



END OF THE ALCO'S ON THE UTAH RAILWAY



by Doug Harrop

By the end of 1955 the Utah Railway was “fully dieselized,” as the saying went back then. Time had run out for the three big Mallet 2-8-8-0’s that made the mine runs between Martin, the headquarters for the railroad, and the mines at Hiawatha and Wattis. A group of nine well-worn 2-10-2’s ceased filling the Price River Canyon with heavy smoke as they muscled drags up the 2.4% grade to Kyune and on to Soldier Summit. Now the work for the next 15-plus years would be adequately handled by a tidy stable of six brand new Alco RSD4’s and one RSD5. One or two of these very light gray units with a broad red stripe would make one, sometimes two, runs up to the mines five days each week trading empties for loads. Once back in the assembly yard at Martin (near Helper, Utah) the day’s loadings would be built into a mainline train. If the loadings were light, no train would be run up and over the mountain to Provo and the interchange with the Union Pacific would wait until the next day. During periods of light demand, as few as three trains per week would enter the Rio Grande main at Utah Railway Junction (a mile out of Martin) for the track-age rights run over Soldier Summit.

ABOVE: Alligators spotted in the Beehive State! Utah Railway RSD15 #403 is at Provo, Utah, on December 3, 1975, a few months after its purchase from the Santa Fe. Eventually someone noticed that a “3” was missing from the engineer’s side of the cab! Kodachrome by Keith Ardinger.

OPPOSITE: By 1977, pure sets of Blues began running up to Hiawatha (but not Wattis, as they were too heavy for that branch) on one of the two daily mine runs. On a delightful winter day (January 11, 1980), a perfectly numbered set of 401, 402 and 403 leads 50 empties two miles south of old Jacobs, five miles out of Martin. Earlier, four Grays went by with 50 loads out of Wattis. Photograph by Doug Harrop.

A standard mainline train would have two locomotives placed on the headend and four more cut in as a mid-train helper. Cars would number 80-85, totaling 5000-5500 tons. The train would walk up the canyon at 7 to 12 m.p.h. (or less) depending on the weather and the day’s tonnage. The helper would cut out at the summit and return to Martin. The train would terminate at Provo.

On the crew’s rest and when empties were available, a train would depart Provo for Martin around noon the next day. With little variation, this was the pattern of operation for nearly two decades after dieselization. When business was down, trains were run to Provo with as few as 10 cars, no helper. When business was booming, a second train, the following day (called the “overflow”) was run with extra tonnage that could not be handled on the evening train.

By the early 1970’s the demand for good Utah coal was growing at a rapid rate. The Utah Railway had more of it to move than the seven Alco’s could handle. It became obvious that bigger trains were needed. To accomplish this, the railroad acquired another RSD4, two hi-hood RSD12’s and four RSD15’s by the end of 1975, all sec-

BELOW: The Schenectady Salute! ALCO RSD12 #600 and former Santa Fe Gators #403, 400 and 402 are laying down a thick smoke screen as they reach Soldier Summit in Run 8. The RSD12's and RSD15's remained in blue and yellow paint while on the Utah, who didn't revive the gray and red company colors until EMD's showed up in the next decade. When you look this good, who needs a fresh coat of paint? Kodachrome by Dave Augsburger.



OPPOSITE ABOVE: The morning train of empties is heading out of Martin and is clearing Tunnel 1. You can see the three gray RSD4's way off in the distance and Canyon Road is down below you. The Union Pacific was a great supporter of the Utah Railway since the early 20th Century, as it gave the UP access into coal territory that should have all belonged to the Rio Grande. You were more likely to see Union Pacific hoppers than those of the Utah. Here is a nice example of an H-100-10 quad hopper built by Bethlehem Steel. Kodachrome by Dave Augsburger.

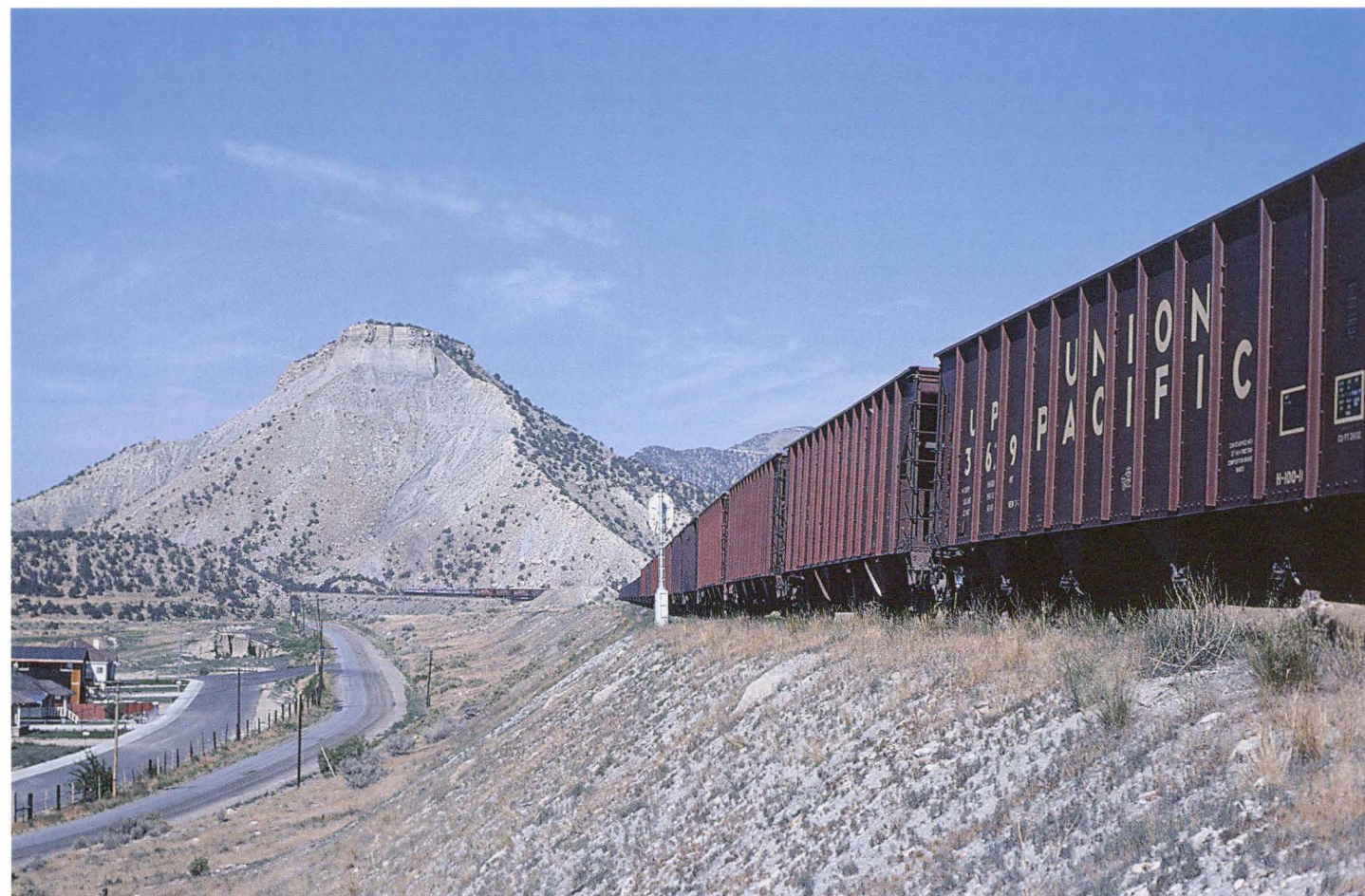
OPPOSITE BELOW: BELOW: Utah Railway RSD4 #304 and RSD5 #306 are loading a train of battered steel hoppers at a mine south of Helper. The 306 was Utah's only RSD5. Kodachrome by Dave Augsburger.

on hand. Since the RSD12's originated on the Chesapeake & Ohio and the RSD15's came from the Santa Fe, and were to remain in the two carriers mostly dark blue paint, they were, on the Utah, referred to as the "Blues." Logically, the original Alco's, plus the former CNJ RSD4, would be called the "Grays." Civil War buffs would nod approvingly, one would suppose.

Now with 14 units to draw from, train tonnages swelled. The number of cars per train remained in the 80-90 range, which was dictated by the Rio Grande. But car capacity by the mid-70's was up by nearly 80% over the 1959 standards. Four or five big six-axle motors on the point and everything left that could turn a wheel back in the helper, now handled the daily train, five days each week, and sometimes six. This four-model Alco show continued for three years to 1974 and it was a sight to behold. The train often left Martin after dark. But just to witness and listen to this nocturnal event on the

mountain grade was an experience not soon forgotten. On the days the train departed Martin before or just after sunset (and on the days an "Overflow" train was run, usually around 8 a.m.), it was a photographers delight. The growth in traffic continued and by 1978 leased Union Pacific SD40's and SD40-2's began appearing on the Provo trains. Up until 1982 the Alco's continued to be used as helpers and on the mostly-daylight mine runs. They were then retired and replaced by secondhand EMD's from BN and Southern Pacific.

It could be argued, and I often did, there was no better place in the West to do railroad photography in the 1970's than on the miles between Provo, over Soldier Summit to Martin and on up to Hiawatha. The DRGW offered varnish (*Rio Grande Zephyr*) and a busy freight schedule pulled by a variety of locomotives in a great yellow and black paint scheme. But nothing could top those Coal Route (as the Utah was called) Alco's which really caused the heart to race.



