

hen World War II started, I was in high school in Troy, N.Y., working every spare minute and saving to go to Rensselaer Polytechnic Institute to become an engineer. As the war progressed, it looked like I would go directly from high school into the service just like everybody else. Instead, I was accepted in 1944 as an engine cadetmidshipman at the U.S. Merchant Marine Academy in Kings Point, N.Y. This included one year at sea in a ship's engine room. I received my degree and Marine Engineer's license in 1949, and my service obligation was ended. That June I started at the American Locomotive Co. as a field engineer in Schenectady.

Dieselization of the railroads was in full swing. Alco had ended steam production the previous year and was turning out 105 diesels per month, with a backlog of 18 months.

Our week was spent four days on shift work in the shop and one day in the class-room, where we learned about braking systems, engine design features, electrical equipment, and controls. We worked alongside the shop people, who graded our performance and treated us wonderfully. The hands-on shop experience was invaluable.

Alco built almost everything itself. We had a huge foundry, forge and hammer shops, sheet-metal shops, a truck shop, machine shops for all engine components, paint shops, complete engine and locomotive test stands, and test tracks. The shopwork was fascinating—I can remember the fabrication, machinery, welding, and

assembly sequences to this day. The 539 engines were built completely in our Auburn, N.Y., plant. The 244 engine frames were welded in Auburn and machined in Schenectady. Electrical equipment, traction motors, generators, switchgear, and controls were shipped in from General Electric.

When we left to go on the road as field engineers, the shop people could not have been kinder in expressing their hopes that we did well. They gave us their home phone numbers, and truly meant it when they said, "If you have any problem, call anytime, day or night."

On the last day of training, we met with Cliff Sheen, head of field service. He was an old-timer and well-known by railroad management throughout the country. We got Mr. Sheen's earthy view of what we might expect as 20-year-olds interacting with seasoned railroaders, and what he expected from us as representatives of the American Locomotive Co. Some things I still remember:

- Your customer knows what he is doing in running his railroad
- You know only about some new equipment the customer has bought
- You are younger than just about everybody you will deal with, and you look it, so you are to wear a suit, tie, and hat
- The customer is always right, and you are to do everything and anything he wants
- There are to be no "prima donnas" or "superior" attitudes
- Schenectady would support us, and we were to support Schenectady

I was assigned to the Cleveland District,

We worked alongside the shop people, who graded our performance and treated us wonderfully. The hands-on shop experience was invaluable.

working out of Buffalo. The railroads I spent the most time on were the Pennsylvania, Nickel Plate, New York Central, Erie, Baltimore & Ohio, Lackawanna, and Lehigh Valley.

THE IMPACT OF RAPID DIESELIZATION

The rapid delivery of diesels, and the equally rapid scrapping of steam locomotives, had a dramatic effect on railroad people and operations. The use of diesels was an inevitable and logical advance, but as in many technical advances, there were interim negative human consequences. Shop workers, locomotive engineers, and firemen were laid off in such numbers that sometimes 20 or 25 years of service was needed to hold a job. Engineers were bumped back to firemen; firemen were bumped to the extra board. Trades like boilermakers were especially hard-hit.

Steam-era shops were often located in small towns. With dieselization, these shops were cut drastically and the layoffs had major local economic effects. Having grown up during the Depression and survived the war, I was very fortunate. I em-

Just after delivery, New York Central RS3's 8251 and 8350 are ahead of a 4-8-2 Mohawk on a mail-and-express train at Jordan, N.Y. The Central broke in many RS's this way.





STANWOOD K. BOLTON JR

In weather more pleasant than the snowy night author Graulty spent on three Erie RS2's, a pair of RS3's (Nos. 915 and 1016) are eastbound out of Owego, N.Y., on June 2, 1951.

pathized greatly with the railroaders and their families who had to cope with the rapid changes, and I admired them for how they dealt with it.

After the diesels arrived, shop personnel who had worked on steam all their lives had to gain the same skills on diesels: running maintenance (fix anything), monthly inspections, and major overhauls (tear an engine or component down and rebuild it). Alco provided formal classes in Schenectady and also classroom cars that were set out near shops to instruct railroad employees. We field engineers, as well as training specialists, conducted classes in these cars. The most practical and effective way of training was for a field engineer to work with a shop crew the first time they had to make a significant repair.

We would visit often, for a short time after delivery, any shop that maintained a number of new diesels, to provide the machinists and electricians repair guidance, help them become familiar with the manuals, and help diagnose trouble.

The shops had machinists, electricians, and boilermakers (who did the welding),

all trades that required acceptance into a four-year apprenticeship program that included classroom and hands-on training with math, physics, and basic technical principles. I enjoyed working with machinists, especially when they would remove a diesel engine from the locomotive for the first time. They would tear it down, inspect it, measure it, and replace parts from the crankshaft on up. They would set the timing and valve clearances, check the torque on all the bolts, carefully fit all parts, seals, and bearings, and then load-test it in the locomotive.

An electrician's skills were different. Steam engines hadn't needed them much. The railroads dealt with their sudden need for electricians by bringing on new apprentices and World War II veterans, usually those with Navy electrical experience.

A major early problem was the lack of load-testing equipment in smaller shops. Without it, the best way to make an evaluation was to ride the locomotive on a run, which especially on road-switchers was physically difficult. Eventually, more load-testers were placed on the railroads, and

the employees became more skilled.

Another difficulty was the lack of tools and spare parts, particularly small things. When we rode new locomotives to instruct engineers, firemen, and road foremen, the training focused on the features of the locomotive itself but not necessarily on how to handle a train. The engineers knew more about train-handling than we could ever know, even if they'd never run a diesel.

I had several operating experiences that were relatively common in the early days. I started on these runs by explaining to the diesel's engineer about the power a diesel had at both slow and fast speeds, and the need to give the steam engine a chance to get moving. I usually ended up with the engineer showing me exactly how to handle it even if he had never before run a diesel. Reflecting on that, I realized it was probably because they had run steam engines, every one of which behaved differently, even those in the same class.

A DIESEL-STEAM EPISODE ON THE ERIE

On the Erie, during a typical heavy Buffalo snowstorm in 1949, I was in the roundhouse late one night, planning on supper and heading to the hotel, when a road foreman came up and said he had a problem. One steam engine and three of our new RS2 road-switchers were on 50 reefers of meat that had to be in Rochester the next morning. The engineer and fireman on the RS's were new to diesels; neither engine crew had ever doubleheaded steam and diesel; and there was 2 feet of snow on the ground, with more coming. Could I ride with them? Sure, I said, remembering Cliff Sheen's pep talk.

So, at about 11 p.m., with a two-candybar supper under my belt, the road foreman and I were stomping through the snow on the ready track, trying to get the air-brake doubleheading cocks properly lined up so we could try our air. We soon were moving slowly toward the yard, passing crews cleaning ice and snow from the switches. As we made our way to the train, we briefed the engineer on such things as how our eight-step throttle worked, the load meter's green and yellow zones, the wheel-slip relay, and various breakers and switches. You never had to show an engineer anything on brakes except to caution him that they could easily lock a diesel's 40-inch wheels, so he had to be ready to "bail off" the engine brakes to avoid flat spots.

We coupled to the train, tested the air, and got the conductor's highball—all in pitch dark, with no radios, only hand and lantern signals. Ahead of us, the steam engine stretched the train and soon began barking hard to "get a swing on the train." In the RS2's cab, the cinders poured down on us so heavily they stalled our windshield wipers. I took the fireman out to show him a safe way to walk the running board around the nose and back to the engineer's windshield to wipe it. Feeling responsible for my safety, he wanted to do it himself, but I, likewise concerned for him, insisted that I go out, too. Through the snow and cinders, I could see the glow from the steam engine's firebox door as the fireman opened it to touch up his fire. I was worried about our generator eating the cinders and flashing over, but that didn't happen.

