

TRAINS

of the 1960s

Special 2014



Challenging times for America's railroads

Diesel diversity • Steam survivors • Passenger trains • and more!

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The first GP30 is the subject of a proper Detroit new-model roll-out at the General Motors Technical Center in Warren, Mich., on October 18, 1961. EMD produced 948 GP30's during 1961-63. John S. Ingles

TRAINS *of the 1960s*

Challenging times for
America's railroads

Edited by Robert S. McGonigal

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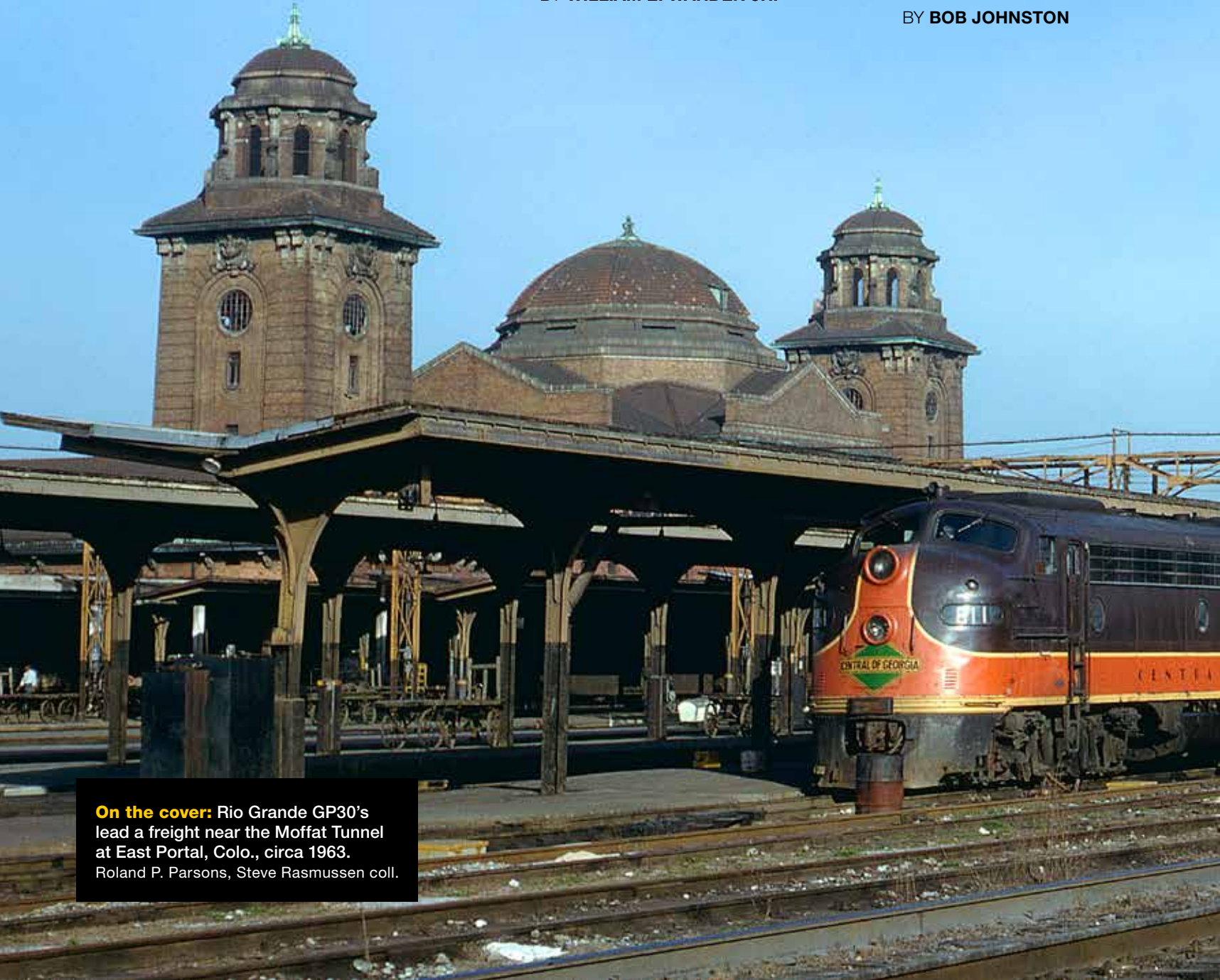
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The *Seminole*, a Chicago–Jacksonville (Fla.) train that operated over Illinois Central, Central of Georgia, and Atlantic Coast Line, awaits its 8:20 a.m. departure time from Terminal Station in Birmingham, Ala., in March 1968. Frank & Todd Novak collection

A time of challenges

Welcome to TRAINS OF THE 1960s, the second in a series of decade-themed publications from CLASSIC TRAINS. Like its predecessor of one year ago, TRAINS OF THE 1950s, this edition is composed of articles from TRAINS and CLASSIC TRAINS magazines. The covers of the issues in which the stories were originally published appear at the beginning of each article. These stories have generally been completely redesigned, with additional photos added, or with color photos in place of the original black-and-whites. Once again we've included an all-color photo gallery, and historian H. Roger Grant has returned with an introductory essay covering significant trends in 1960s railroading.

Of the 18 listings in the table of contents on the previous pages, 11 are by one author: David P. Morgan, TRAINS' editor from 1953 to 1987. Morgan was at the top of his form in the '60s, not only editing the magazine but also producing major feature stories. "DPM," who died in 1990, is also remembered for his short essays, which, paired with one or a handful of photos over two or a few pages, were eloquent reflections on some aspect of railroading. We've included eight of these gems here.

The 1960s were challenging times for America's railroads. Competition from other modes was killing the passenger business and cutting deep into freight revenues. Government regulation limited managers' options. There were no silver bullets of productivity, as dieselization had been in previous decades. But from our vantage point half a century later, the era was one of great richness and diversity.

Robert S. McGonigal

TRAINS of the 1960s

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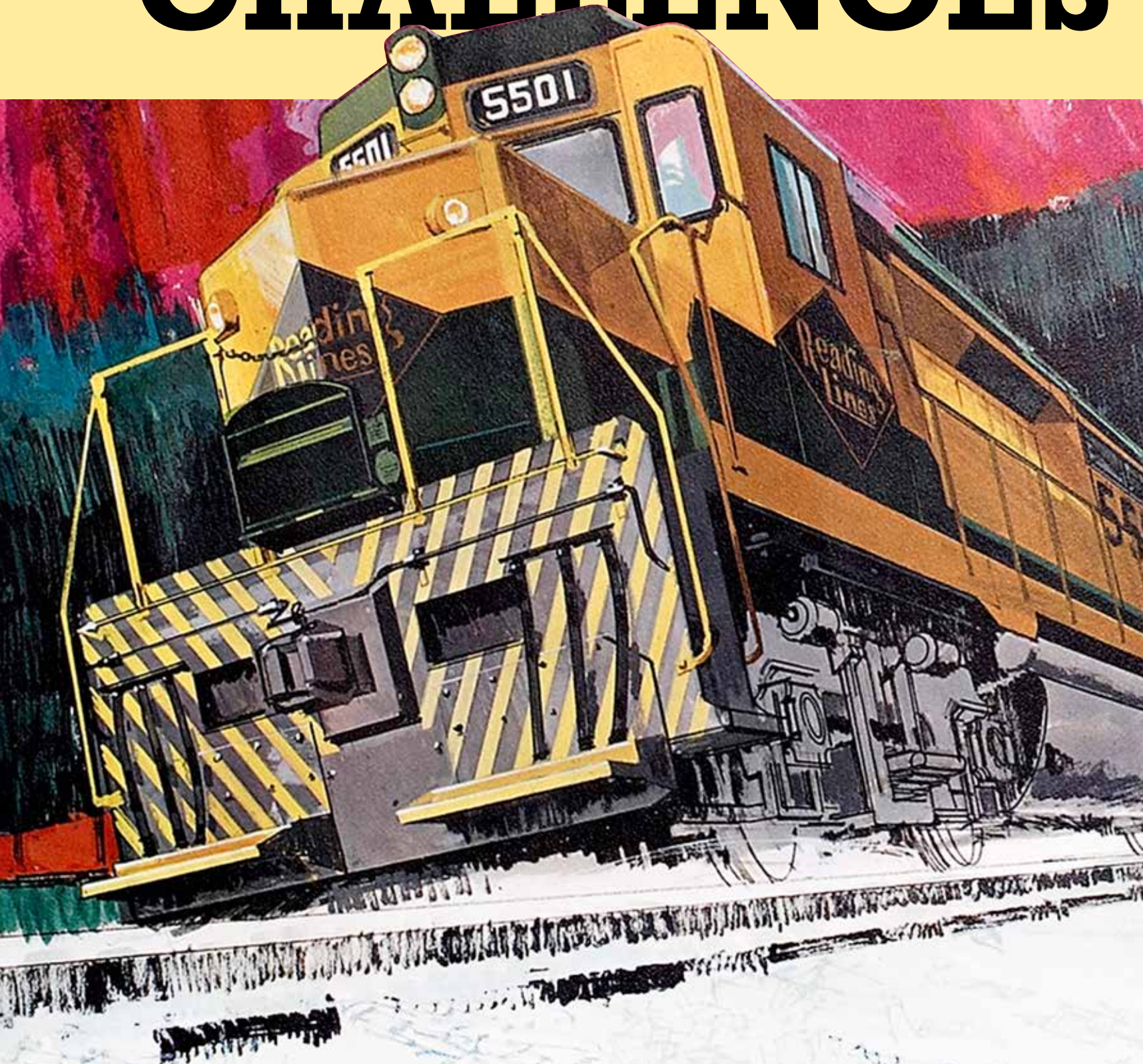




