# ↓ UNION PACIFIC RAILROAD



### A BRIEF HISTORY

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You see where you're going ... you remember where you've been!

. .when you travel

meliner

To really see the unforgettable West—in living color—there's no better vantage point that a Union Pacific dome car. Yes, the "eyes have it," when you go by Domeliner.

Distinctive Lounge and Club cars offer refreshments and deep-cushioned relaxation.Pullman and Coach equipment is the finest.

Adding to your travel pleasure are the marvelous meals, freshly prepared by our culinary experts. And, on the "City of Los Angeles" and "City of Portland," are the only Dome Dining cars on any railroad a special treat.

On your next trip through the West, see for yourself what a joy travel can be—by Union Pacific.

Domeliners "CITY OF LOS ANGELES"

between Chicago-Salt Lake City-Las Vegas-Los Angeles "THE CHALLENGER"

between Chicago-Salt Lake City-Las Vegas-Los Angeles "CITY OF PORTLAND"

between Chicago-Denver-and Portland (Tacoma-Seattle) "CITY OF DENVER"

between Chicago-Omaha-Denver "CITY OF ST. LOUIS"

between St. Louis-Kansas City-Denver-Los Angeles Streamliner "CITY OF SAN FRANCISCO" between Chicago and San Francisco

UNION PACIFIC Railroad Omaha 2, Nebr.

## Foreword

Building the Union Pacific Railroad through the wild and woolly west proved to be one of the amazing developments which history records man has accomplished. In compiling material to briefly outline the story of this activity we have used only what we believe to be reliable.

If this is your introduction to Union Pacific history and you want to know more, let us refer you to the bibliography at the back of this booklet or to any public library.

Should you desire additional copies of this little history for yourself or friends, we will be happy to supply them. Just mail a post card to Department of Public Relations, Union Pacific Railroad, Omaha 2, Nebraska.

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## A Brief History

T WASN'T LONG AFTER DAWN and a group of railroad workers, dressed in their Sunday best, stood around a 56-foot gap in the single track line.

Nearby, on a siding, was a construction train which had brought them to the scene, and a mile away from the opposite direction a similar train was approaching.

Its engine whistle was blowing but the sound was nearly drowned by shouts of workers who all but covered the train from the pilot (cowcatcher) of the engine to the rear platform of the caboose.

Smoke poured from its diamond stack and two firemen tossed logs into the firebox as the train raced up to the gap in the track and stopped. Its occupants poured off the train shouting greetings to those already there.

May 10, 1869, was becoming one of United States history's most important dates as these workers of the Union Pacific and Central Pacific Railroads gathered at Promontory, Utah, to await the arrival of officials of the two railroads, the completion of track over the 50-odd foot gap and the driving of the Golden Spike.

When the spike had been driven, the nation's first transcontinental railroad would be completed, the Union would be linked with the Pacific, California and Oregon would be bound to the Union, travel time from the Atlantic to the Pacific and from England to Australia and the Far East would be shortened.

And most important of all, the nation would be opened to the development which was to make it the most powerful, the richest, the best in the world in which to live.

In addition to the railroaders, other residents of the railway camp were converging to witness the completion of the building of the railroad.

Soon after the work trains had delivered their passengers a Central Pacific special bringing excursionists from Sacramento pulled in.

This was followed shortly by the arrival of two trains from the east, via Union Pacific and the fourth passenger train of the day, a special bearing Governor Leland Stanford of California, president of the Central Pacific, arrived from the west at 11:15 a.m.

Union Pacific officials now on the scene included Thomas C. Durant, colorful vice-president of the company; Sidney Dillon, chairman of the board of directors; John Duff, another director

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and later a president of the line; General Grenville M. Dodge, chief engineer; General John C. "Jack" Casement and his brother, Dan, track laying contractors, and others.

When their train arrived, Governor Stanford and his group marched over to Durant's car, one of the most elegant walnut

masterpieces of the day and the two parties shook hands all around, accompanied by the shouts of those assembled.

#### 1,500 IN CROWD

The air was electric with excitement and tension mounted as the men — and the few women present — realized the hopes and struggles of thousands over a period of years were nearing completion.

The crowd had grown to about 1,500, including four companies of the Twenty-first Infantry, commanded by Major Milton Cogswell.

With the military came the headquarters band from Camp (now Fort) Douglas, at Salt Lake City. And accompanying the Union Pacific group were a large number of Utahans who also brought a band.

Resplendent in the gayest of uniforms, the Utah band was that of Salt Lake's Tenth Ward, equipped with \$1,200 worth of brand new instruments from London.

The two locomotives which had brought up the official parties' trains, Union Pacific's not named but identified by its number, 119, and Central Pacific's "Jupiter", both polished within an inch of their lives, stood near their respective ends of the gap, a full head of steam up, ready for action.

The guests included bankers and railroad builders from both coasts, workers from all parts of the railroad, civic leaders, newspaper correspondents, camp followers of every



The Golden Spike

description and settlers who had trudged across the nearby countryside for their first look at a locomotive and train.

Brought to the scene in Governor Stanford's private car were the world-famous Golden Spike, the last spike to be driven in

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the building of the railroad, and the "last tie," into which this spike and several others of precious metal were driven.

Presented by David Hewes, of San Francisco, the last spike was fashioned from about \$400 worth of gold by Schultz, Fischer & Mohrig, San Francisco jewelers, whose bill was \$25.24, including the engraving of 381 letters on the spike at four cents a letter.

#### AMES' RING IN MUSEUM

At the tip of the spike was a gold nugget roughly the size of the last spike itself. This was broken off and later made into souvenirs of the ceremony, tiny golden spike watchfobs and rings which were presented to Oliver Ames, Union Pacific president; Governor Stanford; President U. S. Grant; and Secretary of State William H. Seward.

Ames' ring and watchfob today repose in the Union Pacific's Historical Museum in Omaha, along with a second ring whose original ownership is unknown, the engraving inside it having worn away.

On the head of the last spike was inscribed the legend "The Last Spike"; on one side, "The Pacific Railroad; Ground Broken January 8, 1863; completed May 10, 1869"; on another side, "May God continue the unity of our Country as this Railroad unites the two great Oceans of the world"; on the third side, "Presented by David Hewes, San Francisco"; and on the fourth, the names of the company officers.

