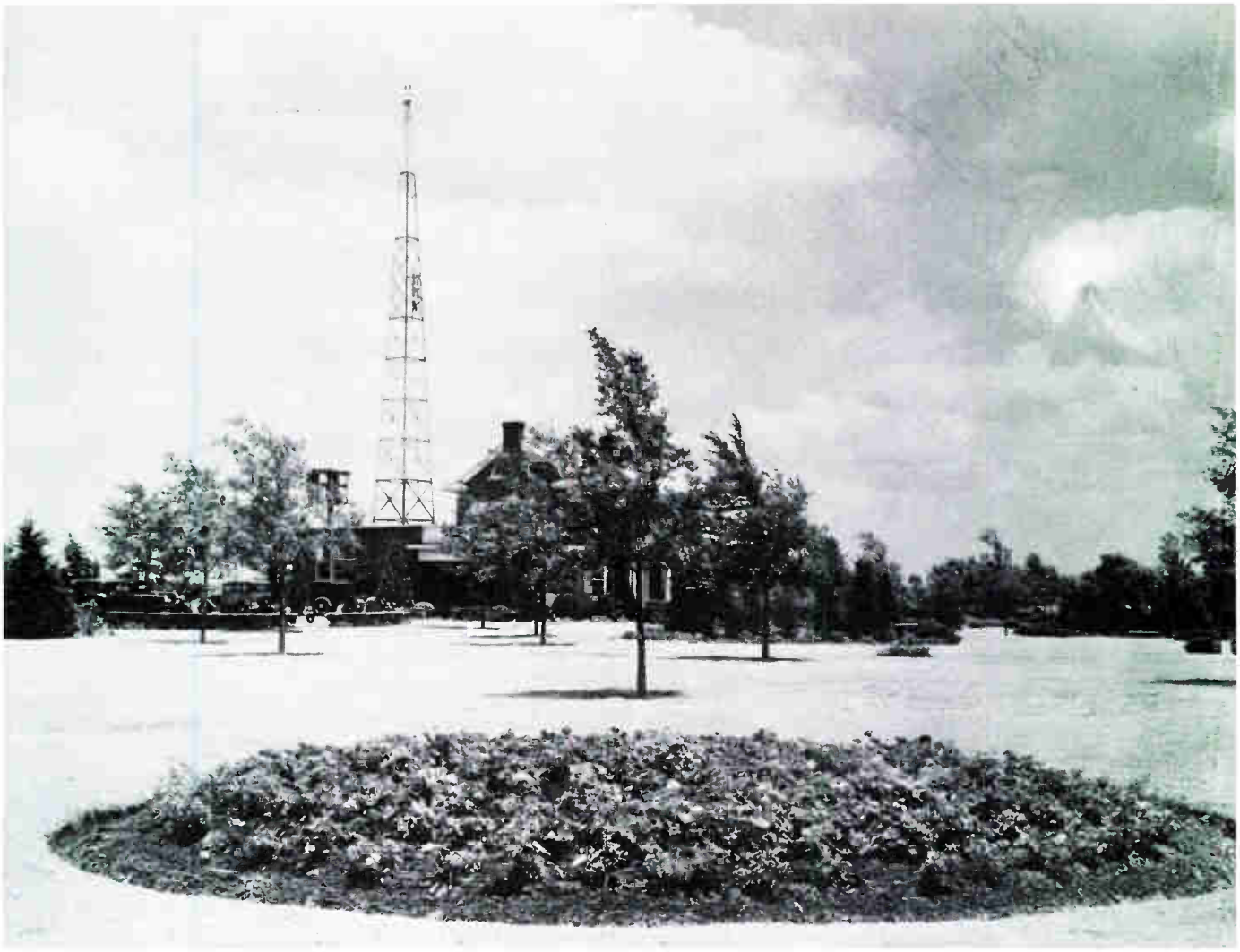
Radio news was still a small part of any station's daily programming partly because of opposition by the American Newspaper Publishers Association, which controlled the Associated Press. But while the parent Oklahoma Publishing Company went along with the position of the publishers group, owner E.K. Gaylord saw a future for radio news. Accordingly, WKY installed a small studio in a converted closet on the fourth floor of *The Daily Oklahoman* building and provided it with carbon copies of all the paper's local stories. Dale Clark, a young reporter who was assigned to read the news, remembered there was a microphone and a clock but no radio receiver and no speaker. There also was a hand-cranked telephone connected to the Plaza Court studios. When the telephone rang, Clark started reading, and when it rang again 15 minutes later he signed off.[2]

Oklahoma City Times editor Walter Harrison was another newspaper man who believed in the new medium, and he began to use the little studio for a daily commentary on the news somewhat in the style of Paul Harvey. Power for the studio equipment was provided by a wet cell storage battery, and Harrison sometimes found his pants cuffs eaten away by contact with the acid. That the normally fastidious Harrison was willing to put up with such an indignity is a telling commentary on the power radio was beginning to exert on those who wanted to be "on the air."[3]

WKY had hardly started radio operations at the new transmitter when the station management also applied for permission to begin experiments with television. Station W9XAP, affiliated with WMAQ in Chicago, had started broadcasting a crude television picture utilizing a mechanical scanning device, and Edgar Bell, who oversaw WKY's operations for the publishing company, thought he saw a new opportunity. On January 9, 1929, he wrote to Judge E.O. Sykes, head of the Federal Radio Commission, requesting permission to start television transmissions using WKY's assigned radio frequency of 900 kilocycles. The FRC apparently wrote back questioning the application and on March 25, Bell wrote again:

> Please pardon the delayed reply to your letter of March 13. It was misplaced out at the studio and has just come to my attention.... We applied for a permit to broadcast television on our present wave of 900 kc with the idea that if the radio commission would issue permits of this sort we would have our request in the hands of the commission.... We already have a good bit of equipment and are merely waiting now for permission...to do television experimental work before assembling the machinery.[4]

Bell identified Earl Hull and E. E. Sims, the original engineer at KFRU, as the men who would build the television transmitter and told the FRC that



WKY's transmitting site from 1929 to 1943, located near Northwest 39th and Meridian in Oklahoma City. It was moved during World War II because the Army Air Corps thought the tower was a hazard to planes landing at Will Rogers Field. (Courtesy Oklahoma Publishing Company.)

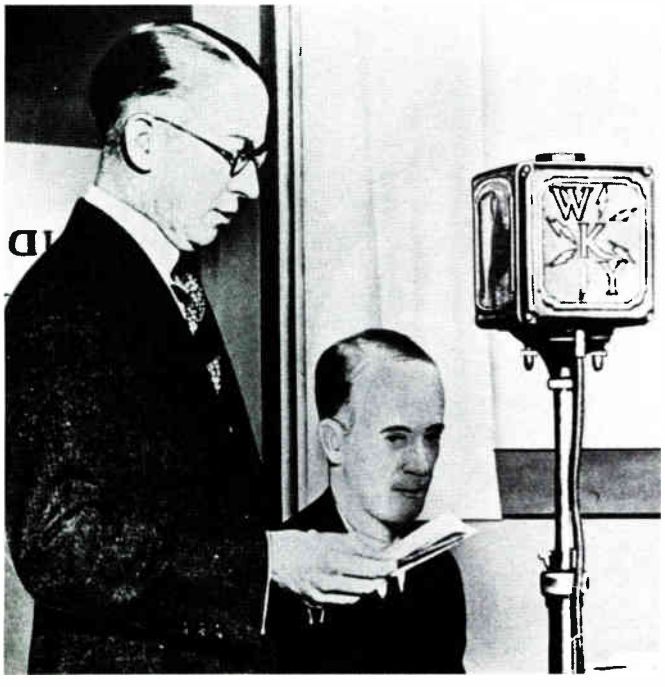
WKY had "in its laboratory developed a system incorporating several original ideas not now in use."[5] However novel the ideas might have been, the mechanical scanner was doomed to failure because of its inability to transmit a picture with sufficient detail to be viewable by the general public. Television had to wait on the development of an electronic scanner which was still almost 10 years in the future. But the Oklahoma engineers were trying.

In Tulsa the KVOO staff had been busy making their own pioneering efforts. The station became the first to air what is now known as a "telethon," a fund-raising effort spanning several hours. In 1928 the station raised money for the families of a group of miners killed in a mine explosion in McAlester and repeated the effort in 1930 for victims of a Wilburton mine disaster.

By 1930 the studios were located in the Wright Building, and a new 10,000 watt transmitter, the most powerful in the entire Southwest, had been installed at a new site east of town on Highway 66. The complex included living quarters for Chief Engineer Watt Stinson, who liked to keep a close eye on things. The program log for February 16, 1930, began with morning devotions at 9:10 A.M. and ended at 10 P.M. with lyric soprano Thressa Flo Grimes. Monday through Friday the station signed on at 6:55 A.M. with the "Musical Alarm Clock," featured a remote informational program from Oklahoma A. & M. College at noon, and signed off at 9 P.M. with the "Voice of Firestone."

The early sign-off was necessary because the station was still having to share time with WAPI in Birmingham, Alabama. But Skelly was making progress with the Federal Radio Commission. On November 17, 1931, the Commission authorized the station to go to 25,000 watts, the only station in the country at that time with that much power. Skelly's response was to install a 50,000-watt transmitter and run it at half power against the day when the Commission would approve another increase. But the interference problem with WAPI continued to limit KVOO's operating hours. By 1934 the station had outgrown the Wright Building studios and moved to spacious and impressive quarters atop the Philtower in downtown Tulsa.

KVOO was doing more live programming than most stations with dance bands broadcast direct from the Mayo Hotel several times a week. As late as 1935 the station did not have a single phonograph record in the studio. There were a few 16-inch transcriptions and one turntable to play them on, but practically everything that went on the air was live.[6] Billy Bumps and Happy Fenton read the funnies on Sunday morning. Allen Franklin read poetry, and Lydia White played the organ. The station began originating a country music program from a local auditorium on Saturday nights, and soon had every performance sold out. At its height, "Saddle Mountain Roundup" was filling the Tulsa convention hall at 40 cents per person with another 1,000 turned away for lack of room. Later the show went on the road from various Oklahoma towns where each mayor had a chance to talk, and local talent sometimes had a chance to play. Among the regulars on the show were the Tennessee Valley Boys, old time fiddler Georgia Slim, Little Orphan Girl, and Cousin Herald Goodman as master of ceremonies and producer.



Oklahoma Publishing Company executive Edgar Bell makes a plea for donations for victims of the 1930 Bethany tornado. Seated is Gayle Grubb, WKY manager. (Courtesy Oklahoma Publishing Company.)

There was always something different to try. Not content with the usual pipe organ programs common to most stations, KVOO engineers did a pipe organ duet originating from two different theaters at the same time.[7]

Radio was beginning to develop the power to move people along with its ability to communicate and amuse. WKY engineer Jack Lovell was one of the first to experience the extent of that power. He was working a transmitter shift on November 19, 1930, when an excited man rushed into the building and asked to use the telephone. He told Lovell a tornado had struck Bethany, Oklahoma, and the town needed all the ambulances it could get. Lovell called Oklahoma City police, but they were unable to confirm the story because there were no regular phones working in the area. Lovell called Walter Harrison at *The Daily Oklahoman*; his response was that of any hard driving editor: "Don't hang up, and don't let anyone else get their hands on that phone! I'm sending a reporter out there now!"[8]

Throughout the day,, Lovell kept the line open while his wife made coffee, and reporters for both radio and newspaper told the WKY audience that 23 people had been killed, more than a hundred injured, and 650 left homeless. The Red Cross asked for $30,000 in relief funds, and the radio station broadcast the appeal. The reaction was immediate. By midnight more than $15,000 had been raised, and within 36 hours the fund was over subscribed. As a WKY publicist put it, "By painting a vivid, breathing picture of the disaster, the dire need of the unfortunate storm-stricken people of Bethany was told to thousands of WKY listeners."[9] Even without the purple prose, it was clear that radio, for all its entertainment and commercials, had become a communications giant.

Not all Oklahoma stations were doing as well as WKY and KVOO, of course. KFJF was still strug-

gling, and the 1930 records of the FRC show a long list of complaints dealing mostly with off-frequency violations. In an attempt to improve the situation, the station asked for a construction permit to make transmitter improvements. But the permit expired before the engineers could finish, and KCRC in Enid immediately petitioned the FRC for the KFJF frequency, pointing out the Oklahoma City station's history of problems and stating that KFJF was $40,000 in debt and having problems meeting its financial obligations. The FRC took pity on KFJF, however, and refused the KCRC application. On May 3, 1931, FRC inspector Joe McKinney visited KFJF and found the transmitter still operating very poorly, especially in the direction of Oklahoma City, but noted the station had a 25 by 40 foot studio in the Security Building in downtown Oklahoma City and even had a pipe organ.[10]

By then KFJF had been sold to Southwestern Broadcasting Company, which also owned stations in Fort Worth, Wichita Falls, Waco, and San Antonio. Its call letters were changed to KOMA, and the station moved to the top of the new Biltmore Hotel in downtown Oklahoma City. Net income was up to $5,000 a month, although the station refused to allow any advertising that quoted prices and management was spending $500 a week on talent. Better times were just ahead.[11]

KCRC in Enid, now owned by Champlin Refining Company, was doing well, despite losing its takeover bid with KFJF. An ad in *Broadcasting Advertising* in October 1930 placed KCRC in "the gold spot of the south" and promised "results positive and sure." The station was operating with 250 watts daytime and 100 watts at night.[12] There must have been problems, however, for in 1931 manager Forrest Campbell wrote the FRC asking for a voluntary transfer from Champlin to the Enid Publishing Company. The request was granted.[13]

In Ponca City WBBZ was having its own financial problems. Owner C.L. Carrell blamed some of these on his transmitter location. His proximity to "several large oil storage tanks" was causing his signal to be "absorbed" and asked the FRC to allow him to move to a new location eight miles north of Ponca City. The Commission refused, pointing out that with only 100 watts of power he would not be able to cover Ponca City from eight miles out. Unable to sell enough advertising to meet expenses in Ponca City alone, Carrell set up a remote operation in Winfield, Kansas and another in Arkansas City, from which he got a guarantee of $325 a month plus a percentage of advertising sales. But it was still not enough, and in 1931 the station went into receivership. It managed to survive until 1933 when Carrell died, and the station was then taken over by the Ponca City newspaper.[14]

The FRC continued a gradual increase of its control over the nation's radio stations and inevitably irritated some of the fiercely independent broadcasters. In the case of WKY's Edgar Bell, it was a matter of what he considered unwarranted governmental interference with private enterprise. The Commission revised its license application in order to require information about station income and expenses. Bell's reaction to this bureaucratic probing was simply to leave those sections of the form blank. This prompted a note from FRC Secretary Herbert Pettey advising, "...Again noting you have failed to answer Section 15, the financial information section, you are therefore notified that it will be necessary for you to supply this information immediately."[15] This did not seem to achieve the desired result, and as late as 1934 the FRC was still writing to insist on compliance, and Bell was still leaving the financial information form blank.

The 1930s saw more stations go on the air in Oklahoma. In 1930 it was KGFF in Shawnee. In 1934 KTUL began in Tulsa, and KADA signed on in Ada. In 1935 KVSO joined in from Ardmore. In 1936 Muskogee got KBIX, and KOKL opened in Okmulgee. All seven survived their Depression era birth and are still operating today, although some lost their original call letters in transfers of ownership.

Every year brought new firsts for Oklahoma stations. From its new studios on the 24th floor of the Biltmore Hotel, KOMA had a birdseye view of what was then the largest oil field in the United States, complete with frequent gushers and fires. KOMA also came close to another first in 1931 when Wiley Post and Harold Gatty returned to Oklahoma City for a triumphant parade and dinner following their round-the-world flight. The CBS station broadcast the dinner, but unfortunately Post and Gatty had already signed an exclusive contract with NBC and were not allowed to say anything for the KOMA microphone.[16] It was probably just as well because both Post and Gatty were famous for having little to say before any microphone.

KOMA did get its day in the sun later when it originated a nationwide CBS broadcast for Gene

Cowboy star Gene Autry was one of the first of the "singing cowboys" who built a career on radio. Autry was an early performer on KVOO.

Oklahoma favorite son Will Rogers during a radio broadcast at the dedication of the Pioneer Woman statue at Ponca City. The occasion was WKY's first big national broadcast and was carried over NBC. (Courtesy Will Rogers Memorial.)

Autry's "Melody Ranch" program. It all started when a small Oklahoma town decided to change its name. Autry remembered the occasion in his autobiography:

> I was on the air with Melody Ranch and when we took to the road the show went with us. We did one broadcast from the back of a rail car in...Berwyn, Oklahoma, and later I bought a 1200 acre ranch two miles west of there. [One of the residents] proposed that the name of the town be changed to Gene Autry.... The gesture flattered me but, frankly, Berwyn didn't have a great deal to lose. With a total of 227 residents it had slept quietly in the foothills of the Arbuckles. A petition passed and the town became Gene Autry, officially. On the 34th anniversary of Oklahoma statehood we broadcast the show from there. A network of Oklahoma stations was formed expressly to carry one hour of the festivities just before we joined the national hookup over CBS. Newsreel cameras were there, Life magazine sent two photographers.... Churches set up food and drink stands that featured buffalo meat sandwiches. It was...83 degrees that day..., and a man named Pinky Crossland said he sold 7,700 pounds of ice. We went on the air that day before a live audience of 35,000." [17]

In 1935 WKY had two major programming successes. The first was a national broadcast over NBC of the unveiling of the Pioneer Woman statue at Ponca City. Will Rogers flew in from California to be on the program.

