

# RAILROADS

## *Illustrated*



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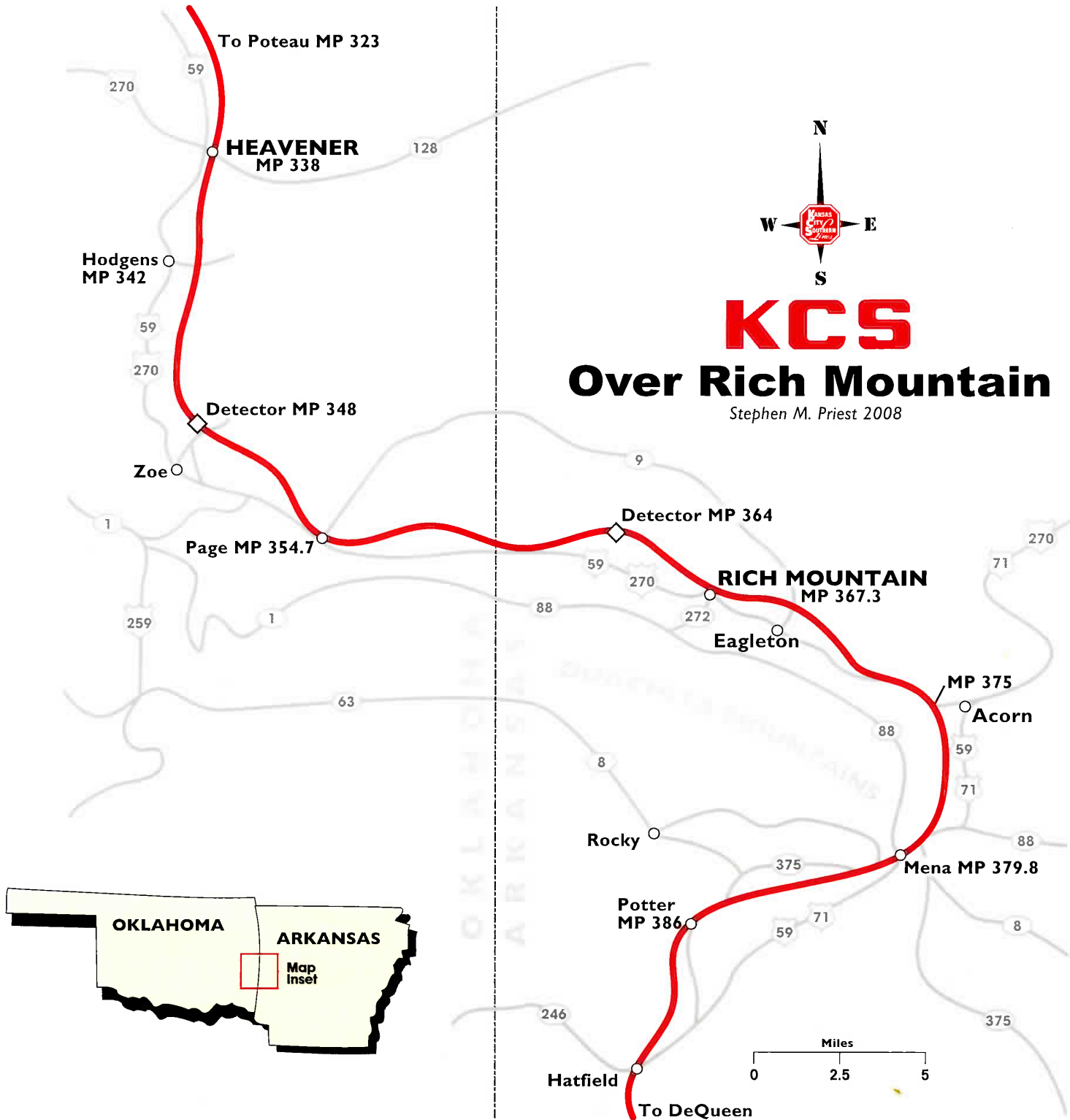




# MOUNTAIN

ARTICLE BY CARL GRAVES





**L**ike ghosts gliding through mist, three snow-white locomotives pierced the fog blanketing the valley floor. They struggled by me, pulling a long string of southbound cars over rickety, weed-choked tracks lying between two mountain ridges. I was standing by the Kansas City Southern mainline at Page, Oklahoma, in the verdant Ouachita National Forest on a humid August morning in 1971. As the growl of these SD40s receded, I heard the rhythmic clang of steel wheels on jointed rails, but then I became

confused by locomotive rumbles coming from behind. To my amazement, two more white engines appeared in this seemingly endless stream of rolling stock, followed by more freight cars and a silver caboose.