We were really starting to roll, and when I got back to the cab. I was afraid the diesels were starting to "run away with the train." Just at that time we could hear the lead engineer cut back. The road foreman and our engineer discussed how "strong" our engines were and how they planned to handle things from now on. Basically, he would let the steam engine run as it naturally would and use the diesels when he knew he could "help" rather than "take over." Our engineer had immediately grasped the kind of power he had. He already knew what the steam engine had, and he knew the grades and curves, so the rest of the trip went beautifully. Holding track speed all the way, we delivered the meat to Rochester early. The road foreman said it was the fastest legal run he had ever made over that division.

We hit the hotel right away because we had to take the diesels back with a train later in the day. I also had a hotel bill in Buffalo for that night, but since my candybar supper had cost only 10 cents, my expense account wasn't unduly taxed.

ON THE SEABOARD—AND MY ARREST FOR VAGRANCY

About March and April 1950, Alco delivered 60 RS3 road-switchers to the Seaboard Air Line. I was staying in the Hotel Buffalo when I took a phone call ordering me to Richmond, Va., where I was to see that the SAL units were placed in service. I caught a sleeping car out of Buffalo that night and arrived in balmy Richmond the next day—boots, heavy jacket, and all—and found the Seaboard shop. People there told me the railroad had changed its mind and the locomotives were going to Tampa, Fla., instead. Indeed they had, replacing all 100 steam engines maintained there, which went to scrap immediately.

Bob Fay, an Alco man who was working the Southeast, had also arrived, so we started driving in his car straight through to Tampa. Diesels were new to the Tampa shop and road people, and were arriving in twos and threes every few days. We placed the RS3's in service and went out with the road foreman and engineers the same night, aided by a third Alco man, Ray Herbert, who had come from working on the Southern Railway to the north.

We had the usual problems with so many people experiencing such a fast

In the RS2's cab, the cinders poured down on us so heavily they stalled our windshield wipers.

change. When an engine left the round-house, it had to go to the passenger station because the engine terminal didn't yet have fuel facilities to handle the diesels. The fuel was delivered by relatively small tank trucks, which resulted in traffic jams around the depot. It was comical to watch people come by the station in their autos and shout "Fill 'er up!" and "Get the windshield, too!"

Since field engineers were expected to support the railroad day and night, we caught our sleep and meals when and where we could. Communication in those days was not as it is now—there were no radios on the locomotives. We kept in touch by using the railroad's own phone system and dropping notes at the telegraph shanties, which were everywhere. Trains operated by Form 19 orders handed up by operators, and engine cabs would be full of string left over from the train-order forks. Whenever we could, we would work our way back to the Tampa roundhouse to make sure we covered newly arriving units.

One night, after a typical long day, I was awakened by a call from the Seaboard. A train with one of the new RS3's was barely making speed. It was jamming up the railroad, and the engines were needed for



HARRY L. JUDAY; J. DAVID INGLES COLLECTION

Seaboard RS3's 1669 and 1668 are seen at Madison, Fla., on November 25, 1965. Perhaps one of these units was responsible for Graulty's arrest some 16½ years earlier!



J. DAVID INGLES

Far from the Keating Summit grade on which Pennsy hubris defeated a quartet of RS3 pushers in 1950, PRR RS3's 8458 and 8833 roll a freight into Detroit on March 24, 1964.

other trains. Usually a railroad would come get us in a car and put us on a train, but nobody was available right then. To intercept the train, I took a taxi and then a Greyhound bus and arrived at a small town around 1 or 2 a.m. It was a guiet little town, but after all these years I don't remember where it was. A railroad building was in sight, as was a bench along the street. Since the train was not near, I took the bench and fell sound asleep. I was wearing an old jacket and was using my road-weary satchel (filled with wiring diagrams, multi-meter, voltmeter, and small tools) for a pillow, so I didn't look too great.

Suddenly I was shaken awake, blinded by a flashlight in my face. The town cop wanted to know what I was doing and, still groggy, I told the truth: I was waiting for a train. He said something like "We don't want people like you hanging around in our town," put me in his car, and took me to the home of the magistrate, who came down stairs in his bathrobe to hold court. The charge was vagrancy, and I was to pay with a fine or jail and then leave town.

At this point I really woke up and put on an "act" about our company lawyer who would sue for false arrest, and pulled out my Alco credentials. The cop and judge soon understood my story, while stating they "had a duty to keep their town clean," whereupon the officer took me back to the railroad just in time to see the ailing RS3 pull in.

The engine problem was soon fixed, and

I stayed aboard for the ride to Tampa. Exhausted, I slept on the seat behind the fireman with the window for my headrest. We got back to Tampa by daylight and, wouldn't you know, some more nice new units from Schenectady were waiting to get placed in service.

WHEN THE PENNSY DID NOT KNOW BEST

The Pennsylvania's line into Buffalo had a tough grade from Emporium to Keating Summit, Pa. There was a pusher station at the bottom of the hill with four to six steam engines assigned there, with a maintenance shop.

I was sent there in summer 1950 to help the shop and road crews with six RS3's, which were to replace the steam helpers. The morning I arrived, the shop foreman explained that the plan was to close the steam shop and just do daily trip maintenance on the diesels. The road foreman said the engineers had not run diesels before, nor had diesels been used there before as pushers.

I got a room at the Emporium Hotel, and the next day we were to make our first push up to Keating Summit. I had noted and was surprised that the trucks on the RS3's had plain, not roller, bearings—but a lot of railroads did that. We set up our four units, which was the Pennsy plan and the basis for their maximum train tonnage limit.

The train, with doubleheaded steam engines, came in, started up the grade,

and stopped with the rear end opposite the shop. We coupled onto the caboose. When we heard the train air release, we started pushing. After slowly bunching the slack, we opened more throttle, and from the load meter we knew we were pushing a lot more of the train than the head end was pulling. We staved in the green on the load meter, but the diesels started skewing badly. I couldn't believe they could skew that much and stay on the track. The couplers canted to one side until the shank hit the draft-gear housing. We had the caboose sandwiched between a train with 6,000 h.p. pushing against it and at the same time pushing it sideways.

Then, the axle-bearing end stops started smoking on the RS's. I told the road foreman we would have to cut back, and the engineer, of course, knew just how to do that without breaking the train in two. The steamers up front apparently couldn't take much more of the train. The road foreman agreed we would have to cut off and back down to the shop. Without pushers, the train had to double the hill.

I immediately got down and looked in at the swing bolsters in our trucks, and sure enough, they were not equipped for pusher service. The foremen started calling their PRR bosses, and I called Schenectady. Word came that Schenectady had recommended special bolster side pads and roller bearings for these roadswitchers, but "the Pennsy knew better."

The PRR sent steam engines back up to Emporium to keep the line open. A mechanical engineer prepared sketches for the welding of heavy steel plates in the draft gear housing to limit lateral drawbar movement, thereby stopping the skewing. I again called Schenectady, then told the railroad we did not agree with its fix and that we recommended Alco's swing-bolster kits. But the PRR wanted to try its own solution.

Next time out, as we were tying on, the conductor and brakeman refused to stay in the caboose, remarking that the vard had given them a much bigger train than they'd ever had with steam pushers (a common practice with new diesels). So they rode in the cab with us.