The other was an elaborate broadcast of the Professional Golfers Association tournament held that year at the Twin Hills course in Oklahoma City. The tournament ran from October 17 to October 24 and featured all the biggest golfing names of the day. To describe the action for what WKY's publicity department called "the unseen gallery," the station constructed five large wooden observation towers. There was also a broadcasting location atop the club house and a roving reporter with a portable short-wave set. It took 35 people to produce the broadcasts, and just about everybody on the staff was called into service including station manager Gayle Grubb, who was perched atop one of the

towers, and Walter Harrison and Edgar Bell, who worked as play-by-play announcers.

The towers did not provide much of a close-up look at the action, so the station assigned an assistant to go with each caddie. As a player selected a club for each shot, the caddie would tell the assistant, and the assistant would hold up a card with the club name and number on it. That way the announcer was able to tell the "unseen gallery" how the shot was being played even though, at times, he could barely see the action.[18] Even the presentation of winner John Revolta's trophy had to be specially orchestrated for the microphones. The newsreel cameras were making so much noise that the presentation was first "rehearsed" for them, then "rehearsed" again for the still cameramen and finally done for real for the live radio broadcast.[19]

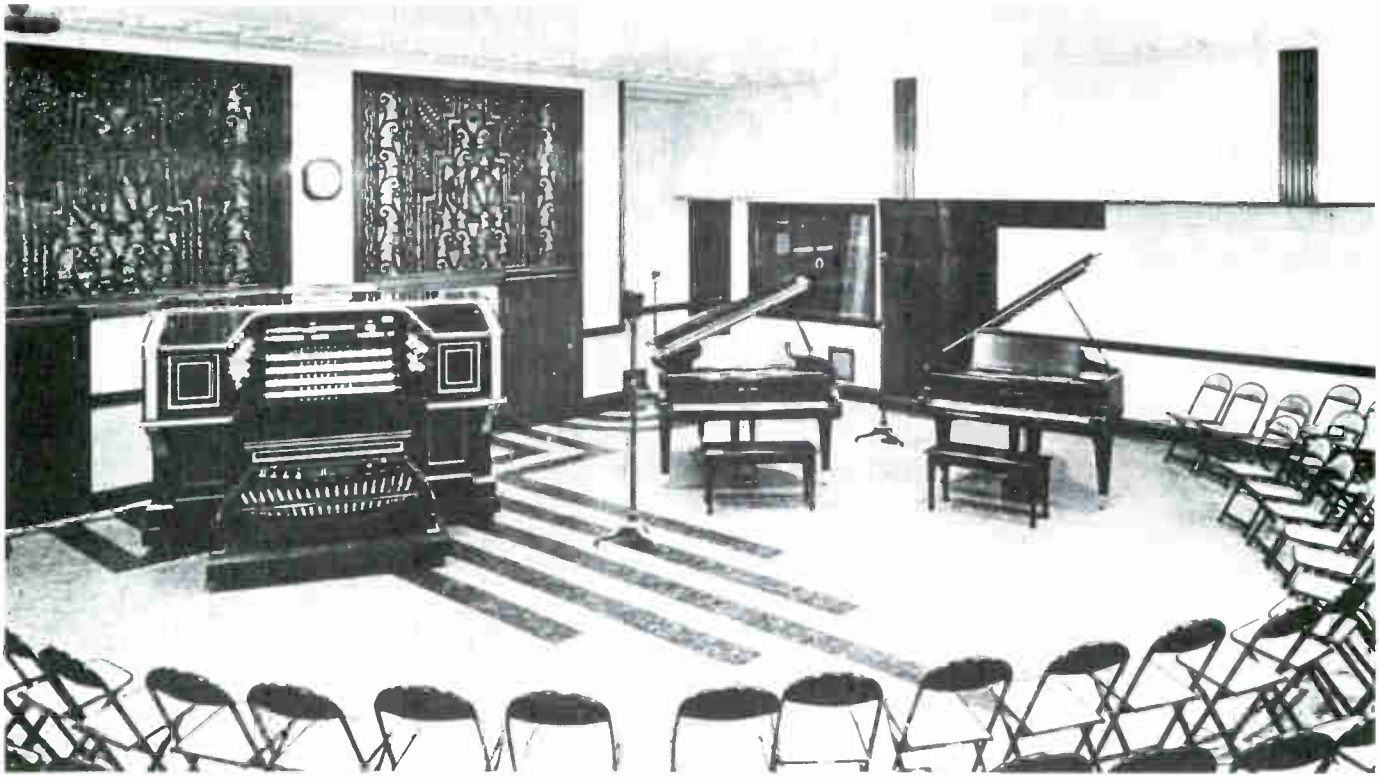
KVOO received national recognition for a unique late afternoon program entitled "Calling All Cars." Someone calculated that about 15,000 tourists were passing through Tulsa every day during the summer

Oklahoma radio pioneer Earl Hull handles a chilly remote for WKY radio. (Courtesy Oklahoma Publishing Company.)

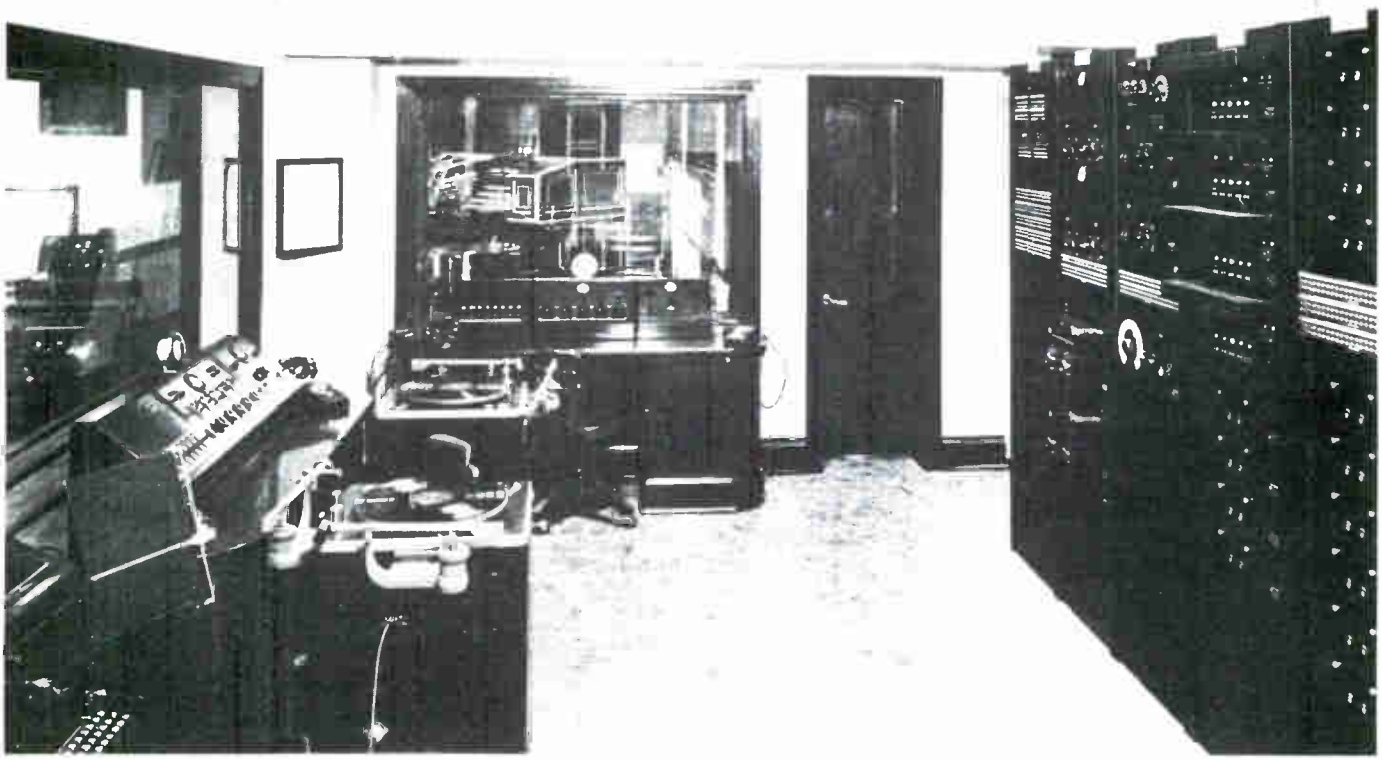
months, and the station produced a special news program just for them. KVOO also claimed the first broadcast of a Christmas Eve Mass from a Catholic church in the United States. Presented during a period of religious suppression in Mexico, the program had a large audience south of the Rio Grande.[20]

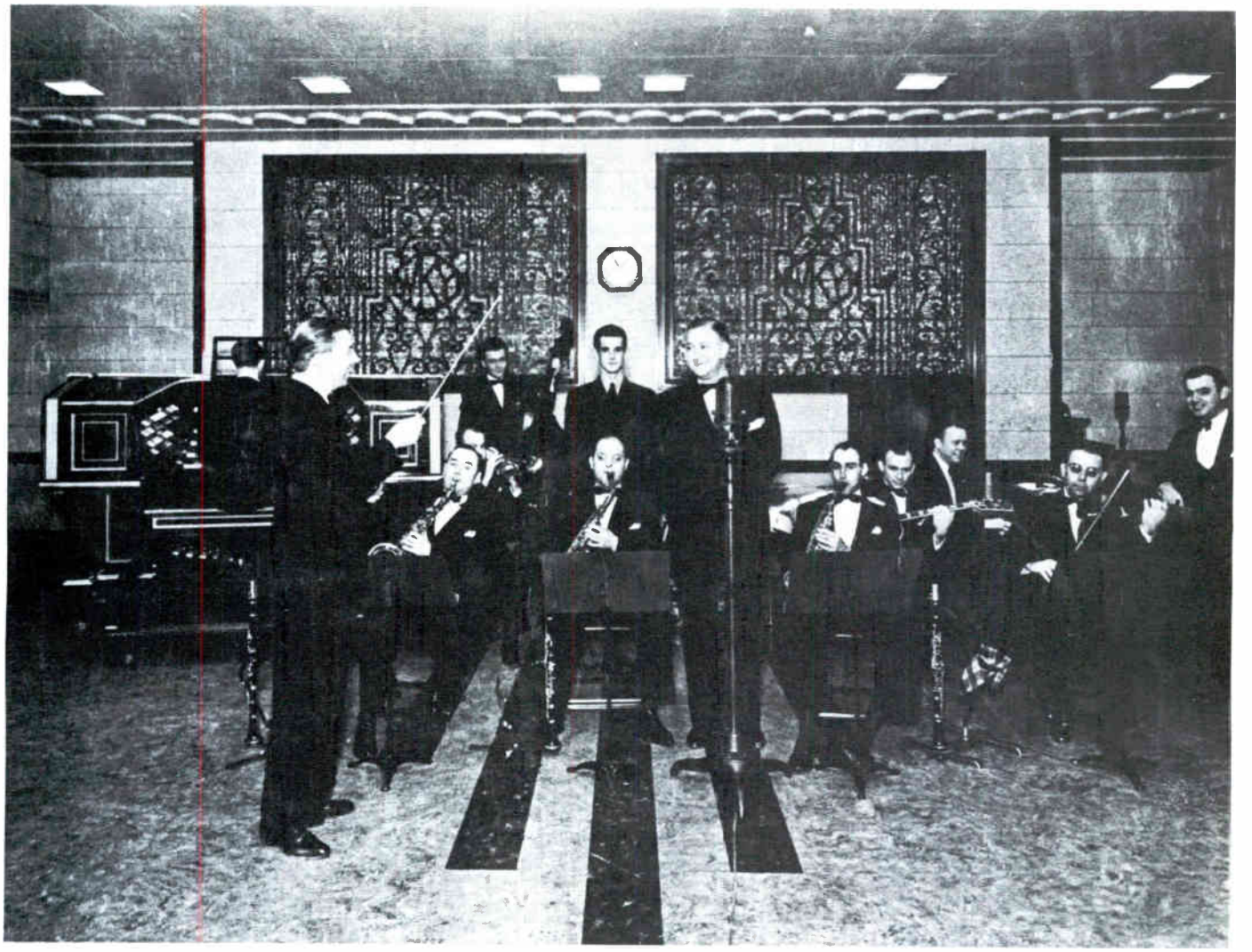
Few of those early local programs survive today. Not many were recorded, and most that were ended up in the trash following the innumerable house cleanings and moves that took place over the succeeding years. One exception was a series of first person historical recordings made by WKY's Daryl McAllister in the late 1930s. The subjects included Dr. Angelo Scott, one of the founders of Oklahoma City; Pistol Pete, now immortalized as Oklahoma State University's mascot; and Chris Madsen, an early-day marshal whose thick Scandinavian accent made him exceedingly hard to understand on radio. Former governor Alfalfa Bill Murray was recorded as he presided at a recreation of the Oklahoma Constitutional Convention, an event that, for the most part, was able to utilize the original cast of characters. These interviews were broadcast on Sunday mornings, which suggests they were not

WKY manager Gayle Grubb describes the action at the 1936 PGA golf tournament in Oklahoma City. The station used five of these wooden towers to give announcers a better view of the action. (Courtesy Oklahoma Publishing Company.)



Above: Studio A at WKY's Skirvin Tower facility in 1936. Pipes for the studio organ were concealed behind the decorative grill. Below: One of the control rooms at WKY's Skirvin Tower studios. This equipment was considered the very latest in design when it went into service in 1936. (Both courtesy Oklahoma Publishing Company.)



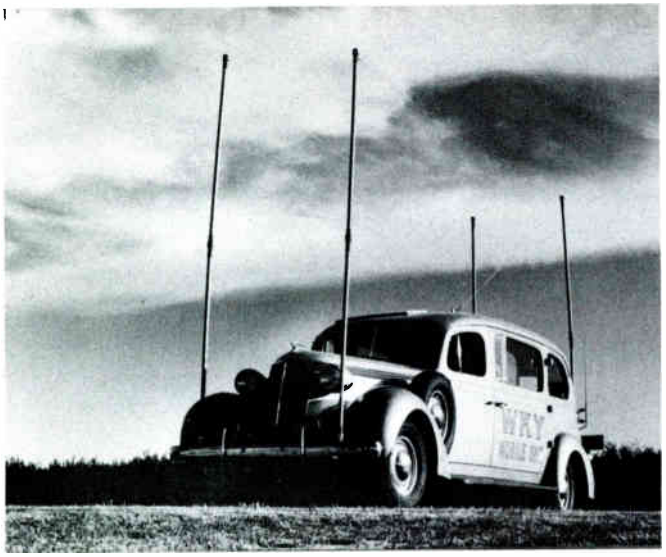


One of the many live musical groups featured on WKY. This photograph was taken in the Skirvin Tower studios about 1939. (Courtesy Oklahoma Publishing Company.)

considered to be particularly important programming. They probably would not have survived at all, but the station donated the acetate discs to the Oklahoma Historical Society. In later years they would form the beginning of what is now the Oklahoma Oral History Project, a priceless collection of voices from our past.

But it was the voices of the present that more and more engaged the radio audience. The American Newspaper Publishers Association was slowly beginning to recognize the importance of radio news. In 1934 the radio committee of the Association worked out an agreement with AP, UP, NBC, and CBS. The networks agreed to drop their own news gathering plans, and the news services agreed to provide materials for two daily news broadcasts of five minutes each plus bulletins on important breaking stories. The broadcasts were arranged so they would contain only information already published in the newspapers, and none of the broadcasts could be sponsored. This remarkable agreement lasted for more than a year.

One part of the document provided for news "commentators," who were to confine themselves to background information only, but in return they could be sponsored. The result was that Walter Winchell, Elmer Thomas, and H.V. Kaltenborn were immediately classified as "commentators," thus introducing a new class of radio announcers.[21] The ban on direct news sponsorship lingered on at many stations, including WKY, for years, but the networks soon began their own news operations in preparation for World War II and the news services began providing radio news under the pressures of



WKY's first mobile unit was a converted Studebaker. The transmitter inside had a useful range of only a few miles. Broadcasts were picked up and relayed back to the studios by telephone lines. (Courtesy Oklahoma Publishing Company.)

competition.

