

ABOVE: First movement — East Switch Belden, mile 294.5, 3:15PM, August 10, 1996. Westbound Train KCBAT-8 enters the siding at Belden, Colo., to meet an eastbound coal train before resuming its crew's eight-hour trip from Pueblo to Minturn. Today's train includes several overflow au-toracks normally handled on the hot KCOAF. The balance of the tonnage includes TOFC and other priority traffic.

ON TENNESSEE PASS

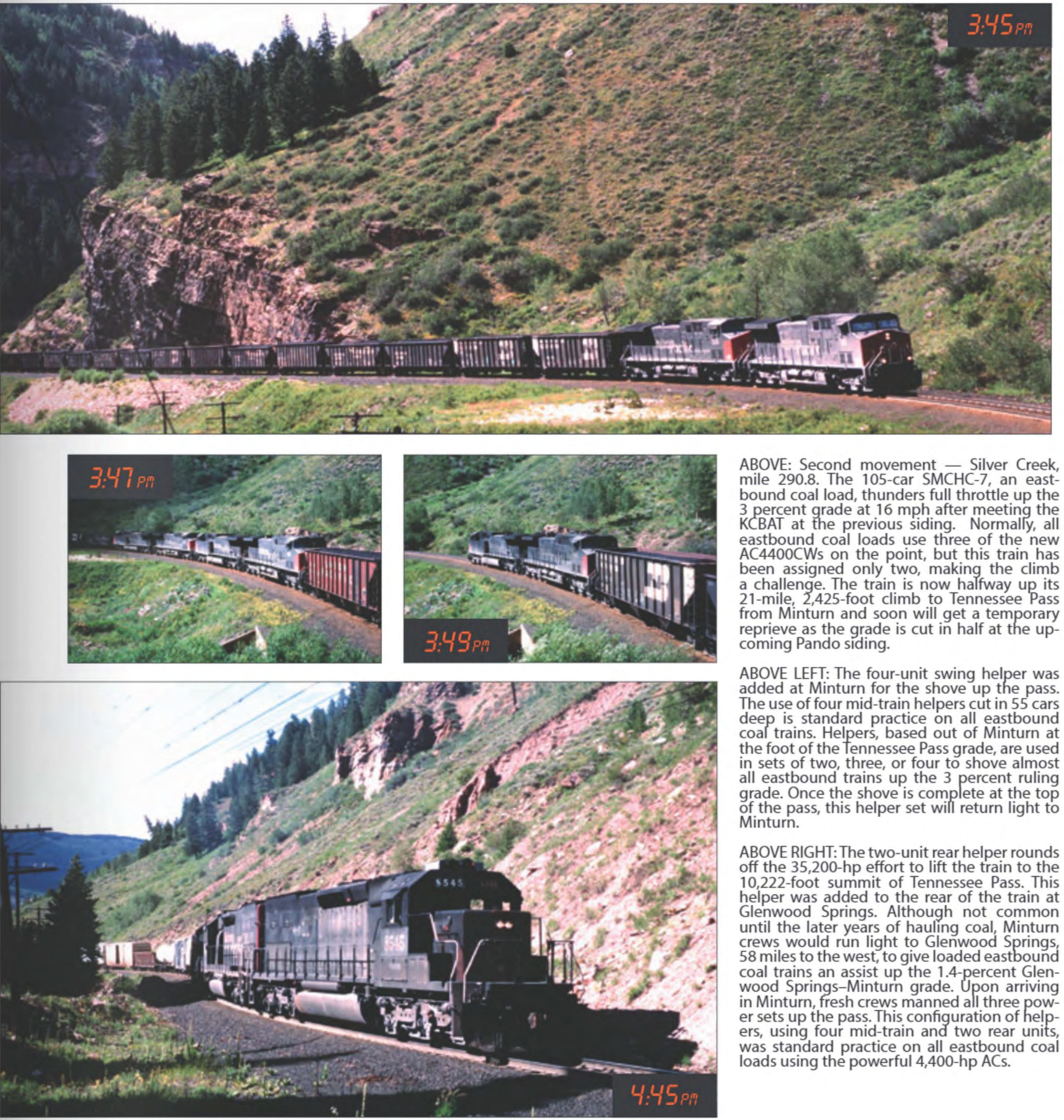
ENNESSEE PASS was once one of the percent grades and 10,222-foot apex despite Pass. The Moffat's 2 percent grades and a lot of traffic. improvement over Tennessee Pass' 3 practically seamless interchange with The pieces of the route formed the