The last tie, which was eight feet long, eight inches wide and six inches thick, was of highly polished California laurel. It was bound with silver and bore a silver plate seven inches long and six inches wide, inscribed with the date of completion of the railroad and the names of the Central Pacific directors.

It was presented to Stanford by West Evans, tie contractor for the Central Pacific.

When Stanford's special had pulled up to the scene, Chinese laborers from the Central's construction outfits had begun leveling the ground in the gap, preparing it for the last tie and the joining of the iron.

On orders from W. B. Hibbard, Western Union superintendent, wires from the nearest telegraph pole (on top of which a nine-yearold boy had perched himself for a bird's eye view of the proceedings) had been run down to a special operator's kit on a little four-legged "deal" table beside the gap.

W. N. Shilling, of the telegraph company's Ogden office, sat

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there ready to dispatch a blow-by-blow description of the ceremony to the waiting nation.

#### FIRST NATIONWIDE "HOOKUP"

A silver-headed spike maul which was to be used in driving the final spikes had been wired so its blows would activate a telegraph key and they would be tapped across the nation, providing what was probably the United States' first nationwide "hookup."

As the Chinese working on this special occasion in clean frock coats, carried the last rail into the gap and prepared to lay it, an event took place which epitomized the life the construction crews had led.

Photographers for both the railroad companies and other photographers were present.

When the Chinese moved into place with their last rail, someone in the crowd shouted: "Now's the time, take a shot!"

The Mongolians knew very little English, but were thoroughly acquainted with "Shoot" in all its tenses.

They heard the word and saw the camera pointing toward them, dropped the rail like it was red hot and scrambled for cover to the delight of the crowd and the consternation of the officials; but after a few minutes of animated conversation in combination Chinese-pidgin English they were coaxed back and the ceremony proceeded.

The last tie was carried into place by Superintendents J. H. Strowbridge, of the Central, and S. B. Reed, of the Union Pacific, to the accompaniment of more cheers.

The telegrapher had been tapping out messages east and west to impatient inquirers from throughout the country; "To everybody: Keep quiet. When the last spike is driven at Promontory, we will say, 'Done.' Don't break the circuit but watch for the signals of the blows of the hammer."

The crowd had been cleared from the south side of the gap and asked to stand back so all might see.

#### "ALMOST READY, HATS OFF"

Just before noon General Dodge, who had been conferring with Edgar Mills, Sacramento banker interested in the building of the railroad and who was to act as master of ceremonies, lifted his hand for silence and introduced the Rev. Dr. John Todd of Pittsfield, Mass., who led the prayer which formally opened the ceremony.

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Champagne hoisting ceremony after Golden Spike had been driven, completing first trans-continental railroad. Locomotive at left that of Central Pacific (now Southern Pacific), locomotive at right No. 119 of Union Pacific.

The telegrapher now tapped out: "Almost ready. Hats off; prayer is being offered." This was bulletined at 2:27 eastern time, in Washington, which would have been within 10 to 20 minutes of 12:30 Promontory time, standard time not yet having been adopted.

All Western Union wires had been cleared for Promontory news and now as each event took place crowds at telegraph offices in all parts of the country were apprised of the fact.

At 2:40, eastern time, the telegrapher bulletined: "We have got done praying, the spike is about to be presented."

The spikes had been brought forward and F. A. Tritle of Nevada, a commissioner of inspection, presented a spike of silver from the Comestock lodes to Dr. Durant.

Governor Anson P. K. Safford, of Arizona, added a spike of gold, silver and iron alloy.

Idaho and Montana furnished spikes of silver and gold and Hewes' Golden Spike and Evans' laurel tie were presented as California's contribution.

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Speeches were made by Governor Stanford, General Dodge and others and the crowd cheered each sentence, then cheered for the Star Spangled Banner, the Pacific Railway, the officers, the men who raised the money, the laborers, and the engineers who found the routes.

The telegrapher clicked off: "All ready now; the last spike will soon be driven. The signal will be three dots for the commencement of the blows."

The silver and alloy



#### Stretch of original track.

spikes had been set into holes prepared to receive them and driven by guests. Dr. Durant then was invited to drive Nevada's silver spike and he did so.

The last spike remained untouched. Governor Stanford was to have the privilege of signaling the waiting world that the great moment had come.

#### STANFORD, NERVOUS, MISSES SPIKE

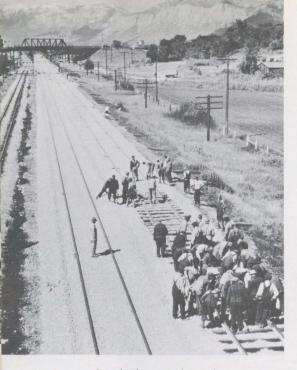
He stepped forward and, plainly nervous, took the silverheaded maul, inconvenienced by the dangling wires. A hush fell over the crowd and the President of the Central Pacific swung his maul.

He missed!

The maul struck the rail but the telegrapher signaled, "Dot! Dot! Dot! — Done!"

In San Francisco the wires were connected with the fire alarm in the Tower, in Washington with the bell of the Capitol, so that the message echoed from coast to coast and announced the wed-

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Stretch of present day track.

ding of the Atlantic and the Pacific.

After striking his blow Governor Stanford politely stood aside and handed the maul to Dr. Durant, who, also polite, imitated the Governor's blow and struck the rail.

After that, various guests were invited to tap the spike and it dropped into the hole which had been bored for it.

Flashed to the Associated Press and to President Grant was the official announcement:

"PROMONTORY POINT, UTAH MAY 10TH

"THE LAST RAIL IS LAID! THE LAST SPIKE IS DRIVEN! THE PACIFIC RAILROAD IS COMPLETED! THE POINT OF JUNCTION IS 1,086 MILES WEST OF THE MISSOURI RIVER, AND 690 EAST OF SACRA-MENTO CITY.

LELAND STANFORD CENTRAL PACIFIC RAILROAD T. C. DURANT SIDNEY DILLON JOHN DUFF

UNION PACIFIC RAILROAD"

The two engines, Jupiter and 119, were unhooked from the trains and, covered with cheering celebrants, advanced until their pilots touched. Bottles of champagne were broken on the engines and the bubbling wine flowed down over the Golden Spike and the last tie.