We started pushing. The RS3's skewed. The axle end stops smoked. We cut off the train and backed down to the shop. Steam engines pushed the train up the hill. I called Schenectady. Schenectady called Philadelphia.

The next day, I went to the PRR's Olean, N.Y., backshop, where truck modification kits had been received from Schenectady and where the six RS3's had been sent over from Emporium.

The shop crews were old-timers (the only ones with enough seniority to still be working), and boy, could they work! It was a simple modification to add the bolster side pads, but taking that type of truck apart the first time and without a drop table was not easy. All the locomotives were done within a week of two-shift days. The RS3's went back to Emporium. The skewing stopped, and there were no more problems with the RS3's on the Keating Summit grade.

A ROUNDHOUSE GETS ITS FIRST (UNINVITED) DIESEL

In 1950, Alco was shipping a new Alton & Southern RS3 dead-in-train from Schenectady to the A&S at East St. Louis. Intended for slow-speed operation, the road-switcher had plain bearings on its trucks, not rollers. The route included running on the Canadian National across southern Ontario. We got a call from the CN telling us they had set out the locomotive for a hot journal and that they had no equipment, parts, or skills to repair it. About all they could do was slowly nurse it to their Fort Erie, Ont., roundhouse, right across the Niagara River from Buffalo.

I was sent over to see what was available and to get it repaired. Gus Praetzel, a GE service engineer from Buffalo, went along, because the shop had never worked on a diesel truck before and had limited resources for such a job. The A&S unit was placed on a pit track normally used for the replacement of steam-locomotive pony truck wheelsets. The shop workers were smart, capable journeymen, and they worked safely for three days, despite the fact that everything they touched was heavy and we didn't have an overhead crane or drop table.

What we did have was good wood for cribbing, wire rope slings, chain falls, come-alongs, bottle jacks, and a big, 1895vintage air hoist with axle cradle located in the pony-truck pit. We blocked the locomotive frame from the floor, hung the

In three days, working round the clock with three different crews, we changed out the front wheel and axle assembly and journal boxes.

traction motor to the frame (with cribbing from the bottom of the pit for insurance), and blocked the truck equalizers from the floor. When it was all rigged, this brandnew RS3 looked liked something out of a Rube Goldberg cartoon, but it was in control and safe.

In three days, working 'round the clock with three different crews, we changed out the front wheel and axle assembly and journal boxes. I had a cot set up beside the work so I was available to direct the men at all times and still catch some sleep, using my trusty satchel for a pillow. We were under pressure to free up the track, because it was needed for routine ponytruck work. The master mechanic, who by the time we were done had six engines waiting to get on the pit, kept checking on our progress.

We had to obtain all parts for the job from Schenectady, so we sent a list of everything we needed to make the locomotive operational. A flatbed truck arrived with all the items we'd requested, plus one I hadn't even thought of: cans of aluminum paint. In filling my order, our parts people learned the undercarriages of the Alton & Southern units were painted aluminum. This figured—A&S was owned by Alcoa. So we sent that RS3 on its way with freshly painted wheels!

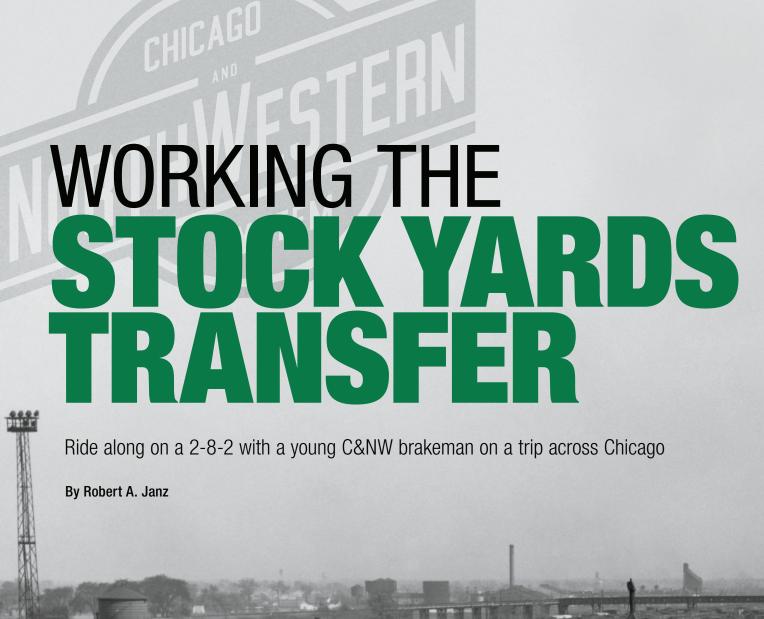
LOOKING BACK ON SOME GREAT YEARS

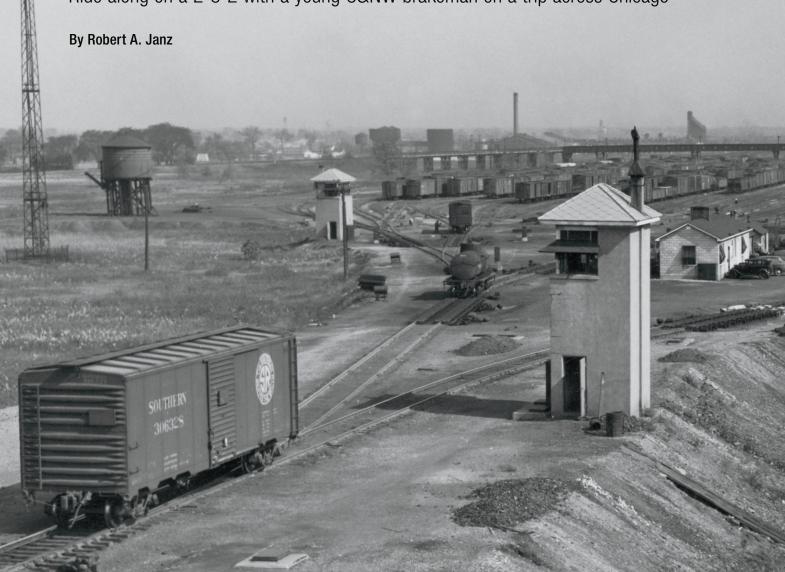
I worked on the road for four years, and loved it. I find it strange now to see the locomotives I put in service referred to as "first-generation diesels"—I still think of them as brand-new. I got married during this period, and my wife traveled with me for about a year, which she enjoyed in spite of some lonely times. We began our family, and all the Alco and GE district engineers and their wives, plus the railroadmen and their wives, treated us well. Our spare time was never dull.

When I left the road to return to engineering in Schenectady, I worked on the development and testing of our new 251 engine, but I will always have nothing but admiration for the railroad shop and road employees with whom I worked during those "transition years."



Alton & Southern RS3 No. 43-the engine whose repairs Graulty oversaw from a cot in a Canadian National roundhouse—is seen in its natural habitat of St. Louis in July 1959.





n 1952 I hired out on the Chicago & North Western as a Galena Division trainman and was assigned to the Proviso extra board. Frequently I was called for the transfers and other jobs that ran between C&NW yards and "foreign lines" hauling interchange traffic. One of the assignments I looked forward to was the 2:30 p.m. Stock Yards Transfer.

The job operated out of the Proviso yards in suburban Bellwood, hauling mainly perishable traffic to terminals on Chicago's South Side. Deliveries were made to C&NW's Wood Street Terminal, the Chicago Produce Terminal (an Illinois Central-Santa Fe facility), and the Union Stock Yards on the Chicago River & Indiana Railroad.

