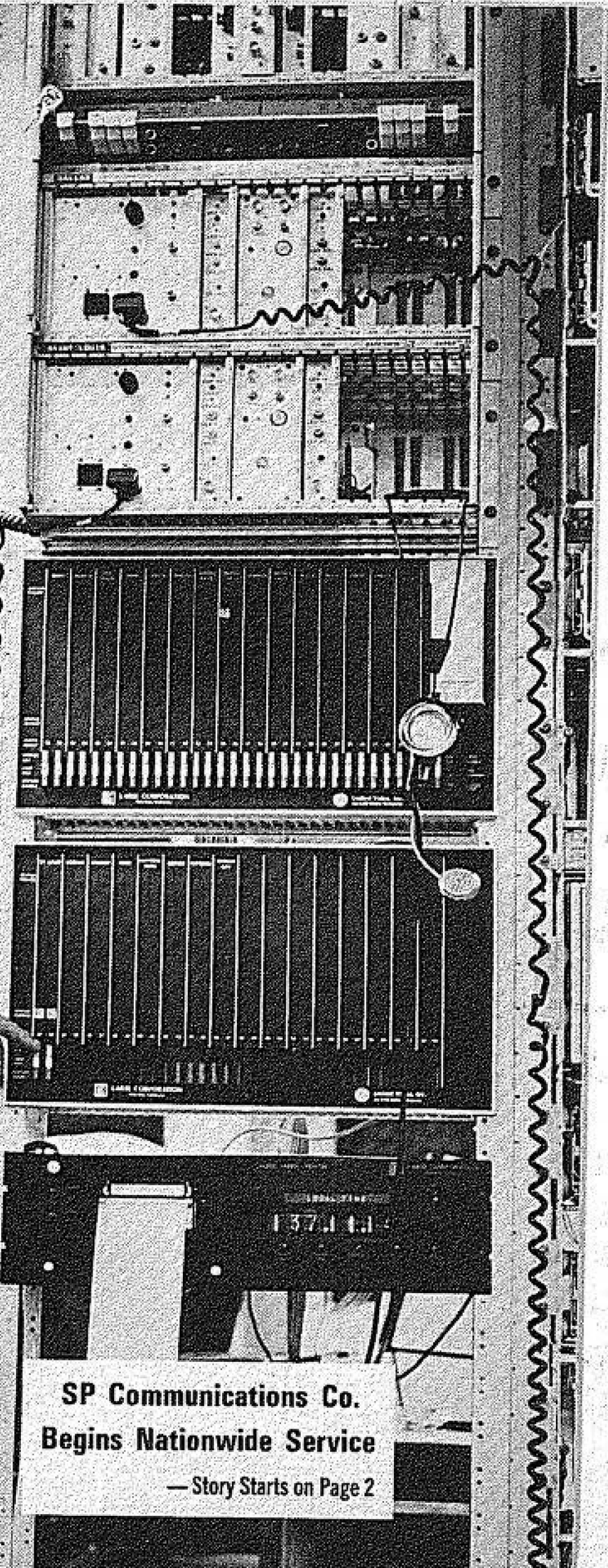
