# THE WHITE ALICE NETWORK



Built for
the Defense of Our Nation
under the supervision of
Western Electric Company

#### Western Electric Company

.NCOPPORATED

DEFENSE PROJECTS DIVISION 220 Church Street, New York 13, N.Y.

O.W. KAMMERER MANAGER, PROJECT 717 WORTH 4-5400

June 16, 1958

Mr. Gustave O. Ekstedt 614A N. 32nd Street East St. Louis, Illinois

Dear Mr. Ekstedt:

The White Alice Network, toward which you contributed your work and skill, was formally accepted by the United States Air Force on March 26, 1958, and placed in full operation over all its routes.

While only a few of the more than 800 Bell System people responsible for so much of White Alice could be present at Elmendorf Air Force Base, Alaska, I know that every man and woman associated with the project has taken a deep personal interest in its successful completion. It should be a source of inner satisfaction to all of us that the benefits of the network are already being realized in greater security for the United States, and in better communication for the people of Alaska.

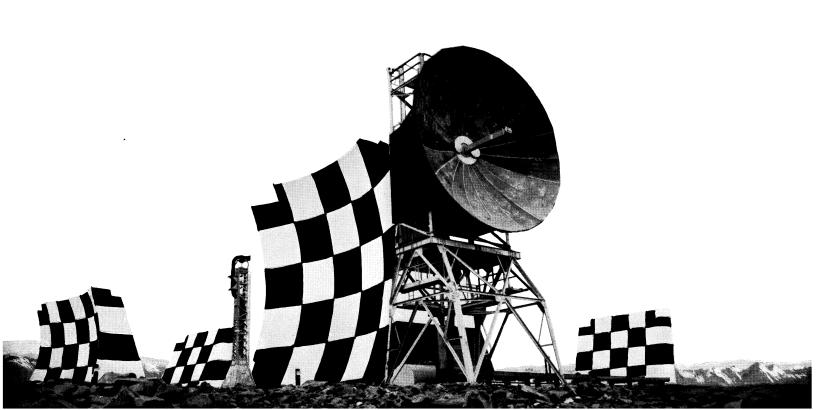
White Alice has been a chapter in our lives that few of us will casually dismiss. For many there have been personal sacrifices and hardship. For all there has been the experience of helping to forge a new frontier in communications.

This booklet has been prepared as a memento, to bring together through words and pictures the story which, in a very real sense, you helped write. I hope it will serve also as a small symbol of the Bell System's appreciation for your share in a remarkable achievement.

To this I would like to add my personal thanks for your generous effort and cooperation, during all the time you were associated with the project. I think that spirit, more than anything, was responsible for White Alice.

Sincerely,

# THE WHITE ALICE NETWORK



#### DEPARTMENT OF THE AIR FORCE WASHINGTON

OFFICE OF THE SECRETARY

March 26, 1958

The completion of the White Alice Network is a significant event for the defense of the United States and the development of Alaska.

Swift and reliable communication is essential in fulfilling the mission of the United States Air Force to protect our country in the event of attack from any corner of the globe. With the accomplishment of the White Alice project, communication is now assured across the sternest regions ever challenged by the telephone and telegraph.

It is most gratifying that this achievement couples an important step toward our national security with a major stride in Alaska's progress. In serving simultaneously the people of the Territory, White Alice may well make an historic contribution to its settlement and growth.

The United States Government fully recognizes the hardships under which the network was built, and the courage and perseverance of those who built it. I extend hearty congratulations to all who will use its facilities, and to the many companies and the thousands of Americans who have had a part in creating the White Alice Network.

JAMES H. DOUGLAS

Secretary of the Air Force



# HEADQUARTERS ALASKAN AIR COMMAND OFFICE OF THE COMMANDER UNITED STATES AIR FORCE APO 942, SEATTLE, WASHINGTON

ICSA 6 MAR 1958

Mr. O. W. Kammerer Project Manager, White Alice Western Electric Company 220 Church Street New York 13, New York

Dear Mr. Kammerer:

On 24 February 1958, I was notified that the last station of the White Alice System had been completed and commissioned for service. Since this notification we have not been out of contact with any of our operational stations for the first time in Alaskan Air Command history. This to me, as well as to my commanders, is considered to be so outstanding that I am making this opportunity to write you this letter of appreciation.

To you, as Project Manager, and to all of the Western Electric and Bell System people involved with the design, engineering, installation, test and lineup, I extend my commendation for a magnificent accomplishment. Your company can be well proud of such people as Carl Hudson, Mel Bullen, Chuck Lawson, Rich Tratham, and Butch Stancil, who have directed their specific areas of management and work in the building of this system; as well as others such as Fuzzy Furr, Paul Southwell, Jack Terry, Frank Clement, Lee Olson, Dick Evans, and so many more, impossible to list, who may still be with the project or who may have left for other assignments. Among these many others, I wish to make specific mention of Louis Houck, Jack Dupre, and K. H. Hentschke, who lost their lives in their line of duty. The loss to their families, communities, and your company can not be measured.

Once again I commend you all for this great development in the art of communications which is so essential to the defense capabilities of the Air Force.

Sincerely,

KENNETH H. GIBSON Brigadier General, USAF

Commander

# crificate of ompletion

## ite Alice Communications Detwork

This is to certify that upon this date, construction of the White Alice Communications lienvork is hereby completed

And this turther certifies that the Network is ready to serve the Department of Detense and the people of Alaska, with all tacilities, at all stations and over all routes.

And with this certiticate, the Western Electric Company, prime contractor, acknowledges with sincere appreciation the efforts of all who contributed to this undertaking with mind, hand and heart.

The Bell Telephone Taboratories, tormuch. The Contractors and Suppliers, who perof the fundamental research upon which the network rests formed the tasks and produced the materials

The United States dir Lorce, for transport tation, supply and able supervision.

The United States Army Corps of Engineers, for supervision of construction at ten **કાંપાઇંગા**ક.

Dresented to The United States Air Horce at Anchorage, Alaska Warch 26, 1958.

essential to the project

The many men and women of the Bellx oclephone System and all contracting companies, who gave of themselves and their skills despite personal risk and hardship, to build the white lice Detwork.

Western Electric Company arthur B Goete

Provident

W. E. Burke, Vice President, Defense Projects, makes formal presentation of the Network.





O. W. Kammerer,
Manager,
White Alice Project,
places calls to
perimeter stations,
demonstrating completion
of the Network.

## "White Alice . . . speaks with authority and has the workday qualities and ruggedness of a Tugboat Annie"

We all have looked forward to the completion of White Alice with great anticipation and I am sure you will excuse our feeling of pride in this project. We are proud in two major respects, first of the technical performance of the system and secondly of the people who did the job.

White Alice, like so many developments we see in this electronic age, owes its success to the creative genius of our American scientists and engineers. At a time when White Alice was still a gleam in the eyes of the Air Force and the design engineers, a new and radically different method of radio transmission, called "tropospheric scatter," was being developed by the scientists of the Lincoln Laboratories of the M.I.T. and the Bell Telephone Laboratories. Not only did this new method have seven league boots, but it had a high degree of immunity from the auroral interferences which disrupt radio communication so frequently in the North.

White Alice is the first large scale application of this new technique both in terms of the number of stations and its load-carrying capacity. Obviously certain technical risks were taken and there were many unknown problems in the use of this new method on such a large scale. We are exceedingly happy that the performance of this system has fully vindicated the judgment of the Air Force and the design engineers.

I might also say, partly in a humorous vein and partly with all seriousness—

The name—"White Alice"—is obviously feminine. Feminine she may be with all the refinements and sensitivity of our finest culture—But she speaks with authority and has the workday qualities and ruggedness of a Tugboat

Annie—and so I would say to you in the Air Force and the Federal Electric Company who will operate and maintain her: Love her, cherish her and watch over her faithfully and she will be a thing of beauty and a joy forever.

And now I would like to say a few words in recognition of the many people who shared in the responsibility for this work. First I would express my appreciation, as Mr. Kammerer has done, to the Alaskan Air Command and the Air Materiel Command. We have had excellent administrative and technical liaison and support.

Secondly, I would like to acknowledge the participation of many suppliers and subcontractors. Out of the total of about 113 millions of dollars expended by the Western Electric Company under its prime contract, 85 millions were paid out directly by us or by our construction subcontractors to 1,017 other firms or companies.

While the Western Electric Company was the prime contractor, this effort was supported by the Bell System as a whole. Our team was made up largely from people drawn from the entire Bell System as well as Western, each man in accordance with his needed skills. Seventeen Bell System companies and the Bell Telephone Laboratories furnished members to this team. Over 800 Bell System people were drawn from 46 states and the District of Columbia.

And so, when I convey to you the White Alice System, not only is it made up of electrons, copper and steel—it contains from each man on our team a part of his ambition, his loyalty and his devotion to our accepted task to assist, where we are uniquely qualified, in strengthening this country's defenses.

# The White Alice Network Acceptance Ceremony

#### **PROGRAM**

#### Welcome and Opening Remarks

Col. DAVID S. WOODS, U.S.A.F.

Assistant Chief of Staff, Communication,
Alaskan Command

#### The Significance of White Alice

Brig. Gen. Kenneth H. Gibson, U.S.A.F. Commander, Alaskan Air Command

#### Report of Completion

O. W. KAMMERER
White Alice Project Manager,
Western Electric Company

#### Presentation of the Network

WILLIAM E. BURKE Vice-President, Defense Projects, Western Electric Company

#### Acceptance and Turnover

Col. J. P. WALTERS, U.S.A.F.

Chief of Electronics Defense Systems Division,

Air Materiel Command

#### Activation of The Network

Brig. Gen. Kenneth H. Gibson, U.S.A.F. Commander, Alaskan Air Command

#### Inauguration of White Alice Service

Hon. MIKE STEPOVICH Governor, Territory of Alaska

#### Inauguration of Interior Service Official Calls

Hon. Anton Anderson

Mayor of Anchorage, Alaska

#### Inauguration of Full Military Use Official Calls

Brig. Gen. Kenneth H. Gibson, U.S.A.F. Commander, Alaskan Air Command

#### Acceptance of Network Operation

FRED M. FARWELL

Executive Vice-President, International Telephone and Telegraph Corp.

#### Closing Remarks

Brig. Gen. Kenneth H. Gibson, U.S.A.F. Commander, Alaskan Air Command

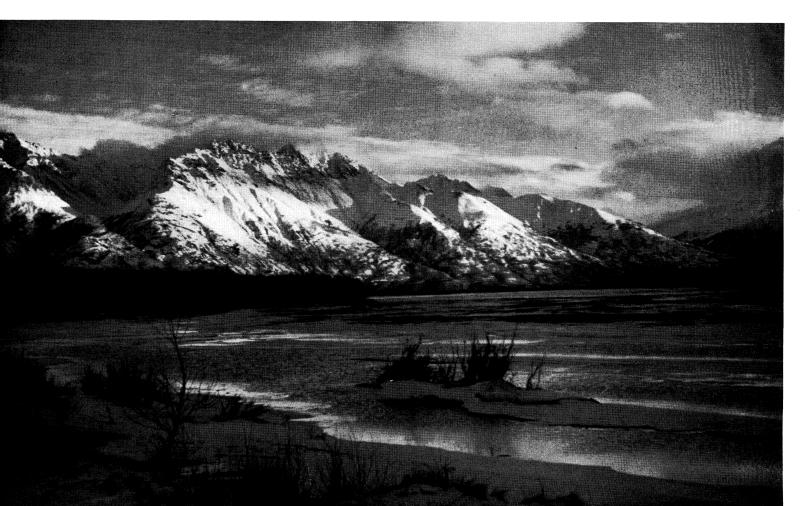
#### White Alice

Above Alaska's jagged peaks, in the emptiness that once belonged to the wind, the aimless bird and the rushing airplane, electronic streams of messages are flashing precisely from place to place. The bearer of these messages is White Alice, the new long distance telephone and telegraph network serving the greater part of the interior of the Territory. White Alice is bringing reliable communication to some areas of the north country where it has been at best, precarious—at worst, non-existent.

"White Alice" is a strange name for a communications system. The words alone signify nothing more than a code designation for the project—picked because they were an available combination. In meaning, however, White Alice has come to symbolize a struggle against the harsh north, and a new triumph of science.