Union Pacific received 161 immense twin-engined diesel freight units from all three major builders in the 1960s. One of the giants, 5,000 h.p. EMD DD35A No. 77, leads an SD45 and GP30 on a freight in Oregon's Blue Mountains. Keith Arding

RAILROADS IN THE 1960s

A decade of **CHALLENGES**



By the early 1960s, the diesels that had replaced steam in the 1940s were due for replacement, resulting in a wave of “second-generation” models like EMD’s 2,250 h.p. GP30, ordered first by the Reading and promoted in bold artwork by illustrator Tom Fawell.

AND WORRIES



Beset by competition, rising costs, and regulation, American railroads in the 1960s responded with mergers, new types of equipment, and a retreat from the passenger business

BY H. ROGER GRANT

The 1960s was a time of challenges and worries for American railroads, continuing concerns of the previous decade. Yet when lawmakers passed the Transportation Act of 1958, there had been a glimmer of hope. This measure was well-meaning, being designed “to relieve the deteriorating railroad condition.” Although the law created a more progressive approach to rate-making and guaranteed loans to carriers in serious financial trouble, it was badly flawed. In the words of the Association of American Railroads, “The railroads remain bound by horse and buggy-era restraints.” Companies still found it difficult to win speedy approval to remove money-draining passenger trains, close little-used stations, and abandon lightly trafficked branch lines. A meaningful regulatory renaissance remained in the future.

If dieselization and other technological improvements dominated railroaders’ attention during the 1950s, corporate mergers took center stage in the ’60s. Between 1955 and 1966 the Interstate Commerce Commission received 50 merger applications from Class 1 roads, and more were to come. Although political assassinations, civil rights, Vietnam, the space race, and such counter-cultural events as the Woodstock music festival grabbed headlines, the news media also covered some of the leading railroad mergers, most of all the monster union of two historic rivals, New York Central and Pennsylvania. Although stockholders of the Central and Pennsy had endorsed a merger in 1962, it took the ICC several years before it ultimately granted its approval. “M-Day” for the new

Penn Central Transportation Co. was February 1, 1968. Then 11 months later, at the ICC’s behest, the bankrupt New Haven Railroad, a “hopeless invalid,” was forced into the fold, so a single corporate banner flew over 20,000 miles of line in 16 states and 2 Canadian provinces. Penn Central proudly claimed to be the largest investor-owned railroad, in terms of mileage, in the world.

Observers knew that mergers were radically changing the industry’s structure. Other 1960s combinations garnered attention as Chesapeake & Ohio took control of Baltimore & Ohio and Western Maryland; Erie united with Delaware, Lackawanna & Western; Chicago & North Western acquired Minneapolis & St. Louis and Chicago Great Western; Atlantic Coast Line and Seaboard Air Line became Seaboard Coast Line; Norfolk & Western absorbed Nickel Plate Road, leased the Wabash and Pittsburgh & West Virginia, and gained stock ownership of Akron, Canton & Youngstown; and Southern acquired Central of Georgia and Georgia & Florida.

Although the hoped-for merger of Rock Island and Union Pacific never occurred, the lengthy hearings before the ICC, which began in May 1966, generated considerable attention in the Midwest and West. The merger proceedings became badly bogged down, lasting into the early 1970s and producing a staggering 150,000 pages of testimony, exhibits, briefs, petitions, and replies. By the time the ICC gave its assent, UP no longer wanted the Rock Island, whose physical plant and finances had deteriorated severely.

Why this “merger madness?” The consensus in the business world grew that if railroads



were to remain economically viable, mergers offered the best option. The list of advantages was considerable, as savings were anticipated to be realized from uniting administrative functions, as well as operating and maintenance consolidations, plus the downgrading, sale, or abandonment of duplicative lines. Yet the excessive time that the ICC often took to decide the cases had a pronounced negative impact — every month of delay cut into the savings that companies had hoped to gain.

VANISHING VARNISH

Other railroad-related events received media attention, notably the “vanishing varnish,” as the number of U.S. intercity passenger trains shrank from about 2,000 in 1960 to 500 or so at the end of the decade. Another way of showing the decline was route-miles: passenger trains operated over 107,000 miles in 1958 but on only 49,000 miles in 1970.

MERGERS AND OTHER MILESTONES

Oct. 17, 1960

Erie and Lackawanna merge, forming Erie-Lackawanna

Nov. 1, 1960

Chicago & North Western acquires Western Minneapolis & St. Louis

Dec. 31, 1960

Minneapolis, St. Paul & Sault Ste. Marie (“Soo Line”); Wisconsin Central; and Duluth, South Shore & Atlantic



merge to form the Soo Line Railroad Co.

May 1962

Chesapeake & Ohio acquires control of Baltimore & Ohio

Jan. 21, 1963

North Shore Line interurban shuts down



June 17, 1963

Southern Railway acquires control of Central of Georgia

October 1961

Lehigh & New England shuts down



September '64

Texas & Pacific acquires Muskogee Group (KO&G, MV, OCAA), sells OCAA to ATSF



Penn Central symbolized the industry's ills and its penchant for mergers. Two PC freights, one led by a PC GP40, PRR U28C, and NYC F7, are eastbound on Horseshoe Curve on June 25, 1969, one year before the behemoth went bankrupt. David Oroszi

During 1960–69, 13 Class 1 railroads went freight-only. Several factors explain these numbers. Increasing competition from private automobiles took advantage of the rapidly expanding network of high-speed Interstate highways. Passengers enjoyed the luxury and convenience of jet-powered airliners, a new fastest form of long-distance travel. The continuation of a World War II-era tax of 10 percent on railroad tickets also hurt. And when the U.S. Post Office Department canceled mail contracts that removed most Railway Post Office cars in 1967 and '68, the last pillar that supported many passenger trains was destroyed. By 1970, it appeared that long-



Room-filling computer systems like Illinois Central's "Main Central" installation near Chicago wrought a hidden revolution in the 1960s. CLASSIC TRAINS collection

Photo credits: M&STL RS1, M. L. Powell; Soo F7, Tom Hoffmann; NSL car, D. Greer Nielson; L&NE FA, Gene Collora; C&EI E and F units, Robert Cafilisch, Helen Cafilisch coll.; CGW GP30, J. David Ingles; NH FL9, Jim McClellan

Oct. 16, 1964

Norfolk & Western absorbs or gains control of Nickel Plate, Wabash, P&WV, and AC&Y

May 1966

Missouri Pacific acquires control of Chicago & Eastern Illinois



July 1, 1967

Seaboard Air Line and Atlantic Coast Line merge to create Seaboard Coast Line

Feb. 1, 1968

Pennsylvania and New York Central merge, forming Penn Central

May 1968

Tennessee Central divided among Illinois Central, Southern, and Louisville & Nashville

July 1, 1968

C&NW acquires Chicago Great Western



Jan. 1, 1969

PC acquires New Haven as condition of PRR+ NYC merger



July 1, 1969

SCL acquires Piedmont & Northern

June 6, 1969

MP sells C&EI Evansville line to L&N, as required by ICC



Passengers in the 20th Century's observation lounge appear as ghosts during a stop at Harmon, N.Y., just days before the train's December 3, 1967, last run. Karl Zimmermann

haul passenger trains were doomed.

The contraction of passenger service was nationwide, and "last runs" became ubiquitous. Southern Pacific exemplified the shrinkage, and its philosophy was clear. Said President Donald Russell to SP shareholders in 1967, "The long-haul passenger train has outlived its usefulness." During the 1960s SP ended such trains as the *San Francisco Overland* (1964), *Shasta Daylight* ('66), *Golden State*, and *Lark* (both in '68). Russell's conclusion was a widely accepted. When Minneapolis St. Louis ended its final passenger runs on July 20, 1960, motor trains Nos. 13 and 14 between Watertown, S.Dak., and the Twin Cities, the *Minneapolis Tribune* observed, "Such is progress. Now the passenger trains are all but done, and the depot is no longer the center of the town's attention."