Out on the Rio Grande Main

On any visit to the Utah Railway during this era, it was a good omen to find the eastbound train getting out of Provo around noon. This meant, on a long summer day, there was a real chance for catching the loaded train coming back in the Price River Canyon before dark. Two or three rolls of film would usually be burned just following the empties to Martin, but the real prize was shooting the loaded train coming up the hill out of Utah Railway Junction. As friend and fellow photographer Blair Kooistra used to say, nothing was as good

as experiencing big Alco's "thrashing" up the 2.4% grade at 5 m.p.h. More often than not a Rio Grande train would overtake the Utah on the second main, but photos of two trains were elusive due to highway traffic, trees, shadows and late departures. Three times each week the *Rio Grande Zephyr* went west up the canyon around sun-down. Oddly, the only time I ever witnessed this train overtake the Utah coal train was once while riding the *Zephyr*. It was too dark for photography, but standing in the dutch doors, taking in two sets of Alco's grinding by just a few feet away, was powerful.

Big power. Busy main line. Big show.

BELOW: "No thank you, Amtrak, we'll run this train ourselves!" A beautiful matched A-B-B set of golden F's are slinging DRGW train #18, the *Rio Grande Zephyr*, through Narrows, Utah, on July 19, 1977. The lucky passengers in the dome cars are getting their money's worth on this beautiful summer day. DRGW arranged the schedule for a daylight run across the state, leaving Salt Lake City at 7 a.m. and arriving at Helper three hours later. Number 17 would arrive at Helper at 6:20 p.m., which gave passengers a year-round daylight run across the scenic desert and summer light all the way to the western terminus. Amtrak's replacement *California Zephyr* runs Utah's coal route at night, but to be fair, they trek across Colorado's scenic Moffat Route during the daytime. The station wagon towing the camper in the distance is parked along U.S. Route 6 and you can see how closely the highway follows the railroad through this part of the state. Kodachrome by Doug Harrop.



OPPOSITE ABOVE: A 30-car train of empties comes down the single main at the east end of Soldier Summit on June 16, 1976. With each loaded coal train cutting out a helper here and hot trains running around the drags, the two controlled sidings are constantly being used. Photograph by Doug Harrop.

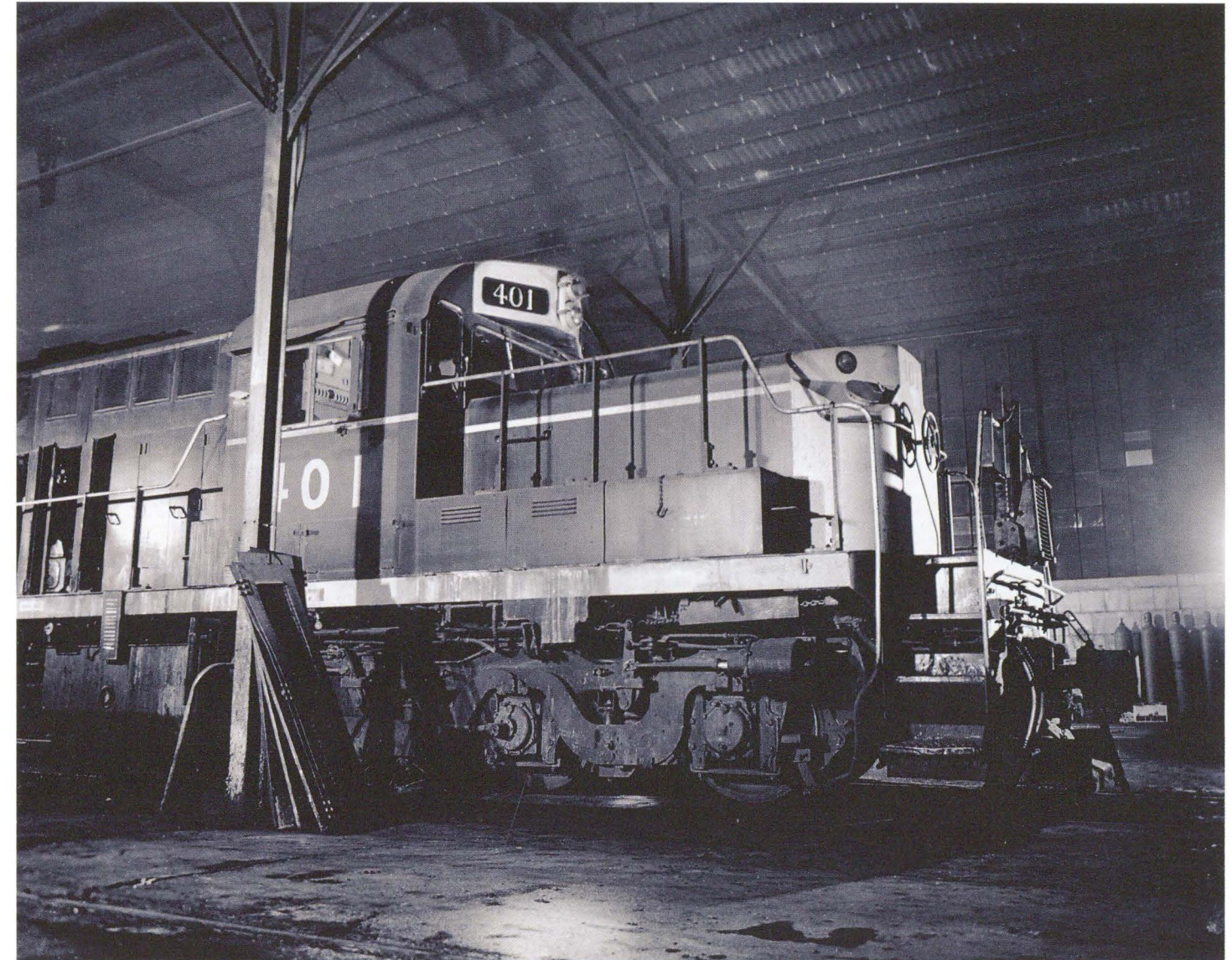
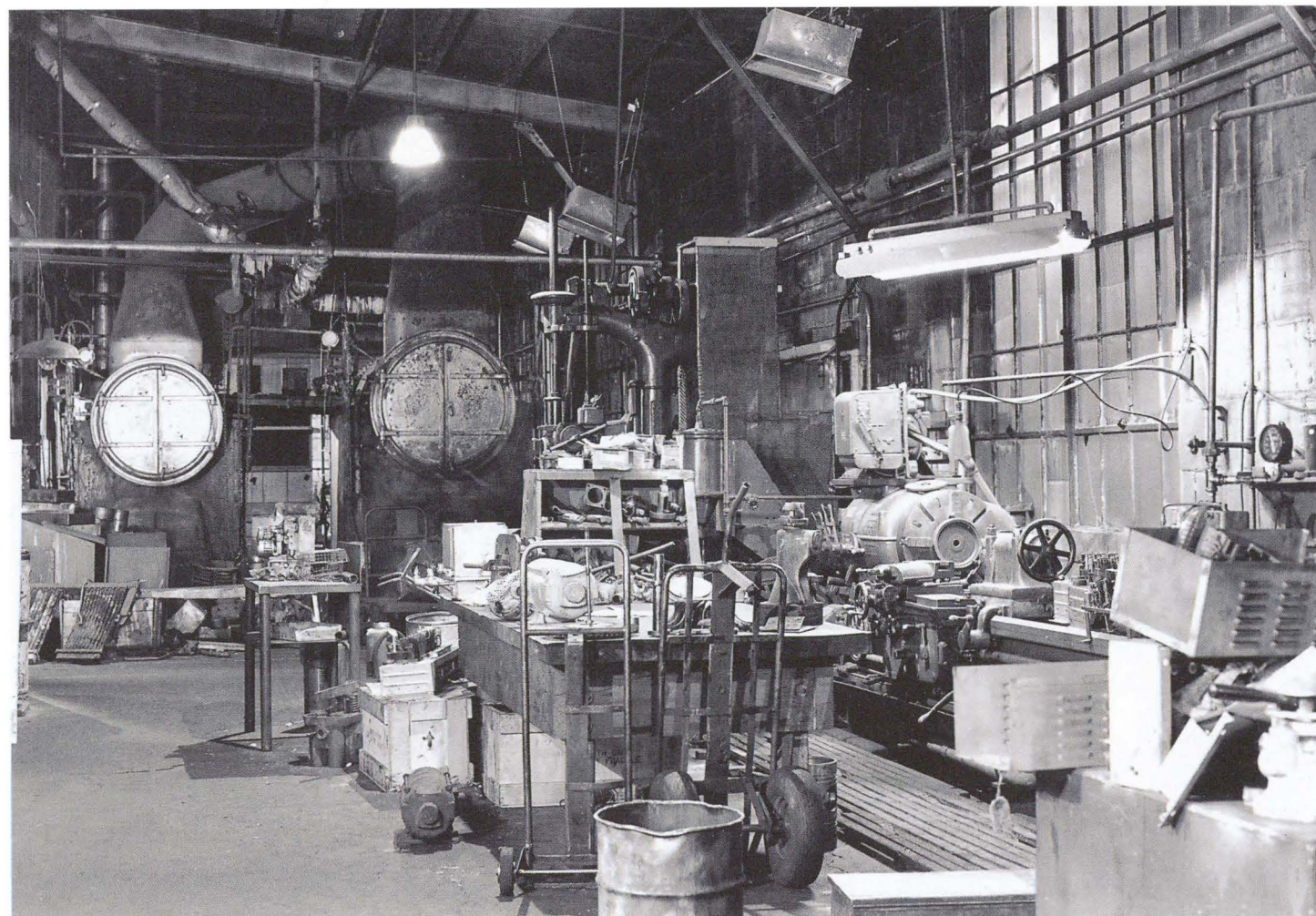
OPPOSITE BELOW: Utah Extra 402 East runs around Rio Grande Extra 5371 East at Utah Railway Junction with empties heading for Martin Yard on June 16, 1976. Where else on the planet could you witness modern EMD Tunnel Motors waiting in the hole for a consist of three ALCO RSD15's and an RSD12 pulling outside-braced coal hoppers? By the way, the 5371 was the last DRGW diesel operating in full un-altered Rio Grande paint. It was generously donated by the Union Pacific to the Utah State Railroad Museum at Ogden. Photograph by Doug Harrop.