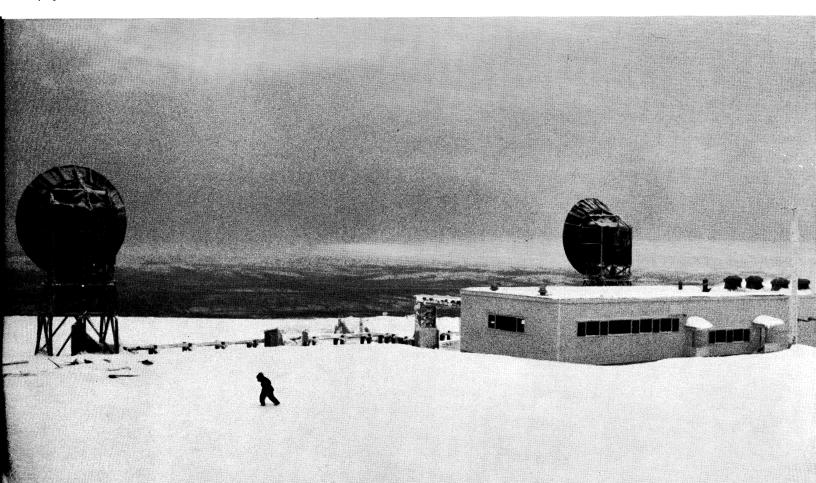
It represents the first large-scale application of a new communications technique. It is the biggest network of its type yet built, and the first to provide commercial service. It has established high grade telephone facilities where they could never before exist.

Majestic and beautiful, Alaska's jagged peaks long stood as barriers to the telephone and the telegraph—and to progress.



Today, relay stations of White Alice rise on the mountain tops—beaming messages across the sky.

Stations and strange antennas symbolize a victory for progress over the harsh land of the North.

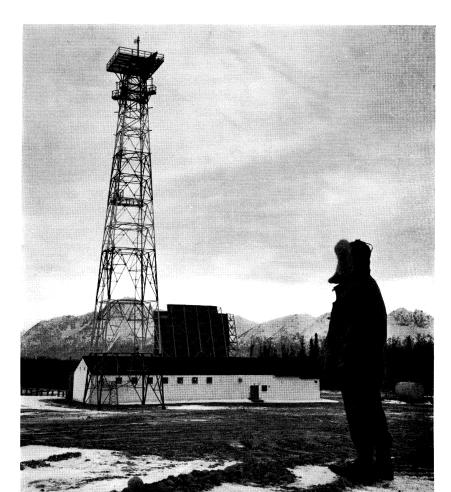




The route of White Alice. The short sections shown in dashes are the only places where conventional type of relay systems could be used.



White Alice stations are of different size and shape, each a distinctive landmark from the air.



The job done, one of the 3,500 men of White Alice silently contemplates a completed station.



Tailored to Alaska, White Alice conquers Arctic storms and static, as well as the lonely miles.

Constructed for the Air Force to give it essential communication with its bases throughout Alaska, and to provide a link with the remote Distant Early Warning Line radar stations beyond the Arctic Circle, White Alice also serves the Army, the Navy, the Civil Aeronautics Authority, other government agencies and the citizens of the Territory—for it was designed and constructed with all these needs in mind. Circuits in the White Alice Network are made available to the public through the Alaska Communication System, which has the responsibility for providing civilian long distance communications in Alaska.

It has taken three years, and some 3,500 people to build White Alice. Work started in 1955. The first link was completed the following year, and the first call transmitted over it on November 29, 1956.

White Alice is a radio relay communications system. There are 33 stations, where the telephone and telegraph signals are amplified and sent on to the next point. Most of the stations are manned. The network and its stations have been tailored to Alaska. For White Alice has to span vast uninhabited distances. It has to work when Arctic storms batter the installations. It has to conquer atmospheric interference, as well as distance and weather.

#### The Story

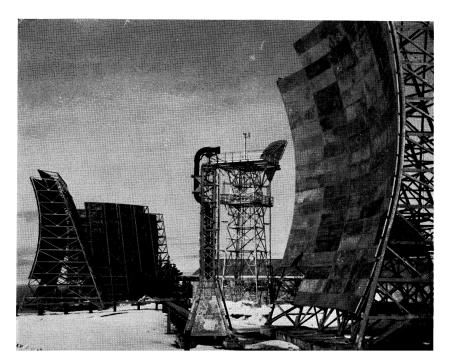
White Alice was born in May, 1954, when the Air Force asked the American Telephone and Telegraph Company to study the Alaska communications problem. Stated simply, this problem was to provide adequate military and public telephone and telegraph facilities, of the best quality, through regions where they could never before be built.

It looked like a forbidding task. Considering the wild terrain, the fierce weather and the atmospheric difficulties, the problem under study ranked with the most challenging communications projects ever considered.

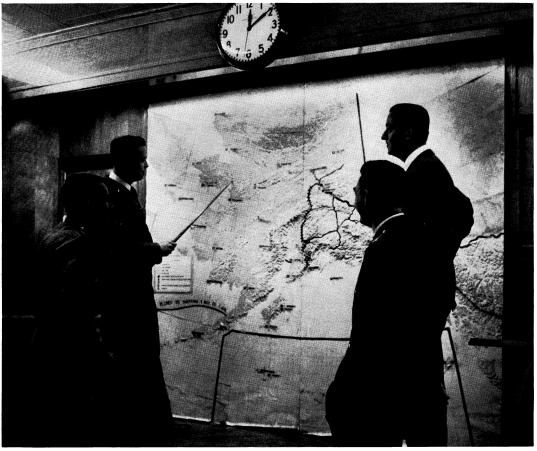
As the survey progressed, it appeared that a new form of radio, barely out of the laboratory, could do the job. The recommendation was made, and with it the decision.



The Air Force needed far-flung communications for Alaskan operations.



A new form of radio relay was selected as ideal for the job at hand.



Air Force officers and communications experts set up the plans for Project White Alice.

Site selection teams took advantage of summer weather when they could. The season was short.



Helicopters delivered equipment to selected sites for the preliminary transmission path testing operation.





A temporary transmission path testing tower was the first big structure put up at each White Alice site.



Bulldozers panted and strained to gouge foundations, roads, air strips from the unyielding terrain.



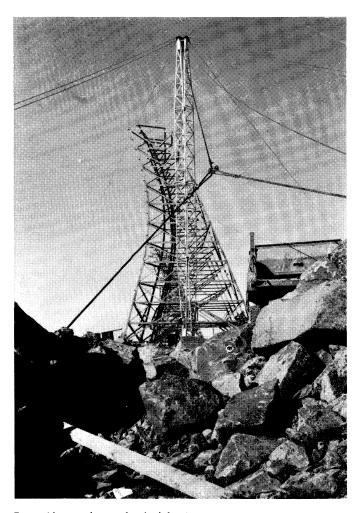
Air Force planes delivered tons of materials to the sites as the permanent construction got under way.



# Men and machines drove hard... slowly the land surrendered.



The neighbors were curious. Nobody attempted to find out if they were friendly.



To provide enough room for the lofty sites, tops of mountains sometimes were leveled.



Antennas up, waveguide runs were built to carry signals between antenna and station.



White Alice men used muscle with care in moving heavy, fragile electronic equipment.

Early in 1955, the Air Materiel Command signed a contract with the Western Electric Company to build the White Alice Network. For Western Electric, no stranger to hard assignments in remote places, it meant assembling a team of experts in a score of different specialties. Western drew liberally on its own resources, and those of the other companies of the Bell Telephone System.

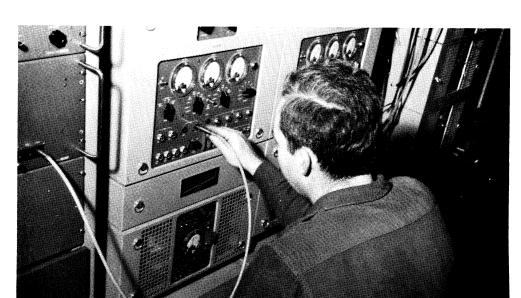
Locating the terminals and laying out the routes was the first step—and a rugged one it was for the men who did the job. Field survey teams explored the areas selected, working with the best maps available. Even then they found some mountains ten miles from their mapped location, and as much as 1,000 feet too low. In one instance, a team considered 48 sites before finding a suitable one. Finding the sites was only the first part of the job. Path testing came next—the testing of a proposed route for transmission characteristics. If the route proved to be a poor one for transmission, the site of a relay station had to be moved until a good path was found, and transmission met the objectives.

Men and machines from all over the continent arrived in Alaska for the next chapter—construction. The airplane, which has been called the covered wagon of the Arctic, became the work horse of White Alice. Air Force planes manned by seasoned crews, chartered "bush" planes, helicopters and airliners delivered materials to remote wilderness spots. Often, the air route was the only way to get there. Many air strips had to be built. To provide enough room for some of the lofty sites, the tops of mountains were leveled. Finally the antennas rose in the air, and the delicate electronic equipment was installed in the stations by telephone men who came to Alaska from the Bell companies.

Hundreds of American firms—Western Electric, the prime contractor; Morrison Knudsen, the chief construction firm; the smallest supplier—did their jobs on tight schedules. The Army's Corps of Engineers built ten of the stations. The Air Force, with planes and 'copters, performed remarkable feats. And in building White Alice, remarkable feats were common events.

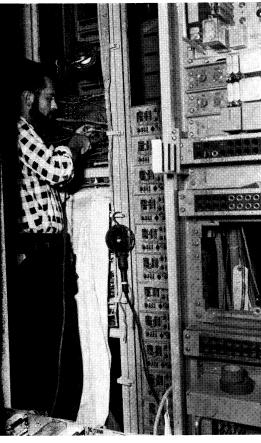


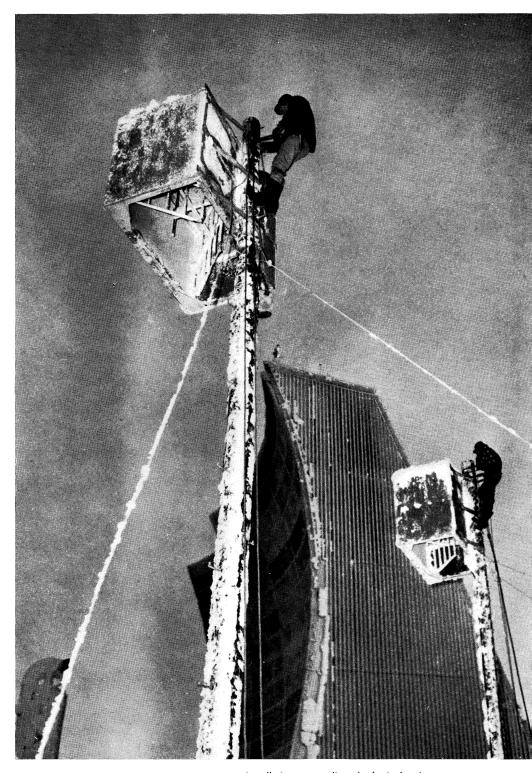
A carboy of acid on the way toward the power room, for charging new batteries.



Testing followed all phases of the intricate installation work, for peak performance.







Installation men adjusted plastic housings protecting small antennas from ice and snow. Big antenna, in background, is heated.

To the skilled installers, White Alice was millions of colored wires, each with a beginning, an end and a purpose.

#### Beyond The Horizon

Alaska is not a land which is kind to telephone lines. Maintenance of poles, wire and cable becomes a constant struggle with weather and terrain. In some areas, wire routes cannot even be built. So it was that a recent development in radio relay came to be selected as the invisible wires of the White Alice Network.

A few years ago, it was believed that radio signals of the type used for beaming telephone calls and telegraph messages from point to point were effective only for "line-of-sight" use. They were thought to fade out rapidly beyond the horizon.

Evidence that this was not true in practice became apparent through a number of curious incidents, which began attracting attention during World War II. Cases were noted where radar sets picked up targets at distances theoretically well beyond maximum range. Other examples showed up in telephone microwave radio relay systems. Signals from a transmitter were received at distant stations as well as the intended one, causing considerable interference.

After studying this phenomenon in detail, and summarizing all the available information, Kenneth Bullington, a Bell Telephone Laboratories scientist, was able in 1950 to show that transmission beyond the horizon was possible from a practical standpoint. Far from being a problem, it could open the door to high-quality communications service in areas where conditions prevented frequent relay points.