To reach these terminals, the Transfer ran east from Proviso on the Galena Division main line to Kedzie Avenue interlocking and then south on the Rockwell Street Line, which turned east into the Wood Street Terminal at 14th Street and Western Avenue. Our trackage ended there, and the Transfer continued south on the Chicago River & Indiana. The train returned to Proviso with cars pulled from the CR&I and the Illinois

Northern, a small switching road.

First, let me introduce the Stock Yards Transfer crew I worked with from time to time. Railroad men have a penchant for nicknames, and this crew had its share. The engineer was "Bull" Siebert, an easy-going, well-respected old-timer with seniority dating back to the turn of the century. He was a big man, strong as a bull, perhaps explaining the name. Bull loved running the class J-A and J-S Mikados that were common power for Proviso-based transfers.

Most engineers would trade off with their fireman, but Bull enjoyed running so much that he surrendered the throttle only when he wanted to eat his lunch. The usual fireman was "Red" Melton, so named because of his flaming red hair. He was a qualified engineer and would be set up running at times, but would always return to the Stock Yards job when set back, just so he could work with Bull.

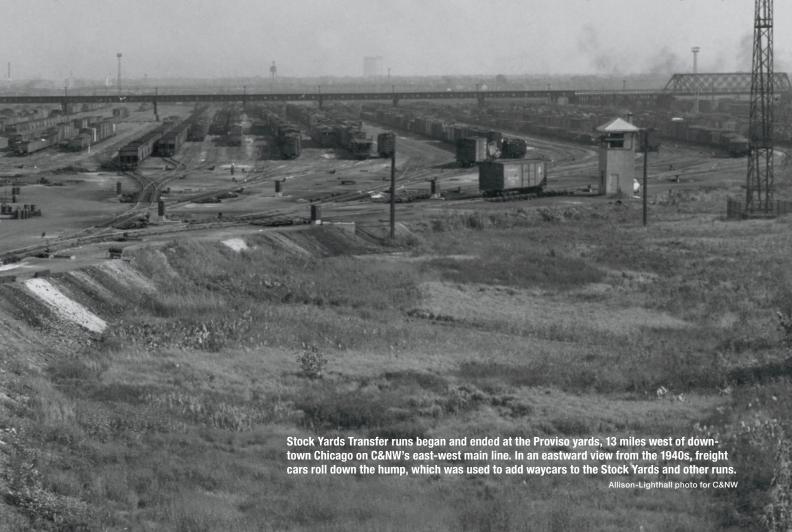
On my first day with the crew, during summer 1952, Red told me that Bull was a showman with a locomotive, especially when he had an audience. "A westbound scoot [suburban train] is due at Kedzie Avenue station at 4:40. Bull

times it so we'll get there just before it arrives so we'll be held at Kedzie interlocking for the scoot to pass. He'll make a 'grandstand' stop there, thinking the commuters will notice how smooth he handles a freight train. When their train arrives, making a typical 'stonewall' stop, he imagines they will wonder why their engineer can't do as well. Just watch, you'll see what I mean."

The conductor, "General" Grant, was another old-timer. The other brakeman on the job was Ike. He wore lace-to-toe boots, and the way he tucked his overalls into them gave him the appearance of a long-legged bird, so of course his moniker was "Bird Legs." The entire crew was amiable, never a cross word, a pleasure to work with, and always tolerant with me even though I was still wet behind the ears. My nickname? "The Kid." I was only 18 then!

ON DUTY AT PROVISO

In a routine that seldom changed, the job began at the east end of Proviso's Yard 5, the lower end of the hump yard. Ike and I would first switch out the General's waycar (caboose). All the terminal waycars were laid up on a spe-









From top: H. Olson, R. H. Kennedy, Ed Selinsky; all from Robert A. Janz collection

Class J-S Mikados like No. 2451 (top) and J-A's like 2494 (middle) were standard Stock Yards power; J-S's had stokers, while J-A's had stokers, Boxpok drivers, higher steam pressure, and bigger tenders. Waycars rode on passenger-style trucks and were assigned to specific runs.

cific track in Yard 5. The waycars were wood with steel underframes, and a dozen or more were on the track. Their assignments were identified by small black signs with the job name stenciled in white above the car number. Jobs operating out of Proviso included the Ginger Bread, Flash, Auction, Per Diem, Leavitt Street, and Pan Handle transfers plus various "roustabouts," as some local switch jobs were called.

When we had the waycar switched out we'd shove it through a clear alley up to the west end of Yard 5. Hump operations would be halted so the car could be spotted in a retarder and held in place. The engine would then uncouple and move away, leaving the car

standing. Then the retarder was released, allowing the car to roll down onto the rear of the train. Ike rode the car, controlling its speed with the hand brake. This was an everyday move at Proviso by both North Western and foreign-line crews.

We'd return on the engine to the east end and make up our train by doubling up three tracks. Each track contained a block of cars that had been classified over the hump for our train. First we'd pull the Wood Street block, then double over to the CR&I block, and finally the Chicago Produce Terminal block. The train generally totaled 60 to 70 cars, mostly loaded refrigerator cars. The Wood Street and CPT cars were loaded

with produce, while the CR&I block carried dressed meat.

Other than waybills, lists of our consist and tonnage, and a brake test, there were no more formalities. The train ran as an extra. The Special Instructions section of the employee timetable provided for the operation of extra trains without clearance forms or train orders between Geneva and Chicago, which included the territory east of Proviso.

When the train was together, the car inspectors conducted the air-brake test. The brakes had been checked earlier using yard air, but it was necessary to make a set and release from the engine. On a signal from a car inspector at the waycar, Bull set the brakes by placing the automatic brake valve in the service position, drawing off about 10 pounds from the brake pipe. He'd sound one long whistle to indicate the brakes were being applied. Then he placed the brake valve in the lap position to hold the brakes applied, and he watched for leakage in the brake pipe.

When a signal to release was given, Bull placed the brake valve in the running position and sounded two long whistles to indicate the brakes were being released. If the brakes applied and released on the waycar and there was little or no leakage in the brake pipe, the test was satisfactory and the train was ready for departure. The General then gave us a highball, which Bull answered with two long whistles.

A switch tender at Harbor Hill and a towerman at JN interlocking at the east end of the yard were then advised by the yardmaster. Typically, we'd hear a loudspeaker announcement, "Harbor Hill, JN tower, the Stock Yards man has a highball." JN tower would advise Kedzie tower, who would in turn advise the switch tender at Lake and Rockwell, and so on until everyone along the way was aware of our progress.

RIDING THE 2-8-2'S CAB

My place while under way was on the engine. Sitting behind Red, I'd watch Bull start the train. He'd open the cylinder cocks, sand the rail, shove in the slack, then put the reverse lever all the way forward and tug the throttle halfway out. Steam built up in the Mikado's cylinders, and when she began to move forward with a few sharp barks, Bull closed the throttle part way to keep her from slipping.

While the cylinder cocks were open, alternating jets of steam and accumulated water pulsed into the air, creating great clouds that dissipated into a fine mist. When Bull figured the slack was all taken up, he tugged the throttle out

a little more. Then the exhausts increased in intensity. He looked over at Red and me, grinning with satisfaction.

Bull was a master of his craft. All this was on a fairly stiff uphill grade through Yard 4. The engine spewed smoke and cinders into the sky as we climbed toward Harbor Hill at the east end of the yard. By this time, because of the noise, normal conversation in the cab was impossible. When we passed under Mannheim Road, whose viaduct spanned many yard tracks, exhausts mushroomed against the bridge, filling the cab with smoke.