Having spent a fitful, sticky night along the tracks in a Pontiac Bonneville, I wondered if I was still asleep because I had never seen two separated engine sets on the same train. Later, I learned that my morning experience was no dream. This new-to-me railway was running two-mile-long trains with the aid of unmanned mid-

train engines. These Locotrol-powered units were the first of three strategies KCS would employ between 1966 and 2006 to lug heavy tonnage over the steep grades of Rich Mountain. First came unoccupied mid-train "slave" sets, then manned rear helpers, followed by crewless distributed power-enabled engines on the rear and middle of heavy southbound trains. These efforts were part of a fascinating 40-year railroad struggle to move minerals, merchandise, and agricultural products through a distinctive mountain region.



*Opening pages 24-25: At Page, Oklahoma, manned helpers clad in white paint push Train 97, a southbound coal load for Mossville, Louisiana, in October 1993. — Carl Graves photo*

*Opening page inset: The "DeQueen Dodger," based in Heavener, Oklahoma, is southbound at Eagleton, Arkansas, in October 1972. — Dale Jacobson photo*

*Left: Southbound G-KCAD passes South Page, Oklahoma, on October 21, 2006. Part of the new passing siding extension is visible (the near track). — Carl Graves photo*

*Below: Northbound G-MXKC, a grain empty from Mexico, sits at Page until a southbound passes so it can complete its trip to Heavener on June 8, 2006. — Carl Graves photo*





**Left: White engines on southbound Train 9 (Kansas City–New Orleans intermodal train), sit in the siding at Rich Mountain, Arkansas, for a northbound on March 20, 1995. — Carl Graves photo**

well as a casino just west of the state line near Ft. Smith, Arkansas. The majority of folks in the region are native-born Caucasians with Southern accents. For example, at Heavener's Southern Belle Restaurant, a waitress might greet you as follows: "Ha. Ya'll know the spa-shul tuh-naht is thuh rib-ah?" (Translation: "Hi. Did you know that the special tonight is the rib eye?") A southeast Oklahoma convenience store chain is called "Tote-a-Poke," which roughly means: "carry away things in a sack." For years, the region has been home to Baptist churches, bluegrass, and country music. At the Rich Mountain Country Store in Arkansas, good old boys play checkers and dominoes at indoor tables while locals chat and smoke on the front porch, like characters straight from the sets of *Green Acres* and *The Andy Griffith Show*. In the early 1990s, a new Heavener chicken processing plant stimulated the spread of poultry farms and an influx of Spanish-speaking residents, Mexican music, and businesses.

## THE TERRITORY

Southeastern Oklahoma and southwestern Arkansas have a fascinating climate, geography, and culture somewhat reminiscent of Southern Appalachia. A central feature is the Ouachita (pronounced "WASH-ih-tah") National Forest, 1.8 million acres of pine and hardwood trees. Its heavily forested mountains run from east to west like parallel fencerows, with ridge tops often 1,500 feet above the valley floor. Shortleaf pine, oaks, hickory, sumac, and sweetgums cover the slopes and bottoms. In late October and early November, the fall foliage is at its best, while winter can bring an occasional short-lived blast of snow or ice. In spring, white and pink blossoms burst from the tips of dogwoods and redbuds, followed by summer's sauna-level heat and humidity.

The forest contains few people, but is home to numerous critters. Black bear, deer, and turkey roam the region, as do hunters during distinct seasons devoted to bow and arrow, black powder weapons, and modern rifles. One can spot crows, raccoons, and armadillos, snare fish in nearby lakes, and be annoyed by large ticks and mosquitoes. Rock bottom streams like Big Creek gurgle softly, while occasional beagle or hound dog barks echo off the mountainsides.