The engines backed up to their trains, hooked on and took turns crossing the rails which had joined the gap. The crowd, in the words of one who was there, "Was yelling fit to bust!" The nation's first transcontinental rail line was in existence!

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Crews from both the Union and Central Pacific now rushed in, removed the precious spikes and the tie, replacing them with regular materials, but the new tie soon was reduced to splinters by souvenir hunters, as were half a dozen more — and two rails in the next six months.

#### SPIKE IN VAULT: TIE BURNED

The Golden Spike was returned to California and today rests in the Stanford University Museum at Palo Alto.

The last tie also was returned to California but was destroyed in the fire and earthquake which devastated San Francisco in April, 1906.

On the day following the driving of the last spike, the first train in transcontinental service passed Promontory, having left the Missouri River several days previously.

Another train had started from the west coast a few days before and soon would pass Promontory going east.

The little tent and shack towns which had sprung up near the point of the meeting of the rails had become "Queen for a Day," but today the railroad no longer passes this point, having been rerouted when the Lucin Cut-off was built across Great Salt Lake. The rails at Promontory were taken up in 1942 to provide scrap for the nation's war effort and today the place of the meeting of the rails is marked only by a monument. Several of the original iron spikes put in the rail in 1869 are on exhibit in the Union Pacific museum in Omaha.

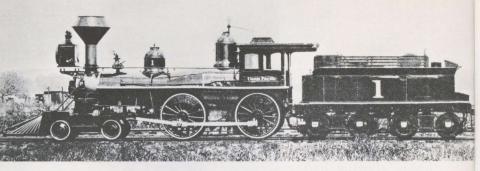
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NTEREST IN THE TERRITORY which was opened to development by the completion of the railroad had begun even before the turn of the nineteenth century, while the nation still was a youngster, and had resulted in the Louisiana Purchase in 1803.

Under encouragement from President Thomas Jefferson and on authority from Congress, funds for the famous Lewis & Clark Expedition were appropriated and the expedition prepared to leave in the spring of 1804.

Their reports, made when they returned from the territory two years later, prompted civic leaders, writers and adventurers to further exploration and exploitation of the territory.

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The "General Sherman", Union Pacific's first locomotive, brought to Omaha by steamboat from St. Joseph, Mo., in 1865.

Business men, too, were interested in the development of this vast and potentially rich territory and in July, 1810, John Jacob Astor, Wilson Price Hunt and Donald McKenzie left Montreal to move into the Louisiana Territory and launch the Pacific Fur Company.

Many others also probed the area and as early as 1819 one Robert Mills of Virginia made to Congress the first suggestion of a "rail way" linking the Atlantic and Pacific Coasts.

Mills' suggestion, incidentally, was made eight years before steam had even been successfully applied to motive power in this country.

In 1842, with the exploration of the territory continuing and knowledge of it growing, one of America's most observing pathfinders, John C. Fremont, traversed the vast region, bringing back a store of important information about the country and the route through the middle of it to the west.

The newest in railroad motive power, Union Pacific's 8500 horsepower gas turbineelectric locomotive. Total length, including fuel tender, is 179 feet. Locomotive alone, without tender, weighs 842,000 pounds.



#### **INTEREST HITS HIGH PITCH**

Still more suggestions had been made to Congress to act on promoting a railroad to the Pacific Coast, private citizens were endeavoring to arouse public sentiment for such an undertaking, the Mormon people moved into Utah, the Oregon Boundary question was settled with Great Britain in 1846, California was acquired from Mexico in 1848, and gold was discovered on the west coast. Arguments for and interest in a railroad to the west coast reached a high pitch.

In 1853 Senator Salmon P. Chase, of Ohio, long a supporter of the Pacific Railroad idea, introduced to Congress and had passed there, a bill providing for a survey of four routes to the Pacific Coast.

All under serious consideration at the time the bill was submitted, the routes were:

(1) - A line from the Upper Mississippi to Puget Sound.

(2) — A line along the thirty-sixth parallel, through Walker's Pass in the Rocky Mountains, to strike the coast at San Diego, Los Angeles or San Pedro.

(3) — A line through the Rockies near the headwaters of the Rio del Norte and Heuferno Rivers, emerging at Great Salt Lake Basin.

(4) — A line along the thirty-second parallel, via El Paso and the Colorado River, to strike the Pacific somewhere in lower California.

At the same time, Jefferson Davis, then Secretary of War, sent five other engineering corps into this field, their reconnaissance to cover five routes extending from the forty-ninth parallel in the north to the thirty-second parallel in the south.

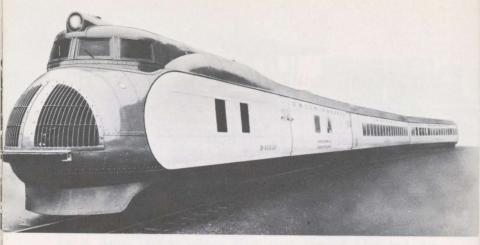
He reported their findings to Congress upon completion of their missions two years later, at about which time Stephen A. Douglas (of the Lincoln-Douglas debates fame) was promoting in Congress a bill which would have provided for three routes to the coast.

Douglas' proposal was defeated, but trunk lines following the routes, North, South and Central, which he proposed, subsequently were built.

#### **CIVIL WAR SHOWS NEED**

With interest thus aroused and most of the nation convinced its future was dependent upon pushing trade routes through to

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Union Pacific's, and America's, first streamlined train, the "City of Salina"

the Pacific (a reason which soon was to become secondary in the arguments for the building of the Pacific rail line) there naturally was a great deal of local and sectional interest in the proposals.

The North — including such men as Asa Whitney, a wealthy New York merchant who, beginning in 1840 and continuing until the road was completed, spent most of his time and money conducting a vigorous campaign for the construction of the railroad — wanted the line to serve that part of the country; the South, of course, wanted the line to have its primary connections in their area. And adding to the sections' inability to agree on this matter was their ill feeling over the slavery question.

So, between 1850 and 1860, while there were thorough inspections of all proposed routes and much research for the building of a railroad, the railway measures failed to pass Congress.

On December 20, 1860, the next major move which resulted in the forwarding of the Pacific Railroad idea was made as South Carolina adopted its ordinance of secession. Several of her sister

Union Pacific's Modern Diesel-electric Domeliner, "City of Portland"

states followed suit, the Civil War began, and a new argument for the building of the railroad emerged.

