



Richmond District
1929-1979



"A Ring of Pride"

This historical account is dedicated to "Dedication" itself. That is, the spirit of dedicated service performed by Richmond District employees for half a century. It is not unique to this district alone but certainly the spirit is not surpassed in any location known to us.

Monetary values and survival needs are major driving forces bringing people together in the telephone business. The satisfaction and pride displayed in performance of duties are even greater reasons why telephone people remain with the business. Evidence is everywhere. How many times have we heard such statements as, "Remember the time we had a fire and restored service in xxx hours?"

Further proof of this dedication to service has come to us from active and retired employees who responded to our request for material to be used for the celebration of the district's golden anniversary. Every story and factual event has a ring of pride built into the presentation by the provider – and this can be felt by the reader.

Those who are still active in the Richmond District are most fortunate to have shared some of the years of dedicated service with those who are retired, working in other locations, and the ones no longer living. Hopefully, this spirit of dedication will flow on to the next generation, who will attend the centennial celebration in the year 2029.



"Into a Climate of Prosperity and Growth..."

Commercial telephone service began in the United States in 1877, just one year after Alexander Graham Bell's invention of the telephone. In that same year, the first "long distance" call was made between New York and Boston. The spread of telephone service to the South was rapid. By 1879, an exchange had been started at Richmond, Virginia. When the system went into operation in Richmond with twenty-five subscribers, it reached only where the wires could go over the tops of houses and, therefore, was installed only in the heart of the city. Growth was southward, and before the end of the year, additional exchanges were begun at Petersburg, Norfolk, and Lynchburg. Long distance service between Norfolk and Richmond was established in 1890 and extended to Washington, D. C. in 1898.

On December 30, 1899, A. T. & T. became the parent company of the Bell System. At this time, the United States had one phone for every sixty people.

Theodore Vail assumed the presidency of the American Telephone & Telegraph Company in 1907. He was to do far more than anyone else to build the modern Bell System. It was Vail's business philosophy that was to provide the basis for future Bell System policies. He postulated that maximum profit was not necessarily the primary objective of private enterprise. He cited the company's responsibility to its customers, *as well as* financial health, as being elements in an equation that needed proper balance. This was a totally new concept in American industry.

Vail was very aggressive in buying independent telephone companies and adding them to the Bell System. By 1911, the system had collected so many local companies that they were difficult to manage; so Vail consolidated them into a lesser number of state and regional companies. Thus, the Chesapeake and Potomac Company of Virginia was formed in 1912.

The telephone business in the early 1920's was booming along with most of the rest of American business. For the American Telephone & Telegraph Company, it was a decade of ample profits, lavish growth, and wide public acceptance. Also, the company was a paternalistic organization in the old tradition. It treated its workers fairly, wages were generally competitive, working conditions had been vastly improved, and a system-wide pension plan had been inaugurated. So prosperous were economic conditions in the late 1920's, that the Bell System was able, for the first time, to make some rate reductions while improving service and increasing employees' wages.

It was into this climate of unparalleled prosperity and period of peak growth that the Richmond District was born.

Front of our Grace Street Building which was erected in 1929. The sign on the corner is our present 701 entrance to the business office.

"A Haze of Worry and Disbelief..."

The "Roaring Twenties," as they were known, were rapidly coming to an end when the Richmond District appeared on the scene. Prior to 1929, there were four Districts as part of Philadelphia Division 2. These were 21, 22, 23, and 24. Washington District was #22 and consisted of Virginia, West Virginia, Maryland and Washington, D. C.

It was decided to separate the Virginia and West Virginia offices from District 22 (Washington) and form a new District 25, called the Richmond District. The dates of decision and dates of announcement are not known, but hopefully there was no correlation with Oct. 24, 1929 . . . known as "Black Thursday." Surely that didn't cause all the trouble.

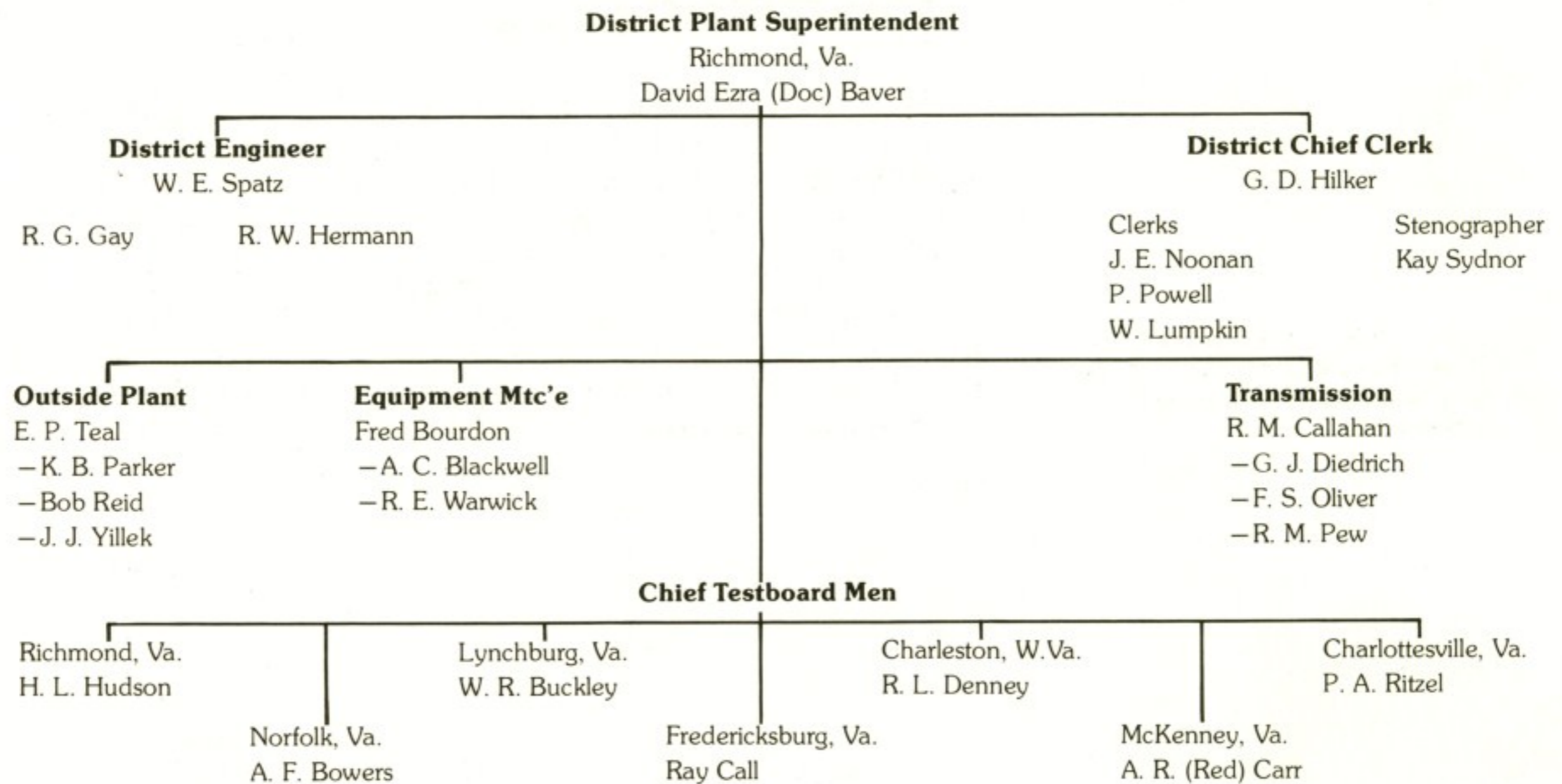
Built in 1928, one year before the birth of the Richmond District. This was one of the seven offices comprising the original district.



District 25 started operating in December of 1929 with its Headquarters office located at 703 E. Grace St., Richmond, Va. Offices reporting to the new District were Richmond, Va., Fredericksburg, Va., Lynchburg, Va., Charleston, W.Va., Charlottesville, Va., Norfolk, Va., and McKenney, Va.

David E. (Doc) Baver was appointed the first District Plant Superintendent and was characterized as "a very studious Pennsylvania Dutch Gentleman, who was extremely reasonable and always fair."

Doc, who was living in Pennsylvania and was invited to the 50th celebration died in March, 1979. His District organization looked like this at the start:



Much of the information supplied has come from the amazing memories of some of our retirees. They concede some "approximate dates" should be used, as the years have passed so quickly.

Speaking of memory, Bob Pew remembers that his total moving expense reimbursement for the November, 1929 move was \$15.82! Some actual material found in the McKenney office revealed interesting letters about power problems and electricity costs in 1927, problems that continue today.

The last two months of 1929 disappeared in a haze of worry and disbelief, and then the 1930's were upon us.



The General Managers of several telephone companies held a conference at White Sulphur Springs, W. Va. in 1929. A group of plant men were sent to Covington, Va., which was switching point for traffic. Long Lines operated the traffic at that time. Miss Lena Saunders was the Chief Operator. Switchboard was located in her house. Picture shows: David E. Bayer, Harold Marsh, part of the "circuit watch dogs." The imposing piece of test equipment on the table is a variable oscillator. Marsh is doing a bit of telegraphing.

Troubles and Fun in The Great Depression

The Great Depression was engulfing the nation when the Richmond District began functioning. President Hoover was in office at the time. He was the first President with a telephone on his desk. Initially, the depression was slow in affecting the telephone industry. One of the reasons was that people were using the phone to discuss the economic disaster. As it continued, however, there were layoffs, some affecting Long Lines and up to eighty percent of Western Electric employees. A bright note was that Long Lines hired some highly competent people as a result of the layoffs.