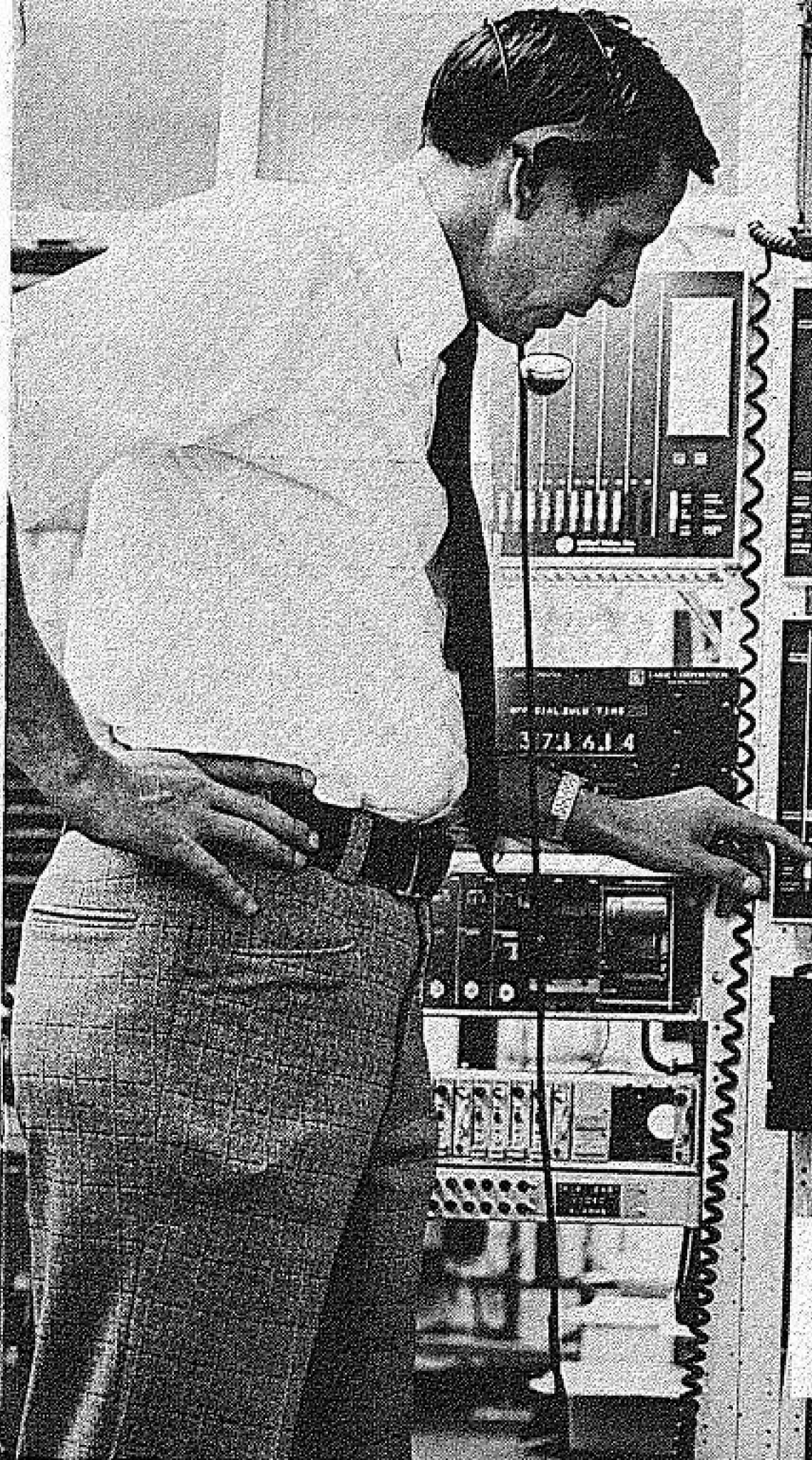