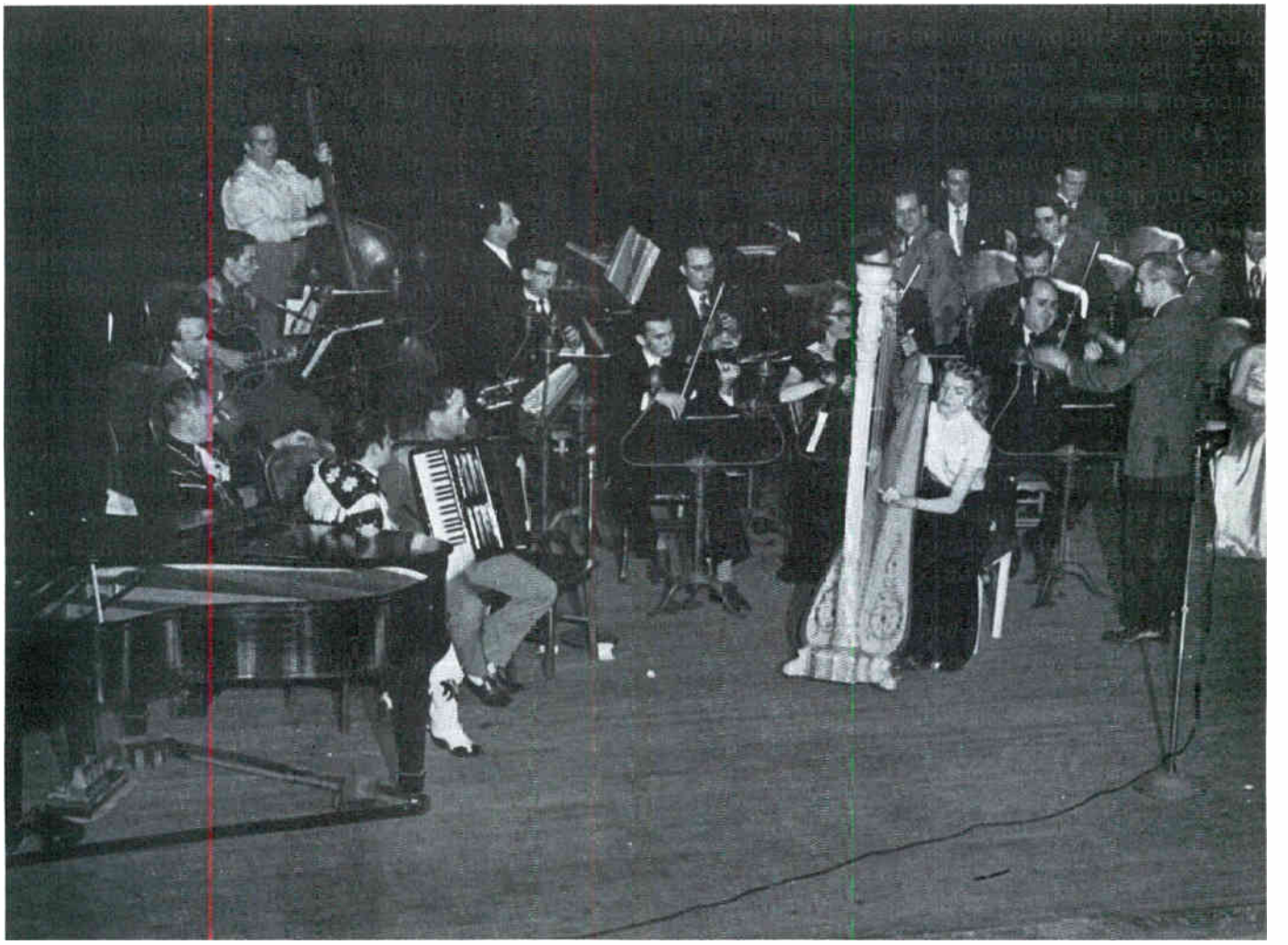
1935 was a big year for radio. There were 8,248,000 sets in American homes and another 1,412,000 in automobiles. There were 12 stations operating in Oklahoma that year, and they sold $785,098 worth of commercials, 62.5 percent to local advertisers. The 12 stations employed 226 people and had a total payroll of $278,090.[22] 1935 was also the year WKY started construction on its new studios in the recently completed Skirvin Tower in downtown Oklahoma City. The station's studios on the fifth floor had been planned before construction actually started, and to this day the building's fifth floor is taller than the rest, an architectural concession to the need for high studio ceilings. The latest in radio technology went into the construction. Studio floors were laid on springs to minimize unwanted vibrations. There were two air conditioners, one for the studios and one for the offices, this in an era when movie theaters were almost the only other cool locations in town. There was also a studio for cooking with two complete kitchens. There had to be two: both Oklahoma Gas & Electric and Oklahoma Natural Gas were major sponsors, and no one was prepared for the possible financial consequences of choosing between electric and gas appliances.

To eclipse KOMA's studio organ, WKY installed a specially built Kilgen organ and imported Ken Wright, a young organist from Chicago, to play it. The organ was magnificent, but neither Wright nor Chief Engineer Jack Lovell was ever quite satisfied with the sound. It was simply too big for the studio, and the extensive collection of specialty stops such as drums, xylophone, and bells created so many extraneous sounds they finally had to be disconnected.[23] Nevertheless, the great organ was a favorite with many listeners and was heard until the Skirvin Tower studios were finally closed in 1951. WKY donated the organ to Oklahoma City, where it was installed in the Civic Center Music Hall amid surroundings more suitable to its grandeur.

Edgar Bell considered the new studios to be fully as advanced as anything NBC might have in New York or Los Angeles, and he ran the operation with the same kind of discipline he thought David Sarnoff might employ. Announcers read from carefully prepared scripts, and ad libbing was strictly forbidden. Correct pronunciation was monitored, and more than one unfortunate announcer came off the air only to find Bell waiting on the telephone ready to critique his performance. A strict dress code was enforced. Male employees wore coats and ties at all times, and it was worth your job to be caught improperly attired during one of Bell's unannounced inspection trips, which could come at any hour of the day or night.

But radio was also expanding outside the luxury of the studio. As a result of the experience covering the PGA golf tournament, the management of WKY decided to build a mobile unit. The engineers converted a 1935 Studebaker ambulance into a rolling radio broadcasting station. It carried a 250-watt transmitter with a range of about 10 miles and fed an antenna that was supported by four vertical poles, similar to insulated linemen's poles, one at each corner of the vehicle. The usual routine was to transmit from the ambulance/studio to the nearest telephone line and feed the program by phone line to the studio. This worked reasonably well in most cases, and the station even broadcast from a floating barge at the dedication of Grand Lake. But the Studebaker had a bad habit of breaking rear axles, and the radio engineers were finally reduced to carrying a spare axle on every assignment. When President Franklin Roosevelt came to Oklahoma City during the campaign of 1936, the newsreel of the day showed the WKY mobile unit/ambulance proudly occupying its assigned place in the parade.

In 1938 Tulsa got its third radio station when KOME went on the air on Christmas morning.



KVOO maintained a large staff of musicians, and during its early years rarely played recordings. (Courtesy KVOO.)

KOME was a 250-watt daytime station on 1310 kilocycles, was affiliated with the Mutual Broadcasting Network, and proudly proclaimed that its call letters stood for "Kovers Oklahoma's Magic Empire." The station manager was Glen Condon, well known Tulsa newsman, and former editor of *Vaudville News* where he became famous for giving Walter Winchell his first job in journalism. For its first day of operation, KOME broadcast special programs from New York City, Chicago, and Oklahoma City and featured Bob Wills and his Texas Playboys, Governor E.W. Marland, Jimmie Wilson and his Catfish String Band, and the Pioneer Mother's Chorus. In a kind of repeat of the old KFRU days, KOME decided to operate studios in both Tulsa and Sapulpa, and its Sapulpa studio manager was listed as Jimmie Wilson.[24]

In Oklahoma City the Exchange Avenue Baptist Church was still the owner of KFXR, although it allowed the station operator, W.S. Thomason, to broadcast and sell commercials during the week. In 1938 this arrangement became strained, and at the same time the Federal Communications Commission charged mismanagement and threatened to take the station off the air. The church decided to solve the problem by selling the station. E.K. Gaylord had an option to buy it, but the FCC had instituted a new rule making it illegal for one person or company to own more than one radio station in a community. So KFXR was bought instead by a local group of businessmen including Edgar Bell and Mathew Bonebrake, both of the Oklahoma Publishing Company. Bonebrake later became the sole owner. The call letters were changed to KOCY, and

the studios were moved to the Plaza Court Building which WKY had vacated two years before in its move to the Skirvin Tower.[25] Without the transmitter power and coverage of his competitors, Bonebrake competed instead with innovation. He was the first to program news on the hour every hour, and would later be a leader in the post-television broadcasting environment.

It was also in 1938 that W.G. Skelly won his long battle with the Federal Communications Commission, and KVOO began broadcasting full time with 25,000 watts. On Tuesday, August 9 the station celebrated the event with a dinner for 150 nationally known celebrities followed by a program that originated from New York and Chicago as well as Tulsa. The Tulsa portion opened with the Tulsa male chorus and closed with the Starlight Symphony. The full-time schedule was made possible by directional broadcasting technology which aimed the station's signal westward away from WAPI and Birmingham. On March 24, 1941, the Commission changed KVOO from 1140 kilocycles to 1170, a frequency it would share with a station in Wheeling, West Virginia. This meant KVOO had to use its directional antenna only at night. By 1943 the station was broadcasting full-time with 50,000 watts, a combination of power and direction that made it a major broadcasting outlet far out into the Pacific Ocean, not to mention the American West.[26] Skelly also provided for an experimental laboratory as part of the engineering department, and KVOO technicians started working with television. They built a transmitter and receiver and also received experimental telecasts from Kansas State University, giving many Tulsans their first look at the future of electronic communications. The KVOO engineers were pleased with their accomplishments, but they were also aware that WLW in Cincinnati was conducting tests on a 500,000-watt radio transmitter and that Skelly had gotten KVOO on the list for the superstation category, should it ever come about. It never did, but they had their dreams.

CHAPTER TWELVE

THE SOUND OF STARS

It is remarkable that a medium which provided only sound should have been able to create so many star performers, both on the national and local level. It has often been pointed out that radio required more of the listener's imagination and participation, and perhaps that explains why performers became so popular. The faces of Bob Hope, Edgar Bergen and Charlie McCarthy, and, to a lesser extent, Fibber McGee and Molly, were familiar from their movie roles or stage appearances, but thousands of other network performers and most local stars were disembodied voices—except in the minds of the listening public. And that apparently was enough.

Oklahoma had its share of national stars, including the first performer to make a legitimate claim to the title. That was Will Rogers, who began his radio career with short appearances over WEAF in New York between vaudeville shows. Vaudeville was on the way out as radio was on the way in, and Rogers was a natural for the new medium. His off-the-cuff style of speech was perfectly suited to the informal circumstances of radio's earliest days.

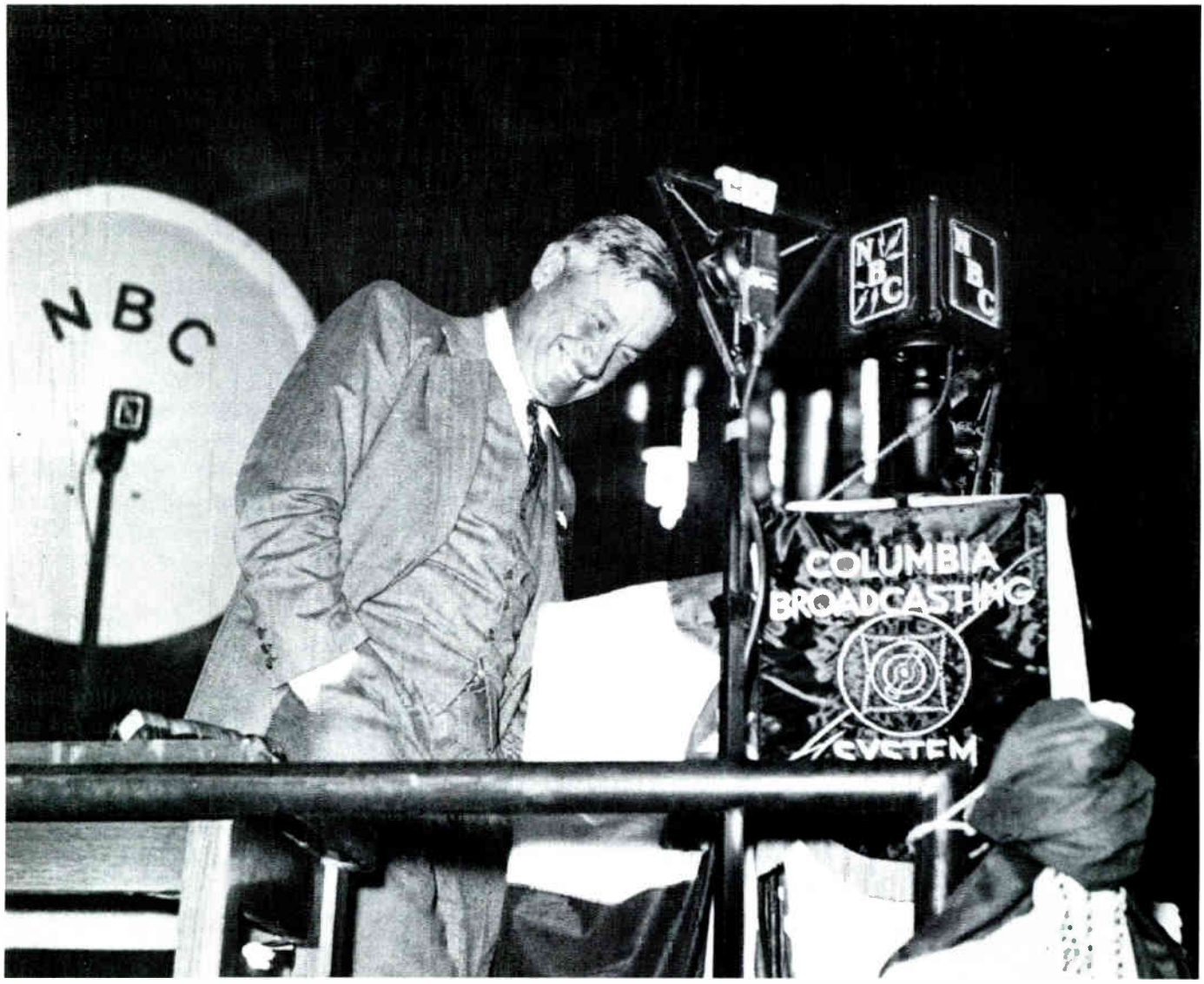
When the national political conventions came around in 1924, Rogers was hired to provide commentary for WEAF, a job that today would probably be described as "color" announcer. The Republicans held their convention first, in June; as veteran announcer Graham McNamee remembered, "...The convention was a rather cut and dried affair, with the only color the beautiful effects of the lighting system, the tones of the magnificent organ, and the tremendous chorus of 'Onward Christian Soldiers' from 15,000 throats." William Jennings Bryan was working the convention as a newspaper correspondent, and McNamee recalled hearing Bryan offer in all sincerity to tell Will if he saw anything funny on the floor of the convention. Will thanked Bryan and replied that he would be glad to inform *him* if he saw anything serious.[1]

The Democratic convention in New York, on the other hand, was a long and contentious affair that finally ended with the nomination of Al Smith. Rogers received one delegate vote from the floor, but he was not happy with his job. Because the Republican convention had lasted only a few days, he had agreed to do the Democratic broadcasts for a flat fee. "Never again," he said. Next time he would ask for daily wages.[2]

As radio networks developed, Rogers became even more popular. He was on the broadcast that inaugurated the National Broadcasting Company (NBC) and later did a show from his home in California. He wrote an article about the experience that explains a lot about how the early day broadcasts were done:

> Men worked at my home in Beverly Hills for at least 10 days before [the broadcast] and the last three days some of them worked all night, rigging up lines and electrical wire and big apparatus. They had a complete broadcasting station, as complete as any, all right there in the home.... Now I spoke into an ordinary receiving microphone and my voice was carried over a special leased wire into Chicago. In fact it went two ways, over two lines. One by way of Frisco and then east to Chicago, and the other south by the way of Yuma, Arizona, one in case the other had any hitch.
>
> Chicago was made the headquarters of the whole hook up, for it was more central. They had to have special leased telegraph wires. There was a full sending and receiving telegraph set right in the room..., and all their communications in regard to how things were going in all the various places was carried on by telegraph. [Al] Jolson was working from New Orleans and [Paul] Whiteman from New York and Mr. Wilmer from Detroit..., and Fred Stone from his dressing room at the New Erlanger Theatre.... It really was a wonderful mechanical and systemically worked out affair. Sitting right by me during my little part was Graham McNamee, the great announcer of all the big things that are done over the radio. I have known him and been friendly with him for years. But I felt so nervous to be talking there in an amateurish way, while here sat the Daddy of all the talkers over the radio.[3]

In 1930 the broadcast trade press reported that E.R. Squibb Company was paying $500 a minute to put



Will Rogers at one of the national political conventions, probably in 1932. (Courtesy Will Rogers Memorial.)

Rogers on 32 CBS radio stations. That included the cost of music, announcer, and, of course, Rogers. Counter cards appeared in neighborhood stores announcing, "E.R. Squibb Company invites you to listen to a concert orchestra and Will Rogers himself 10 P.M. next Sunday evening, New York Time."[4] Oklahoma listeners had to wait a little longer to listen to their favorite native son. The program was not carried in either Tulsa or Oklahoma City.

Rogers had one problem with radio that he never entirely overcame: lack of a visible audience. Growing up in vaudeville, he had learned to pace his routines to audience reaction, and he frequently complained about the loss of that contact when doing radio. Graham McNamee recalled one instance in which he became a one-man substitute for the audience:

> It seemed to worry him, facing that blank wall near where the microphone stood. As he went on, I noticed him turning around again and again to look inquiringly at me and it suddenly struck me what was the matter. The typical actor's need of audible applause.... Leaving my seat in the monitor's booth, I came out and sat on the edge of the table not far from the mike and smiled or grinned at each thing he said. From that time on he did not turn around. He had that response which the actor always needs.[5]

By 1933 Rogers was being heard in Oklahoma and just about everywhere else. His new sponsor was Gulf Oil, and the show was advertised as "Music by the Al Goodman orchestra, the singing of the Reveler's quartette and a few words from Will

Rogers."[6] In fact, the bulk of the show consisted of Rogers' lengthy monologues, his jabs at politicians and his down-to-earth comments on the world in general. The Gulf show ran for two years and undoubtedly would have lasted much longer, but in August 1935 Will Rogers was killed in a plane crash with Wiley Post.