With the nation engaged in civil war, it became clear that the nearly-isolated west coast was extremely vulnerable to any hostile force and the Enabling Act, first of the measures which provided for the actual building of the railroad, was pushed through Congress and signed by President Abraham Lincoln on July 1, 1862, with national defense, rather than trade, the prime influence in getting the job done.

This was the act that created the "Union Pacific Railroad Company," authorized it to "lay out, construct, furnish, maintain and enjoy a continuous railroad and telegraph line, with the appurtenances, from a point on the 100th meridian of longitude west from Greenwich between the south margin of the valley of the the Republican river and the north margin of the valley of the Platte in the Territory of Nebraska (near where the present day city of Kearney, Nebr., is located) to the western boundary of Nevada Territory."

The act also provided that a connection between a point on the western boundary of the state of Iowa — later fixed by President Lincoln at Council Bluffs — and the one hundreth meridian point be established and it provided for land grants and bond issues which would aid in financing construction of the road.

#### **GOVERNMENT REPAID MANY TIMES**

These provisions also were extended to the Leavenworth, Pawnee and Western (now part of the Union Pacific's Kansas division, and to the Central Pacific (now part of the Southern Pacific) which was to build from the west coast to a junction with the Union Pacific at the eastern boundary of California.

There was difficulty in raising enough money to build the road even under these conditions, however, and a later Congressional Act, signed by President Lincoln on July 2, 1864, doubled the grants and liberalized other features of the financing.

Incidentally, unlike the land grants made to many railroads, these were not made with the provision that the railroad must carry government freight and passengers at a special reduced rate. The railroad did, however, carry government freight and passengers at the land grant rates rather than lose the government business and over a period of years repaid the government in reduced rates and fares many times the value of the land which aided in its construction.

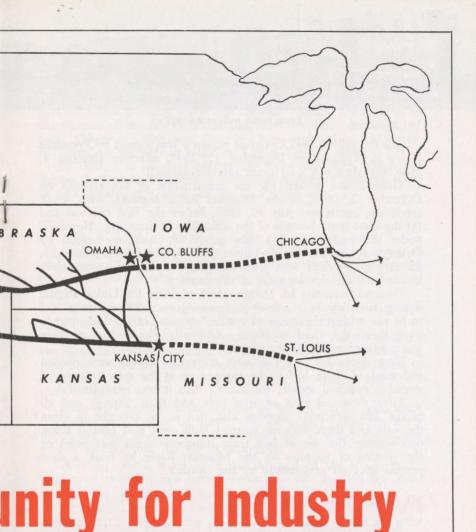
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Choice industrial sites are available for sale or lease in a number of industrial properties owned by the Union Pacific and at other points served by its rails, among which are the following, as indicated on the map:

Omaha, Neb. Council Bluffs, Ia. Kansas City, Kan. Denver, Colo. Cheyenne, Wyo. Salt Lake City, Utah Ogden, Utah Boise, Ida. Pocatello, Ida. Spokane, Wash. Portland, Ore. Seattle, Wash. Las Vegas, Nev. Long Beach, Cal. Los Angeles, Cal.

★Stars indicate principal cities where industrial sites are available.



The industrial properties held at Omaha, Kansas City, Kans., Denver, Portland and Los Angeles are fully developed properties, having paved streets, utilities and trackage immediately available to meet the usual requirements of industries seeking attractive locations.

By locating on the Union Pacific, industries are assured of prompt and efficient rail transportation for all shipping requirements over one of the finest transportation systems in America.



Union Pacific train of the 1870's

(In the fall of 1945 Congress passed a law, signed by President Harry S. Truman on December 12, 1945, effective October 1, 1946, repealing the land grant rate legislation.)

Ground was broken for the construction of the railroad on December 2, 1863, in the Missouri River bottoms, with much ceremony, but it was July 10, 1865, before the first rail was laid (at the same spot) because of the difficulties in financing. However, under the leadership of a new group of financiers headed by Oakes Ames and his brother, Oliver (third Union Pacific president), the railroad reached west with amazing rapidity, advancing civilization and the development of the country.

General Grenville M. Dodge, chief engineer for Union Pacific during most of its construction, pointed out: "Every mile had to be run within the range of a rifle," because of the Indians, nor were these the chief problems. (Actually, the Indian problem was confined mostly to the plains).

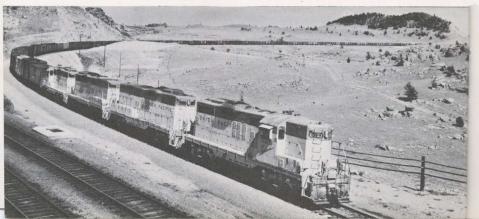
Ties, about six and a quarter million of them, were needed and most of them had to be shipped in as the soft cottonwood available required special treatment. And it was not plentiful.

Fifty thousand tons of iron rails and their fittings and all bridge and structural supplies also had to be brought in from the east and there was no railroad built west past central Iowa, necessitating the use of bull team shipments from that point or the routing of supplies up the Missouri River by boat, a slow process shut off periodically by the weather.

#### **30 MILES LAID FIRST YEAR**

But by September 22, 1865, just a little more than two months after the first rail was laid, 10 miles were completed and in use

Modern Union Pacific freight train with turbo-charged diesel-electric locomotives.



and about 20 miles more were completed that year.

During 1866, two hundred sixty miles more were added and in 1867 a two hundred forty mile advance brought the railroad to the summit of the Rocky Mountains, Sherman Hill, altitude 8,247 feet. (Sherman's elevation since has been reduced to 8,013 feet, but it still is the highest point on Union Pacific's lines.)

In 1868, four hundred twenty-five miles more were added and during the first four months of 1869 one hundred twenty-five miles of new construction took the line to Promontory.

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HE ACTUAL LAYING of the rail on the Union Pacific was done by hard-working gangs, largely Irishmen, many of whom were Civil War veterans, and their work and life, less storied than their clashes with the Indians, often were as interesting, or more so.

The track-laying gangs working across the prairie were out of bed and had breakfast by the time it became daylight.