OPPOSITE ABOVE: A quiet well-lit shop with no work being performed was perfect for night photography. On June 16, 1976, the building is full of products built by the American Locomotive Company. Photograph by Doug Harrop.

OPPOSITE BELOW: The ancient shop provided good men with all they needed to keep the old ALCO's in top running order for over three decades, and work is still performed here today. For over 35 years prior to the diesel, Utah steam was also given the royal treatment. Some of the equipment seen here looks like it might have been there for the entire life of the shop! Photographed on June 16, 1976, by Doug Harrop.



ABOVE: The historic engine shed at Martin has serviced a wide variety of steam power and diesels, including former Class I power, like this ex-Santa Fe RSD15. The enormous size of these six-wheeled machines really is apparent when you get right up next to them. Photograph by Don Sims.

In the shop and the Martin Yard

The big barn at Martin that serves as an enginehouse was built in 1922. During the last years of the Alco's it was chock full of locomotives each evening. Since almost all shop work was performed during the day, the photographer, armed with a pass, found himself in Alco heaven during the night. The big shop was quiet, well-lit and hours could be spent making portraits.

Not much had changed here since the days when big steamers were being serviced. It is still in use today.

During the period covered by this article, Martin yard activity was quite sparse. The mine run or runs were made up in the a.m. When they returned, the road and helper power made up the Provo train. A fan could roam the yard to his heart's content and shoot anything and everything as long as he remained unobtrusive. No one ever questioned your being there. Times were simpler then.

The Blues ran to Hiawatha

After 1975, when two trains were run to the mines, the Blues always caught the Hiawatha Turn. They were too heavy for the track between Wattis Junction and Wattis, so those runs were always assigned to the nimble Grays.

The mine trackage crossed four paved roads and was not otherwise easily accessed. Gordon Creek trestle and other highlights of the line could be reached with a strong four-wheel drive vehicle, but most photos, especially in the winter, were made at the end of a long hike. As the mines were mostly located at just below the 8000-foot level, storms in winter were plentiful and the snow was deep.



ABOVE: Four Blues move 80 empties over the switch at Wattis Junction on February 11, 1982. The train will continue on to Hiawatha where most of the cars will be shoved to spot for loading at the United States Fuel King mine. Loads will then be gathered up for the 21-mile run back to Martin. The crews liked the mine runs -- they were all made in daylight. Photograph by Doug Harrop.

OPPOSITE ABOVE: Sky blue Rock Island hopper cars are far from home rails as they head for the mines at Hiawatha. They will eventually be emptied to fill the boilers at a power plant near Kansas City. Today's Hiawatha Turn is powered by 400, 401 and 403. Photograph by Doug Harrop.

OPPOSITE BELOW: Those Rock Island cars were infrequent visitors to this area, but one of the more common cars you would find here is Utah Railway coal hopper #3051, one of 200 built by Pullman-Standard in June 1958. Stenciling on the car indicates that there may have been work done on the car at the Provo shops in May 1970 and it was likely repainted at that point. Photograph by George Barker.



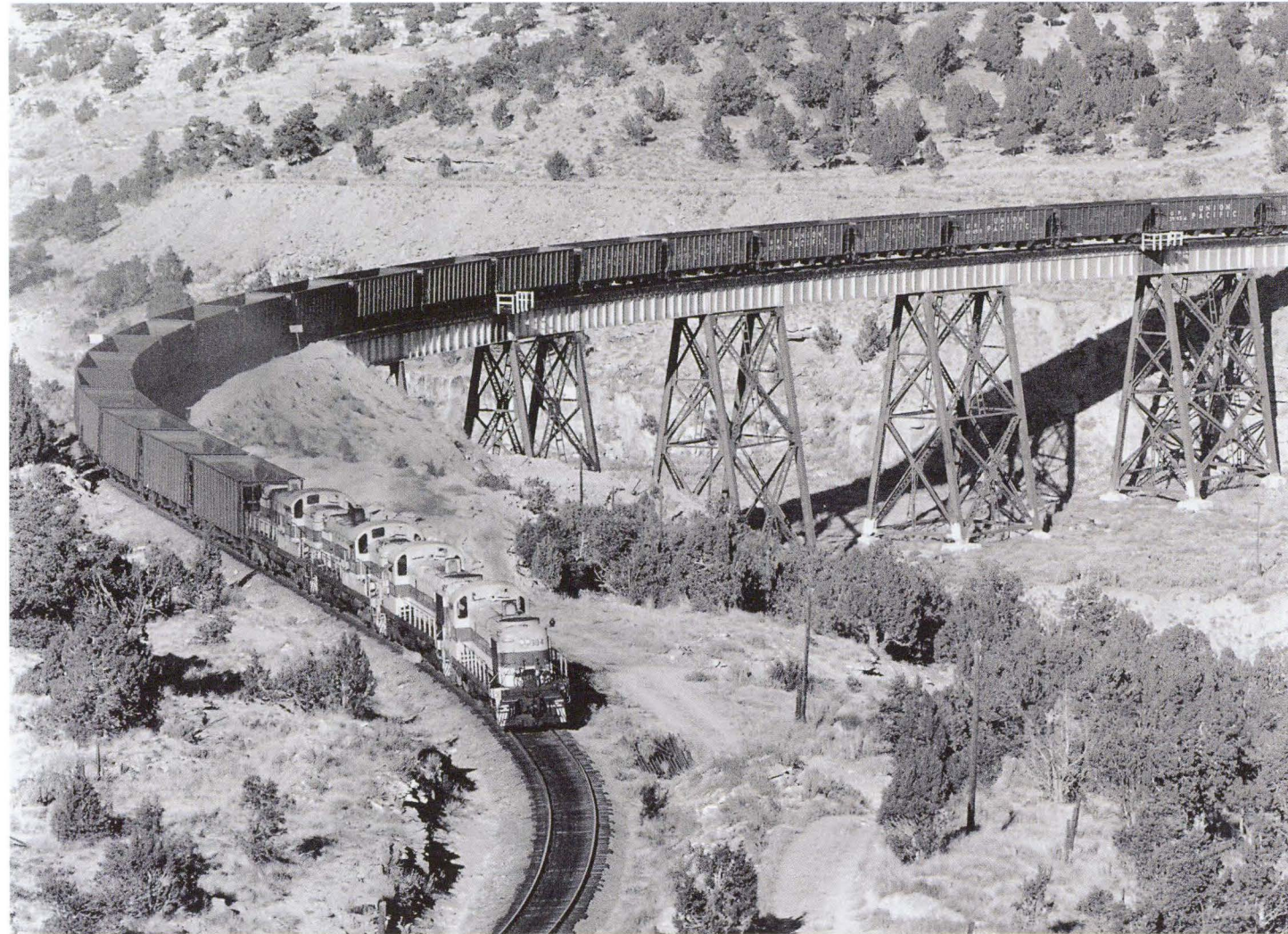
The Grays work the Coal Route

Even if the mainline train got out of Martin too late to photograph before darkness fell, an enjoyable day had probably been spent shooting the mine runs.

The schedules varied. Sometimes the Hiawatha Turn and Wattis Turn both left Martin in the morning and returned in the afternoon.

Other days one turn would go out and return before the second train departed Martin. A third option had just one train working all the mines when loadings were light. This one train was always headed by the grays as the blues were too heavy for the Wattis branch.

It was always hoped that two trains would be run and they would both return in early afternoon. This improved the chances of the mainline train getting out before sundown.