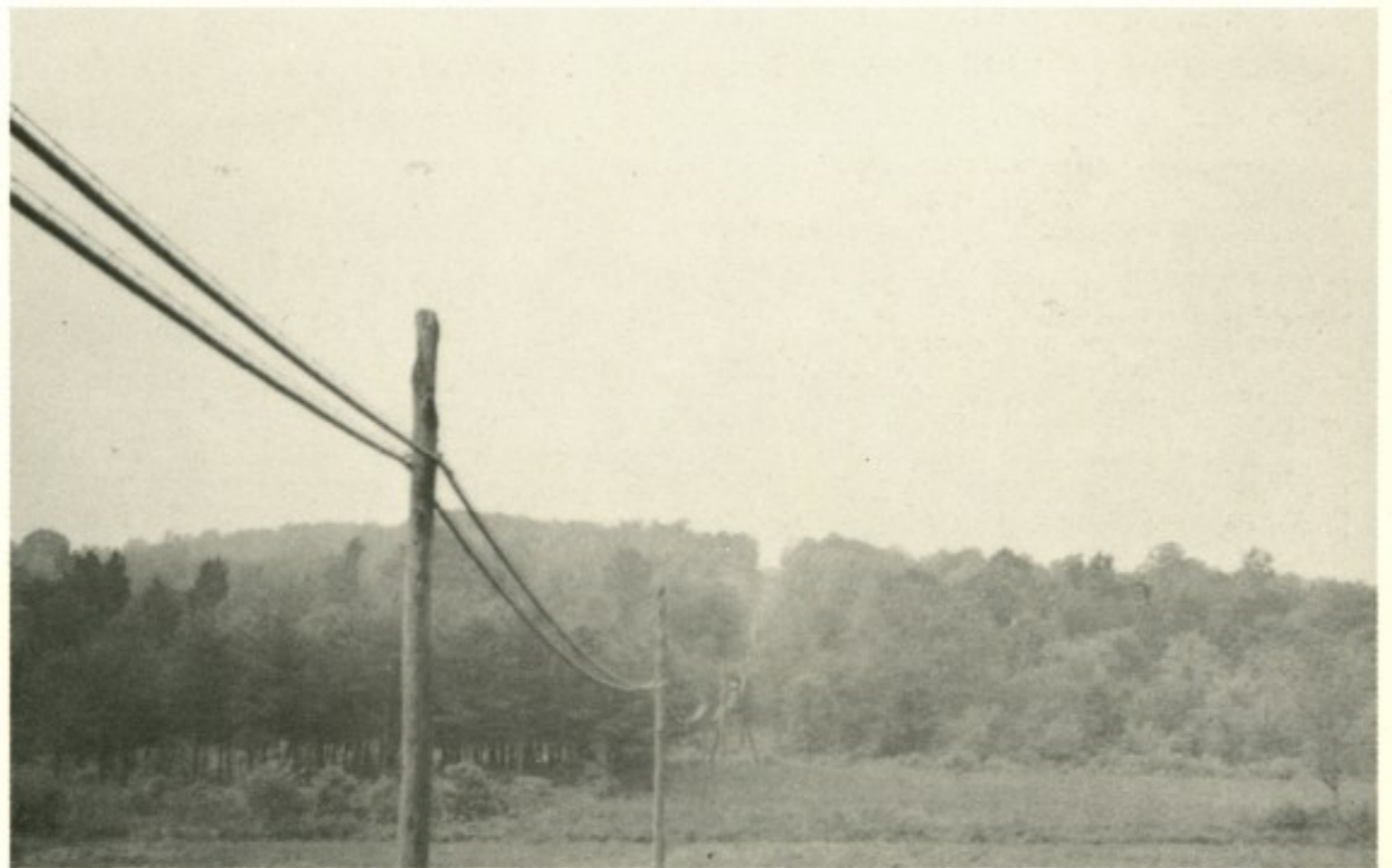
In the early Thirties, "private line" service consisted mostly of telegraph and program service. The telegraph was of two types: Morse wires and D. C. telegraph using model 12 teletypewriters. The most common type of telegraph repeater was a 16 B1 working to a 128 subset at customer's location. Teletypewriter equipment repairs and maintenance were performed by Long Lines forces during the early years. The program service offered was telephone circuit switching of radio programs provided to major network affiliates.

Facilities provided by Long Lines at the start of 1930 consisted of the Washington-Richmond-Greensboro "A" cable (1925). The bulk of facilities were open wire lines, the oldest of which was the Washington-Norfolk line installed in 1897-1898. "Open wire" meant bare copper wire hooked on glass insulators from pole to pole and provided



Square pole on the Richmond-Norfolk section of the Norfolk-Washington line installed in 1897-1898.

Washington-Richmond A and B cables looking south from pole 1129.



a single voice channel per pair of wires. It served Washington, Fredericksburg, Richmond, Petersburg, Suffolk and Norfolk. Square poles used on this line were still in service after seventy-plus years. Many other lines connecting Lynchburg, Charleston, Huntington, Petersburg, and points between, were maintained by Long Lines. "C" carrier was added early in the Thirties; this device expanded the ability of a pair of wires to produce three additional voice channels.

At the start of 1930, Lynchburg showed twenty-four people employed. All of them were still remembered in 1979 by Haynie Kabler, who provided a good many of his personal recollections for this book.



This picture taken in 1924 or 1925 shows some of the original force at Lynchburg when the district was started in 1929. W. R. Buckley, far left, was the first chief.

This employment figure would drop to eleven by 1939. Lynchburg in 1930 was a major facility point, being terminal for five major open wire lines. Starting wages in 1928 were \$18.00 per week and never advanced above \$19.50 through the depression. But the work week dropped from five and one-half days per week to four and one-half, so that more people could be kept on payroll.

While mentioning Lynchburg, an interesting story concerning the Chief, Bill Buckley, went something like this:

A loudspeaker system was installed between work areas. When Mr. Buckley grew lonesome for conversation he would leave his desk to visit one of these areas. Subordinates would yell "Tally Ho!" over the speaker system to alert these areas, and everyone would suddenly

District office personnel at the beginning of 1930.

Standing L-R

J. E. Noonan, R. W. Hermann, W. Lumpkin, G. D. Hilker, F. V. Bourdon, Percy, J. Yillek, R. Reed, G. J. Diedrich, E. P. Teale

Seated L-R

R. G. Gay, Kay Sydnor, D. E. (Doc) Bayer, A. C. Blackwell, K. Parker, W. C. Spatz, R. M. Callahan.



get busy. Not finding anyone to chew the fat with, Mr. Buckley followed one of two options: (1) If before lunch, he would take a walk until lunch; (2) If after lunch, he would feel a cold coming on and leave early. However, it was admitted that even though Mr. Buckley was a stoic type, he was always fair and considerate with individuals willing to listen to him.

One of the first District functions which bears witness to the Bell System Safety Creed was a safety audit conducted in 1930 by Frank Dalberg out of the old Philadelphia Division 2 offices. Year after year, Harrisburg (District 24) won first place, and never seemed to have any competition. But Dalberg's audit showed the upstart Richmond District 25 was a winner by a wide margin. This greatly boosted the morale of

Clearing Right of Way on Richmond-Greensboro cable. Doc Baver is on far right.



the new Richmond regime, and it is said that Dalberg's fair audit was remembered by Doc Baver, and Frank Dalberg felt that it may have helped save his job during the depression.

Some rail travel fares the District faced in 1931 showed:

Richmond-Washington, D. C. — \$4.20

Richmond-Charleston, W. Va. — \$13.29

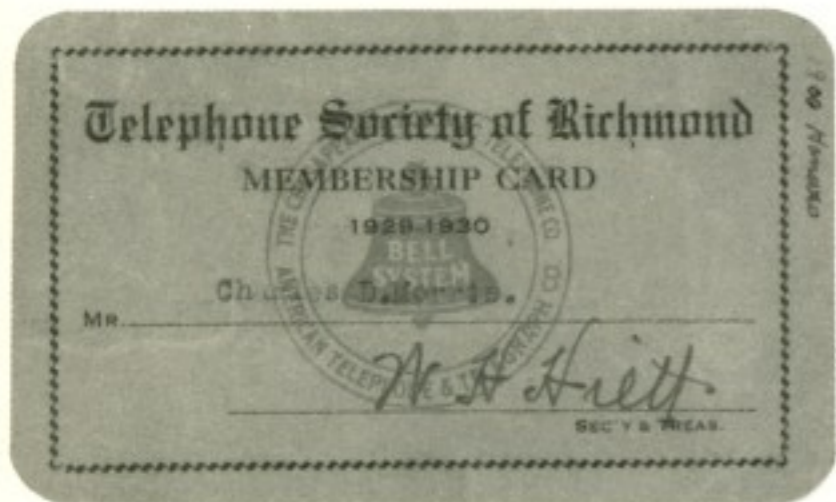
Richmond-Lynchburg, Va. — \$5.26

Richmond-Newport News, Va. — \$2.70

Hotel rates in Richmond averaged \$3.00, per day.

At the time, Robert M. ("Bob") Pew was in the transmission group, and his good memory and notes provide us with the costs of living in those days:

Labor relations in 1930 consisted of a union which was a non-dues group financed by the company. Monthly meetings were held with management and participants were hard pressed to find anything to talk about except lack of salary increases during the depression. There were a few social events in the District but everyone's pocket lacked funds for many activities.



Copy of C. D. Morris's union card — note no mention of dues. The company sponsored this union.

National events with wide public appeal in the Thirties involved Long Lines assistance to the radio networks on pickups. Some notable items included:

- (1) Launching of the S.S. *President Hoover* from Newport News, Va. in 1930.
- (2) First Apple Blossom Festival from Winchester in 1931.
- (3) President Hoover from Rapidan Lodge (a Presidential retreat) in 1931.
- (4) Yorktown Sesqui-Centennial 1931.
- (5) Lowell Thomas—1934.
- (6) Williamsburg Restoration—1934.
- (7) Eleanor Roosevelt—1934.

These were but a few. Long Lines, then as now, was called on for every high appeal presentation.

The year 1932 saw the nation elect Franklin Roosevelt to the first term of his unprecedented four terms in the White House. Everyone was hoping for relief from the gripping depression. Fortunately, in 1934, the sun started shining as progress was seen. For the telephone employee this meant an increase in work hours per week.

As the depression eased, telephone plant expansion and new technology started moving. Construction began on new cables. There were the Washington-Richmond-Greensboro "B" cables, which would utilize K1 carrier and enable twelve voice channels to be formed per quad. Some of the other facilities added in the Thirties included an open wire line between Fredericksburg and Charlottesville utilizing "C" carrier. This line ran through old Civil War battlefields in the wilderness. It was not unusual to unearth skeletons and old guns. Prior to 1928, Charlottesville had been served by open wires on the Washington-Lynchburg route with no electronic amplification. After the new building was constructed, these wires were terminated in the building and repeaters installed to improve quality of transmission. The repeaters used were 22 type (2 wire) and 44 type (4 wire), and these were combined with term sets and C carrier. Charlottesville also added a small amount of telegraph equipment at the same time.

