DIARY OF A RAILROADER — 1

I'VE BEEN WORKING

The story of how a railfan, in love with steam and steel, laid aside his camera one morning in 1941 and "went firing." Among other things, he found there was more to it than waving at the pretty gals

BY WALTER THRALL

THIS is the true story of an ordinary railfan who secretly aspired to being a locomotive engineer.

I HAVE BEEN INTERESTED in railroads as long as I can remember, and that goes back to the 1920's. My phobia consisted of more than photographing railroad subjects; I was a watcher and a listener and everything else that qualifies a railfan as a true devotee of railroading. But I was graduated from high school in 1937; and in the late '30's the railroads were doing well to recall manpower that had been laid off, so that it was unheard of to hire new blood. Like other railfans, I had to be content on the sidelines.

Then in the summer of 1939 I got a railroad job — as a coach cleaner on the Southern Pacific *Daylight* at Los Angeles. But only because the *Daylights* were running in sections to the Golden Gate International Exposition at San Francisco. What a job it was. It paid me 43 cents an hour from 7:30 p.m. to 3:30 a.m., and it was all hard work. But at last I was working on the railroad. I steam-cleaned trucks, mopped floors and polished the exterior of that super flyer. But in the fall business declined, and I was laid off. So I went to college for a while, with many a week end spent at the Southern Pacific, Union Pacific or Santa Fe yards taking more pictures to add to my growing collection.

HOW WELL I remember that warm, bright Sunday in February 1941. I had just taken a picture of a UP Consolidation at work on the lead when her hogger called down to me, "Hey, kid, if you like the railroad so well why don't you go firing? They're hiring student firemen now!"

Bright and early the next morning I was literally camped outside the division superintendent's office on Hunter Street. It seemed as though I had waited for hours before I was ushered into the inner sanctum to stand trembling before kindly gray-haired Superintendent H. H. Larson, boss of the 400-mile Los Angeles Division of the UP. He probed and questioned and seemed surprised that I wanted to be a fireman rather than a trainman. Finally he called in his chief clerk and told him to give me the necessary papers to fill out. At the master mechanic's office at East Yard I was given more papers to fill out, still more at the chief crew dispatcher's office. Then there was a long trek to the medical examiner's office, where no less than three doctors gave me every kind of test, including several for color blindness. At last the chief examiner proclaimed, "Well, son, I see no reason why you can't start making your student trips."

PROMPTLY at 6:30 a.m. on March 5, 1941, the regular fireman on yard job No. 1 was hosing down the deck of old 4233, a veteran Los Angeles & Salt Lake 0-6-0 of 1905 vintage. His attention was arrested by a tall, skinny, grinning youth standing on the ground in brand-new overalls, new cap, new gloves and with new lunch pail — me. I awkwardly climbed up into the cab and tried to make myself heard above the roar of the blower, but my introduction was unnecessary. Another student fireman.

It didn't take the crew long to sense my eagerness to learn how to fire an oil-burning locomotive and we became good friends. It seemed to me that a fireman needed at least six hands: work the injector, blow out the water glasses but don't burn anyone on the ground; ring the bell over the crossings; keep that fuel oil at 160 degrees and don't boil it over; blow out the boiler; watch the pin-puller for signals; keep the water at half a glass; don't let her safety valve pop; don't let her work water; watch that steam gauge . . . We ended the shift

ON THE RAILROAD

Walt Thrall.

THE AUTHOR — "a tall, skinny, grinning youth" — poses in the gangway of a 4-8-2 in 1941.

by having the No. 3 drivers climb the rail and bounce along a few ties before we got stopped. Needless to say, this was a harrowing experience.

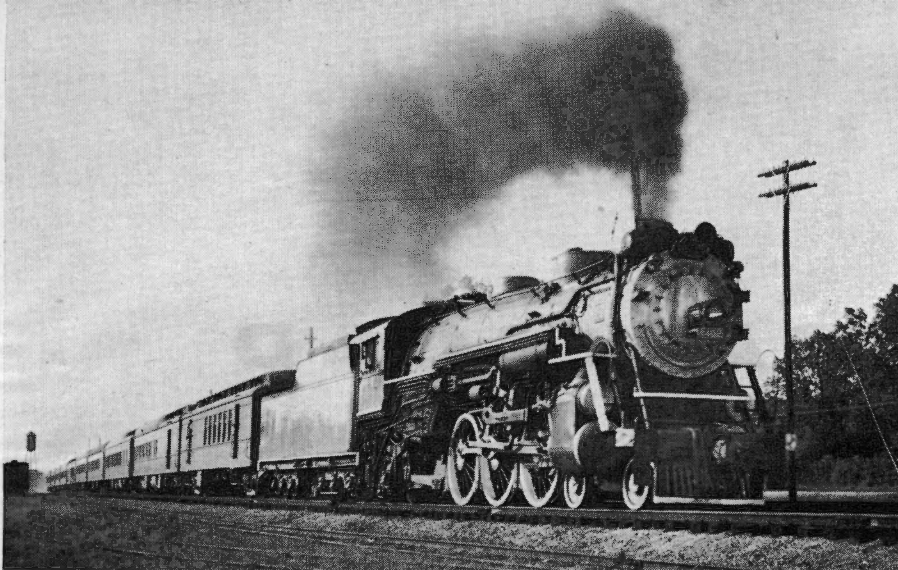
My first four days were spent on the switch engines around East Yard; the fourth day I spent on a 6000-class Consolidation which seemed twice as big to me as the little 0-6-0's. By this time I was gaining more confidence and champing at the bit to make a mainline trip.

On March 11 I went out on the 6085 with the Anaheim local. The 6085 had been the pride of the old Las Vegas & Tonopah. We made a swift trip on the main line for about 5 miles to Whittier Junction, then went down the old branch toward Anaheim a-rockin' and a-swayin' through Whittier, La Habra and Fullerton at a top speed of 20 miles an hour, switching the packing houses along the way and passing through picturesque orange groves.

The branch was all up and down, and a new fireman had a time trying to figure where to carry his water. The highlight of that trip was the old air-actuated turntable at the end of track at Anaheim. It was a source of pleasure to balance the old 6000's just right, then hook up the table's air line to the engine. The air from the engine would actually kick the turntable around. It was an art to line up the rails correctly and then signal the hogger to ease the engine off the table. As each wheel came off, the table would jump.

The handsome 6085 had one of the prettiest whistles I have ever heard, and old John Spencer did a grand job of blowing it. This trip was my initiation to working nights, and a fireman had too much to do to even think about getting sleepy. Besides, I was anxious to get another taste of the main line, even if it was only for the 5 miles back to East Yard.

I WAS CALLED OUT March 13 for a trip on the San Pedro local on 2-8-0 6080, another LV&T veteran. We left the yard at dusk in a pouring rain with a helper on the rear to aid us out of the yard past Hobart Tower. Engineer Montgomery was an old Salt Lake veteran, and that 6080 was a rough-riding hog. He got a good run to make it over the Los Angeles River trestle, and as we roared over, it looked to me as though the water were just under the ties. I was scared!



Walt Thrall.

SOUTHERN: MY FAVORITE

SOUTHERN impressed Thrall as a railfan photographer. He caught the northbound Crescent in Greenville, S. C., back in '38.

After another trip on the Pedro local I was called for the local officially known as the FPU, or Fruit Pick-Up. I wasted no time getting to the roundhouse that night. Main line all the way to San Bernardino with a Mike at that — which looked as big as a Mallet to me after being on the little 2-8-0's.

My fireman instructor on the run was new to the UP but experienced. He was cut off a Midwestern road, so he wasn't too familiar with the line. The local switched all the citrus packing houses between East Yard and Riverside besides dodging the mainline trains, and it seldom made the 68-mile trip in less than 12 hours.

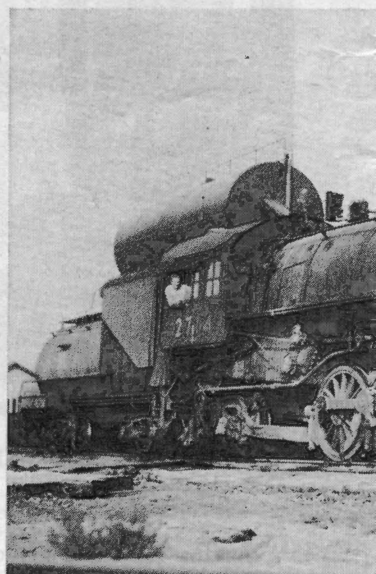
I remember that night with Engineer Oscar Bumcrot and two new firemen. In those days we had the old semaphores, and we couldn't tell an order board from a block signal! But Oscar was very patient, and we did manage to keep No. 2714 hot. Between stations Oscar flew low, trying to keep out of the way of the hotshots.

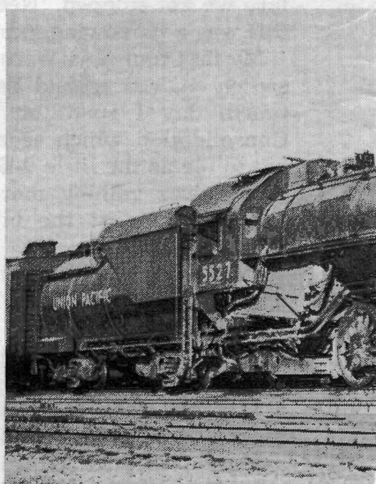
Westbound the next night the crew went to "beans" at Pomona and I stayed on the engine. I had my lunch pail with me, and besides, in those days a student fireman didn't get paid while he was learning. The local ran at that time as No. 257 on the timecard and as a third-class train. Suddenly I noticed a headlight approaching from the west. He dimmed his light, and I noticed he was carrying the green and his indicators showed 1-262 — First 262. He whistled a long and two shorts to me. The crew at the beanery also heard First 262 approaching and their hearts sank. They were sure I wouldn't know what to do and First 262 would stop for failing to receive an answer to his signals. But being a railfan, I knew just what to do. I answered two shorts with our whistle. You can imagine their joy when the crew heard me respond.

On March 19 I was called for the Pasadena-Glendale local freight at 6 a.m. We took our cars and the 6085 up the SP main line to Arroyo Junction where electric motor No. 101 (an 0-4-4-0) awaited us. We set the 6085 into Delay siding and traded engines. That was when I discovered that the fireman didn't get to sit in the cab. He rode the rear deck and held the trolley pole line as the local made its way up the middle of the street in Glendale. This was the only electric line on the Union Pacific, and what a time I had trying to hold the trolley on the wire — especially backing up over switches. Several months later, diesels replaced both steam and electric on this branch and the overhead catenary was torn down. The 101 was sold to the Oregon Electric Railway.

MARCH 21 was the Big Day. I was called for a manifest east to Yermo, 161 miles — all main line, over Cajon Pass! Engine No. 5527 was a big handsome 2-10-2 with 63-inch drivers and a Coffin feedwater pump. Her regular fireman was tickled to get a student fireman; he could take it easy and ride the sandbox on the trip. I quickly learned that a high-speed mainline run was a lot different from the easygoing yard and local runs. The pace and the consequent tension the crews are under make it real work. This was particularly true on the single-track main line between Los Angeles and Riverside Junction. There our line joined the double track of the Santa Fe and shared joint trackage rights over Cajon Pass to Daggett where UP single track again resumed to Yermo and on to Las Vegas, Nev., and Salt Lake City, Utah.

Learning to fire a big 2-10-2 on fast freight was a task in itself. Then there was savvying the many train orders: knowing who had right of track at meeting points; watching the timecard for opposing first- and second-class trains; remembering that when a following first-class train was overtaking us we had to be in the clear for not less than 10 minutes, and that for the *City of Los Angeles*, which ran as Nos. 103 and 104 every third day,





we had to be clear for not less than 15 minutes — or the wrath of Mr. Jeffers himself* would be upon us. And so it went.

On my first trip on the 5527 we took water at Ontario, and my instructor told me there was nothing to it. "Just keep a big fire going with lots of blower and your water pump on to fill the boiler, and signal the hoghead to stop when the plug is opposite the manhole!" I can remember trying to hold on and balance myself on the narrow deck of the Vanderbilt tender with the waterplug hook in one hand as the engineer deftly brought the long 70-car train in slower and closer to the plug. At the back of my mind were the tales of two or three firemen who had fallen off tenders and badly crippled themselves.

We made a perfect spot; then I had to reach out with the hook, release the latch (which often worked hard) and swing the big pipe over and down into the manhole, then stand on the little step while the tender top-filled with 8000 gallons of water in 4 minutes (5500's carried 12,000-gallon tanks). I learned to ease up the lever in plenty of time so that the terrific pressure wouldn't send a geyser of water up and over the fireman.

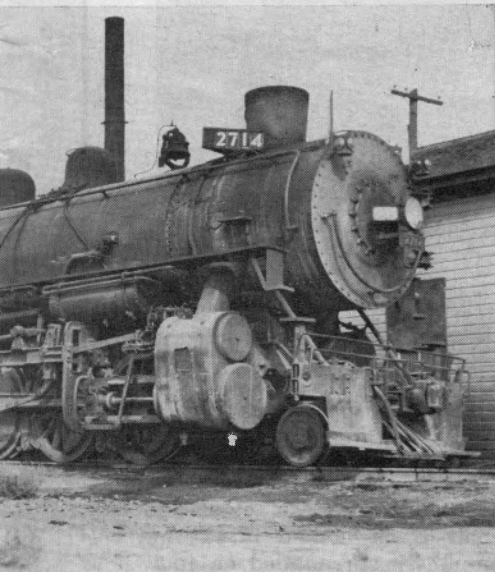
The steady two-hour or more climb up Cajon Pass offered the engine crew a release from tension. As the grade became a steady pull the hoghead set his Johnson bar according to his back-pressure gauge and the fireman could set his fire accordingly; nothing had to be changed until Keenbrook, half way up the hill, where it was always necessary to get water. At this point a fascinating drama took place.

It was the usual practice for the eastbound freights to have a helper engine in the middle of the train and one or two cut in just ahead of the caboose. All the engines would need water at Keenbrook. (A few of our engines at that time did have 18,000-gallon tanks and they alone could run Keenbrook.) The engineer on the point would ease down on his throttle until he was letting the helpers slowly push him to his water spot. Then he would set his air brakes in the train and blow one long on the whistle. At this point, the brakeman would cut off the middle helper, which in turn would back to a spot at the center water plug and set the brakes in his portion of the train, indicating such by one long blast of his whistle. In turn then, the conductor or swing brakeman would cut off the rear helpers and they would move back to the west water plug. All of this took place around an S curve on the side of the mountain. Finally, when the two rear portions of the train had been recoupled, they would signal to release brakes with two long, loud blasts which only the head brakeman could hear by stationing himself quite a distance behind the engine, which usually had its blower going. It took experience for the engineer on the point to know when his brakes had released

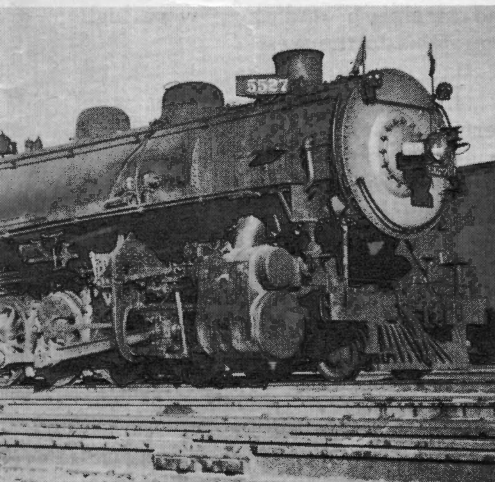
*William Jeffers, president of Union Pacific from 1937 to 1946.

THE POWER I FIRED

PLAIN, straight-boilered power dominated UP's roster when Thrall went firing.



Walt Thrall.