BY JEFF SIMLEY/PHOTOS BY THE AUTHOR

3 percent grade up and over the Continental the financially strapped Southern Pacific needed Rio Grande. Meanwhile, Rio Divide posed a significant challenge to was bought at a bargain price by Rio Grande had itself extended its reach from Denver & Rio Grande Western's steady Grande, controlled at the time by the Pueblo, Colo., to Kansas City on the tracks stream of trans-mountain traffic. Eastbound Phillip Anschutz investment empire. The of once-partner Missouri Pacific, which had trains required helpers up the grade transaction mostly had to do with real merged with Union Pacific in 1983, and and westbound trains tested the skills of estate, and the railroads happily went along granted the trackage rights as a condition engineers keeping their trains under control for the ride. The merged D&RGW and SP of the merger. While all this was going on, down the grade. It was such a burden that found themselves with a transcontinental Southern Pacific bought the former Rock by the late 1980s D&RGW attempted to railroad stretching from Chicago to San Island Tucumcari Route between the Sunset eliminate the problem and route all trains Francisco with the key rail terminals of St. Route in New Mexico and Kansas City and through the Continental Divide via the Louis and Kansas City, Mo., a part of the quickly gained access from Kansas City to Moffat Route instead of up Tennessee system. They also found themselves with St. Louis. The next move was for SP to buy

9,239-foot apex were seen as a significant Southern Pacific had long enjoyed a and Chicago in 1985.

Union Pacific in Ogden, Utah, but the great epicenters of big-time western the extra mileage. 1982 merger with Western Pacific found railroading. Its legendary 21 miles of Then fate swung its hand in 1988 when SP significantly cut off from UP; SP badly the former Alton Route between St. Louis





ABOVE: Third movement — Stillwater, halfway between Belden and Pando, mile 291.7. Eastbound Train RVKCM-5, with four tunnel motors in charge, heads up the pass through a seldom-seen remote valley of the Eagle River. With three ACs cut in mid-train, the train is sufficiently powered to maintain a posted 25 mph speed up the 3 percent grade at full throttle. At Pando, 1.5 miles ahead, the engineers will throttle back on the 1–1.7 percent grade to keep the speed in check.

LEFT: The three-unit swing helper thunders by looking railroad east. The use of three units was determined by the trainmaster based on this particular train's tonnage and head-end power. Too much or too little helper power would make train handling a headache, particularly with the powerful ACs. Note that the helpers have spliced flatcars loaded with Geneva steel.

ABOVE: Second movement — Silver Creek, mile 290.8. The 105-car SMCHC-7, an eastbound coal load, thunders full throttle up the 3 percent grade at 16 mph after meeting the KCBAT at the previous siding. Normally, all eastbound coal loads use three of the new AC4400CWs on the point, but this train has been assigned only two, making the climb challenge. The train is now halfway up its 2,425-foot climb to Tennessee Pass from Minturn and soon will get a temporary reprieve as the grade is cut in half at the up-

added at Minturn for the shove up the pass. The use of four mid-train helpers cut in 55 cars deep is standard practice on all eastbound coal trains. Helpers, based out of Minturn at the foot of the Tennessee Pass grade, are used in sets of two, three, or four to shove almost all eastbound trains up the 3 percent ruling grade. Once the shove is complete at the top of the pass, this helper set will return light to

ABOVE RIGHT: The two-unit rear helper rounds off the 35,200-hp effort to lift the train to the 10,222-foot summit of Tennessee Pass. This helper was added to the rear of the train at Glenwood Springs. Although not common until the later years of hauling coal, Minturn crews would run light to Glenwood Springs, 58 miles to the west, to give loaded eastbound was standard practice on all eastbound coal

RIGHT: Fourth movement — Silver Creek, mile 290.8. The returning four-unit swing helper from Train SMCHC drops onto the 3 percent grade below Pando on its way back to Minturn. At this time, there were normaly 12 two-person helper crews assigned to Minturn. Each shove up the pass earned the crew a day's pay; normally, one or perhaps two shoves were worked in a day.