In 1935, Doc Baver left for assignment in District 22 and was replaced as District Plant Superintendent by Earl Hagen, who was previously construction superintendent in New York, and later Division Superintendent in Denver and St. Louis.

Naturally, service starts and accomplishments have blended with some undesirable service failures. Some failures were man-made, some were caused by equipment, and some, heaven made. One embarrassing failure occurred when Walter Gifford, President of A. T. & T. in the mid-thirties, was addressing the American Bankers Association convention at White Sulphur Springs, W.Va. The Petersburg-Georgetown line which furnished service to this location was an open wire line running through heavily timbered mountains. A storm occurred during the convention. Trees fell through the lines and service was lost. President Gifford had to endure the remarks of bankers who were without phone service to their offices for several days.



A view of the Thirties automobiles before parking meters were invented.



Petersburg—Georgetown open wire line. Tress falling on lines produced an embarrassing moment for Walter Gifford when addressing the ABA in White Sulpher Springs, W.Va.

Testimonial dinner to Doc Bauer when transferred to District 22 in Washington. Banquet held at the Commonwealth Club in Richmond on Feb. 13, 1935.



There were also four major ice storms and two major floods that caused extensive failures during the Thirties.

All section men had vehicles except Corey Hiers at Pikesville, Kentucky. He had none simply because there were no roads passable along the Big Sandy River for at least nine months out of the year.

Some of the early district employees at Mr. Fitzpatrick's 40 year celebration.

Rear: Morris, Blackwell, Diedrich, Conner, McBride, Hilker, Callahan, Warwick, Pew, O'Neil, Roest, Spatz, Hagan, Bourdon, Noonan, Dalberg

Front: Miers, Neaves, Fitzpatrick, Hudson



Hiers used to clear troubles on the old Catlettsburg-Norton open wire line by taking a two-a-day C&O train to the station stop calculated to be nearest the trouble. Then, he would start walking . . . sometimes camping out for several days. He had numerous troublesome encounters with moonshiners, and squatters on coal company property.

The Norfolk, Virginia, office had a total force of eight people in 1932. Records show that in 1930 there were 25,377 local stations

making 1,283 toll calls per day. In 1938, Coastal Harbor Radio (Station WGB) went on the air, and this required all employees to acquire a Second Class commercial radio license in a period of slightly less than two weeks. This was extraordinary because the test in radio theory was very tough. In 1939, an historic occasion was the first visit ever to Norfolk by both the Atlantic and Pacific fleets. At the turn of the decade, the first 101 A TWX concentrator was installed. This preceded the community dial mechanism, and it was primarily for teletypewriter customers.

The Richmond testroom addition provided ample parking for any who could afford an automobile, and it was noted that it overflowed with vehicles during the showing at the Loew's Theatre two blocks away of the famous 1939 film, "Gone With The Wind."

As the Thirties came to an end, a madman in Germany, Adolph Hitler, was leading a movement that was to threaten the world. His forces and actions would later have a resounding impact on communications and the lives of millions of people.

Group picture of outside section men in Covington, Va. during the Thirties.



The 1940's: Demand Always Exceeded Supply ... And Then, Television!

At the start of the Forties the cloud in Europe was getting blacker, and Japan, the land of the rising sun, was making war preparations in the Orient. Hitler was rampaging countries friendly with the United States and fears grew that we would be pulled into the conflict.

When it happened, it was not from Hitler but from Japan – in a devastating attack on Pearl Harbor in Hawaii. Our Pacific Fleet was severely damaged and war was immediately declared against Japan, and soon after, against Germany.

This fighting war was to become known as World War II. It affected every family in one way or another. As far as Long Lines was concerned, problems were multiple and difficult.



This wallowing bulldozer illustrates some of the problems encountered when plowing in cables. Previously constructed lines were aerial.

The Norfolk Long Lines Office, at the outset of the war, consisted of a small portion of the second floor front at 120 W. Bute Street. The responsibility of Norfolk was cable testing to Virginia Beach, Newport News and Suffolk, plus openwire testing responsibility to North Carolina. Equipment used was 22 type repeaters, duplex tables, program amplifiers, and the like. Norfolk office had its first "Hire" in twelve years in December of 1940, and three more in the next three months. This boosted the force to twelve. C&P engineers had had foresight enough in 1939, upon observing Hitler's move in the Third Reich and the invasion of Austria, to have added a fourth floor to the Bute St. office and enlarge the available room by extending the third floor to York Street. This later proved invaluable when the boom in the need for circuits arrived. This project was completed in 1940.

Later in 1940, K carrier equipment was installed on the fourth floor. This equipment used the just-completed Richmond-Norfolk A&B cables, which were plowed in rather than strung on poles.

When war was declared all offices in the district were involved and had problems. There came an enormous buildup of military power in the Norfolk area. All personnel were called in immediately to wire circuits. Traffic increased beyond capacity, even with the additional facilities. A massive switchboard installation job was started promptly. Western Electric installers and operators were brought in from all parts of the country.

From a base of about 4,000 toll calls a day, toll traffic increased at a rate of 1,000 calls every month. In just two years peaks of 26,000 to 28,000 daily calls were reached. Simply stated, demand *always* exceeded supply. Many high quality voice circuits were split into two low quality circuits using EB carrier. More people, more circuits, more switchboards were needed. Improved models 14, 15, and 19 teleprinters were introduced.

With most able-bodied males being trained to fight overseas, Norfolk hired its first female clerk and then hired two females to work the frame, adjust relays and test ringers. Some Long Lines men were offered temporary deferments for essential service, but the mood at the time was to join the military forces, and most did. Some who joined the military were pressed into service doing the jobs they knew for Uncle Sam in the Signal Corps.

Perhaps the most heartwarming stories to come out of the war days at Norfolk were the services the operators provided to hundreds of servicemen. These operators came from all over the country, worked long hours, and tried desperately to place calls home for the boys who were on their way overseas. When time or circumstances prevented a boy from getting his call completed, these operators would volunteer to write a letter home for the lad explaining why they hadn't been heard from. With Hitler's submarines waiting in the Atlantic, this last communication was very important.



The Huntington, West Virginia long lines force.



These pictures depict the installation of the Washington-Richmond "C" Cable. The job became known as "Lehman's Canal," named after the project engineer.



Upon cessation of hostilities with Japan in 1945, a post-war boom was expected in business. Naturally, this would require new and expanded telephone service. One of the major contributions to satisfy this need was the introduction of the first coaxial cable. This cable was installed through Virginia. It was an eight-tube cable utilizing L1 carrier and extended from New York to Atlanta, with terminals in Philadelphia, Baltimore, Washington, Richmond, Greensboro and Charlotte. In Virginia it was known as the Washington-Richmond-Greensboro "C" cable. The Washington-Richmond portion was installed in the winter of 1946 in mud . . . unbelievable mud . . . and as a result it was known as Lehman's Canal. It was named after the project engineer. It was claimed that with a few short portages, a person could canoe the "C" cable line all the way from the Potomac to the James.

During World War II, Frank Sinatra, the Skinny Kid, had emerged



as an Idol to the younger set, and Glenn Miller's style of music was appealing to all age brackets until his untimely death. With the end of the war, the big interest was in rekindling romances that had been interrupted by four years of fighting. The resulting effect was known as "the baby boom." It caused a heavy demand for home construction and, yes, for even more telephone services. In 1943, Joe Beirne had become the first President of the NFTW (National Federation of Telephone Workers), which in 1947 became the CWA (Communications Workers of America). Local 2250 represented the Richmond District.

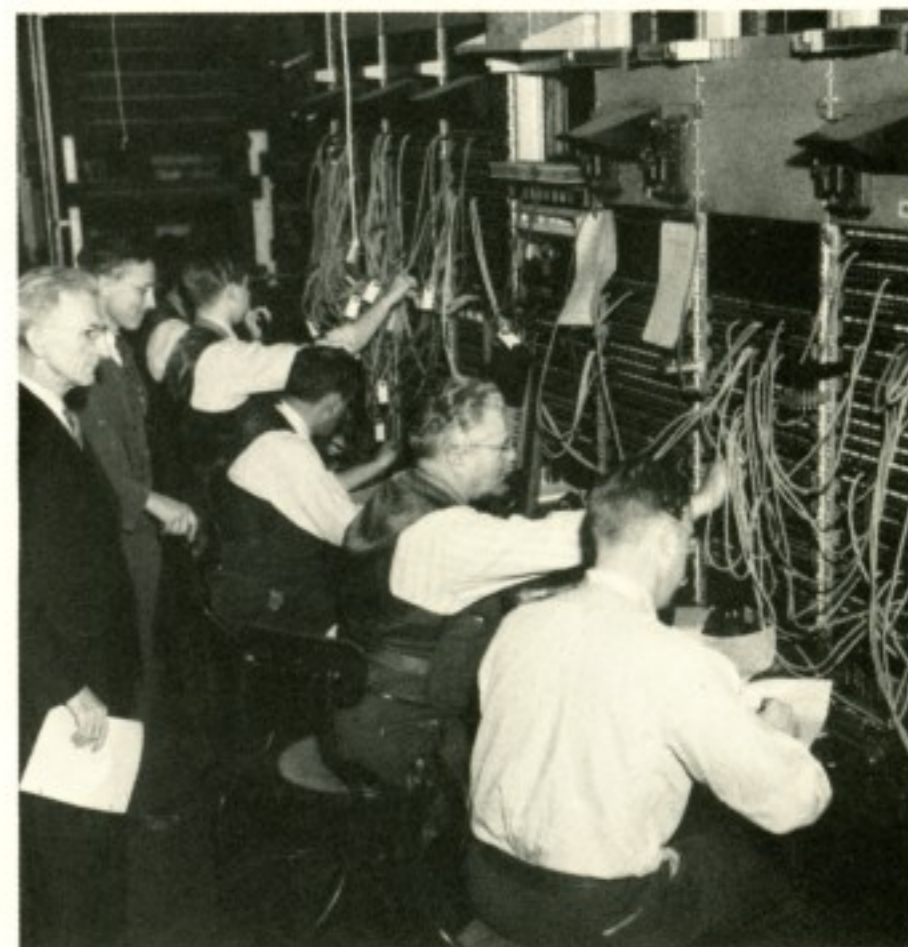
All of the districts grew greatly in the Forties. Lynchburg had growing pains and required a move to larger quarters. It moved to its present location in 1941, and its office force, similar to Richmond, started climbing upward from a low of eleven to twenty by 1949.