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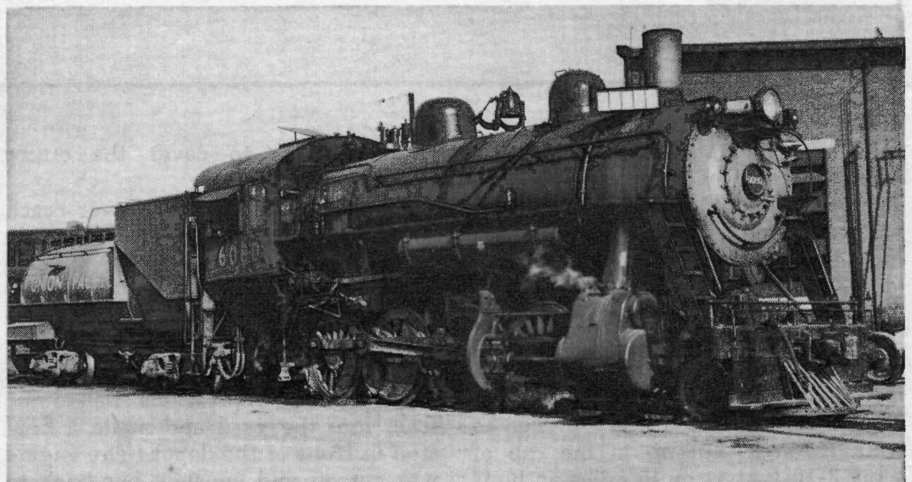
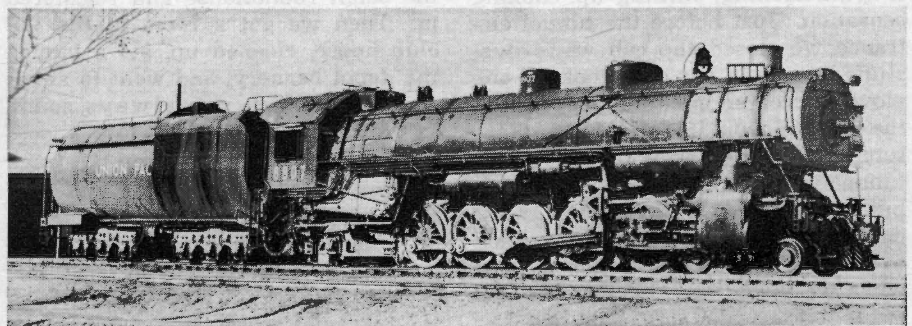
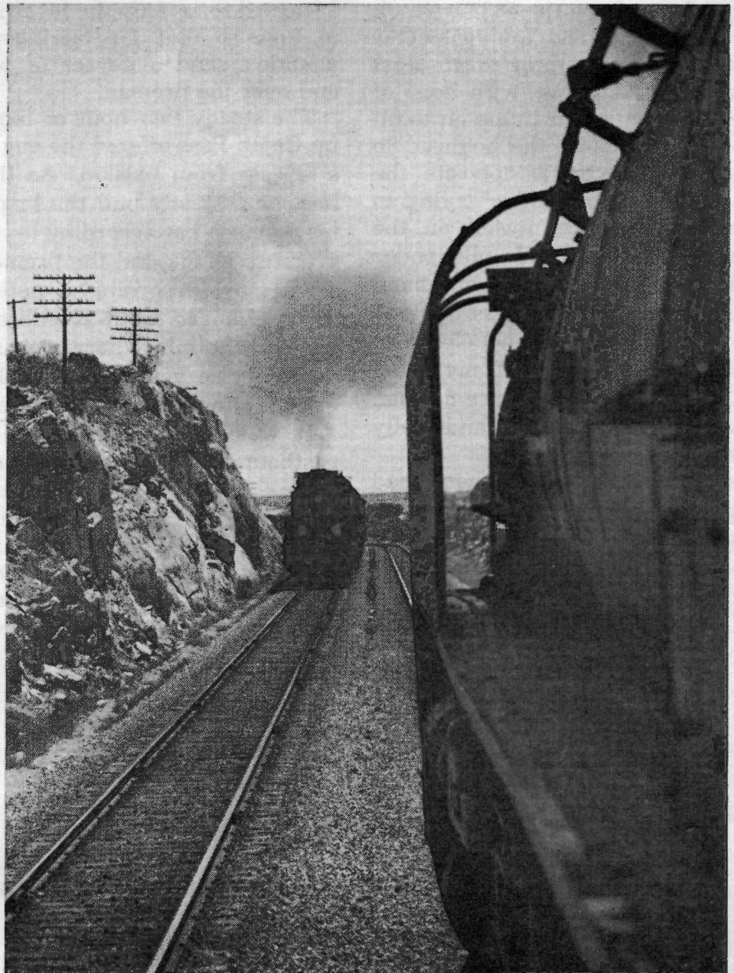

Walt Thrall.


T. J. Peterson.

REMEMBER OLD NO. 3?

REMEMBER the day you were firing on old No. 3 and you took this picture from your side of the cab of UP's No. 831? How could you forget? No. 3 was called the *Transcontinental Limited* back then in 1946 and you got the big 4-8-4's regular from Yermo to Los Angeles. Man, how those babies would go! They had the deepest, fastest, loudest bark you ever heard, and their whistles made your blood run cold, they were so pretty. How those hogheads loved to blow them! It was sure hot that day in June when you had your fire set and your exhaust injector just right. You got the old Graflex out of your seatbox and focused out through your window at the 3800-class Challenger coming toward you on the eastbound, right near the curve beyond Oro Grande, Calif. You damned the elephant ears that were supposed to keep the gas out of your face when you were drifting, and didn't. All they did was ruin your pictures of a real good-lookin' space-coverin' locomotive! Those were the good old days — lot of work; hot as Hades in the summer; hard on your ears and clothes and gloves; but sure fun.



Walt Thrall.

sufficiently for him to start his train in a manner not to break it in two by snapping a knuckle or pulling a drawbar, or coupler. Sometimes he would have to take slack several times, and on a 2.25 per cent grade this is ticklish business indeed.

No one can accurately describe the feelings of a new fireman going through a tunnel for the first time. Tunnel No. 1 seemed short enough to walk through, but up in the cab of a big 2-10-2 at 14 or 15 miles an hour it is a deafening, burning-up, choking sensation. Just before the tunnel entrance we closed the cab windows, stuffed waste in our ears, took off one glove to breathe into, and prayed that the old girl wouldn't slip down. Fortunately, we had only the two short tunnels on this Second District run, but they were bad enough. After passing through tunnel No. 2 we had to start filling up the boiler so that when we tipped over the Summit and started down the east side we had enough water to cover the entire crown sheet.

I didn't think we would ever reach Yermo, our division point. As a rule it was a good 12-hour run from East Yard, sometimes longer. Leaving Daggett, Yermo appeared as a tiny green spot across the desert — truly an oasis to a very weary engine crew and a welcome sight as we snaked our train into the yard and made a final stop in front of the depot. The engine was cut off and we took her back to the small roundhouse and registered in. Then we got a room in the UP club house, cleaned up, ate a bite in the depot beanery, and went to sweet slumber — which was always sound in the clear desert air.

Yermo consisted of an 11-track yard, a handsome depot and employees' club of Moorish architecture surrounded by green lawns. There was a swimming pool, a library, pool tables. The town was spread along the two sides of the highway and consisted of 200 or 300 people, most of whom derived their living from the railroad. There was also a turntable that prefaced an eight-stall roundhouse with a power plant and car-repair track behind it. Yermo was completely surrounded on four sides by desert of the most foreboding sand and sagebrush, and there were high mountains to the west.

I WAS getting acquainted with Yermo the next day when the call boy came for Second CKC — engine No. 8800. Gee, a hotshot west and a three-cylinder 4-10-2! The crew I was with was also delighted because the assignment paid them a higher rate than the smaller 2-10-2. I shall always remember those handsome big 8800's — not only for their staggered rhythmic exhaust but for the fact that they were the only engines on our division which had a screw reverse instead of the usual Johnson bar. The engineers hated them — particularly

so when they had to reverse them.

The gradient is slightly ascending all the way from Yermo through Barstow to Victorville, then Cajon starts really upward to Summit. As long as an oil-burning engine is working it is creating a good draft and is easy to fire; but when it is drifting downgrade that is another problem. So it was with 8800. It had a good Worthington feedwater pump, an 18,000-gallon tender; and it was clear sailing across the desert to Victorville, where we stopped for water and our helper coupled onto the point to doublehead us to Summit. Then as we crept out of Summit with a full boiler of water and started down the 3 per cent at 10 miles an hour (for the first mile, then 15 miles an hour to Cajon) I learned an 8800 trait. They gassed when drifting and always, it seemed, to the hoghead's side. If you used too much blower you used more water and the hogger objected to the noise. And her safety would pop too. But if you didn't use enough blower the hogger got his lungs full of gas. And the brakeman decorating the top of the train also objected to the gas. That's the way it was!

At San Bernardino the usual practice was to leave the train in the yard and take the engine light back to the passenger depot No. 6 track for water, then go to beans. I learned another fireman's duty: dope the pins — which was to take a large, heavy grease gun full of pin dope and grease each pin, *including* the inside main rod. From then on I did respect the engineman's dislike for three-cylinder engines.

Riverside to East Yard is 58 miles: the speedway. Although freight trains were restricted to 45 miles an hour at that time, most of the engineers made every extra mile per hour they could squeeze out of their engines. On this particular trip the engineer decided that with a little extra effort we could go to East Yard for No. 5, the *California Fast Mail*, and to East Yard we flew. When these big 4-10-2's were drifted properly they rode very well, even at high speed. That day this student fireman felt as though he were on a varnish job, with the excitement mounting as each member of the crew consulted his watch approaching each station. Were we going to make it?

Woebetide the crew that laid out No. 5, but old No. 8800 performed gallantly and got her crew home in time for dinner with a nice daylight trip all the way to boot.

EXPERIENCE — and lots of it — was the only teacher for a new fireman. An engineer made every second count — and milked every sag for a little extra effort in making his running time. He was constantly referring to his orders and timecard and the steam gauge and water glass. He actually had *all* of the responsibility on his shoulders, and if he perchance had a new fireman and brakeman, he was well aware of it. Under these conditions a good fireman who was really on the ball made himself lots of friends amongst the engineers when they learned they could depend upon him to take complete care of the left side of the long-boilered engines. Invariably when an engineer was trying to make time a red order board would show up at an open telegraph office, but the fireman learned never to miss the order hoop. The rules required that the train be slowed down when receiving train orders, but to keep in good with the boss the fireman would shout, "Keep her rolling! I'll get 'em!" That was all right except at Bly, which was an old box car office with an order board and was right at the bottom of a sag. In both directions trains would barrel past Bly with wide-open throttles making a run for the grades. The dispatchers knew this so they seldom gave us a red board there, but I have been known to grab an order hoop from the operator there at a good 45 miles an hour.

The older engineers demanded that the steam gauge never waver from the 200-pound mark, and if an engine didn't steam too well the fireman was a mighty busy man, even though all of the power was oil-burning. The water had to be carried at a half-glass mark when the engine was working hard, and woe to you if it went a fraction above and started working water out through the stack. I also found out why steam engines were always called "she." They were as temperamental as any female, and you couldn't judge one by another even though they bore similar numbers and wheel arrangements. One 2-10-2 steamed fine with just a little amount of atomizer and her fuel oil at 160 degrees, but another one of the same class might require a lot of atomizer (the fuel is sprayed into the firebox; the degree of spray is controlled by the atomizer) and her fuel at a temperature of 180 degrees. If you got the oil too hot it would boil over, down the sides of the tender and even onto the rail, causing a following train to slip down. Then you *were* in trouble — not only with the master mechanic but with the trainmaster too.

I had heard how nice and easy the feedwater pumps were compared with the old-type injectors, but I found out the hard way that they often wouldn't supply the boiler and we'd have to double-gun the engine (use the right-side injector to put water in the boiler). That made it really hard to keep the engine hot. And basically, of course, a good fireman never had to smoke his engine. I was often to hear the remark, "You can't make steam out of dense black smoke!" I must confess that in those days UP engines were well kept up, and it was possible to keep most of them hot with not a trace of smoke. (But when I saw a camera pointed at me I always made a little smoke, for I knew what it meant!)

I was sold on railroading. The Union Pacific didn't know it, but I'd gladly have *paid* the road for the privilege of riding and firing its big steam locomotives!

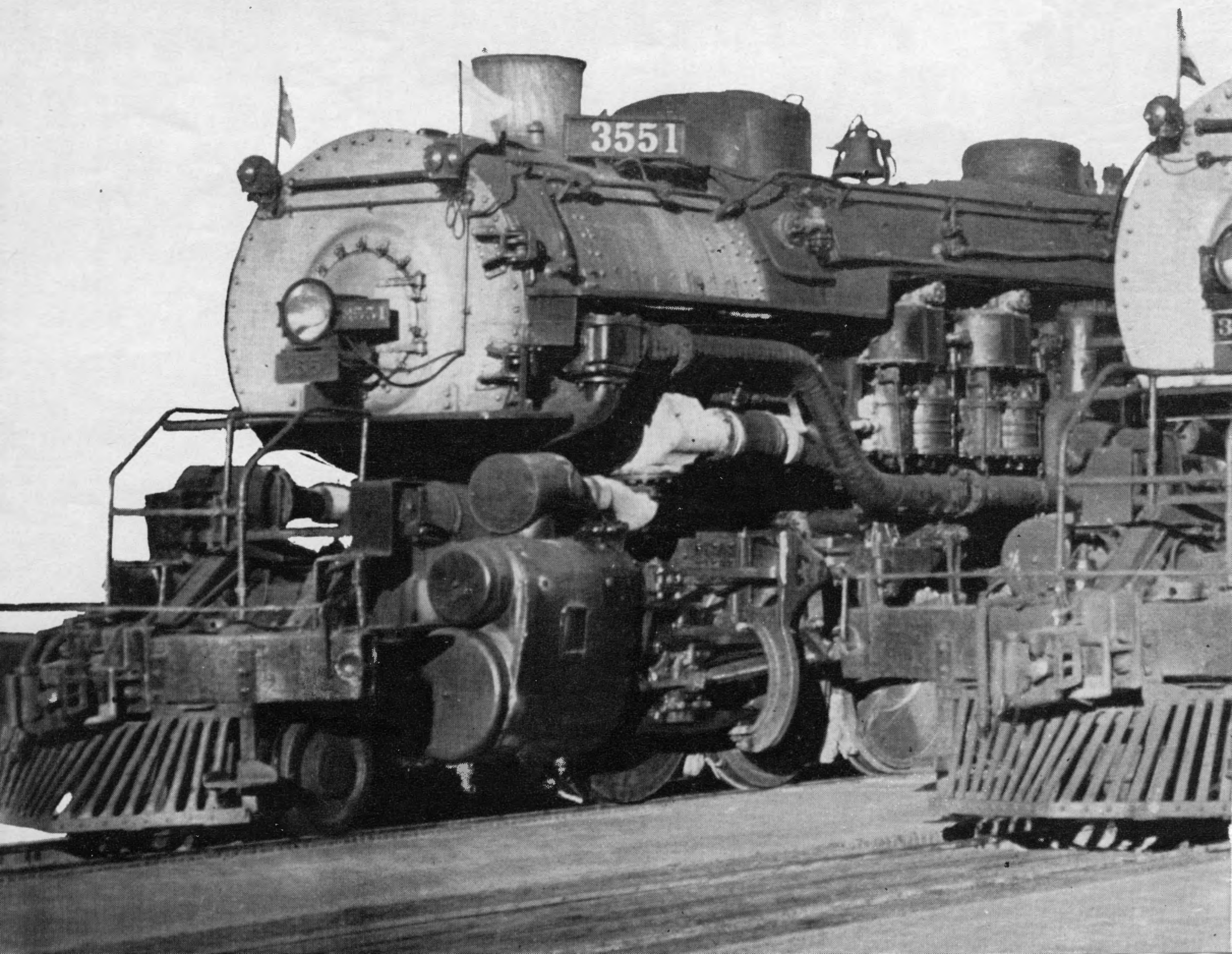
Walt Thrall.