Southern Pacific
BULLETIN
AUGUST, 1974



SP Communications Co.
Begins Nationwide Service

— Story Starts on Page 2

SPC Goes

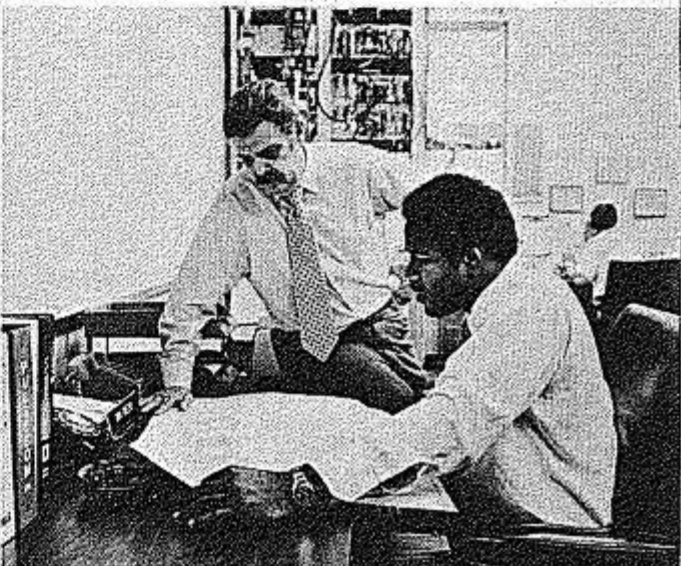
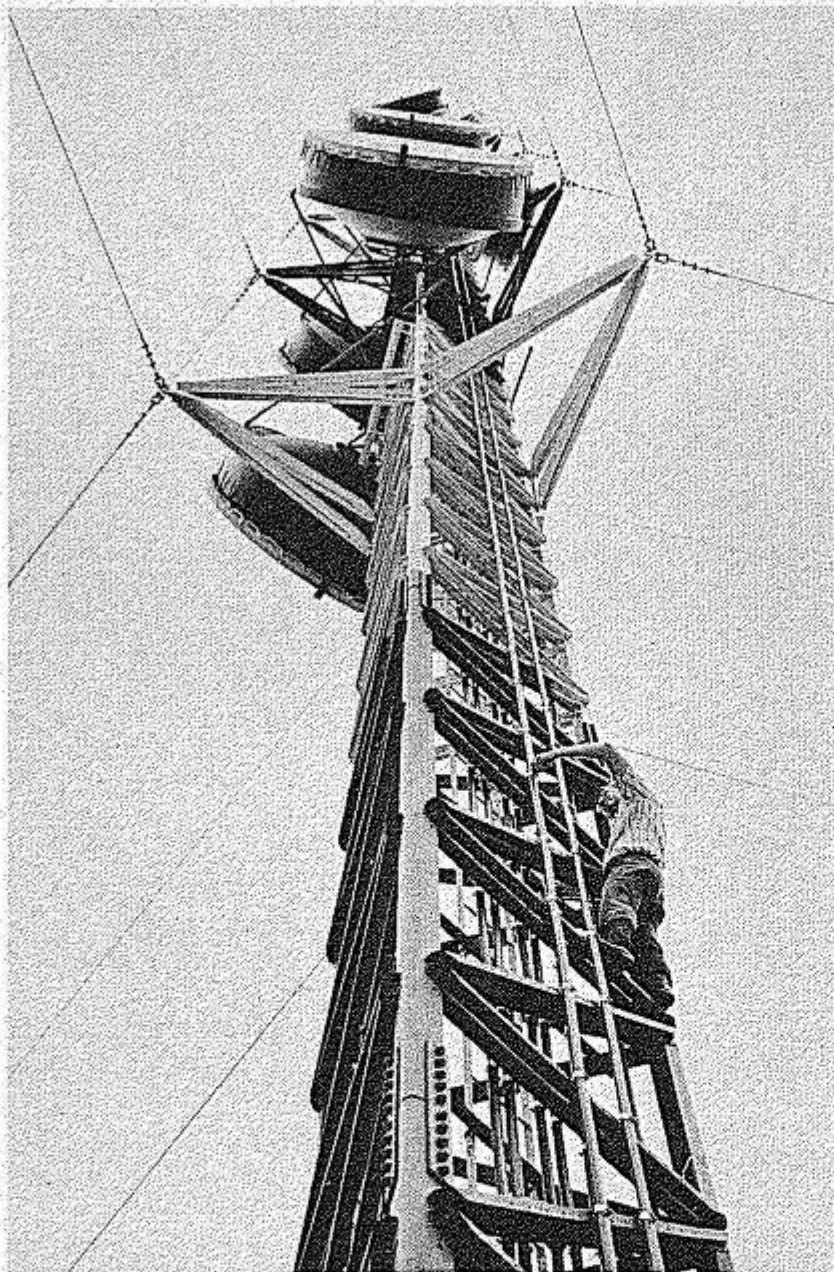
SP's new Communications Company is the nation's first specialized common carrier to offer customers coast - to - coast service.