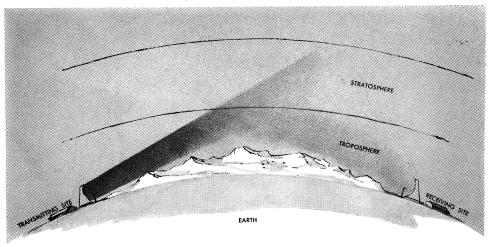
Without this discovery, there might never have been a White Alice Network in Alaska. Of the 33 relay stations, 23 use the new technique, now appropriately known as "beyond horizon" radio.

Its most important virtues are that it can span vast, rugged distances, and it is static-free. Thus it overcomes both meteorological conditions and forbidding terrain. These are the factors that have always plagued communications in the far North.

The signposts of this unique radio system are its huge antennas, which have become landmarks at most White Alice Stations across Alaska. There are two types of antennas—a 30-foot, dish-shaped structure, and a 100-ton, scoop-shaped antenna, which looks not unlike a drive-in movie screen.



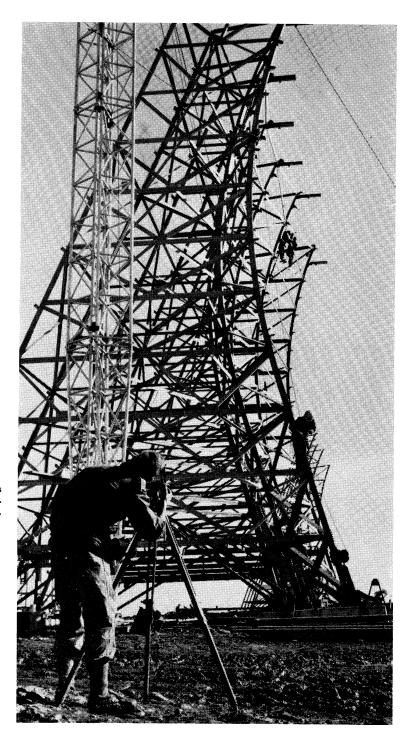
A "dish" antenna, one of the two types used in the White Alice beyond horizon system. Its face measures 30 feet across.



The antennas direct a radio beam toward the next station, hidden by topography and curve of earth. Scattered in troposphere, a tiny fraction of the signal arrives at the distant station.

The ponderous transmitting and receiving scoops are aimed toward the antennas at the next station, which may be as much as 170 miles away. The aim must be precise. The antennas cannot be off as much as a twentieth of a degree. They were carefully positioned and carefully built. Once up, the massive structures could not be re-aligned.

When the powerful radio signal leaves the transmitting antenna, it shoots out toward the horizon in a straight line. Traveling through the air, a minute portion of the radio waves is scattered downward in the troposphere—the air envelope about five miles thick, surrounding the earth. The faint signal that arrives at the receiving



Constant check of antenna positions was required during construction. Their alignments had to be precise.



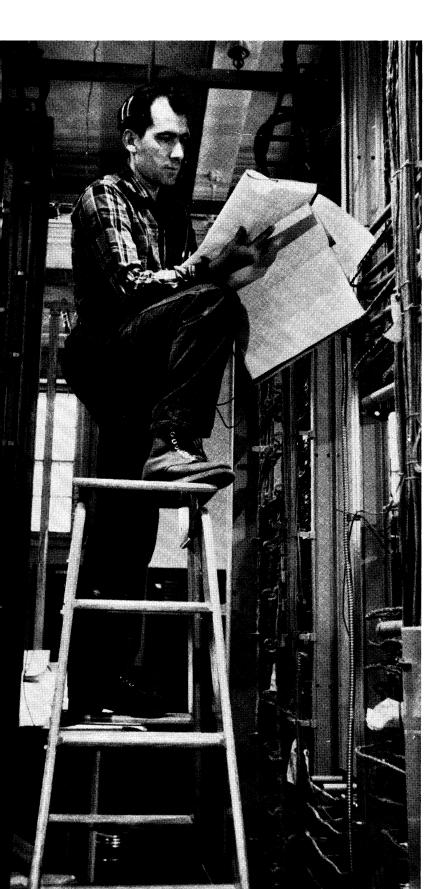
antenna is only about one ten-trillionth the strength of the one transmitted. This tiny part of the signal is picked up by the distant receiving antenna, amplified and sent along the route by repeating the process of transmission, scatter, and pick up. From this process the technique has acquired an impressive professional name, "forward propagation tropospheric scatter."

From a start as a freak and even a nuisance, beyond horizon radio has become a useful and respected servant. Its practicality and versatility have been demonstrated by White Alice, and communications people expect its use to spread to many parts of the world.



"Scoop" antenna, 60 feet tall, resembles outdoor movie screen. Checker pattern marks it as obstacle to fliers.

#### The People



Skill, ingenuity and courage built White Alice. These qualities were outstanding among the 3,500 men and women who performed the countless tasks and put together the billion pieces to make the network.

At the sites themselves, men from Alaska and many states built living quarters and operating installations under conditions they had never encountered before. Some of them hacked through woods and swamps to determine whether a preselected site would do. Others packed loads up mountains when helicopters couldn't fly and schedules couldn't wait. Construction men put up steel and put down concrete, and then frequently fought the elements to keep them there.

Supporting the efforts of those at the stations were the building experts, engineers and businessmen in the background. There were specialists in buying and shipping. There were secretaries and typists. There were factory workers and transportation people. There were the employees of more than 800 suppliers, who produced materials and equipment for the project.

There were many people.





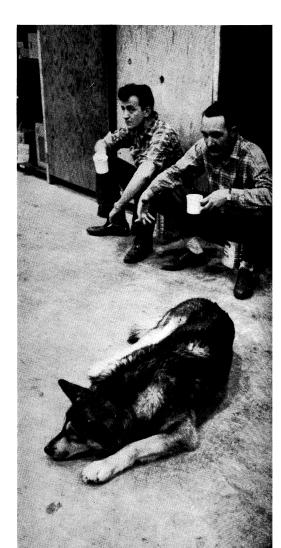




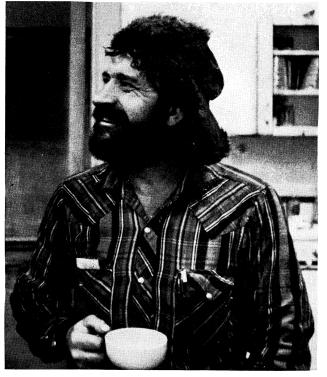


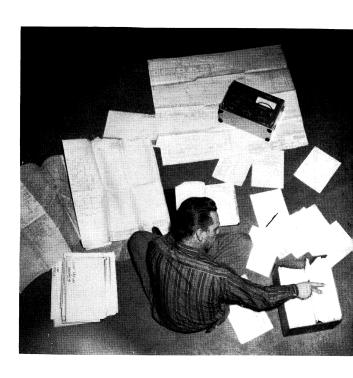
For those who built it, White Alice was a challenge and triumph.









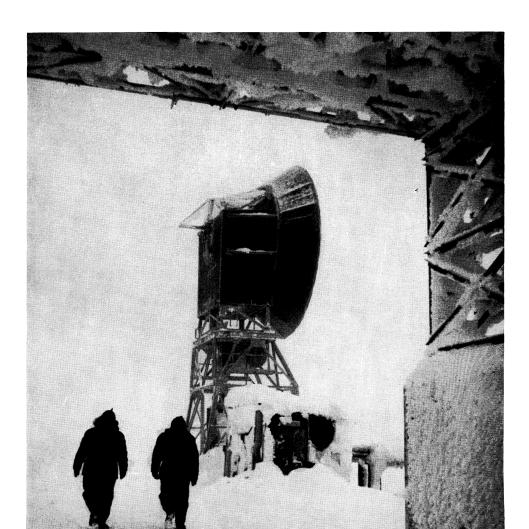




#### The Stations

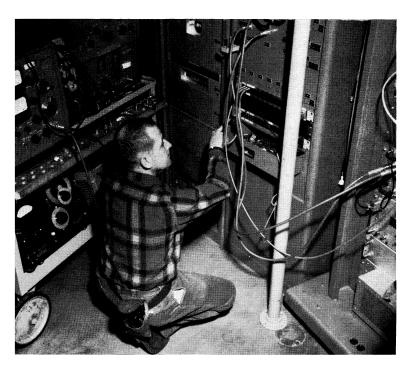
One or two low buildings, dwarfed by several huge antennas; this is a White Alice Station. Almost as often as not it is perched on a mountain top.

Movies two or three times a week, hi-fi record outfits, ping-pong tables, cards, and, where possible, outdoor recreational facilities, enliven the routine at isolated stations. Not too hard to take is life on a mountain top in Alaska today.

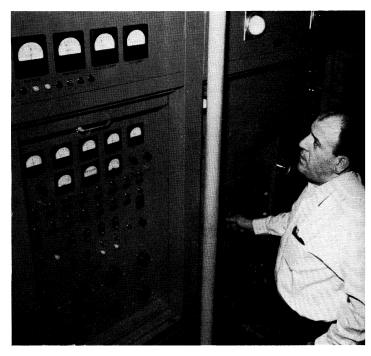




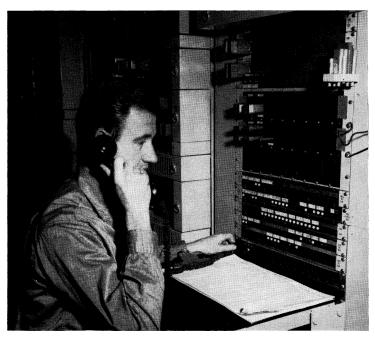
The fastest trail down is for he who can ski.



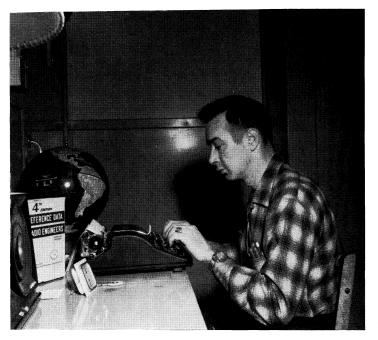
Testing a transmitter with many instruments.



 ${\bf Station\ supervisor\ regulates\ his\ equipment.}$ 



A call on the order circuit to a distant station.



Time for study before the next duty tour begins.



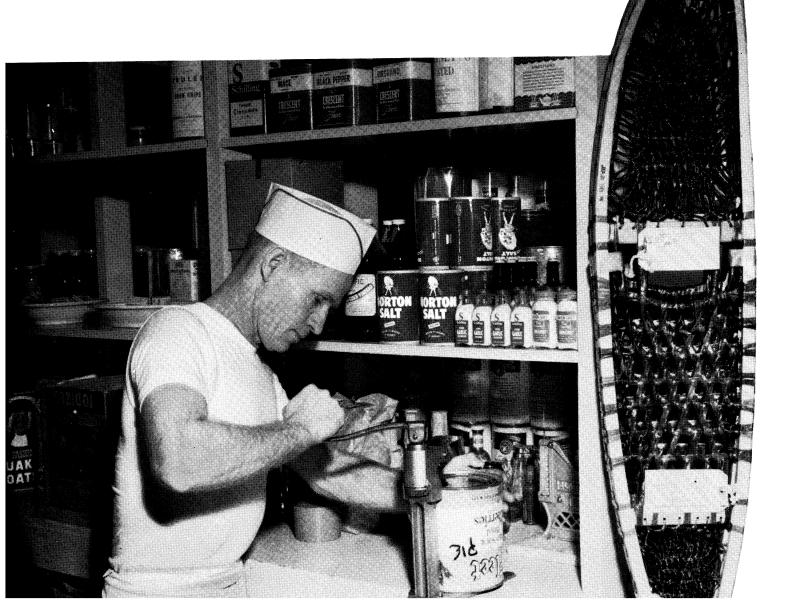
Modern facilities ease life on isolated peaks.

The recreations and comforts make living conditions as agreeable as possible for the men who live at White Alice stations. The Federal Electric Corporation maintains and operates the network under direction of the Air Force. Good food, prepared in stainless steel kitchens, and served family style is an important part of station life. There are food storage facilities holding a year's supply at remote locations.

Tastefully furnished in maple and decorated in pastel blues, yellows and pinks, the station dormitory provides bedrooms for 12 to 16 men, two in each room. The bedrooms are furnished with maple chests and chairs finished in "smoky pine." At one end of the building is the combination dining and recreation room with desks, lamps and settees.

At some of the stations, the men live at nearby Aircraft Control and Warning barracks. Some operating crews, assigned to stations near towns and cities, live there and "commute."

Good food is important. Some stations stock a year's supply. The snowshoes are not on the menu.