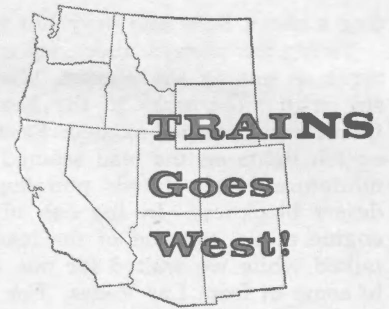
FOR 43 CENTS AN HOUR **AUTHOR'S first railroad job was coach cleaner at Espee yards in Los Angeles in summer of '39.**

EXTRA BOARD ON A MOUN

A fan turned pro completes his student trips and goes firing for pay. Along the way he falls in love with 4-6-6-4's . . . is aboard an engine that smacks a bull at 40 miles per hour . . . and is told to "grab the order hoop and not the mail sack!"

BY WALTER THRALL





TAIN RAILROAD

MY second student trip to Yermo, Calif., was on the afternoon of March 24, 1941 — but under circumstances much different from the first. We drew a drag freight and as we walked with Engineer Reynolds across the turntable to the eastbound ready track we beheld Union Pacific engine No. 2264, a medium-sized 2-8-2, awaiting us. The groaning was loud. And the trip was rough and long. We took siding for anything and everything that looked slightly more important. We didn't miss a waterplug the entire way, and we picked up and set out all along. Since it was a 161-mile run, the crew didn't go on overtime until after 12 hours 53 minutes on duty. We felt sure the train dispatcher had it in for us for some offense we must have committed previously.

Dawn was breaking across the desert when Extra 2264's whistle sounded at the Yermo mileboard next morning. A weary crew filed into the locker room after riding interminable miles at 45 miles an hour in a cab built for two that held four. Someone always had to ride on the steel top of the sandbox.

We were in the midst of a game of snooker pool in the clubhouse when the callboy interrupted us for a hotshot west with engine 2735, another 2-8-2. There was muttering until our conductor learned that we were get-

Walt Thrall.

ting a short, light and very hot train.

Yermo has always impressed me at night as having the biggest, blackest sky with more stars in the heavens than I ever dreamed existed. Even the switch lights on the lead seemed like miniature block signals piercing the desert blackness. In the cab of our engine at the top end of the lead we talked while we waited for our train to come in from Las Vegas. For lack of room, I stood in the gangway, until a fast-moving headlight showed over the horizon behind us. Soon the wail of a whistle announced the arrival of our train.

The other engine was cut off and we backed to a gentle coupling. Blue signals were hoisted on the cab, and while car-toads' lights went in and out between cars our engine pumped up the train line. Minutes after our air test, Extra 2735 West was snaking out on the main, and away we went. "We're due in Los Angeles now," announced our hogger.

I've often wondered how fast we streaked across the desert that night. I remember holding onto the cab sill for dear life. And I remember the steady deafening roar of the exhaust that seemed never-ending, the exuberance of the drama taking place — plus a fear that I couldn't dismiss. I had read of a main or side rod breaking off and smashing the cab to pieces. Between such thoughts my instructor was hollering in my ear: "Don't let your oil get too hot! Better blow out those water glasses! Call to him how that order board is! Don't let your water get away from you!"

AFTER four mainline trips, more on locals, and several on Cajon Pass helpers, I received a call on April 6 to deadhead on No. 6 to Las Vegas. Three of us student firemen were on No. 6 that night, and we spent most of the trip comparing notes instead of getting some rest.

We had just finished our breakfast the next morning when I was called for Second 262, engine No. 8803, to go to Caliente, Nev. This 125-mile run was then known as the Third District of the Los Angeles Division, and it was by far my favorite of the three districts — mainly because it traversed the beautiful canyon from Rox to Caliente, over many bridges and through numerous tunnels. Since the run was comparatively short, the crews nearly always doubled out of Caliente to Las Vegas without a long layover. Even so, Caliente had a handsome depot and a clubhouse with recreation facilities; and there was a small movie house in town to help pass the time.

Much as I wanted to view this new country, I had learned that to be a successful student fireman you had to be on the ball *all* of the time; for if your hogger didn't take to you he might not give you a good letter of recommendation, which was required from each engineer to which we were assigned. I also found that firing the big engines was just a small part of the game. Understanding train orders on a single-track high-speed mainline railroad was in itself a science. The many rules governing the operations and safety rules had to be remembered. And we had to watch always for tests, for which the UP is notorious. We also had to learn to watch section gangs for signs — particularly a "whisker" sign, which denoted an official nearby.

After the turnaround trip to Caliente, I was called the evening of April 8 for a manifest west to Yermo, with engine 5529, a strapping 2-10-2 equipped with Walschaerts valve gear (most 5500's had the unusual Young valve gear). I had a congenial crew; the engine practically fired itself; and I was fascinated watching the opposing trains' headlights many miles away coming off Cima Hill. The crew tried to guess where we would meet each of them.

Suddenly my fireman instructor yelled, "Blow your whistle!" We were making a good 40 miles an hour, and dead ahead of us stood the biggest bull I had ever seen! I was scared. Before I knew what was happening, my instructor had closed our window and shouted "Duck!" Needless to say, in spite of our whistle and open cylinder cocks, we hit the bull — without so much as a shiver — and scattered him the entire length of our engine and tender. We "smelled" him the rest of the way to Yermo.

Cima Hill is as noteworthy to the Pedro (the former San Pedro, Los Angeles & Salt Lake Railroad) as Sherman Hill is to the UP main. For 18 miles we sneaked down that hill that night to Kelso at the bottom, which is another oasis for beans for the crew, as well as the helper engine terminal. Indeed, Cima is a rough one: 2.2 per cent all the way — with a maximum speed of 15 miles an hour for freight trains — and long, gentle, graceful curves that offer slim resistance to wheel flanges. All retainers were set up at Cima (the summit), and two wheel-cooling stops had to be made on the hill. As many a hogger reminded me, it took real skill to bring a long, heavy train down that mountain when all the cars were equipped with the old K-2 triple valves.

And I learned another lesson that night. "Be sure you grab the train order hoop and not the mail sack," warned my instructor. This was not too unusual a mistake for a student fireman to make.

A feature of this Second District was Crucero, where we crossed the old Tonopah & Tidewater Railroad. At Crucero were an odd-looking tower and a depot, a few trees and section-houses, and the T&T, perfectly straight as far as the eye could see in both directions. But I never saw one of its trains there, much to my sorrow.

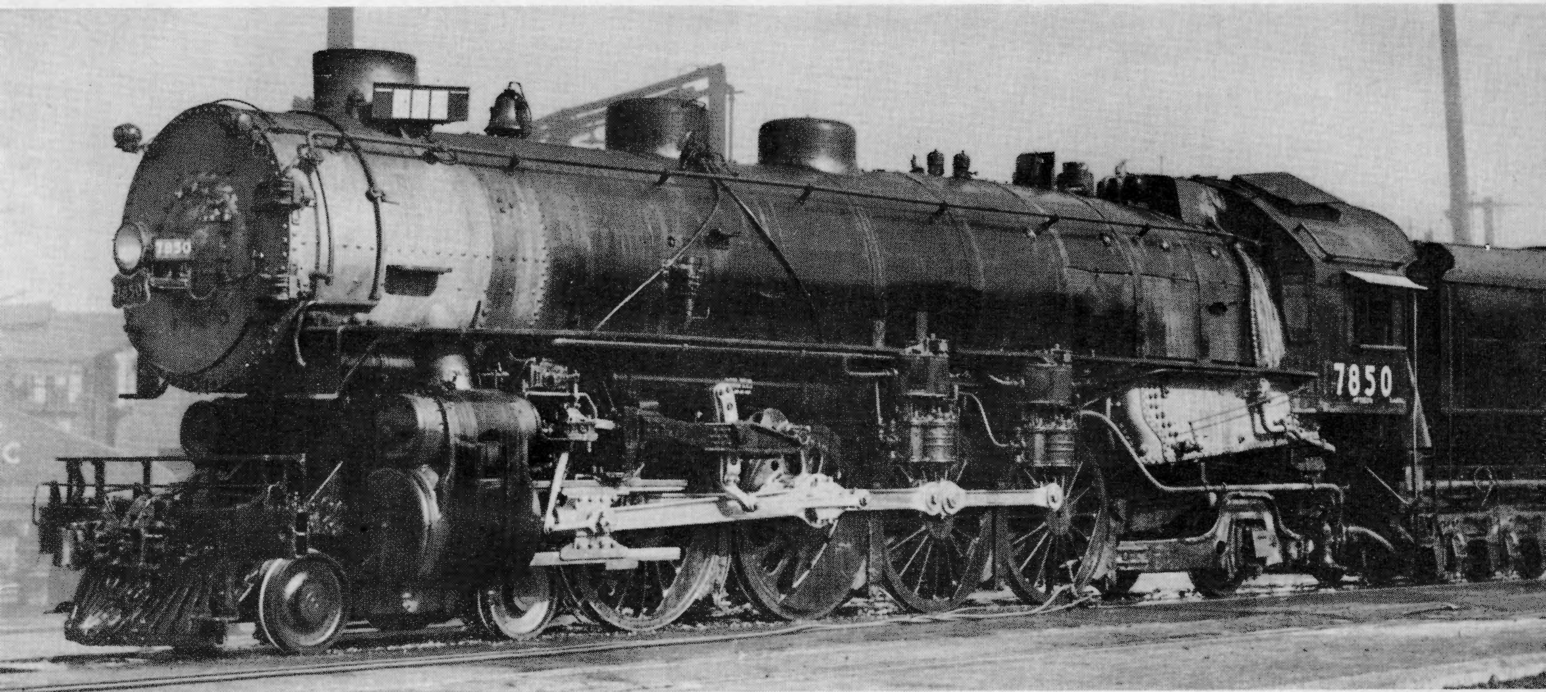
On the cold, overcast morning of April 11 we slipped out of Las Vegas yard on the Boulder local. We had engine No. 6050, one of the old Salt Lake's favorite 2-8-0's. The line was built early in the depression as the main supply link in the building of Hoover Dam; and since it was so new it was as good track as a main line. From the main line to Boulder City the grade is ascending all the way, and old 6050 was working hard. The crew was gathered on the right-hand side of the cab around genial Harry Healy, our hogger. They were engaged in light conversation. Something ahead caught my eye. I strained forward, then let out a yell. It was an open derail — on our track! No one paid the slightest attention. This time I ran over and really shouted. They all acted as if I weren't even there! By now you know. It was a spring derail, and the boys had a whale of a good laugh on me. My only consolation was that someday my turn would come to work it on some other green student.

MY 30 student trips were over, so on April 12 my compatriots and I deadheaded back to Los Angeles on No. 5 to take our examinations. We studied and we studied. At last I was called in to take my oral Book of Rules exam with two experienced brakemen. Our examiner was Terminal Superintendent E. E. Marksheffel, one of the old-school Salt Lake boys — as tough and as amiable as they come. He showed us no mercy, and finally he asked one of the brakemen what he would do if he heard an engineer whistle one long and three shorts. The brakeman thought and his companion thought, but they couldn't come up with the answer. At last the superintendent turned to me. "Fireman, if you can answer that question I'll sign your card and let you go and I'll keep these boys here a while longer." That was one I did know.

"Flagman protect the rear of his train," I replied.

I felt sorry for my two companions as I left the office. We all knew that they had responded to that signal many times; but under the pressure their minds weren't functioning.

Now, I thought, I'll get to go to

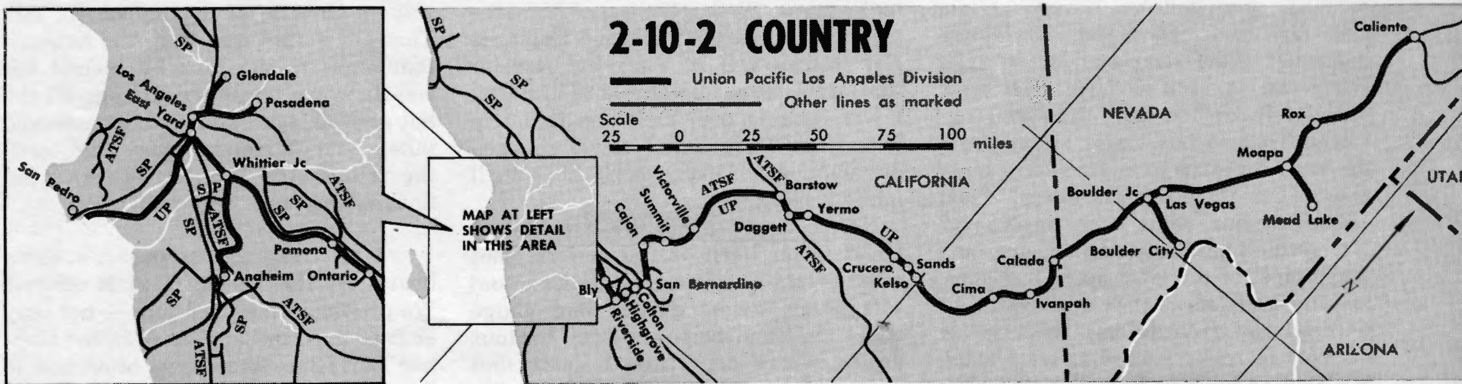


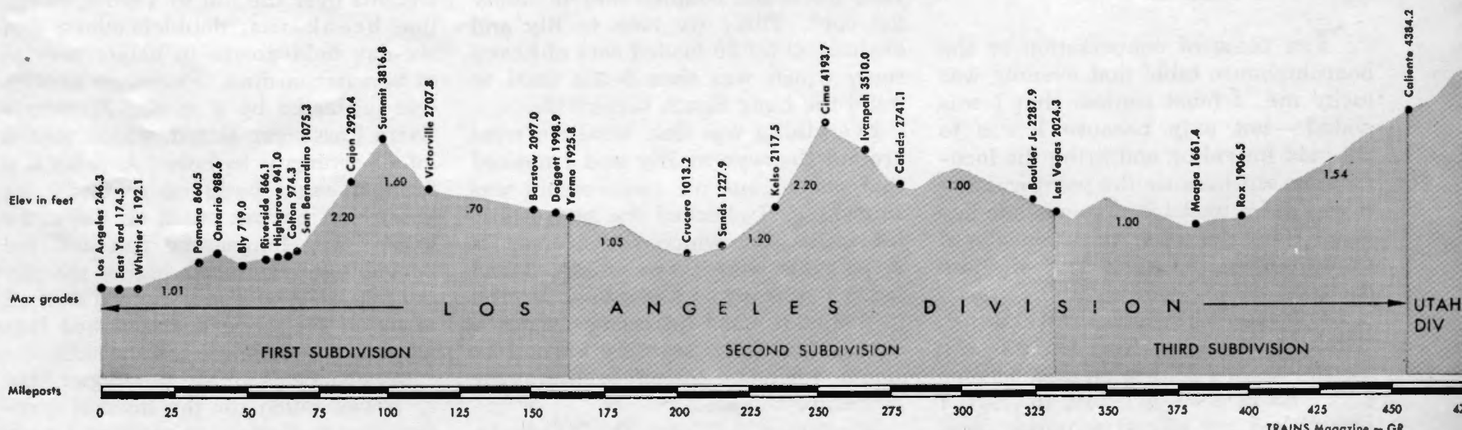
Walt Thrall.