Glenn Ransom succeeded Earl Hagen as District Plant Superintendent in the early Forties and was himself succeeded by Harold West. Mr. West left the District in the late Forties, giving way to Mr. Claude Ballenger, the fifth District Plant Superintendent.

Other offices and routes experiencing changes included Fredericksburg, which required its first and only building addition, as well as the establishment of an outside maintenance force. Construction forces in the mid-Forties were re-transposing the Petersburg-Georgetown, Charleston-Bluefield, Roanoke-Petersburg Bristol routes. "Re-transposing" meant changing the position of the wires to cancel out voice interference commonly called "cross talk." This required several trips, retransposing 1-2 groups at a time to enable addition of 10-12 new "C" systems.

As in every decade, there were many unfortunate service impairments, two of the most notable being outages in the Charlottesville area causing total failure between Charlottesville and Fredericksburg for a short period. Another major failure was due to a severe ice storm in the Richmond-Petersburg area which caused total failure of the Richmond-Norfolk route for several days.

These pictures show the problems caused by ice storms during the "open wire" days.



Storm break in 1944 as seen from the inside of a testroom. Not all the problems were outside.

Two of the original district office force in a group photo in the mid-Forties — George Diedrich, standing second from left and Fred Bourdon, standing far right.

Others in picture are Bill Buckley, (standing far left), first chief at Lynchburg, Earl Crews, Ed Flint, (Seated): Harold West, Jimmy Howison, Pete Pratt and Dick Shoup.



As the Forties wound down, some new developments appeared which added excitement to the future. One was in 1948 in Richmond with the starting of the first television station in the South — Station WTVR, Channel 6. The new L1 carrier facility using Coax cable from Washington to Richmond was used to bring in the Network Programs. Also in 1948, Bell Labs was introducing the transistor, the key to modern electronics, which had just been invented in 1947. This would revolutionize telephone service in the coming years. In 1949 sites were being selected from Richmond to Norfolk for a planned Philco Radio System which would provide television transmission to be extended to the Tidewater area. With this the Forties closed.

1940 vintage photograph of district people. How many can you name?



Korea, Ike, Elvis ... and Frenzied Growth

As the Fifties entered, Long Lines was frantically attempting to expand services in many areas because of the tremendous post-war growth. But, the full peace that had come in 1945 was short lived. The North Koreans and Chinese Reds were preparing for hostilities. In 1950, South Korea was attacked. Again, the United States was in a war, even though it was at first called a "Police Action."

In 1952, W. A. McArtor became District Plant Superintendent, succeeding Claude Ballenger. Also, Former General Eisenhower, Supreme Commander of Allied Forces in Europe during World War II, was elected to the first of two terms as President of the United States. He would serve the country for the balance of the Fifties.

Installation of television facilities was heavy because of the demand for this new service. Expansion was everywhere. Three new TV stations were started in the Lynchburg-Roanoke area and in April of 1950,



service was extended to Norfolk over the Philco Radio System to station WTAR. This Philco Radio System was a real challenge to maintain and provided many, many hours of overtime for Long Liners. Later, in 1954, it was replaced with more reliable TD-2 microwave, greatly improving quality of service.

Some of the early shows enjoyed in this period were Milton Berle, Howdy Doody, Lucky Pup, Your Show of Shows, Your Hit Parade, The Honeymooners, and many more. Eddie Fisher, Patti Page, Giselle McKensie were popular singers, to name a few, but perhaps the most remembered will be Elvis "the Pelvis" Presley and "Hound Dog."

By the mid-Fifties, the construction of many new radio relay stations had begun. One of the first TD-2 Radio Routes was the



Old Cumberland-Parkersburg open wire line in Bridgeport, W. Va. around 1950.

Chivalry was not dead in the early fifties. Ray Call holds the door for Margie Browder, Alice Raver and Billie Merkel.



Clarksburg, W. Va. storeroom in 1952

Washington-Charlotte route. Stations involved were Haymarket, Clark Mountain, Heard Mountain, Tobacco Row, Smith Mountain, and Axton Lodge. Virg Ewing recalls the completion of path loss tests on this route in 1952. Other early TD-2 routes included Richmond-Baltimore, Aylett-Rocky Mount, Aylett-Petersburg 50.

Typical of problems where the K carrier cable ran parallel to U. S. Route 1 was this truck taking out a pole and resulting in a messy failure of the cable.



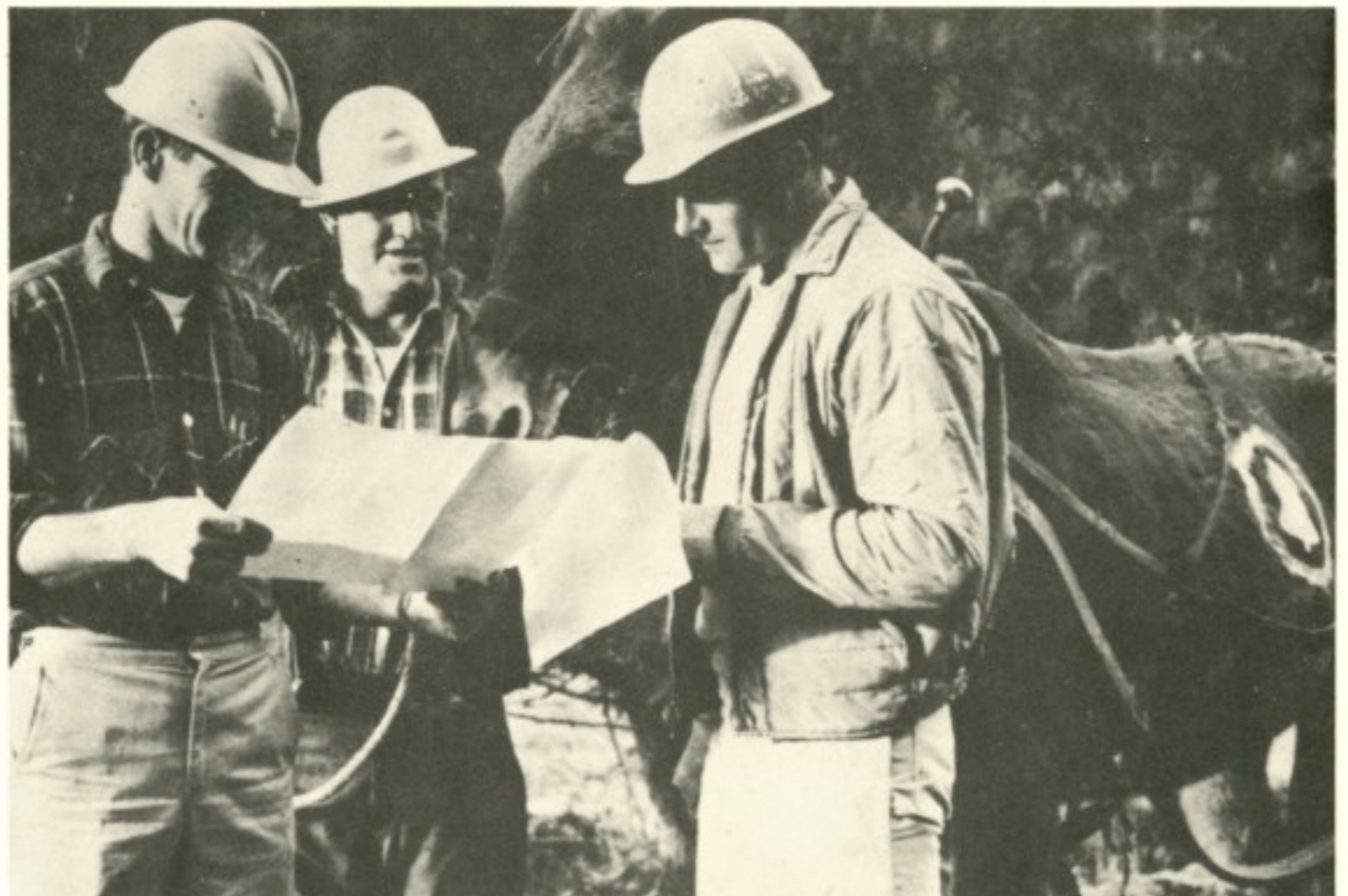
Cable damage to K carrier cable resulting from the truck which took out the pole on U. S. 1.



Radio was not the only facility growth going on in the District. The upper Strasburg, Pa.-Lynchburg aerial cable was placed in service in 1956, with Charlottesville and Warrenton 2 serving as repeater points. Warrenton 2 was a new TD-2 building, just completed. In 1958, both Charlottesville and Warrenton had building additions. Charlottesville became an outside maintenance center and Warrenton 2 became an attended location.

L1 carrier was slated to be replaced with L3 on the Washington-Richmond-Charlotte route, increasing capacity from 600 to 1800 circuits

Three Long Lines supervisors and a consultant reading a print in the field.





per pair of tubes. This was a tremendous project. It required that stations be built between every existing building, with the new spacing just two-and-one-half miles apart. The original spacing was five miles. When this work was completed, new maintenance centers were established at Fredericksburg and McKenney to provide faster coverage and more efficient maintenance.

"N" and "ON" carrier was added to the "K" cable from Washington to Richmond and Long Lines assumed maintenance responsibility of the Richmond-Newport News "N" and "ON" route formerly maintained by C&P. Also related to "N" additions was the "A" cable installed between Charlottesville and Staunton.