The region's culture is as distinctive as its climate and terrain. Prior to statehood, much of southeastern Oklahoma was the Choctaw Nation created when those Indians were driven from their ancestral home in Mississippi. Today, one sees Choctaw-owned convenience store-service stations in Poteau and Heavener, Oklahoma, as

## THE TRACKS

For well over 40 years, Heavener has hosted a KCS yard and engine shop, served as a base for helper engines, and been a crew-change point for the Third District to the north and Fourth District to the south. Unlike some mountainous lines, the Heavener–DeQueen stretch has seen no major track realignment since the route was built between 1895 and 1897.

The company track chart for the 100-mile segment south of Heavener (MP 338) resembles a roller coaster. Southbounds leaving town go downgrade for the first few miles into the Poteau River valley. The climb out of this area is irregular until mile 346.5, just north of Stapp. At this spot, southbounds go from a fast gallop to a slow walk. For approximately five miles, trains struggle up a 1.5-percent grade to Blue Cut, which is the crest of Stapp Hill. Southbounds receive a brief break as they head downward to Page, but then they face a steady 13-mile stretch of 1.1-percent grade to the summit, which is the south switch of the Rich Mountain back-track (mile 367.3). From this point, trains descend segments of 1- and 1.2-percent grade, then navigate hogbacks to Mena, Arkansas, followed by 0.5- and 1.1-percent declines to Potter (MP 386).



**Left: Veteran KCS engineer Larry Harrison (at right) chats with another trainman (at left) at the yard office in Heavener on October 21, 2006, prior to jumping on his train (in the background), the H-KCSH. — Carl Graves photo**



**Left: Midtrain slaves assist northbound Train 42 at Zoe, Oklahoma, in October 1972. — Dale Jacobson photo**

Although many consider Potter the bottom of the mountain, the roller coaster is not yet finished. There are two stretches of 1.3-percent ascent between Hatfield and Hatton. From the latter point, the line is basically all downhill (1–1.3 percent) to DeQueen (MP 433) and Wade (MP 438). Thus, southbounds climb 1,100 feet from Heavener to Rich Mountain, then drop 1,300 feet to Wade. Downgrades for southbounds are hills for northbounds, but since the latter are seldom as heavy, trains traveling from Wade to Heavener face fewer challenges. The line, which goes from west to east through the forest, is seldom far from parallel highways. There are few stretches of straight track. According to veteran KCS hogger Larry Harrison, the line has 85 curves in the 95 miles from Heavener to DeQueen. Twists and turns in the trees mean that train crews must be vigilant because in spots they have little advance warning of signals.