#### Alaska's Air Defense



guided missile, the northern outposts of our continent have become the most direct aerial avenue for an attack against the United States. And simultaneously, Alaska—the nation's polar frontier—has become a front line base for both our air defense and retaliation.

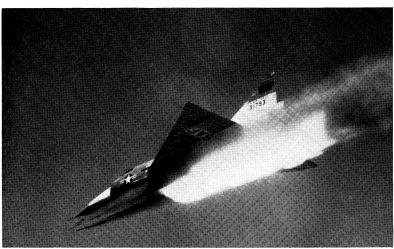
In the age of the jet bomber and the

Above snow-capped ramparts, the Alaskan Air Command guards the roof of North America. The Alaskan Air Command is in charge of the White Alice Network as part of its three-fold mission: to furnish expeditious warning to the United States of an aggressor attack; to defend Alaska and all its holdings in the air, and to provide a launching platform for retaliatory Strategic Air Command aircraft.

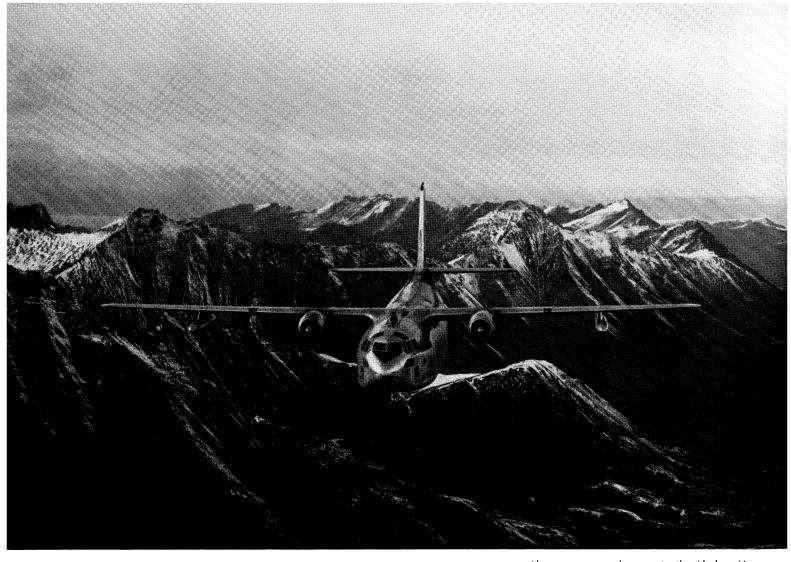
Compounding the difficulties of this mission are the forces of nature, at work over a land area of 586,400 square miles. But distance and the elements have succumbed to the imagination of man in Alaska. The White Alice Network is the most recent example.

White Alice provides communication to the Distant Early Warning Line above the Arctic Circle. In addition, it ties together 30 Aircraft Control and Warning Stations under control of the Alaskan Air Command. These isolated sites are scattered strategically along the Bering Sea Coast, the Arctic Slope and throughout Alaska's interior. They are operated and supported by this Command.



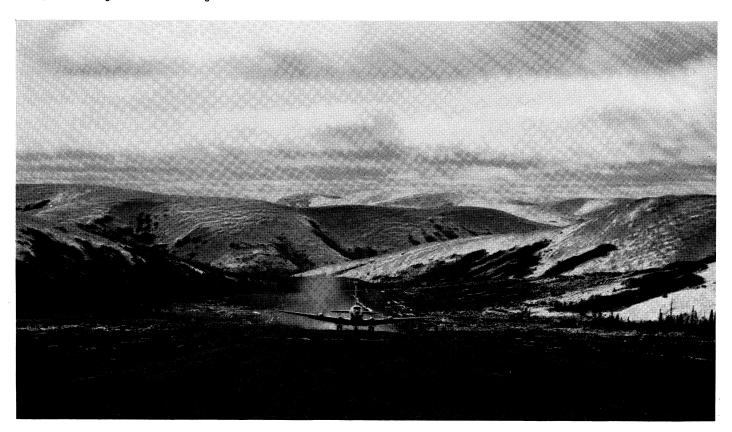


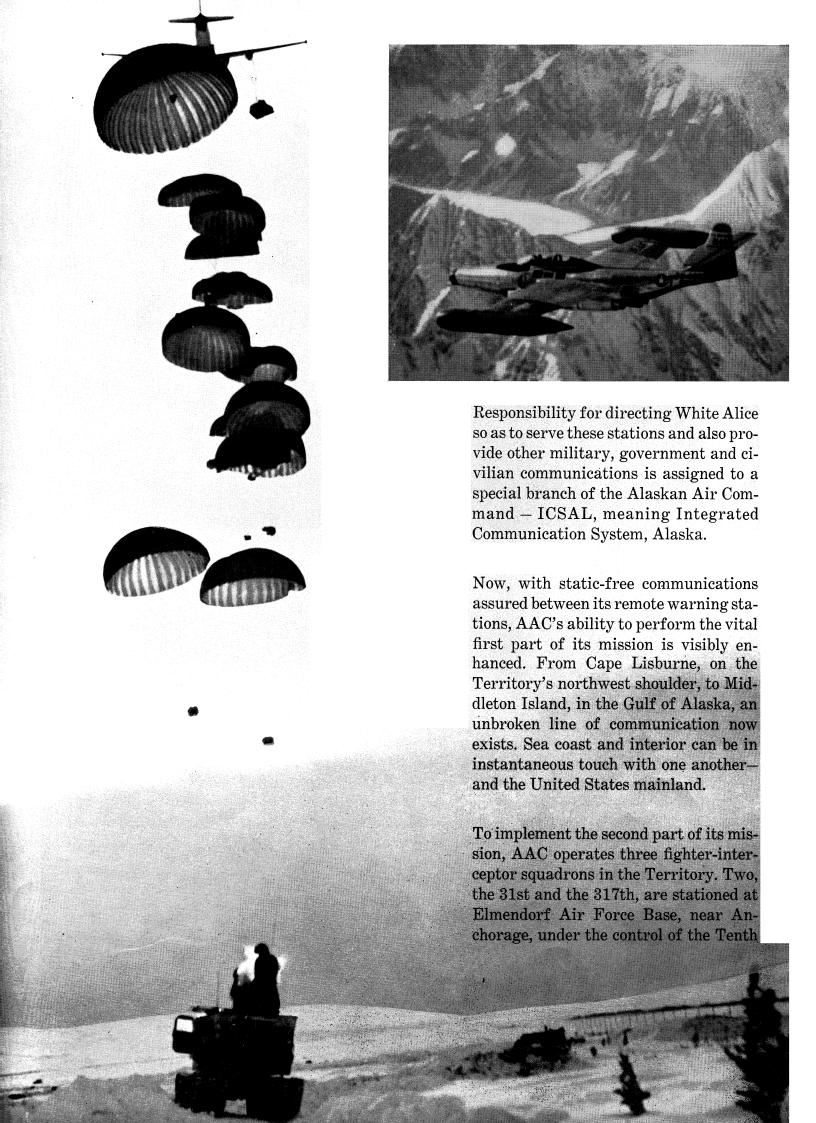
An F102A "Delta Dagger," the type flown by the Alaskan Air Command, fires its 24 rockets in photos taken a split-second apart.



Above snow-capped ramparts, the Alaskan Air Command patrols the blue roof of North America.

Air Force pilots master plane strips like this uphill one, where landings are made in climbing attitude.







Air Division. Equipped with the F-102A "Delta Dagger," they are the mainstay of the Tenth Air Division, responsible for aerial defense south of the Alaskan Mountain Range.

North of the range, the Eleventh Air Division is on guard. With headquarters at Ladd Air Force Base, near Fairbanks, the Eleventh operates the 449th Fighter Interceptor Squadron, equipped with the most improved model of the F-89 "Scorpion" jet.

Twenty-six miles south of Fairbanks, along the Alaska Highway, lies Eielson Air Force Base, the "launching platform for Strategic Air Command retaliatory aircraft." The base is operated by the Alaskan Air Command. SAC bomber units share this vital northland duty on a rotational basis. Their giant jet bombers have become a familiar sight to Alaskans as they criss-cross the Arctic on seemingly endless training flights. And they serve as a constant reminder of the Air Force's retaliatory

strength against potential aggressors.

While discharging its peacetime obligations, the Alaskan Air Command performs a number of varied functions, including participation in Arctic maneuvers, and cold weather experimentation and testing. It actively assists in all northland rescue efforts. In addition, the Command supports a number of special projects, both civilian and military. These include certain geological expeditions, programs of polar research and a continuous Arctic mapping survey.

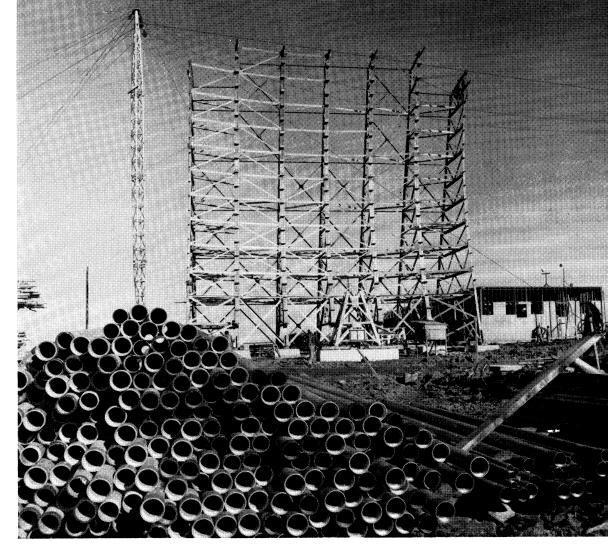
Under the command of Brigadier General Kenneth H. Gibson, AAC's ability to discharge its assigned mission has steadily increased. Today, it is an indispensable adjunct of the North American Air Defense Command. And as the Alaskan Air Command moves into the age of guided missiles, the need for instantaneous and reliable communications becomes paramount. White Alice is making its contribution to North American defense at a timely hour.

#### For The Record...

- The White Alice Network covers 3,000 route miles.
- There are 33 stations in the network.
- They provide 170,000 telephone circuit miles and 50,000 telegraph circuit miles.
- White Alice was built by more than 3,500 people.
- Its cost was about \$140,000,000.
- Construction began in 1955.
- Special teams traveled more than 300,000 miles to select the site.
- Building the stations required over 26,600 plane flights.
- The planes carried about 24,000 tons of supplies and 42,600 passengers.

Brought by plane - 24,000 tons.





Building materials — 64,000 tons.



Petroleum products — 2,200,000 gallons.

- The builders used some 64,000 tons of equipment and materials; 2,200,000 gallons of petroleum products; 670,000 cubic yards of gravel.
- They built 60 miles of roads to reach the stations.
- They ate 5,000,000 pounds of food, delivered to the sites.
- They installed and connected 300,000 feet of communications cable.
- The network's power plants can generate enough electricity for approximately 25,000 homes.
- To generate it requires 21,600 gallons of fuel a day.
- The first call was placed over the first completed link on November 29, 1956.
- The White Alice Network was completed and placed in full operation on March 26, 1958.



# MEN AND WOMEN OF WHITE ALICE

A total of 821 Bell System people came to the Project from 17 companies. Their names, company affiliations, occupations and home addresses are listed below.