So had the graders who'd preceded them laying out the roadbed, the surveyors, who'd preceded the graders, and the bridge-building gangs who were working far enough ahead of the track layers to insure that their work did not have to pause when it came to a river or gully.

Rails were brought up to the end of the line on an open truck car drawn by a couple of horses. As the horses pulled the truck up to the end of the last pair of rails laid, it was stopped, the wheels blocked and the horses unhitched.

A single, small horse then was hitched to the truck, to be used until the rails had been unloaded, a job handled by crews of five men on either side of the truck.

At a word from the foreman each crew seized a rail, pulled it out over the front of the car to its full length, placed it on the ties at the shout, "Down!" from the foreman.

As the rails hit the ties, a man at the far end applied a measure and adjusted the width; and as he completed this work and stood up, the horse moved forward, pulling the truckload of rails over the newly laid rail until he had reached the end of it, where he stopped, more rail was taken off and the process continued until the thirty rails a truck carried were gone.

About two miles a day was the average distance of rails laid. Close behind the truck of rails came the crews who spiked them down for permanent use.

As the tracks crept across the vast and undeveloped wilderness

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west of the Missouri River they took with them a town and a gang known as "Hell on Wheels."

#### WHOLE VILLAGES UNLOADED

This name was popularly associated with the construction crews and their hanger-on friends who arrived on the first train into the new "end of track" towns which sprang up every few miles to take care of various of the workers' needs as the road grew.

When these gangs piled off the train at a new "end of track," they often unloaded whole villages.

Shacks, tents, furniture and personal belongings and even complete weekly newspaper plants were brought in by the gangs, sometimes leaving the town which had been "end of track" nothing but deserted prairie sites with street lines and piles of debris.

Gamblers, saloon keepers and various other gun-toters joined the "Hell on Wheels" aggregation at points along the line, taking advantage of the golden opportunity to help workers spend their hard-earned cash.

And by the time the tracks reached Cheyenne, Wyo., in the summer of 1867, the rougher element constituted no small group.

Finally, their robbing of trainmen and their other depredations forced General Dodge to call on General J. E. Stevenson, commandant at nearby Fort D. A. Russell, (now Frances E. Warren Air Force Base) for help.

General Stevenson and his soldiers ran the entire population out of town to a point about a mile south of there, had a parley with them and permitted them to return to town only after having made arrangements which would insure a more orderly city.

#### INDIANS PLAGUE CREWS

Indian trouble, too, still plagued the construction crews near Cheyenne.

In fact, the Indians were responsible for the beginning of the Cheyenne graveyard, according to General Dodge, who related, in his book titled, "How We Built the Union Pacific," that an Indian band attacked a Mormon grading train and outfit near Cheyenne and killed two men, the first occupants of the city's cemetery.

A few years earlier, Indians attacking a scouting party which included General Dodge, forced the men to retreat over a ridge of the mountains which he named Sherman in honor of his old com-

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mander, General W. T. Sherman. Further exploration by General Dodge proved that to be the best way for a railroad over the mountains at that point.

There were a multitude of raids similar to these, engineered by only a few redskins. But over a period of time they cost many lives and necessitated constant vigilance and preparedness.

And then, on occasion, the Indians would marshall a band of several hundred and sweep out of a ravine to attack; murdering, mutilating, or kidnapping and torturing workers, tearing up track, burning buildings, killing stock and tearing down the telegraph wires.

Not as subtle as the fifth columnists of World War II, the Indians nevertheless made "friendly" visits to the white men's camps to look over the place as an aid in plans for a future attack.

At least one of these visits proved helpful to the construction workers, also, according to a story handed down along the railroad.

It was while work on the road was being done near Grand Island, Nebr., and Chief Spotted Tail of the Sioux and 17 warriors rode up and announced they would like to see how the men laid track.

The workers were civil to the Indians, though they were suspicious of them, and when after watching track laying for a while the Indians asked to be conducted through the outfit cars, they were led through four in which one thousand rifles were stored.

As the Indians prepared to leave, they asked to be permitted to carry off a large amount of supplies and when their request was refused, Spotted Tail threatened to come over that night with three thousand braves and enforce his demands.

The section foreman simply placed his doubled fist gently against Spotted Tail's nose and gave him a good old-fashioned track worker's cussing out.

#### INDIANS SOAR IN ALL DIRECTIONS

The foreman's attitude and the Indian's recollection of the rifles apparently made temporary pacifists out of them, for the raid never materialized.

But a few miles away, down on what is now the railroad's Kansas division, a raid made to order for a two-reel movie comedy was coming off at about this time.

Steaming westward near Fort Wallace, the engineer discovered that the telegraph wires had been cut — usually a sign that there were Indians ahead, waiting to ambush the train.

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And sure enough there were Indians ahead, Cheyennes, and they were waiting to ambush the train.

As the train neared their hiding place, they rose up one hundred strong — fifty on each side of the track — and pulled taut a rawhide rope they'd stretched across the track between them to stop the train.

When the locomotive hit the rope the air was full of Indians and they were thrown in all directions. More than a dozen were killed or seriously injured and it was several years before they even attempted to stop a train again in that part of the country.

HEN THE GOLDEN SPIKE finally had been driven into its laurel tie after the years of building the Union Pacific across the prairies and mountains to its meeting with the Central Pacific, the U. P. consisted of a single line from Omaha westward just a little more than 1,000 miles.

But it began to grow rapidly, absorbing smaller lines, building more trackage, and by 1893 the system had expanded by the addition of main lines and branches to 7,682 miles.

That same year, as the result of its early financial maneuvers, severe competition, drouth, crop failures and the depression aftereffects of the panic of 1873, the railroad was unable to meet its fixed charges, and was placed in the hands of three receivers.

The property was sold at foreclosure under order of a federal court November 1, 1897, and title to the property was conveyed to the present Union Pacific Railroad Company.

Soon after this new company was launched, Edward Henry Harriman, one of the participants in the syndicate which had charge of the reorganization of the railroad, emerged as the dominant figure in Union Pacific's management.

#### HARRIMAN REBUILDS RAILROAD

The properties of the company were rehabilitated under his direction. Millions were spent for modern locomotives and freight and passenger cars; curves were eliminated and grades cut down; wooden bridges were replaced with steel or masonry; the water supply was systematically improved; yards were enlarged; heavier rail was installed and double tracking was done by the hundreds of miles.