Although there were public protests about train discontinuances, railroad officials tried to convince regulators that passenger losses could no longer be sustained. Some carriers hoped to gain regulatory approval for train-offs by discouraging ridership, while others refused to embrace such a shameful ploy. In early 1967, Gregory Maxwell, president of the Erie Lackawanna, observed the differing atti-

tudes. "When I took the 20th Century from New York to Chicago," he said, "I found smelly, overflowing toilets; broken seats; and filthy windows. Going back to Ohio, I took our train. Everything worked, cars were clean, and we were right on time. The only problem I saw was that we didn't have many passengers. We wanted to treat the traveling public right." Among others that embraced a

customer-friendly attitude were B&O-C&O, Burlington, Great Northern, Illinois Central, Kansas City Southern, Santa Fe, Seaboard Coast Line, and Union Pacific. All discontinued some trains, but strived for quality service on what was left.

Not all varnish was on the chopping block. As the decade closed, the media made much of a particular set of smart, new trains. On January 11, 1969, Penn Central introduced on the New York-Washington corridor its high-speed electric *Metroliners*. The federal government helped make these trains possible through financial assistance in the High Speed Ground Transportation Act of 1965. The Budd-built multiple-unit cars offered excellent accommodations and received positive responses from a growing ridership. "The designers and operators have combined in the *Metroliner* some of the best features of air and rail transportation without bringing along the discomforts, too," said one review. Still, these popular trains alone, of course, could not save PC from financial disaster; it entered bankruptcy in June 1970, at the time the largest corporate failure in history.

While *Metroliners* pleased travelers, the Pennsy had angered many when it came to a beloved building. Although the closure of scores of small-town depots, many of which were razed, sold, or left to decay at trackside, caused some local displeasure, there was a real outcry in 1964 over the destruction of Pennsylvania Station in New York City. The demolition of this icon energized a crusade to preserve the nation's architectural heritage, and it directly led to a growing civic determination to save nearby Grand Central Terminal. Indeed, today's preservation movement owes its genesis to the loss of Penn Station.

Grand Central remains, serving thousands of passengers daily, but only on suburban or commuter trains, a niche of railroading that began to see major changes during the 1960s. Most of the 20 or so involved carriers wanted to extricate themselves from what had become a heavy financial burden. Commuter trains were a real worm in the apple for such

1960s UPS & DOWNS

Route-miles owned

(Class 1 only)
1960: 217,552
1970: 206,265
Change: -11,287



Rail-industry employees

1960: 909,000
1970: 640,000
Change: -269,000



Revenue freight ton-miles

(millions; Class 1 only)
1960: 572,309
1970: 764,809
Change: +192,500



Passenger-miles (millions)

| | Intercity | Commuter |
|---------|-----------|----------|
| 1960: | 17,064 | 4,197 |
| 1970: | 6,179 | 4,592 |
| Change: | -10,885 | +395 |



roads as EL, New Haven, and Rock Island. During the decade, a growing number of state governments either provided operating subsidies or created transit authorities to maintain these vital public services. Through government assistance, obsolete rolling stock was replaced, but the railroads themselves continued to provide the service.

A different approach to money-losing commuter service took place in Chicago, where C&NW used its own resources to improve operations. As the 1960s began, the company had finally retired the last of its ancient “umbrella” coaches, replacing them with comfortable, high-capacity bi-level “gallery” cars, pioneered by neighbor Burlington Route. Although their profitability is debatable, C&NW claimed its three lines functioned in the black. But the railroad had benefitted from two unrelated events beyond its control: “white flight” from Chicago to the suburbs, and the closure of two parallel inter-urban lines, the Chicago Aurora & Elgin in 1957 and the North Shore Line in '63. Eventually, Chicago's dozen or so commuter routes would also get government involvement.

INNOVATIONS IN FREIGHT

Freight remained the bread and butter of the industry. Even though railroads faced regulatory restrictions, some showed imagination in this sector. A good example involved the unit train, where Southern, B&O, and Louisville & Nashville led the way with coal movements. Southern in 1960 started such a service with new 100-ton-capacity hopper cars constructed of aluminum to save weight. These trains ran between mines in central Appalachia and electric power plants in Alabama. Three years later B&O followed suit. After April 1, 1963, its unit trains, often 120 cars carrying 9,000 tons of coal, traveled from mines and collection sites to large generating stations owned by East Coast utilities. About the same time L&N began operating unit coal trains from mines in Kentucky to a TVA facility in Alabama. By the end of the decade, more railroads were providing this service for coal and other bulk commodities.

Additional improvements in the freight sector occurred. Southern in the early '60s placed into service scores of “Big John” 100-ton (later 110-ton) aluminum covered hoppers. These were capable of handling grain and other bulk cargoes, and competed on rates with barge lines and other railroads once the company won a protracted legal battle over pricing in 1965. NYC in 1958 had launched its Flexi-Van system, and the containers began to appear on certain fast freights and in dedicated service between New York and Chicago in 1960. By 1965, Flexi-Vans generated 15 percent of Central's profits using only .05 percent of its equipment.

Another success began in 1968 when Santa Fe introduced its *Super C* trailer-on-flatcar (TOFC, or piggyback) service. These fast,



Federal funding came to intercity passenger rail service by enabling the development of the New York–Washington *Metroliners*, one of which dashes through Seabrook, Md.



Public support of commuter operations expanded greatly in the '60s, exemplified by state-funded Long Island Rail Road M.U. cars at Kew Gardens, N.Y., in 1965. New York State bought the entire LIRR in '66. Two photos, T. H. Desnoyers, Krambles-Peterson Archive

premium-price trains ran on a 34½-hour schedule between Chicago and L.A. That same year, UP, C&NW, and PC launched a coast-to-coast COFC (container) service. Similarly, expansion of piggyback plans enabled railroads to reduce or eliminate less-than-carload operations that had long hemorrhaged red ink. Railroads also succeeded in the 1960s in modernizing and expanding their haulage of auto-industry traffic, with 5,000-cubic-foot capacity “hi-cube” boxcars and two- and three-level auto-rack flatcars.

While the public may have taken notice of a passing unit or piggyback train, another revolution was hidden — the use of computers. Arguably this technology was to railroading in the '60s what streamliners had been in the 1930s, but computers resulted in

much greater profitability. There was another positive dimension. Computers, so badly needed for accounting, car-tracking, payroll, and related tasks, brought an infusion of fresh blood and thinking to an industry that suffered from an often tradition-bound workforce, especially in management.

Technology affected other aspects of railroading. Diesel locomotives became more powerful and dependable. The dominant manufacturer, GM's Electro-Motive Division, made some memorable improvements. Faced with growing competition from newcomer General Electric, EMD responded in 1965 by replacing its long-serving 567 engine with the 645. GE came on strong to become the No. 2 locomotive builder in the '60s, replacing long-established Alco, whose market



Santa Fe's *Super C* premium piggyback train swings around a curve at Lemont, Ill., on its first run, January 17, 1968. Steve Patterson

share had plummeted to 3 percent by 1965. Four years later, Alco exited the business.

Additional betterments reflected the changes taking place in the emerging post-industrial age. Communication was one sector, best exemplified by microwave networks. This replacement technology made museum pieces of the remaining telegraph equipment and older telephone devices. Other improvements included continuous welded rail that appeared on more main lines and better maintenance-of-way machinery that allowed for the greater automation of trackwork.

FIGHTING FEATHERBEDDING

While technological advances pleased railroad management (and investors too), labor matters caused concerns. Although the size of the workforce continued to decline, dropping from 1.7 million in 1944 to some 909,000 in 1960 and 640,000 a decade later, compensation rose substantially. The average annual amount a railroad worker received in 1960 stood at \$6,270 and reached \$10,086 in 1970. In fact, railroaders were among the highest-paid blue-collar workers in the country. The size of the workforce in 1960, though, would have been less had it not been for the on-going impact of outmoded work rules, which some called "featherbedding."

Consider this example. As the decade opened, the Wabash paid dearly for labor costs on one of its principal trains. Said President Herman Pevler, "The engineer on our

passenger train *City of Kansas City* leaves Moberly [Mo., a division point] at 11:45 a.m., after an early lunch, arrives in Kansas City at 2:25 p.m., leaves Kansas City at 3:55 p.m., and arrives back in Moberly at 6:15 p.m. in plenty of time for dinner. In a matter of 6½ hours he has accumulated 2½ days' pay without missing a meal at home."