### MIDTRAIN “SLAVES”

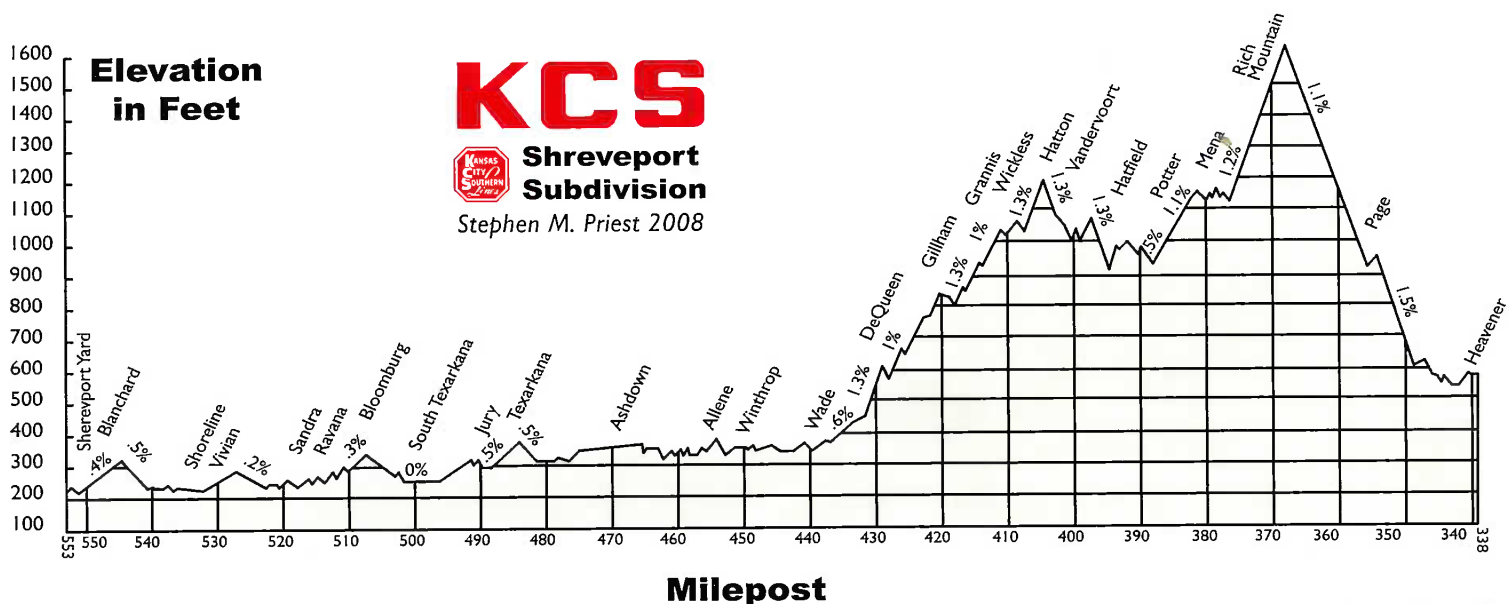
For decades, KCS operating employees have faced not only physical challenges but also scarce resources; their company has rarely possessed the financial deep pockets for equipment, crews, and track beyond a bare minimum. The philosophy of KCS president William Deramus, Sr., and successor William Deramus III was to diversify the company, using railroad income and equity to generate money for its non-railroad ventures. One result of this approach was to reduce investment in track maintenance, another to run fewer trains with more cars.

This corporate philosophy led company executives to adopt the Locotrol midtrain system, which KCS used from late 1966 until 1984. For several years prior to 1966, Southern Railway had been experimenting with radio-controlled midtrain “slave” units. KCS decided that this system would be a perfect fit for its

“mega-freight” strategy. To implement this crewless electronic train control system, the company chose new SD40s, and later SD40-2s, which were less prone to excessive wheelslip than its existing engines. The 3,000-hp SD40s, which happened to be the first KCS locomotives delivered in the new white paint scheme, began arriving in October 1966.

The system worked like this. In Shreveport, Louisiana, or Kansas City, Missouri, KCS would assemble a train of 200 or more cars, the maximum length and tonnage that coupler strength and airbrake performance would allow. On the head end, crews would place three to four SD40s, the first of which would be equipped as a “master,” while a one or two unit crewless “slave” would be placed two-thirds of the way back in the enormous consist. Between Kansas City and Shreveport, monster trains Nos. 77 and 41 would head south, while Trains 42 and 82 would journey north, in addition to an occasional grain extra. These giant freights chugged up Rich Mountain at 13–15 mph, although engine trouble could drop the speed to single digits, especially at Stapp.

From the start, these mega-freights had troubles, some not related to Locotrol. First of all, the enormous train lengths made meets difficult. Veteran KCS engineer John “Sarge” Locke recalled that on Christmas Day, 1973, the train he ran from Watts, Oklahoma, to Heavener measured two miles and five pole lengths! KCS sidings, many of which held only 40–50 cars, would not allow these monsters to meet. Locke recalled that sometimes he loaded the Page siding with cars, then took the rest of his southbound train to Rich Mountain for a meet with a northbound, after which he would take his head-end power back to Page to fetch his cars for the





**Left: A southbound manifest works between Howard and Rich Mountain, Arkansas, in July 1976. In 2006, this shot is one of many obscured by foliage. — Paul Walters photo**

return trip to Rich Mountain. Another engineer remembered splitting his 170-car northbound train between sidings at Gilham and Wickes so that a 200-car southbound could pass. An older crew member recalled that two mammoth trains sometimes used a single long siding to pass each other by a series of time-consuming forward and backup moves and car shuffles called a “saw-by,” an operation as difficult to describe as it was to execute.