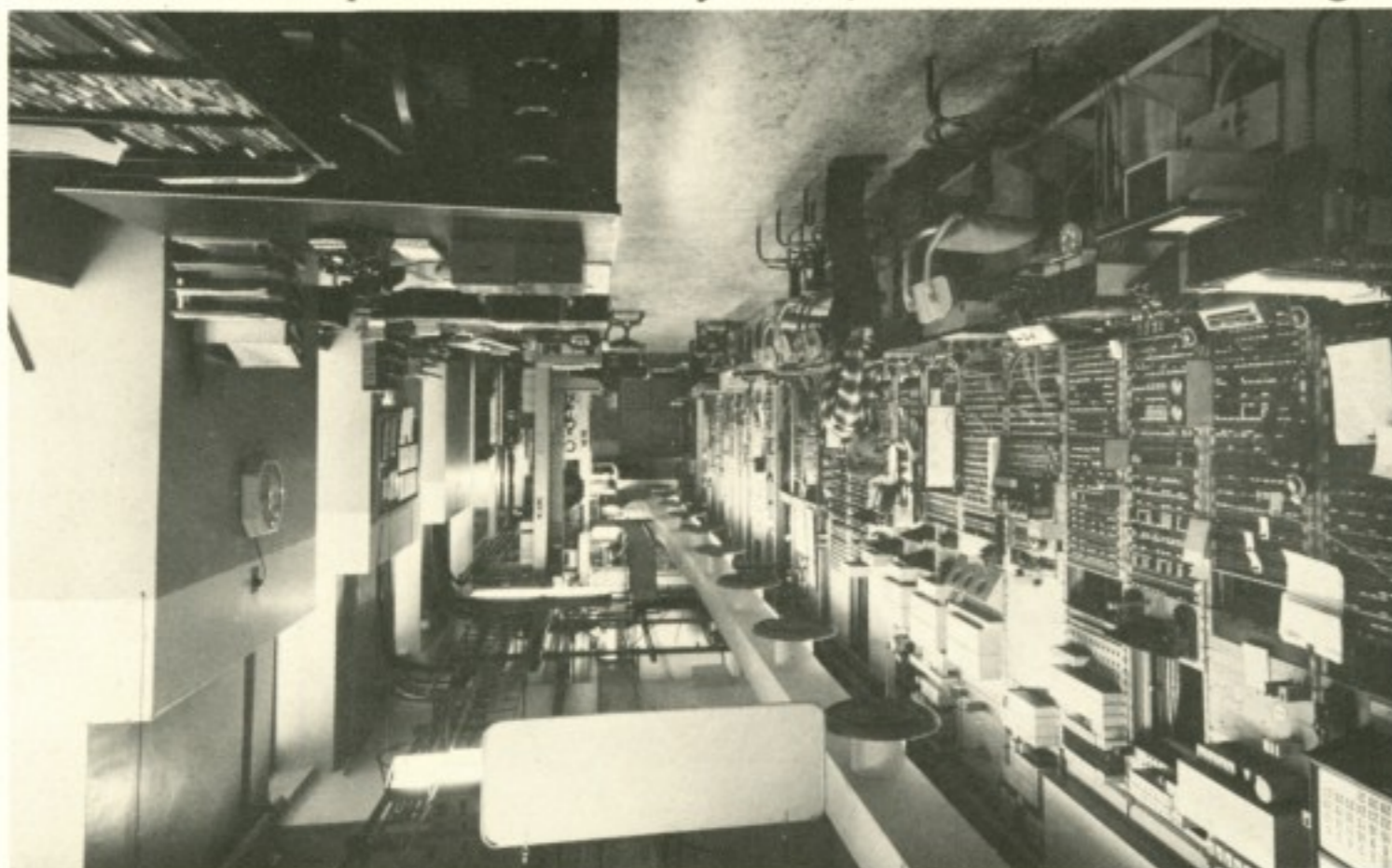
There was also a need for greater switching capacity. The 4A switching machine at 703 E. Grace St. in Richmond was scheduled in 1954 to replace the existing step-by-step system. George Diedrich of the original force was named coordinator of the cutover. His regular duties were delegated to Eddie Wendt, who directed service until the cutover was completed. In the early Fifties, Richmond started hiring

Richmond Central Office and District Office personnel in the early Fifties.



Lynchburg Central Office in the Fifties.

Inside the Lynchburg Central Office show's Wallace Kabler carrying the load.



Tobacco Row Mountain radio relay station in the late Fifties.



Haymarket microwave station – Also known as Garden City RIS which is on the Washington-Charlotte TV route, the first through Virginia.



large numbers of men in both of the Chief's groups. They were trained in the wiring, maintenance and operation of the 17-C testboard and related circuits. Western Electric also had what seemed to be a regiment in the building and installing equipment. No one who was in the building at the time will ever forget the electrical fire on the cable rack above Mr. Diedrich's desk. It started when an installer accidentally penetrated an armored power cable while trying to install a fiber insulation device under the cable. Thirteen CO2 extinguishers were used. They didn't faze the fire. Finally, all of the fuses in the basement blew out. This cut off the power and the fire burned out. The damage was repaired and the cutover went as scheduled.

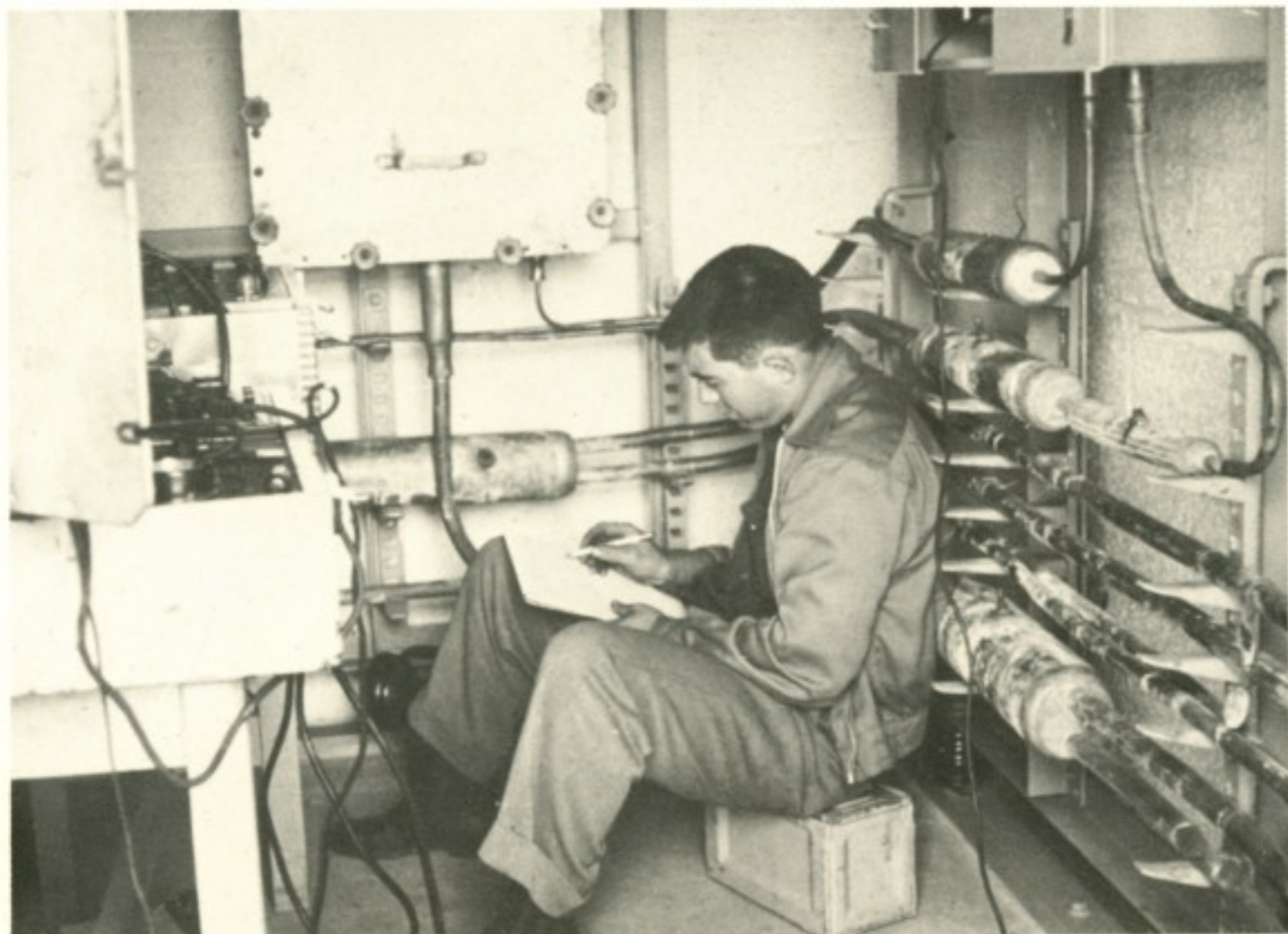
Private Line service also continued to grow steadily during the Fifties. An elaborate 81 D1 teletype switch system was installed for the



Charlottesville Office after 1958 building addition.

Warrenton #2 after 1958 building addition





Craftsman Bob Schwier working in L station. Ingenuity in finding comfort has always been characteristic of telephone people.

Federal Reserve Bank System in Richmond, and an 82-B1 system for the U. S. Navy in Norfolk. Air Defense of the United States had a high priority in the mid-Fifties and the Air Force initiated at Fort Lee, Va. a SAGE (semi-automatic ground environment) defense system. This consisted of an Air Force-maintained computer with Long Lines providing the data communications services and necessary air-ground switching equipment. In Fort Lee's prime, there was a Chief, three Supervisors and about twenty-five other employees working directly with the Air Force.

With the end of the Korean "police action" more attention was focused on peace-time growth. Toward the end of the Fifties, Long Lines installation activity was still trying to keep ahead of the big demand.



This is the proper way to guy a pole in West Virginia.

The By-Words Were, "Condition Blue"

Projects planned in the preceding decade were surging ahead as the Richmond District faced the Sixties. Demands for service dictated more efficient facilities and the challenge to provide them was accepted by Long Lines.

In 1960, John Kennedy was elected President and immediately got involved in situations in Cuba – first the Bay of Pigs and then the sensitive Cuban missile crisis. Telephone people will remember well their nervous feelings as they observed teletype news reports of the danger of direct confrontation with Russia at sea. The build-up of Armed Forces in Florida and the Virginia Tidewater area resulted in overnight requirements for hundreds of circuits. The crisis was so acute that message circuits were converted to Government use on verbal orders alone from circuit layout engineers. Circuits were installed in two days from Langley, Virginia to Florida, that ordinarily would have required three to six months. Local forces in Hampton-Newport News area worked around the clock for days installing terminal equipment for the military's use. The tone was set for the Sixties; "Survivability" was engineered into future installations to survive hurricanes, or nuclear attacks.