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In short, Mr. Harriman put the railroad on a solid foundation and started it on the road to becoming what is today; one of the outstanding railroads in the world which now boasts over 10,000 miles of road. This comprises 8,500 miles of single track main line and more than 1,500 miles of double track. In addition there are approximately 4,700 miles of yard tracks and sidings.

In addition to the original line from Omaha west, there is another main line from Kansas City to Denver, Colo., then to Borie, west of Cheyenne, Wyo., where it joins the main line from Omaha and continues west. At Granger, Wyo., one principal division heads northwest toward Portland, Ore., with tentacles of connecting track throughout the states of Idaho, Montana, Oregon and Washington, including the recently acquired Spokane International Railroad from Spokane to Canadian border. One of these branches at Shoshone, Idaho, serves famous Sun Valley. At Ogden, another division turns southward to Los Angeles, serving the southern Utah National Parks country (including the Grand Canyon area), southwestward through Nevada at Las Vegas serving mighty Hoover Dam, into the heart of southern California at Los Angeles.

The direct connection to San Francisco is over the Southern Pacific (the old Central Pacific). With other railroads, Union Pacific operates through service to Chicago and St. Louis.

Today, Union Pacific has 82 steam locomotives, 1,257 Diesel power units, 37 gas turbine electric locomotives, more than 54,326 freight cars and 1,050 passenger cars.

#### FIRST STREAMLINER OUT IN 1934

For these and for other equipment and maintenance to prepare for and take care of the volume of wartime traffic, the railroad spent \$414,000,000 between 1939 and the end of 1945, when traffic still was heavy despite the end of the war.

In addition, since 1946 more than \$58,000,000.00 has been spent for new passenger equipment alone in order to build and maintain Union Pacific's fleet of Domeliners and Streamliners to a level unsurpassed in the industry.

The nation's first streamlined train was introduced by Union Pacific in February, 1934, and in May of that year completed a nation-wide tour, during which time more than a million and a half persons actually passed through the train. It was then placed on exhibition at the Century of Progress World's Fair in Chicago and

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on January 31, 1935, this three-car train was placed in service as the "City of Salina", running between Kansas City, Mo., and Salina, Kansas. The first streamliner was scrapped several years ago after having rolled up nearly 900,000 miles on its regular run.

From this beginning, the railroad has built its fleet to a total of 27 daily trains. Those with one or more dome cars are called "Domeliners" and they are: 5 "City of Los Angeles", 5 "City of Portland" — "City of Denver" which are all operated jointly with the Milwaukee Road (between Chicago and Omaha); and 6 "City of St. Louis" operated jointly with the Wabash Railroad (between St. Louis and Kansas City). The "City of St. Louis" also serves San Francisco in connection with the "San Francisco Overland" of the Southern Pacific between Ogden and Oakland-San Francisco. An additional 6 Astra-Dome Coaches were added to the Domeliner "City of St. Louis" during the fall of 1958, and operate between St. Louis and Los Angeles.

The Streamliners are as follows: 5 "Portland Rose" between Kansas City and Portland; 1 "City of Las Vegas" (local between Los Angeles and Las Vegas); and 5 "City of San Francisco" trains operated jointly with The Milwaukee Road and the Southern Pacific. During the peak summer and winter tourist seasons 5 "Challenger" all coach Domeliners are operated as separate trains on the same schedule as the Domeliner "City of Los Angeles" to Los Angeles, raising the total to 32 trains.

Equipped with the newest and most modern cars, these trains are the finest railroad equipment in the world. Thirty-five astradome cars were placed in service on these trains in 1955 and the "City of Los Angeles" and "City of Portland" now offer the only astra-dome dining cars in the country.

Supporting this fine equipment is service unexcelled. Typical of the high standard of Union Pacific service is that of its dining cars. The railroad was recently awarded for the third time a certificate of merit by the U.S. Public Health Service for dining car sanitation and design. It was the first major railroad to receive the award. To win the certificate, all Union Pacific dining cars had to average higher than 95 on a rating scale set up by the Public Health Service. The cars compiled an average of 97.

In addition to its highly efficient passenger train service, the railroad maintains lodges, cabins, cafes and cafeterias in beautiful Bryce, Zion and Grand Canyon National parks (north rim) a dining lodge at West Yellowstone and operates Sun Valley, the internationally famous all-year recreation and sports paradise in Idaho's Sawtooth Mountains.

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#### FREIGHT IS THE BIG JOB

Needless to say, the important improvements which it has made in passenger service are but a small part of Union Pacific's program. Its greatest revenue comes from freight service.

Every minute, around the clock, dozens of great trains of freight are moving over smooth steel rails under electronic control systems on Union Pacific, the leader in electronic railroading.

Transporting freight is the big job of Union Pacific. This giant task requires armies of experts and a host of specialized freight equipment in constant activity. Union Pacific serves more of the West than any other railroad.

Pioneering is the spirit at Union Pacific. New designs in freight cars are continually coming off the boards and into existence on the rails. Modern types of cars for today's products, whether for fragile or out-size materials, new ways of carrying loose bulk goods fast and safe, new protection for foods and other perishable products, all this is to keep America supplied with the goods we need.

Push - button railroading is everyday procedure on Union Pacific. An array of tracks and controls sorts carloads of freight in large yards, remakes trains and automatically makes a listing of each carload in the new train, as it moves out onto the mainline. This report is flashed to every traffic office of the railroad, so all shippers can know exactly where their shipment is located as it speeds over rails of Union Pacific . . . even though the shipper may be thousands of miles away.

And, as the great freights move swiftly along the mirror-smooth railway, more electronics guide them. Centralized Traffic Control keeps the trains on clear tracks, by control towers hundreds of miles away. A complex system of signals and safety devices checks again and again, automatically, so that trains are sent safely through more than two thousand miles of CTC tracks. In rail yards and through heavy traffic areas, radio and other devices aid in keeping the complex rail system operating smoothly and swiftly.

West Coast ports of Seattle, Tacoma, Olympia, Longview, Vancouver, Portland, San Francisco Bay, Los Angeles Harbor, Long Beach, and San Diego, can all be served by Union Pacific Railroad. This coastline coverage, coupled with Union Pacific's ability to do an outstanding hauling job, makes it the logical stateside carrier for shipments to and from overseas points. The Foreign Freight Department is headquartered in Chicago, with representatives in principal port cities, although any Union Pacific representative may be contacted to assist you in your shipping problems.