Several leads, running tracks, and yard mains joined at Harbor Hill, where there also was a connection up to the Indiana Harbor Belt. The switch tender stationed there gave us a highball, which we yelled across the cab to Bull.

We continued on, through the maze of switches toward the top of the hill. Bull depended on us to watch for signals because of the curves ahead. We swung to the left, passed over the crest of the hill, swung to the right, and started downhill onto the City Lead. Bull had her shut off and we were just drifting, letting the train push us along. At the end of the lead, a yellow dwarf signal indicated proceed, so we shouted "Yellow!"

About halfway down, we swung left again, blocking Bull's view as we passed under the IHB. It was up to Red and me to watch for the next signal. "Yellow!" we called again, and Bull tugged out the throttle gently to pick up the slack that had run in as we drifted along.

It was 4:10 as we pulled out onto the main line. A check of the timetable indicated we were about 20 minutes ahead of train 64, the next eastbound scoot. Our run to Kedzie interlocking, about 9 miles, where we would be routed south to the Rockwell Street Line, normally took about 20 minutes. The scoot behind us was due at Kedzie Avenue at 4:55. That gave Bull plenty of time to get into position before the arrival of the next westbound scoot (train 45) so he could demonstrate his train-handling expertise at Kedzie Avenue station.

The run to Kedzie was uneventful. Bull dogged along in no apparent hurry. The westbound platform was crowded with passengers waiting for 45 as we arrived, and the interlocking signal ahead was red. Because of C&NW's left-handed operation, we'd have to cross the scoot's track to access the Rockwell Street Line. Bull set the brakes on the train, holding the engine brakes in release, but did not reduce the throttle, keeping the slack stretched. The effect was to smoothly slow the train. He



C&NW

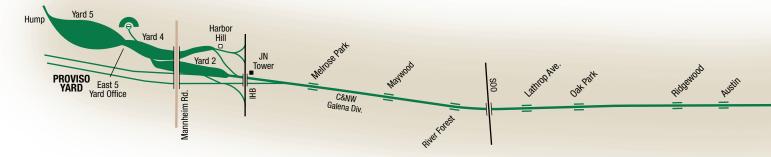
After stopping grandly at Kedzie Avenue ("A" in this westward view), the Stock Yards would use the west leg of the wye (B) to head south on the Rockwell Street Line. Flanking C&NW's main line are California Avenue Yard (C), South Yard (D), and Western Avenue/Tower A-2 (E).

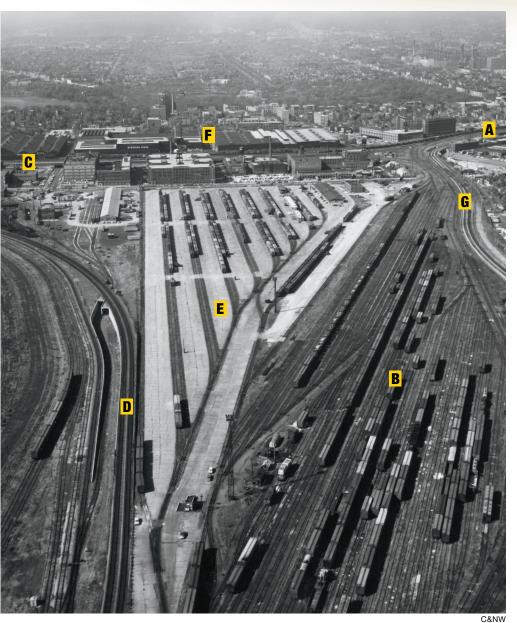
began to ease off on the throttle, working steam right up to a textbook stop at the signal. Sitting on his seat grinning from ear to ear, he tried to look nonchalant, as if to say there was nothing to it!

Ahead to the left was the California Avenue coach yard, where passenger cars were stored and serviced. To the right was South Yard, a freight facility within the wye that led to the Rockwell Street Line. Certain passenger trains backing out from the downtown depot would use this wye to turn their cars before laying up at the coach yard.

I stood in the gangway behind Bull to watch the arrival of scoot 45. As it approached in full "stonewall stop" mode, its coaches trailed blue smoke from chattering brake shoes. The leading edge of the truck frames dipped downward from the force of the application. The sudden deceleration caused seated passengers to lean forward, but they appeared unconcerned by this routine practice. As the brakes were released, the truck frames righted themselves with a sigh. In a few moments the train pulled out of the station, accelerating with each turn of the wheels as if on a holy mission.

When our signal cleared, Bull started her up, cylinder cocks open, reverse lever in the front corner, thunderous exhausts filling the sky. Beyond the signal we swung to the right, clattering across the interlocking plant as we left the





The Stock Yards Transfer came down the Rockwell Street Line ("A" in this west-facing view) and entered Wood Street Yard (B); the engine ran around the train, uncoupled from the Wood Street block, and went south, tender-first, on the CR&I (C). Other features: CB&Q main line (D), Western Avenue team tracks (E), Ryerson Steel (F), and B&OCT (G) to Grand Central Station.

main line. A few city blocks east, we skirted South Yard on the west leg of the wye and turned south on the Rockwell Street Line.

On this line, North Western switch tenders were located at Lake Street, Taylor Street, and Ogden Avenue. At crossings and junctions with other railroads that were not protected by interlocking plants, "stop" boards were in place. A complete stop was required at many locations even though a signal was cleared or a switch tender had given us a highball.

The Rockwell had three tracks between Lake Street and Ogden Avenue. The west track was an industrial lead that also was used as a running track and as a tail track by passenger trains turning on the wye. The two other tracks were operated as main lines. To the east were three Pennsylvania Railroad tracks that paralleled the east leg of the wye, then ran alongside to Taylor Street, where they crossed our tracks and continued south. Both the C&NW and the Pennsy were operated "on sight" at restricted speed. At Taylor Street were direct connections to the PRR and the Baltimore & Ohio Chicago Terminal Co. Traffic moving south through Taylor Street switched from C&NW's lefthand running to right-hand operation.

Two wyes overlapped each other between Taylor Street and Ogden Avenue. The north leg of the C&NW wye connected the Rockwell Street Line to the Wood Street Terminal; the other two legs were formed by connections of C&NW and CR&I at 14th Street. The CR&I tracks were also operated "on sight" at restricted speed. The second wye was the B&OCT.

Beyond Taylor Street, a crossing of the north leg of the B&OCT wye at Great Western Junction was manned by two B&OCT switch tenders. At Taylor Street, we'd wait for highballs from both the North Western switch tender and the B&OCT switch tenders, who used green flags or lanterns. After receiving highballs from both, we crossed the north leg of the B&OCT wye. Farther south, we headed around the north leg of the North Western wye, where the Ogden Avenue switch tender routed us toward the Wood Street yard (today, the site is the Global I intermodal yard). Before entering the yard we crossed the interlocked south leg of the B&OCT wye at Western Avenue Junction.

When the rear of our train was in the clear at the west end of the yard, I'd cut the engine off. But before I could, Bull would have a story to tell me. He'd kill a few minutes by telling me a story or a joke every time I had to get off the engine. When Bull finished his story, I could cut the engine off so we could return to the west end.

When the engine was lined up to a clear track, I boarded the trailing footboards for the ride to the rear of our



train. The 2-8-2's side-rod brasses made a clanking sound as the rods revolved on their pins. She seemed to be talking to herself as she rolled along, sloshing from side to side, rising and falling over the uneven trackage. I was right below the smokebox where I could hear all this, especially her soft exhausts as she ran backwards through the yard.