"Central Corridor," and by 1989 it was obvious Tennessee Pass would be handling more traffic. Also, a major consideration was that double-stack trains could not traverse the Moffat Route due to the numerous height-restricted tunnels. The few tunnels on Tennessee Pass had been enlarged in anticipation of such a need.

On top of the transcontinental traffic, the U.S. Geneva Steel works in Provo, Utah, reopened. It shipped large amounts of steel and took in massive amounts of eastern coke and Midwest taconite. Those westbound empties were often backhauled loaded with Utah coal sold on the spot markets out east. Adding to the mix was that lumber and other loads coming out 20 to 24 movements every 24 hours on stationed at Minturn at the foot of the 3

ABOVE LEFT: Fifth movement — Silver Creek. At the same location, the three ACs making up Train RVKCM's swing helper return west to Minturn. Normally, the mid-train swing helpers were inserted about two-thirds of the way into the train and ahead of one-half of their tonnage rating.

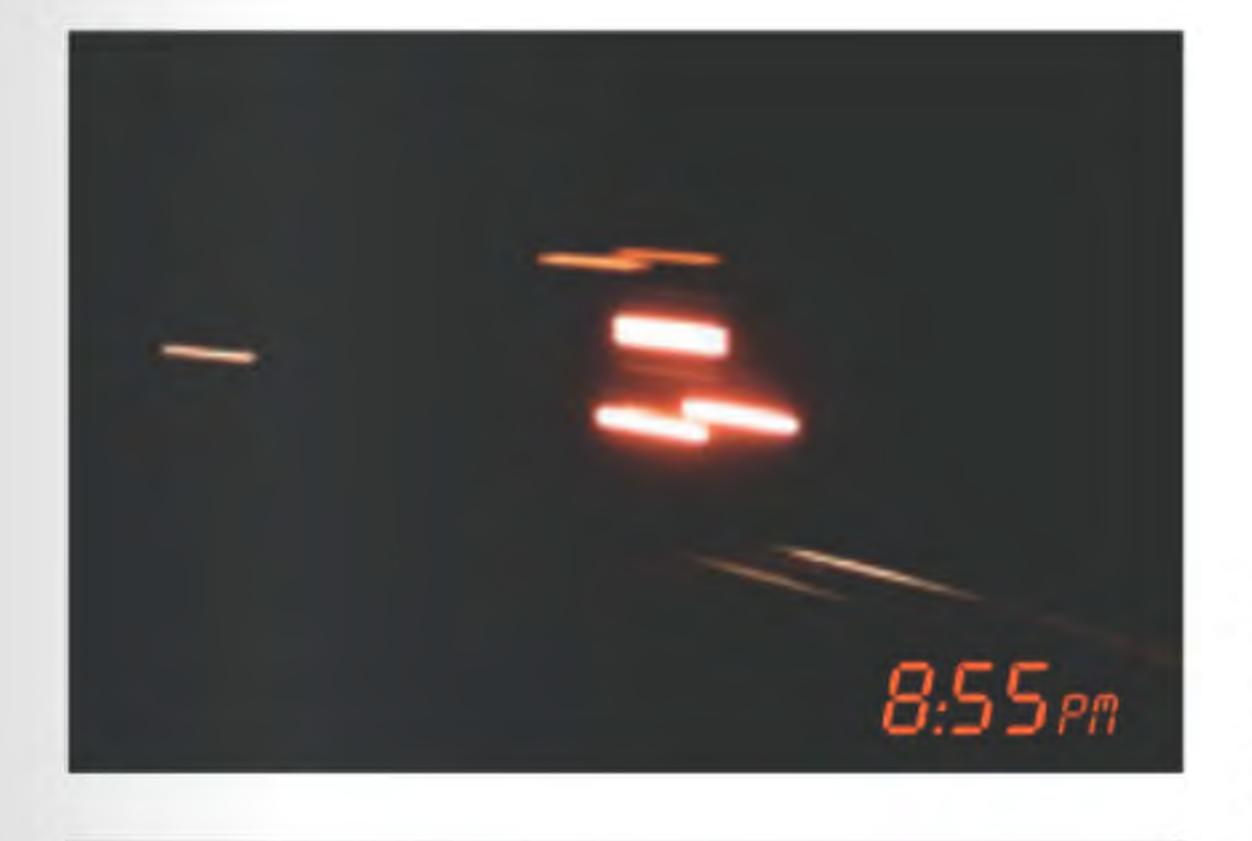
(NO PHOTO) Sixth movement — Deen Tunnel, mile 286.6, 6:20pm. The two-unit rear helper from the SMCHC returns to Minturn after aiding the heavy coal train downgrade to Kobe, located 18 miles east of the pass.