Ironically, Rogers influenced the radio business even in death. His competition on Sunday nights had been the Rudy Vallee show. Rogers was giving Vallee a run for his money, and the advertising agency decided to add a homespun comedian of its own. It settled on a young man named Bob Burns, who proved in his first appearance with Vallee that he could talk politics in the best Rogers style. But with the plane crash, Rogers became an instant legend, and Burns had to make some radical changes overnight to avoid being called a second-rate imitator. He went hillbilly and never returned to his original style.[7]

It is interesting to speculate how things might have turned out if Rogers had lived. Perhaps Bob Burns would have had a much shorter radio career trying to compete with the master of homespun humor and political satire. And probably the U.S. Army would have been stuck with calling its new infantry weapon the "Rocket Propelled Grenade Launcher" instead of naming it after Burn's famous home-made musical instrument, the Bazooka.

Will Rogers was also responsible, at least partially, for another of Oklahoma's major radio stars, Gene Autry. Autry was a relief telegraph operator for the Frisco railroad in Chelsea, Oklahoma, in 1927 when Rogers stopped in to send his daily newspaper column. Autry was strumming a guitar and singing and as he remembered:

> When he dropped his copy on the counter he said, "You know with some hard work, young man, you might have something. You ought to think about going to New York and get your self a job on radio." I knew who the customer was even before I read to the bottom of the last page and saw where he had signed it, Will Rogers.[8]

Autry knew good advice when he got it and headed for New York where a record executive thought he had possibilities but sent him back to Oklahoma to get some more experience. That experience consisted mostly of singing on KVOO, where he was billed as the Oklahoma Yodeling Cowboy. In 1927 and 1928 he travelled around the state singing for any group that would have him, and writing songs. With Jimmy Long, a friend from the railroad days, he wrote "That Silver Haired Daddy of Mine" and introduced it over KVOO. The song was an immediate hit, and Autry soon had a recording contract and a spot on the "National Barn Dance" out of Chicago. In 1934 he went to Hollywood where he became the first of the singing cowboys.

In was 1940 before he got around to another regular radio program. On January 7 of that year he started "Gene Autry's Melody Ranch" on CBS for Wrigley gum. The show ran for 16 years, always on the same network, always for the same sponsor. The format was simple: western music with accordion emphasis and usually one cowboy classic by Autry, comedy by side kick Pat Buttram who invariably called the host "Mr. Artery" and a 10- to 15-minute dramatized western story. The only break in the show's long run came when Autry joined the Army Air Corps. He was sworn in on the air in July 1942. By September 1945 he was back on the air and back in the saddle.[9]

Another Oklahoman who made a major mark in radio during the 1930s was Tom Mix—and he managed to do it without ever actually being on the air. His adventures were eagerly awaited by thousands of young cowboys and cowgirls each week. Mix was always played by an actor, and at one point one of his juvenile supporting actors was a youngster named George Gobel.

While all these stars were on the rise, another Oklahoman was making his mark in radio in a different way. His name was Paul Walker, a former Shawnee school principal and a member of Oklahoma University's first graduating class. In 1934 President Franklin Roosevelt appointed him to the new Federal Communications Commission, a post he held until 1953. He served through all the turbulent growth years, saw the advent of FM and TV, and was one of those responsible for reserving 242 channels for educational use, an accomplishment he considered his greatest achievement. President Harry Truman considered him so vital to the operation of the FCC that he issued an executive order allowing him to continue past the mandatory retirement age of 70. In 1952 Truman appointed him chairman of the Commission. Walker retired because of failing health in 1953 and died at Norman in 1965. Senator Mike Monroney said he was "the ideal public servant, incorruptible in his administration of radio and television without one accusa-

KVOO sportscaster Bob Graham broadcasting a Tulsa University-Oklahoma A. and M. football game in 1927 or 1928 before press boxes provided comfort and a view. (Courtesy KVOO.)

tion of favoritism."[10] There was general agreement that Paul Walker had more influence on the development of the United States' system of radio and television from 1934 to 1953 than any other individual.

Oklahoma radio was a wonderful place in the 1930s, a place where it seemed that almost anything was possible for a talented young performer. Broadcasting was still in the process of being created and many of the fresh, young faces with unknown names went on to become stars.

Walter Cronkite had been knocking around the Midwest with not much more than an interest in journalism. He had been a sports announcer in Austin, Texas, then went on to KCMO in Kansas City in 1937. He left there for El Paso where he opened a bureau for United Press, and that fall he was hired to broadcast University of Oklahoma football games over WKY. The station ran newspaper ads promoting the broadcasts, but one looks in vain for a mention of the young sportscaster. Perhaps it was just as well. Walter was not a big success as the voice of the Sooners. In fact, as Edward L. Gaylord, Chairman of Gaylord Entertainment Company and owner of WKY, recalled; "He was the worst sportscaster we ever had. We had to fire him."[11] Cronkite moved on to Dallas for what was described as "exploitation work" for Braniff Airlines. Perhaps the experience convinced him that his real future lay in straight news.

At KVOO a couple of young announcers went on to do well in the entertainment business. One was a high school kid named Paul Aurandt who started out by hanging around the studios just watching and listening and then was hired for minor announcing chores. He liked to do local station breaks, imitating the voices of the big league network announcers. For reasons no one can remem-

ber today, the KVOO engineers called him "Moonglow." People today call him Paul Harvey.

The other KVOO product was Tony Randall, who was born in Tulsa in 1920. He worked at the station until 1941 when he took an announcing job at WTAG in Worcester, Massachusetts. In August that year he took a short leave of absence so he could appear in a play at Marblehead. He never went back.[12]

France Laux was another Tulsa kid who got into radio almost by accident. He had been an athlete in high school and college and in 1927 was living in Bristow doing a little coaching. In October the manager of KVOO bought the rights to recreate the World Series from telegraph reports. The technique involved reading a series of cryptic abbreviations off a ticker tape, adding sound effects and sounding excited. It all took some practice. Just before the first game the announcer who was supposed to do the Series recreations quit. The station manager remembered that Laux knew something about baseball and dispatched an employee to find him in Bristow. The KVOO man spotted him on the street, pulled over to the curb and yelled, "Can you broadcast a ball game ?"

"I don't know," Laux replied, "But I'll try anything once!"

When Laux got to the station, he knew no one. It was only a couple of minutes before air time. He could not read the abbreviations the Western Union operator gave him, and he had to follow the score sheet to get the players' names. He did not have time to get nervous and somehow got through the ordeal. He stayed on to become KVOO's sportscaster and in 1938 won the *Sporting News* Trophy as radio's outstanding baseball announcer.[13]

One thing radio did that television never seemed able to pull off was giving kids an active role in live programs. KVOO even set aside one whole day each year when students ran the station, doing everything from announcing to sales. Both KVOO and WKY had Saturday morning dramatic programs and held regular auditions for promising young actors. Marolyn Donnelly Stout, who won an audition and appeared on many Saturday morning programs, remembered her initial experience well. The first thing they taught her was how to hold her script so the pages would not rattle. She always remembered the thrill of hearing her name on the credits at the end of the program. A few years later, in high school, she was on a program called "Recess Time at Clarke's," which was live from Clarke's Department Store. It was there she met Mary Stuart Houchins, who later became Queen of the Soaps on television's "Search For Tomorrow."

At WKY there were the Saturday morning adventures of "Gismo Goodkin," a puppet who had his own fan club. WKY-TV tried to transplant Gismo to television when the visual medium came along, but it turned out to be impossible to reproduce the imaginative radio scripts.

For some, radio stardom came out of the most unlikely places. For Clara Ann Fowler it happened because someone put a quarter in a pay-for-play radio in the old Bliss Hotel in Tulsa and did not use the full two hours of listening. The next person in the room was Jack Rael, who was working as a saxophone player with Jimmy Joy's travelling band. He turned on the radio and heard Clara Ann singing on KTUL. They didn't call her Clara Ann, of course. Because she was sponsored by the Page Milk Company, she was called Patti Page. Rael got her a job with the band, then became her manager, and they both moved on to long careers, all of which started from a Tulsa studio and a coin operated radio.[14]

For Bob Wills, radio fame and fortune came as the direct result of being hounded out of his native Texas. Wills started playing on a Fort Worth station as a way of advertising his band. When Burrus Mills decided to sponsor Wills' program, his band was renamed the Light Crust Doughboys. At the same time Burrus Mills owner W. Lee "Pappy" O'Daniel took over as leader of the show. O'Daniel did not approve of dances or drinking, and because Wills enjoyed both they were soon enemies. Bob left O'Daniel in 1933, formed his own group again, and started plugging his dances in broadcasts over WACO in Waco, Texas. O'Daniel retaliated by buying Wills' air time on this station and forcing him off the air.

Wills decided to leave Texas to get away from O'Daniel. He moved to Oklahoma City hoping for a spot on KOMA. But the station was already carrying the Light Crust Doughboys, and the manager was not about to jeopardize his standing with O'Daniel. Next, Wills went to WKY and talked the program director into giving his band a sustaining show beginning in February of 1934. They went on the air for the first time as Bob Wills and the Texas Playboys. After five broadcasts O'Daniel called the station and told the manager he was thinking of moving the Light Crust Doughboys from KOMA to

Bob Wills and his Texas Playboys rode KVOO's airwaves to musical success in one of the industry's longest and most successful partnerships. (Courtesy KVOO.)

WKY but would do so only if it got rid of Bob Wills. WKY's management got rid of him, but O'Daniel never lived up to his end of the bargain.

Wills and the band then moved to Tulsa, broke and on the edge of giving up. In Tulsa they finally found a station willing to stand up to their old enemy. W.B. Way, manager of KVOO, put the band on the air and pointedly refused to listen to O'Daniels' threats and offers. With 25,000 watts, KVOO gave the Texas Playboys a tremendous market for their dances, and they, in turn, gave the station one of the most popular and longest-running radio programs in Oklahoma history. Together they created what has become known as Western Swing.[15]

Another Oklahoma radio group that had a long career on the air and in personal appearances was the Serenaders, a true family act. The Serenaders consisted of Stubby and Louise Daniels and Kenny and Lucille Driver (Kenny and Louise were brother and sister). They started doing radio shows in 1937 in Iowa and Nebraska. In September 1940 they were booked by the Oklahoma State Fair. They were contracted by the Merit Feed Company, changing their name slightly to the Merit Feed Serenaders, and spent the next 14 years either in the studio or on the road. Their wholesome, western style music made them great favorites wherever they played. On the air they occupied the 12:15 to 12:30 spot on WKY's daily noon lineup and, as with most radio performers of the day the station's coverage was valuable in setting up outside bookings for them.

One of their more memorable adventures came in 1941 when they were part of a touring show featuring Gene Autry and Governor Phillips. After playing to sold out houses in Oklahoma City, the group flew to Enid, then to Fort Sill for an Army show, followed by a flight to Tulsa. They were scheduled to fly back to Oklahoma City in time for

Above: The Whalin Brothers Band was a daily feature on WKY in 1936. (Courtesy Oklahoma Publishing Company.) Right: KVOO's mobile farm department, with Farm Director Sam Schneider. Schneider was President of the National Association of Farm Directors. (Courtesy KVOO.)

their noon radio show, but fog rolled in, and the plane was grounded. When it finally did take off, time was running out. They landed at Will Rogers Field where a car and police escort were waiting. After a wild dash through traffic to WKY's downtown studios, they walked in just in time to start their theme. Missing a broadcast was unthinkable in those days.[16]

Two other performers who used radio as a means of promoting their personal appearances were Wiley Walker and Gene Sullivan, known to WKY listeners simply as Wiley and Gene. They arrived in Oklahoma City hoping to get on 50,000-watt KOMA but soon decided that while KOMA's signal was stronger over the western half of the United States, WKY did a better job of covering Oklahoma, which was where they hoped to book personal appearances. The station gave them 15 minutes in the early morning, and they soon had a sponsor. Both were talented musicians; Wiley played fiddle and Gene guitar.

Their big break came in 1941 when they wrote and recorded one of the big country hits of all time, "When My Blue Moon Turns To Gold Again." The recording was a hit, but it came out just as the government clamped production restrictions on record manufacturing as part of World War II rationing. It was five years before Wiley and Gene

The sound effects men were important parts of any radio drama. Two unidentified WKY staff members demonstrate their capabilities. (Courtesy Oklahoma Publishing Company.)

were able to cut another record. They continued their broadcasts and their song writing and a few years later finally managed to get an invitation to perform on The Grand Ole Opry. They travelled to Nashville separately, but when Gene arrived Wiley was nowhere to be found. The Opry had one hard and fast rule: performers who failed to show never got another chance, and Wiley and Gene never did.

Many others made their careers first on Oklahoma radio. Jimmy Wakely was singing western songs on WKY about the same time Mike Douglas was singing pop songs on the same station. Frank McGee, who eventually became host of NBC Television's "Today" program, started out at KGFF in Shawnee and then moved to WKY where he got up long before dawn, drove a rickety old car to the studios, and did the *early* radio news.

Another group of radio reporters was surprisingly late in arriving on the Oklahoma scene, especially considering the size of the farm audience in the state. These were the farm reporters. KVOO had been doing remote broadcasts from the A. & M. College campus since the 1920s, using college specialists, but the first station staff member to be assigned that duty was J. Kendall McClarren of KBIX, Muskogee. He did not begin broadcasting until 1936 when that station went on the air. McClarren did a daily half hour program at noon.

In 1937 KOMA offered A. & M. a quarter hour at noon for farm programming, and the school's extension department named Sam Schneider as the first radio specialist, primarily because he was the newest person on the staff. Years later he insisted he had never heard a radio program when he got the

Above: A typical late-night big band remote from the Silver Glade room in the Skirvin Tower Hotel, one of Oklahoma City's more popular entertainment spots during the 1930s. Because the Silver Glade was just four floors below the WKY studios, the station often did remote pickups from there. (Courtesy Oklahoma Publishing Company.) Right: Allan Page, co-owner of KGWA and KOFM, Enid, as a 23-year-old junior announcer at KVOO in 1939. (Courtesy KGWA.)

job and said he bought his mother a radio receiver "so I'd be sure of one listener." In 1941 Schneider moved to KVOO as its farm director and was a founder of the National Association of Radio Farm Directors.

At that time WKY was still relying on outside talent to do its farm broadcasts. Layne Beatty was working for the Oklahoma State Board of Agriculture in 1939 when he got a call from WKY announcer Terry O'Sullivan asking him if he thought he could do a Saturday half hour farm show. Having no experience in radio, Beatty naturally said, "Sure." The program featured the usual farm news and interviews, but because it was a half hour everyone thought they ought to have some music, too, and Beatty relied mostly on student entertainers from A. & M. College. Nobody got paid anything, but they all had fun and it apparently did wonders for Beatty's career. He was chief of radio and television at the Department of Agriculture in Washington, D.C., when he retired in 1980.[17]

WKY got its first full-time farm director in 1944 when it hired Ed Lemmons, who had been working at KBIX. He started a daily quarter hour show at noon that included not only farm news and weather but also remote broadcasts almost daily.

The radio revolution changed life for the farmer especially, but it also changed the relationships between farmer and city dweller. As Sam Schneider wrote later:

> The development of fire and the electric light are the only things worth comparing to what radio did for Americans.... The farmer was able to get help at appropriate times; city people began to realize they couldn't operate an industrial nation without help from the farmer.[18]

Many of the musical stars of radio simply adapted their vaudeville talents to the new medium, but one class of stars was created by radio itself. These were the announcers. From the beginning they were a chosen breed. When KFRU brought "Swan" Johnson to Oklahoma as the first professional announcer, he was already known as "the man with a million dollar voice." All of the stations were constantly in search of other "million dollar voices" and held regular auditions for announcers, but the requirements were rigorous. One author listed them:

> An announcer must have a clear, authoritative speaking voice, an extensive and flexible vocabulary and an understanding of the tonal quality of words beyond their dictionary meaning. The "right" word may not be the pleasing word. He must understand the effect of understatement as well as of emphasis. He must not use "hifalutin'" language. He mustn't get excited in an emergency. He must understand his script. He must remember that, though millions may listen, his average audience is a family of three. To be welcome in such homes he must be a gentleman. In their new applicants nearly all networks require a college education, some knowledge of music and ability to speak at least one foreign language fluently.[19]

Such requirements produced a group of announcers, even at the local level, that were unique to their time and were, in fact, welcomed into the homes of most Oklahomans. Marolyn Donnelly Stout remembered vividly her first time on the air and the announcer who made it possible:

> It was one of those "man on the street" programs and it was noon and bitterly cold, just before Christmas. There were a bunch of us fourth graders watching the announcer do his program and I was wishing, wishing so hard that he would talk to me instead of the adults crowding around. He was so handsome, with a beautiful tan and bright, white teeth and he was wearing a camel hair coat. And then suddenly he came over to me and leaned down and asked me a question.
>
> "I'll bet you've already bought your Dad a Christmas present haven't you?"
>
> My dad was dead. I didn't know what to say, but I looked up at him and he was so handsome and so nice that I knew he would never ask me a question that would embarrass me, so I said: "Oh yes, I've done all my shopping."[20]

Like little Marolyn, Oklahomans listened and believed and loved the voices that came floating so pleasantly from their radios. Television would add faces to those voices later, but the effect—and above all—the feeling of intimacy were never quite the same.

CHAPTER THIRTEEN

OKLAHOMA RADIO GOES TO WAR

In 1941 young Oscar Heuser finally achieved his goal. He had longed to become a radio announcer, but he had a problem. There was no radio station in his home town of Lawton, nor had there been one since the early 1920s when the Army Air Corps boys had toyed with their government-issue transmitter, filling the air with dance music and small talk. But all that changed in 1941 when Lawton's KSWO went on the air, and Oscar managed to get a place on the staff. True, the job did not pay anything the first week—and only $10 dollars a week after that—but the important thing was that he was allowed to announce from time to time, especially at odd hours such as Sunday afternoons.