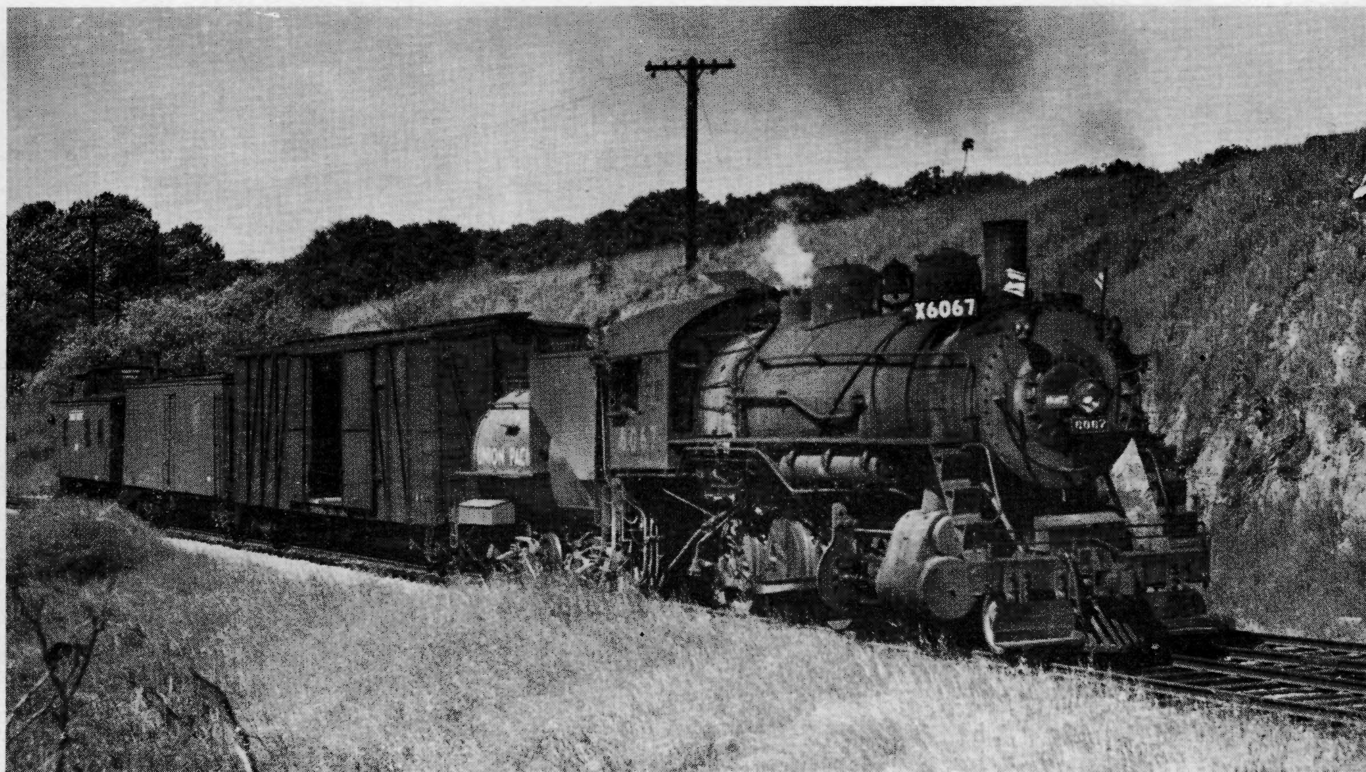
MOUNTAIN RACER THE LINK between UP's Pacifics of World War I and the 4-8-4's that came in 1937 was a batch of straight-boilered 4-8-2's constructed by Alco in 1922-1923. Author Thrall fired on such power at "jet speed." The 7850 posed in Los Angeles.

work. But I was too anxious. The only opening for new firemen was on the extra board. That meant working over the Santa Fe tracks — which in turn meant going to San Bernardino to *write* the entire Santa Fe Book of Rules and to face its Trainmaster Sugars — who was as tough as they made them — for the oral examination.

I still shudder when I think of the written part of the examination, but Mr. Sugars turned out to be quite human. He was the topic of our conversation as we deadheaded back to East Yards in the smoker of No. 5 that







John Shaw.

TWO-CAR EXTRA **EXTRA 6067 WEST chuffs placidly down the 20-mile Anaheim Branch in April 1947 with an elderly Consolidation that was in steam when E. H. Harriman was alive. An extra board fireman might catch an engine this size one day, a 2-10-2 the next!**

same afternoon. We were confident that we would be "marked up on the board" when we got back to Los Angeles.

"Why, you fellows haven't taken your air brake exams yet," exclaimed the chief crew dispatcher in L.A. We were crestfallen. He did some hurried telephoning, then told us: "Take No. 6 to Las Vegas tonight, and the road foreman of engines will meet you in his office for the exam. Then you can come right back on No. 5." We studied and questioned one another most of the way up. I feel sure, looking back now, that our examiner realized our situation and went out of his way to make sure that we passed. We headed back to East Yard bearing cards that stated we were qualified locomotive firemen.

THE TOPIC of conversation at the boardinghouse table that evening was lucky me. I must confess that I was elated — not only because I was to get paid for riding and firing the locomotives but because the pay for doing it was more than I had ever made before. Railroad jobs were considered to be among the very best of those days.

At 7 p.m. the telephone rang. "Thrall? You're called for the Bly Turn — engine 3532 — on duty at 8:30 p.m." So at 8:30 on April 16, 1941, I established my official seniority date.

My head was in the clouds. I tried to review the 101 things I must not forget. I was conscious of my responsibility, and above all I wanted to make good. With a feeling of humbleness and excitement I signed Engineer Enz and myself in the crew register that night, after explaining to him that I was making my "date" on that trip with him. He grinned as we checked our watches. "Don't worry, kid. We'll make it okay."

No. 3532 was a big 2-8-8-0 Mallet. I had never been on one before. But after I had checked her firebox and soft plugs, water glasses and gauge cocks, and had performed my various duties before departure, I knew that I would be her master that night. We slipped down the back lead to "C" yard No. 5 and coupled into 46 empty flat cars. These we took to Bly and exchanged for 50 loaded cars of heavy rock, which was then being used to build the Long Beach breakwater.

Everything was fine, until we went around the wye at Bly and I noticed that one of our air compressors was squeaking. I checked the hydrostatic lubricator, for which the fireman is responsible, and it was empty. I had fed it too heavy. I knew how to refill it, thanks to good instructors; many a fireman has been severely burned by steam when he failed to drain the lubricator completely.

It's a steep pull from Bly to Ontario, especially for 50 cars of rock. Even with the needle against the peg, we had to take slack a few times to get started. Then it was a fight all the way to Ontario at the top of the hill. That old Mallet roared to the heavens that night as she literally inched her way forward while we fed her all the hot fuel oil, sand and steam she would take. At 3:30 a.m. we were tied up at the roundhouse; I had successfully finished my first trip with pay.

I ENJOYED the fireman's extra board for the variety that it offered. We protected the yard jobs — not only at East Yard but at Pier A on the Harbor Belt Line (where we often had to fire Southern Pacific and Santa Fe switchers)—the local freights, through freights over the hill to Yermo, mainline break-ins, doubleheaders, and six-day hold-downs in helper service at San Bernardino. Passenger service was protected by a special Fireman's Extra Passenger Board, which took a lot of seniority to hold. And until a fireman could build up seniority, he knew that he was stuck on the extra board. The longer the run and the heavier the engine the higher the pay per trip, so it was only natural that all of us on the extra board looked forward to the mainline freight runs.

My chance came the evening of May 1. I was called for the hotshot merchandise to Yermo: on duty at 9 p.m.;

engine 5516. We had a fine crew — with one exception. Our conductor was a grouch from way back; he railroaded strictly by the book and he let everyone know he was the boss. While we were taking water at Ontario he walked to the head end, then he rode the cab to Riverside. I could not help but notice that he and my hogger were having some hot and heavy words as we sped through the night, but I had so much on my mind I didn't pay much attention until we were nearing Highgrove on the Santa Fe. The hogger suddenly jumped up, grabbed the conductor by his shirt front. For a few moments it looked as if we were in for a real fight — with only myself watching where the train was going. The two brakemen quickly brought the situation under control, and peace reigned after the conductor got off at Colton and caught the caboose. We felt sure we would be in for an investigation, but he never reported the incident.

The "lucky boys" were the ones who flew by us with a wave of the hand each time we took the hole for a passenger train. Main line all the way, short hours, high-speed excitement, plus the prestige of the whole railroad! In those days we had Nos. 7 and 8, the all-Pullman *Los Angeles Limited*, and Nos. 717 and 818, the *Challenger,* with three almost-new engines that ran through to Caliente, Nev. — the big, handsome 3935, 3938 and 3939 4-6-6-4's. They were the ideal of every engineman on the division: they paid the most money, had the prettiest whistles, and rode the best of all. We had too the *Pacific Limited,* Nos. 21 and 14, and the *Fast Mail*, Nos. 5 and 6; these four were pulled by the handsome 7800-class 4-8-2's which had 73-inch drivers.

My first contact with a 3900 was on July 9, 1941, at Yermo. We were called for the Fourth CKC West, engine 3939. Our hogger was the late Fred Lockwood, a wonderful hoghead and a wonderful person. We were excited about getting a 3900. I soon found out, however, that these engines were temperamental. They had to be fired with silk gloves, and you didn't take your eye off the water glass or feedwater pump gauge for more than a minute. But we made a good fast run.

Just west of Hillgrove the main line goes over a bridge, then around a 40-mile-an-hour curve and over another bridge. When we left Pomona Lockwood really let the big gal roll since there is a slight descent all the way to East Yard; furthermore, he got a kick out of blowing her beautiful whistle over the numerous crossings. The Hillgrove station went by in a blur, and Lockwood yelled over to me, "Hey, Walt, how fast do you think we're going?" Jeepers, I figured we must have been doing 55, and I told him so.

"No, I think you're wrong. I don't think we're going over 40!" I thought to myself, "Surely he'll set some air!" But he didn't, and we hit the curve in such a manner that the big gal strained at the outside rail and quivers ran all through her.

"Man, I sure hope she goes through that bridge and not around it!" he yelled. I was too scared to answer for I was hoping so too. But she did all right, and Lockwood laughed when he realized that he really had frightened me.

I was married in September; and it seemed after that I caught only main-line runs and was away from home much of the time. It was on one of these trips that I first got to run an engine. On November 18, 1941, we were called out of Yermo on engine 8808, a 4-10-2, on the Third CKC, a real manifest. As we started up the hill out of Victorville behind a helper, I noticed that my hogger was not himself. Finally at Summit, after the helper had left and the brakemen were setting up retainers, he said, "Well, Walt, you'd better run her down the hill. I'm sick." In spite of my protests that I had never run an engine even in the yard, he convinced me that he was too ill to run it. He said he would instruct me from the fireman's side. I took the engine down Cajon Pass exactly as he told me, and outside of stalling through "drawbar flat" just west of Gish, I didn't do too badly. But that was one experience I didn't cherish.

Christmas of 1941 our country was at war, and our single-track railroad was flooded with trains. I was called to deadhead on No. 818 to Yermo, and the next day I was called for First No. 5, a troop train with engine 7850 — a 4-8-2 known all over the railroad as The Killer because one engineer, one road foreman of engines, and one shopman had been killed by her or on her. Needless to say, I was the talk of the division, for it was unheard of for a fireman as new as I was to fire even an extra passenger train. But the war made exceptions to nearly everything.

One of the novelties of railroading is that every run, or job, is put up for bid and the man with the highest seniority who bids for the job gets it. Once in a great while a fireman with a low number gets a regular job. When I learned this, I bid on everything desirable, saying, "Well, at least no one younger than I will get it." On March 1, 1942, I was the successful bidder on a regular Kelso helper job. This was considered a good job if you could stand Kelso! Kelso consisted of a depot, beanery, rooms above the depot, a few houses, and a small roundhouse and power plant — and sand as far as the eye could behold. We would couple into the train to be helped just ahead of the caboose and take it to Cima (18 miles), where we would cut off, go around the wye, and head back down the hill light to Kelso. Once in a while we would be sent west to Sands to help a train back to Cima. This had one decided drawback: we had to *back* to Sands. Sometimes this was through a sandstorm, and the block signals were on the fireman's side. Talk about a miserable experience. Sands consisted of a water tank and sectionhouses and sand dunes and a whale of a lot of absolute quiet. After three weeks of Kelso helpers, I bid back to Los Angeles and the extra board.

In the spring of 1942 a large class of firemen was called up for promotion to engineers. This qualified me for hostling service, which I enjoyed very much — except for the times when a roundhouse foreman wanted me to put in the house an engine that had so little steam there wasn't enough air to stop it or even reverse it! (Several new sections of wall in our roundhouse testified to what happened to several hostlers who didn't get stopped.)

By this time many of the engineers were giving me experience and instruction on the right seatbox, mostly on switch engines and locals on the main line. I took this very much to heart, for I found that *only* experience could train a person to operate a steam locomotive and cultivate his judgment. And the real secret of success of any steam locomotive engineer is good judgment.

I was on a work train spreading ballast between East Yard and Bly on September 3, 1942. We were coming west into Ontario in the early afternoon with engine 2726 (a 2-8-2), about six hoppers and the caboose. Our trainmaster was riding the caboose. Suddenly I noticed a man sitting on my side of the track around a left-hand curve, and I called to my hogger to lay on the whistle. He did, but the man didn't move. I told the hogger to set some air and blow his whistle again, but still the man didn't move. By this time I was frantic. "Big hole her!" I yelled, and I motioned and shouted, to no avail. We were almost stopped when we hit him, and I turned away. Both the hogger and I were sick with apprehension. But when we got down on the ground the man was

John Shaw.

TWO CHALLENGERS **GANGWAY! — it's 6:10 a.m. on a June morning in 1940 and Challenger 3935 rolls west off Cajon Pass at 75 miles per hour on train 717, the Challenger. Strung out behind are 22 cars. The 4-6-6-4's were favorites of the crews.**

sitting up, rubbing the back of his head. Beside him was a bottle of wine — half empty. The trainmaster had witnessed the whole episode from the caboose cupola, and I was officially credited with saving the man's life.

I got a regular through freight run on September 16, 1942, with Engineer Jake Pfister. He and I became warm friends, and he was one of the best teachers of running an engine I ever had. He was particularly noted for handling the air down Cajon Pass, and in this he gave me much instruction. I was soon handling the trains down the hill every trip, in addition to the stretch from Pomona to East Yard. I became so attached to Jake Pfister that I actually disliked being called for extra passenger runs while I was on freight with him. By this time a number of the original 4-6-6-4's of the 3900-class Challengers were running on our division, and they were indeed my favorite of all the engines.

During November 1942 I was bumped from my freight run, so I bumped on the Fruit Pick-Up with Engineer Oscar Bumcrot, who gave me all the experience I wanted in running an engine. It was rumored that since another class of firemen had been promoted, it wouldn't be long before more engineers were needed.

In those days our railroad and the Santa Fe were literally plugged with trains. Often there would be four and five trains lined up waiting to get into the yard, every siding would be full, and many, many times it took us 16 hours to get over the road — sometimes longer. This required that a crew come and "dog-catch" us on the Law.

On June 21, 1943, I was regularly assigned to Nos. 38 and 37 — the famous *Los Angeles Limited* — between Los Angeles and Yermo. I was assigned to Engineer Jim McMahon, one of the best. We would fly into Pomona on those big 7800's, and I was sure he was going to miss the waterplug and have to respot — but not once did he. Nor did the passengers ever feel a rough start or stop. When we left Summit we were due in Victorville. I used to hang on for my life as No. 38 would go down that mountain as fast as she could turn a wheel. A brief pause, and away we'd go for Barstow across the flats at jet speed. We had a 3-hour break in Yermo, then it was back to Los Angeles on No. 37. There we would lay in until the next night. A swing crew relieved us every nine trips.