The big labor battle was over firemen on diesel locomotives. D. W. "Bill" Brosnan of the Southern led the charge. After a federal court denied him permission to eliminate unneeded firemen by attrition, he ordered the company to fill most of the vacant jobs with African-American males who were 65 years or older. Their sole responsibility was to ride in the locomotive. With this, Brosnan effectively made his point about such redundant employees. A real victory came when the U.S. Supreme Court in 1963 agreed to end this flagrant form of featherbedding, and by 1966 half of all firemen's positions had been eliminated. It would take years before the last firemen left railroading, but the 1960s marked the beginning of the end for these superfluous and expensive positions.

State-enacted work rules often took longer to modify or repeal. Various legislatures, imbued with the spirit of progressive reform, decided early in the 20th century to require extra brakemen on longer freight trains. These "full crew" laws were most prevalent in the Northeast and Midwest. In Indiana, for example, a freight train needed a six-person

crew if it exceeded 70 cars. Unions clung to their position even when a study by the New York Public Service Commission in 1960 reported that the state's 1913 law, amended in 1921 and twice during the 1930s, was unnecessary for the "safety of railroad operations, employees engaged therein, and the public."

An important event in the 1960s pointed to the future of crew sizes on freight trains. The carrier that "showed the way" was Florida East Coast. In 1960 this 351-mile property came under control of the anti-union owners of the St. Joe Paper Co. Three years later, FEC management rejected a pay increase that labor had negotiated with the industry, triggering a bitter and lengthy dispute. The non-operating brotherhoods struck, and operating employees honored their picket lines.

FEC stood fast. It did not take long before non-union personnel, two to a crew, were running FEC freight trains. The strike escalated to the point that property, including bridges and track, was being damaged or destroyed by disgruntled workers. It would take years before a settlement was reached; non-operating employees accepted a contract in 1971, and the operating unions followed suit in 1976. By then, a safely run and money-making FEC benefitted enormously from its two-person crews operating caboosseless trains. What was significant about the strike was that FEC demonstrated the practicality of reduced freight-train crews, underscoring again the need to alter antiquated steam-era

job descriptions and work rules.

While labor troubles on FEC generated only modest public attention, a landmark piece of federal legislation, the Civil Rights Act of 1964, caused a nationwide sensation. And this new law had a direct impact on railroads. It ended the last of the interstate "Jim Crow" accommodations on passenger trains and gave black employees a means to redress grievances and open doors for promotion. Significantly, rail employment of blacks increased substantially by the end of the 1960s and would continue to do so.

It took time for rail labor to realize the full impact of corporate mergers, changing technologies, civil rights legislation, and other events on its membership. Union gains of the past appeared to be eroding, and the organizations' answer paralleled their corporate counterparts — mergers. To obtain the benefits of joint action, most of the operating brotherhoods merged in 1969, creating the United Transportation Union. Only the Brotherhood of Locomotive Engineers, the nation's oldest rail union, stayed independent.

NATIONALIZATION?

Although railroads contended with "labor problems," another matter caused considerable angst. A growing number of company officials, their bankers, and others in the financial world fretted about the ultimate fate of the American railroad industry. Their fear: nationalization. After all, nearly all railroads worldwide were owned and operated by governmental bodies. The pronouncements of such prominent executives as Bill Brosnan, Ben Heineman, and Jervis Langdon Jr. indicated that if profitability could not be significantly enhanced and sustained, then public ownership would likely follow. Commented Langdon, "The free-enterprise system may come to an end, turning back the clock to the earliest days of railroading when there were public bodies directly involved in the railroad business."

Beginning in the late '60s, such thinking resulted in some corporate restructuring to safeguard investments. Take what happened at Union Pacific. The anxiety over nationalization caused its leadership to become proactive. To protect its valuable non-rail holdings, UP split its rail and natural-resources assets. On January 30, 1969, Union Pacific Corp. made its debut, more than eight years after such a concept had first been considered. This holding company ensured protection from any form of federal takeover of the railroad side of the business and permitted management to begin non-rail acquisitions. There now existed a legal structure that could operate outside of ICC control, and other railroads followed suit.

If industry leaders had had a crystal ball toward the close of the 1960s, they might have panicked. Most of all, the economic picture worsened considerably. A combination



New freight car designs: tri-level auto-rack (carrying '66 Mustangs), 86-foot hi-cube boxcar for auto parts, and "Big John" covered hopper. Top two, Jim Hediger; above, Southern

of modal competition, a national recession, hyper-inflation, and continued regulatory restraints led to a series of corporate bankruptcies. By the mid-1970s nearly one-third of all Class 1 roads were in receivership, and many carriers had cut back on essential maintenance and capital improvements.

Moreover, the possibilities of national ownership loomed large. Although creation of the National Railroad Passenger Corporation (Amtrak) in 1971 had been welcomed by nearly all of the remaining passenger roads, the industry hardly applauded the socialistic format that earlier had taken place in Great Britain and other nations that once had had private-sector ownership. Unionized workers, though, saw possible advantages in government ownership, some recalling how rail-

road labor benefitted under the U.S. Railroad Administration during World War I. Without question, the coming decade of the 1970s would entail years of struggle for railroad managers and their financial associates. The public worried, too. Would the railroads shut down? Would taxpayers absorb the tremendous costs of taking control of a presumably dying industry? Such were the monumental questions hanging over railroading as the 1960s drew to a close. ■

H. ROGER GRANT is a professor of history at South Carolina's Clemson University. He has written or edited 30 books, mostly about railroads, and has had five articles in CLASSIC TRAINS publications. Grant is president of the Lexington Group in Transportation History.

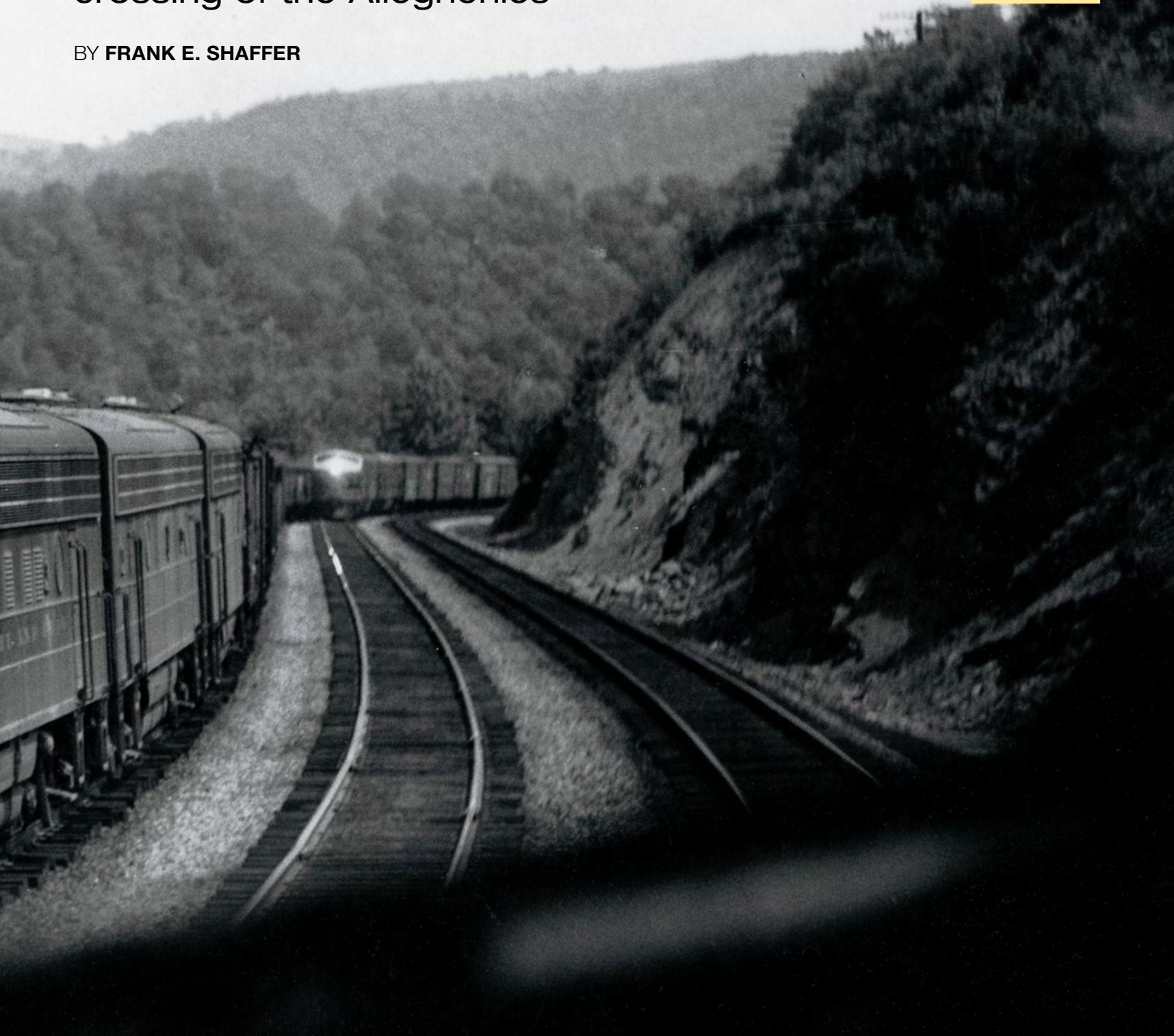
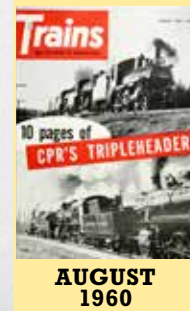
B&O'S WEST END