Some Locomotive-related woes were fixed, while others could not be. The original control system required that mid-train and head-end power had to be in sync, be it Run 8, Dynamic, or any notch in between. Locke recalled that in 1972 the railroad changed the system so that engineers could independently motor the slaves. For example, he could throttle down the head-end power once it crested a hill while still keeping mid-trains revved up until they reached the summit. On the other hand, Locomotive engines could not be switched from “slave” to “master.” As a result, sometimes “slaves” would end up on the south part of the KCS when they were needed farther north to shove southbounds over grades like Rich Mountain.

A serious problem arose when mid-trains lost electronic communication with the head end. Veteran KCS engineer Larry Harrison placed some of the blame on Locomotive electronics placement in engines noses right next to the sand box, where this sensitive equipment was exposed to intense heat and grit. When a moving freight’s electronic continuity was interrupted, “slaves” would continue running in the last mode prior to the break.

Loss of contact between head end and “slaves” contributed to derailments. Sev-

eral Heavener-based train crew members recalled the time at Wade (south of DeQueen) when a long freight put 67 cars on the ground, including the mid-train slaves, which was still roaring in Run 8 when mechanical department people arrived! In other cases, trains kept upright, but knuckles or drawbars broke, causing lengthy delays. During these years, one could see a large pile of such train pieces at the Page siding backtrack, and along the right-of-way.

Trouble also stemmed from the destructive combination of mid-train placement and bad track. The in-train dynamics of “slaves” placed two-thirds of the way back from the head end generated slack run-ins and run-outs that jolted cars and broke knuckles. According to Locke, “The track was bad in those days, so the rails were easy to spread and there were low joints.” When the slack hit just right, the

force of “slaves” pushing forward would lift a car off the rails at a bad joint, generating a derailment. He recalled a string of such incidents, including derailments at Potter and Page. Railroad analyst Fred Frailey reached a similar conclusion: “[T]he slaves were literally pushing unstable cars off unstable track on unstable curves.”

Over time, KCS made changes that reduced derailments, pull-aparts, and meet delays. Officials shifted the “slaves” forward of the midpoint in the cars so that on the heaviest trains, they were pushing only 40 percent of the consist and pulling the rest. The railroad also decided to reduce train length so that their size did not exceed existing passing sidings. The latter change was partly generated by realization that shorter, more frequent trains would better satisfy customers. In addition, under the leadership of President Thomas Carter, who took over in 1973, the railroad doubled its maintenance-of-way spending, in part because of the impending arrival of new traffic — unit coal trains.

The 1973 Arab oil embargo-related energy crisis stimulated U.S. power plants, including some along KCS rails, to shift from oil and natural gas to coal. To prepare for heavy unit coal trains, the railroad significantly upgraded the line from Kansas City to Welsh, Texas. The generating station at the latter point received the first 100-car hopper train in November 1976. Later, KCS began carrying unit trains to the Mossville, Louisiana, power plant.

On the Rich Mountain grade, heavy coal loads for both plants struggled up new rails with the help of four engines on the point and three mid-train “slaves” back among the



**Right: An array of end-of-train devices, hoses, and knuckles are “sorted” by the yard office at Heavener. — Carl Graves photo**



hoppers. This Powder River coal brought the first significant foreign power (cascade green Burlington Northern engines) and the heaviest trains ever to the Ouachitas, as well as a steady revenue stream to fix bad track marked by slow orders as low as five mph. Around 1980, KCS stopped using "slaves" on manifest freights following a major derailment at MP 427 north of DeQueen, but mid-trains continued in coal trains for several more years.

## MANNED HELPERS

In 1984, KCS switched from crewless mid-trains to manned rear helpers because of the looming high price tag to update the aging Locotrol equipment as well as the need to run more and heavier southbound trains over grades at Rich Mountain and the Ozarks to the north. The railroad used between one and three pairs of white SD50s, SD40s, or SD40Xs to push heavy southbound unit coal, grain, and potash trains from Heavener to Hatton or Gillham, Arkansas. After uncoupling from their train, helpers returned light to Heavener, unless a northbound needed assistance due to engine failure.