I was enjoying myself on the varnish when a bulletin came out in August. It simply stated: "The following firemen are hereby notified to prepare themselves for promotion to engineers . . ."

My name was on the list.

"I BELIEVE there is an unchanging law of economics and engineering which merits consideration in trying to forecast transportation effects in our changing world. That is the low frictional resistance of a flanged steel wheel on a steel rail. A 40-ton freight car, given a 60-mile-per-hour shove, will roll more than 5 miles on straight level track before stopping. A 40-ton truck on level concrete highway will coast in neutral from 60 miles per hour to a stop in less than 1 mile. Four thousand horsepower will pull a mile-long freight train of 5000 trailing tons. The same horsepower will move 20 trucks aggregating 400 tons. Or it will move 50 passenger type automobiles aggregating 85 tons in weight. Or one four-motor, propeller-driven airplane weighing 60 tons. But that isn't the whole story. The railroads develop these 4000 horsepower with diesel fuel oil at an average cost of 10.93 cents per gallon while the fuel used by automobiles, airplanes, and most of the trucks, costs from 30 cents to 50 cents per gallon. So fuel costs per 1000 ton-miles range about like this:

Two-engine airplane	**$16.00**
Four-engine airplane	**8.15**
Passenger-type automobile	**8.66**
Truck and trailer combination	**2.10**
Average freight train	**.165**

Just to round up the fuel economy inherent in the combination of a flanged steel wheel on a steel rail, let me point out that the railroads now move about half of the intercity freight ton-miles with only one-tenth the amount of fuel that all other forms of transportation use to move the remaining half. That is one of the unchanging transportation facts in this changing world of ours." — *David E. Smucker, President, Detroit, Toledo & Ironton.*

PROMOTED... TO THE

BY WALTER THRALL

Less than three years after going firing, our onetime fan puts a gloved hand on the throttle. Of his double-stacked, loud-talking 4-6-6-4's he recalls "mile after mile of sheer exaltation"

THE PROMOTION to engineer was in itself a great deal, but, oh, how we dreaded the thought of the examinations! We had heard plenty about them from the boys in the previous class, and a number of them had flunked the first time. In addition, the Union Pacific had every type of valve gear, feedwater pump and injector that had been invented, and we had to know all about every one of them.

I went to the master mechanic's office to get some literature to study, and I was given no less than six books — these didn't include the Book of Rules, which we had to know by heart. Fortunately, I had a regular passenger run so I managed to get in a lot of study on my layovers. And I had a good hoghead on my run who gave me help and advice. To him my greatest attribute wasn't that I kept his engine hot but that I kept the cab clean. It was always light enough in the dawn on the desert so that I could see as we left Victorville starting up Cajon on No. 37, and I would steam-clean the big roomy 7800-class cab. First I'd take the torch and spill coal oil around, then steam it down, and polish everything with the waste. Even though an oil-burning locomotive was cleaner than a coal-burner, those oil-burners could get plenty dirty. Most of the 7800's were good steamers, and you could set your fire and take it a little easy. But then, when you did get one that didn't steam, you really worked all the way over the road!

A milestone for me was September 16, 1943. I was the successful bidder as fireman on Nos. 104 and 103, the *City of Los Angeles*, between Los Angeles and Las Vegas, Nev. — 334 miles. That was the pinnacle for the fireman. I had almost five days at home between trips. I thought I was somebody when I got that job. It also made me impervious to being bumped by a senior man for 90 days.

But I was due for a surprise, for I quickly found out that the fireman got to ride in the cab very little. He had to spend most of his time in the hot, deafening, gassy diesel units. And in the summer it was anything but a picnic. Eastbound on No. 104 we got the old LA4-5-6 units, which were quite modern, but coming west out of Las Vegas on No. 103 we had the old LA1-2-3's, which required nursing. We always had a diesel road foreman of engines riding with us, so the fireman had to be on the job.

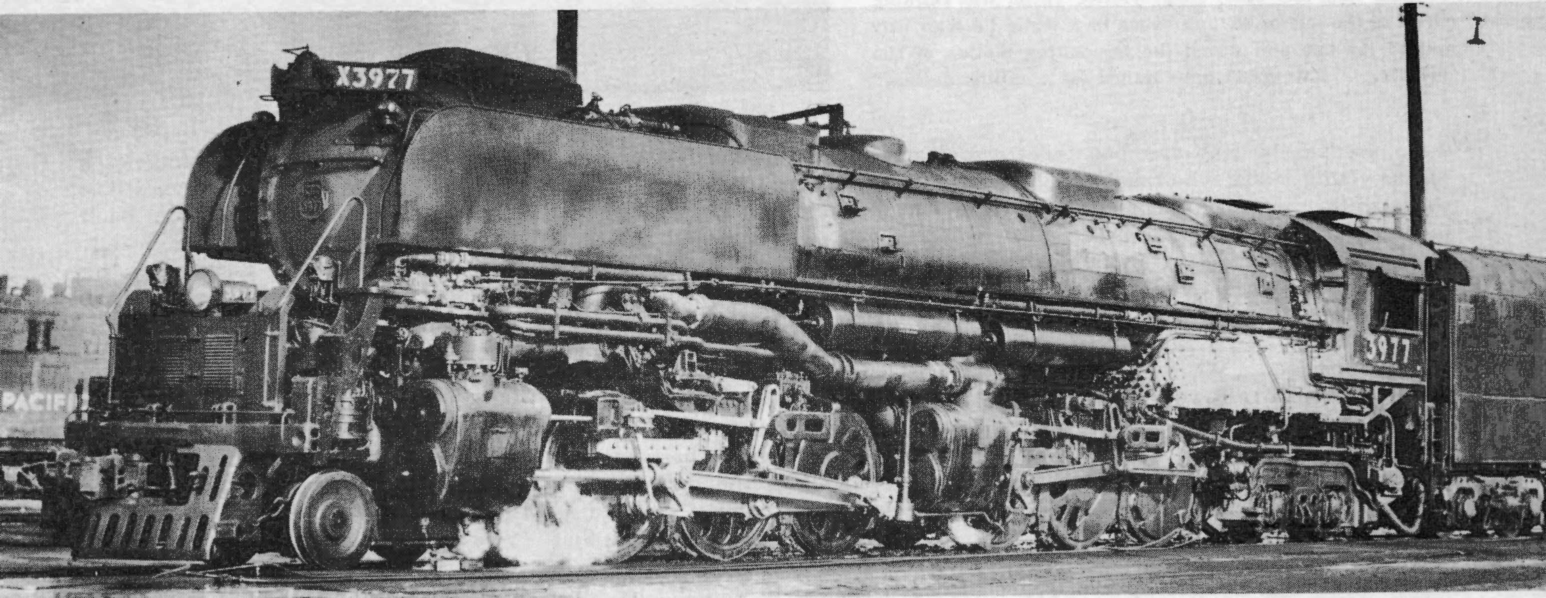
Every freight train had to clear us by 15 minutes, passenger trains by 5 minutes; and every second had to count in order to make the schedule. The complicated flash boilers that always needed attending were the only items that ever really gave me trouble. The fireman was held responsible for the engineroom, and this was not to be taken lightly.

On my second trip west, I rode in the cab for a while as we climbed Cima Hill. Then I entered the second unit, just as something went wrong. I took the engine off the line and killed it; then I got the maintainer who always rode the train. His inspection showed that if I hadn't caught the trouble when I did the engine would have been badly damaged. After that experience I kept a really close lookout.

One trip going west I shall never forget. Apparently in those days there was no maximum speed on the *City of Los Angeles*. Imagine the sheer thrill of seeing our speedometer on 120 . . . 121 miles an hour for about 5 miles. That train was (and is) a marvel with its electropneumatic brakes that seemed to do the impossible. Many a time coming down the east side of Cajon through Hesperia I've looked back on a solid stream of fire flying from every wheel.

FOUR OF US were called on December 1 to take our promotion exams. For six days, from 8:30 a.m. until 5 p.m. with an hour off for lunch, we wrote and we answered questions. There were over 1000 questions on the mechanical phase alone (for example, we had to know every part of a steam locomotive and how to make temporary repairs in order to move a crippled engine off the main line).

RIGHT-HAND SIDE OF THE CAB



Walt Thrall.

ELEPHANT EARS **HIGH-WATER MARK in Challenger design on Union Pacific arrived in 1942 when Alco began delivery of 45 roller-bearing 4-6-6-4's to supplement 40 engines of the same wheel arrangement built in 1936-1937. No. 3977 stands on the L.A. wash track in 1946.**

There were more than 700 questions on the complicated air brake — plus the Book of Rules, plus all forms of train orders, plus C.T.C. rules. When we had finished and had been notified that most of us had passed, it was indeed a great day.

The telephone rang in my home the afternoon of February 23, 1944. It was the crew dispatcher.

"Thrall? You're assigned as an engineer to a Caliente helper. Deadhead on First Number 8 tonight."

I got off at Las Vegas the next morning because I had to make a student trip over the Third District before I could mark up at Caliente. I got that trip over with quickly, even though the railroad literally was flooded with trains of every description and we seldom passed a station without finding a train in the hole or taking the hole to let one by.

I was called on February 26 at Caliente, Nev., for a west end helper to Carp to help First 160 back. It was snowing fiercely and the wind was blowing when I walked to my engine — No. 2293, a 2-8-2 — outside the roundhouse. I climbed into the cab and introduced myself to my fireman, adding that I was a brand-new hogger and would appreciate any help that he could give me since I wasn't too familiar with the Third District.

"Gosh, mister, I'm making my second trip myself," he stammered most apologetically. I suddenly realized what responsibility really meant, especially since many a new engineer has been known to fail on his first trip.

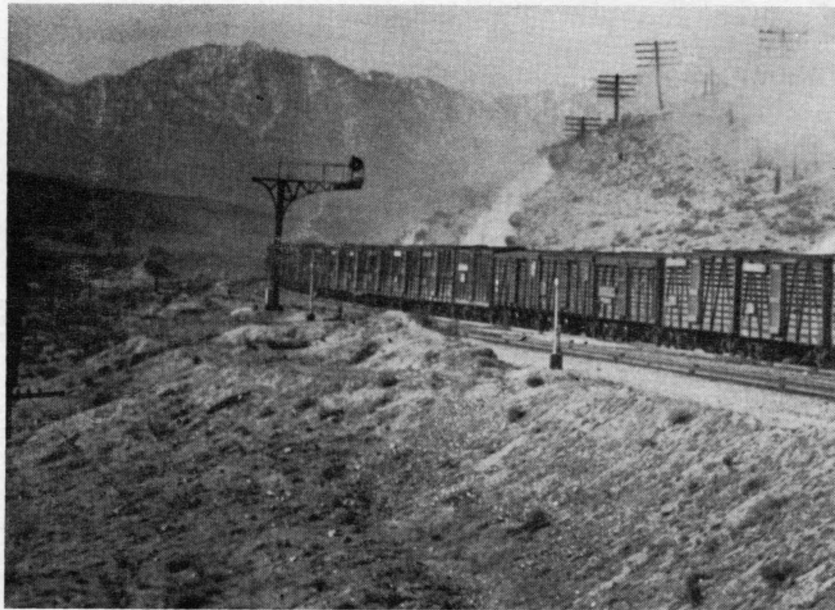
I went into the telegraph office to register out and to check my watch. The operator handed me 19 train orders. I was to run light to Leith, turn on the wye there, and then back another 10 miles to Carp. *But* some of the opposing trains had rights over me; I had rights over others. Then there were the first-class trains I had to watch for in my timecard.

We took off down the main line in the blinding snowstorm. Not being familiar with the line we had to keep our eyes peeled for the old-fashioned semaphores that were hard to see even under good conditions.

Those were war days, and a number of young women were serving as telegraph operators at the various isolated offices scattered over the Third District. I admired those gals for their spunk. Almost without exception, they were stuck out in makeshift offices; their only companions were the helper crews that stopped in or the conversation that they got on the wire.

At Leith the fireman lined the switches and we turned our engine on the wye. The order board on the old box car office was red. We secured the engine and went inside, where we

EASTBOUND EXTRA



EXTRA 3809 EAST at Lugo, Calif., in 1946 is rolling livestock to the power of four cylinders and 12 drivers. Union Pacific pioneered the 4-6-6-4 type, purchased more of them than any other road. Walter Thrall was running them at the age of 26, and "once in a while I'd lean way out of the cab and watch the fascinating motion of the drivers. . . . I wouldn't have traded for a million dollars."

were greeted by not one but three lovely young ladies who made up the three shifts there. As we drank coffee one of the girls was taking orders. She turned to me and announced: "The dispatcher's changed the dope. You're to get going to Carp and doublehead No. 24." No. 24 was the *Pacific Limited*. We were dumbfounded. Doublehead a passenger train — and here I was a brand-new hogger!

The block signals were on the fireman's side the next 10 miles to Carp. What a night to remember!

We were in the siding getting our water when No. 24 pulled up to a stop and whistled out a flag. It was still snowing and blowing when the brakeman lined the switch, and we pulled out on the main, then backed onto No. 24's engine. The conductor gave me the orders and we compared watches. How that old hoghead did scream when I told him I was brand new so he would have to take the point (lead engineer handles the air). He tried to coax me into staying on the 2293, but new steel was being laid up the canyon and there was a slow order on it, so I wasn't about to give in to him.

I went back to the road engine — 7855 — and climbed into her warm cab. As soon as we got No. 24 moving, I gave big 7855 every ounce of steam she would take; and away we went. My head was out the window. Neither snow nor anything else could have bothered me that night. I thrilled at every bark of the stacks, at the 2293's headlight piercing the blackness and driving snow, and at looking back at the lights in the train windows. People back there were depending on us to get them to their destinations safely.

After we had successfully made our spot at Caliente the old hogger came back to get his grip.

"You did all right, kid, except you worked her too hard through that slow order!" Actually, that was a real compliment coming from an old head, and I was pleased at having successfully completed my first trip as an engineer.

SEVEN helpers were called to go to Carp a few nights later. We all coupled together; I was on the point and therefore handling the air. What a sight — seven locomotives coupled as a train, winding down through that deep rock-walled canyon.

I was assigned to Caliente for only two weeks, but I enjoyed every minute of it. How well I can remember the echo of the whistles through the canyon and the deep-throated barks of the exhausts. We would exceed the running time when we were running light so that we could spend a few extra minutes in the friendly warmth of the open telegraph offices and enjoy a cup of coffee with the girl operators. We would bring them the papers and the local news. Many a time the dispatcher would come on the wire: "See anything of that helper engine yet?" We might have been there 4 or 5 minutes. She would reply, "I think I see his headlight showing now."