### American Telephone and Telegraph Company

*E. L. Albin	(C.O.) Supervisor	Vandalia, Ill.
D. G. Allison	Supervisor Foreman	Kansas City, Mo.
W. Arcand	District Plant Supervisor	Newark, N. J.
*A. D. Arico	Acctg. Results Assistant	New York, N. Y.
*D. J. Armstrong	Trans. Maintenance Man	Tulsa, Okla.
*N. T. Barnett	Toll Testman	Montgomery, Ala.
*B. G. Bean	Trans. Maintenance Engineer	Cincinnati, Ohio
J. T. Belford	Equipment Maintenance Man	St. Louis, Mo.
R. Bruce	Plant Engineer	Cincinnati, Ohio
D. H. Bruette	Transmission Man	Elizabethtown, N. Y.
E. J. Bucher	Transmission Supervisor	New York, N. Y.
J. L. Buck	Transmission Man	Dayton, Ohio
W. H. Canada	Equipment Maintenance Man	Washington, D.C.
*W. W. Carney	Transmission Man	Augusta, Ga.
R. R. Carver	Senior Lineman	Cincinnati, Ohio
C. D. Chapman	Groundman	Cincinnati, Ohio
J. T. Charlson	Equipment Maintenance Man	Amarillo, Tex.
W. L. Christensen	Equipment Maintenance Man	North Platte, Nebr.
*J. F. Cipra	Staff Supervisor	Kansas City, Mo.
*W. E. Clark	Transmission Man	Indianapolis, Ind.
L. W. Claussen	Division Plant Superintendent	Washington, D.C.
H. R. Cochran	Material Man	White Plains, N. Y.
*G. T. Coker	Engineer	Denver, Colo.
R. L. Collinson	Craftsman	St. Louis, Mo.
R. L. Copley	Line Foreman	Cincinnati, Ohio
E. J. Courtain	Transmission Tester	Minneapolis, Minn.
*A. C. Cowan	Craftsman	Pittsburgh, Pa.
*P. H. Currier	Engineer	Chicago, Ill.
M. De Petris	Telegraph Serviceman	Pittsburgh, Pa.
E. H. Dodge	Division Plant Superintendent	Springfield, Mass.
W. K. Dozier	Lineman	Cincinnati, Ohio
**J. J. DuPre	Technical Operator	Oakland, Calif.
*P. J. Eastman	Staff Asst.	New York, N. Y.
*W. F. Ellsworth	C. O. Supervisor	Iowa City, Iowa
*W. A. Enick	Equip. Maintenance Sup.	New York, N. Y.
*O. Eriksen	Transmission Supervisor	New York, N. Y.
W. J. Fletcher	Equipment Maintenance Man	Glens Falls, N. Y.
N. B. Fowler	Circuit Layout Engineeer	New York, N. Y.
*W. D. Freezee	Engineer	New York, N. Y.
*H. M. Furr	Engineer	Atlanta, Ga.
H. F. Gnecco	Transmission Supervisor	New York, N. Y.
*F. C. Guthrie	Supervising Foreman	Kansas City, Mo.
*R. A. Haley	Transmission Man	Boston, Mass.
*J. E. Hamberg	Staff Assistant	White Plains, N. Y.
H. R. Hammond	Equipment Maintenance Man	Danielson, Conn.
*L. J. Hargis	C. O. Chief	Knoxville, Tenn.
B. P. Harris	Lineman	Cincinnati, Ohio
*H. C. Harris	Outside Plant Engineer	Cincinnati, Ohio
M. L. Helton	Transmission Man	Wheeling, W. Va.
*E. J. Henley	Toll Transmission Man	Chicago, Ill.
M. F. Henson	Staff Supervisor	Cleveland, Ohio
M. R. Hessin	Division Plant Superintendent	Denver, Colo.
*H. B. Hostetter	Equipment Maintenance Man	Harrisburg, Pa.
**L. J. Houck	District Plant Superintendent	St. Louis, Mo.
F. T. Hover	Equipment Maintenance Man	New York, N. Y.
*R. G. Jaeger	C. O. Supv.	New York, N. Y.
*W. T. Jefferey	Equipment Maintenance Man	Peoria, Ill.
W. L. Jones	Lineman	Cincinnati, Ohio
W. D. Jones	Lineman	Omerman, Omo

<sup>\*</sup>Still assigned to Defense Projects \*\*Deceased

# American Telephone and Telegraph Company

W 0		
*O. W. Kammerer	Assistant General Manager	New York, N. Y.
*W. J. Keas	Equipment Man	Tulsa, Okla.
R. J. Keiffer	Chief Test Boardman	Cleveland, Ohio
*F. J. Kellett	Transmission Man	Newark, N. J.
J. J. Leahy	Equipment Maintenance Man	New York, N. Y.
L. T. LeCerff	Acctg. Results Assistant	New York, N. Y.
*P. F. Maher	Transmission Supervisor	
D. May	Lineman	Omaha, Nebr.
*D. Metcalfe	Engineer	Cincinnati, Ohio
*G. L. Miguet	9	White Plains, N. Y.
*R. W. Miller	Equipment Maintenance Man	Davenport, Iowa
	Transmission Man	New York, N. Y.
*H. A. Milne	Division Outside Plant Engr.	Denver, Colo.
*C. R. Moore	Transmission Man	Laramie, Wyo.
*C. R. Morris	Transmission Man	Omaha, Nebr.
*A. O. Myers	Engineer	Kansas City, Mo.
*F. S. Norris	Chief Equipment Man	Kansas City, Mo.
H. O'Neill	Acctg. Results Assistant	New York, N. Y.
W. F. Owen	Div. Tel. Plant Service Sup.	Atlanta, Ga.
A. Oxehufwud	Engineer	Kansas City, Mo.
J. D. Ozier	Line Foreman	Kansas City, Mo.
K. M. Parkinson	Methods Acctg.	New York, N. Y.
*B. W. Pierce	Engineer	White Plains, N. Y.
C. N. Pierce	Transmission Supervisor	New York, N. Y.
J. P. Plummer	Equipment Maintenance Man	Oklahoma City, Okla.
*D. A. Potter	Equipment Maintenance Man	Kansas City, Mo.
*J. W. Purcifull	Engineer	Kansas City, Mo.
J. L. Rhymes	Technical Assistant	Kansas City, Mo.
*G. J. Russell	Transmission Man	New Orleans, La.
*L. M. Schindel	Area Outside Pl. Design Engr.	Kansas City, Mo.
E. R. Schmidt	Equipment Maintenance Man	Denver, Colo.
H. I. Schmidt	District Plant Supervisor	Chicago, Ill.
*C. J. Shelton	Transmission Man	New York, N. Y.
*S. H. Sledd	Lineman	Cincinnati, Ohio
L. J. Smith	Transmission Man	
C. F. Stallings	Plant Engineering	Greensboro, N. C.
O. E. Stancil	Construction Supervisor	Dallas, Tex.
*R. B. Stecker		Kansas City, Mo.
C. V. Steele	Statistician Gen. Acctg.	New York, N. Y.
*W. A. Stetson	Project Supervisor	Atlanta, Ga.
W. G. Strickland	Staff Supervisor	Kansas City, Mo.
*M. J. Szklarz	Line Foreman	Kansas City, Mo.
	Transmission Man	Chicago, Ill.
*W. A. Teller	Engineer	New York, N. Y.
P. W. Thrush	Staff Supervisor	New York, N. Y.
R. J. Tyborsky	Equipment Maintenance Man	Clarksburg, W. Va.
*L. G. VanLiere	Equipment Maintenance Man	Holbrook, Ariz.
*L. F. Verges	Equipment Maintenance Man	New Orleans, La.
*W. M. Watson	District Plant Engineer	Cleveland, Ohio
*L. B. Widman	Special Assignment Clerk	Kansas City, Mo.
H. H. Wilken	Div. Emp. Welfare Supv.	St. Louis, Mo.
*D. A. Yaap	Equipment Maintenance Man	Dallas, Tex.

Las Vegas Elco Reno

# Bell Telephone Company of Nevada

W. E. Combs Transmission Man

\*F. W. Hall Toll Transmission Man

\*A. J. Tarr P.B.X. Installer

\*Still assigned to Defense Projects

### The Bell Telephone Company of Pennsylvania

G. C. Ainsworth	Splicer's Helper	Pittsburgh
J. T. Bickham	Installer	Irwin
W. F. Bowser	P.B.X. Repairman	New Kensington
I. A. Bressler	Field Engineer	Harrisburg
G. O. Brown	P.B.X. Repairman	Pittsburgh
G. H. Chambers	Station Repairman	Pittsburgh
E. W. Drum	Field Engineer	Hazleton
R. W. Forney	P.B.X. Repairman	Stroudsburg
W. J. Frey	Cable Foreman	Jenkintown
R. T. H. Gardener	Accounting Supervisor	Philadelphia
*C. A. Geiger	Switchman	Easton
H. M. Hamilton	Switchman	Pittsburgh
T. M. Harkness	Sr. Staff Asst.	Philadelphia
J. L. Hart III	Engineer	Philadelphia
B. M. Hewett	Switchman	Upper Darby
W. G. Johnson	Station Repairman	West Chester
G. J. Kappel	Repairman	Philadelphia
B. Lare	Line Foreman	Lansdale
C. H. Lewis	Station Installer	Coatesville
J. Lloyd	R/W Repairman	Lansdale
J. S. Lynch	Cable Foreman	Upper Darby
W. W. McCauley	Station Installer	Reading
J. B. McDonald	Switchman	Pittsburgh
C. W. McFarland	C.O. Repairman	Pittsburgh
E.W. F. Mawhinne	yStation Installer	Pittsburgh
*J. S. May	P.B.X. Repairman	Pittsburgh
C. D. Mengel	Cable Foreman	Harrisburg
F. E. Moffat	Frameman	Pittsburgh
R. J. Mueller	P.B.X. Repairman	Pittsburgh
*R. F. Rizzi	Station Installer	Philadelphia
L. F. Rotz	Supv. Construction Foreman	Pottstown
J. B. Sessoms	P.B.X. Repairman	Pottstown
D. R. Shafer	Radician Repairman	Pittsburgh
R. E. Smith	Station Installer	Pittsburgh
J. Stephens	Line Foreman	Reading

### **Bell Telephone Laboratories**

\*W. G. Domidion Technical Staff Associate Murray Hill, N. J.

### The Diamond State Telephone Company

L. F. Eckrich Switchman Wilmington, Del. E. C. Reese P.B.X. Installer Wilmington, Del.

# The Chesapeake and Potomac Telephone Companies

D. F. Arnold	C. O. Repairman	Washington, D.C.
		Baltimore, Md.
*A. T. Boemmel	P.B.X. Repairman	,
R. P. Fleet	T.T.Y. Installer Repairman	Washington, D.C.
W. J. Goodman	Installer Repairman	Washington, D.C.
*E. Hahn	P.B.X. Installer	Baltimore, Md.
*H. W. Neal	C. O. Repairman	Washington, D.C.
M. H. Nelson	P.B.X. Installer	Baltimore, Md.
P. C. Nicholson	T.T.Y. Repairman	Washington, D.C.
C. J. Sebold	Installer Repairman	Washington, D.C.
*A. P. Shinsky	P.B.X. Installer	Baltimore, Md.
*R. B. Spear	C. O. Repairman	Washington, D.C.
*T. B. Yarborough	P.B.X. Repairman	Baltimore, Md.

<sup>\*</sup> Still assigned to Defense Projects

# Illinois Bell Telephone Company

R. G. Bowron	Communication Serviceman	Gary, Ind.
J. R. Corbett	Plant Engineer	Springfield, Ill.
L. E. Cunningham	Plant Engineer	Chicago, Ill.
C. R. Forsberg	Cable Splicer	Chicago, Ill.
R. E. Gillespie	Communication Maintenance Man	Decatur, Ill.
G. R. Gottman	Lineman	Chicago, Ill.
J. Haas	Communication Maintenance Man	Aurora, Ill.
R. D. Halvorsen	Teletype Repairman	Chicago, Ill.
P. W. Hassel	Line Foreman	Harvey, Ill.
*J. B. Kiss	Communication Serviceman	Mount Vernon, Ill.
*W. J. Lehmann	C.O. Comm. Maintenance Man	Oak Park, Ill.
J. Marco	Line Foreman	Chicago, Ill.
W. J. Menard	Communication Serviceman	Chicago, Ill.
K. J. Mendenhall	Cable Splicer	Chicago, Ill.
A. R. Mitcheltree	Line Foreman	Aurora, Ill.
E. Nalli	Communication Serviceman	Chicago, Ill.
*R. H. Oyen	Installer Repairman	Elgin, Ill.
L. R. Payne	Line Foreman	Hammond, Ind.
D. E. Punches	Plant Engineer	Springfield, Ill.
*K. L. Ross	Assistant Sup. Engineer	Chicago, Ill.
R. A. Schlak	Installer Repairman	Wheaton, Ill.
*L. A. Voigt	Communication Serviceman	Wheaton, Ill.
*G. Watt	Stockman	Chicago, Ill.
W. R. Watt	P.B.X. Installer	Gary, Ind.
H. F. Wehlitz	Plant Engineer	Chicago, Ill.
W. R. White	Lineman	Rockford, Ill.
T. J. Wisniewski	Installer Repairman	Chicago, Ill.