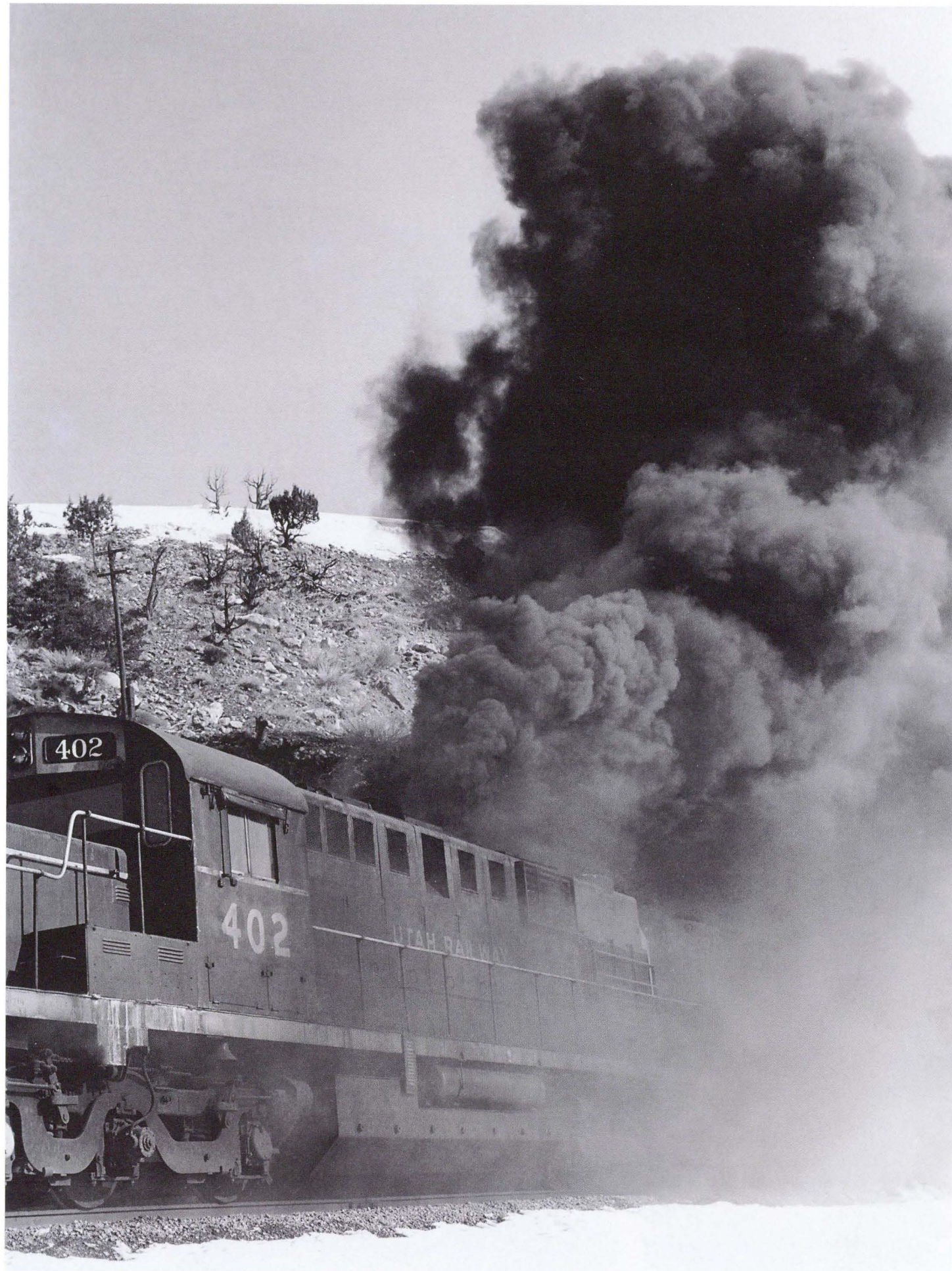


ABOVE: The structure that was on the top of the “must see” list of every Coal Route visitor was Gordon Creek bridge. Aside from the great trestles of the Kennecott Copper mines at Bingham, this 620-foot long, 130-foot high bridge was the biggest in the state of Utah. As of 2006, only an occasional trainload of sand for the Highway Department at Hiawatha crosses this structure. All coal mined at Wattis is now trucked out. On January 9, 1981, four RSD’s are snaking across the high desert floor. Photograph by Doug Harrop.

OPPOSITE ABOVE: On January 20, 1980, a brace of ALCO’s shove empties back to spot at the King Mine. The building is the old Hiawatha station, which prior to everything being moved down to Martin, was the railroad’s headquarters, including the dispatchers office. In 2006 it still stands, barely, in a town that no longer mines coal and is nearly without population. Photograph by Doug Harrop.

OPPOSITE BELOW: A Wattis Turn is about to enter Tunnel One on May 11, 1977, before terminating at Martin. The signal protects the tunnel, site of a horrendous collision during the steam era. Notice that this photo was taken long before drones were invented -- the photographer actually had to climb above the tunnel entrance to get this view! Photograph by Doug Harrop.





Leaving Martin - with a Vengeance

At the south end of the Martin yard is an 800 foot long tunnel which curves to the right when leaving town. Out of the tunnel the railroad is on a bench above Spring Canyon and is starting a 2% climb to Wattis Junction. Short trains leaving the yard from any track or long heavier trains leaving on the main are already in run eight when leaving the tunnel. During the Alco days, the smoke was considerable, to say the least.

If the train was long and was leaving from a yard track at a slow speed to negotiate switches, the photographer, knowing the situation, could still request smoke. The engineer would almost always oblige. They seemed to enjoy it, too. (Ah, the feeling of raw power at your finger tips. As a retired locomotive engineer I remember it well.)

The signals guarding the tunnels and junctions, on an otherwise dark railroad, were added during the steam era after a loaded train from Wattis met a Spring Canyon job being pushed caboose first in the middle of Tunnel One with two crewmen losing their lives.



OPPOSITE: I'm almost too excited about this photo to write this caption! Just imagine the thrill that Doug felt when the ALCO's lit the sky on fire as they came blasting out of Tunnel One on February 11, 1982. Rumors have it that if you politely requested a little smoke, the Utah crews would be happy to oblige. Photograph by Doug Harrop.

ABOVE: The Utah avoided work trains whenever possible. On June 20, 1979, the Wattis Turn pushes a load of rail out of the tunnel to be set out at Wattis Junction before spotting the mine. The action was usually good, smokey and sunny bright at the south portal of Tunnel One. I would highly doubt that you will see Genesee & Wyoming pushing a flat car loaded with rails in front of one of their coal trains! Photograph by Doug Harrop.

The Helpers

After dieselization and following the practice adhered to during the steam era, smaller trains were run from Martin to Provo “as needed.” These were 30-35 car trains that, after the diesels arrived, did not require a helper. Since each RSD4/5 could handle 1050 tons on the Price River grade, these trains would be assigned two to four units.

The standard 80-car train ran “two by four” until the “new” used power arrived in the 1970’s. With 14 units to draw from representing four models (and four color schemes) the power sets, especially the helpers, were quite varied. Helpers were only used on the loads up to

Soldier Summit, never on the empty trains coming up the west side of the mountain.

The helper would cut out at the summit, return to Martin and be broken up for the next day’s mine runs. One of the mine run sets might be the lead power for the next day’s Provo train. For this reason the helper sets were always made up of different power from day to day, depending on the tonnage and what units were available. The Utah Railway maintained their power to the highest of standards, hence one or more units were always in the shop for service or mechanical work. They almost never failed out on the line -- a real tribute to the toughness and dependability of the Alco locomotive when properly maintained.

BELOW: The grade from Kyune to Soldier Summit is “only” 1.1%, but it is still stiff enough to require the helpers to remain in the train. The Rio Grande often cut their helpers here, sometimes on the fly, when placed behind the caboose. For those of you who have photographed trains here at Kyune on the Emma Park Road overpass, how many of you noticed the small spur track heading off to the right? That is the remnant of the spur to Jennings and Potters quarries. In fact, this location was once known as Jennings Junction. The Price River seems very peaceful here, but it responsible for cutting the canyon that allows loaded coal trains to cross the mountains from Helper. Photograph by Doug Harrop.



Across the Wasatch on the Utah



by Don Sims

Helper is a small railroad terminal located in central Utah. Coming in from the east, Utah's desert country runs into the Wasatch Mountains, a vertical rock-faced barrier blocking the way to Salt Lake City. Once the domain of Denver & Rio Grande Western, it is now Union Pacific territory after a brief flirtation with Southern Pacific. But one image that has not changed is that of the Utah Railway. Dating from 1912, the Utah and its original partner across the mountains, the Rio Grande, have been working the coal traffic out of Carbon County for many decades.

This article deals with a 75-mile long subdivision whose cross-section looks like an unbalanced inverted "V," with one third rising

1,631 feet eastbound from Helper and cresting out at the 7,440-foot high Soldier Summit, one of America's highest rail lines. The other two-thirds is a 50-mile drop into Provo, where Utah and UP maintain a joint yard. That descent is a fall of 2,944 feet. This is a modern story, but a trip over the mountain hasn't changed much in the last 40 years, except for the builders of the diesels doing the hard work.