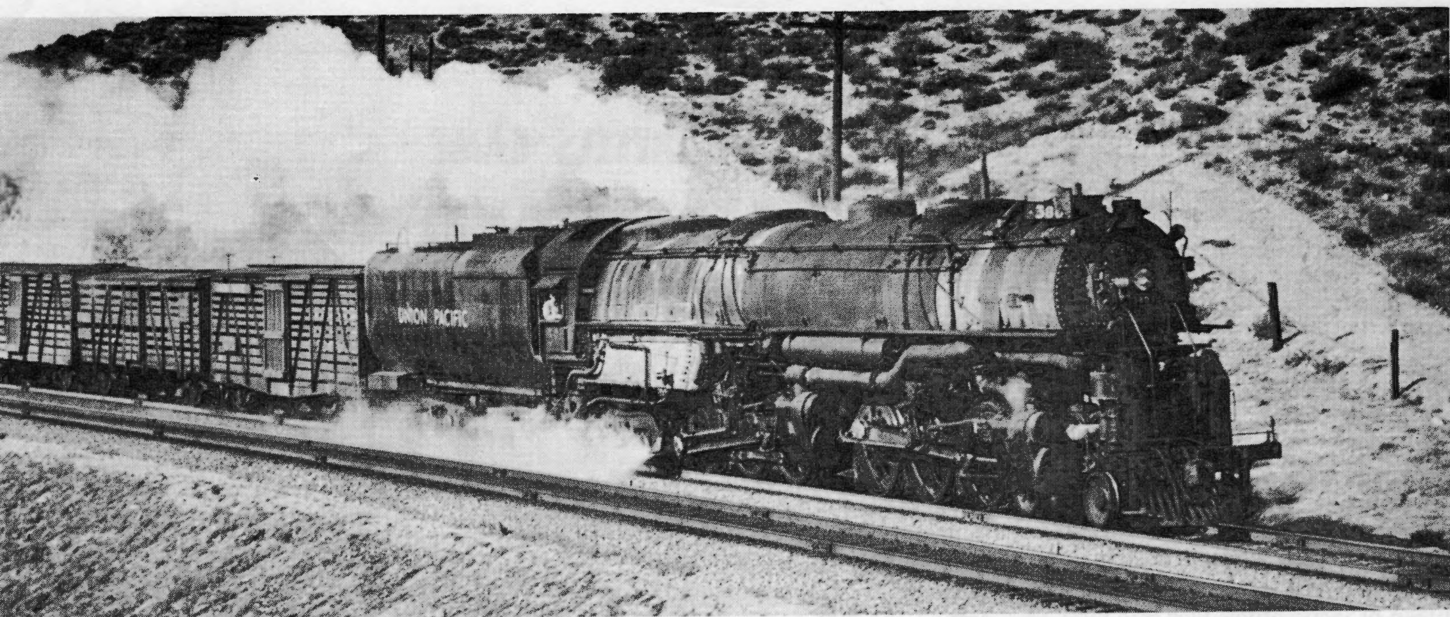
Once in a while we would be run on through Caliente to Crestline if the Utah Division didn't have any rested crews. The wye at Crestline was, I believe, the coldest place I have ever been. Not only did Caliente have a good beanery in the depot but the town was accommodating. If we went to a movie there and happened to be called during the show, a typewritten note was projected at the bottom of the picture: ENGINEER THRALL YOU ARE CALLED FOR 10 P.M.

UPON returning to Los Angeles I was assigned to a midnight yard engine until April, when I was cut back firing — mostly on passenger trains. In October 1944 I was assigned to the engineer's extra board, but it wasn't until November 3 that I caught a through freight trip to Yermo. I was called for a manifest at 8 p.m. — engine No. 3824, one of the big 4-6-6-4's. I was probably more scared than thrilled, and the conductor was anything but overjoyed at the prospect of having a new hogger. I was just 26 years old, in charge of a huge locomotive and with a hundred details to remember. Millions of dollars' worth of equipment was in my care out on the main line of a high-speed railroad.

I still remember a bit of advice that many a hoghead gave me when I was first promoted: "Don't try to old-head!" It saved me from not a few would-be jackpots, for every young runner wants to impress the train dispatchers so that they will give him breaks and get him over the road faster.

I'll admit I did like to wheel those big 3800's, with their 69-inch drivers and 255 pounds of steam pressure. On this first trip I got a yellow, then a red block coming into Mira Loma. I stopped for the block all right, but then under the strain and excitement I pulled a boner. Instead of flagging ahead, as the rule required at night, I whistled off and proceeded at restricted speed through the block. This was permissible only during the daytime. Fortunately, no trainmaster was around, and I got away with it.

It was November 4 that I really became a man. I was called for engine No. 3810 on a hotshot on duty at Yermo at 8:45 p.m. We had 68 cars — all loads and all through to Los Angeles.



F. J. Peterson; collection of Donald Duke.

It rained all the way from Yermo to San Bernardino. It rained hard. At Victorville we figured that we had time to go to Summit for No. 223, the *Pacific Limited.* But at Summit we found that the passing track contained a Santa Fe, so we went on down the main and stopped. The helper cut off and while the brakeman set up retainers, I went into the office. There I received this order: EXTRA UP 3810 RUN AHEAD OF 223 SUMMIT TO GISH. My protests to the dispatcher were in vain. There was a train in the siding at Cajon, so I had no alternative. Actually, one must see the siding at Gish to appreciate it and to understand why many an engineer has developed cold feet heading in there. It lies on the very steepest part of Cajon mountain, curving in and out with light rail and with a derail at the west end.

The rain was coming down in torrents as shortly after 2 a.m. I eased the long heavy train out of the Summit and started down the 3 per cent grade in the inky blackness. The 3800's all were equipped with the latest 8 ET air brake equipment and they handled nicely. It wasn't much of a problem to bring the train to a stop at the heading-in switch. I was as nervous as a doctor performing his first surgery. When I was sure the entire train was released, I whistled off long and loud, and carefully let the big Mallet roll ahead, using her engine brakes only. Then the slack hit us a wallop and she started going like crazy. I was setting the automatic air, and at the same time nearly shoving my feet through the end of my shoes. By "short-cycling" the brake valve, using the engine and tender brakes, and relying a good deal on the retainers, I managed to keep the train under control. In the course of the excitement it never dawned on me to have the brakeman walk ahead and line the derail — just in case. The siding held just 72 cars. We stopped two car lengths back of the derail and our caboose was just clear of the fouling point.

Hardly had the switch been lined back than No. 223's headlight showed. We didn't make him stop. I learned later that my crew had been mighty worried as to how their new hogger would perform under pressure, and they were as pleased and relieved as I (secretly) was.

This trip was the fulfillment of years of desire on my part. One can appreciate my intense feeling, the sheer thrill of running one of the largest of locomotives. Every railfan has pictured himself at the throttle of a big locomotive. I sat in the cab of *my* engine reading the orders while my fireman changed his indicators at Riverside station. Dawn was just showing as I turned on the engine bell and released the engine brakes. I nursed back the throttle so that the slack moved out gently until I felt that the caboose was starting to move. Then, with the sanders on, I delighted in making loud barks and getting my train moving as fast as possible. And that big 3810 with her double stack was a master at that. I doubt if even Casey Jones ever blew as beautiful a whistle or one with more meaning than I put into it as we flew over the crossings or called for signals approaching a red order board or called in the flag. I carefully hooked up the Johnson bar a notch at a time as the exhaust came faster and faster until it merged into a constant rhythm. Around the long curve into Pedley we went, with the whistle wide open over the crossing, streaking for the grade leading to Ontario. Once in a while I'd lean way out of the cab and watch the fascinating motion of the drivers and the monkey motion of the Walschaerts . . . and glance back at the thousands of tons of steel train following and the yellow marker light flickering from the caboose as it obediently tailed around the long curves into the straightaways. I marveled at the instant response to my left hand as I set the air in the train and carefully kept the engine and tender brakes released. Mile after mile of sheer exaltation on the Riverside-Los Angeles speedway through the orange and walnut groves.

"Man in the hole!" the fireman yelled, and I quickly dimmed my headlight for an eastbound in the siding as we streaked past him. I checked my Hamilton at every station, mentally noting the time just in case I got called on the carpet for exceeding the running time.

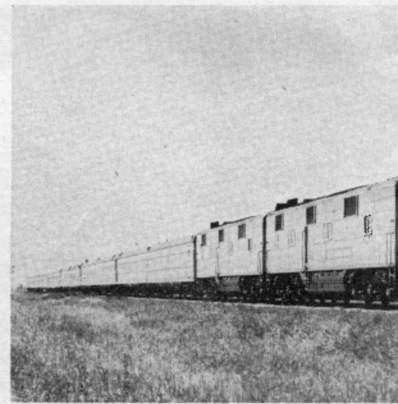
I wouldn't have traded my job for a million dollars at the end of that first trip!

A LOUD POUNDING on my door in the Rose Hotel in Yermo awakened me on Sunday, November 26.

"Hey, Walt! Wake up!" My fireman, Bill Lupo, came barging in. "Get your clothes on. Wait till you see what's over at the roundhouse!" I dressed quickly and followed him in the bright morning sunlight to the roundhouse. On the ready track stood the biggest locomotive we had ever seen — and all brand new. On her cab were the numbers 3977. She was a 4-6-6-4 with a centipede tender that held 6000 gallons of fuel oil and 25,000 gallons of water. Her cab was huge, with every modern device known to mankind and twice as many gauges. The engine and tender was half again

WHEN THE DIESELS CAME

DIESELS went West, not so much in the form of switchers as in the flashy dress of long-haul streamliners. A decade and more before UP decided to entrust tonnage with anything but steam, the road built a fleet of diesel-powered streamliners, starting with the M10000 of 1934. ←Early model LA1-2-3 units raised headaches reconciled in later, larger LA4-5-6 units.↗



as long as a 3800's, and there wasn't a turntable on the division that could hold her.

We marveled and we drooled, but alas, we were second out and that queen of locomotives was due west on the first train out.

She was the topic of conversation as we ate breakfast in the depot beanery. Conversation ceased as the callboy came in. He called out the crew for the First C.K.C. West — engine 5524. Then for Second C.K.C. West: "Thrall! Engine 3977!" I was spellbound . . . speechless. I was conscious of all eyes upon me.

Earl Peacock, our genial road foreman of engines, carefully briefed us on the many new features of the 3977, including the fact that she was all roller-bearing and carried 300 pounds steam pressure. She was so big and long and heavy that she had a riding quality all her own which we noted as we drifted down No. 11 track, then backed to our train to a gentle coupling.

When I got our train on the straightaway at Daggett I peeled back her throttle and gave her free rein. Her exhaust was deep and sharp, almost like a crack, and she responded quickly. We flew to Barstow.

"Red over yellow! Lined for No. 30 track!" Bill called out as we drifted by East Tower. No sooner had I brought her to a stop than a dozen Santa Fe enginemen swarmed into our cab to look over the latest in locomotive giants. They were as perplexed as I had been at the maze of new gadgets and gauges in the cab. Not only was the engine equipped with the latest exhaust-steam injector but she had electric markers that could be turned on and off in the cab, heavy folding glass doors across the back of the cab, and four custom leather seats.

As we passed West Tower the towerman hung out the window to get a better look. As soon as we were out of yard limits I had the giant rolling across the desert with her heavy train.

Very shortly I learned a lesson. East of Helendale the fireman called, "Two yellow!" I acknowledged and started easing off on the throttle. Then, "One yellow!" and I immediately started setting the air.

I saw the red block up ahead, but I figured I had her about the right speed. Earl Peacock leaned over. "Remember, this is a roller-bearing engine. Better set a little more air!" he advised me. I nodded and set a little more, figuring that I had her right. Lo and behold, when I finally got her stopped the block signal was right beside my window!

Peacock grinned. "See what I mean? I hope this isn't a test or you'll be in trouble!"

From that moment on I had more respect for the big 3900's. I felt that Mr. Peacock paid me the highest compliment when he caught the caboose out of Summit and let me handle the new baby alone down Cajon Pass to San Bernardino. He assured me later that he slept undisturbed, even with our wheel-cooling stops at Cajon and Devore.

We were stopped at Ontario by the SP interlocker. The local was in the siding alongside us and its 2700 class 2-8-2 which once had looked big to me was actually dwarfed by the 3977. We had to look down at her hogger.

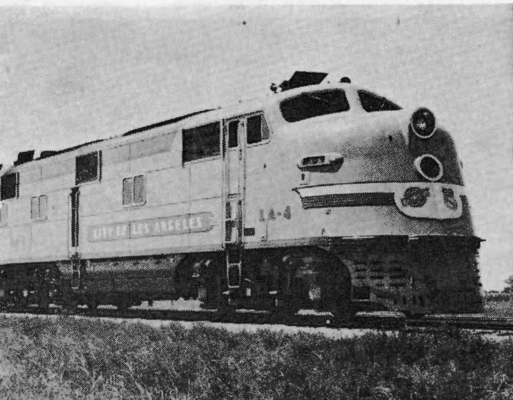
We were on a wait order that night, and the SP was occupying the diamond and laying us out. I did like to make my schedules, for the train dispatchers didn't give you many chances to foul them up. No sooner had our flagman given me a highball from the rear than I had the big gal blasting the heavens. The operator covered his ears, and every window in the depot shook as we roared by. Those engines had no speedometers at that time, and I must admit it was a temptation to cheat a little on the running time — especially since she rolled like a Pullman.

From Pomona to East Yard the grade was slightly descending except for a short pull from Pico to Montebello. That was fun for me. As soon as we got over the 40-mile-an-hour crossing at Pico I hooked her up and peeled the throttle back on the tank. That brute gave with the prettiest stack music you ever heard.

THE BOYS were saying, "Old lucky Thrall!" For that trip qualified me on the 3900's, and when there wasn't a road foreman of engines to ride with an unqualified man I was called for the trip. I was used on a lot of them. In those days we did a good deal of deadheading on passenger trains (can you imagine yourself being paid to ride on a passenger train?) either to "dogcatch" a train (dead on the 16-hour law) or to return from a transfer of power trip. I used to catch a lot of doubleheading runs and six-day hold-downs on Cajon Pass helpers — so life on the extra board was seldom dull. Furthermore, our division had a great variety of power, and I got to run every type of engine from the light high-wheeled Pacifics to the handsome big 4-10-2's, which were then converted from three cylinders to two cylinders.

August 10, 1945, was the day that I nearly became a martyr. Early in the morning we were going east out of Barstow bound for Yermo on the 3810. As we passed the East Tower, the towerman gave me a sign indicating that I would have a yellow — following a Santa Fe out. We rolled along through three yellow blocks at 20 miles an hour until at the west end of Nebo the block went clear. I would ordinarily have peeled back the throttle; there is no explaining why I didn't.

A westbound UP passed us, and then as we came around a right-hand curve I spotted a flagman doing gymnastics with a red flag. Just beyond him was a Santa Fe going through the crossover *onto our main track.* I threw the brake valve to emergency and laid onto the whistle. The Santa Fe hogger peeled his throttle back (it was a



local freight). My fireman ran to his gangway to jump and the head brakeman ran to the other gangway.

We rolled by the scaredest flagman you ever saw, and when I could see that the Santa Fe would outrun us I yelled to my men not to jump.

My pulse still quickens when I think back to that morning. I managed not to put any flat spots on the engine; then I hit the dirt and gave that poor flagman the worst bawling out I ever gave anyone. Actually I was more scared than mad. Several days later there was an investigation over the incident, and the Santa Fe boys accumulated some dummies for short-flagging.

Had I opened up that throttle when the block went clear . . .

But that's all part of railroading.

COLD WAR RAILROADING

. . . the stakes are huge

THERE are many points of quaint, incidental interest about the railways of Russia. Items such as their 4-14-4 steam locomotives and "hard" and "soft" classes of passenger travel. But there is nothing either quaint or incidental about the fact that the Soviet Union, with just a third of our railroad route mileage, moves almost as much tonnage as we do — and that while many U. S. roads seem on the verge of bankruptcy, the U.S.S.R. is exploiting its railroading to the hilt. A man who's been there and seen it all explains why we should be worried. . . . In August TRAINS, on sale July 25.

Stan Kistler Jr.

CHALLENGER ON CAJON

BACK in November 1947, when the days of Union Pacific steam in Southern California were numbered, Extra 3829 East climbed up Cajon Pass in a sight to stir the soul.

Engineer Thrall found himself making up time with the Overland at the age of 27, but after VJ-Day the diesels bumped him back to firing and cooled his enthusiasm. Steam's long gone now, but the memory still lingers on

"I SHALL ALWAYS HEAR THEIR CLEAR, DEEP EXHAUSTS"

BY WALTER THRALL

THE WAR YEARS were hectic ones on our railroad. Union Pacific had a perpetual shortage of men, and there were times when we didn't lay off for weeks. Furthermore, we were running a volume of traffic on our single-track main line that would have made even a four-track main look congested, and this of course meant that we were constantly meeting trains, with the resultant delays which meant long hours on duty. There were many new men who had received a minimum of training, and this put the more experienced men on the spot. I can remember more than once trying to run the engine and then going over to help my new fireman while we sped through the countryside.