# Indiana Bell Telephone Company

J. L. Essex	Switchman	South Bend
R. L. King	Lineman	Indianapolis
J. J. Pridmore	Lineman	South Bend
E. E. Pukrop	Switchman	South Bend

# Michigan Bell Telephone Company

W. S. Anderson	Senior Engineer	Detroit
*A. V. Clark	Testman	Howell
J. R. Clawson	Testman	Cadillac
*W. E. Curtis	Switchman	Ypsilanti
*M. Cutler, Jr.	Switchman	Reed City
W. A. Eaton	Testman	Plymouth
*M. N. Fancher	Testman	Niles
*V. Godoshian	P.B.X. Installer	Detroit
A. Gorashko	Assistant Engineer	Detroit
*B. F. Hineline	P.B.X. Repairman	Lansing
*U. A. Honka	Testman	Benton Harbor
H. H. Huff	Testman	Detroit
G. W. Kost		
	Testman	Lansing
*L. M. La Mothe	Testman	Lansing
B. A. Melton	Station Installer	Pontiac
*M. J. Nault	Switchman	${f Detroit}$
D. R. Olson	General Plant Toll Supr.	${f Detroit}$
R. L. Pearce	Switchman	Birmingham
G. B. Pritchard	Plant Field Engineer	Pontiac
F. A. Sanislow	Switchman	Highland Park
*C. M. Scanlon	Testman	Grand Rapids
R. E. Shattuck	Testman	Grand Rapids
S. Shaver	Testman	Grand Haven
*J. A. Tomczak	P.B.X. Installer	Detroit
R. C. White	Switchman	Birmingham
*J. F. Yoakum	Station Installer	Monroe

 $<sup>*\,</sup>Still\,\,assigned\,\,to\,\,Defense\,\,Projects$ 

# Mountain States Telephone and Telegraph Company

H. K. Christensen Engineer Denver, Colo. D. W. Filipi Cable Splicer Phoenix, Ariz. \*H. F. Flanders Building Planning Engineer Denver, Colo. H. C. Goff C. O. Repairman Denver, Colo. Installer Repairman Boise, Ídaho C. E. Gross E. S. Keenan Construction Foreman Denver, Colo. F. W. Knowles, Jr. Installer Boise, Ídaho Phoenix, Ariz. L. D. Kornegay Cable Splicer \*H. L. Laskey Installer Repairman Albuquerque, N. Mex. D. R. McKinley Plant Assignment Foreman Cold Springs, Colo. \*C. E. Miller P.B.X. Installer Boise, Idaho T. H. Oliver Installer Repairman Tucson, Ariz. R. R. Ostrander Special Service Supervisor Denver, Colo. E. H. Ovens Combinationman Mountain Home, Idaho \*J. R. Parham Key Installer Albuquerque, N. Mex. P.B.X. Repairman P. C. Pinkerton Denver, Colo. \*J. W. Reed Apprentice Toll Testman Billings, Mont. E. W. Schlosser Engineer Denver, Colo. R. E. Schulz Radio Installer Repairman Albuquerque, N. Mex. K. J. Smith R. T. Stuart Lineman Worland, Wyo. Lineman Boise, Idaho \*W. C. Tesch Combinationman Helena, Mont. R. S. Tonks Cable Splicer Phoenix, Ariz. R. W. Troeltzsch Switchman Missoula, Mont. E. H. Tucker Combinationman Mountain Home, Idaho E. P. Wakefield Equipment Engineer Cheyenne, Wyo. J. F. Weg, Jr. Plant Engineer Denver, Colo.

#### New England Telephone and Telegraph Company

Installer Repairman	Burlington, Vt.
Installer Repairman	White River Junction, Vt.
Equipment İnstaller	Boston, Mass.
Transmission Tester	Boston, Mass.
Equipment Installer	Cambridge, Mass.
Cable Splicer's Helper	Quincy, Mass.
Equipment Installer	Braintree, Mass.
Cable Splicer	Boston, Mass.
C. O. Switchman	Boston, Mass.
Junior Engineer's Asst.	Keene, N. H.
Transmission Tester	Boston, Mass.
P.B.X. Repairman	Boston, Mass.
Equipment Testman	Boston, Mass.
P.B.X. Installer	Pittsfield, Mass.
P.B.X. Repairman	Boston, Mass.
Cable Splicer	Quincy, Mass.
Repairman	Boston, Mass.
Installer	Portland, Maine
Engineer Assistant	Portland, Maine
	Rockland, Mass.
	Boston, Mass.
Line Foreman	Montpelier, Vt.
Installer Repairman	Marlboro, Mass.
Equipment Installer	Boston, Mass.
	Brockton, Mass.
	Augusta, Maine
C. O. Switchman	Malden, Mass.
Installer	Cambridge, Mass.
	Boston, Mass.
	Boston, Mass.
Installer (Sub Station)	Springfield, Mass.
	Boston, Mass.
Equipment Installer	Boston, Mass.
	Equipment Installer Transmission Tester Equipment Installer Cable Splicer's Helper Equipment Installer Cable Splicer C. O. Switchman Junior Engineer's Asst. Transmission Tester P.B.X. Repairman Equipment Testman P.B.X. Installer P.B.X. Repairman Cable Splicer Repairman Installer Engineer Assistant P.B.X. Repairman P.B.X. Repairman Installer Engineer Assistant P.B.X. Installer Line Foreman Installer Repairman Equipment Installer Installer Repairman C. O. Switchman C. O. Switchman Installer Installer Installer Installer Installer C. O. Repairman Installer

<sup>\*</sup> Still assigned to Defense Projects

# New Jersey Bell Telephone Company

*P. A. Benson	Staff Assistant C.P.S.	Newark
*T. H. Bruner	Installer	Vineland
W. F. Buesing	Installer	North Bergen
G. J. Buscham	Repairman	Vineland
*S. C. Fritsch	Engineer	Newark
P. A. Gorman	Vice-President, Operating Dept.	Newark
*R. W. Hendrickson	Installer	Old Bridge
C. N. Kreiger	Transmission Testman	Ridgewood
J. F. Kurz	Repairman	Clifton
C. J. Linson	Splicer	Englewood
*T. S. Little	Switchman	New Brunswick
R. W. McAllister	Repairman	Bridgeton
C. F. Martin	Repairman	Englewood
J. A. Melosh	Assistant Engineer	Newark
W. T. Oelkers	Splicer	Hackensack
*H. A. Rowan	Repairman	Riverdale
*G. A. Scharg	Switchman	Passaic
P. A. Tanner	Switchman	Red Bank
A. J. Weisbecker	Cable Splicer	Hackensack
*R. M. White	Switchman	Red Bank

# New York Telephone Company

Lineman	Watertown
Repairman	Levittown
Installer	Manhattan
Switchman	Hicksville
Installer	Brooklyn
Radioman	Manhattan
Installer Repairman	Albany
	Brooklyn
	Manhattan
Engineer	Manhattan
Installer	Brooklyn
Staff Assistant	Troy
Teletype Repairman	Manhattan
Frameman	Brooklyn
Repairman	Jamaica, L. I.
Lineman	Watertown
Installer	Jamaica, L. I.
Cable Splicer	Manhattan
Installer	Pleasantville
Installer	Bronx
Installer	Mount Vernon
Test Deskman	Bronx
Engineer	Manhattan
Repairman	Brooklyn
Repairman	Brooklyn
Installer	Port Chester
Installer	Manhattan
Installer	Glens Falls
	Endicott
Installer	Brooklyn
Switchman	Brooklyn
Installer	Bellmore
Installer	Manhattan
Repairman	White Plains
	Brooklyn
	Watertown
	Brooklyn
Installer	Manhattan
Installer	Brooklyn
	Repairman Installer Switchman Installer Radioman Installer Repairman Telephone Switchman Cable Splicer Engineer Installer Staff Assistant Teletype Repairman Frameman Repairman Lineman Installer Cable Splicer Installer Installer Test Deskman Engineer Repairman Repairman Repairman Installer Switchman Installer

<sup>\*</sup>Still assigned to Defense Projects

# New York Telephone Company

M. J. Ronan	Installer	Brooklyn
*K. A. Schmitt	Repairman	Manhattan
A. F. Schneider	Switchman	Manhattan
F. A. Soltow	Repairman	East Nassau
*P. J. Southwell	Construction Foreman	Buffalo
B. R. Stanton	Line Foreman	Glens Falls
M. F. Van Aken	Installer Repairman	Herkimer
J. C. Van Cura	Installer	Manhattan
C. Volcheck	Installer	Old Quoque
L. J. Wentworth	Lineman	Cooperstown
E. J. Wynne	Switchman	Manhattan
C. F. Yonkers	Installer	Mount Vernon

# Northwestern Bell Telephone Company

R. A. Allison	Tolotypo Maintonanao Man	Minnesonalia Mi
	Teletype Maintenance Man	Minneapolis, Minn.
D. A. Appleby	Service Engr.	St. Paul, Minn.
*H. R. Bartell	Lineman	Wahpeton, N. Dak.
*W. R. Bingaman	Switchman	Des Moines, Iowa
B. B. Bohmert	Frameman	St. Paul, Minn.
C. N. Boyer	Lineman	Minot, N. Dak.
${f J.~E.~Brett}$	Switchman	Minneapolis, Minn.
L. E. Carpenter	Construction Supervisor	St. Cloud, Minn.
*D. W. Cox	P.B.X. Repairman	Des Moines, Iowa
E. G. Davis, Jr.	Lineman	Minneapolis, Minn.
E. C. Drinkwitz	Equipment Man	Hibbing, Minn.
*G. Glumac	Local Tester	Des Moines, Iowa
L. D. Hardenbergh	Cable Splicer	Omaha, Neb.
*V. M. Hilgerson	Lineman	Council Bluffs, Iowa
*R. L. Hoenigschmid	tInstaller Repairman	Robinsdale, Minn.
*R. S. Horton	Switchboard Man	Des Moines, Iowa
G. H. Lauritsen	Engineer	Omaha, Neb.
S. E. Lehnhardt	Frameman	Omaha, Neb.
*J. T. Lilly	Equipment Man	McCook, Neb.
J. M. Mead	Combination Man	Wishek, N. Dak.
*G. R. Nyquist	P.B.X. Installer	Minneapolis, Minn.
C. E. Pesheck	Equipment Man	Red Wing, Minn.
*C. M. Suchy	Lineman	Minneapolis, Minn.
R. G. Taft	Lineman	St. Paul, Minn.
M. R. Tupy	Splicer	St. Paul, Minn.
R. R. Wilson	Equipment Man	Grand Rapids, Minn.
A. C. Zahnow	Engineer	North Platte, Neb.
22. C. Zamiow	migmeet	roi mi i latte, Neb.

# The Ohio Bell Telephone Company

*G. H. Allen	C. O. Repairman	Cleveland
*H. L. Dailey	Foreman (Repair)	Columbus
A. J. Diorio	Installer-Repairman	Bridgeport
N. I. DuVall	Plant Asst. Engineer	Youngstown
G. L. Funkhouser	Deskman	Alliance
D. E. Haas	Apparatusman	Cleveland
R. D. Hall	Repairman	Toledo
J. W. O'Donnell	P.B.X. Repairman	Cleveland
*F. E. Raber	Apparatusman	Steubenville
*F. L. Raber	Apparatusman	Uhrichsville
C. C. Sallaz	Engineer Asst.	Akron
L. A. Steed	Apparatusman	Lancaster
J. F. Sweeney	Apparatusman	Cleveland
R. H. Zonker	Lineman	Steubenville