IN JUST 18 months from the date it started construction, Southern Pacific Communications Company has become the largest specialized common carrier in its field in the United States.

No longer can SPC be shown on just our "Golden Empire" rail, truck and pipeline map. It has put together a nationwide network, and in mid-June it began carrying communications traffic for its customers from coast to coast.

"Our growth has been so rapid that we're still a little bit out of breath," says SPC President Gus Grant, who heads a staff of 146 people in 16 states, "but we're now able to offer most of the facilities and services our customers want and need."

ABOVE LEFT: K. D. (Ken) Hice, microwave technician, Tulsa, Okla., inspects wave guide on 300-foot Sand Springs tower, near Tulsa. **BELOW LEFT:** SPC President Gus Grant, right, confers with John J. Geier, vice president-marketing, at the firm's San Francisco headquarters. **BELOW:** Hurley Kyte, left, operations manager for SPC's mid-continent district, checks over circuit diagram with Don Greene, customer service engineer, who handles installation and engineering of circuits for Tulsa-area customers.



Nationwide

SPC provides voice, data, video and facsimile (document) transmission services to private-line customers in business, industry, education and government.

These services are tailored to specific customer needs, ranging from a simple teleprinter link between two cities to a complex computer network covering many locations.

"Our communications representatives conduct a thorough investigation of the user's needs and recommend a mix of services that will almost certainly give him more communications for less money than he could get anywhere else," explains John J. Geier, SPC's vice president-marketing.

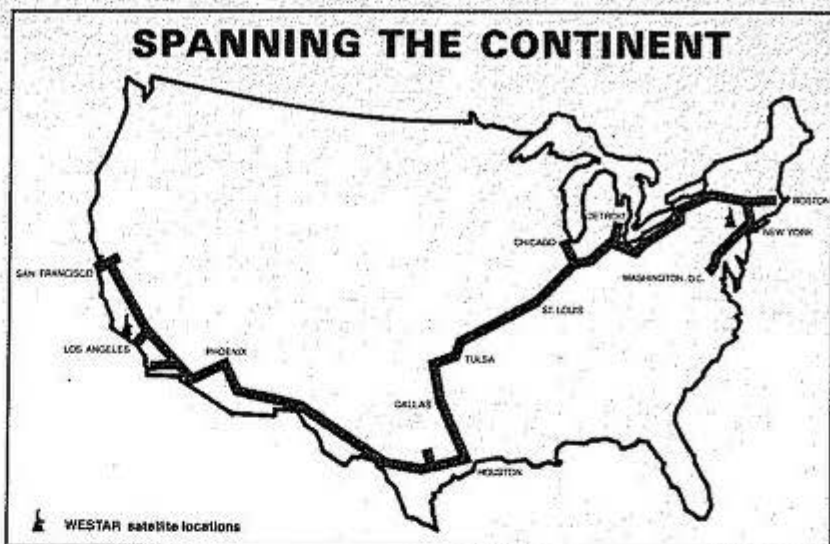
SPC's first customer, the Fibre-board Corporation, which went "on line" with voice and data circuits between San Francisco, Los Angeles and Phoenix on December 26, 1973, estimates that the SPC hook-up saves that company about 17 per cent a year as compared to alternative communications costs.

SP's diversification into the specialized communications business was a logical move for a large and experienced transportation company. Communications, after all, is the transportation of information.

Beyond that, as President B. F. Biaggini pointed out recently, "Southern Pacific has been in the communications business for more than 100 years. Our immediate predecessor, the Central Pacific—which built the western half of America's first transcontinental railroad—was chartered by Congress in 1862 to build not only a railroad but communications lines as well."