The most common helper assignment was southbound coal loads, which grew in length and number as time went on. By 1995, helper sets pushed an average of 38 Welsh and 16 Mossville loads a month over Rich Mountain. After unsuccessful attempts farther north (in the Ozarks) to lug these heavy trains over hills with two fewer units than in mid-train "slave" days, the railroad decided to place five engines on the front (BN C30-7s, BN and KCS SD40-2s), in addition to a helper set on the rear. Over time, KCS and Oakway SD60s and BN SD60Ms made appearances on the point.

The helper operation was straightforward and reliable. According to one Heavener road foreman of engines, pushers virtually eliminated train separations caused by the old remote-control mid-trains. "Sarge" Locke recalled, "After attaching my helpers to the rear of a southbound train and performing an air test, away we went." The head-end crew made no communication with the helpers unless the former saw a yellow or red signal. Except for throttling back a notch or two at Hodgens and Blue Cut, rear pushers were in Run 8 most of the way over Stapp Hill and Rich Mountain.

Helper service had occasional rewarding or uncomfortable moments. After completing their shove, an engineer and conductor would sometimes briefly halt their engines in front of the Rich Mountain Country Store to purchase homemade fried rolled apple pies for their return trip to Heavener. When helper-assisted heavy trains were climbing

**Centerspread (pages 32-33):** Northbound coal empty C-TUKC swings around a curve and enters the new double track at South Howe, Oklahoma, on June 10, 2006, after having received a fresh crew at Heavener a few miles to the south. — Carl Graves photo

Stapp Hill, the normal speed was 10-13 mph, but if an engine on the rear or head end failed, the train could slow to five mph or less. The Heavener trainmaster told crews to stop under such circumstances, but if the dispatcher insisted that the train keep going, traction motor leads might melt, halting locomotive and train.

With troublesome mid-train "slaves" gone, the railroad was a safer place, but danger was never far away on the mountain. In 1998, while supervising an engineer trainee in the rear helper units, "Sarge" Locke became concerned when his heavy coal train failed to slow down after it had passed the Rich Mountain summit. The coal load quickly gained speed as it plunged down the 1.3-percent grade. "Sarge" then told his trainee: "Big hole the train!" but the novice hogger repeatedly hesitated. With the speedometer reaching 69 mph, Locke moved to the control stand and threw the train into emergency himself. The train's momentum was so great that its speed reached 79 mph before the full braking began to slow its descent. With wheels and brake shoes squealing and smoking, the big coal train finally ground to a halt west of Acorn at MP 372, the steepest part of the downgrade.

## DISTRIBUTED POWER

In late November 1999, the sun began to set on manned helper operations over Rich Mountain and the Ozarks to the north. The reasons were not technical or safety related, but issues such as train velocity and crew costs. Under the leadership of Michael Haverty, the KCS decided to purchase 50 new 4,400 hp AC4400CW engines equipped for distributed power, a system Union Pacific had been using

since December 1995. Soon, mixtures of KCS, UP, and BNSF AC4400CWs, and SD70MACs (three engines up front, two on the rear) appeared on Rich Mountain, lugging coal loads destined for Welsh and Martin Lake, Texas, as well as Mossville. Occasionally a single DPU (unmanned distributed power engine) would be on the rear of one of the increasingly frequent unit grain trains destined for domestic feed mills or Mexico. Except during temporary power shortages of DPU-equipped engines, manned pushers were no more.

Distributed power had several advantages. By ending helper districts in the Ozarks and the Ouachitas, train labor costs dropped. According to Mark Davidson, then KCS Assistant Vice President-Strategic Studies, cycle times of coal trains improved significantly because they no longer halted several times to add and subtract pushers. When AC4400s were used as rear DPUs, brake applications were 30 percent faster than with manned helpers because the brake set began simultaneously from both ends. Use of these engines also allowed tonnage on manifests Nos. 83 and 84 (Kansas City-Meridian, Mississippi) to increase from 7,000 to 10,000 tons. In addition, distributed power allowed the railroad to increase coal train length from 115 to 125 cars. Although the new system only boosted train speed on Stapp and Rich Mountain grades by one to five mph, the new AC engine technology had a larger advantage: the ability to grind up grades at single-digit speeds without damaging traction motors. Such an attribute came in handy when a locomotive went down due to mechanical problems.