At the west end, I'd tie on to the waycar and watch for Ike, who would make a cut between the Wood Street and the CR&I blocks. On his signal, the slack was bunched and we'd pull away. The waycar would remain between the engine and the cars for the rest of the trip south. It would be almost 7 p.m. by the time we were ready to continue on.

Leaving Wood Street, running tender first (all the way into the CR&I yards), we'd back around the south leg of the wye, onto the CR&I connection at 14th Street. There were no formalities or communication with a dispatcher: If there were no conflicting movements, we'd pull out and cross over to the southbound track, then continue south at restricted speed.

SUPPERTIME IN THE WAYCAR

Progress was always slow, and we'd stop several times behind other trains or at crossings, often for the better part of an hour. Although I enjoyed riding in the cab, there was no need for me to be on the engine leaving Wood Street. It was far more comfortable in the waycar. By now it was suppertime and, after washing up, we gathered around a pulldown table to eat our lunches. During the winter, we'd use the caboose stove to brew tea or coffee and to toast sandwiches. In good weather, we might have iced tea, lemonade, or soda pop to ease our parched throats. Waycars that were assigned to regular jobs were always kept neat and clean by their crews. Most were mounted on well-sprung, passenger-style trucks and rode like baby buggies. This quality made them conducive to a short snooze now and then.

Next to us on the west side was the B&OCT's double-track main line. Beyond that were the three Pennsy tracks, a small yard, and a massive Ryerson Steel plant. Along the way there were local industries on both sides. Trains

ROUTE OF THE Street Line Taylor St. Taylor St. B&OCT Great Oaden Wood St. Jct. Interlocking tower **B&OCT Tower** Switch tender Western Ave. Jct. AT&SF Atchison, Topeka & Santa Fe 14th St. Baltimore & Ohio Chicago Terminal SR&I Belt Railway of Chicago Chicago, Burlington & Quincy Western CB&Q CR&I Chicago River & Indiana Ave. Yard GM&O Gulf. Mobile & Ohio GTW Grand Trunk Western PRR Illinois Central IHB Indiana Harbor Belt INI Illinois Northern MILW Milwaukee Road Sanitary and Ship Canal Pennsylvania IN enginehouse & headquarters Not all lines and features shown IN Interchange © 2010, Kalmbach Publishing Co., CLASSIC TRAINS, Bill Metzger tracks Chicago More online Ash St. See a timeline of a typical run of the **Terminal** Tower Stock Yards Transfer at our Web site, www.ClassicTrainsMag.com Campbell's Soup GM&O Halsted St. **Brighton Park** Pershing Rd. Packer's CR&I Main Running Tracks Alley CR&I CR&I 39th St Seeley Ave. Ashland Vestern Ave Ave Unloading To C&WI -Yard Chutes Slaughter Houses and CR&I **Packing** Ashland Ave B&OCT Yard CR&I eavitt St. Yard CR&I CR&I Loomis St. Center Ave

from just about every railroad in the city could be found on the CR&I, B&OCT, and Pennsy tracks here.

Continuing south, we passed under the Burlington Route main line at 18th Street. At 26th Street, we crossed the Illinois Northern and passed its engine terminal and McCormick Station freight house. The IN, known as the "Hook and Eye," was once owned by International Harvester. The 28-mile IN had been powered by a fleet of 0-6-0's, but by 1952 it had been dieselized with six Alco S4's. In addition to providing switching service to the extensive Harvester Works, the line served numerous industries and connected with various railroads. On

our return trip there would be a pick-up for us on the interchange tracks.

Eventually we reached the Sanitary and Ship Canal at 31st Street, then, just across the moveable bridge, Ash Street Tower. Four tracks of Santa Fe's main line and IC's Iowa Division crossed the CR&I, B&OCT, and Pennsy there. The interlocking was a combination of tower-operated switches and signals and a switch tender operating certain switches by hand. About a half mile to the east, between the canal and the ATSF and IC tracks, was the Chicago Produce Terminal yard. We would use a connection south of the crossing that swung off to the east to make our CPT setout.



Top, J. David Ingles; above, Robert A. Janz

Illinois Northern, with which the Stock Yards Transfer interchanged cars, owned six Alco S4 switchers, including No. 32 (top). Chicago River & Indiana hosted the Transfer south of 14th Street; Lima switcher 9806 is lettered for parent NYC System and, in an oval on the cab, CR&I.

Ike would make a cut, leaving the CR&I block standing north of the crossing, and we'd pull across the interlocking plant to clear a hand-operated crossover. The switch tender there would line the switches onto the connection. The tower would establish a route to cross the Santa Fe and IC, and clear a signal allowing us to shove around the connection and down to the produce terminal.

During this move, Ike and I would work on top of the cars to pass signals to the engine. After we delivered the CPT cut, we headed back onto the CR&I and then moved north to our train. In the summer, the sun would be setting by this time and we'd need our lanterns when we reached the CR&I terminal.

On the west side of the Pennsy tracks at 35th Street stood the Campbell's Soup kitchens, the source of savory aromas that drifted throughout the area. During late summer, the air was heavy with the scent of fresh tomatoes. A Pennsy switch engine was kept busy switching stock cars fitted with special racks to accommodate the fragile tomatoes. On the roof of the main building, a water tower

decorated like a Campbell's soup can served as a Chicago landmark for years.

At 37th Street, the line crossed the Gulf, Mobile & Ohio main at Brighton Park. The crossing was protected by stop boards and semaphore signals operated by a switch tender. The signal masts extended upward from a shanty between the B&OCT and Pennsy tracks. This was one of the places where a complete stop was required even though a semaphore indicated proceed.

From there, the line passed over Western Avenue, Archer Avenue, and Pershing Road on a long viaduct and turned east into the CR&I yards. A switch tender at 39th Street and another at Ashland Avenue controlled movements on four running tracks through the yard. As we moved along, loud-speakers announced our arrival, number of cars, and what track we were on.

SMELLS OF THE STOCK YARDS

The unmistakable odor of livestock and slaughterhouses permeated the air as we pulled in. Livestock traffic had diminished overall, but the slaughterhouses continued in operation to a lesser degree. The meat products in our train would be processed there and shipped to local distribution points. To our right was Ashland Avenue yard, CR&I's inbound yard, where we would set out the rest of our train; on the left was Seeley Avenue yard, the outbound yard, where cars for Proviso waited.

At the east end of the yard complex, the tracks crossed Ashland Avenue on a wide overpass. A switch tender had our train lined up straight across a row of puzzle switches on the overpass. These particular switches were best left to the switch tenders. They had moveable frogs and points operated by a switch stand at each end and caused no end to confusion to anyone not familiar with them. They were a maze of moving rails and parts: If one end or the other was not lined properly, there was a possibility of breaking something, or worse, going on the ground. With the switch tender's help, we soon had the cars set out on a clear track in the yard.

Towing the waycar, we proceeded on a running track for water at a location known as Packer's Alley. Beyond Ashland Avenue, the tracks descended to street level where there were acres of stock pens—the Union Stock Yards.

At the water plug, Red would scramble up onto the tender and I'd swing the spout over to him from below. While Red filled the tender, Bull would get down with the long-spouted oil can and a hammer to look over the machinery. With a squirt here and a tap there, he'd oil and tighten loose parts. Looking closer, I got the impression he was even talking to the engine. It was obvious he was fond of running steam.

When Bull and Red were finished with their chores, we'd cross over to a westbound running track and shove west beyond Ashland Avenue. At the east end of Seeley Avenue yard, we'd tie the waycar onto the cars for Proviso. The majority were empty reefers returning to packing houses out west. Then I would take the engine through a clear alley and tie onto the west end. The car inspectors had already worked the brakes with yard air and would make a set and release test with our engine.