Over the past 20 years, SP has gained extensive know-how in the field from building the nation's largest privately owned communications system. Its microwave network, extending over more than 6,800 route miles in 12 states, operates with a proven 24-hour reliability of 99.96 per cent.

Starting in 1968, various decisions



Map shows SPC's nationwide network. While coast-to-coast service is already underway, SPC is leasing circuits for some segments of the network, pending completion of its own facilities.

of the Federal Communications Commission enlarged the possibilities for competition in the country's communications business.

"The FCC decided that specialized common carriers could help meet the growing public need for communications service," explains Thor A. Miller, SPC's general counsel. "It was anticipated that such carriers could offer greater flexibility, provide supplemental capital for the rapidly expanding communications market and offer highly specialized services. The FCC also felt that competition would stimulate the spread of technological innovations."

Edward L. Taylor, vice president and manager of SPC's mid-continent district, offers an analogy. "When the automobile business first started, you had one choice of colors—black. And the manufacturer chose the delivery date. Today, there must be at least a thousand colors, styles and types of vehicles to choose from. Before competition entered the communications business, the situation hadn't progressed very far beyond 'basic black.' Now businessmen have a whole new range of services available to them."

SPC — which is helping to provide these services — was incorporated in January, 1970, following feasibility studies conducted under

the direction of John N. Albertson, then general superintendent of communications-system for Southern Pacific Transportation Company and now SPC vice president and general manager. Construction on the first segment of the line began in November, 1972.

The firm's terrestrial system follows Southern Pacific's railroad right-of-way from San Francisco to Tucson.

"We share a number of microwave sites with the Transportation Company, but we have our own equipment," explains Albertson. "We transmit on a different frequency — SPT is on the industrial band, and we're on the common carrier band."

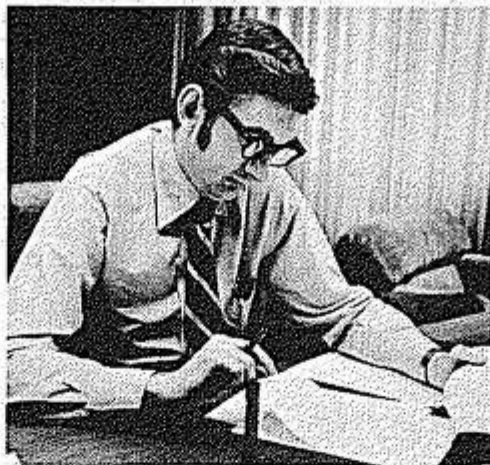
From Tucson to Dallas (via Hous-

COVER

Clint Yarwood, control center supervisor, checks SPC's alarm system at Tulsa. This panel monitors a whole series of functions at 30 microwave sites between Dallas and St. Louis. Lights appear on the panel if someone breaks into one of the equipment buildings, if there is a loss of public power (SPC has standby generators and batteries), or if there appears to be some other kind of a transmission problem. SPC trouble-shooters can get to any microwave site on the system within two hours.