Where 65 cars still make a train



Diesels haven't drained the excitement out of the West End, Baltimore & Ohio's original crossing of the Alleghenies

BY FRANK E. SHAFFER



In an August 1954 view from the cab of mail-and-express train 29 just west of Salt Lick Curve, F7's claw up Cranberry Grade with coal loads (left track) and a *Time-saver* freight (center). William E. Hopkins



Severe grades made the West End an early candidate for dieselization. In March 1951, dynamic braking on a standard three-unit set of F7's holds back a coal drag dropping down the 2.2 percent of Seventeen Mile Grade at Bond, Md. William P. Price

“We have only three seasons of the year up here,” said B&O Road Foreman of Engines Art Tenney. “July, August, and Winter.” The lanky veteran grinned at his observation.

Snow swirled around the cab of the 4493, lead unit of four Baltimore & Ohio F7's shoving hard against the stubby steel caboose of an eastbound coal train climbing out of West Virginia's rugged Cheat River Canyon.

Sixty-five slowly moving hoppers were strung out around Salt Lick Curve. Terra Alta and the western crest of the mountain plateau were just ahead. At 13 mph, seven units were lifting another train of West Virginia's most famous product up the western slope of the Allegheny Mountains on what is probably the most rugged, heavy-duty main line east of the Mississippi — the famous West End of the Cumberland Division.

The 2.67-percent grade began to ease at the 2,557-foot level. Speed picked up and the tracks rose slightly through a small cut to parallel a residential street in Terra Alta.

Engineer Frank Jennings, a mountain-climbing veteran of some 18 years — although only 39 years old — latched the throttle forward into Run 7, then 6. Down on the caboose platform, the brakeman shut the angle cock to seal the train line, then shoved down on the uncoupling lever. The caboose inched away from the nose of the F7. The couplers daylighted, and the only physical connection between Extra 4550 East and helper 4493 was a taut air hose. At 18 mph the hose snapped; brakes grabbed at Jennings' engine; and 65 cars of coal moved ahead through Terra Alta without stopping.

Another helper assignment had been completed.

Drifting back down Cranberry Grade to M&K Junction, the lair of the mountain-climbing helpers, the 4493 was held in check by whining dynamics while Tenney commented about the early winter weather. “It's not bad here today compared with last week.” The day's snow showers were intermittent. Grass in Terra Alta's lawns rose through a half inch of snow. Temperatures

were in the high 20s. “Just last week,” Tenney continued, “I put in a couple of days on the snowplow between Terra Alta and Altamont. We'd shove east with the plow, turn on the wye at Altamont, come back to Terra Alta, and turn on the wye again. All day long it was back and forth. With the wind up here blowing a steady 20 or so, snow will drift up to 8 to 10 feet. We've got to keep after it.”

Snow is one of the problems faced by the men of the West End. But the greatest hurdle is the tonnage-slashing Allegheny Mountains. There are four tough grades, each one rated at 2.2 percent uncompensated, or better.

When the fledgling B&O pushed west from Baltimore in the early 19th century its problems in building along the Potomac River were minor ones compared with the construction campaign it later waged against the Alleghenies.

Keyser was then the base of operations. Today it is a major terminal and car repair center. With muscle power and black blasting powder a single-track line was hacked out of the mountainside to become the fa-

mous Seventeen Mile Grade. From the 800-foot level at Keyser, the first 5 miles to Piedmont were easy. Then the big grade started. It's double-tracked today with some third track, but otherwise the same as it was in the 1850s — rugged every inch of the way to Altamont, the 2,628-foot summit of the Alleghenies.

And the way beyond Altamont was not easy. Trains drop down what was once an eastbound helper grade in the days of steam — 1.04 percent — for 6 miles to Mountain Lake Park at the 2,400-foot level, then roller-coaster 250 feet back up to Terra Alta.

Three tracks wide to the west lies Cranberry Grade, a 2.67-percent drop for 11.9 miles down into Cheat River Canyon. From 1,400 feet elevation at the water, Cheat River Grade climbs 6 miles to Tunnelton; trackage then pierces Kingwood Mountain at the 1,800-foot level with two tunnels, and makes its final dive down Newburg Grade to Hardman, 10 miles east of Grafton.

NINE CARS TO AN F7

Lovers of steam power revisiting the West End can find one cheering note — diesels have not increased the size of coal trains. Even in 1960 it takes only 65 cars to make a train. To muscle 5,900 tons over the mountains takes seven F7's, which means slightly more than nine cars for each unit. (B&O, after buying 24 FT's and 74 F3's, took 311 F7's from EMD during 1949–1953. In early 1957 B&O undertook a system renumbering, changing remaining steam engines from four digits to three, and vice versa for diesels.)

Although Superintendent R. J. Cannon runs his division from Cumberland, the midpoint, M&K Junction is the heart of the West End's helper operations. Terminal facilities here are as modern as on any railroad. The shop has a drop table for maintaining the fleet of 31 units assigned to it. A new brick tower, MK, built on the foundations of an old warehouse, controls most of the switches in the servicing area. Helpers dropping down off Cranberry Grade can curve in off the westbound main track and be switched onto a pit track without any of the crew leaving the cab.

The West End of Cannon's division, 101.4 miles from Cumberland to Grafton, is completely different from the East End. Running 100 miles from Weverton, just east of historic Harpers Ferry, the East End boasts speed limits up to 60 mph for the plush *Capitol Limited* and the fast-running fleet of *Timesaver* freights. On the West End, however, top speed is 50 — and that for only 30 miles. The best that trains can expect to do, downhill of course, is 45.

In the days of steam, M&K Junction was a smoky scene of activity. One slow-moving 2-8-8-0 up front and two more snorting at the rear were standard power for all freights. Passenger trains were given two Mikados up



The engineer of a *Timesaver* freight notches out his F7's as he departs Cumberland for the west in July 1956. Ahead about 25 miles: Seventeen Mile Grade. James P. Gallagher



A four-unit F7 helper leans against a coal drag just west of Terra Alta. Beside the track, a thick layer of cinders remains from generations of steam locomotives. H. W. Pontin

front, or sometimes a Mike and a Pacific, and another Mike on the rear.

Eastbound time up Newburg Grade from Hardman to the tunnels was 1 hour. Cranberry demanded 2 hours with speeds as low as 5 mph forced on the waddling Mallets by the stiff grades. Diesels have chopped both grades in half. But V-16's have meant more than reduced running time on the grades. Without the dynamics and flat-maintaining air brakes of the current era, everyone

stopped at the top of the grades to turn up retainers, then stopped at the bottom to turn them down. Only the *Timesavers* were allowed to turn up retainers at Grafton or Keyser and run through to the other terminal.

A. G. Harvey, the "hill man," or power dispatcher at MK Tower, estimates that diesels have shaved as much as 2½ hours off the time of each Grafton-to-Keyser movement. Convert that into car-days saved and it means that the B&O has, in effect, added



Loaded hopper cars coil through one curve and around another in this late-1959 view from the cab of F7 helper 4493 on Cranberry Grade. Sixty-five cars — 5,900 tons — separate the three units on the head end from the four behind the caboose. Frank E. Shaffer

several hundred hoppers to its coal-carrying fleet without a dollar being earmarked for equipment trusts.

When diesels first came to the West End, B&O added a new locomotive class: DH-1. In all, 28 EMD F7's were sent into the mountains in 1949; their 65:12 gearing was to provide extra power. The idea was sound in conception, yet faulty in execution. In a short time, all 28 units were re-gearred back to the standard 62:15 ratio, and are interchangeable with every other freight unit on the system.

Steam was routed. A parade of 19 Mallets, 6 Mikes, and one 2-10-2 disappeared into the boneyard or were put into service on less rugged terrain. The war-born EM-1 Yellowstones, which Tenney called the best engines the B&O ever owned, were sent out to Fairmont, W.Va., for pool service to Benwood Junction, W.Va., and Holloway, Ohio. Some were marked up at Holloway for coal and ore turns to the Lake Erie port of Lorain.