Imagine it's mid-afternoon in Helper... well named for its role in a century-old railroad drama. Standing on one of two main tracks in front of the depot which once served the likes of the *California Zephyr* is a five-unit Utah Railway helper set waiting for a train coming in on Union Pacific iron from Price, where a short branch con-

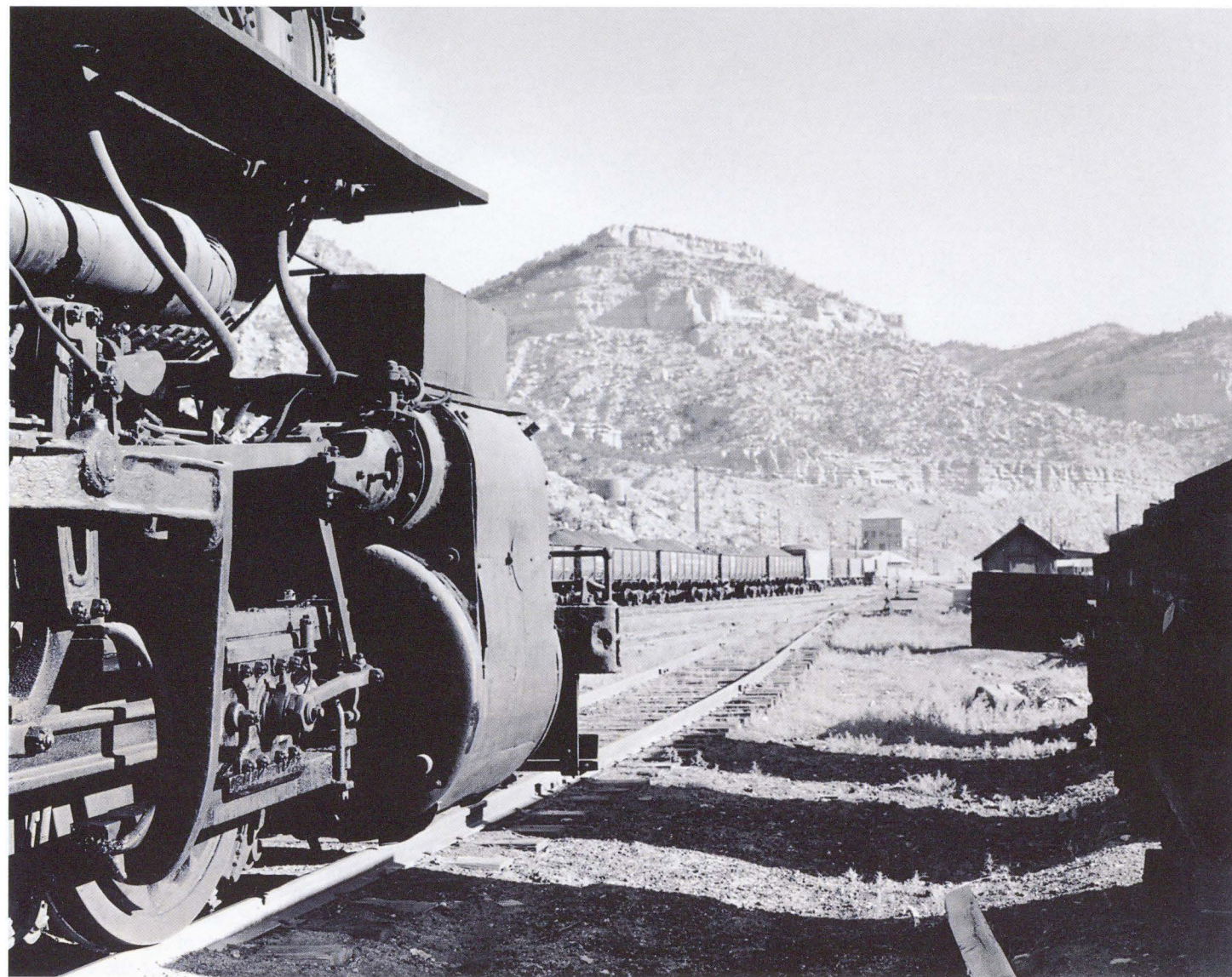
ABOVE: Mid-day finds a heavy loaded Intermountain Power coal train sliding down the west slope of the Wasatch Range near Detour, Utah. The growl of five prime movers in notch 8 has been replaced by the whine of dynamic brakes as the engineer keeps the speed in check for the 2% downhill descent with his five SD40's. Medium format transparency by Don Sims.

nects with the Savage Coal Terminal, one of two loading points for today's unit trains. The other is at Wildcat on Utah Railway's original main stem. Prior to the establishment of unit trains, Utah Railway dispatched coal runs down its 25-mile route to coal mines, bringing them back to Martin -- the terminal where they would be organized into full-sized movements over the Wasatch Mountains. In steam days that meant a roster of big-boilered 2-10-2's based on a Union

Pacific design, along with 2-8-8-0 Mallets. The helper set won't wait long, for just a few minutes after gliding to a stop the road train puts in an appearance around a curve to the east.

Today's coal train consists of 90 cars of Carbon County coal, has tonnage of 10,929 and is 4,700 feet in length. The road engine consist is MK50-3's #5003 and 5004, EMD SD50S #6060 and EMD SD40 #9003. The SD50S is an Australian-built unit that once ran in the

BELOW: This is the scene on the Utah Railway at Martin in 1955. The six-wheel trucked ALCO's have been on the property for three years and soon all remnants of steam will disappear from this town that was built on coal. It must have been difficult for railroads who depended on coal shipments for survival to see the transition from coal-burning steam locomotives to oil-fired diesels. Ironically, you will find more tank cars at Martin today than coal hoppers, thanks to crude oil transferred from trucks at the Wildcat loadout. Photo by Don Sims.



OPPOSITE ABOVE: RSD4 #305 burps a thick cloud of black smoke into the air as it switches a coal mine at Wattis. You have got to wonder how the Utah Railway kept their light colored ALCO's so clean! Medium format transparency by Don Sims.

OPPOSITE BELOW: An early morning train is working the coal branches behind consecutively numbered ALCO's in the 1950's. Notice that the old steel coal hopper is lettered for Union Pacific. Medium format transparency by Don Sims.



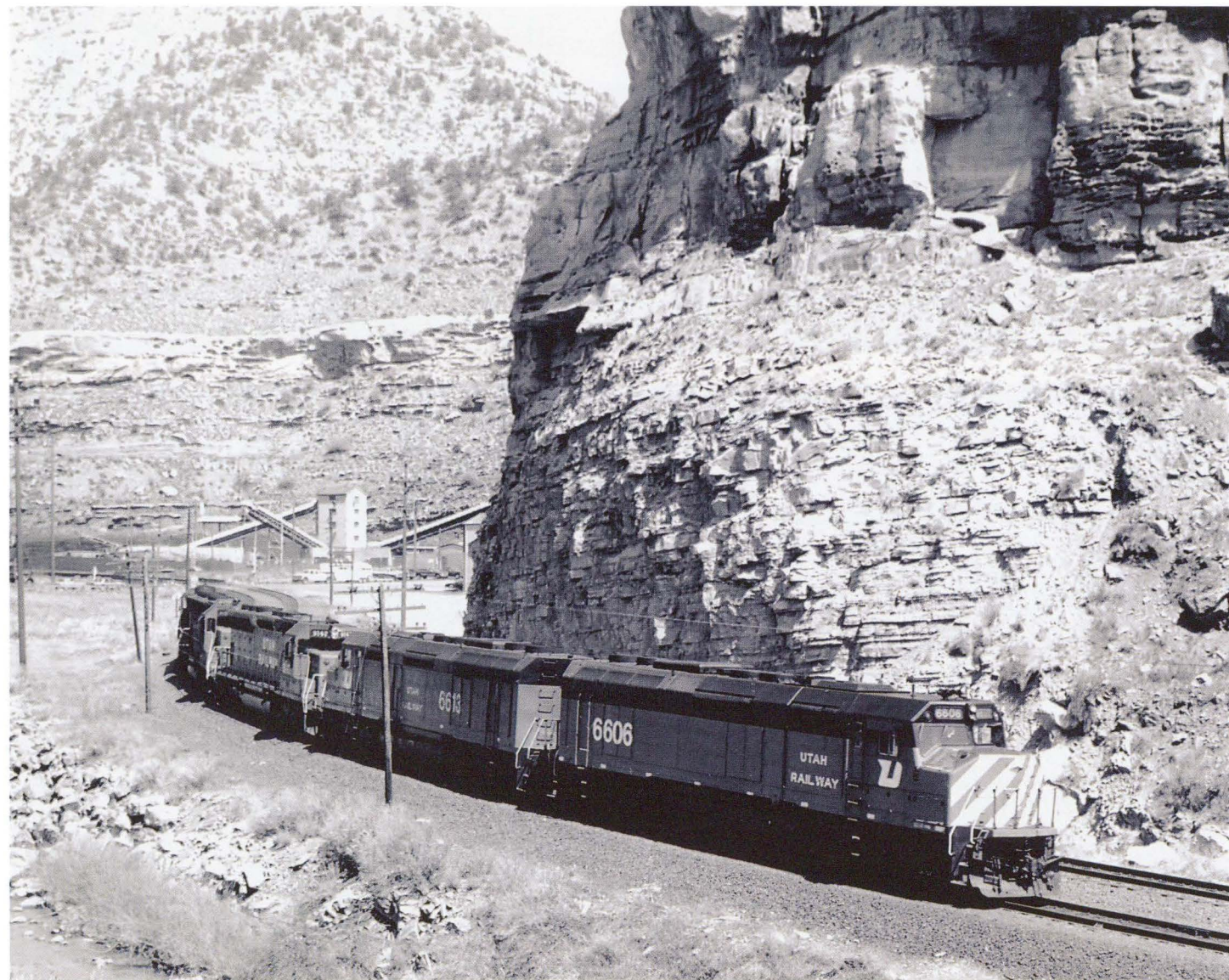
iron ore business in Australia. The five-unit helper consisting of SD50S's #6061-6064 and the MK50-3 #5004 cuts in between cars 51 and 52. The MK50-3's were originally classified MK5000C and demonstrated on the Southern Pacific and the Union Pacific in the mid-1990's. They were returned to the builder and appeared on the Utah in 2000. After some engine problems they were returned to Morrison-Knudsen and then came back to haul coal up the mountain re-designated as MK50-3's.

Today the Utah Railway not only carries coal across the Wasatch range, but also serves as a switching connection to both UP and BNSF in the Salt Lake City region. That gives rise to a roster of smaller horsepower units, but our interest here is in the likes of what coal trains look like between Helper and Provo. The Utah Railway

gained access to both Ogden and Grand Junction, Colorado. Periodically the coal business finds the Utah sending a train east to Colorado, but it's not a routine event.