As with mid-train remotes, KCS fine-tuned distributed power operation

**Below:** Part of the power for the Ft. Smith Dodger sits near the diesel shop at Heavener on October 22, 2006. Lately, the power short KCS has used locomotives like the 4099 to switch the yard or attempt to switch nearby industries on the Waldron Branch. — Carl Graves photo









**Above: A tied-down and crewless northbound train waits for new conductor and engineer near a distinctive KCS mile marker at Petros, Oklahoma, located a few miles north of Heavener, on June 10, 2006. — Carl Graves photo**

through experimentation. After considerable study, railroad officials decided in September 2001 to place DPU power two-thirds of the way back in heavy grain and coal train consists, instead of on the rear, to reduce track stress and fuel consumption. For a while, KCS ran Welsh coal loads with only two AC4400s on the point and another pair two-thirds of the way back, thereby saving one engine. Officials later added back that third engine to the head end because, in the words of Heavener's then-assistant trainmaster John Carson, two + two trains "would stall on Stapp if there was even one raindrop" of precipitation on the rails.

Heavener-based crews appreciated distributed power for additional reasons. First, the ACs were the first KCS-owned engines with air conditioning, a valued feature in the hot, steamy Ouachita National Forest region. Silver-haired conductors and engineers note that in contrast to the old "master" and "slave" units, the AC engines can quickly switch from being remote DPUs to head-end units. These veterans have a special appreciation for the more reliable head end-remote continuity, a result of advances in radio communications and micro-processor controls. Several pointed out that sensitive electronics housed in their new isolated climate-controlled cabs are better protected than the Locotrol equipment exposed to the elements in engine noses. Company towers as well as DPU-equipped locomotives repeat

engineer's electronic throttle commands, thereby reducing the chance of head end-remote interruptions. Communication breaks do happen, but they are usually so brief that the computer does not switch the DPU throttle setting to idle or trigger a penalty-brake application.

Distributed power has proven its ability on the railroad's heaviest regular train, the C-KCTU, a monster coal load for the Texas Utilities power station in Monticello, Texas. In 2006, these 135-car, 7,200-foot-long behemoths dragged their 19,000 tons for 300 miles over grades from Pittsburg, Kansas, to DeQueen or Wickes, Arkansas (where they set out their rear units) with the aid of a 2-2-2 configuration. That is, they had two engines on the point, another pair approximately two-thirds of the way back, and a final pair of DPUs on the rear. One train service veteran described a recent run over Rich Mountain as a "sweet" experience. "You can't imagine with a difference it makes," he said, to have three sets of reliable, electronically-linked engines spread out among the hoppers, thereby dramatically decreasing split knuckles and drawbars.

Experienced with both Locotrol and manned rear helper operations, hogger Larry Harrison explained how his console provided him considerable train handling ability when running the C-KCTU. During much of the trip segment from Heavener to Hatton, he operated all three engine pairs "mu-ed," that is, in the same setting (often Run 8). At certain points he switched to "split screen" so he could run them separately. "Once your lead units reach Stapp Hill summit, you notch them back to 4 while keeping all your DPs in Run 8. You put your mid-trains back to 4 when they crest the hill, keeping the rear DPs in 8 until they pass the summit." After a brief respite, he returned to "mu" mode, placing all engines in full throttle for the climb to Rich Mountain summit, at which point he repeated the "split screen" independent handling. He added that when operating the train over hogbacks, he could put the head end in dynamic braking mode while keeping the DPUs in power, thereby eliminating the chance of tearing the train apart.

Distributed power has greatly reduced, though not completely eliminated, train handling problems over Rich Mountain. If all units are working properly, southbounds like the C-KCTU will go 12-14 mph up Stapp and 16-19 from Page to Rich Mountain. According to Heavener Assistant Trainmaster Jesse Gath, perhaps once a month during 2006, a train would stall on the mountain, almost always due to engine failure. For example, in September, a grain load laid down on Stapp Hill because a locomotive ran out of water. He dispatched another crew from Heavener to swap out the dead engine with a functioning locomotive from a nearby northbound grain empty. Broken knuckles and draw-

bars are a cause for vigorous investigation because of the major damage they cause to train velocity, but these days such incidents are rare.