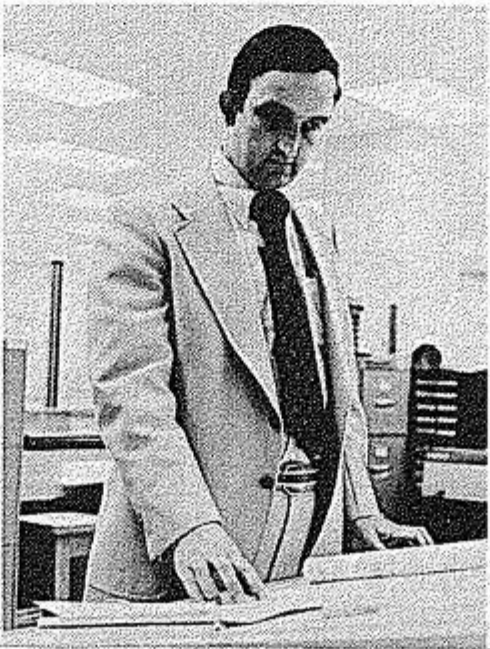
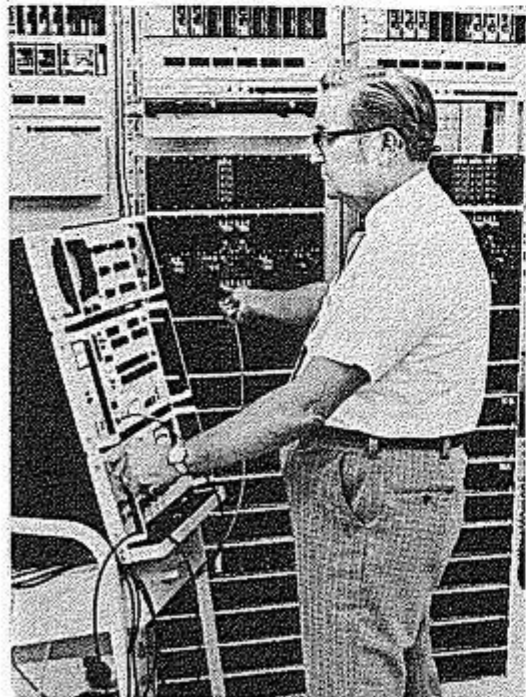
ABOVE: Donald Sharp, SPC project engineer, checks data in front of new SPC microwave tower in Tucson. **BELOW:** Robert A. King, manager of engineering, tests circuits at Houston. He is supervising the construction of SPC's microwave system between El Paso and Dallas.



LEFT: Edward L. Taylor is vice president and manager of SPC-Mid Continent, with headquarters in Tulsa. **RIGHT:** I. Tunis Corbell is vice president and manager of SPC-East. His territory includes the Atlantic Seaboard, New England and west to Cleveland.



ABOVE LEFT: Miki Swenson, manager, finance and administration, Tulsa, handles budget matters for SPC's mid-continent area. **ABOVE RIGHT:** Tom A. Marino, left, manager, order control, and V. Madhva Raja, multiplex engineer, both at Wakefield, Mass., discuss engineering aspects of a customer order. **BELOW LEFT:** K. F. Leddick, manager of SPC's Atlanta, Ga., office, is directing planning and engineering of the firm's St. Louis to Chicago system. **BELOW RIGHT:** Ray Watley, right, SPC communications engineer, supervises installation of alarm system at Tucson.



ton), SPC is leasing SPT's microwave facilities until construction of its own network is completed in about six months.

From Dallas to St. Louis (via Oklahoma City and Tulsa), the firm now has its own microwave system, acquired from United Video, Inc. in February, 1974. From St. Louis to Chicago and New York, it is leasing circuits provided through Western Union's surface system.

SPC is also acquiring two other firms — Video Microwave, Inc., with construction permits and applications before the FCC for service between New York, Albany and Boston; and Transportation Microwave Corp., with a microwave system in operation between Philadelphia and Buffalo (via Albany).

"By late 1975, we will have completed our own coast-to-coast network (see map) with line-of-sight towers placed about every 30 miles along the way. We expect to have more than 300 microwave stations between San Francisco and Boston," Grant says. "This \$45 million system will be capable of carrying 1,800 individual voice conversations in each direction. It will serve about 80 cities in nearly every metropolitan area of the country."

SPC also has a lease agreement with Western Union for use of its Westar domestic satellite system. Starting November 1, SPC will use this satellite capability to supplement its own surface network, combining the two systems to provide the most efficient service for its customers.

"For example, we will relay long distance traffic from various West Coast points to Western Union's ground station near Los Angeles," Grant explains. "From there it will be transmitted direct to the satellite and then relayed to another ground station near New York. Then it will be beamed to our tower on top of the Empire State Building for transmission to customers in eastern cities. Western Union, in turn, will use our surface system to carry its traffic to major cities in the Southwest."