Rapid growth and expansion of facilities continued and new maintenance locations for radio relay station were established at Roanoke, Danville, Charlottesville and Fredericksburg, to mention a few. Lynchburg had a work force of approximately 45 taking care of the various routes in the western part of the state. Other locations also reached peak growth in the Sixties, such as Fredericksburg, which carried a Chief, one supervisor and 13 craft.

Warrenton #2 named John Vovakes as its first Chief in 1961 with a supervisor and several craft reporting to him.

1964 picture of the Warrenton #2 maintenance force.



Meanwhile, Norfolk was busy preparing for cutting over to direct distance dialing in October of 1961. Expansion continued with the demolition of an adjacent residence in 1969. This made way for the doubling in size of the Bute St. building. "L" and "R" carrier, which was fitted with TD automatic switching, was installed along with LMX equipment. Miniaturized equipment was installed that used floor space much more efficiently. But even then, more space was needed. Demolition was started on the Virginia National Bank to make way for another addition to the existing building.

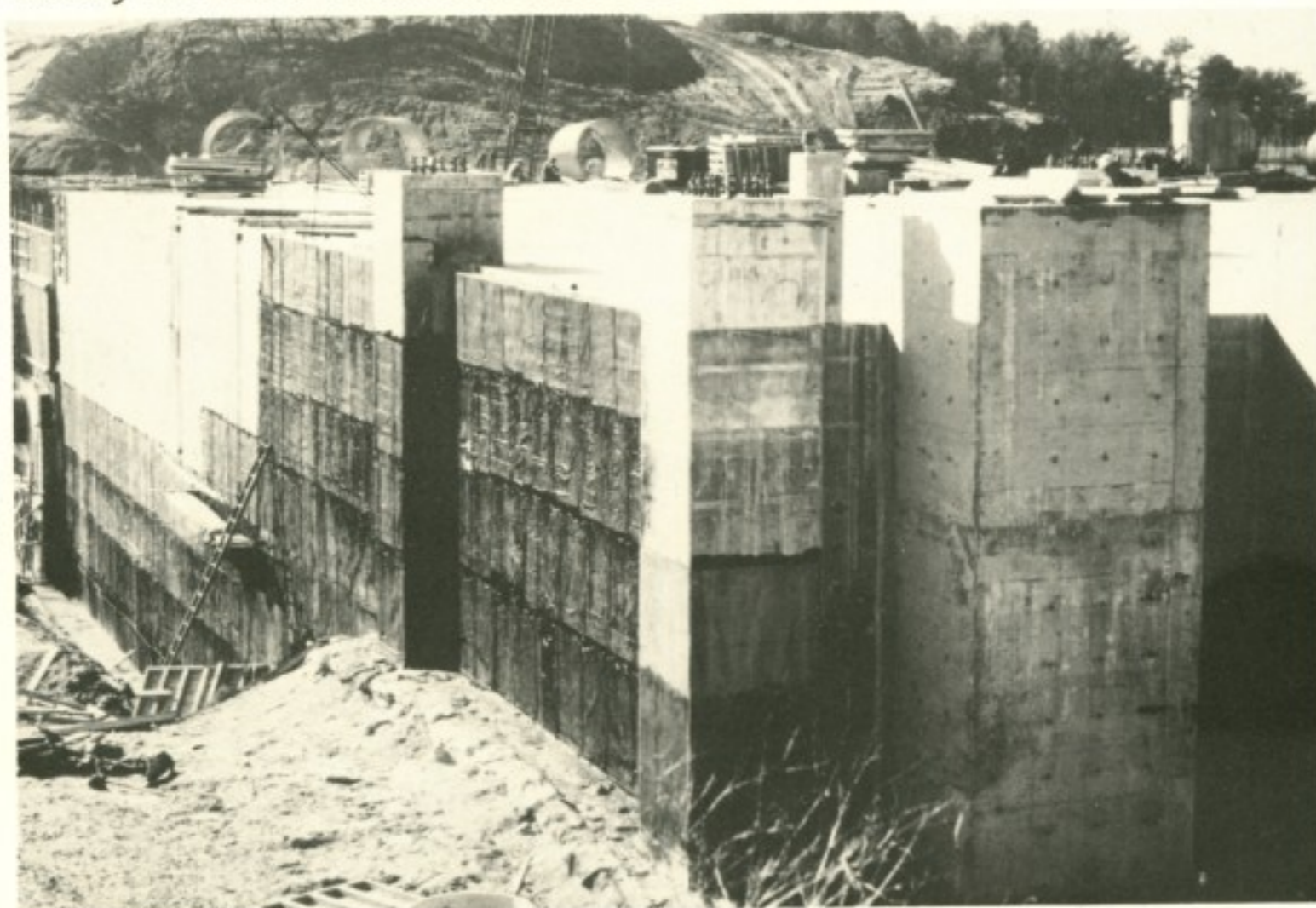
In August 1963, Wheeling, W. Va. was added to the Richmond District. It has previously reported to the Pittsburgh District. This office originated in 1927 and had bounced around from one district to another so many times it got to be funny.

President Kennedy was assassinated in Dallas on November 22, 1963, and two days later the entire nation witnessed, on live television, Jack Ruby murder Lee Oswald. Vice President Johnson assumed the Presidency and later in 1964 was elected for one term.

Network demands for coverage of events steadily grew and "Condition Blue" became a household word in Long Lines. During the broadcasting of historic events, Condition Blue prohibited any work on high capacity cables that might interfere with the transmission of the event. Speaking of network demands, one should not forget that the Space Age began in the Sixties. Cape Kennedy was the place from which the satellites were launched. Later came the moon visits. Circuits and television pickups were needed more often as space shots increased.

By 1964, building expansion was needed again in Charlottesville to house the TL/TM microwave system, LMX-2, and N3 carrier equipment that was to be installed. Warrenton #2 had the same type building needs for additional radio relay routes.

Across the border in West Virginia, a new transcontinental cable with L3 carrier equipment was going in to service early in the Sixties. The Monrovia-Williamstown route ran through the mountains of West Virginia with main repeater manned locations at Mt. Storm and Pennsboro. This cable was engineered with maximum survivability features employed. Next came an even higher capacity facility, the L4 carrier, twenty tube coaxial cable from Boston to Miami.



L4 cable being laid on the Moseley-Stanfield section of the Boston-Miami route.

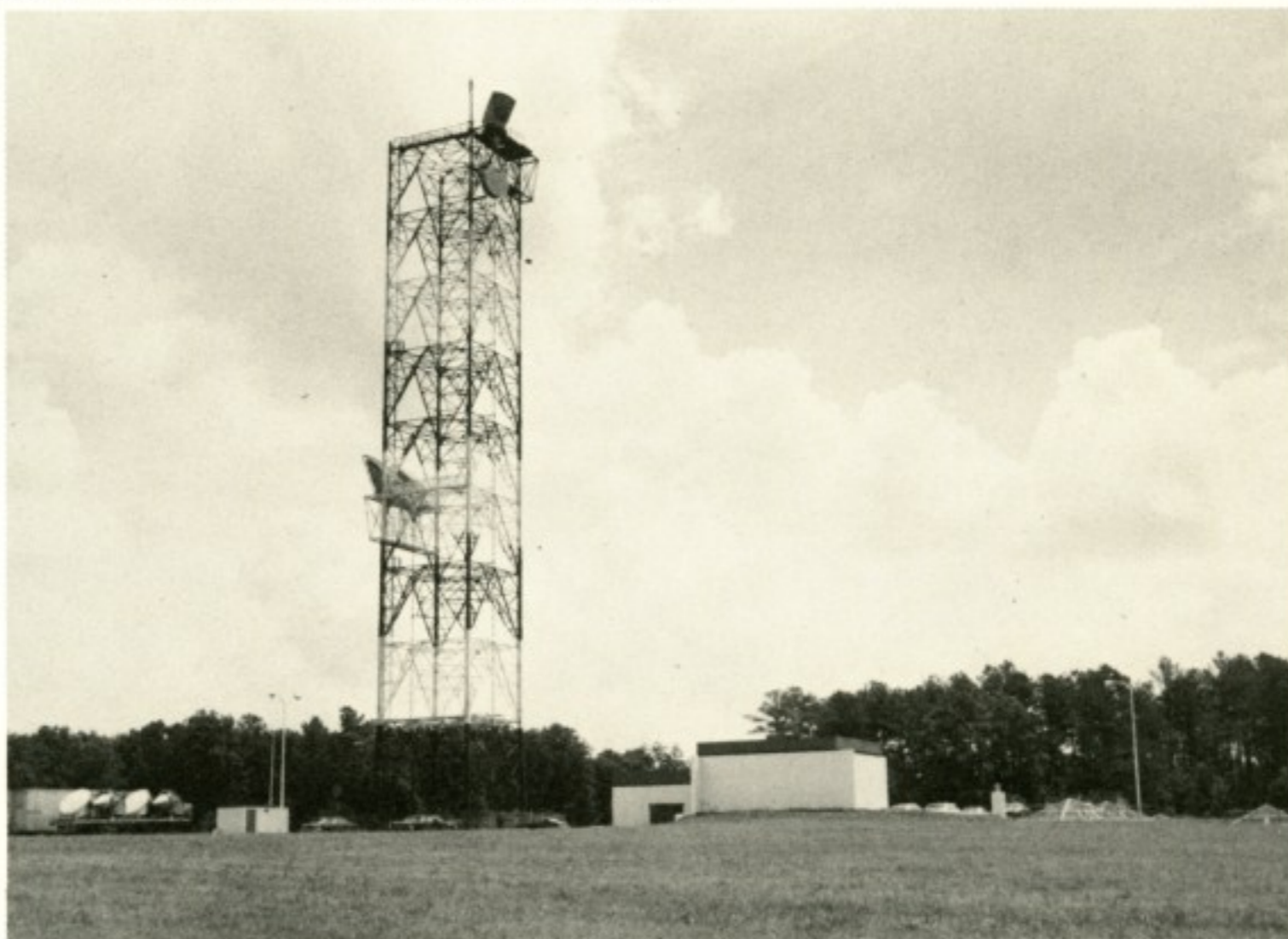


Laying the transcontinental cable through West Virginia on the Monrovia-Williamstown route.