While the test was being made, Ike would bring our waybills and consist up to the head end. It was a standard practice to carry the bills on the head end of trains going to Proviso. They would be handed off to a clerk at Mannheim Road and sent via pneumatic tube to the administration building. When the inspectors were finished, the General would give us a highball. If there were no conflicting movements, we'd pull right out and be on our way home.



C&NW photo, Robert A. Janz collection

BACK HOME AFTER MIDNIGHT

After short delays at Brighton Park and Ash Street, we arrived at the Illinois Northern to make the pickup, usually a couple of dozen cars. Bull would stop short of the switch to the interchange track and I'd cut the engine off. Then he'd pull up to clear the switch and I'd line it toward the pickup. But instead of backing in, the engine would run me up to the yard office for the waybills and then it would go back to the pickup.

Creaky wooden stairs inside the enginehouse led to the office, a typically dingy railroad facility with well-used desks and battered file cabinets. "Ready in a minute, Kid," a clerk would say as he was organizing a pack of waybills and writing a consist. During the time I was up there, Bull had backed down to the pickup, where Ike, who had walked up from the waycar, was waiting.

Many of the cars in the pickup were less-than-carload lots of International Harvester parts ordered as replacements for worn-out farm equipment. The parts had been consolidated at the McCormick Station freight house into cars for common destinations. Along with cars from other lineside industries, they were placed on the interchange tracks.

By the time I had the waybills and

Proviso's 58-stall roundhouse dominates this west-facing view from the coaling tower. Also visible are sand and cinder storage areas, water tanks, hopper cars filled with locomotive coal, and several engines, including 2-8-2 2568 (facing camera), 4-8-4 3025, and 2-8-4 2812.

consist, the train was all together, and an air test was being made. A highball from the General back at the waycar indicated the test was satisfactory. It was after 10 p.m. by now.

At 14th Street, we got back on North Western rails, although still operating to the right. At Great Western Junction, the B&OCT switch tenders would send us on to Taylor Street, where left-hand running resumed.

Occasionally we'd be delayed for a short time by passenger equipment being turned on the wye at Lake Street. Or we might wait east of Kedzie while a westbound scoot passed by. Our runs west on the main line were generally uneventful, and soon we were pulling into the east end of Proviso. At Mannheim Road, we'd stand in the clear while burly class M-4 0-8-0's stormed back and forth on the leads to Yards 6, 7, and 8. Eventually the switch tender would line us up into Yard 7. As we pulled in, we handed off the waybills to a waiting clerk.

Even before we stopped, arrangements were already under way to switch some of the cars of International Harvester parts into the freight transfer house for further consolidation. The empty reefers would be sent west on the second section of train 253, departing around 2 a.m.

When we got to the west end of Yard 7, we often waited while a yard crew with another M-4 finished switching a cut of cars. When the lead was clear, we'd return to the east end, pick up the waycar, and shove it over to Yard 5. Then the engine went to the roundhouse.

After three years away from the railroad in military service, I returned in 1956 to find numerous changes had occurred. Steam power was almost a thing of the past, and I learned that Bull had retired. He and Red had come to work one day to find a diesel standing on the ready track instead of the usual class J. Bull called the roundhouse foreman and asked where his engine was. The answer was, "What you see is what you'll get from now on." Bull grudgingly ran the diesel for a few hours and then called Red over, saying, "Red, you run it—that's it for me." When they tied up, Bull marked off and retired. The joy for him was gone.

The mighty

Firing a Union Pacific 4-8-4 as the helper engine on a drag freight was indeed a treat

By Les Clark

again had slept in at my 50-cent room in the old Pacific Hotel, my home away from home in Huntington, Ore., when I was working as a locomotive fireman for the Union Pacific Railroad on its Idaho Division. The year was 1953. My actual home was 183 miles east in Glenns Ferry, Idaho, where I had reported for work the day before.

A streak of good luck had been bless-



George N. Bisenius

Striking a classic pose perhaps not unlike the author's, a UP fireman relaxes and prepares to light a cigar at Rawlins, Wyo., in 1951.

ing me with several good, daylight runs. The day before had been no exception, when I'd been called for No. 257, a west-bound time freight with Forrest "Timber" Jones as engineer. This was the hottest freight on our division, drawing as power a set of three EMD F units. Except for adding a helper engine for the climb out of the Snake River valley near my home, this was a non-stop run all the way to Huntington. Though it seems hard to imagine now, it was a real treat to catch a train with diesel power instead of steam, which we called "black iets."

I had arrived at Huntington about dinner time and, after a good feed at one of the local greasy spoons, spent the evening in the railroad clubhouse playing cards and assisting in circulating various railroad yarns, the usual drill for off-duty enginemen and trainmen. When I gave in and hit the sack, I was listed several times out on the call board for my return trip. I was expecting an early-morning call, but when I awoke around 10 a.m., obviously the early call hadn't occurred.

I checked out of the hotel and went to the clubhouse for an update. I learned that Timber and I were second out, in







line for an eastbound drag that had not yet been called, so I meandered across the street for a late breakfast. Timber soon joined me. I remarked that it appeared my streak of good luck had about run out. A drag freight usually entailed a 12-hour, or longer, run on a steam engine with a fair share of local switching. Timber pointed out that the crew ahead of us—Robertson and Ballard—would probably get the drag and

To draw one of UP's great 800-class 4-8-4's was a treat for me at any hour.

we wouldn't get our call until evening, when the multiple sections of the HFX fruit specials would be coming through. I thought that, except for being an allnight run, this wouldn't be so bad. Finding something to occupy the day in Huntington, though, was a challenge—after all, the place wasn't exactly Paris!

As we were leaving the café, we ran into Red Ahlschlager, our conductor. He asked if we'd received our call, saying the callboy had been looking for us. We said no, but we soon ran into him on the way to the clubhouse. We were told that the crew ahead of us had indeed caught the drag, with engine 7856, a 4-8-2, but that we would doublehead with them on it with engine 825. The train would be Extra 7856. Although we would be on the point, we were the helper and therefore were

called after the regular crew and our engine would display "X7856." Our train crew of conductor and two brakemen were to deadhead back home in the caboose.

I was delighted. Maybe my luck hadn't gone sour after all. To draw one of Union Pacific's great 800-class 4-8-4's was a treat for me at any hour. Although I had taken student trips on the 800's, until now I had not been called for one. A big reason was that a fireman was not allowed to work passenger trains until gaining one year's worth of experience, which I did not have, and most of the 800's that ventured on the Idaho Division were on passenger trains. An exception was when there would be a power transfer to a different area, or an engine that was heading to the shops for maintenance. Such was the case





Having left the author's home Idaho turf, No. 808 negotiates the pass at Kamela, Ore., with six-car Pocatello-Portland mail train 25 on November 27, 1950. She's climbed 1,147 feet since leaving La Grande, and is doing 35 mph.

here—the 825 was heading down to Cheyenne, Wyo., for shop work.

Back at the clubhouse, since we had received our official call, we all headed for the depot to register for our trip and then to the roundhouse to pick up our power. As we started our rituals of preparation, we found that the engines were already coupled together. For me, our preparation was also an exploration. I was thankful that I'd been curious enough to snoop around the 800's that often would lay over at Huntington. I can't recall ever



Jim Scribbins

finding one of the big Northerns (FEF's, for 4-8-4, in UP parlance) at my home terminal of Glenns Ferry, so I hadn't had a chance to become acquainted with them there. At Huntington, however, the 800's often would be swapped out for other power for the trip through Oregon's Blue Mountains with the line's steep grades and sharp curves.