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In addition to its modern facilities. Union Pacific offers its patrons a great variety of services. Typical of the departments involved in this task is the livestock and agriculture department. Through six agricultural agents located throughout the Union Pacific territory, the department cooperates with producers of agricultural commodities, dairy products, livestock and others to improve production and distribution techniques, develop new markets and in every way possible improve the agricultural industry. This department has an agricultural improvement car which tours the railroad as a farm forum center for farmers, vocational agriculture students and 4-H club members, and also offers a number of motion pictures and publications of interest to agricultural people. The department also awards scholarships to worthy farm youth through the Union Pacific Railroad Scholarship program. Scholarships are awarded each year to one vocational agriculture student and one 4.H club member in each of the 197 counties served by Union Pacific Railroad.

#### INDUSTRIAL SITES OFFERED

The railroad also works with its patrons by providing sites for industries. Considerable acreage owned or purchased by Union Pacific in various cities along its line has been developed into industrial districts. After improvements such as trackage, street paving, sewer, gas, water and similar facilities have been installed, locations in the districts are offered to various industries on a purchase or long-term lease basis (see map on page 16-17).

With the present trend of locating away from the larger metropolitan areas and still maintaining a favorable location for efficient distribution of products, industrial sites in Union Pacific territory offer excellent opportunities for decentralization. Providing these industrial sites to industry is just one of the ways Union Pacific continues to serve and develop the territory it once helped create from a wilderness.

#### ACTIVITIES ARE DIVERSIFIED

Union Pacific is engaged in other phases of industrial activity in addition to its transportation business.

In Wyoming, for example, it operates its own coal mines which incidentally have won a national reputation for safety and efficiency — and produces electric power for consumption in a large area of the state. It is one of the largest oil producers in California, with fields in several areas in that region, and also operates oil developments in conjunction with other companies in Colorado and other regions.

Union Pacific officers and employees throughout the territory of its operations have long taken active part in the civic affairs of their communities. In addition to the considerable tax bill paid annually by the railroad to state, county and local governments, the local payrolls and purchases add much to the regional economy. Generally speaking, about 50 per cent of the company's employees own or are purchasing homes.

One of the leaders in safety among railroads, Union Pacific's zealousness in this respect stems from the insistence of the late E. H. Harriman and for 25 of the past 37 years Union Pacific has operated with the lowest casualty rate among all Class "A" railroads. In addition, Union Pacific was awarded the National Safety Council's special wartime award for Distinguished Service to Safety both in 1943 and 1944. In 1958 it won the E. H. Harriman Memorial Medal of the American Museum of Safety for the fourteenth time.

In its Omaha headquarters, the railroad maintains a historical museum where more than 50,000 people from all over the world visit every year to view the mementoes of the winning of the west which are on display. The museum's Lincolniana display is considered one of the most interesting in the country, and there are thousands of other objects such as maps, letters, guns, household articles, pictures, books and Indian objects exhibited there.

ITH THE END OF WORLD WAR II, students of the history of American civilization became increasingly aware of two things:

- (1) American industry, divorced from the overly populated east, has gone west and can be counted upon to stay there, and
- (2) Some safe, certain lifeline is an absolute necessity not only to keep that industry there but to maintain a close link between it and the populous eastern and midwestern markets.

That lifeline was created with the completion of the first trans-continental railroad in 1869 and strengthened by the rebuilding work of E. H. Harriman shortly after the turn of the century. Today, because of an ever increasing faith in the continued growth of the west, the lifeline continues to be strengthened and rebuilt this time under the direction of President Arthur E. Stoddard and E. Roland Harriman, chairman of Union Pacific's board of directors and a son of E. H. Harriman.

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#### LONG RANGE PROGRAM IN OPERATION

The company's long range program is a comprehensive one new yards, new motive power and cars, changes in the line to eliminate troublesome grades and curves, installation of additional centralized traffic control, and an intensive campaign to induce more businesses to locate on the railroad.

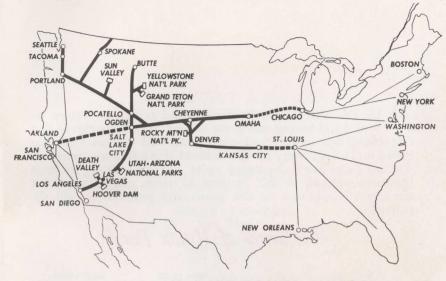
Since the end of World War II new yards have been completed at Pocatello, Ida., North Platte, Nebr., Ogden, Utah, Kansas City, Kan.; Hinkle, Ore., and Spokane, Wash., to speed the flow of freight. The yards at Pocatello and North-Platte are the latesttype retarder yards. Two-way radio installations in many of the yards are speeding up the work of car inspection and repair, switching and yard inventory. Car reporting has been mechanized through the combined use of business machines and teletype to further increase speed and accuracy of handling.

Union Pacific is completely dieselized on its Northwestern and South-central Districts, which cover the line from Green River, Wyo., to Portland, Ore., and from Ogden, Utah, to Los Angeles. It is also dieselized from Omaha and Kansas City west to Ogden except for periods of peak traffic. In use on the Eastern District are 37 gas turbine-electric locomotives, the newest form of railroad motive power, and another Union Pacific "First". Twenty-five of the gas turbine locomotives pack 4500 horsepower into one unit as much power as three diesel-electric locomotive units — and twelve are even newer units of 8500 horsepower. Union Pacific is the only railroad using this new type of motive power.

The biggest construction job on Union Pacific Railroad since its original completion was finished in 1953. It involved building a 42-mile line around Sherman Hill in Wyoming at a cost of \$16,000,000. The new line eliminated the last grade between Omaha and Ogden that exceeded .82 per cent and allowed westbound trains to bypass 8,014-foot Sherman Hill, the highest point on Union Pacific's main line. Somewhat of an engineering triumph, the job necessitated moving more than 7,000,000 cubic yards of earth and rock and was completed just one day short of a year from the time the first earth was broken. Other smaller changes in the line were made at Kemmerer and Rawlins, Wyo., with the Rawlins job involving more than 10 miles of new track and the Kemmerer project 8 miles.