Wrecking crews pulled down the massive

coal dock that spanned four tracks just east of MK Tower. The soot-blackened two-track enginehouse was flanked by a new brick shop and parts storage building, and the West End was in business in a new era.

HELPERS AND TIMESAVERS

Harvey, dean of the hill-man staff, spends his days shuttling a quartet of four-unit helpers up and down three of the West End's four grades. Keyser handles the helpers on Seventeen Mile Grade. In addition to the 16 units at MK, an SD9, two spare F units, and 12 F7's assigned to other parts of the system are maintained by the 60-man shop force at M&K Junction.

While daily traffic falls into a standard pattern, there is nothing routine about the helper movements. Shoving up Newburg, a helper cutting off on the fly west of Kingwood tunnel may be returned to Hardman to await the next train from Grafton. Harvey may, however, order the helper to follow its

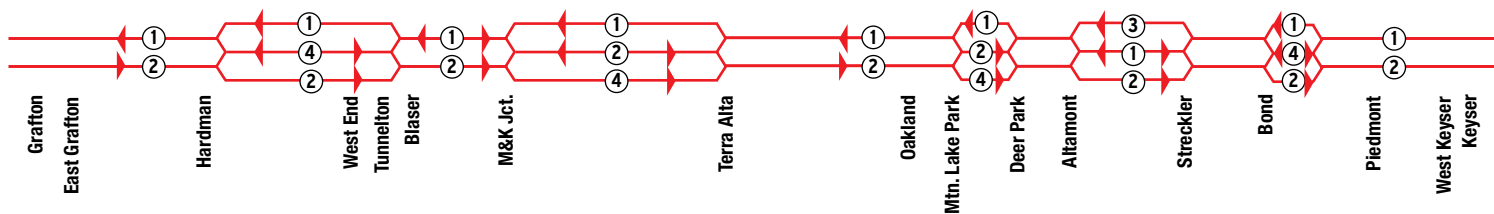
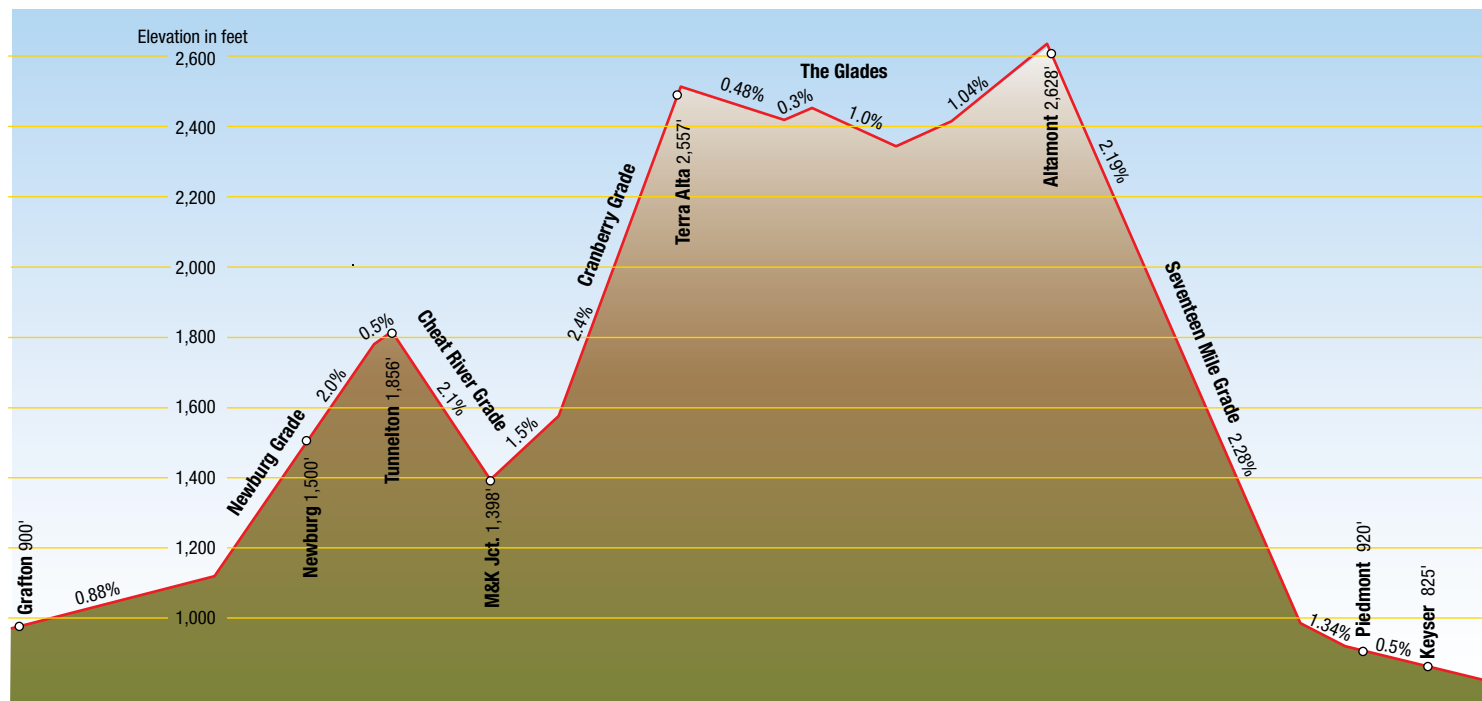
train through the tunnel on approach blocks, drift down to M&K Junction, couple up again, and shove the same train up Cranberry to Terra Alta. A helper at M&K Junction might well spend part of its day boosting trains up Cranberry, then come back to the canyon and find signals beckoning it westward to Hardman.

If trains are highballed out of Grafton in a slightly different sequence, the Newburg helper may cut off at West End and return to the foot of the grade at Hardman for three or four more shoves up the 7.8-mile grade.

One helper assignment is different. Once four units shoulder up against the eastbound *Timesaver* at Hardman, they're not cut off until the high-speed manifest is roaring through Terra Alta 29 miles away. This shaves about 10 minutes from the schedule and makes the *Timesaver* even more competitive.

Diesels have eliminated two helper assignments. One, already mentioned, was the Mountain Lake Park-Altamont district

WEST END, 1960: *B&O's mountain battleground*





Empty hoppers follow three F7's up Seventeen Mile Grade at Bond Tower in March 1951. Note the safety track curving behind the tower and up the hillside, ready to divert a train running out of control down the hill. William P. Price

where a Mike once shoved up the 6.2 miles of eastbound 1.04-percent grade. Helpers in the steam era were needed to hoist westbound empties out of the canyon up Cheat River Grade. The standard road engine of three units can handle as many as 110 empties up this short stretch of 2.06 percent, but trains are held to 85 cars. This enables the empties to roll out of Keyser's 2,400-car yard and run unassisted up Seventeen Mile Grade.

Speed is all important in handling the *Timesavers*, which despite the recent steel strike often hustled enough highly rated merchandise out of the East to run in two sections. Witness the preferential treatment accorded the revenue king of B&O in handling retainers in steam days. Check the slicing of 10 minutes time today in sending its helper straight through east from Hardman to Terra Alta to save a stop at M&K.

Then consider a day late last year. Instead of a normal consist of 70-plus cars and 2,800 tons with four units up front, the *Timesaver* had only 44 cars, which totaled 1,734 tons. Its three units rolled the light tonnage up Newburg in 26 minutes, half the time of a coal train. Yet dispatcher J. T. Shirley in Cumberland, who had received the speed merchant late from the west, wanted to pick up time on Cranberry.

Was a helper available at M&K Junction? Second-trick hill man Clifford Carrico reported that the 4493 was ready.

As soon as the *Timesaver* whined off Cheat River Grade and stopped in the winter darkness at 5:01 p.m., the 4493 nosed out of the terminal and coupled up. Operator Harold Baylor peered into the gloom from MK Tower, watched as diesel sparks skied against the blackness of the mountain. He glanced at the clock, cut into the dispatcher's circuit, and reported to Cumberland. "Timesaver east at MK, in at 5:01, moving at 5:05."

The helper was coupled up and moving in 4 minutes flat.

What good did the 4493 do? From a standing start on the grade at MK Tower, the *Timesaver* covered the 11.9 miles to Terra Alta in 24 minutes. This matched the schedule of the eastbound *Diplomat*, a St. Louis-Baltimore streamliner, and was only 3 minutes slower than the *National Limited's* carded downhill run on Cranberry.

MOUNTAIN BRIDGE LINE

A rundown of the dispatcher's train sheet in Cumberland tallies a day's business on the West End: 16 coal, 4 merchandise, and 4 passenger trains in each direction add up to 48 daily movements. No light helpers are

shown. Operators block them downhill to their bases on verbal authority of the dispatcher to save him from recording at least 40 more movements.