<sup>\*</sup>Still assigned to Defense Projects

#### The Pacific Telephone and Telegraph Company

Admin. Staff Supervisor R. L. Beach San Francisco, Calif. \*D. L. Bernardino Transmissionman Oakland, Calif. \*D. W. Bowey Transmissionman Portland, Oreg. Portland, Oreg. \*H. M. Budlong Station Installer H. Buoy Transmissionman Portland, Oreg. N. D. Campbell Assistant Engineer Walla Walla, Wash. \*F. M. Clement Senior Engineer Spokane, Wash. Lineman Santa Monica, Calif. J. I. Cummings Los Angeles, Calif. Cable Foreman J. Dawson T. L. Dombrowski Construction Foreman San Diego, Calif. F. W. Durboraw Cable Splicer Van Nuys, Calif. Operating Assistant \*D. S. Eaton Fresno, Calif. C. W. Eddens Cable Splicer Los Angeles, Calif. R. R. Edwards P.B.X. Repairman Canaga Park, Calif. Teletypewriter Repairman Seattle, Wash. R. D. Evans \*W. Evans Transmissionman San Francisco, Calif. Portland, Oreg. \*B. W. Falk Transmissionman San Francisco, Calif. E. E. Ford P.B.X. Installer R. R. Frazee Cable Splicer San Diego, Calif. \*K. Gannaway Transmissionman Coalinga, Calif. Los Angeles, Calif. Transmissionman M. Garcia Transmissionman Blythe, Calif. \*R. B. Gelinas Oakland, Calif. \*J. B. Gerst Transmissionman Portland, Oreg. M. R. Githens P.B.X. Installer Cable Splicer Alhambra, Calif. H. J. Green \*R. M. Harper Transmissionman Roseburg, Oreg. Outside Plant Engineer Hayward, Calif. E. L. Hill \*F. R. Holloway P.B.X. Installer Hollywood, Calif. Los Angeles, Calif. \*J. L. Ketels Transmissionman San Francisco, Calif. Plant Staff Supervisor L. L. Leyrer San Francisco, Calif. A. E. MacMahon Engineer C. Mc Intyre Outside Plant Engineer Bakersfield, Calif. W. M. McKenna Engineer San Francisco, Calif. P.B.X. Installer Roseburg, Oreg. \*H. D. McLean \*G. S. McNeill P.B.X. Repairman Hollywood, Calif. San Diego, Calif. \*R. G. Marsh Switchman Escondido, Calif. E. C. Neumann Cable Splicer Outside Plant Engineer D. J. O'Connell Los Angeles, Calif. \*L. F. Oliver Transmissionman The Dalles, Oreg. San Diego, Calif. \*F. J. Olson Technical Man Longview, Wash. Outside Plant Engineer \*L. A. Olson D. L. Osborne Transmissionman Portland, Oreg. Brawley, Calif. Installer Repairman J. L. Panosh \*L. F. Parker Transmissionman Los Angeles, Calif. San Francisco, Calif. \*J. M. Perotte P.B.X. Installer \*J. R. Price Transmissionman Portland, Oreg. J. E. Ray P.B.X. Repairman Santa Ana, Calif. Los Angeles, Calif. L. G. Read Installer Foreman Crockett, Calif. \*W. D. Reese Transmissionman Subway Inspector San Diego, Calif. A. J. Schweigan Cable Splicer Temple City, Calif. N. E. Snow Portland, Oreg. \*N. C. Steenson Transmissionman R. R. Stevenson San José, Calif. Lineman Santa Cruz, Calif. \*R. B. Swindell P.B.X. Repairman Chula Vista, Calif. H. A. L. Thacker Construction Foreman E. C. Tinsman Cable Splicer North Hollywood, Calif. San Francisco, Calif. Senior Engineer J. P. Tynes El Centro, Calif. \*D. J. Washburn Switchman

# The Southern New England Telephone Company

\*W. F. Clemens
\*R. W. Edwards
D. J. Fahy
J. J. Morrisroe
\*H. H. Vogel

Station Installer
Frameman
Lineman
Technician
Electronic Repairman

Hartford, Conn. Hartford, Conn. New Haven, Conn. New Haven, Conn. New Haven, Conn.

 $<sup>*</sup> Still \ assigned \ to \ Defense \ Projects$ 

# Southern Bell Telephone and Telegraph Company

_		
R. C. Austin	Installer Repairman	Asheville, N. C.
E. F. Basel	TTY PBX Installer Repairman	Hollywood, Fla.
*A. L. Bennett	Switchman	Nashville, Tenn.
W. A. Boudreaux	Installer Repairman	New Orleans, La.
R. H. Brady	Installer Repairman	Birmingham, Ala.
N. K. Briggs	Testman	Murfreesboro, Tenn.
G. W. Brummett	Installer Repairman	Knoxville, Tenn.
W. C. Burnett	Div. Trans. & Prot. Engineer	Charlotte, N. C.
S. K. Carpenter	PBX Installer Repairman	Nashville, Tenn.
W. D. Carpenter	PBX Installer Repairman	Nashville, Tenn.
W. A. Cline, Jr.	PBX Installer	Ensley, Ala.
T. R. Cobb	PBX Installer Repairman	Ensley, Ala.
D. J. Coble	Switchman	Greensboro, N. C.
*E. P. Cole	Cable Splicer's Helper	Memphis, Tenn.
L. J. Daspit	Installer Repairman	New Orleans, La.
H. M. Drake	Testman	Tullahoma, Tenn.
*J. E. Draper	Assignment Man	Gallatin, Tenn.
*G. A. Draughon	Installer	Nashville, Tenn.
C. D. Feeney	Test Deskman	Gulfport, Miss.
R. R. Garrett	Switchman	Memphis, Tenn.
H. C. Gibbons	PBX Installer Repairman	Miami, Fla.
E. A. Green	Assignment Man	Lebanon, Tenn.
J. H. Green	Switchman	La Grange, Ga.
J. S. Hibbard	Installer Repairman	W. Monroe, La.
R. B. Hickman	Assignment Man	Charlotte, N. C.
R. T. Hope	Installer	Brighton, Ala.
J. Hourguettes	Lineman	Hattiesburg, Miss.
*R. C. Hudson	Construction Supervisor	Louisville Ky.
*J. C. Jinks	Rural Repairman	Maryville, Tenn.
H. A. Jones	C. O. Equip. Inst. Repairman	Nashville, Tenn.
C. E. Joyner	Switchman	Murfreesboro, Tenn.
B. B. Kelly	Toll Testboard Man	Raleigh, N. C.
W. F. Kirwin	Lineman	Metairie, La.
J. H. Knight	C. O. Equip. Inst. Repairman	Hattiesburg, Miss.
*R. E. Lane	Assignment Man	Gallatin, Tenn.
H. B. Litchfield	Div. Planning & Bldg. Engineer	Columbia, S. C.
W. A. Martin	Installer Repairman	Anniston, Ala.
J. R. Matherne	Engineer	New Orleans, La.
J. L. McBride	Lineman	Birmingham, Ala.
J. R. McCook	PBX Installer Repairman	Miami, Florida
R. H. Miskelly	C. O. Equip. Inst. Repairman	Jackson, Miss.
*B. J. Moore	Switchman	Memphis, Tenn.
C. C. Moore	Installer Repairman	New Orleans, La.
G. Page	PBX Installer Repairman	Miami, Fla.
*J. J. Parrish	Installer Repairman	Savannah, Ga.
C. P. Raski	PBX Installer Repairman	Miami, Fla.
W. L. Rowlette	Switchman	Murfreesboro, Tenn.
*E. G. Sockwell	C.O. Equip. Installer	Atlanta, Ga.
J. R. Spletstoser	Frameman	W. Palm Beach, Fla.
R. N. Strickland	Frameman	Miami, Fla.
*C. M. Thompson	Lineman	Knoxville, Tenn.
*R. Thompson	Installer	Nashville, Tenn.
C. L. Townsend	Installer Repairman	Anniston, Ala.
R. D. Tuchek	Line Foreman	Winston-Salem, N.C.
*J. R. Wales	Switchman	Memphis, Tenn.
W. H. Weatherman	Installer Repairman	Raleigh, N. C.
R. P. Whelahan	PBX Installer Repairman	Miami, Fla.
G. J. White	PBX Installer Repairman	Miami, Fla.
*C. S. Whitlock	C. O. Repairman	Morristown, Tenn.
*J. R. Wilder	Engineer  BRY Installer Beneimmen	Jackson, Miss.
W. E. Williams	PBX Installer Repairman	Nashville, Tenn.

<sup>\*</sup> Still assigned to Defense Projects

# Southwestern Bell Telephone Company

	_ •	
*J. A. Achilles	Estimate Assigner	San Antonio, Tex.
K. D. Adams	Switchman	Alice, Tex.
J. E. Bittick	C. O. Repairman	St. Charles, Mo.
H. P. Bodine	Lineman	Sedalia, Mo.
M. H. Brehmer	Installer	San Antonio, Tex.
J. M. Brown	Telephone Repeaterman	Little Rock, Ark.
D. R. Brownfield	Lineman	Kansas City, Mo.
J. C. Bryan	Station Installer	San Antonio, Tex.
G. G. Bryant	Cable Splicer's Helper	Kansas City, Mo.
*M. J. Bullen	Estimate Supervisor	Dallas, Tex.
J. P. Burks	C. O. Repairman	Dallas, Tex.
G. K. Burns	Frameman	Houston, Tex.
G. L. Caver	Telephone Repeaterman	Oklahoma City, Okla.
S. V. Cooper	C. O. Repairman	Dallas, Tex.
D. A. Cowles	Telegraph Repeaterman	San Antonio, Tex.
*C. W. Daulley	Station Installer	Houston, Tex.
R. F. Denton	Teletype Maintenance Man	Little Rock, Ark.
B. J. Dotson	Station Installer	Dallas, Tex.
G. O. Ekstedt	Plant Assigner	St. Louis, Mo.
J. D. English	Telephone Installer	San Antonio, Tex.
*R. J. Evans	Construction Foreman	East St. Louis, Mo.
*H. A. Franko	Lineman	Brownsville, Tex.
C. R. Gifford	C. O. Repairman	McAllen, Tex.
H. L. Griffith	Installer	San Antonio, Tex.
M. W. Grunwald	Cable Splicer	San Antonio, Tex.
L. J. Gunz	Lineman	Brownsville, Tex.
W. E. Hartman	Installer	St. Louis, Mo.
**K. A. Hentschke	C. O. Repairman	St. Louis, Mo.
H. W. Hix	Deskman	McAllen, Tex.
P. J. Jackson	Cable Splicer	Corpus Christi, Tex.
*A. G. Jewell	Senior Engineer, Trans.	Little Rock, Ark.
*E. J. Kincannon	Station Installer	Ft. Smith, Ark.
I. L. Lawson	Cable Splicer	Corpus Christi, Tex.
E. E. Lockaby	Deskman	McAllen, Tex.
S. M. McClellan	Station Installer	San Antonio, Tex.
A. B. Miller	Construction Foreman	St. Louis, Mo.
H. F. Moore	Switchman	San Antonio, Tex.
D. M. Moseley T. O. Owen	Exchange Repairman P.B.X. Repairman	San Antonio, Tex.
*D. W. Palmer	Switchman	McAllen, Tex.
D. E. Perido	Cable Splicer	Little Rock, Ark.
W. C. Plumb	Transmission Supervisor	San Antonio, Tex.
*M. N. Ricks	Exchange Repairman	St. Louis, Mo. Victoria, Tex.
A. T. Rife	Plant Assigner	Harlingen, Tex.
W. G. St. Pierre	Teletype Maintenance Man	Oklahoma City, Okla.
P. F. Schultz	Repair Foreman	Dallas, Tex.
D. E. Smith	Repairman	Odessa, Tex.
C. B. Smyth	Telephone Repeaterman	Dallas, Tex.
*J. E. Terry	Toll Engineer	Dallas, Tex.
J. D. Tisdel	Lineman	San Antonio, Tex.
C. E. Wetmore	Telegraph Repairman	Oklahoma City, Okla.
H. L. Williams	Frameman	Dallas, Tex.

# Wisconsin Telephone Company

\*R. A. Kendzierski
W. F. Ribbens
\*R. C. Wolfgram

\*Still assis

 $* Still \ assigned \ to \ Defense \ Projects$ 

\*\*Deceased

Fond du Lac Milwaukee Milwaukee Lake Geneva Milwaukee

# Western Electric Company

### HAWTHORNE WORKS

J. M. Coyne	Tester	Chicago, Ill.
M. Gottlieb	Tester	Chicago, Ill.
W. H. Orr	Electrical Tester	Chicago, Ill.
C. W. Young	Tester	Chicago, Ill.
W. J. Zimmerman	Tester	Chicago, Ill.
C. N. Zook	Section Chief	Chicago, Ill.