Moseley Central Office under construction in excavated area of Chesterfield county site. After completion, the installation was covered with dirt seen in background.

It ran through Virginia from a point just west of Washington, D. C., southward to North Carolina, just east of Danville, Virginia. Dranesville (north) and Moseley (south) were major offices created by this new route. Dranesville would later split-off to be the nucleus of a newly formed district. This was a "hardened" cable route using underground buildings of reinforced concrete for both its repeater and main locations, like the ones at Moseley and Dranesville.

Moseley Central Office. Building on right shows ground garage and entrance. Small white building on left is emergency exit. The two-story building is constructed below this area with the parking lot covering the entire structure. Tower on end is for TH radio transmission to Oilville and Aylett. Also, there is transmission to Danville on TM radio for Associated company.



1969 demolition of the old Virginia National Bank in Norfolk, making way for addition to the Bute Street office.

The survival features included ability to withstand a twenty megaton blast, one half mile from center. Fortunately, it hasn't been tested.

Service started at the Moseley Site and Dranesville in 1967. They are self-sustaining buildings complete with power, water, and sewerage and can operate many weeks without employees leaving premises. There is a supporting body of water outside the Moseley office known affectionately as "Lake Elmore," in honor of its former Chief. In 1968, the TH1 radio relay route was added from Moseley to Aylett and in 1969 the first ESS (Electronic Switching System) machine in the District was installed for service at Moseley to begin in 1970. This was a four-wire #1 machine and would be used for AUTOVON, an all-military network.

Richmond Special Services Group in 703 E. Grace Street became involved in providing a bulk-rate concept for private customers called TELPAK, which caused many circuit re-arrangements. There was a considerable increase in private line boards and the introduction of a new testboard called SMAS-1 (Switched Maintenance Access System). Richmond Telegraph started using a DOTC (Data Observing and Testing Console) Board at about the same time Richmond Special was joining the FTS Network.

Two major services interruptions were recorded during the Sixties. One was the fire at Fredericksburg-KS. The other was a major flood. Hurricane Camille swept through Virginia in 1969. Torrential rains devastated Nelson County. Records show at least 25 inches of rain fell at Massies Mill in just three hours. The massive floods and mud slides were responsible for death (132 died, many never found) and destruction which staggered the imagination. Homes, roads, bridges, and human lives were buried in tides of mud.



These pictures show damage done by Hurricane Camille in Nelson County. The flood and mud slides resulted in damage to 5 sections of the Upper Strasburg-Lynchburg Cable.



The Upper Strasburg-Lynchburg cable was cut in five places over a thirty mile span. Some of the cable was never found. A State monument was erected later at Woods Mill in Nelson County to recall the event. It was referred to as "The 100 Years Rain." Long Lines forces went to work, first restoring service with patches on "N" and radio systems. With the aid of two helicopters, they started installing temporary sections of replacement cables. All employees working in the area were inoculated against typhoid fever. Within forty-eight hours, the first service was restored on the damaged cable.

The fire came shortly after the retirement of Bill McArtor, District Plant Superintendent for thirteen years. Mr. McArtor was replaced by Hank Ryan, who was baptized early with the fire. The entire north cable route was put out of business. It was a massive restoration job, with an all-out effort by dozens of people. Together with Mr. Ryan, they helped restore service in less than one day. Hank Ryan left in the late 60's, being replaced by Bill Van Dorn and a new title, "District Operations Manager."

One of the most hilarious Safety Events in the District was the Safety dinner and show put on by the Richmond people. Could anyone

One of the most enjoyable and memorable events of the Sixties was the Family Safety Presentation and comedy skits performed by the Richmond District employees in a church basement. Those who admit identification include Virg Ewing, Charlie Elmore, Bobby Joyce, Ivan Shimp, Mrs. Ewing. Not sure of the others but everyone who was there had a ball.



forget the "Cousins?" It was one of those memorable events where, as they say, "You had to be there." If you weren't the picture tells a bit of the story.

Safety in the Sixties was, as in every decade, one of the most important products. During this time the Safety Center idea emerged,

which every area office adopted. In each center was collected everything pertaining to safety, current and past, that could be conceived. Items such as first aid kits, goggles, safety glasses, safety tickets, snake bite kits, books, safety cones, helmets, medical history records, pictures, and much more. The idea mushroomed. Some offices, such as Moseley, established a center on each floor. Some of these centers were mounted on wheels to make them even more convenient.

Richmond District had experienced such growth in the Sixties that it required a split in responsibility. The West Virginia portion was removed in 1966, resulting in a new Charleston District, taking Wheeling with it. (Bounced again!) Total force in the Richmond District after the split was 300 plus.

The late Sixties saw another "police action." This time in Viet Nam. There was also radical opposition to government policies, college riots, political assassinations, Nixon elected President, the Beatles, Rolling Stones, miniskirts – and everywhere the growth of Telephone service.

The concept of Territorial Route Maintenance was introduced in 1968. All outside maintenance work was divided into three groups: Lynchburg, covering the Western portion; Northern Maintenance Territory (NMT) located at Warrenton, covering the Northern portion, and the newly formed Southern Maintenance Territory (SMT), covering the Southern and Eastern portion of the State.

Space shots and preparations for a moon shot continued throughout the Sixties and culminated on July 20, 1969, with the successful landing of Apollo XI. America had beaten Russia to the Moon as the Sixties drew to a close.



Supervisor John Sedivy at the Moseley Safety Center on upper level. Identical center also located on lower level.

Richmond District Office and central office locations personnel before the West Virginia split off and during the time Hank Ryan was District Plant Superintendent. Hank Ryan is standing on far left.



"Using Equipment to Its Fullest Potential..."

The Seventies entered on a wave of prosperity. Everything was soaring upward; space shots, wages, prices and the need for more telephone service. Even Superman was revived.

One of our first significant telephone events in this decade was the placing of the 4-wire #1 ESS machine in service at Moseley on April 5, 1970. Seventy switchers were now in the Autovon network in the United States, and Moseley became the busiest ESS machine, handling record traffic loads from the start with busy hour traffic calls in the 20,000 plus bracket. However, a switcher is of no use without circuits to switch, and Moseley had its problems one day after it opened when, on April 6, 1970, lightning struck the L4 cable south of Moseley resulting in the first major facility failure in Moseley's brief history.

Eras pass, and one of these was the passing of the "open wire." Collectors of the colorful insulators used on these poles have saved many a fond memory. An innovative supervisor in Richmond, named Atwell Power, made some unique lamps using wood from the old square poles for a base and collectable glass insulators for the top portion. Another era which was to pass was the retirement of the old faithful "K" carrier. The Washington-Richmond pole line, the B cables and buildings including the Fredericksburg office, were sold to the Associated Co.

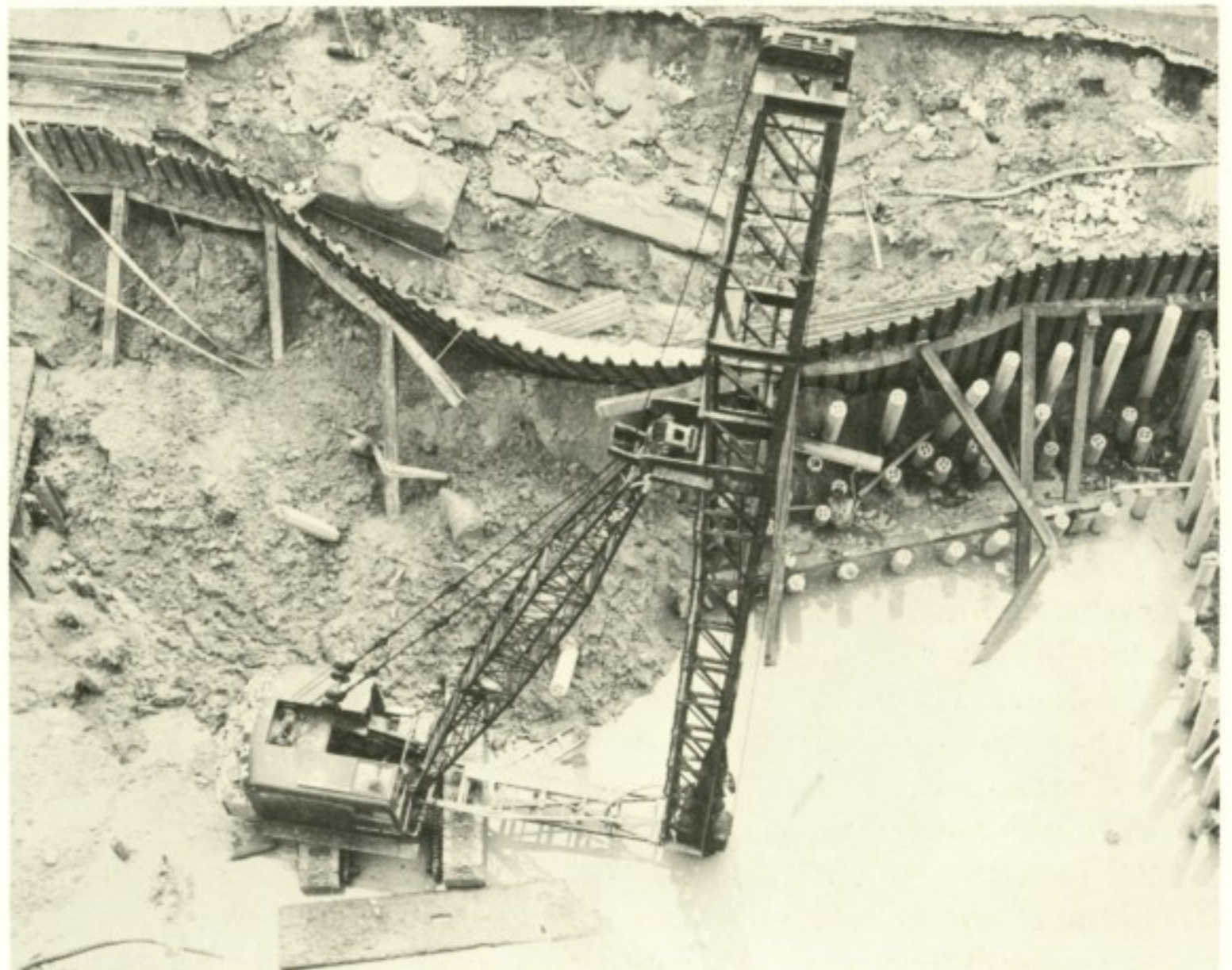
The A Cable was retired and dismantled. Then came the dismantling of the Richmond-Greensboro A & B, Richmond-Norfolk A & B, and the Richmond-Lynchburg-Roanoke A & B Cables.