ABOVE: Seventh movement — Mitchell, mile 283.5. Just before sunset, the westbound MNGVC-4 uses its two ACs on the point, two remotely operated ACs cut into the middle, and one remote AC on the rear to hold back its 105 cars of taconite, weighing in at 13,800 tons, down the 3 percent grade. The westbound taconite trains heading for the Geneva Steel Works near Salt Lake City were the only Tennessee Pass trains to use distributed power operation.

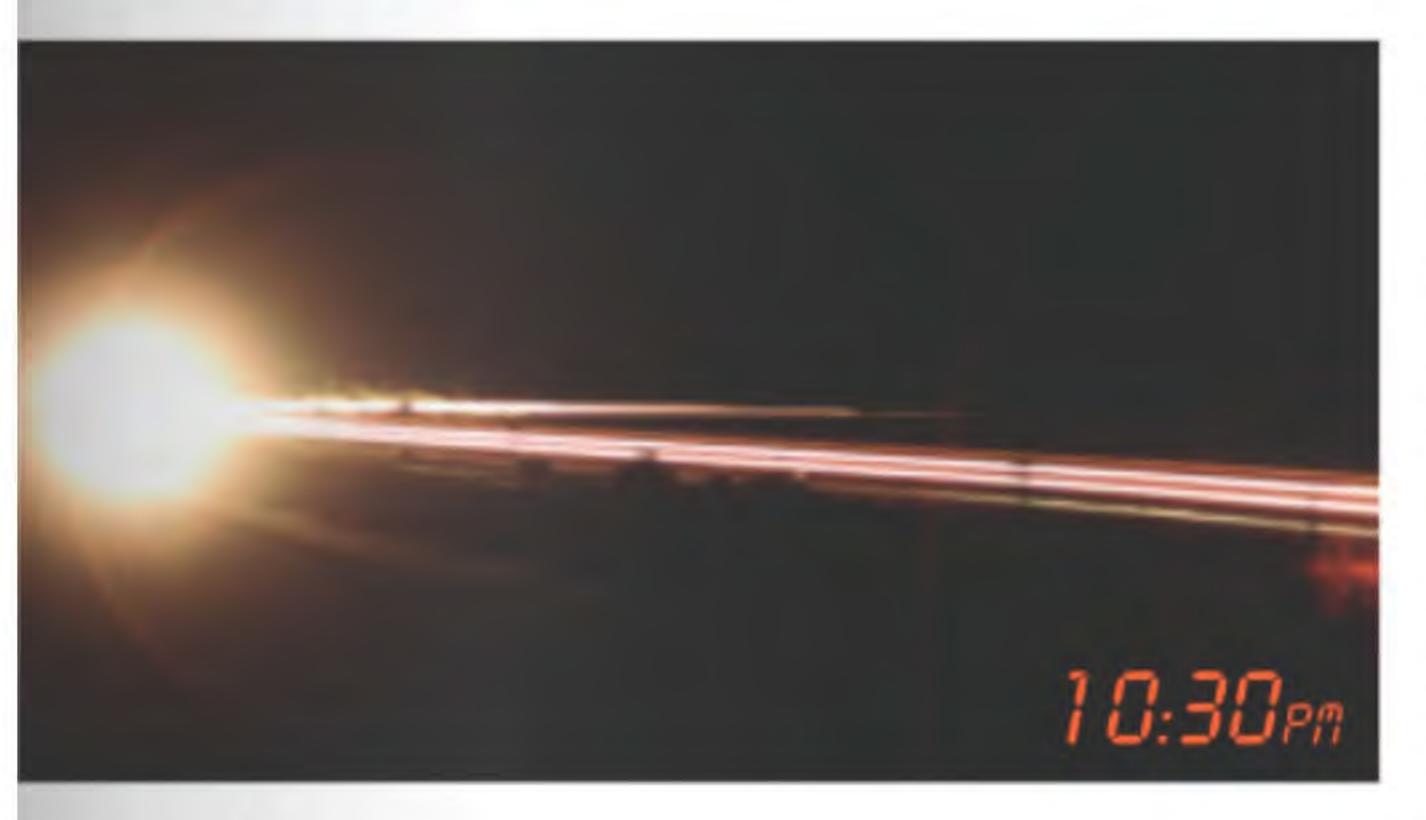
routed via the Central Corridor rather than required a helper set to get up the pass; coal the Sunset Route. That made Tennessee Pass unavoidable and flush with traffic.