That was what he was doing on Sunday, December 7, when the first bulletin came over the teletype: the Japanese were bombing Pearl Harbor. Many years later Oscar would become a well-known Oklahoma advertising man, but on that particular Sunday the news bulletin meant that his short career in broadcasting was about to come to an end, to be replaced by a job in his country's service. It would not be radio, but at least the pay was better.[1]

Bob Eastman was already drawing a good salary as news director for WKY radio. Being news director meant he did not have to work on Sunday, so he was home with his wife preparing to go out to eat. That was when copy boy Earl Sinclair called him and asked where Pearl Harbor was located. When Bob asked Earl why he needed that unusual bit of information, Sinclair replied, "The wire says the Japanese have just bombed it." Actually, Eastman did not have a clear idea where Pearl Harbor was either, except that it was in the Pacific, and it was not some place the Japanese should have been bombing.[2]

Gene Autry was standing in a CBS studio that Sunday waiting for the cue to begin his regular "Melody Ranch" program. Instead he heard a news announcer coming over the control room speaker. He listened, along with the cast of the show and the live studio audience, none of them really believing what they heard. Autry later recalled:

> Those of us on the stage and the hundred or so seated in the audience and the millions across the land listening to their radios...listened numbly to the details of the attack. For the next vacant seconds the people in the studio were like figures in a wax museum. No one stirred. Or spoke. Then the director gave a cue, my theme came up, and almost by reflex we started the show. One of the stock questions of our time would soon become "What were you doing when you heard about Pearl Harbor?" ...What I was doing was a radio show. We sang. Joked. Went through our lines. And when it was over the audience got up and walked out in a silence that was like leaving a tomb.[3]

Radio fulfilled its finest promise that day, first by bringing the sobering news instantaneously and then by bringing the nation together for the long, dark months ahead. But despite that miracle of radio technology, it was a nervous time for broadcasters. Many station owners remembered the first World War when the government had padlocked every transmitter for the duration. But those were simple amateur stations, and the action had no particular effect on the nation. In 1941 broadcasting was a multi-million dollar industry, and the fortunes of many hung in the balance. It seemed unthinkable the government would repeat its 1918 action.

On the other hand, radio in 1941 had developed the potential for great national harm. Only a few short years before the country had watched, fascinated, as Wiley Post homed in on WKY's signal to demonstrate a new radio navigation device. Could not the German Air Force do the same? Americans had become accustomed to hearing Adolph Hitler's speeches by short wave. Could the Nazis flood the country now with harmful propaganda?

Section 606 of the Communications Act of 1934 stated specifically that in case of a declared national emergency or a declaration of war the president could take over all licensed radio stations "upon just compensation to the owners." Well, war had been declared and war was the War Department's department, so most broadcasters assumed that somewhere in those secret files there

was a detailed plan for action. Edward M. Kirby was Director of Public Relations for the National Association of Broadcasters and had been trying to find the plan:

> Nobody knew what blueprint for the wartime operation of American broadcasting was on file..., nor did anybody know what White House advisors had or would recommend to President Franklin D. Roosevelt. An exhaustive and unrewarding search was launched for the master plan which many people *insisted* was in existence and none was found. There were some bits and pieces of odd, impractical approaches to segments of the problem...such as suggesting that ham and short wave stations be massed together to form one massive electronic shield to jam enemy broadcasts. The facts of the matter were...there was no master plan for the operation of American radio either by government or by the industry itself in the event of war.[4]

Some broadcasters acted on their own responsibility. W.G. Skelly, mindful that KVOO's 50,000-watt directional signal was often heard far out in the Pacific, put his own censor on the staff. For that duty he selected Ben Hennecke, who later became President of Tulsa University and was probably the only privately employed broadcast censor in World War II. Skelly had good reason to be concerned with security. KVOO had an unusually long reach into the Pacific. During the war the station received regular requests from a tiny atoll known only as "Tin Can Island." The island was surrounded by reefs, and the only method of supply was to float essentials to shore in waterproof containers—"tin cans." The servicemen sent mail out the same way and told the KVOO staff they listened regularly. Skelly reasoned that if residents of Tin Can Island could hear the Voice of Oklahoma then any Japanese in the area might listen, too.

It was not long before the government started taking care of the censorship chores itself. The decision was made that, the Communications Act notwithstanding, it was better to leave radio stations in the hands of their owners and simply make certain they contributed to the war effort instead of hampering it.

Shortly after the beginning of hostilities, the government decided to rely on voluntary censorship by both radio stations and newspapers. The newly organized Office of Censorship drew up a Press Code and mailed copies to every station and paper in the country. It was general in nature, prohibiting the reporting of such things as the movement of troops, ships or planes, information about fortifications, war production, photographs of military areas, and movements of the president and other high government officials. Broadcasters were especially quick to comply. The alternative, as they all knew, was a government takeover of their transmitters.

One category of information controlled by the Code was weather. A few years before the war, a United States Navy officer had discovered that by listening to the weather forecasts of any three commercial radio stations along the East Coast, he could draw a reasonably accurate weather map for the entire Atlantic area. This was vital information for any German submarine commander, and because the Germans were sinking ships at regular intervals, often in sight of coastal cities, the government moved to prohibit any radio weather reports although it allowed limited weather reports in newspapers. The order applied to all American radio stations inasmuch as it was possible that even a Midwest station might be heard at night because of signal "skip."[5]

The prohibition of weather reports even affected radio sports departments. Play-by-play announcers were not allowed to say that a baseball game was being delayed by rain or that a cold north wind was affecting a quarterback's passing accuracy. In 1943 the Office of Censorship wrote to NBC Sports Director Bill Stern with a few suggestions:

> Our greatly expanded military operations heighten the security involved in the broadcast of weather information.... There should be no mention of current, specific weather conditions, especially as regards to winds, clouds, electrical disturbances and sudden temperature changes.... Interruptions in training due to weather can be handled by referring to unfavorable weather or its sports equivalent.[6]

At times the censorship of weather was a genuine hardship to radio stations. For example, one of Oklahoma's worst tornados ever, the storm in April 1945 that hit Tinker Air Force Base and Midwest City, doing millions of dollars of damage, went largely unreported on the air. It was especially ironic because it was this storm that led the Air Force to organize its own severe storm research group. Af-

ter the war the Air Force meteorologists and their newly discovered forecasting techniques were combined with the United States Weather Bureau to form the severe storm forecast center which today issues all tornado watches and warnings to radio and television stations nationwide.

A recurring fear at the Office of Censorship was that a Nazi agent or saboteur would somehow find a way to use a commercial radio station to relay coded messages to a submarine off-shore. This fear was further amplified when the FBI actually intercepted a group of German saboteurs landing on an Atlantic beach. It did not take much imagination to come up with a scenario in which an agent would use a code tied to the titles of popular songs. All he would have to do would be write or call a station and make a request. "Deep In The Heart Of Texas" for Aunt Martha, for example, could mean "the convoy leaves tomorrow." To prevent such a possibility, stations were asked not to broadcast requests that came in by mail asking for specific times or dates for the selection to be played. Stations were to hold requests for an irregular, unspecified time before playing them., That way, an agent could not be certain his message would be transmitted tomorrow, next day, or a week later.

A second and even more popular radio format was hit even harder by censorship. That was the "man-on-the-street" program in which an announcer would take a microphone to some busy location and talk with anyone who passed by. That bothered the Office of Censorship because, it was reasoned, an enemy agent could manage to get himself selected by the announcer and deliver his message in person, albeit in code. There was a second—and probably more likely—danger to man-on-the-street interviews. That was that some member of the armed forces or a defense worker would accidently let slip some important bit of information. The Office of Censorship asked that audience participation programs be limited to in-studio productions where conditions could be tightly controlled.[7] Once again, these restrictions applied to Oklahoma's stations, distant though they were from the coastal activity.

But the real story of Oklahoma's radio stations in World War II was told not by the things they could not do, but rather by the things they did. All stations immediately began campaigns to sell War Bonds and Stamps, to collect aluminum and other scrap, to support local USO centers and, in general, to boost morale on the home front. KVOO converted its Saturday morning children's dramatic series to "Commando Kids Theater" and pushed the sale of small denomination savings stamps to the audience. When rationing of tires and gasoline cut out Oklahoma county fairs, KVOO farm director Sam Schneider developed the idea of taking the fair to the farmer. Schneider, cowboy singer Hank Sanford, and engineer Howard Phillips travelled all over the state presenting remote broadcasts of farm information and entertainment.[8]

Glen Condon, who was news director at KTUL, had once been in vaudeville and formed a company called "Hey Rube, Inc.," the purpose of which was to put on shows for soldiers and sailors stationed at bases in Oklahoma and adjoining states. These shows were enthusiastically received, but, of course, it was impossible to please everybody. Following a performance for Navy personnel training at Oklahoma A. & M. College in Stillwater, Condon received some suggestions from the detachment commander:

> Most of the numbers were clean, high type entertainment and very well done. The orchestra was splendid, the magician, juggler, acrobatic dancer, harmonica player and ten year old soloist were well received. It is only fair to say to you that some of the acts were highly improper for mixed audiences. The announcer's remark: "I feel like a rookie who can't find the latrine" was highly improper before a mixed audience and the fat man's number, while not so improper, did not add anything to the show. I am offering this criticism in a constructive manner.[9]

When Oklahoma City, crowded with servicemen, found it was developing a serious venereal disease problem, WKY went on the air with a dramatic series promoting blood tests for the entire community. It was daring programming in that day and earned the station a coveted national Peabody Award for public service.

KOCY ran a daily newscast especially for servicemen and women, and they could not have had a better-known local reporter. He was Lowe Runkle, who had been operating his own advertising agency in the city since the mid-1930s; he found himself in the Army Air Corps and then, amazingly, assigned to the Tinker Air Force Base Public Information Office.

Oklahoma's wartime radio programming also had its tragic aspects. One of those involved Private Marjorie Babinetz, stationed at Tinker Field.

KVOO's Sons of the Range doing a Red Cross benefit during World War II. Left to Right: Tubby Young, Cy Tuma, Kenny McMeins, Tex Hoepner, and George Maras. They were on the air from 1942 to 1945. (Courtesy KVOO.)

Babinetz was an attractive young woman who came up with the idea of using radio to recruit other young women into the Air Corps. Her official biography said she spoke five languages and was a native of Vienna where her father once had been mayor and where her brother was being held in a concentration camp. At Tinker she was assigned a pilot and a dive bomber which had been equipped with a radio transmitter. She would fly over a selected Oklahoma town, and while the pilot put on a display of stunt flying she would broadcast to the residents below. After a few passes over the town, they would land to be met by the mayor or other town officials and proceed to the local recruiting office to talk with young women interested in joining up. She was soon known as "The G.I. Jane In The Airplane." Her Air Corps publicity releases called her "a kind of modern Paul Revere with a plane instead of a horse."

On the afternoon of July 27, 1944, she was in the sky over Stillwater with pilot James Howey broadcasting back to KOMA. She finished her last broadcast at 2:30, and Howey made one last low level pass over town before landing. But something went wrong, and the plane crashed in the middle of a residential area on West 7th Street. Both Howey and Babinetz died instantly, but through some miracle no one on the ground was hurt. There was some editorial criticism of the Air Corps for allowing stunt flying over populated areas, and that particular form of wartime radio broadcasting came to an end, at least in Oklahoma."[10]

WKY had been taking part in a research project since the mid-1930s dealing with high frequencies in the 26 to 50 megacycle range and the way these were deflected by the earth's ionosphere. WKY's

regular programming was simply routed to this special transmitter, but because of high frequency "skip" it often ended up as far away as the Panama Canal Zone where military units tried to figure out what an Oklahoma City commercial station was doing on what was thought to be a strictly military frequency.[11]

As the war went on and draft calls increased, Oklahoma radio station managers found it more and more difficult to find personnel to operate their stations. In July 1942 Selective Service classified broadcasting as an essential industry, making it possible for some key personnel to be deferred from military service. This usually applied to executives and heads of major divisions or technical experts and did not often help local stations. It rarely applied to announcers or studio operators. The situation was not helped by managers in larger markets, such as Kansas City and St. Louis, who regularly sent scouts through Oklahoma City and Tulsa looking for any available talent that might be lured to the brighter lights of a bigger city.

The National Association of Broadcasters, the National Association of State Universities and the American Association of Schools of Journalism joined together in 1944 to increase the flow of radio journalism graduates, but the best they could come up with was a five-year plan which did little to help the hard pressed radio managers immediately.[12] W.B. Way, the manager of KVOO, joined with Ben Hennecke at the University of Tulsa to urge that school to institute a radio curriculum to help students take advantage of the opportunities in broadcasting. The courses were approved the next month and were the first step in building a nationally known radio department at the University.[13]

During the war years, however, there was only one quick way to fill the vacancies in the stations: hiring women broadcasters, a course of action that had once been unthinkable. KVOO hired Joanna Green and Marolyn Stuart Miner as announcers in 1942, Amy Unas Collins as a transmitter engineer in 1943, and Helen Richards Cumberland as a control engineer in 1944.[14] Marolyn Donnelly Stout remembered, with some wonder, hearing Ann Fountain doing a newscast on KTUL in 1943. It was the first time she had ever heard a woman filling a responsible position in radio.[15] The fact that women turned out to be equal in every way to their male counterparts amazed some station managers, but few, if any, of the women got to keep their jobs once the war was over. It would be another 20 years before women were allowed to do much more on Oklahoma radio than host cooking shows.

The war produced one unexpected benefit to radio. In order to conserve paper supplies, the government required newspapers to cut advertising lineage by about five percent. Magazines were reduced 10 percent. In most cases, those extra advertising dollars went to radio.

But radio's physical growth was brought to a complete halt. Applications for new stations were eliminated, and the War Production Board ordered a halt to the production of civilian radio receivers. This resulted in a brisk trade in used receivers and a campaign urging people with two sets to sell or share their extra radio. This same spirit was evident at the station level where engineers had to work hard to maintain their transmitters in the midst of a severe shortage of tubes, condensers, and even copper wire.

While the war brought many hardships to most of Oklahoma's radio stations, it brought an unexpected opportunity for WKY. In 1941 this Oklahoma City station was transmitting from a site on West 39th street near Meridian Avenue. Although it was several miles north of Will Rogers Field, it was in line with the field's main runway, and when the Army Air Corps started using Will Rogers as a training base it began worrying about WKY's towers.

Discussions about moving the transmitter to a new site on Britton Road went on for months, and, as Chief Engineer Jack Lovell recalled, they became an unbelievably complex negotiation involving the Air Corps, the Federal Communications Commission, and various other governmental agencies responsible for allocating the steel, copper, and other materials which would be required for a new tower in a new location. Lovell would get a AA priority for the materials, but before he could get these ordered he would find he needed a AAA priority.

Finally the Air Corps' anxieties prevailed, the details were worked out, and Lovell was instructed by WKY owner E.K. Gaylord to come up with a design. There were two basic requirements: Gaylord wanted the most modern, efficient transmitting plant he could get, and he wanted a tower that would also support the antenna for a Frequency Modulation, or

FM, transmitter at some point in the future.

To meet the first requirement, Lovell chose a design called a Franklin Tower, which was essentially two towers, one on top of the other with the signal fed from the middle. It was an expensive selection, but Gaylord overrode the objections of his managers and told Lovell to go ahead. He wanted, he said, nothing but the best. The result was a major improvement in WKY's signal throughout its coverage area.

The second requirement, that the tower support an FM antenna, was not so simple. Frequency Modulation radio was still largely experimental. In fact, Lovell knew of only one FM antenna in existence, and it was a monster. Reasoning that no one was going to come up with anything larger, Lovell had the tower engineers build the new WKY tower to support that antenna. He was right. When FM was introduced after the war, all transmitting antennae were considerably smaller and lighter. The WKY tower is surrounded today by other, taller towers, built with newer materials and technology, but none looks quite as sturdy as Lovell's wartime creation.[16]

KVOO and WKY also gained an international audience when they cooperated in the production of the largest—and probably finest—program to come out of the war. "The Army Hour" was a giant wartime extravaganza first heard on NBC on April 5, 1942. It gave Americans their first in-depth look at the war and how it was being fought, doing this through a series of on-the-spot broadcasts from virtually every place in the world. "The Army Hour" was an unusual combination of military and civilian talent. NBC supported it with a $500,000-a-year budget, and by the time the hour-long program had been on the air for a year it was being heard in 3 million homes.[17] One of its origination points that first year was Camp Gruber, Oklahoma. The size of the audience was helped by the fact that just about every family had at least one member in the armed forces somewhere, and people listened routinely to the Army Hour in the hope of hearing something they could identify with a son, brother, or husband. Typical of the responses from the home front audience was this letter from Frederick, Oklahoma:

> Dear Sir; On Sunday September 26 you broadcast on The Army Hour that Lt. Griffith of the 126th Infantry was in a government hospital recuperating from wounds received at Buna, New Georgia. I had a nephew, PFC Laurence Nultz, killed or missing in this fight and if not against military regulations would like to have Lt. Griffith's address so that I might write him concerning my nephew.[18]

Any time an Oklahoma station was asked to help with "The Army Hour" production, it did its best to make it a realistic experience for the audience. WKY engineer Jack Lovell remembered working hard to get just the right sound of an artillery barrage at Fort Sill:

> I had gone out on a hill with a Colonel in his command car. The artillery was firing over our head, using proximity fuses. The shells were exploding about 30 feet above the ground. We wanted to get the sound of firing, but using one mike made it sound like slapping two boards together. Eventually we set five mikes in parallel in a straight line for 200 yards and it was the most perfect cannon fire sound you ever heard.[19]

KVOO had a narrow escape with one of its recorded assignments. Before the war, radio stations recorded on aluminum based discs. But when the war started, there was no more aluminum for recording discs. Instead the stations had to make do with wax-coated glass discs. KVOO engineers were headed for Fort Sill with a supply of these fragile discs when they hit one too many bumps, and their entire supply of records was broken. That would have been the end of that trip except for the spirit of cooperation that was the rule among competing stations during the war. The KVOO engineers stopped by WKY, borrowed a supply of discs, and drove on—somewhat more cautiously.[20]

The Army was having troubles with disc recording equipment, too. Colonel Edward Kirby reported, "The acetate recording gear we had mounted on a ton-and-a-half ton truck was both impractical and dangerous. Every time an explosion would occur nearby the needle bounced out of the groove and the cumbersome truck was a sitting duck for enemy gun fire."[21] The Army led the way in developing a portable magnetic recorder using spools of fine wire which overcame the problems associated with the disc recorder. Both KVOO and WKY got wire recorders during the war, but they were a mixed blessing. The news departments loved their portability, but the engineers hated their "tinny" sound and the way the wire often tangled and knotted.