The theme of the Seventies has been in the provision of high capacity facilities, using equipment to its fullest potential. In line with this, Norfolk erected a new nine-story building allowing, among other



Bute Street building under construction after earlier problem with cave-in of foundation.

During the construction of the new nine-story building at Bute St. in Norfolk, the builders experienced this cave in as viewed from above. They soon were able to recover and complete the building.



things, the introduction of L4 carrier, with a twelve tube route into Moseley. After a minor cave-in, the building was successfully completed.

Other changes in the Seventies included a stronger Affirmative Action Program and Equal Employment opportunities. In 1971, the first female technician officially began working in Richmond. (Story and picture in Easterner) More minority technicians and staff assistant positions were made available.

AT&T Long Lines
Vol. VII No. 6
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Easterner

Ellie is Area's first female craftsman

Ellie is a craftsman in the Richmond Central Office.

She is the first woman craftsman in the Eastern Area and took the job for two reasons:

"I don't want to be a man," she said. "I just want to use my intelligence and ability and I wanted a better paying job."

"Traditionally, craft jobs have been filled by men," said Ed Bradley, personnel supervisor. "But we offered Ellie a craftsman's job for several reasons. Times are changing and we are changing with them. If a person is qualified to do a job, we will hire him, or her. We looked at Ellie's qualifications very closely and we are convinced she can



Ellie will be working on the frame in the Richmond Central Office as her first assignment as a craftsman.

do the job and is willing to do the job."

Roy Woodroof, Ellie's husband, is also a craftsman. He and his wife will be working on the sixth floor in the Richmond Central Office but will be in different groups. Ellie is starting out on the frame.

"I am glad for her and really proud of her," said Roy. "I was afraid she wouldn't be offered the job. I thought the odds were stacked against her and I hoped she wasn't heading for a let-down when she took the craft test. She will have to work hard to prove herself, but this is one of her traits—she works hard at anything she does."

Ellie had been a reports clerk in the Richmond district office for three years.

"I came to work when our son was two. I was tired of staying home and talking with my neighbors about the children and what type of detergent I used," she said.

"But after three years on the job I was getting bored with it and I felt



District restoration trailer with flags and supervisors Frank Hall, Virg Ewing and Buddy Lowe.



Another prime change was the emphasis placed on devising more rapid actual facility repairs. The Richmond District group accepted this challenge by forming what became known as "The Flying Squad" (see photographs). This group has a "Restoration Trailer," spare L4 repeater equipment, just like in manholes, patch cords, test equipment and mobile radio. The group also has its own unique insignia worn on outer clothing. They also have their own flag in white, blue and gold. "The Flying Squad" concept is vital in that it is the only way to make some services good.

Storm damage was, as usual, a major problem. Hurricane Agnes struck Northern Virginia in June, 1972, and more than three-hundred feet of the Dranesville-Moseley L4 cable was washed out of its protective earth trench near Dulles Airport. The cable was pounded



Inside the restoration trailer are supervisors Buddy Lowe and Frank Hall.

on rocks by the rushing waters and the entire 36,000 circuit capacity was brought to a dead halt, making it the worst facility loss in the District's history. Outside forces performed their usual spectacular work and restored service with patch cords until permanent repairs were made.

Agnes not only caused trouble to the L4 carrier but wrought destruction through Virginia, Maryland, Pennsylvania, New Jersey and New York. From the telephone service standpoint, this storm probably caused more damage than any natural disaster in the United States.

Flood and damage caused by Hurricane Agnes in 1972 near Dulles Airport. Long Lines forces from the Richmond District are shown in the restoration process.



Throughout the early Seventies the Government was rocked time and again by scandal. All these events were covered by the media, and directly and indirectly involved telephone people with the TV pickups and news media lines.

By the middle Seventies, other significant District events included the installation of CTMS (carrier transmission measuring system) in Richmond. This system enabled remote testing of carrier in distant offices without assistance. Private Line service, of which data constituted the largest percentage, was increasing rapidly. This growth would reach two-hundred and fifty percent later in the Seventies. The use of business computers by customers required provision of data transmission facilities to allow up to 50,000 bits per second of information to be sent. Adaptations have been made to CPE (Customer Provided Equipment) and OCC (Other Common Carrier) and many vendors of equipment in a rapidly changing regulatory and competitive environment.

Another major accomplishment involving Virginia was the successful cutover in 1973 into a two area code number system. Formerly all of Virginia's area code was 703. But with the enormous growth in phone requirements it was decided to make a split. The northern and western portions of state remained 703, while the southern and eastern portions became 804. A tremendous amount of work was involved in Richmond since it's 4A machine was selected to serve as principal city and sectioned center for both codes. Not only did this affect Richmond, but virtually every switcher in the nation. This cutover was one of the largest ever attempted in the Bell System, and it proved successful.

One of the original District office force was George Diedrich. He

served for years as chief testboard man. He was transferred from the Richmond Central Office back to the District Office, where he remained until retirement. The Seventies also saw new District Operation Managers, first Jan Pottervield, then Elmer Smither, followed by David Quinn, who left in May of 1979 for Bedminster, N.J.

The year 1979 found Long Lines leasing space in the building at Fredericksburg previously sold to C&P in 1974 for use as a maintenance work center. Sharing part of the building are the Telephone Pioneers, who occupy space in the basement.

In the summer of 1976, things looked bleak in the SAGE center at Fort Lee, Va. There was a major fire in the Command Center of the 20th NORAD Region Headquarters and massive damage was done to the Air Force and C&P Telco equipment. The Air Force had to transfer operational duties to other centers while they, Long Lines and C&P worked to clean up and reinstall equipment. Long Lines was able to provide long haul service throughout this period. The Air Force and C&P were able to reestablish total control of operations in less than two weeks. Many observers of the initial damage never envisioned re-establishment at all, much less in two weeks. This type of cooperation has been typical in providing service to the military forces in the Richmond District.

Jimmy Carter, former peanut farmer, won election for President over Gerald Ford in a close election in the fall of 1976.

One event the Richmond District participated in was the "Great Debate," between candidates Carter and Gerald Ford. This effort involved the establishment of a multitude of various voice and teletype circuits, as well as seven different TV and audio feeds in and out of Williamsburg, where no broadband facilities of any type existed. No starts of any nature were missed and a TV network was developed and established which provided fully protected service within the C&P Companies division.

Among other things happening in the Seventies around the District, was the start of service of the 4A machine at Norfolk, operated by C&P Telco with associated 17-C board maintained by Long Lines. Speaking of machines, service demands on the Moseley ESS machine had resulted in a major AV 5 retrofit, performed in 1974. The retrofit expanded ESS capacity. Later, in 1979, AV5, an Issue 3 retrofit was required.

As the Seventies wore down, several other events of significance occurred. In 1978, the District Office moved to 2510 Turner Road into an office adjacent to the new #4ESS machine. Long lines forces got it ready for cutover to the message network in May of 1979. The Richmond #2, as Turner Road is known, was cutover to the Richmond Moseley L4 cable in February of 1978.

And, the end of the decade found "Cutover Charlie" Elmore involved in still another one. This time, on April 9, the Richmond #2 4ESS machine cut into the message network on a limited basis. The major cutover was on May 5, 1979, with news media coverage and an open-house on May 7. Norfolk was preparing its plans and has started training its people for a 4ESS machine with network service due in 1981.

Change continued constant. Prices were still inflating as the Seventies approached the 1980's. Gasoline had been twenty-five cents a gallon in 1970; in 1979 it cost at least three times more, or a three hundred percent increase.



View of Fredericksburg Office in the Seventies. One of the original buildings in existence in 1929 when the district was formed. Currently used as base for outside maintenance forces and also as an office for the Telephone Pioneers.



View of the Warrenton #2 office as it appears today. It is headquarters for the Northern Maintenance Territory forces.



This barge was constructed in the fog by Long Lines forces during cable break of the Rappahanock which was caused by a commercial barge mashing the cable. The homemade rig was christened "SS Long Lines #2"

In May, 1979, the Richmond District area of responsibility included twelve central offices with operations managers at Lynchburg, Moseley, Norfolk #1 and #4, Richmond Message and Facility, Richmond Special Services, and Richmond #2 at Turner Road. The Northern Maintenance Territory operations manager was located at Warrenton #2, and the Southern Maintenance Territory operations manager was located in the Richmond Central Office. The District had forty-five microwave stations, three L-3 main repeaters, 351 L3/L4/L5 auxiliary repeaters, thirty-one N Carrier repeaters, 684 sheath miles of coaxial cable, 162 miles of aerial cable and fifty-five motor vehicles. In addition, there were 11,500 controlled message circuits, interstate and intra-state, as well as 15,114 private line telephone, telegraph, voice-grade data, wide band data circuits, both interstate and intra-state, which were controlled by STC (Serving Test Centers) in District central offices. The total force consisted of 306 people.

The whole telephone industry was at a point in the history of the business at the end of the Seventies which was crucial. Only the invention of the telephone itself rivaled the importance of the inventions and decisions being made as the Eighties approached.

We stood on the brink of unparalleled opportunity for our people and our technology, and yet social, economic and political change was eating away the foundations of our industrial structure.

Almost certainly, the 1980's will see greater competition, both in the number and the size of competitive firms. Customers will be able to "be choosy", but also able to select from a wider array of products and services.

We can look forward, however, to our Company aggressively building and maintaining its leadership position in the industry with new technology, new marketing skills and a renewal of commitment to service to our customers.

Long Lines and the Richmond District face many challenges in the Eighties, and the Richmond District is confident it can face and meet them all. May the years ahead be as fruitful and memorable as the first fifty years have been for the people and telephone industry in the Richmond District.



Hopefully the person who left his helmet or anyone in the district hasn't been left out of the history covered so far.