Today's 90-car train is an IPPX symbol. That means it is headed for the Interstate Power Project plant at Delta, Utah, by way of UP interchange. As today's road train stops in front of Helper's depot, the cut is made just before a crossover, the front half moving forward, while the five-unit helper set moves through the crossover to a coupling in a well-choreographed exercise. Once the brake line is charged a slight surge of power is felt and the train is underway. But this trip is all-mountain and it will never travel very fast, for it will never be a 50 m.p.h. hotshot. It will be maximum power to Soldier Summit and heavy braking for most of the downhill run to Provo.

BELOW: A helper set returning light sports a couple of ex-Burlington Northern F45's -- still wearing Cascade green, but relettered for the Utah Railway and featuring a flying "U" logo beneath their cab windows. They are only a few yards from Utah Railway Junction. Notice the complex coal conveyor system in the distance. Photo by Don Sims.



OPPOSITE ABOVE: The faint nose lines of a former Southern Pacific SD45 still live on this coal train seen shortly after passing Utah Railway Junction. Utah acquired eleven SP SD45's in 1985-86, complementing the quartet of BN F45's in order to move coal to the brand new Intermountain Power Plant at Delta, Utah. The *Deseret News* reports that the Delta plant will likely be converted to burn natural gas in 2025 due to [Global Warming](#) concerns in California. Photograph by Don Sims.

OPPOSITE BELOW: Speaking of Delta, a loaded westbound IPPX train is crawling alongside the Price River in the vicinity of Royal, on its way to the huge power plant on the other side of the mountains. Medium format transparency by Don Sims.



BELOW: This is the view you get looking toward the rear of the train from a mid-train helper as it transits the Price River Canyon. As great as it looks from here, it can't match the roar of the engines! Medium format transparency by Don Sims.



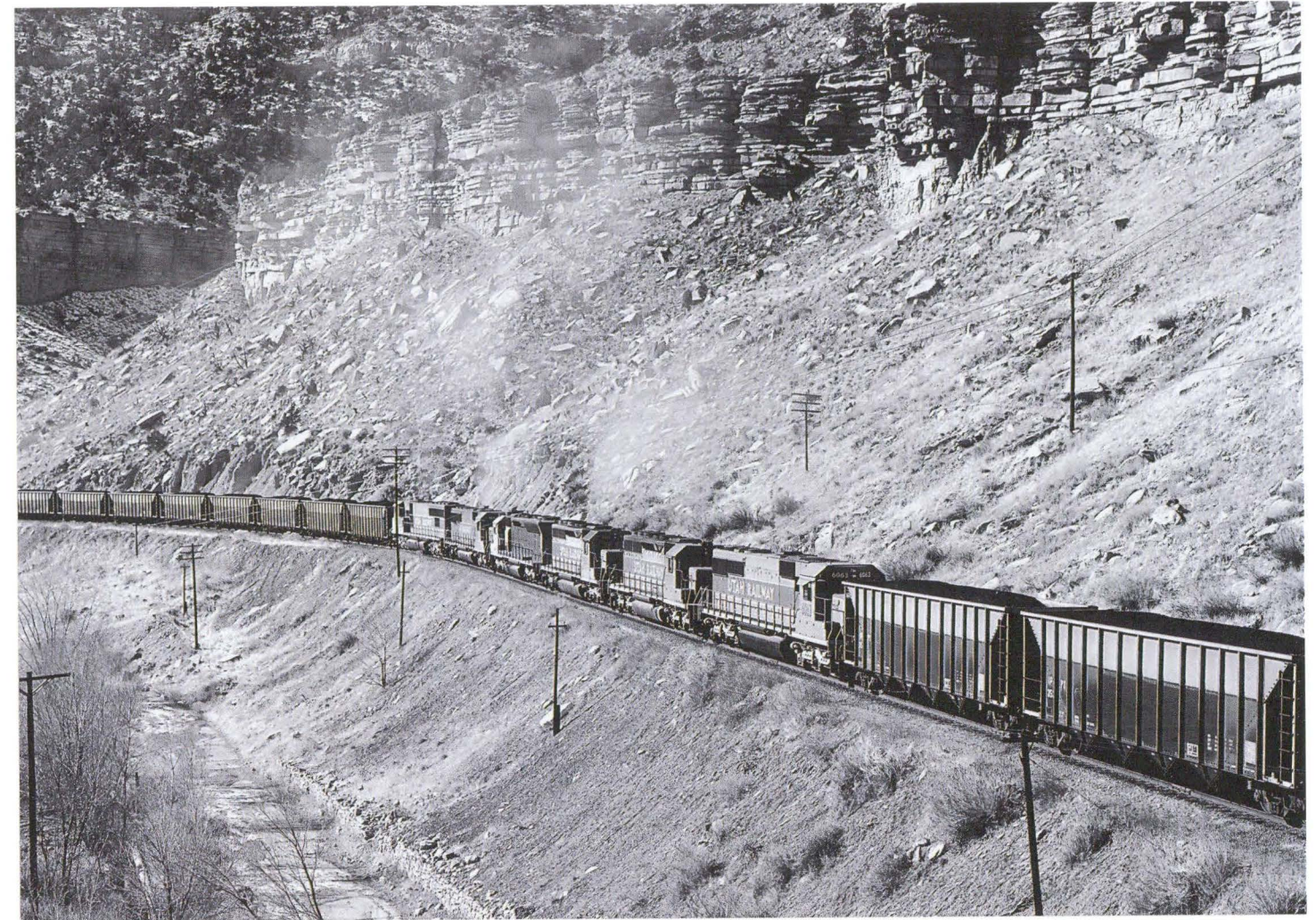
OPPOSITE ABOVE: Six mid-train helpers are lifting a loaded Intermountain Power coal train up the east slope of the Wasatch Mountains in the vicinity of Royal. Medium format transparency by Don Sims.

OPPOSITE BELOW: In stark contrast to the plodding ALCO's, a four-unit set of DRGW speedsters are heading up the canyon near Helper on May 11, 1977. While the Rio Grande transported their share of coal, they also moved a lot of merchandise across the state, plus automobiles and even piggybacks on *Railblazer* trains. Photo by Doug Harrop.

Barely out of the station the road engine is already on a 2% incline and an 8% curve. A mile later it will be at Utah Railway Junction, where the original Utah Railway splits off and once connected a network of coal mines to the south. The Wildcat loadout is located six miles down the branch and is one of the two current sources of coal for the URY. It dates from 1985, while the other, Savage, opened in the 1970's. Wildcat is also the location of a crude oil transfer point, where the petroleum is trucked in and transferred to tank cars. Just a mile from the junction is Martin, Utah Railway's original yard and headquarters. It's a classic portrait that a model railroader would drool over. There's a large stone building on a small hill that overlooks a two-track enginehouse of similar construction. At one end there is now a diesel servicing facility and in steam days there was a coal chute to service the big 2-10-2's. In today's world the helper assignments for trains from the Wildcat loadout come aboard at Martin.

But back to our westbound. Once past Utah Railway Jct. and roughly two miles out of Helper, trains enter a narrow defile at a large outcropping called Castle Gate. This is where the defining moment for tonnage ratings puts in an appearance, as ten miles of 2.40% grade curls around a winding Price River Canyon between great sandstone walls to Kyune, where a siding widens the roadbed to three tracks. From Helper to Kyune trailing tonnage behind a helper consist is restricted to 4300 tons for standard couplers, 5500 tons for high-strength couplers.

As a train rolls onto the 2.40%, it's already modest pace slows to 10-15 m.p.h. creeping around curves that run to the 8-9 degree range. In this area the mile-long coal train is typically wrapped around three to four curves at any time. Before reaching the upper limit of this heavy grade at Kyune it must pass through the Nolan Tunnels, with the main line splitting slightly to allow a single-track concrete tunnel for each track. One is 403-feet long and the other is 351 feet.





BELOW: Why go to the expense of installing and maintaining controlled center siding? Here's a good illustration... eastbound coal is stopped while being run around by westbound autos as a manifest climbs eastbound on October 4, 1994. Shades of the old PRR on Horseshoe Curve! You see exciting railroad action in this scene, while the bean counters see dollar signs. The coal train was loaded at the ARCO mine and the other two trains are the KCOAF *Kansas City - Oakland Forwarder* and RVASQ *Roseville - St. Louis (Alton & Southern Interchange)*. Photo by Doug Harrop.



At Kyune, site of a former train order office, the grade abruptly falls off to .8%, with speed picking up accordingly as the shale cliffs are left behind and more open terrain appears. A few more miles brings the train to Colton, where the Pleasant Valley Branch takes U.P. coal trains to the Skyline Mine. These days, the Utah Railway cuts off their helpers here. For decades the Utah and DRGW made that move at Soldier Summit, but several years ago, the UP decided to eliminate the crossover at that point, so Colton became the only option for that move. From Colton to the summit, there are approximately seven miles of 1%. On most railroads anything more than 1% is considered a heavy grade, but here on the Wasatch Mountains, it seems modest.