The first of two satellites for the Westar system has already been launched and is now in a synchron-

ous orbit 22,300 miles above the earth. SPC will lease 60 communications channels when this system becomes operational, with an option to increase the number of channels to 240 after a year, as its market develops.

Discussing the growing demand for specialized communications services in the Los Angeles area are George J. Vasilakos, seated, SPC's western area sales manager, and Tom A. Welch, senior sales representative.

"We're planning our facilities to serve a specialized communications market that is expected to grow about 25 per cent a year over the next decade," Grant points out.

"We're already serving about 60 customers—some of whom are using as many as 60 circuits," Geier says, "and we have five times that many waiting to come on line — a backlog of about \$3 million worth of orders. We're hooking them up as fast as we can."

A typical SPC customer is an industrial firm with sales offices, plants and warehouses in several states. It uses SPC circuits for a private telephone network, to transmit data on its operations to a computer in its headquarters city, and to relay sales



reports, charts and other written material by facsimile to its principal offices.

SPC users include an interstate chain of men's clothing stores, a bank with several branches, a brokerage firm (which uses a private line to carry stock quotations), an insurance company, a gasoline producer and distributor, a truck line and a major food processor.

"SPC will design and deliver a

(Concluded on page 13)

A Company of Specialists

Of the 146 people employed by SP Communications Company, 21 are in administration and finance, 31 are in marketing, and the rest are engineers and technicians. The firm employs 22 graduate engineers, most of them with electrical engineering degrees.

"Even our salesmen — quite a few of them — are engineers," SPC President Gus Grant points out. "They need extensive technical knowledge in order to be able to sell our services."

The SPC staff includes 12 former railroaders — all that could be spared by SP Transportation Company, which needs its technical people for its own, still-expanding communications system.

"SP Communications Department people were responsible for all the initial planning and engineering of our network," Grant says. "The fact that we've been able to move ahead as fast as we have is directly due to the experience they gained in building and operating the Transportation Company's system. You can't buy that kind of experience anywhere."

"Those who have joined our organization," he adds, "starting with Vice President and General Manager John N. Albertson, who is really the father of the Communications Company, are continuing to make an important contribution to its success."

Pictured on these pages are some of the people from both Southern Pacific and outside firms who have joined the SP Communications Company team.

SPC Goes Nationwide (Concluded)

complete communications system, including terminal equipment, or simply sell time on the system to the customer who knows his needs and owns his own equipment," Geier says. "Our specialists are also available as 'outside staff' communications managers for the customer who needs sophisticated engineering and experienced operation of his private line system."

"Each of our customers gets exactly what he wants, but does not have to pay for more service than he needs," he adds. "That results in significant savings to most of them."

The firm has three administrative divisions. Directing operations of SPC-West is Vice President and General Manager John N. Albertson, who is also responsible for the engineering of SPC's nationwide system. As previously noted, Ed Taylor is vice president and manager of SPC-Mid Continent, with headquarters in Tulsa, Oklahoma. His territory extends from El Paso, Texas to Cleveland, Ohio. I. Tunis Corbell is

vice president and manager of SPC-East, with headquarters in Wakefield, Mass. His territory includes the Atlantic Seaboard, New England and west to Cleveland.

How do SPC's employees, most of whom have come from other companies, feel about joining the Southern Pacific family?

Dick Smith, area marketing manager for SPC-Mid Continent, reflects the views of many of them.

"I was really delighted when SP took over," he says. "As United Video, we were a small regional carrier. All we had was St. Louis to Dallas. The handwriting was on the wall that regional carriers would have a tough time making it. With SP's resources and its commitment to go nationwide, there's no longer any doubt about the future of this business. And we don't have to explain any more who United Video is. When we tell them we're part of Southern Pacific, that says it!"

"We're not quite as free-swinging as we once were," he adds, "but we're now working for a company that understands what it takes to build a fine railroad or a great communications system."▲