The West End is basically a bridge line. Except for traffic from coal mines atop Kingwood Mountain at Tunnelton, all switching can be handled by a triweekly district run. One or two daily Keyser-Tunnelton turns handle the Kingwood mines and the 70-plus cars originated daily by the West Virginia Northern.

To make the West End flexible enough to handle coal, passengers, fast freight, and light helpers, there are 30 miles of three-track line with the center track signaled for both directions. There's flexibility on the double-track sections too. Several miles on Cheat River Grade between Blaser and M&K Junction provide both-way movements on the westbound track. It's customary for a helper out of Hardman, completing its day's work shoving eastbound up Newburg Grade to the tunnels, to run around the assisted train after cutting off. By moving down the westbound track, the helper can be parked in the terminal area by the time its tonnage train rolls off the mountain.

Grafton originates about half of the West End's coal tonnage and handles all the mer-

chandise. Some of Grafton's coal comes from Clarksburg and the Weston branch, plus some mines between Clarksburg and Grafton. Most, however, rolls up from the Charleston and Cowen subdivisions where the B&O tapped the new Gauley coal fields just prior to World War II and rebuilt a spindly branch into mainline capabilities.

The Gauley coal line from Grafton southward to Cowen is a story in itself. Once the line could handle nothing heavier than a tiny E-8 Consolidation or a B-8 Ten-Wheeler. When coal started flooding the little line, with its thin 70-pound rail and wood trestles, B&O inaugurated a crash program to build it up enough to accommodate USRA Mikados. Four were needed to handle 65 loads.

Today four diesels move 100 cars out of Cowen, with a helper needed only between Burnsville Junction and Frenchton. Cowen contributes 250 loads (for the West End), Gassaway sends 80, Clarksburg and Weston 70 more, and mines north of Buckhannon add 70. But only Fairmont joins Grafton in making up the mountain-climbing trains.

Terminal Trainmaster Jim Sell in Fairmont answers to J. R. Frease, the Monongahela Division superintendent in Grafton, but serves three others: his father, J. J. Sell, boss of the Wheeling Division; Cannon of the Cumberland Division; and T. E. Johnson of the Pittsburgh Division.

Sell's yard serves up six 65-car tonnage trains daily for the West End out of the most important coal-originating terminal on the 13-state B&O system. Crews out of Keyser turn in Fairmont, drop the empties, and head east with coal in as little as 2 hours.

Six more trains of the 100-car variety leave Fairmont for Benwood Junction and Holloway via the Short Line through New Martinsville, shunning the Old Main Line completed west of Fairmont in 1852. In addition to these 12 trains, Sell makes up three 125-car giants for movement down the Monongahela River to Connellsville, Pa., over the Pittsburgh Division.

Grafton gets its four merchandise trains from three different directions. The *Time-saver* roars through on the main line from St. Louis. No. 88 has the same route. High Car 96 is barred east of Parkersburg because of the string of low tunnels dating back to Civil War days (some are now being daylighted), so it turns north along the Ohio River to New Martinsville, then eastward over the Short Line to Clarksburg. No. 196, the only daily service from Wheeling over the Old Main Line, comes in from Fairmont for pickups at Grafton.

The long-established roles of Cumberland and Keyser will be changed within the next year as new yard facilities are completed. Cumberland's hump will replace flat switching at Keyser and will save more car-days by getting trains out onto the road faster.

As the flood tide of West Virginia coal



Partway up Cranberry, helper 4493 has stopped to cool its traction motors as yet another set of F7's swings past with empties headed back to the mines. Frank E. Shaffer

rose late in the 19th century, Cumberland struggled to mesh it with traffic from the new main line from Pittsburgh over Sand Patch. Then came the 6.2-mile Patterson Creek cutoff. It was the work of dynamic Leonor F. Loree, the Pennsylvania Railroad-trained engineer who was installed in Baltimore by the PRR when that road controlled the B&O at the turn of the century. Loree spiked down the new double track, drilled 4,120-foot Knobley Tunnel, and freed Cumberland of congestion.

To help Patterson Creek deliver at its fullest potential, Loree spent a million dollars building 2,378-car Keyser Yard and another million in the narrow valley of the Monongahela River at Fairmont. The traffic pattern that flowered under Loree has remained fairly constant for six decades.

Now, in the seventh decade of the century, the pattern will be materially changed for the first time. New yards in Cumberland will receive coal from the West End, hoist it over an automatic hump, and make up trains for Brunswick and Hagerstown, Md. The Patterson Creek cutoff will see little or no coal; its traffic may diminish to two passenger trains and a handful of freights.

The cutoff now handles two of the West End's four passenger runs, the *National Limited* and the *Diplomat*, and all coal moving out of Keyser. The three other merchandise trains — the 97s — are classified at Cumberland. The Queen City's distinctive, ornate passenger station also handles the West End's two other passenger runs, the *Metropolitan Special* and the *West Virginian*.

LOOKING AHEAD

What of the future for the West End?

Trains may grow longer, but Art Tenney doubts it. Tests have been run with various combinations of road and helper engines up to nine units, yet the pattern always reverts to seven units: three on the point and four behind the caboose.

Complete centralized traffic control might help some, but with the plethora of helper movements, a dispatcher in Cumberland would have his hands full. As it is, the subdivision's 13 interlocking towers now reach out electronic fingers to cover virtually all operations by signal indication. Electrification is seldom mentioned. The prospect of Cascade-length tunnels is even more remote.

Baltimore has no magic wand to solve the West End's problems. It can only look southward and envy the Norfolk & Western its 1.1-percent ruling grade eastward into Bluefield, W.Va., and the Chesapeake & Ohio its easy 11-mile climb of 0.57 percent over the Alleghenies at White Sulphur Springs, W.Va.

The B&O's four mighty 2.2-percent barriers remain to be conquered 48 times a day in hot sun, drifting snow, and bitter winds at high altitudes in the land of the three seasons — July, August, and Winter. ■

FRANK E. SHAFFER was business editor of the Charleston (W.Va.) Daily Mail when he wrote this story for TRAINS. He was Kalmbach's Vice President, Sales, 1967–69 (during which time he authored articles and a monthly column for TRAINS), before joining Modern Railroads magazine. He died in 1988.



LOW-NOSE LOOKOUT



Ed Wojtas

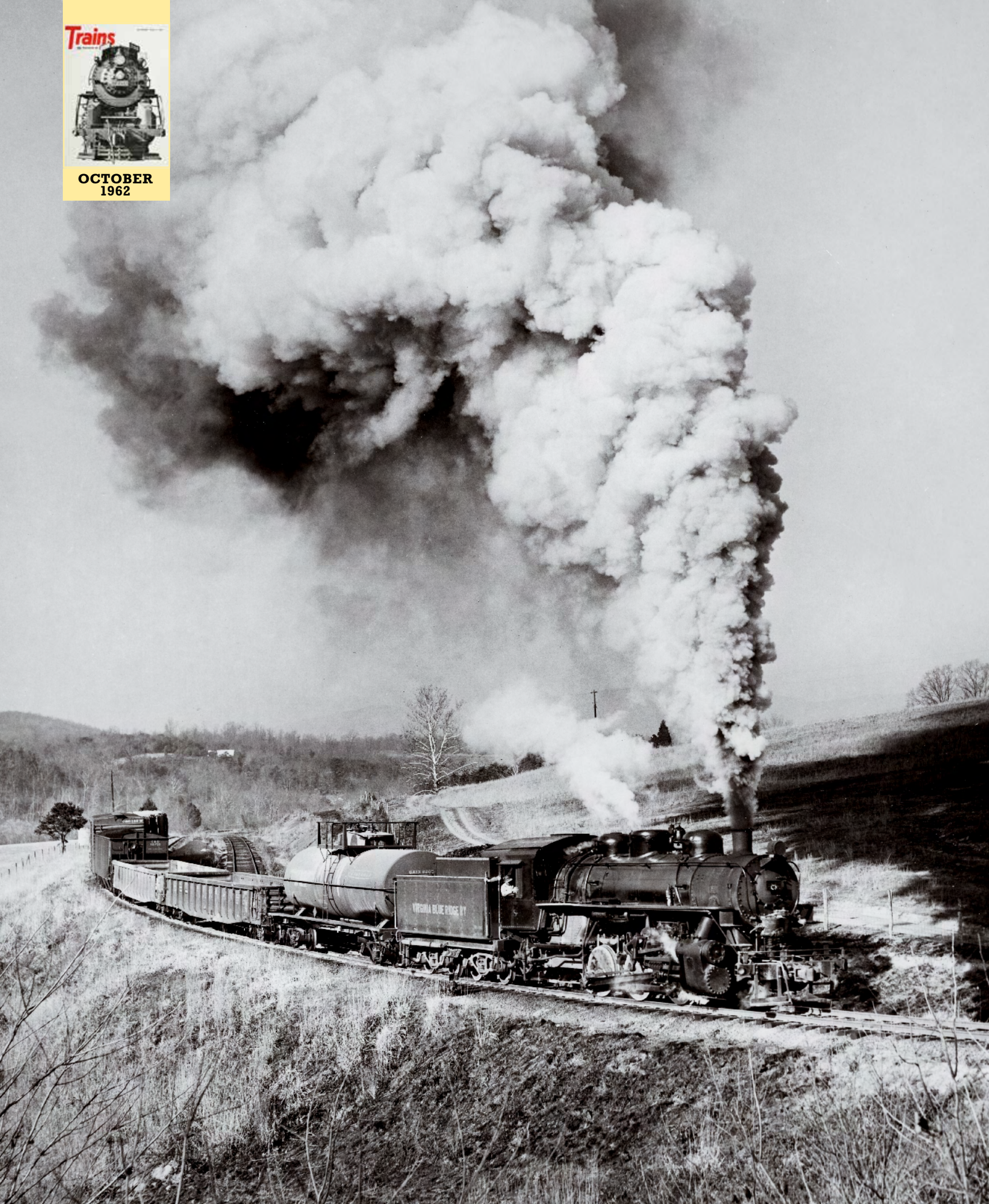
Startling . . . and ugly: those were perhaps the commonest thoughts among train-watchers when Santa Fe led the industry in the adoption of low-nose short ends for hood units. The basic aim was 180-degree visibility for the engineer, of course; and external esthetics aside, no one could complain about the change. See here as Rock Island engineer Phil Reynolds notches out GE-built U25B No. 204, first