Then there was the day I was heading into Barstow Yard going East. I hadn't made a mainline trip in some time, and the yard had been enlarged and changed. West Tower assigned me Track 26, which I frankly didn't know how to get into. However, both the fireman and the head brakeman assured me that if I kept the train at a crawl they would line me into 26. The first inkling I had that something was wrong was when I noted that a westbound UP train was coming up my track! The yardmaster came running out of the office giving me a washout (stop) sign. It was then I learned the difference between Track 26 and Track 30; I was on 30. To make matters worse, I had a long train which extended around a curve behind the cliff, and Santa Fe No. 24 was due shortly. Backing up was out of the question. The YM and I got our heads together. Just east of the yard office was a sharp, crooked downgrade crossover — leading to the passenger main — which I had never seen used.

"Tell you what," said the YM, "I'll line you out through that crossover and you take it real slow and easy with that big Mallet and your train, and I'm pretty sure you can make it. Also I'll fix it up with the delayer [dispatcher] for you to run ahead of No. 24 to Daggett."

I had some anxious moments as that big 3800 groaned and creaked through the crooked crossover, but we made it.

Another lesson learned the hard way occurred while I was on a yard engine at East Yard. We coupled into a solid ammunition train which we were to take out on the main line and cap with a crummy. I told the foreman to be sure we had air in every car, then I made an air test. From the sound of the exhaust, I decided that we had our air, so we started down the lead for the main line. One yard switch was open, so I set the air. Nothing happened. I poured it to her but we could feel the weight of the train shoving us on. We ran right through the switch and finally got stopped after I whistled for hand brakes. We found an angle cock turned about 15 or 20 cars back.

ONE of UP's strictest rules was that an engineer could not handle a passenger train until he had 365 time-slips as engineer. I turned in No. 365 on December 11, 1945, and the very next morning I was called for an extra passenger train to East San Pedro and back to East Yard. I drew little old 2-8-0 No. 6085 for an engine and 21 green ex-interurban cars off the defunct New York, Westchester & Boston (they had been converted to steam-drawn troop train service); nevertheless, I felt mighty important on my first passenger assignment. This consisted of taking the empty train to shipside at the Los Angeles Harbor, where the cars were loaded with troops who were to be taken to Camp Anza, near Riverside, for processing.

On the afternoon of December 23 I was called for an extra passenger train to Yermo with engine No. 5008, one of the big 2-10-2's. We coupled into a string of 14 Pullmans in the coach yard and made our air test. Our road foreman of engines was riding with us to qualify me, but I had drawn an almost new fireman and the foreman had to spend most of his time instructing the fireman — for which I was most grateful. We made a fast trip with the empty Pullmans to Arlington, where we had to back our train over the rolling terrain several miles to Camp Anza for loading. Loading the troops was an operation that took over an hour, so we were told that we could go to the officers' mess for dinner. We had a fine meal at a small cost, and the German prisoners who did the KP duty were all about.

When we got back on the main line at Arlington with a full load we were strictly a first-class train with rights over everything. The usual running time up Cajon Pass was seldom less than 2 hours on a freight train; it was a novelty to go up behind a helper in less than an hour with green eyes all the way and the freights in the hole for us. At Summit the helper cut off and ducked into the spur behind the depot. I made my air test, then we were off, making stack music as I made the running test. Those 63-inch drivers made you think you were doing 60 when you were actually making perhaps 45 miles an hour. So compared with what I had been used to, this train fairly flew down the east side of Cajon to Victorville that night. The headlight beam swung eerily around the cuts as we wound around the curves, then we came down the straightaway into Thorn and the fire was flying from every truck as I braked her down for the curve. We

had a big 6-wheel truck tender; water ran out on the deck from the measuring hose, so we knew we could run Victorville for water. (If we could feel a bubble when we blew into the hose, we had enough water for 30 minutes' running.)

The grade is slightly descending all the way from Oro Grande to Barstow, and that is the stretch on which we could always make fast time. Boy, how we used to roll across that desert on the Santa Fe double track, hoping to heaven that the order board at Helendale was clear so that we could get a good run through the sag there. Usually it was clear. And the nicest thing about running a passenger train, I found out, was the almost instantaneous response after setting the air in the train — compared with the braking of a long freight train. The same holds true when the brakes are released in a train of Pullman cars.

The real test came at Barstow as we rolled down the passenger depot main and I had to spot for water at the east plug (without knocking everyone in the train down). I was glad that I had Road Foreman Dave Kramer with me that night. He sat behind me and coached so that I managed to make a pretty fair spot without a noticeable slack action. He was a stickler for inspecting the engine at every stop, so I lighted the torch, grabbed the long-spouted oil can, and gave her a good going over. The conductor brought the orders up, and once again we were making stack music through the deep cut, past east tower, and out on the rolling desert for Daggett and Yermo. That was one trip that seemed too short as I brought 5008, our heavy 2-10-2, by the Yermo depot slower and slower, then to a halt at the east end of the platform at the water plug spot.

CHRISTMAS EVE 1945 was the pinnacle of my railroad career. It all began in the club room at Yermo, where a large group of enginemen and trainmen were relaxing, playing snooker pool and pinochle. An air of expectation was in the room, since most of the men were sure of getting out on runs which would take them home for Christmas. About 10 a.m. the callboy burst into the room in his usual hurry and all conversation ceased. He called the crew for Second No. 7, the *Challenger*, and then "Thrall!" he bellowed, "you're called for Third 7, engine No. 7864, on duty at 11 a.m.!" My fireman and I were speechless. We were sure there had been a mistake, but the assignment board in the telegraph office confirmed our call. It was one of those rare, almost unheard of breaks. Outside of myself, there was not a rested hoghead qualified for Overland passenger service. I was on the threshold of fulfilling my lifelong ambition. I was then 27 years old.

Second No. 7 arrived and departed carrying the green. Then above the

CLEANING FLUES

GLORY DAYS returned briefly to Cajon Pass in 1950 when gray-jacketed 4-8-2's were fired up to assist diesel-hauled trains. Her fat stack indicates that the fireman's sanding the flues as Mountain 7019 rides the point of the Los Angeles Limited on a sunny September 19.

Robert Hale

desert stillness we heard Third 7's whistle at the mileboard, and he was coming fast.

After the train stopped the old hogger handed his grip down to me and climbed out of the cab. "Where's the hogger, kid?" he almost demanded. When I acknowledged my identity, he nearly swallowed his plug of tobacco. "Well, she's a good engine, and you've got only 11 sleepers so you ought to make up still more time."

She was indeed a big, handsome 4-8-2 with 73-inch drivers and all the rest that it took to do the job, I thought to myself as I oiled her all around while a half dozen mechanics swarmed over her. Conductor Silk came up with the orders and we compared time. "Take it easy spotting for water at Barstow. The diner will be full of people eating lunch," he cautioned me with a sly grin. I was well aware of that fact.

I made the air test; the blue flag was removed. I could hear Silk singing out, "A-a-a-l-l aboard!" The cab signal sounded; it was all up to me. Bell on, cylinder cocks closed, sanders on, Johnson bar in the corner, engine brakes released . . . I nursed her throttle back gently, watching the ground move for a few feet, then I eased her back. How that gal could bark, and pick up speed too!

From Daggett to Barstow, Barstow to Victorville I piloted Third No. 7. Every block was clear . . . train after train was in the hole for us, waving us by . . . the deep, raucous exhaust was a steady rhythm of lightning sound, the drivers a blur of fascinating motion as we sped across the vast Mojave Desert. I lived, and since have relived, every minute of that trip . . . up the east side of the Pass to Summit . . . a running air test, and then down the 3 per cent at 30 miles an hour to Cajon . . . 40 miles an hour to Devore . . . 50 miles an hour to the Junction.

"Two yellow!" Fireman Eldon sang out at the west end of Devore. "One yellow," he called at Verdemont, and I set more air, slowing her to about 20 miles an hour.

"Red-eye! Red fusee!" I answered the signal and eased down to a walk; we could see a freight heading in at Ono ahead of us. And as it never failed to happen, just as I got stopped the block changed to *clear*.

A light engine was in the coach track waiting for us at Riverside. When her veteran hogger sighted me on the varnish he let out a bellow. I was the talk of the railroad for days afterward!

With rights over all trains, we departed from Riverside with a wide-open throttle for Los Angeles — home for Christmas. We were very late and the railroad was ours. Every siding held a troop train or a freight train, and we passed them all in a cloud of dust with our whistle wide open. Around the long curves, through the orange and walnut groves, and over the highway crossings we bolted as fast as the drivers would turn, trailing those Pullmans packed with people anxious to reach Los Angeles for Christmas.

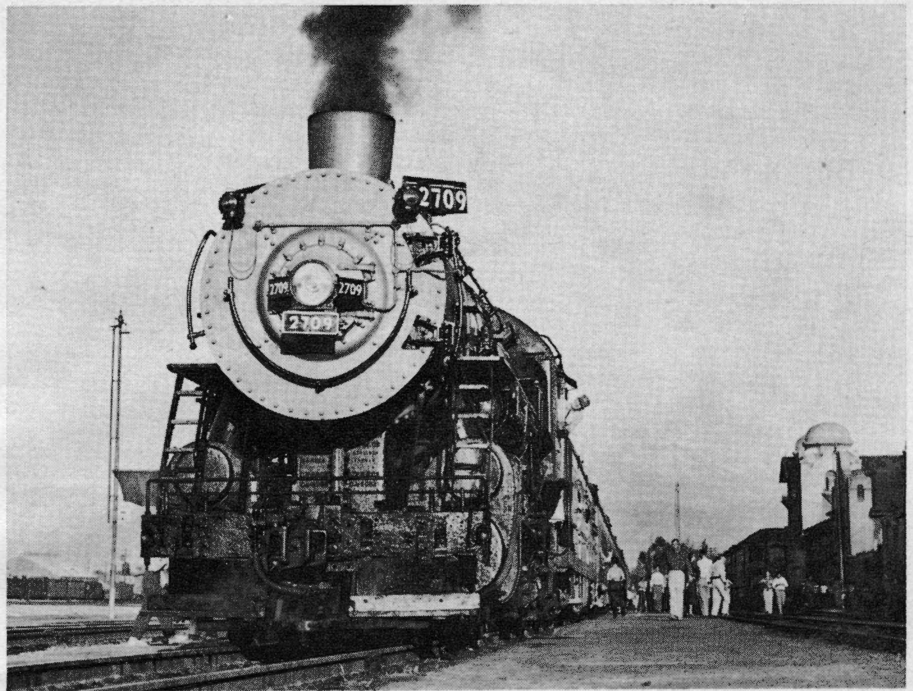
We went over the last crossing in Montebello, then I gave my special whistle for my wife telling her that I'd be home for dinner (I lived two blocks from the main line). The East Los Angeles mileboard . . . then a sea of upturned faces awaiting us on the long platform. A pre-release with the automatic brake valve, and we came to a nice stop. We looked back and watched the passengers unloading from the Pullmans — there were cries of delight, handshaking, embracing. We had helped to make a lot of people happy.

The cab signal sounded and once again I had majestic 7864 blasting the skies on the last leg of our run. We backed our train into the Union Station trainsheds, and reluctantly I turned over 7864 to the hostler. I never again had the opportunity to run an Overland passenger train, but I was later informed that I, at the age of 27, was one of the youngest engineers on the system to be qualified for that service.

After that I ran many troop trains, usually with the 2700-class MacArthurs (as the Mikados were renamed by the UP during the war). But on February 15, 1946, we were short of power and I was called for a troop train to the harbor with engine No. 7019, a 4-8-2. I had never before seen one of the big engines on the Pedro branch nor have I since, and it was something of a task to hold her down to the 30 mile-an-hour speed allowed on the branch. I had to take it easy on the drawbridge over the channel, but once back on the main line I could open her up all the way to Arlington.

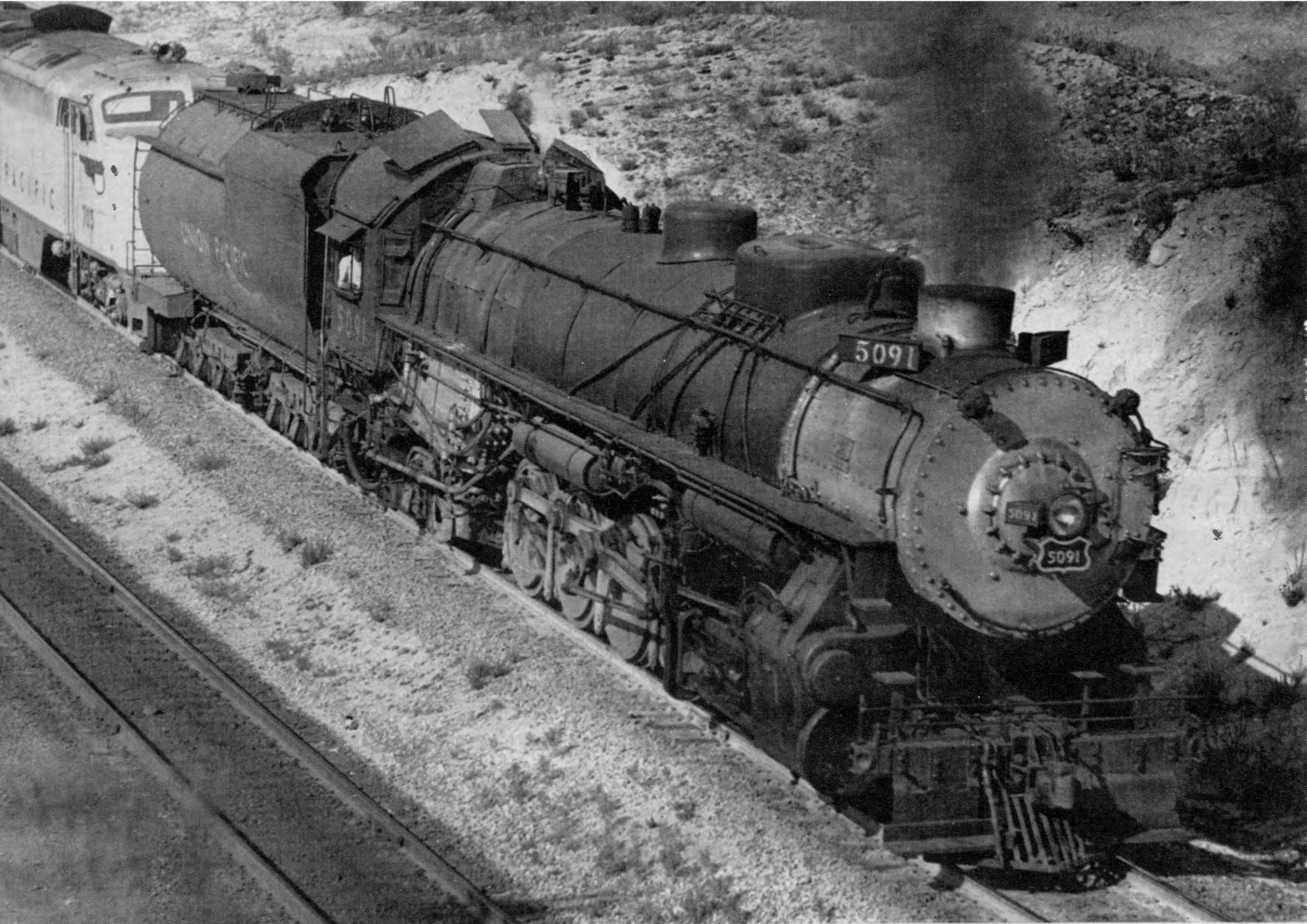
Early one afternoon at Ontario I was oiling around my 7800 on a troop train while the fireman took water. A young captain came up to me, told me that he was in charge of the troops, and asked if it would be possible for him to ride in the cab with us. I consented, and he sat behind the fireman when we pulled out. We were running late on a schedule wait order, so I opened up and got the train rolling to a good 70 miles an hour.