New freight houses have been completed at Kansas City, Kan., Portland, Ore., and East Los Angeles, Calif., to improve freight handling capacity and efficiency at those points. Each of the mammoth buildings can handle an entire freight train at one time

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MAP OF THE UNION PACIFIC RAILROAD PASSENGER AND CONNECTING LINES

and utilizes the most modern freight handling facilities. Less thancarload freight is moved to and from freight cars by an underfloor conveyor system, portable talk back speakers speed freight checking, and pneumatic tube systems carry written material between offices in the terminal.

Construction is under way on a microwave radio installation between Omaha, Neb., and Laramie, Wyo., that ultimately will be extended over the entire railroad. The radio operation will supplement Union Pacific's regular wire communications system, one of the largest private communications operations in the nation. Use of high-frequency radio will give greater communications capacity and reduce the effects of extreme weather conditions encountered in the mountainous regions of the west in which the railroad operates.

Installation of centralized traffic control on more than 80 miles of track between Denver and Carr, Colo., brought Union Pacific's total CTC mileage to 2,098 miles. Centralized traffic control is a signaling system that enables single track, with passing tracks, to handle almost as much traffic as double track railroad. Dispatchers located at strategic points along the line have complete control of all trains in their districts, often extending several hundred miles. A control board before each dispatcher shows basically a line map of the area he controls and small lights on the board indicate the positions and progress of trains in that area. He directs their movement by remote control, switching them into and out of passing tracks by flicking small switches on the board.

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A LL IN ALL, Union Pacific Railroad represents history recorded and history still in the making. The shiny thread that first united our country and opened our vast western lands has grown into a vital artery for the lifeblood of our nation's commerce. The west's primary developing agent and still one of its most important citizens, it will continue to serve and develop that territory realizing that as this grows and prospers, so will the railroad.

## Presidents of Union Pacific

W. B. OGDEN	DCT 1863	NEW YORK
J. A. DIX	Ост. 1863	NEW YORK
OLIVER AMES	Nov. 1866 Nov. 1866	NEW YORK
	MAR. 1871	
Т. А. Scott	MAR. 1872	NEW YORK
HORACE CLARK	MAR. 1872	NEW YORK
JOHN DUFF	JUNE 1873	NEW YORK
SIDNEY DILLON		
	JUNE 1884	NEW YORK
C. F. ADAMS	JUNE 1884 Nov. 1890	NEW YORK
SIDNEY DILLON	Nov. 1890	NEW YORK
S. H. H. CLARK	APR. 1892	NEW YORK
STILL BEAKK	DEC. 1897	NEW TURK
W. S. PIERCE	DEC. 1897	NEW YORK
HORACE G. BURT	DEC. 1897	OMAHA
E. H. HARRIMAN	(JAN. 1904	NEW YORK
R. S. LOVETT		
	Ост. 1911	NEW YORK
A. L. MOHLER	Ост. 1911	DMAHA
E. E. CALVIN	JULY 1916	ОМАНА
C. B. SEGER	JULY 1918	
L. B. SEGER		
	JULY 1918 JAN. 1919	NEW YORK
R. S. LOVETT	JAN. 1919 FEB. 1. 1919	NEW YORK
R. S. LOVETT	LJAN. 1919 FEB. 1, 1919 DEC. 31, 1919 JAN. 1, 1920	
R. S. LOVETT	LJAN. 1919 {FEB. 1, 1919 DEC. 31, 1919 [JAN. 1, 1920 DEC. 1 1937	NEW YORK OMAHA
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R. S. LOVETT	(JAN. 1919 (FEB. 1, 1919 (DEC. 31, 1919 (JAN. 1, 1920 (OCT. 1, 1937 (FEB. 1, 1946 (FEB. 1, 1946 (MAR. 1, 1949) (MAR. 1, 1949	NEW YORK OMAHA OMAHA

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For Further Reference

ROBERT BRUCE UNION PACIFIC AND PAWNEE SCOUTS

GRENVILLE M. DODGE How We Built the Union Pacific Railway

> WAYNE GARD SAM BASS

ZANE GREY THE U. P. TRAIL

G. B. GRINNELL TWO GREAT SCOUTS AND THEIR PAWNEE BATTALION

> G. R. HEBARD WASHAKIE

J. R. PERKINS TRAILS, RAILS AND WARS

E. L. SABIN BUILDING THE PACIFIC RAILWAY

HENRY KIRKE WHITE HISTORY OF THE UNION PACIFIC RAILWAY

> NELSON TROTTMAN HISTORY OF UNION PACIFIC

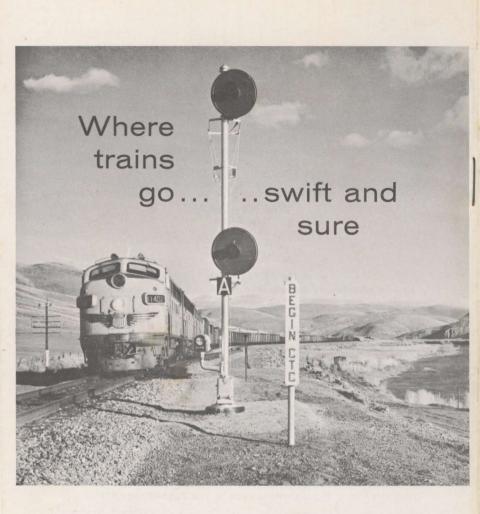
WILLIAM LEE PARK PIONEER PATHWAYS TO THE PACIFIC

MATTHEW JOSEPHSON THE ROBBER BARONS

GLENN CHESNEY QUIETT THEY BUILT THE WEST

> ERNEST HAYCOX THE TROUBLE SHOOTER

SILAS SEYMOUR Incidents of a Trip through the Great Platte Valley to the Rocky Mountains and Laramie Plains in the Fall of 1866



CTC works both directions, guiding trains either way. By the automated signals and switches of CTC operation, traffic is guided across the West. Trains moving along the great stretches of track under Centralized Traffic Control go more swiftly and surely.

Whenever you ship or travel on Union Pacific, you have the benefits of 2,098 miles of CTC. Trains move more efficiently. Goods arrive more dependably. Your travel is easier, smoother, more relaxing.



Whenever you ship or travel... be specific—