Topping Soldier Summit our coal train faces almost 25 miles of an unrelenting 2% fall. If you stand at the two signals at Soldier Summit and look to the west, you can see the railroad dropping off quickly. In a few seconds, throttle control will be past tense. The crew's objective now is to keep an almost 11,000-ton train from running away. For eastbounds it's a stiff climb, but since the Utah Railway trains heading in that direction are empty, they can get away without using helpers. In the latter years of steam power, even an empty train required a couple of 2-10-2's. There are not many Union Pacific general freights running, but BNSF's trackage rights add to the volume and many of their trains sport a DP unit in each direction as they cross the Wasatch.

OPPOSITE ABOVE: At a time when Espee ran over Soldier Summit, a Utah Railway loaded coal train waits at the crest of the Wasatch Mountains for a Southern Pacific freight heading to Provo. Here an SD45T-2 gets a roll-by as it passes a perfectly matched set of former CSX SD40's on a stunningly beautiful winter afternoon. Medium format transparency by Don Sims.

OPPOSITE BELOW: Utah Railway caboose #61 is following a long string of empties as it tops Soldier Summit at an elevation of 7440 feet, 37 feet lower than the crest on Route 6. The crew has it relatively easy from here, and will soon have the empty cars back in Martin, ready to be filled again with Carbon County's finest. Kodachrome by Dave Augsburger.

BELOW: Southern Pacific power leads a westbound train along Soldier Creek through Narrows, Utah. The railroading in this state offers some of the most diverse views imaginable, and the Utah Railway is no exception. One of the few things I remember from my geography classes was the rainy side and the dry side of mountain ranges. This is a stark illustration, with the lush forested western slope of the Wasatch Mountains contrasting with the barren landscape offered just a few dozen miles east at Kyune on the "rain shadow" side of the mountain! Kodachrome by Doug Harrop.

OPPOSITE: A nifty Rio Grande SD40T-2 Tunnel Motor leads an eastbound *Railblazer* trailer train past the signals at Rio on June 29, 1987. This location is one of the top spots along the Utah Railway, for there are impressive mountainous backdrops looming over both eastbound and westbound trains here. There is no doubt that designers had the Rocky Mountains in mind when they dreamed up this beautiful scheme for the D&RGW. Kodachrome by Doug Harrop.



As our coal hauler descends the eastern slopes of the Wasatch Mountains, it often finds its mile-long consist wrapped around 9-degree curves with its engines in dynamics. When the power disappears behind one of the many curves, the sound focuses on the aluminum cars themselves. It's a low metallic sound that is occasionally interrupted by flanges squealing on tight curves and the grinding of brake shoes. It's a symphony that you can't get when some piggy-backer rushes past you at 60-per on a three-mile flat tangent.

When Rio Grande ruled the mountain and it was controlled as a double-track line, there was a rule that no westbound trains could follow each other at less than ten-minute intervals, a concession to the toughness of mountain railroading.

At some point before Thistle is reached, several miles of original line had to be replaced because of a giant mudslide that came along

in 1983. Thistle had been a small terminal where eastbound helpers were added, and access to the 132-mile long Marysvale Branch originated, a line that no longer exists. With Thistle gone, a three-month shutdown of the main line took place while several miles of new roadbed were built, which included twin tunnels. U.S. Route 6 also was rerouted across a higher ridge.

Dating back to the early 1900's when the original Utah Railway came into existence, it had at one point decided to build its own line out of Provo over the Wasatch Mountains. It got as far as Thistle when it signed an agreement with the Denver & Rio Grande Western to function as a double-track operation. The original Utah Railway ownership map shows the segment from Martin south into mines along the Wasatch foothills, plus the disconnected twenty miles from Provo Yard to Thistle.





Just past where Thistle used to be, a narrow canyon opens to a wide plain for the final few miles as the 90-car coal train pulls into Provo Yard. Utah Railway has done its job and now Union Pacific will take over for the final leg to Delta. Ownership of Utah Railway passed to the Genesee & Wyoming in 2002 and with its 47-mile long purchase came trackage rights north to Ogden and east to Grand Junction, adding another 378 miles.

For anyone interested in photography, U.S. Highway 6 parallels the rail line over the Wasatch Mountains. Not all, but most, of the railroad lies within close sight of the slow-moving trains that this

steep mountain barrier demands. This is especially true from Soldier Summit east to Helper. Make sure you stop at the epic Tie Forks rest area -- you'll have plenty of time to catch up with your train. Be advised that U.S. 6 is a very dangerous highway and quite treacherous when the weather is bad. There is no need to speed here, as the trains move at a snail's pace. Don't worry about missing a shot at any location, since there will be an equally spectacular scene just around the next corner. If you use the generous pull-outs for your photography and stay well-clear of the roadway, you should have an enjoyable and safe adventure, with lots of beautiful pictures.

BELOW: Utah Railway Extra 400 East has a trainload of empty hoppers on the move at Thistle, Utah, on April 17, 1971. The train is crossing over to the near track and you can see the line heading south to Salina here. That is the branch to Marysville that was cut off from the rest of the system when the great landslide occurred here at Thistle in 1983, burying both the Rio Grande main line and U.S. Route 6. The line to the south was abandoned and the highway and main line were re-routed. Photograph by Doug Harrop.



OPPOSITE ABOVE: Isn't it amazing that the Utah Railway could keep their power so clean? These three RSD4's have been in almost daily coal service for nearly twenty years at this point. It's August 1970 and the trio of ALCO's are heading back to home base toting the relatively light empties up the west slope of the Wasatch Mountains. This is the view from Thistle looking west at the junction of U.S. Routes 89 with U.S. 6 and 50. Thanks to the landslide, the highway does not cross the railroad here anymore. Also, U.S. Route 50 no longer runs with U.S. 6 in this part of the state. DRGW had a small yard located right behind the photographer -- with the removal of the Marysville branch, it no longer had a purpose. Kodachrome by Dave Augsburger.

OPPOSITE BELOW: You are standing at world famous "Moark Junction" where the D&RGW and the Utah Railway part ways for a couple of miles before reuniting at Springville. Someone saw it fitting to combine the names of Arkansas and Missouri for this location in Utah. Perhaps early settlers emerged from the mouth of the Spanish Fork Canyon and decided that this plain reminded them of the midwest? This is also the location of the split of U.S. Route 6 West from U.S. Route 89. The eastbound train is traversing original Utah Railway trackage and will soon begin the long, steep climb to Soldier Summit in earnest. Kodachrome by Dave Augsburger.

LINKS TO THE PAST



A trip to the Utah Railway today is still a worthwhile experience. You can find vestiges of the past, like this concrete bridge crossing Utah State Route 51 in Springville. Right behind you is a similar bridge with a Rio Grande nameplate. Along U.S. Route 6 at Sky View, located between Detour and Tucker, UDOT built this stunning rest area in 2010 complete with a roundhouse! There is a reproduction steam locomotive inside and they even laid real tracks! They call it "Tie Fork" and it replaces the old rest area at Tucker. The UP train flying high above the roundhouse was the only coal train I saw in two days here -- mixed freights far outnumbered hopper trains.



Thanks to Positive Train Control mandated by the government, classic D&RGW searchlight signals are disappearing quickly. Here is the view at Soldier Summit facing west, showing replacement signals ready to go into service. Notice the precarious drop of the railroad here! Despite changes in signaling, railroad ownership and motive power, this is still a fascinating place to watch trains. Even UP widecabs look good when there are two on the front, three in the middle and two at the end. This train is slowly making its way to Nevada Power at Moapa. I assumed that the helpers were all remotely controlled until a crew member in the midtrain set gave me a friendly toot on the horn. Yes, one more thing that has not changed is the very amiable employees who take pride in their work and skillfully operate on of the most treacherous pieces of railroad in the U.S.





IN THIS ISSUE



End of the ALCO's on the Utah Railway ..6

Utah's Fleet of Six-Axle ALCO's Puts on a Show!

Doug Harrop

Across the Wasatch on the Utah ..21

How the Utah Railway Climbs one of America's Toughest Grades

Don Sims

Going Cables ..36

Looking at B-Units, Slugs and other Cables Goodies

Rainbow of Color in the Lehigh Gorge ..50

Lehigh Valley's River Route in Eastern Pennsylvania

Mike Bednar



- Write-of-way..4
- Time Machine..60
- Sign Language..62
- Quiz..62
- The Scenic Route..63
- People..65
- Antiques RailRoadshow..66
- Car Corner..67
- Close, But No Cigar..68
- Odds & Endcabs..70
- Trading Corner..72
- E.O.T...74

FRONT COVER ABOVE: In August 1976, Utah Railway ALCO RSD4's #303 and 305 are crossing one of the largest bridges in the state. The Gordon Creek bridge is over two football fields long and stands more than 10 stories high. Kodachrome by Dave Augsburg.

FRONT COVER BELOW: Delaware & Hudson C424m #455 and GP39-2's #7612 and 7410 are heading up into the Lehigh Gorge at East Jim Thorpe, Pennsylvania, with a mixed freight on July 15, 1981. They are on former Lehigh Valley rails here -- the CNJ passenger station is visible across the river in Mauch Chunk. It's easy to see why this town is known as "Switzerland of America!" Kodachrome by Dave Augsburg.

INSIDE FRONT COVER: Erie Lackawanna E8 #832 was built as Erie 832 in 1951. The handsome E-unit is at EL's Croxton engine terminal in Secaucus, New Jersey, in October 1974. Medium format Ektachrome 120 transparency taken with a Rolleiflex by Walter Olevsky.

©2014-2015 by White River Productions, PO Box 48, Bucklin, MO 64631. All rights reserved. Printed in U.S.A. *Trains & Railroads of the Past* is published quarterly in January, April, July and October. The contents of this magazine may not be reproduced in part or in whole without the written permission of the publisher or editor.