Suddenly we noticed two men walking down the middle of the track ahead. I laid on the whistle, and when it was apparent that they didn't hear us, I held it wide open. It seemed certain that we would hit them. Then one of them turned around, gave his companion a shove, and literally dived after him. We missed them by inches. The fireman and I were accustomed to such experiences; we had had many close calls at highway crossings. But I'll never forget the look on that



Norman Clark.

FINEST HOUR **OVERHAUL of veteran Mike 2709 for the event cost $5000 but Union Pacific did it so that R&LHS members could enjoy last UP L.A.-San Berdoo steam trip. Thrall fired.**



Robert Hale.

FM'S AND FRIEND

FOOT-BOARDED 4-10-2 5091 pilots the FM's of the Utahn over Cajon Pass September 18, 1950, shortly before diesels made good their threat to abolish steam. Alco built the 5091.

young captain's face. He seemed relieved when we arrived at Arlington, and I doubt if he ever felt like riding in the cab of a locomotive again.

Experiences? I had loads of 'em. One night I was called to doublehead with "Tumblebug" Thompson (most rails have very appropriate nicknames) on the mail train to Yermo. I drew old No. 3177, a 4-6-2 of Los Angeles & Salt Lake vintage and just out of the backshops. She was light, rough-riding, with a small tender and 77-inch drivers (and small pay went with her, too). Tumblebug had a 7800. We had a light train, and we made time until, near Rowland, I smelled something hot. I brought the train to a halt, whistled out a flag, and hit the dirt. The right trailer truck was burning up. We nursed her along to Walnut, where there was an open office, and I told the delayer my troubles. I finally convinced him to let me cut off and return to East Yard — backing up all the way with no backup light. Talk about spooky: it was a pitch-black night and we stopped before going over every highway crossing.

On February 23, 1946, I ran my last troop-passenger train, and just two weeks later I was cut back to firing on passenger trains. A month later I could hold only freight as a fireman. That spring the first 800-class 4-8-4 came to our division. We had never seen one, and it created quite a stir. The UP cut the running time considerably between Los Angeles and Salt Lake City and put on Nos. 3 and 4, the *Transcontinental Limited.*

I first caught the *Transcon* out of Yermo on August 3, 1946 — with engine No. 826, one of the "big" 4-8-4's with 80-inch drivers and 300 pounds boiler pressure. What an engine she was. After I learned to work her five-movement steam injector I enjoyed her very much. Coming into the 80-mile-an-hour curve at Helendale on a clear block, my hogger set the air and then released it. He noted the confused look on my face and yelled over, "How fast do you think we're going?"

"About 80," I replied.

"You forget that we've got 80-inch drivers — not 73-inch, like we're used to. We were making 90 back there!"

During the rest of 1946, I fired for a while, then ran for a period as our business fluctuated. For some time I held a regular passenger run with old "Dutch" Beyers — the fastest, most cold-blooded engineer with whom I ever worked. He knew every trick of the fast track, and he was the only engineer I ever saw who kept the throttle wide open from Oro Grande to west Barstow and never set the air. Poor Dutch was killed a few years later when, as engineer of the streamliner *City of Los Angeles*, he hit a gasoline truck at a crossing in Montebello. He died a hero by sticking to the throttle until the train was by the burning truck. His loss was felt by all who knew him.

In the summer of 1947 I was firing the varnish regularly — Second No. 38, the *Los Angeles Limited*, east and No. 3 west, always with one of the big 3900's on Second No. 38. Imagine rolling at a steady 75 miles an hour on a big 4-6-6-4 Mallet on a passenger train. Well, we did this every other night between Los Angeles and Yer-

mo. But those engines were hard-steaming and a fireman worked all the way to make steam for them.

In October I was firing No. 4 east with the 800's and No. 37 west with a Mallet. If we had over 14 cars we got a helper out of Victorville. Then came the night the first set of Alco passenger diesels arrived in Yermo on No. 37. Old John Lundholm, my hogger, and I both liked the Mallets, and we were almost hoping the new Alco units would fall down on the job. The factory representative accompanying the new units took a berating from us, I'm afraid.

At Barstow our conductor handed up just one set of orders. "Where are the helper's orders?" John asked.

"We're not getting a helper," the conductor replied.

Sixteen heavy steel cars and no helper on that grade. We were dumbfounded. We were even more astonished after we made our stop at Hesperia to unload mail. We started without any apparent effort on the grade, then had to kill time to keep from arriving at Summit ahead of time. From then on we never underestimated the virtues of the diesels.

I made my last trip on a steam locomotive for many a year to come on January 2, 1948. It was on engine No. 818, a 4-8-4, on a returning Rose Bowl special. We pulled out of the Los Angeles Union Station sheds at 9 p.m.; I little realized that this was to be my last trip on a steamer. By that time the 800's were painted a two-tone gray, trimmed in silver stripes and lettering and chrome cylinder heads. They were beautiful. Their exhausts were very deep and their whistles melodic as they worked up Cajon Pass around the curves and through the deep cuts. They moved with confidence in their ability to climb the grade in spite of the heavy Pullmans they trailed.

ACTUALLY, the diesels came so fast that it was hard to believe that a complete transition had taken place. For the next two years I was cut back to firing — diesels on freight. My engineers traded off with me so that I got plenty of experience running the diesels on freight. Even though the diesels all had manual transition in those days, to me there just wasn't any spark or thrill in running one. Most of the older enginemen liked them; and when one considers these fellows had spent years on the little old teakettles that were so rough riding on long hours over the railroad, it is not hard to appreciate their liking for the diesels. Particularly was this true on the coal-burning roads on which it was impossible to make a run without getting filthy dirty. Even the oil-burners could be plenty dirty.

No sooner had the transition to diesels taken place than our division completed the installation of C.T.C. over the First District between Los Angeles and Riverside. All the order boards disappeared; stations were closed; some of the passing tracks were torn up, others were lengthened, for the diesels were pulling much longer trains with more than twice the steam-rated tonnage. No more did operators highball us by their stations. We were modernized to the push-button degree. Out of San Bernardino we had once had as many as 23 helper crews with up to four helper engines on the long steam-drawn freights. Crews were reduced to four at the most and the majority of the trains went through without a helper. The same situation was true at Kelso. An even worse fate befell Caliente. It was completely abandoned with no helpers whatsoever! It even lost its status as a division point, and Las Vegas crews were run through to Milford, Utah.

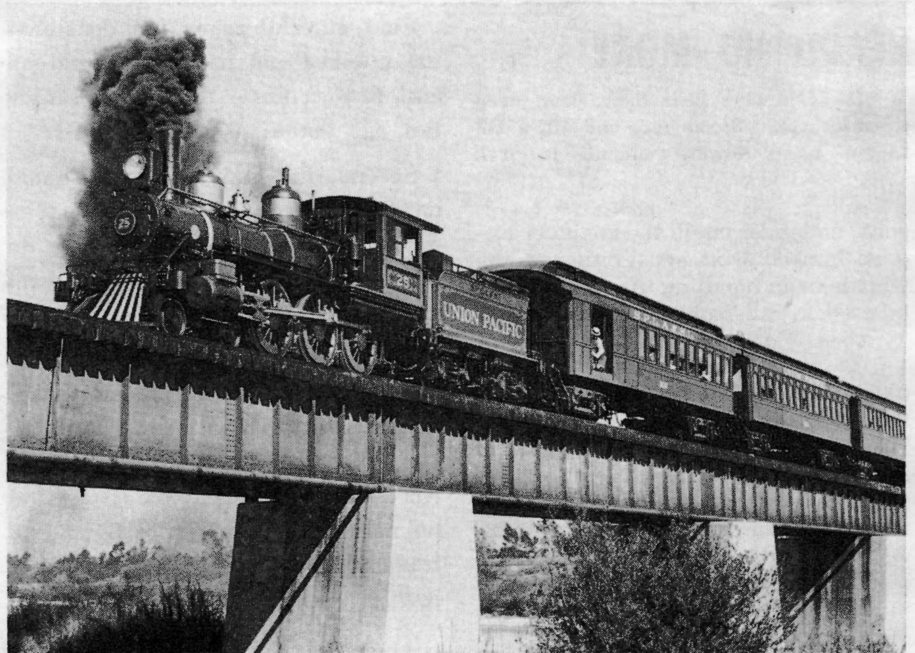
Our railroad had indeed changed, almost overnight. All water plugs were removed, then fueling stations, then the roundhouses at Los Angeles, Yermo, Kelso, and at every terminal.

For me all the glamour of railroading was gone; I was living in a new age. But as a railroad our line reached a new peak of efficiency. We were moving more cars at a much higher average speed at less cost and with far fewer delays; and the men who still had jobs certainly had better jobs.

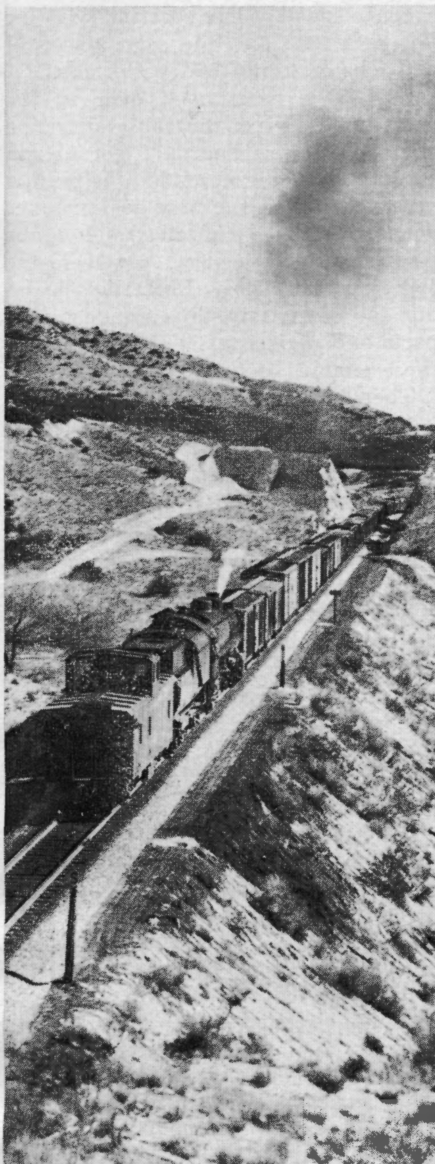
In 1950 I went back over to the right-hand side of the cab and on the engineer's extra board. I got to run every type of diesel made plus pulling several trips on the new gas-turbines which were tried out for a time on our division. Eventually, however, the company kept only EMD diesels on our end of the line, thus standardizing parts and servicing. We all preferred these engines anyway.

Then in 1955 for freight and locals we received brand-new GP9's with improved dynamic braking, more power and automatic transition. We thought they looked like something from Mars, but they put out a performance. They were able to descend the steepest part of Cajon Pass on the D.L.S. (fast livestock train) and never have the air brakes set. I have brought this train with 75 cars from Summit to San Bernardino, using only the dynamic brakes. No hot wheels, no stops to cool wheels (which lessened our running time by 20 minutes on Cajon alone).

Another innovation on the UP was the adoption of what was called the pressure maintaining feature, which meant that with *one* light brake application we could descend the hill and get full benefit of the dynamic brakes. Boiled down, the many new devices made an engineer feel that he was little more than a robot. Everything was automatic — the day when keen judgment and skill were required was



OLD-TIMER **OLDEST engine Thrall ever operated was ex-Virginia & Truckee 4-6-0 No. 25 (Baldwin 1905), borrowed from RKO studios to celebrate 50 years of UP into Los Angeles.**



Malcolm Gaddis.

HEARD NO MORE

"I SHALL always hear their clear, deep exhausts . . . " Steam fore and aft, a UP freight blasts toward summit in 1947.

gone, no longer could the engineer express himself as an artist either on the whistle or in handling the throttle. My interest in railroading was lessening.

IN the summer of 1953 I helped organize the Southern California Chapter of the Railway & Locomotive Historical Society, and I was elected its first chairman. The chapter seemed to grow overnight, and the local railroads went out of their way to help us. As a result, the chapter sponsored the last steam run over the Union Pacific's main line from Los Angeles to San Bernardino and return. We persuaded the railroad to use old LA&SL 2-8-2 No. 2709 for this trip. She had been boarded up for years at East Yards, and it was amusing to watch a group of rails who said they liked diesels as they removed the boards from the cab windows and towed old 2709 to the backshop. There the mechanics swarmed over her and the results of their work were amazing: she got a complete paint job, rods polished, and special emblems placed on the tender, plus our own specially built five-chime whistle installed.

We pulled out of Los Angeles Union Station on Sunday morning, March 14, 1954, with 14 cars and a capacity load. Thousands of people lined the right of way to San Bernardino to cheer the last steam engine by. I was fortunate enough to share the running honors with the regular engineer, who also was a railfan. After so many years of seeing diesels, it was a real treat for everyone to run behind a steam engine again. Not long afterward old 2709 was towed to the backshop and cut up for scrap, but she had had one last burst of glory.

With the passing of old 2709 I was sure that I had made my last run on a steam engine. Then the Union Pacific decided on one more bold stroke of publicity. It borrowed old Virginia & Truckee No. 25, a 4-6-0, from RKO Studios and on January 30, 1955, the 50th Anniversary Special with three coaches pulled out of Los Angeles Union Station bound for East San Pedro. In the coaches were chapter members dressed in old-time costumes; at the throttle of No. 25 was yours truly, running the oldest engine of his career. How did we get water for old No. 25? Why, the fire department met us down on the Pedro branch and filled up the tender. At Douglas Junction all the passengers disembarked and our genial general manager drove a golden spike, just as one had been driven 50 years before to mark the completion of the San Pedro, Los Angeles & Salt Lake Railroad. It was a fitting way to wind up a fascinating segment of my life.

On February 4, 1957, I stepped down from the cab of diesel No. 1049, a midnight switch engine, to end almost 16 years of service on the Union Pacific. I resigned from service to go into business for myself.

WHEN I look back what do I recall? Not the diesels, which should be fresh in my mind, but the big 3800's. I shall always hear their clear, deep exhausts, the cry of their whistles through the night, see the sharp beam of their headlights piercing ahead and around the curves, through the cuts. . . . The countless stars out on the desert. . . . The fireman yelling, "Clear order board!" . . . The wave of an operator's lamp as we passed the open office in a blur. . . . The caboose marker light always following.

Yes, that was living! I

MEMO TO FAN CLUB SECRETARIES . . .

OF ALL the "joiners" in America there's not a more enthusiastic or active fraternity than organized railfans. Welded together by a common concern for all things railroad, these fans are responsible for book-length research in corporate history, preservation of priceless equipment, backwoods rail rambles attracting up to 1300 riders, and — always and convincingly — an outspoken declaration for the merit of railroading in the U. S. economy.

TRAINS is proud of its circulation in these clubs, proud to be of value to organizations of good will the like of which no other industry than railroading can boast.

To report the organized railfan today TRAINS has prepared a questionnaire — now available to club secretaries. The tabulated results will be published in early 1959 and will, we think, be of service in two ways.

First, our club report will document the number and location of railroad enthusiast clubs — their size, activities, age, ambitions.

Second, the club directory should be a boon to the great "unchurched" — the enthusiasts who would like to share in club operations but don't know whom to contact where.

So . . . those concerned please drop us a post card. The questionnaire will be placed in the return mail. Remember, all railroad enthusiast clubs in North America are eligible (sorry, but no model railroad groups or purely trade organizations) and are warmly invited to participate.

The deadline is near, so please contact us today.