When that happened, the wire was almost impossible to straighten out. It was only after the war that advancing American troops discovered the Germans had perfected a much better recording system using magnetic tape. This "liberated" technology was rushed back to the United States and was soon available to radio stations everywhere. Perhaps it was appropriate that the medium which did so much to support the war effort was the first to benefit from a prize of that war.

CHAPTER FOURTEEN

A NEW VOICE IS HEARD

The first post-war change for the radio industry happened before the war was over. In January 1945 the Federal Communications Commission announced it would consider a major move of the entire Frequency Modulation band to a higher frequency and substantially change other parts of that service.[1] FM had been suffering through an extended period of development even before the war. It had been invented by Edwin Armstrong, a Columbia University professor, as a result of his search for a way to eliminate static on AM radio.

Armstrong had started trying to find a solution to static in 1914, but after eight years he found he was no closer to an answer. The problem was that static was practically indistinguishable from the program signal and was, therefore, impossible to filter out. Armstrong finally concluded the only solution was to develop a completely different kind of transmission. Radio transmitters at that time sent out a steady wave called a "carrier." Program material was superimposed or "modulated" on this wave, causing it to vary in amplitude, or power. Home receivers detected this change in power and converted it back into sound. The entire system was called Amplitude Modulation, or AM. Toward the end of 1933 Armstrong announced he had developed a new kind of transmission system, one which modulated the frequency instead of the amplitude of the carrier wave. He called it Frequency Modulation, or FM.

The result was a signal which not only eliminated static, but also vastly improved the quality of the entire listening experience. That was the good news. The bad news was, the FM system was limited in range: the signal would travel only to the horizon. FM also meant existing AM radio receivers and transmitters would not work with the FM signal. They would have to be either duplicated or junked.

Armstrong was a large stockholder in the Radio Corporation of America and asked it to conduct tests on his new system. RCA was not enthusiastic. Its engineers emphasized the problems of starting up a new radio service and minimized the potential benefits. The company was willing to use FM for the sound portion of the new television system it was developing, but it was not interested in creating a whole new radio system at the same time.

RCA's reluctance touched off one of the bitterest corporate struggles in radio history. Armstrong charged that RCA was deliberately holding back his invention for its own interests. He battled the FCC for a construction permit to test the concept and fought again for frequency space for stations. After several years of tests, the FCC authorized the start of FM broadcasting for January 1, 1940. Twenty-five stations were authorized, but by the start-up date, 150 applications for FM stations had been filed with the FCC.[2]

WKY started doing experimental FM broadcasts before World War II with W5XAU, transmitting on 31.6 megacycles. (At that time FM stations were identified by a combination of letters and numbers, a practice that was changed in 1943.) Programs were limited, consisting mostly of classical music offered by NBC that was not carried by WKY-AM. There are no records of how many FM receivers were operating in the Oklahoma City area in the 1930s, but the number must have been exceedingly small. There were about 400,000 FM receivers in the entire nation by 1941, but, of course, once the war started production of them stopped and applications for new stations were frozen for the duration.

By 1945 the FCC had more than 600 applications for new FM stations in that frozen file, and it was clear something would have to be done if the Commission was going to avoid an application crunch similar to the one experienced by AM stations in the 1920s. The FCC came up with a plan to move all FM stations out of the 30 megacycle band and place them in the space from 88 to 108 megacycle. This would allow the creation of 100 channels, 60 more than the old location. In addition, the FCC proposed to allocate 20 of the 100 channels for educational institutions. There was considerable opposition to the proposed ruling. For one thing, it made all existing FM stations and receivers obso-

lete. Industry leaders estimated it would cost $75 million to get started again. But after two days of hearings, the Commission approved the plan, and by April of 1946 it had also approved 375 conditional grants for stations.

The post-war period was a time of great uncertainty for Oklahoma's station owners and managers. Going into FM actually meant going into competition with themselves for advertising dollars. Matt Bonebrake of KOCY did not think his advertisers would appreciate his putting out another signal to compete with KOCY's AM commercials, so he planned to duplicate KOCY AM and FM programming 100 percent.

And then there was television looming on the horizon. Many broadcasters had trouble believing television would ever be able to offer more than just a few hours of programming each day and even more trouble believing the local advertising base would be broad enough to pay for many hours of TV. Some thought FM could be used to fill those programming gaps inasmuch as both FM and TV operated on the same band. Perhaps part of the broadcast day would have pictures, and part would have only sound. The greatest revolution in communications history was bearing down on the radio broadcasters, but the signals of change were ambiguous.[3]

Oklahoma's first three FM stations went on the air in 1947. KWGS-FM, which officially signed on May 6 1947, was not only first in Oklahoma but also the first educational station. WKY-FM was next, starting programming July 1, and KSPI-FM Stillwater began November 1.

For WKY-FM it was a matter of going from experimental to regular broadcasting. The station had been operating with 3,000 watts and soon increased that to 10,000 watts. The new antenna raised the overall height of the AM tower to 959 feet, which made it the tallest tower in the United States. Chief Engineer Jack Lovell found to his surprise that the combination of height and relatively flat terrain gave WKY-FM a better signal in some parts of Oklahoma than the AM station could boast.

The management of WKY started by emphasizing FM's freedom from static, a major selling point in a state famous for its ferocious thunderstorms. Inaugural ads also pointed out FM's superior sound, and much of WKY-FM programming was classical or semi-classical music. There was a strong effort to minimize the duplication of WKY-AM programs and make WKY-FM a true second station, but, even so, acceptance of the new FM broadcasts by the public was restrained.

In Tulsa W.G. Skelly took another approach toward FM. Instead of building an FM version of KVOO, Skelly created an FM station for the University of Tulsa. Actually, the station was the culmination of a project that had its beginning in 1944 and involved Skelly, his general manager, W.B. Way, and Ben Hennecke, part-time speech teacher at TU and part-time KVOO employee. The three men approached the Board of Trustees with a plan for instituting a radio curriculum. Way pointed out the changes in communications patterns that would follow the war and the need for well-trained individuals to fill the new jobs being created. In May 1945 Hennecke presented a $100,000 plan for building studios in Kendall Hall, the school's theater, and Way announced plans for donating the FM station. All three Tulsa radio stations took part in the plan, and the Trustees approved it. The trans-

Once a year KVOO brought Tulsa area high school students in to run the station. Here student Dick Askew, center, does the 5:45 "News of the Air" as newscaster Frank Simms watches. In the foreground is news editor Manton Mars. (Courtesy KVOO.)

Professor Ben Henneke of the University of Tulsa conducts a "Going To College" broadcast in 1940. The program was a regular KVOO feature. (Courtesy KVOO.)

mitter, tower, and studio equipment were a gift from Skelly, and the station was assigned call letters KWGS in his honor.

The station was modern and up-to-date in every respect. Marolyn Donnelly Stout, who chose Tulsa University over Northwestern in Chicago because she was promised her own radio program as a freshman, remembered the studios had "great acoustics and walls the color of pistachio ice cream"[4] KWGS went on the air as the first educational FM station in the state and one of the first in the nation.

KWGS and KVOO maintained a close and unique relationship. KVOO engineers built and maintained much of the KWGS equipment. Two of the early programs broadcast by KWGS were classes for credit in the novel and the history of music. Both were also carried by KVOO and by NBC radio. Hennecke's students also created a quiz program for high school students entitled "Going To College." The quiz originated from high schools throughout the area and was recorded and played back on KVOO. Prizes were college scholarships. The program did much to improve the image of Tulsa University and was honored by the American Public Relations Association as one of the outstanding public relations projects of the year.[5]

The third Oklahoma FM station to go on the air in 1947 was KSPI-FM in Stillwater. L.F. and Jim Bellatti had started KSPI-AM a few months before but were only able to get a daytime frequency. FM seemed the only way to have a nighttime voice for their station, something they very much wanted because Oklahoma A. & M. College basketball was one thing they could get sponsors for, and the games were invariably at night.

Most major AM stations in the state added an FM channel, and their managers began to look for ways to make them successful. KOCY-FM went on the air from a tall tower located on the present site of KWTV in northern Oklahoma City. The high

An educational cooperative effort by KVOO and the University of Tulsa taught classes by radio. The programs brought national recognition to the station. (Courtesy KVOO.)

quality of the FM signal suggested the possibility of using it to create a network that would be independent of telephone wires and their high costs. KOCY started with a couple of morning musical programs designed to be picked up and rebroadcast by smaller AM or FM stations across the state. The concept was sound, but advertiser support failed and the programs went off the air in a short time. It was a different story for sports. FM relay was one of the methods used by Oklahoma broadcasters when they established their own sports network in 1957. The network, which broadcast Oklahoma A & M and OU football and basketball, was owned cooperatively by some 40 Oklahoma radio broadcasters with Jim Bellatti of KSPI as manager.[6]

FM broadcasting started off with much fanfare and high hopes, but it soon became apparent that FM was not going to be the instant success AM had been. There were several reasons. The listening public was not yet aware of the real improvement in sound possible with FM. The words "high fidelity" and "stereo" were not part of our daily vocabulary. Most recorded music was still on 78 rpm records, and FM reproduced the scratchy surface noise just as faithfully as it did the music. The early FM receivers had an annoying habit of drifting after they were tuned to a station, requiring frequent adjustment. There were no FM car radios at all, eliminating an important and fast-growing segment of the radio audience.

In order to cut costs while waiting for advertisers and listeners to discover the advantages of FM, most stations simply duplicated whatever they were running on AM; this caused listeners to ask, with perfect logic, why they should buy another receiver to hear what they were already hearing on AM. Also, FM had the great misfortune to come into being just as television was arriving on the scene. Advertisers who were willing to maintain their existing AM radio budgets and carve out a little extra to get into television had nothing left for FM. The general public, already lined up to buy a first TV set, was mostly uninterested in also adding an FM receiver.

One by one, Oklahoma FM stations struggled with the realities of the problem and then gave up and went off the air. In 1952 WKY had to make its decision. Management wanted to put a new television antenna on top of the radio tower in order to increase TV power to 100,000 watts. The tower would not support the new antenna and the existing FM antenna. The decision was not difficult. Television was booming; FM was languishing. WKY-FM donated its transmitter and associated equipment to the Oklahoma City public schools and went off the air. The station received only one letter of protest, that from a music lover in Norman.[7]

At that point, only two Oklahoma FM stations remained: KWGS in Tulsa and KSPI-FM in Stillwater. The transmitter engineer at KSPI-FM had one of the loneliest jobs in all of radio. He came on duty at sundown when the AM transmitter signed off. Until 11 o'clock he was alone. There was no announcer; all station breaks were recorded. All programs came from the Mutual Network. Listeners almost never called. He had only to sit on the hill outside Stillwater, keep the transmitter log up to date, and wait for the next basketball season and Henry Iba and his Aggies to bring advertisers and

listeners back again. Not surprisingly, the KSPI night engineers were usually A. & M. College students who needed to do a lot of homework.

There was no new FM station in Oklahoma until December 29, 1955, when KAMC, operated by Oklahoma A. & M. College, went on the air. The station would change its call letters to KOSU in 1959 when A. & M. College became Oklahoma State University. The Stillwater school had been planning for an FM station since at least 1947. The original concept had been for a powerful transmitter near the campus with call letters KOAG and satellite transmitters throughout the state to relay the programs. It would have given A. & M. a statewide voice 24 hours a day, a visionary concept for the time.[8] However, the estimated cost of $70,000 was not immediately available, and A. & M. president Henry G. Bennett was killed in a plane crash before the plan was approved. KOSU started modestly enough in 1955 both in power and facilities, but over the years it grew to a 100,000-watt station which became the first educational station to win a Peabody award for news coverage.

Shortly after KOSU went on the air, OSU, which

The entire cast of "Matinee at Brooks," a student-produced music-and-audience participation radio show carried on KSPI in 1947. The program originated from Brooks Student Store, across the street from the Oklahoma A. & M. campus, each Sunday afternoon. Left to Right, foreground: student announcers Jim Critchfield and Jack Lynch, vocalist Sharon Oliver, and bandleader Marvin Whisman. Sharon later became Mrs. Whisman. The trombone player on the left is Bob McCulloh, who later composed the OSU Alma Mater hymn.

had not been able to get any kind of a radio station for more than 30 years, suddenly found itself with two, a situation which a few years later developed into one of the more interesting stories in Oklahoma broadcasting. OSU students had been learning about broadcasting at KVRO, their homemade AM "wired-wireless" station. But the interference problems caused Dr. Robert Lacy, head of the broadcast department, to conclude it would be better to convert KVRO to an FM station. In 1967 he managed to convince the FCC to move an unused channel from Shawnee to Stillwater only to realize that Commission rules made it impossible for the University to own two stations in the same town. To solve that problem, he worked out a plan whereby a group of former broadcasting students, all of whom had been KVRO student managers, to form a nonprofit corporation to own the station. The University provided space and utilities, while the station continued to be operated entirely by students and programmed for students.[9]

This was a unique arrangement, but it caused a philosophical division among Oklahoma broadcasters. Some station owners felt it would be good for the industry and provide much better training for their future employees. Others, especially those operating in the same trade area, felt the University was subsidizing their competition.[10] Eventually the university ended its ties with KVRO, and the station moved off campus to the location where it still operates, no longer a formal training facility for young broadcasters, but a full-fledged competitor for the Stillwater advertising dollar.

After KOSU in 1955, not another FM station went on the air until 1958. That was KLBC in Durant. KMOD began in Tulsa the next year, and KATT in Oklahoma City in 1960.

The low point for FM broadcasting in Oklahoma probably came in 1961. That year a company called Video Independent Theaters came to the same conclusion as everybody else: FM stations were not going to be profitable anytime in the foreseeable future. Video Independent Theaters owned a construction permit for a station in Oklahoma City, and it looked around for a potential buyer. It found some interest in an unlikely place: the First National Bank and Trust Company of Oklahoma City. First National owned one of the tallest buildings in the city, which already had a couple of antennae on it, and Video Independent convinced the bank management that an FM station could be operated out of

Richard Corner, program director of KFNB and Oklahoma's first stereo FM transmitter. The station was owned by The First National Bank and Trust Company at that time. (Courtesy Richard Corner.)

a closet on the top floor of the bank with little or no staff and little or no expense. To close the deal the station was priced at $10. First National bought it.

The bank spent another $24,000 for a transmitter and, while the station did not exactly operate out of a closet the facilities were modest in the extreme. One employee, Richard Corner, served as station manager, program director, disc jockey and music librarian. Fortunately for Corner, the regular bank janitor did the cleaning, or he would certainly have had that job also. When Corner became sufficiently hungry, bank vice president Virgil Sprankle or Sprankle's wife Virginia would come up and relieve him long enough for him to get a quick sandwich.

The station always seemed to be something of a mystery to the bank's officers. They liked having the call letters of KFNB to advertise the bank, and, in fact, in the early years they were the station's primary sponsor. But like most bankers they found radio's show business aspect an alien environment. They did provide new equipment from time to time and made KFNB Oklahoma's first 100,000-watt

FM station as well as the state's first stereo station. Gradually over the years the staff also was enlarged, although Corner still wore multiple hats most of the time.

First National's management was luckier than they knew because in 1961, the year the bank bought KFNB, the FCC approved something new for FM: stereo. At last FM had something AM did not, and slowly the new medium began to establish itself. In 1969 the FCC gave FM another boost by ruling that AM-FM combinations could not duplicate programming more than 25 percent of the time in most markets. Most broadcasters responded by automating their FM outlets and playing lots of uninterrupted music. The audience responded by listening to the uninterrupted music more and more.

As the number of listeners began to increase, more FM-only stations went on the air, more advertising started showing up on FM, and stations became more valuable. In June 1979 First National cashed in on its $10 investment. The bank sold KFNB to Clint Murchison and Ken Dowe of Dallas for $1 million in cash. It must have been a bargain for five years later the station sold again for $3,150,000.[11] If First National's other investments had performed any thing like its tentative foray into broadcasting, the bank might have escaped the financial disaster that destroyed it in 1987.