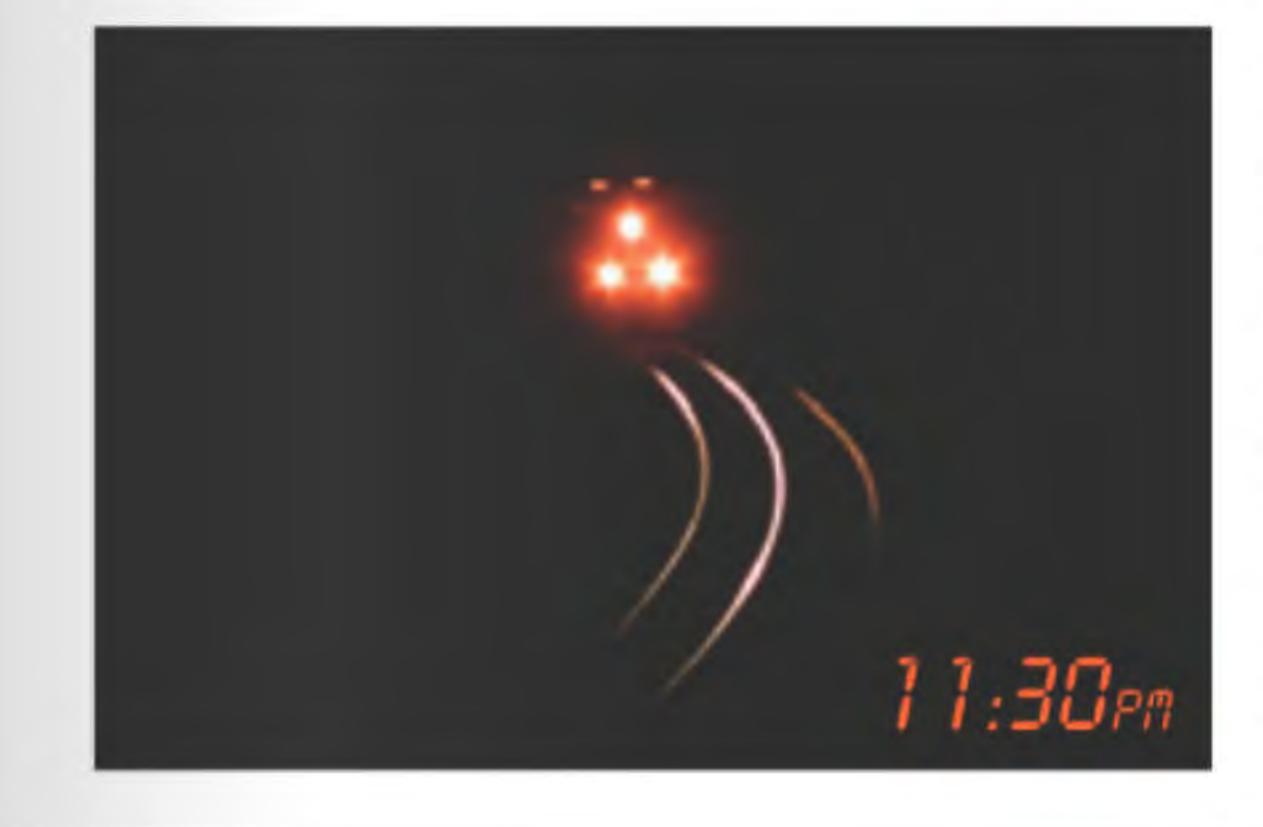
In the 1990s, there were anywhere from

trains needed two helper sets in addition to the head-end power. That meant three helper sets and a dozen helper crews were of Oregon and northern California were Tennessee Pass. Almost all eastbound trains percent grade. Minturn was also the away-









LEFT: Eighth movement — Mitchell. The howling sound of dynamic brakes has filled the still evening air for the last eight minutes, and now the 90-car Train ASRVM-7 drops through the Mitchell S-curve with four ACs heading up this westbound manifest. At night, it was possible to see an eerie, bright orange glow inside the dynamic brake louvers on the left side of the AC4400CWs as the energy of the descent is converted into intense heat.

BELOW LEFT: Ninth movement — Mitchell. The headlight of SP 8492 illuminates a path for the westbound CHROM-6 as its four SDs and 82 cars of manifest freight head down the 3 percent grade of the pass.

BELOW LEFT: Tenth movement — Mitchell. The valley of the south fork of the Eagle River is again filled with the sound of dynamic brakes as the westbound SHARC-8 drops 105 empty CTRN coal hoppers through the Mitchell S-curve with three ACs in the lead.

BELOW LEFT: Eleventh movement — Mitchell. The valley now echoes the thunderous roar of nine 4,400-hp ACs as eastbound Train SNHVC-8 blasts its way into the first curve at Mitchell. The 105 cars of coal are powered by the standard three ACs on the point, four mid-train, and two on the rear.

BELOW: Twelfth movement — Mitchell. The four-unit swing helper and two-unit rear helper of the SNHVC have coupled together for the return trip to Minturn after having both cut out at Tennessee Pass siding. The two-unit rear helper has not aided the descending train to Kobe as is normal practice.