As I started my preparations, I was a bit nervous about a run with unfamiliar power, not to mention that I would have one of my peers firing the engine behind me to critique every puff of smoke that came out of the 825. At least I knew where to get on the engine, and I couldn't help appreciating its big, all-weather cab as I entered it. To have a back wall with doors, instead of the back of the cab being wide open to the elements, was impressive. I thought

A long way from Idaho, No. 825—the very engine the author fired—pulls out of Omaha Union Station on July 7, 1952, with the lead section of train 23, the transcontinental workhorse *Gold Coast* via C&NW-UP-SP.

about how nice it would have been on older power in helper service to have had protection from the cold when backing with a light engine after helping a train up the hill. (UP's modern power—the Big Boys and the late-model Challengers—had enclosed cabs, but the former never ran into Idaho and the latter were not common there.) I charged into my standard chores, which included inspecting the water level, fire, and firebox, and the associated oil-firing controls. I then washed out the cab with the hot-water hose.

Since we were listed as Extra 7856, I



went out front and climbed up to the train indicator boxes so I could remove the "825" numerals and install "X7856" in them. This required a bit of scrounging on other locomotives to "borrow" the correct numerals. I also had to be sure the classification lights were both showing white to indicate our status as an extra train.

Back in the cab, I decided to concentrate on my one major area of concern—the Sellers exhaust steam injector on the fireman's side. All of the 800's were equipped with them when new, but this cantankerous appurtenance was found on few other Union Pacific locomotives. To start it required the manipulation of three control levers in conjunction with a vacuum gauge. During a student trip on an 800, I'd been warned by a sarcastic engineer who

said, "The first thing you want to do, kid, is run all the water out on the ground." This stuck with me.

Most of this injector's problems centered on the operation of an automatic changeover valve. Its purpose was to allow the injector to operate on live steam from the boiler when there was insufficient exhaust steam back pressure available, such as when standing or drifting. When the engine was working, the valve transferred over to the use of exhaust steam in place of the live steam. It was a very efficient system when it worked, but a headache when it didn't. It could be operating just fine until the engineer changed the exhaust back pressure by changing the throttle or reverse-lever position. Then, without notice, the injector would start spilling water ("breaking," as it was termed)

and, more importantly, not injecting water into the boiler. One needed to be vigilant! In later years most, if not all, the 800's were re-equipped with Worthington SA type feedwater heaters.

I practiced with the injector, starting and stopping it several times. It seemed to work fine. One ace I felt I held was that on this day I was with a young engineer who had fired 800's many times. The old heads who had never fired oil-burners were sometimes long on criticism and short on helpful advice, but I had worked with Timber before and found him to be helpful and understanding. Also, there was the very dependable Nathan injector on the engineer's side when all else failed.

A nuisance characteristic of the 800's was that, when drifting, they were difficult to fire without smoke entering the



Henry R. Griffiths Jr.

Mountain 7855, a sister to the author's road engine 7856, helps a trio of F's on a 106-car eastbound extra up King Hill, east of Glenns Ferry, on October 23, 1949. Even with 2-8-8-0 3566 on the rear, they're doing only 10 mph.

cab. This was the reason for the "elephant ear" smoke deflectors that Union Pacific installed on them in later years. I had spoken with regular passenger firemen about how they approached the problem. Their advice was that heavy use of the atomizer and blower could usually reach a reasonable balance so as to have minimal smoke emission and still be able to hold near the 300-lb. boiler pressure. Most of the 800's steamed so well that, as soon as the engineer started working the engine, any lost steam pressure could quickly be recovered.

hese concerns were going through my mind as we finished our preparation and rolled out on the roundhouse lead track. The brakeman took us over to the so-called River Yard, where our train was waiting. As we completing our air-brake tests, the conductor arrived with our clearance card and train orders. The orders gave us a clear run with right over everything but No. 17, the westbound *Portland Rose* passenger train, all the way to Nampa, Idaho, site of a yard and roughly the halfway point in our run.

We determined we had a fairly light but long train. With the two engines, we should be able to move right along. And we did! Three miles out of Huntington, the UP main line crosses the Snake River into Idaho. The bridge that existed in 1953 had a restrictive 25-mph speed limit, partly due to a 10-degree curve at the Idaho end. Although the 800's had speedometers, they were not easily visible to the fireman. I was too busy with my own chores to notice our speed as we crossed the Snake, but I'd bet it was considerably over 25. After all, there was the "one-upmanship factor" of two young engineers showing off for each other. Why, that big old bridge literally bounced up and down as we crossed it! (It would later be replaced because of track relocation owing to dam construction on the river.)

Once we passed the bridge, the "rail-road was ours" to Caldwell, where we met No. 17, and we then sprinted to Nampa. Of course, en route, we did encounter the several speed restrictions through towns, and made the customary water stop at Nyssa. But overall, we made good time. I was in seventh heaven—the 825 rode and steamed like a dream, and the injector was working fine. Every now and then I looked back at my counterparts on the 7856—how big and impressive we looked and how insignificant they seemed on their "little" 4-8-2. Yes, it was an ego trip!

We headed into the Nampa yard and cut off the engines so the train could be switched, and we ran the power uptown so we could go eat. At that time, UP had a rule that, at Nampa, a member of the crew must stay with the engine. This applied only to larger engines but included the 800's. I must confess that, to my knowledge, the rule was rarely followed, but by this time I had such a love affair going with 825 that I volunteered to stay with her. It gave me more time to examine the big locomotive.

About two hours later, our crew was all back and with orders in hand. We soon were recoupled to our train and left Nampa. The railroad split here. Pas-

senger trains curved left to go through Boise, the state capital, while freights went straight ahead on the "Kuna freight line" for 33 miles to Orchard, where the passenger line rejoined (today on UP, only the freight line remains intact; the Boise route is severed). Eastbound, the Kuna line had a respectable grade. Trains rarely required helpers here, but it was a strong test for freight power pulling heavy trains.

We hit the grade with a vengeance. It was the first chance I had to witness the 825 really working hard. Although the 7856 appeared to be doing its part, to me it felt like the 825 would've dragged it up the hill. Partway up, Timber had me take the engineer's seat. Sitting at the throttle of that great engine listening to her bark with authority up that hill was a feeling that I will never forget. I was king of the world!

When we arrived at Glenns Ferry and I disembarked from the 825, it was with mixed emotions—the satisfaction of a good run mixed with the sadness of parting. I was convinced then, as I am now, that the 800-class 4-8-4's were the finest steam locomotives ever to grace Union Pacific rails . . . or anyone else's.

Right from the time the three groups of 800's were received from Alco, during 1937-1944, they were out into passenger service, where they recorded outstanding performances. However, it

I was in seventh heaven—the 825 rode and steamed like a dream.

wasn't until the mid-1950's, when they were being bumped from passenger assignments into freight service, when Union Pacific really discovered what a powerhouse it had in the 800's. While working out their final days in heavy freight service between North Platte, Nebr., and Council Bluffs, Iowa, they regularly astonished seasoned veterans with their capabilities. One has only to check the commanding performance record of the 844 in excursion service for the last 50 years to be convinced. UP 844 is, of course, the only major U.S. railroad steam locomotive to never have been retired, and was rebuilt by the railroad at Cheyenne. This should assure that it and its able cousin, Challenger 3985, will be around for a while to stir the hearts and minds of future generations.