FM's success began in the early 1960s for a variety of reasons. The long-playing record and stereo sound caused the public to become more discerning about what it heard. Better-designed receivers produced an improved sound, and new circuits cured the drifting problem. More home radios offered both AM and FM, and manufacturers started adding FM to car radios. FM station managers, with nothing to lose, began to look for special programming niches the big AM stations could not fill. Rock music was the first format to find success on FM. With sounds that often stretched the frequency spectrum to its limit, FM was a perfect medium for rock music, and with rock came an entire generation of baby boomers who claimed FM as their own. Transistor FM receivers were cheap, and young rock fans snapped them up. There was still a general shortage of advertisers, so FM managers made a fetish of playing long, uninterrupted music tracks. Young listeners, who did not want to listen to commercials anyway, were further entranced. Next came classical stations, then religious stations, until every minor segment of the listening public had some station to call its own. By the 1980s the tables had been turned. FM radio had the largest total audience, and AM was fighting back with stereo of its own and its own search for innovative program formats.

CHAPTER FIFTEEN

PEACE, PROSPERITY, AND A RADIO IN EVERY POT

Dreams were one of the few commodities not in short supply during World War II, and Americans stored up a lot of them during the four years of conflict. These dreams ranged from a nice little house in the suburbs to a new car to one of those amazing automatic washing machines. A hometown radio station probably was not on most people's list, but that was among the dreams fulfilled anyway. The freeze on new station construction permits was lifted even before the surrender of the Japanese, and the result was an immediate flood of applications. In 1946 alone, the number of AM radio stations jumped by 50 percent—from 1,004 at the beginning of the year to 1,520 at year's end.

Receiver manufacturers did well, too. In 1946 they sold 14 million home radios and 6 million car radios. 1947 was even better. For the first time, Americans spent more than $1 billion on receivers, tubes, batteries and parts. The number of car radios alone jumped to 25 million. Radio advertising was booming, too. In 1947 time sales increased 12 percent to $374,086,686.[1]

In Oklahoma, the established stations shared in all this new wealth, but the end of the war also brought new competition. In Tulsa in 1946 two new stations opened: KAKC and KFMJ. Oklahoma City got one new station: KLPR. In addition, Chickasha went on the air with KWCO, and McAlester signed on KTMC. In 1947 the list became noticeably longer. New AM stations that year included KWHW, Altus; KRHD, Duncan; KSEO, Durant; KTJS, Hobart; KBYE, Oklahoma City, KVLH, Pauls Valley; and KSIW, Woodward. L.F. "Chub" Bellatti came home from the Navy expecting to go to work for his father at the *Stillwater News Press* only to find his father had applied for radio station KSPI, and "Chub" was in charge. He soon found that one of his first duties as a new radio "executive" was to get out and help put in the copper ground system at the tower.[2]

The rush for new stations slowed slightly in 1948 with KTAT, Frederick; KGYN, Guymon; KIHN, Hugo; KMUS, Muskogee; and KJEM, Oklahoma City. Some in the industry fretted that the economy would never be able to support so many stations, but somehow almost all found a niche of some kind in their local communities. Such was the post-war appetite for new radio.

The war had brought new respectability to radio, especially to the news departments, and peace was simply a jumping off place for radio's journalists. Ken Miller, who had been KVOO's news director since 1933, found he had even more loyal listeners with the end of the war. In addition to newscasts, he did a program called "Assignment Southwest" Monday through Friday at 6:15 P.M. On one of his programs, Miller mentioned that the library at Whittaker State Orphan's Home in Pryor was in need of books. He suggested each listener might send just one book to KVOO and solve the home's problem. The station received 8,000 books from 16 states.[3]

Miller also developed a unique kind of newscast in which he and other members of the news department sat around a table, usually with coffee cups at hand, and talked about stories in the day's news. Some of these were major stories, but others were simply features that had not rated a mention on the "regular" newscasts. The program ran half an hour once a week.

Miller was a no-nonsense radio journalist who earned the respect of his fellow workers. That included the station engineers although they had a way of providing humility when called for. At the end of a remote from a local Catholic church, one engineer lifted a small wooden plaque from the church door and attached it to Miller's office door. The plaque read simply "God Is Near." There were plenty of staff members who felt it was more appropriate than blasphemous.[4]

Oklahoma's radio journalists did not have long to wait before getting a chance to show what they could do. On April 9, 1947, one of the worst tornadoes ever to hit the Sooner state destroyed

Three generations take part in groundbreaking ceremonies for KVOO's Broadcast Center in 1955. Left to Right: Randi Stuart (now Wightman), Harold C. Stuart, President and CEO of KVOO, 1956 to 1978, Jon R. Stuart, President, 1978 to present, and W.G. Skelly, President and CEO, 1927 to 1956. (Courtesy KVOO.)

much of Woodward, Oklahoma, killing several hundred people and injuring several thousand. WKY's Chief Engineer Jack Lovell was doing a live orchestra remote at Spring Lake Pavilion when he got word of the disaster. It was close to midnight when he got back to the station. He was ordered to take the old Studebaker ambulance/remote unit to Woodward and link up with reporters already on their way.

This promised to be a nightmare of an assignment. Woodward was almost 200 miles of two lane blacktop away, far beyond the range of the small transmitter in the Studebaker. Radio coverage of the story would have to come back to the WKY studios by telephone line. Before starting out, Lovell took one small precaution. He called a friend in the engineering department of the telephone company, explained what was happening, and told him he would be calling in toward morning from somewhere near Woodward. The telephone engineer assured him that all the telephone circuits out of Woodward had been destroyed in the storm.

"However," he said, "there are two circuits in the little town of Seiling which feed to an independent phone company in Alva. If you can find them, you can get back to Oklahoma City from there."

Lovell arrived in Seiling in the wee hours of the morning, drove around until he found the phone exchange, which was being operated out of a house by one little old lady. Yes, she thought, there were some extra lines in the back of the office, and, yes, he was welcome to look for them. Fortunately, the two lines to Alva were labeled, and Lovell soon had one of them in operation. The Seiling telephone exchange was the hub of WKY's Woodward coverage, which included a 30-minute feed to NBC and numerous bulletins throughout the day. Finally, Lovell closed up the operation, restored the line,

drove back to Woodward, found one of the few trees still standing, and fell asleep in its shade.[5]

The Woodward tornado coverage convinced WKY manager P.A. Sugg that his station was ill equipped to deal with such major disasters. He junked the Studebaker and told the station engineers to design the most modern radio remote unit they could envision. They took him at his word. They started with a full-size highway bus. Inside they placed a control room with a four-channel mixer and turntables. Next to that was a soundproofed studio large enough for four people. Outside, there were connections for four more mikes and a platform on top to give reporters a clear view of whatever was happening. There was a powerful transmitter, an AM and FM receiver, a police and shortwave receiver, a radio telephone, and a motor generator that allowed the unit to operate independent of any other power source.

When it was finally finished and rolled out, it was an impressive looking piece of equipment that rated a color cover photograph on Popular Electronics Magazine. Its first news assignment, however, was something of a disaster in itself. It started one evening with a plane crash at Tinker Air Force Base, just the kind of story P.A. Sugg had been waiting for. Gene Lyons, the engineer assigned to operate the new unit, had already gone home. He was immediately called back, of course, but Sugg could not wait. He jumped in the bus and headed for Tinker. The Air Force gate guards were not impressed by the rolling radio station, and not even Sugg's war-time rank of Navy captain could get him onto the base. Eventually, however, he got permission and arrived at the scene of the crash only to flood the motor on the generator trying to start it. When Lyons finally caught up with him, the story was long over, there had been no exciting "on-the-scene-reports," the battery in the bus was dead, and Lyons ended the day by finding an Air Force Jeep driver who was willing to give him a jump start.[6]

For all its technical capability, the WKY mobile unit was not used all that much for news coverage. There were not many stories big enough to send it out, and the arrival of small, portable tape recorders made the coverage of most events much easier. The unit was used by News Director Bruce Palmer for a series of interviews with small-town newspaper editors and never failed to attract attention when it arrived in town. Then, two years after it was built, television arrived with its own mobile units. Eventually the radio bus was itself converted to television.

In 1949 two new stations were added to the northeast part of Oklahoma. One was KRMG, owned by Senator Robert S. Kerr and his oil company partner, Dean McGee. Kerr had owned several other smaller stations previously, but had decided he wanted to move up in the world of broadcasting. For one thing, he was aware that his political support was much stronger in rural areas than it was in the state's two major cities. He was determined to have a station that would put a strong signal into both Tulsa and Oklahoma City and cover the rest of the state as well. He hired a consultant from Washington, D.C., to look for a suitable frequency. The consultant reported there was no hope of getting a station of sufficient power in Oklahoma City but that it would be possible to "squeeze" one into Tulsa. The task took all of the Senator's persuasive powers at the FCC and a near miracle by the engineers. The result was a 50,000-watt giant on 740 kilocycles with a coverage pattern that took in both major cities, although it took six towers to create the complicated coverage pattern.

KRMG went on the air on January, 1 1949, and Senator Kerr made a personal trip to Tulsa to sell the first commercial program himself: 10:30 to 11:30 Sunday mornings to the First Baptist Church. The second commercial program was sold immediately to Oral Roberts who wanted the half hour just ahead of the First Baptist program. Kerr also produced a weekly radio program of his own and instructed KRMG's manager, Brownie Akers, to put it immediately following the most popular program on the air, which in 1949 was "Stop The Music."

The station started with a heavy emphasis on news and public affairs and was one of the originators of the "Green Country" tourism promotion effort. It had a distinguished list of alumni, including Jim Hartz who went on to fame with NBC and veteran newsman Glen Condon.[7]

In 1952 Kerr decided to apply for a television channel in Tulsa. KVOO's W.G. Skelly came to the same decision at about the same time, and both men went for Channel 2, the only remaining channel. Skelly's son-in-law, Harold Stuart, a well-known Washington attorney, advised both men that their competing applications would lead to an FCC hearing that would be long and costly to both parties.

Stuart suggested they apply together for Channel 2. Despite the fact that Kerr was the state's most prominent Democrat and Skelly a prominent Republican, they agreed to the arrangement provided Stuart would return to Oklahoma to manage the station. However, the FCC decided that two competing radio stations in the same market could not own a television station jointly. Stuart then devised a plan in which two and one half percent of the television station would be owned by Oklahoma State University and two and one half percent by Tulsa University with Kerr and Skelly owning the rest. That was agreed to but then the FCC ruled that competing radio stations in the same market could not even own stock in the same TV station. Skelly, who had invested so many years of his life in KVOO, was not interested in selling his station, but Stuart managed to convince Bob Kerr and Dean McGee to sell KRMG to long-time associate Harrington Wimberly, and KVOO-TV was at last under way.[8]

The second station to go on the air in 1949 was KGLC in Miami, Oklahoma. Like KRMG, it was made possible by directional antenna technology, but it was much smaller at 1,000 watts. The station was owned by a group of Miami businessmen, and the call letters honored George L. Coleman, prominent mine operator and business leader in Miami. From the beginning, KGLC's owners decided they wanted a quality station. They looked at stations in Tulsa and Oklahoma City, primarily WKY, and acted accordingly. Like WKY, they located their studios in the city's major hotel, the Hotel Miami. They brought in Wallace Dunn, an Oklahoma City

Enid's disastrous 1957 flood was reported for radio by Sam Bogart of KGWA. Bogart is now a free-lance television personality in Fort Worth. (Courtesy KGWA.)

broadcaster, as manager, and Lee Lemon, a flamboyant announcer and disc jockey, as Program Director.

KGLC was a full-time station and had no network, so all programs had to be locally produced. Here also, station management insisted on big city quality. The staff included a music director, and while there was not enough money for a studio organ there was an excellent organ across the street in the Coleman Theater, so that worked nicely. Only the best in popular and semi-classical music was programmed. Country and western music was restricted to the first hour after sign-on. Announcers were not allowed to ad lib; everything, including music introductions, was read from a written script. That posed something of a problem since there was only one writer, but there was a lot of enthusiasm in the young staff, and everyone was determined to make the station a success. On the morning of Sunday April 25, 1949, KGLC went on the air with a major live production:

> ORGAN SCREAM
> VOICE 1:"Listen! Listen closely. I have a story to tell!"
> VOICE 2:"Congress shall make no law respecting freedom of speech..."
> VOICE 1:"Thus it was writ...so be it. But if a person is to be allowed expression why not a town ? Now after 57 years...Miami speaks!"
> VOICE 3:"Miami Speaks!"
> VOICE 4:"Miami Speaks!"
> VOICE 5:"Miami Speaks!"
> ORGAN: CHORD! CHORD! CHORD!
> AUDIENCE: "Miami Speaks!"

The citizens of Miami listened to all of this, no doubt with considerable civic pride but also with some questions. The programming philosophy, for all its emphasis on big city quality, seemed to have been designed without much thought for the majority of the audience. KGLC's audience was predominantly interested in country and western music and religious programming, segments largely left out of the day-to-day schedule. Civic pride lasted for a few weeks, and then the audience went looking for something more familiar.

KGLC had one grand moment of glory, however. On August 19, 1949, the Millner-Berkey Department Store next door to the station caught fire. As flames roared out of control, the staff began a hurried evacuation of the studios—except for program director Lee Lemon. He quickly ran a mike cord out onto the street and started a sensational live broadcast of the disaster.

When the fire threatened to spread to nearby stores, Lemon put down his microphone long enough to organize bystanders into rescue squads which rushed in to carry out racks of clothing and boxes of shoes. He then picked up the mike and described the action he had initiated. Surrounded by smoke and flame and with the sound of exploding shot gun shells from the store's sports department, Lemon decided the Miami Fire Department was losing the battle. Without checking with anyone, he put out a dramatic radio appeal for help from other cities. Soon dozens of fire trucks from nearby towns were rolling toward Miami urged on by Lemon's dramatic descriptions. Finally, after doing some $750,000 in damage, the fire burned out, just as a big hook and ladder truck rolled in from Joplin, Missouri, the crew looking totally exhausted from their wild ride down the two lane concrete of U.S. 66. The Miami Fire Chief took exception to Lemon's call for help, but there was not much he could do at that point.

Lemon's days at KGLC were numbered anyway. By summer's end it was clear that changes were necessary. The noontime programming of live organ music and poetry reading was canceled, along with the daily half hour of Nellie Lutcher blues records, the morning program of Latin American melodies, and the evening Waltz Time, all replaced with country music.

The station prospered.[9]

1949 was also the year television arrived in Oklahoma. KVOO's manager W.B. Way had looked at the financial prospects and advised Skelly to wait a while, but WKY elected to go ahead. As manager P.A. Sugg remembered:

> We went into television when everybody else was losing money. I remember going up to see Walter Damm at WTMJ [Minneapolis] and George Burback at KSD [St. Louis], and they all told me they were losing money. But Mr. Gaylord, who was then in his 70s, said we don't care if we lose money, we think the people of Oklahoma deserve television. We lost money for 18 consecutive months, but the radio station was making enough that my operations never went in the red. On the 19th month I made $18.64.[10]

Sugg promptly threw a staff party at the Oklahoma City Golf and Country Club that cost him more than $200.

A KGWA booth during a live broadcast of the 1958 Home Show in Enid's convention hall. The deejay was Jimmy O'Neill, a high school student at the time. He went on to work at WKY and stations in Pittsburgh and Los Angeles before becoming emcee of TV's "Shindig." (Courtesy KGWA.)

Radio not only paid the bills for the fledgling new communications medium, but also contributed most of the trained staff needed to get the television stations on the air. All this caused serious problems for radio stations. Sugg remembered with regret that while some of his radio people were quickly promoted to better jobs in television, some had to be left in the radio operation to keep paying the bills—to the detriment of their personal careers, he felt.

Going into the 1950s it was clear that television, not radio, was where the future would be. KVOO went on the air with Channel 2 in Tulsa, and WKY consolidated its radio and television operations in one building at the transmitter on Britton Road in Oklahoma City. The Skirvin Tower studios, which had been such a technical marvel in 1936, only 15 years before, were abandoned, replaced by a much smaller set of studios in one corner of the new television building. There was no room for Ken Wright's giant theater organ, but then organ music was not being heard much on radio by then. Television was growing, and prophets on all sides said radio was doomed. It was only a matter of time, they predicted.

In 1952 one of the longest-running partnerships in radio came to an end when Bob and Johnnie Lee Wills broadcast their last program on KVOO. They had been on the air for 25 years. In 1956 W.G. Skelly became seriously ill, and on February 1 1956 Harold Stuart came back from his Washington law practice to take over management of KVOO. Skelly died in April 1957. The station then was program

ming a "good music" format with lots of classical artists, but the audience was declining steadily. The first change was to a "solid gold" oldies format, but that did not help much either. KRMG had taken over the lead in ratings when Stuart hired Jack Cresse as manager, and Cresse changed to country music. It was the beginning of the boom in country, and in a matter of months KVOO was back on top with its audience. In the years that followed, KVOO was named Country Western Station of the Year twice, and KVOO disc jockey Billy Parker won Country Western DJ of the year four times.

As revenues and audiences were lost to television, smaller stations with fewer resources had to act quickly. KOCY came out with a disc jockey format featuring mostly rock music with lots of contests and short newscasts on the hour. KOMA soon followed with its own version, and both started making inroads on WKY's audience. Paul Brawner, program director at WKY, tried to avoid following the leader and looked for some innovative way to stay in the game. At one point WKY broadcast the sound track from late night movies running on WKY-TV with an announcer on hand to explain the action when the dialog did not. For morning programming, Brawner invented "Silent Sam," a disc jockey who played records and sometimes whistled or hummed, but never spoke. Nothing worked. A long debate raged between younger staff members who saw Top Forty rock programming as the only hope for the station, and older, more traditional programmers who found the rock format immoral at worst and undignified at best. Finally the youngsters won out. WKY dropped all its conventional programming, hired a stable of young, energetic DJs, and went after the baby boom generation. On the night DJ Chuck Boyles filled the station's front yard with teenagers gyrating their hula hoops to the beat of a rock record, management figured they had made the right decision. Some would continue to predict the demise of radio for a while longer, but no one watching the fresh-faced enthusiasm of the hula hoopers could doubt that radio had once again found its audience.