(NO PHOTO) Thirteenth movement — Mitchell, 2:35AM. The next eastbound is Train ARSG-9, a 105-car loaded coal train powered by a 3-4-2 configuration of ACs.

(NO PHOTO) Fourteenth movement — Mitchell, 3:05AM. Westbound Train CHROM-7 now descends through Mitchell after meeting the ARSGC at Tennessee Pass siding.





RioGrande

from-home terminal for crews coming west from Pueblo and coming east from Grand Junction, Colo.

Railfans from all over the country, and all over the world, descended on Minturn during the period to catch the action. The sight, the sound, the smell, and the feel of 40,000-horsepower trains weighing as much as 16,000 tons winding up the relentless grades past towering granite cliffs was railroading at its grandest. Standing trackside as one of these thundering behemoths crawled by was an event never to be forgotten.

Then fate swung its hand again. In 1996, Union Pacific merged with Southern Pacific and its already-absorbed Rio Grande. UP's alternate Sherman Hill, at 8,014 feet with 0.82 percent grades, spelled the end for Tennessee Pass. Late in the afternoon on August 23, 1997, the last through freight, a westbound Geneva taconite train, traversed Tennessee Pass, and it was all over.

That spectacular era in railroading is now long gone and the track has sat empty for 23 years. But on August 10 and 11, 1996, the former Rio Grande over Tennessee Pass was still a busy place. Over the course of 24

BELOW: Fifteenth movement — Mitchell. The four-unit Train ARSGC swing helper returns to Minturn running on the heels of Irain CHROM.

(NO PHOTO) Sixteenth movement — Mitchell, 4:40AM. Having helped Train ARSGC down to Kobe, 1,085 vertical feet below Tennessee Pass, the rear helper makes the return to Minturn.

3:15 RM