### HEADQUARTERS

C N D	G . di Gli . f	g .
C. N. Bergmeister	Section Chief	Secretary's
E. M. Brierton	Stenographic Clerk	Radio
M. P. Buovolo	Stenographer	Secretary's
F. Casey	Secretarial-Stenographer	Radio
*R. R. Cocchi	Technical Clerk	Manufacturing
*M. P. Cronin	Secretarial-Stenographer	Radio
T. R. Delahunt	Engineer. Asst.	Secretary's
K. G. Erickson	Stenographer	Secretary's
B. A. Farrell	Emp. Ser. Clerk	Radio
N. Finelli	Secretary	Public Relations
*M. T. Giblin	Emp. Ser. Clerk	Radio
*G. Goldfuss	Secretary	Manufacturing
E. J. Hoffman	Results Investigator	Purchasing
*J. J. Jamieson	Secretary	Personnel
*S. E. Jefferson	Section Chief	Manufacturing
E. R. Konopka	Financial Clerk	Treasury
V. Koziol	Typist Special	Manufacturing
J. M. Linn	Record Clerk	Secretary's
*J. L. Loudon	Staff Specialist	Personnel
W. J. McCann	Payroll Clerk	Treasury
T. J. McSherry	Multilith Operator	Secretary's
*M. E. Minns	Secretarial-Stenographer	Secretary's
D. A. Moore	Utility Man	Manufacturing
G. T. Moore	Utility Man	Manufacturing
A. S. Morasco	Record Clerk	Purchasing
M. A. Natale	Record Clerk	Secretary's
S. K. Nodland	Secretary	Radio
M. G. O'Malley	Messenger	Secretary's
*H. W. Paro	Assistant Superintendent	Telephone
L. C. Quinn	Business Mtds. Investigator	Manufacturing
*M. Schirripa	Secretary	Manufacturing
A. G. Spencer	Service Coordinator	Telephone
B. A. Steinhaurer	Stenographer	Secretary's
*S. G. Sullivan	Secretary	Radio
*A. D. Tomao	Secretary	Telephone
V. E. Toscan	Department Chief	Financial
*T. R. Triplett	Department Chief	Radio
*M. VanCasteren	Secretary	Manufacturing
J. F. Vecchione	Stenographer	Secretary's
*A. V. Zanky	Section Chief	Radio
11. V. Zanky	Deciron Offici	Itaaio

# INSTALLATION ORGANIZATION

INSTALLATION (	ORGANIZATION	
W. A. Allen	Inst. Supervisor	Dallas, Tex.
L. S. Annese	Inst. Supervisor	Albany, N. Y.
*H. T. Bailey	Inst. Supervisor	Cleveland, Ohio
*E. P. Barbante	Inst. Supervisor	New York, N. Y.
D. E. Barkelew	Inst. Supervisor	Cleveland, Ohio
*W. Benshoof	Inst. Supervisor	Omaha, Neb.
E. A. Berichon	Inst. Supervisor	Cleveland, Ohio
M. Bernandino	Secretarial-Stenographer	New York, N.Y.
D. W. Boettcher	Project Supervisor	Portland, Oreg.
*W. L. Bourn	Inst. Supervisor	Dallas, Tex.
*R. L. Brenenstall	Inst. Supervisor	Chicago, Ill.
C. C. Brewer	Inst. Supervisor	St. Louis, Mo.
J. H. Brueggemann	Office Service Clerk	New York, N.Y.
G. B. Burns	Inst. Supervisor	Little Rock, Ark.
*D. D. Callows	Inst. Supervisor	Chicago, Ill.
R. M. Cancro	Draftsman	New York, N. Y.

 $<sup>*</sup> Still \ assigned \ to \ Defense \ Projects$ 

#### Western Electric Company

#### INSTALLATION ORGANIZATION

INSTALLATION	ORGANIZATION
*G. J. Chandler	Inst. Supervisor
E. A. Chase	Inst. Supervisor
W. D. Coffman	Inst. Supervisor
*J. W. Cosgrove	
J. W. Cosgrove	Stock Service Clerk
G. J. Cowley	Inst. Supervisor
*H. N. Crouse	Inst. Supervisor
C. Dabbs	Inst. Supervisor
W. C. Daniel	Project Supervisor
N. S. Davis	Inst. Supervisor
T. E. Denny	Inst. Supervisor
*I I Delliy	
*J. K. DeWees	Inst. Supervisor
H. L. Elkins	Inst. Supervisor
*W. G. Entrekin	Inst. Supervisor
E. B. Felts	Inst. Supervisor
F. W. Glimm	Draftsman
*C. T. Gray	Inst. Supervisor
*L. W. Hagen	Inst. Supervisor
*J. M. Hall	Inst. Supervisor
K. Hermanson	Inst. Supervisor
R. E. Hill	Inst. Supervisor
J. L. Hinch	Inst. Supervisor
*W. H. Hogan	Inst. Supervisor
*E. L. Hood	Inst. Supervisor
G. N. Howk	
	Inst. Supervisor
A. Y. Hutto	Inst. Supervisor
*O. E. Jackson	Inst. Supervisor
G.~H.~Jobe	Inst. Supervisor
L. J. Jozwiak	Inst. Supervisor
D. P. Kannard	Inst. Supervisor
R. W. Kannard	Inst. Supervisor
*M. B. Kelly	Jr. Clerk
D. Kuczinski	Secretary
J. L. Lamberson	Sales Specialist
*R. P. Lovett	Inst. Supervisor
H. W. Manley	Inst. Supervisor
A. M. Massa	Secretary
L. E. McIntosh	Inst. Supervisor
G. D. Mitchell	Inst. Supervisor
*H. L. Mootz	Cost & Price Analyzer
*M. E. Mouchard	Inst. Supervisor
J. G. Pasch	Area Supervisor
E. B. Pedersen	Stock Service Clerk
*L. J. Pedersen	Inst. Supervisor
W. E. Polley	Inst. Supervisor
L. D. Raines	Inst. Supervisor
E. W. Reiss	Inst. Supervisor
*P. C. Roberts	Inst. Supervisor
*J. E. Roper	Inst. Supervisor
J. W. Rude	Inst. Supervisor
L. C. Schau	Inst. Supervisor
R. S. Scully	Inst. Supervisor
G. Sileo	Secretary
*G. R. Snover	Inst. Supervisor
R. Sternad	Inst. Supervisor
R. G. Tighe	Inst. Supervisor
*R. Trantham	Area Supervisor
F. W. Trotter	C.O. Appraiser
C. T. Tsoutsos	Secretarial-Stenographer
G. A. Walser	Inst. Supervisor
*A. J. Wanta	Inst. Supervisor
*J. S. Warren	Inst. Supervisor

Fargo, N. Dak. St. Louis, Mo. Little Rock, Ark. New York, N.Y. San Antonio, Tex. Cleveland, Ohio Gooding, Idaho Denver, Colo. Dallas, Tex. St. Louis, Mo. St. Louis, Mo. Houston, Tex. Detroit, Mich. Cincinnati, Ohio New York, N.Y. Louisville, Ky. Bismarck, N. Dak. New York, N.Y. Omaha, Neb. St. Louis, Mo. San Antonio, Tex. Dallas, Tex. Detroit, Mich. Newark, N. J. Austin, Tex. Chicago, Ill. St. Louis, Mo. New York, N.Y. St. Louis, Mo. St. Louis, Mo. New York, N. Y. New York, N.Y. New York, N.Y. San Francisco, Calif. Houston, Tex. New York, N. Y. Dallas, Tex.
Dallas, Tex.
New York, N. Y.
New York, N. Y. Memphis, Tenn. New York, N.Y. Detroit, Mich. New York, N.Y. St. Louis, Mo. St. Louis, Mo. Dallas, Tex. Chicago, Ill. St. Louis, Mo. St. Louis, Mo. Baltimore, Md. New York, N. Y. Detroit, Mich. Cleveland, Ohio Omaha, Neb. Atlanta, Ga. New York, N. Y. New York, N. Y. Dallas, Tex. Chicago, Ill. Delhi, La. New York, N.Y. Baltimore, Md. Baltimore, Md.

Secretary

Inst. Supervisor

Inst. Supervisor

E. A. Weber

\*W. E. Yocum

C. H. Zeigler

<sup>\*</sup> Still assigned to Defense Projects

# Western Electric Company

#### KEARNY WORKS

L. Antlick	Engineer	New York, N. Y.
*T. H. Batt	Department Chief	Kearny, N. J.
*M. Berkley	Engineer	New York, N. Y.
*R. J. Campbell	Section Chief	Kearny, N. J.
D. N. Clough	Engineer	New York, N. Y.
*R. F. Cote	Department Chief	New York, N. Y.
*P. W. Dilger	Section Chief	New York, N. Y.
J. E. Fanning	Department Chief	Kearny, N. J.
J. E. Frawley	Engineer	New York, N. Y.
H. O. Gales	Draftsman	Kearny, N. J.
G. Hansen	Section Chief	New York, N. Y.
W. G. Harvey	Personnel Investigator	New York, N. Y.
*R. E. Hirsch	Department Chief	New York, N. Y.
*H. Holshoe	Personnel Investigator	Middle Village, N. Y.
*E. G. Ihnken	Section Chief	New York, N. Y.
*G. S. Jarahian	Engineer	New York, N. Y.
J. L. Kelly	Engineer	New York, N. Y.
*J. L. Koch	Section Chief	New York, N. Y.
L. Lara	Engineer	New York, N. Y.
L. B. Laurion	Engineer-Analyzer	Kearny, N. J.
*F. T. Lehr	Engineer	New York, N. Y.
*J. H. Lovell	Department Chief	Kearny, N. J.
J. I. McDermott	Asst. Engineer	New York, N. Y.
E. M. Murphy	Engineer	New York, N. Y.
*F.P. Musnuff	Staff Specialist	Kearny, N. J.
*G. K. Oertel	Engineer	New York, N. Y.
W. Ruch	Engineer	New York, N. Y.
*T. R. Sayre	Engineer	Kearny, N. J.
*D. Schwartz	Asst. Engineer	New York, N. Y.
*C. M. Vission	Section Chief	New York, N. Y.
*E. F. Ward	Secretary	New York, N. Y.
*G. M. Weinstein	Engineer	New York, N. Y.
J. E. Wilder	Section Chief	New York, N. Y.

### NEW YORK DISTRIBUTING HOUSE

\*S. R. Tober Secretary

New York, N. Y.

#### NORTH CAROLINA WORKS

*H. F. Ervine	Section Chief	Burlington, N. C.
		<b>e</b> ,
*J. A. Johnson	Department Chief	Winston-Salem, N. C.
*D. W. Kinsinger	Assistant Superintendent	Burlington, N. C.
R. A. Rossler	Field Engineer	Winston-Salem, N. C.
J. B. Sullivan	Test Engineer	New York, N. Y.
E. S. White, Jr.	Employment Interviewer	Burlington, N. C.

# POINT BREEZE WORKS

G. V. Swan Engineer

Baltimore, Md.

 $<sup>*</sup> Still \ assigned \ to \ Defense \ Projects$ 

#### Recruited from Outside Bell System

\*R. E. Achilles \*D. A. Adams D. E. Allen \*R. W. Anderson H. A. Bartenberger C. G. Beatty M. Beconovich \*N. F. Blackwell \*D. T. Boone \*C. A. Brady \*B. F. Brawner E. S. Brown \*P. Campbell J. J. Carlson O. D. Carlstrom \*F. E. Carter J. D. Clay \*G. J. Coletti \*F. S. Crosson F. Curtis R. C. Dimmitt R. S. Duncan N. H. Edwards R. R. Fawcett N. Fomby E. P. Gallagher J. T. Garrett C. E. Goodwin \*E. Gratias P. A. Guilfoyle G. A. Hageney N.B. Haviland H. Held \*W. M. Holtzclaw \*R. A. Hopkins \*M. M. Jarvis \*M. C. Jung L. G. Kett \*F. J. Kotula \*C. S. Lawson

M. M. Lynar \*E. M. McNamara \*R. T. Marchese W. J. Maurer A. G. Miller G. A. Minella G. M. Moore G. R. Nelson R. C. Nivala G. F. O'Brien \*W. J. O'Hara R. N. Pann \*J. T. Pardovich M. S. Pittler \*A. F. Pomerico \*D. D. Pribish R. W. Ramsey J. L. Raymer W. E. Reed \*C. T. Reeves M. Rice P. C. Robertson J. B. Russell \*V. Scaduto B. Schaeffer E. R. Schmidt \*B. F. Schwab F. Severence \*J. A. Sheehan \*V. A. Siebenrock \*E. M. Suarez W. J. Sullivan R. L. Trout \*D. P. Tyrrell \*B. B. Vickers J. A. Weholt G. F. White \*J. O. White \*C. E. Wollan M. Yoshimori L. A. Young

\* Still assigned to Defense Projects

#### AND IN ADDITION

H. B. Litz

C. F. Long

The completion of the White Alice Network would not have been possible without the capable support of many groups far from Alaska but always close to White Alice. To the following organizations in the Defense Projects Division, New York, goes special thanks for their untiring efforts:

The Contracting and Sales Organization which was responsible for our contractual relations with the Air Force; the Purchasing Organization which negotiated countless contracts with subcontractors and suppliers; the Accounting Organization for able handling of many financing details; the Personnel Organization, which found the many specialists who were needed.

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