When a traffic increase caused KCS in 2005 and 2006 to add new and used engines as well as modify existing units, distributed power was an important consideration in most decisions. For example, 30 new 4,400 hp SD70ACs arrived on the property for head-end or remote DPU service on coal, grain, and manifest trains. Each locomotive can pull nearly 10 percent more loaded coal cars than any other KCS locomotive. The company later decided to purchase 30 more of these engines, as well as 30 GE ES44ACs (also DPU-equipped), with arrival expected in 2006 and 2007. KCS also began preparing 44 existing SD60s for distributed power service, a feature already in place on its 4,000 hp Mexican TFM SD70MACs. In 2006, the power-short KCS had to rely on many UP and BNSF engines for head and rear-end unit coal train power. DPU-capable KCS gray engines tended to cluster in the mid-train position of the Monticello coal loads as well as on the front and rear of southbound unit grain trains. The only non-distributed power newcomers on KCS territory, yellow former UP 6,000 hp EMLX leasers, were usually assigned to manifest freights not requiring DPUs.

## CHANGE AND CONTINUITY

In addition to shifting KCS strategies to shove southbounds over Rich Mountain, other changes have affected the railroad and Ouachita National Forest region during the past 40 years. Foliage now obscures most of the formerly clear right-of-way, while short sidings at places like Howard and Acorn are gone. Gray locomotives began replacing white engines in 1988. Traffic increased from perhaps five through manifests and grain trains per day in 1970 to a dozen in 2004, and by the fall of 2006, 16-20 or more coal, grain, and manifest trains crossed the mountain every 24 hours. Daily pairs of predominantly intermodal trains connecting Kansas City with New Orleans and Dallas in the early 1990s were gone by 2006. Unit grain train shipments to the South and Mexico increased, as did coal to power plants in Texas and Louisiana. Train symbols switched from numbers to letters. For example, Kansas City-Shreveport Train 81 became the M-KCSH. To ease congestion, KCS lengthened sidings at Page, Gillham, and Wade, and connected the Howe and Heavener sidings. In 2006, train crews began calling signals, while railroad personnel in Pittsburg began gassing up DPUs to reduce train dwell time at the Heavener fuel pad.

Other aspects of life on the railroad and Rich Mountain have changed very little. Local freights — called "dodgers" — still operate between points like Heavener and Ft. Smith, Arkansas, although the Waldron Branch is now in the hands of a shortline.

Many members of the KCS operating department still resemble a boisterous extended family of good old boys who joke and kid one another even as they use their skill and creativity to get trains over the road despite Mother Nature, occasional mechanical problems, and limited company resources. Railroad operations in the Ouachitas are still exciting. Seeing a heavy southbound crawl up the grade in the fall of 2006, its SD70ACes illuminating the yellow leaves at old Howard, is as energizing as watching the ghostly white SD40s pierce the fog at Page in the summer of 1971. Both events are fascinating aspects of Kansas City Southern's 40-year struggle to move trains over Rich Mountain.

### THANK YOU

*I incorporated data from the published work or written communication of Fred Frailey, Rich Wallace, Robert Harmen, Paul Walters, Jim Boyd, Warren Cailleff, Terry Lynch, Charles Pitcher, Mike Palmieri, and Tom Kline. I also used material from interviews with John "Sarge" Locke, Larry Harrison, Clyde Bates, Wayne Kuchinsky, Mark Davidson, John Carson, Jesse Gath, Hoyt Dreyer, and a number of KCS employees whose names I did not learn. All these helpful people should be blameless for any errors that might remain in this article.*



**Below:** A northbound rock ballast train passes Page on June 9, 2006. — Carl Graves photo

**Above:** KCS AC4400CW 2041 leads two other ACs through Page on July 7, 2000, on Train 65 bound for Ft. Towson, Oklahoma. — Carl Graves photo