EDITORIAL ADDRESS for letters and editorial submissions of photos and manuscripts is TRP, PO Box 444, Hanover, PA 17331 **Editorial e-mail address:** trp@alco628.com

BUSINESS ADDRESS for classified ads, subscriptions, address changes, advertising, and dealer sales is White River Productions, PO Box 48, Bucklin, MO 64631

Circulation phone number: Toll Free (877) 787-2467 / International (816) 285-6560 **E-mail address:** info@WhiteRiverProductions.com

ISSN # 2376-6018

CONTRIBUTORS: Photos and manuscripts are welcome, but no responsibility can be taken for unsolicited submissions. Send email for guidelines, listing of needed material and submission advice. Photos used in TRP may later be used for future advertising of TRP.

CHANGE of ADDRESS: White River Productions cannot be responsible for undelivered or damaged copies due to post office error or a subscriber's failing to notify us of a new address.

Replacement copies and Post Office notifications will be billed. Send address changes to: White River Productions, PO Box 48, Bucklin, MO 64631.

Please allow four weeks for any address change.

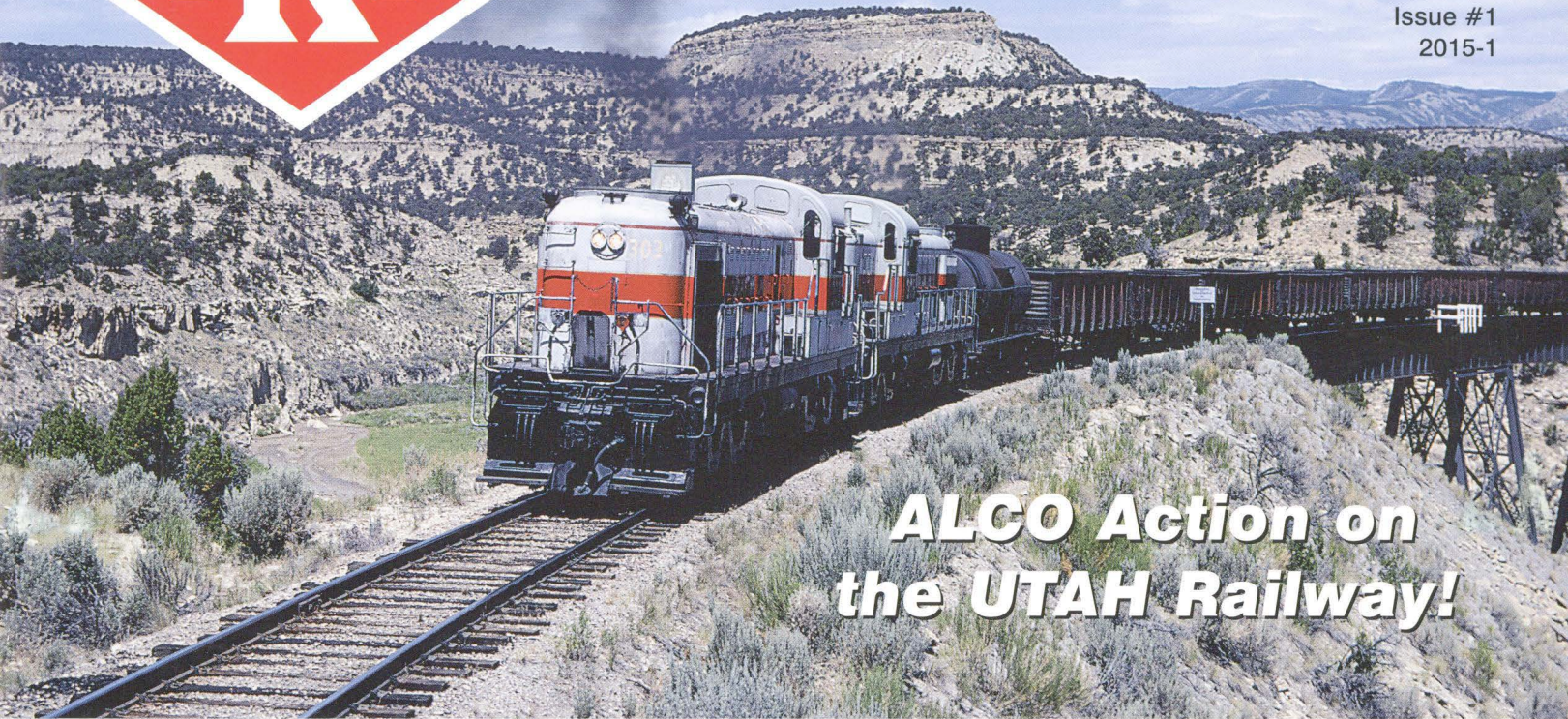
SUBSCRIPTIONS: \$30 for one year (4 issues), \$58 for two years (8 issues). Canada US\$55 for one year, US\$98 for two years, Other Foreign US\$75 for one year via Air Mail.

All subscriptions will start with the current issue unless otherwise requested. **Sample copies to U.S. addresses: \$8.95, subject to change without notice.**

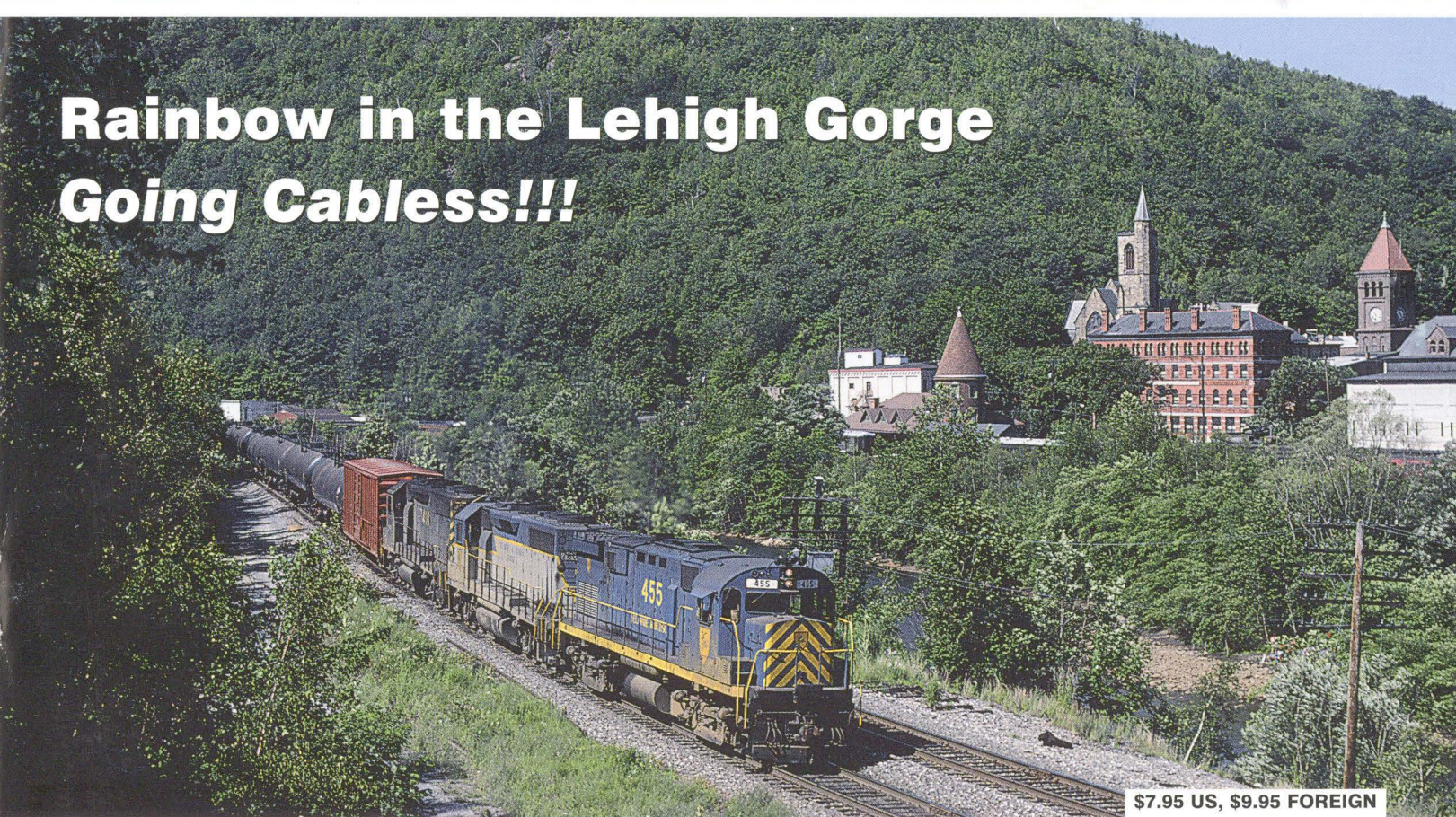


Trains & Railroads *of the Past*

Issue #1
2015-1

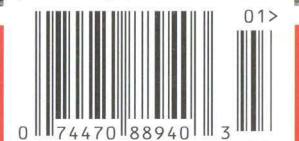


**ALCO Action on
the UTAH Railway!**



**Rainbow in the Lehigh Gorge
Going Cabless!!!**

\$7.95 US, \$9.95 FOREIGN



INAUGURAL ISSUE!