EPILOGUE

Radio is a survivor. There were plenty of people who were certain it would never survive the static and interference of the 1920s. Many thought it would never survive competition with newspapers for advertising. Others were certain the proliferation of new stations would flood the market and bankrupt every station in it. There were prophets who predicted that FM would make it impossible for anyone to make a profit. Television, with both sight and sound, would surely bring the death of the older, supposedly obsolete medium. Then came satellites and cable, suddenly multiplying the viewer's choice from four channels to 60 or more, and many said the end had finally come for radio.

Today there are 177 radio stations in Oklahoma, 67 AM and 110 FM, with a handful of others licensed but not yet in operation. Over the years many stations have changed ownership. Many others simply disappeared, but for every casualty a dozen others appeared. Of the stations which began the radio revolution in the 1920s, only KVOO and WKY still have the same management and call letters.

Across the radio dial today you can find stations providing education, classical music, rock, blues, jazz, talk, sports, sports talk, religion, and news, both international and small town. KVOO has gone back to its roots and programs country music. WKY has returned to its original theme of good music.

In many Oklahoma towns, FM stations have overtaken their AM competitors in the ratings. The AM broadcasters have fought back with new electronics which give them stereo sound. At this writing, the FCC is considering a new marvel—digital radio—which shows promise of giving both AM and FM the same excellent quality stereo sound and doing away with the AM/FM designation altogether. At the same time, there is a distinct possibility of putting some digital stations on satellite, thus returning the listener to the golden age of radio when it was possible to hear the magic call letters KDKA, WSM, KVOO, and WKY all across the country.

In truth, it has always been hard to define that "golden age." Radio, which has evolved entirely within a single lifespan, has shown a remarkabale ability to transform itself as circumstances dictate. In a society which has gone through wrenching changes in every area over the past 70 years, radio has somehow kept pace. Alone among the media, radio was created by its listeners out of their wants and needs, and while those listeners have sometimes gone elsewhere in search of entertainment, excitement, or enlightenment, they have always come back, still seeming to need, somehow, the presence of their unseen companion and the sound of the voice on the wind.

NOTES

Citations for *The Daily Oklahoman* will be abbrevated "DO," while those for the *Tulsa World* will be "TW."

FOREWORD:

[1]Lee De Forest *Lee De Forest, Father of Radio* (Chicago: Wilcox & Follett, 1950), 226-227.

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[1]DO 30 December 1906, 9, col. 3 & 4.
[2]W. Rupert MacLaurin, *Invention and Inovation In The Radio Industry* (New York: Macmillan Co., 1949), 59.
[3]Helen M. Fessenden, *Fessenden, Builder of Tomorrows* (New York: Coward-McCann, 1940), 153.
[4]DO 1 January 1907, 11.
[5]*Tulsa Daily Democrat*, 31 December 1906, 5.
[6]Fessenden, *Fessenden, Builder of Tomorrows*, 154.

CHAPTER 2:

[1]Lowell Thomas, *The Magic Dial* (New York: Polygraphic Company of America, 1939), 12.
[2]*Ibid.*, 14.
[3]*Ibid.*
[4]Thomas Watson, *The Birth and Babyhood of the Telephone* (New York: The American Telephone and Telegraph Company, 1937).
[5]*New York Times* 18 October 1907, 1.
[6]Erik Barnouw, *A History of Broadcasting in the United States*, 3 vols. (New York: Oxford University Press, 1966), vol. 1: *A Tower In Babel,* 28.
[7]Donald McNicol, *Radio's Conquest of Space* (New York: Murray Hill Books, 1946), 123.
[8]Thomas, *The Magic Dial*, 18.
[9]*Perkins (OK) Journal* 26 February 1904, 1, col. 4.
[10]McNicol, *Radio's Conquest of Space,* 124.
[11]Barnouw, *A Tower In Babel*, 29.
[12]R.A. Fessenden, "Wireless Telephony," *Annual Report of the Smithsonian Institution* (Washington, D.C.: 1908), 108.
[13]MacLaurin, *Invention and Inovation In The Radio Industry*, 82.
[14]McNicol, *Radio's Conquest of Space*, 234.
[15]Ernest LaPrade, *Broadcasting Music* (New York: Rinehart & Co., 1947), 5.
[16]*New York Evening Sun*, 4 January 1910, 1.
[17]LaPrade, *Broadcasting Music,* 20.
[18]McNicol, *Radio's Conquest of Space,* 291.
[19]Barnouw, *A Tower In Babel*, 36.
[20]Thomas, *The Magic Dial*, 17.
[21]McNicol, *Radio's Conquest of Space*, 236.

CHAPTER 3:

[1]Thomas, *The Magic Dial*, 18.
[2]De Forest, *Lee De Forest, Father of Radio*, 352-53.
[3]*Ibid.*, 355.
[4]Barnouw, *A Tower In Babel*, 64.
[5]*Lawton Constitution,* 17 February 1921, 4, col. 2,3,4,5.
[6]*Lawton Constitution,* 15 March 1922, 1, col. 6.
[7]DO, 30 April 1922, 13-C.
[8]MacLaurin, *Invention and Innovation In The Radio Industry,* 112.
[9]Mitchell V. Charnley, *News By Radio* (New York: Macmillan Co, 1948), 1.
[10]Walter Harrison, *Me And My Big Mouth* (Britton, Oklahoma: Britton Printing, 1954), 161.

CHAPTER 4:

[1]DO, 8 January 1922, editorial page, col. 5.
[2]The original basic measurement of electromagnetic radiation was the "cycle," and radio frequencies were expressed as "kilocycles" or "megacycles." In recent years the term has been changed to "Hertz" to honor the famous German scientist who discovered the phenomenon. I have made a conscious decision to retain the old term in this book primarily to avoid rewording documents used for direct quotation.
[2]Barnouw, *A Tower In Babel*, 91.
[3]"Radio Gets A Policeman," File 2, Broadcast Pioneers Library, National Association of Broadcasters Archives, Washington, D.C.
[4]DO, 1 January 1922, 1-D, col. 4 & 5.
[5]Thomas, *The Magic Dial*, 24.
[6]DO, 26 February 1922, 13-C, col. 2,3,4.
[7]DO, 9 February 1922, 11, col. 1.
[8]Harrison, *Me And My Big Mouth*, 162.
[9]DO, 4 March 1922, 1, col. 4.
[10]DO, 9 March 1922, 1, col. 1.
[11]*Ibid.*
[12]DO, 14 March 1922, 6, col. 6.
[13]DO, 11 March 1922, 2, col. 2.
[14]DO, 15 March 1922, 4, col. 4.
[15]*Ibid.*, col. 6.
[16]DO, 18 March 1922, 7, col. 3.
[17]DO, 2 April 1922, 8-B, col. 5.
[18]DO, 23 March 1922, 1, col. 3.
[19]DO, 18 March 1922, 5, col. 8.
[20]DO, 19 March 1922, 7, col. 2.
[21]DO, 17 March 1922, 1, col. 1.

CHAPTER 5:

[1]*Broadcasting Magazine*, 14 May 1962, 110.
[2]*Ibid.*
[3]DO, 2 April 1922, 4-A, col.. 1,2,3.
[4]DO, 12 April 1922, 11, col. 3.
[5]DO, 9 April 1922, 6-A, col. 2,3.
[6]DO, 14 April 1922, 2, col. 1.
[7]DO, 30 April 1922, 13-C, col 3.
[8]DO, 20 April 1922, 2, col. 6.
[9]DO, 26 April 1922, 13, col. 4.
[10]DO, 31 May 1922, 1, col. 3.
[11]DO, 1 June 1922, 2, col. 1.

[12]TW, 2 June 1922, 1, col. 2.
[13]*Ibid.*
[14]Earnest C. Lambert, interview recorded 12 August 1976 for Oral History Collection, Oklahoma Historical Society, Oklahoma City. Tape 780.
[15]*Okmulgee (OK) Daily Democrat,* 11 June 1922, 1.
[16]*Yale (OK) Democrat*, 7 April 1922, 1, col. 3.
[17]*Ibid.*, 12 April 1922, 1, col. 1.
[18]*Ibid.*, 21 April 1922, 1, col. 1.
[19]DO, 4 June 1922, 15-C, col. 4.
[20]DO, 11 June 1922, 30-C, col. 4.
[21]DO, 17 June 1922, 5, col. 3.
[22]DO, 9 July 1922, 13-C, col. 4.
[23]DO, 23 July 1922, 3-C, col. 8.
[24]*Okemah (OK) Okfuskee County News*, 13 April 1922, 4, col. 1.
[25]*Ibid.*, 27 July 1922, 10, col. 5.
[26]DO, 10 September 1922, 15-C, col. 8.
[27]Interview with Dorothy Naylor Gideon.
[28]DO, 17 September 1922, 15-C, col. 4
[29]DO, 1 October 1922, 15-C, col. 5.
[30]*Ibid.*
[31]*Chandler (OK) Lincoln County News*, 9 November 1922, 1, col. 4.
[32]DO, 8 November 1922, 1, col. 6, 7.
[33]Lambert, interview, Oklahoma Historical Society
[34]Barnouw, *Tower In Babel*, 93.
[35]DO, 12 November 1922, 15-C, col. 1.

CHAPTER 6:

[1]Francis Chase, Jr., *The Sound and the Fury, An Informal History of Broadcasting* New York & London: Harper & Bros., 1942), 20.
[2]DO, 18 January 1924, 18.
[3]Harrell to Hoover, 8 September 1924, KFJF File, Federal Radio Commission, Record Group 173, National Archives, Washington, D.C.
[4]Hoover to Harrell, 18 September 1924, *ibid.*
[5]Deiler to National Radio Manufacturing Company, 30 December 1924, WKY File, Federal Radio Commission, Record Group 173, National Archives, Washington, D.C.
[6]Stout to Hoover, 18 October 1924, *ibid.*
[7]*Ibid.*
[8]Tyrer to Superintendent of Radio, New Orleans, 24 October 1924, *ibid.*
[9]Hull to Deiler, 29 October 1924, *ibid.*
[10]Deiler to Commissioner of Navigation, Department of Commerce, 27 October 1924, *ibid.*
[11]Deiler to Commissioner of Navigation, Department of Commerce, 29 November 1924, *ibid.*
[12]*Ibid.*
[13]McCabe to Superintendent of Radio, New Orleans, 7 April 1926, *ibid.*
[14]Hull to Deiler, 16 December 1925, *ibid.*
[15]Richards to Deiler, 3 March 1926, *ibid.*
[16]Hull to Deiler, 16 December 1925, *ibid.*
[17]Shaw to Sen. Harrell, 3 December 1925, *ibid.*
[18]du Treil to Superintendent of Radio, New Orleans, 22 December 1925, *ibid.*
[19]*Radio Digest*, 6 March 1926, KFJF File, Federal Radio Commission, Records Group 173, National Archives, Washington, D.C.
[20]*Ibid.*
[21]Tyrer to Superintendent of Radio, New Orleans, *ibid.*
[22]Deiler to Tyrer, 26 November 1924, *ibid.*
[23]Deiler to Tyrer, 23 October 1924, *ibid.*
[24]Deiler to FRC, 26 November 1924, *ibid.*
[25]TW, 14 May 1924, 4, col. 4.

CHAPTER 7:

[1]*Okemah (OK) Okfuskee County News*, 25 December 1924, 4, col.6.
[2]Whitter to Deputy Commissioner, FRC, 26 May 1924, KFRU file, Federal Radio Commission, Records Group 173, National Archives, Washington, D.C.
[3]Deiler to Commissioner, FRC, 19 January 1925, *ibid.*
[4]Roy Griffin, interview taped in 1940 and donated to University of Tulsa by KVOO. Cited by Dr. Guy Logsdon in "KVOO—A Country Music Influence" (unpublished).
[5]*Bristow (OK) Daily Record*, 15 January 1924, 1.
[6]Gene Lyons interview.
[7]Dorothy Naylor interview.
[8]*Okmulgee (OK) Daily Democrat,* 1 February 1925, 1 col. 6.
[9]*Ibid.*, 3 February 1925, 1, col. 6.
[10]*Ibid.*, 10 May 1925, 3, col. 3.
[11]Guy Logsdon, "Starstruck At KVOO," *The University of Tulsa Annual,* 1980-81, 48.
[12]*Ibid.*
[13]Carson to Rollestone, 10 February 1925, KFRU file, National Archives.
[14]Booth to Department of Commerce, 19 March 1925, *ibid.*
[15]Booth to Commissioner of Radio, 27 March 1925, *ibid.*
[16]Walton to FRC, 15 July 1925, *ibid.*
[17]First Radio Conference, Oklahoma City, 18 September 1925, Radio File, Oklahoma State University President's Papers.
[18]Rollestone to Knapp, 1 October 1925, *ibid.*
[19]Griffin to Oklahoma Chambers of Commerce, 10 October 1925, *ibid.*
[20]News release from Voice of Oklahoma Campaign Committee, undated, *ibid.*
[21]Peabody to Oklahoma Radio Dealers, undated, *ibid.*
[22]Radio File, OSU President's Papers.
[23]New Orleans office to FRC, Washington, D.C., 11 April 1928, KVOO file, National Archives.

CHAPTER 8:

[1]DO, 12 March 1922, 4-B, col. 2,3,4.
[2]DO, 25 March 1922, 5, col. 7.
[3]DO, 19 November 1922, 1-B col. 1.
[4]DO, 12 November 1922, 1-B, col. 1
[5]Hugh Mix, interview recorded for Oral History Collection, Oklahoma Historical Society, Oklahoma City. Tape 521-A.
[6]S.E. Frost, Jr., *Education's Own Stations* (Chicago: University of Chicago, 1937).
[7]Knapp to Egly, 22 January 1925, Radio File, OSU President's Papers.
[8]Knapp to Manager, KFRU, 26 January 1925, *ibid.*
[9]Edmiston to Knapp, 16 February 1925, *ibid.*
[10]Knapp to Friends of A.&M., 8 April 1925, *ibid.*
[11]Kositzky to Western Union, 15 April 1925, *ibid.*
[12]Knapp to Rollestone, 10 September 1925, *ibid.*
[13]Knapp to Deiler, 5 December 1925, ibid.
[14]Knapp to Deiler, 21 December 1925, *ibid.*
[15]Knapp to Rollestone, 31 December 1925, *ibid.*
[16]Pickard to Knapp, 28 July 1926, *ibid.*
[17]*Ibid.*
[18]*Ibid.*
[19]Kositzky to Knapp, 11 October 1926, *ibid.*

[20]Knapp to Hutchison, undated, *ibid.*

[21]Frost, *Education's Own Stations*. For details about J.T. Griffin's early involvement in radio, see Odie B. Faulk, *Quality and Spirit: The Griffin Heritage in Oklahoma* (Oklahoma City: Oklahoma Heritage Association, 1991), 102-106.

[22]Oklahoma University Conference On Radio, 1946, proceedings, University of Oklahoma library.

[23]Interview, Dr. Robert Lacy.

CHAPTER 9:

[1]Paul W. White, *News On The Air* (New York: Harcourt Brace & Co, 1947), 31.

[2]*The First Decade of Broadcasting 1920-30* (New York: Barnes Printing Company, 1958).

[3]Hull to Superintendent of Radio, New Orleans, 25 May 1927, WKY File, Federal Radio Commission, Record Group 173, National Archives, Washington, D.C.

[4]Hull to Federal Radio Commission, 28 July 1927, *ibid.*

[5]*Ibid.*

[6]Brumley to Federal Radio Commission, 11 March 1927, KFJF File, Federal Radio Commission, Record Group 173, National Archives, Washington, D.C.

[7]Shipman to Federal Radio Commission, 12 April 1927, *ibid.*

[8]KFJF to Commissioner of Radio, 18 April 1927, KFJF File, *ibid.*

[9]Regional Inspector to Radio Commissioner, 11 April 1928, *ibid.*

[10]Regional Inspector to Radio Commissioner, 15 September 1928, *ibid.*

[11]Deiler to Commerce Department, 12 May 1930, *ibid.*

[12]First Christian Church, Tulsa, Minutes of the Official Board, Meeting of 22 September 1924.

[13]*Ibid.*, Meeting of 15 December 1924.

[14]*Ibid.*, Meeting of 16 February 1925.

[15]*Ibid.*, Meeting of 18 May 1925.

[16]Elmer Wavering interview.

[17]First Christian Church, Tulsa, Minutes of the Official Board, Meeting of 15 February 1926.

[18]Carrell to Superintendent of Radio, New Orleans, 19 May 1928, WBBZ File, National Archives.

[19]McKinney to New Orleans office, FRC, 18 February 1930, KGFF file, National Archives.

[20]*Ibid.*

[21]Wallace to New Orleans office, FRC, 14 August 1926, Wallace Radio Institute File, National Archives.

[22]*Ibid.*

[23]New Orleans office, FRC, to Department of Commerce, 26 September 1928, KCRC file, National Archives.

[24]*Ibid.*

[25]KOCY File, National Archives.

[26]*Ibid.*

[27]*Ibid.*

[28]KGFG File, Nationl Archives.

[29]*Ibid.*

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