of three such 2,500 h.p. units rolling fast freight No. 81 west between Davenport and West Liberty, Iowa. Is this not the ultimate contrast in cabs, between the thumping seatbox hung on the backhead of, say, a long-boilered 5000-series 4-8-4 and the cockpit of a U25B, with its speedometer, radio-phone, windshield wipers and visors, full-view lookout, and short-sleeved engineer? — *David P. Morgan*

Trains



**OCTOBER
1962**



STEAM

success story

Ex-Army 0-6-0s keep Virginia Blue Ridge in the black

BY WILLIAM E. WARDEN JR.
PHOTOS BY THE AUTHOR

Deep in the rolling red clay hills of central Virginia, a shrill locomotive whistle sounds. Moments later a diminutive six-wheel switcher, trailing 15 box and hopper cars, comes pounding into view on neatly ballasted 70-pound rail. It's another working day on the 16-mile Virginia Blue Ridge Railway, one of the nation's last 100-percent steam-operated short lines — and one of its most profitable small roads, too.

It's strange in this day and age to find a steam-run short line. Almost stranger still is finding one consistently in the black (1961 gross revenue: \$308,819; operating ratio: 68 percent). This is especially true when you consider that if all had gone according to plan, the road — which connects the villages of Massies Mill and Piney River with the Southern Railway's Washington–Atlanta main line at the equally small town of Tye River — would long since have ceased to exist.

It took a war and a national calamity to keep the VBR going in the first place, and a man with absolutely no railroad background to turn it into an efficient transportation machine.

Let's go back to the beginning and see how this remarkable state of affairs came about.

The year was 1914; the place, the western part of Virginia's Nelson and Amherst counties — a remote area hard under the brow of the Blue Ridge Mountains. Peaks such as the Priest, the Friar, the Cardi-

Virginia Blue Ridge 0-6-0 No. 8 struggles mightily up a short stretch of 3 percent grade as it approaches the Southern Railway interchange at Tye River, Va.



VBR engine 8 shifts cars at the American Cyanamid Corp. plant at Piney River in September 1960. J. E. Bradley

nal, and Dismal Mountain towered 2,000 and 3,000 feet over tiny isolated valleys. There were no industries, telephones, or paved roads. A few small apple orchards provided the only livelihood for the area's citizens.

As unprepossessing as the area may sound, it did have one untapped resource — chestnut timber. Chestnut wood was favored for the natives' "worm" fences, but for the most part, the groves had never known the ring of an ax.

Onto this stage stepped John W. Powell, timber cruiser and promoter of several West Virginia logging roads. A Lynchburg (Va.) acquaintance, R. G. Leftwich, had brought

this land to his attention, and the two of them had taken options on 55,000 acres in the vicinity of Three Ridges, north of Massies Mill and on the slopes of the Priest.

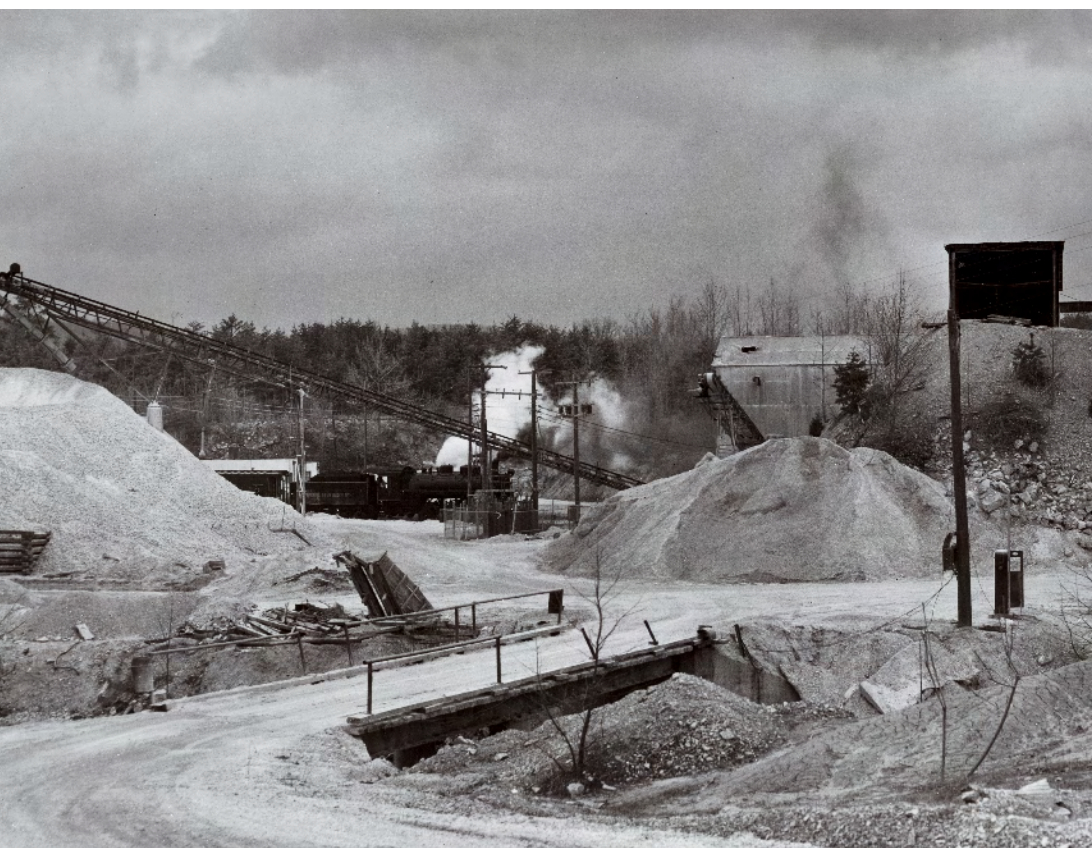
Powell knew they'd better get the logs cut and moved fast. The chestnut blight, first sighted in the United States in 1904, had reached Virginia by 1908. To remove the timber, logging roads would have to be built into the mountains at Massies Mill and north of the community of Woodson. The logs would then be shipped to the Southern's Tye River depot, 15 miles away, by means of a common-carrier railroad that was to be abandoned when the timber had been removed. The road would be called the Virginia Blue Ridge Railway.

Powell approached friend and business associate Theodore Cobb for assistance. Advanced in age, Cobb demurred but suggested Powell talk to his son, Howard Cobb, a lawyer in Ithaca, N.Y. Not only was Howard willing to team up with the timber promoter but he got his cousin, Fordyce Cobb, plus State Senator John W. Dwight of Dryden, N.Y., fired with enthusiasm.

The Cobbs, Powell, and Dwight organized lumber companies to start operating at Woodson and Massies Mill. The four men formed a separate company to operate the common carrier, with Dwight as president. Frank O. Lathrop was appointed general manager. And on May 22, 1914, the Virginia Blue Ridge Railway was incorporated in the Commonwealth of Virginia.

Thereupon began a comedy of errors that was to persist for more than 30 years.

The main line of the Blue Ridge, as the road is familiarly known, was to run from Tye River to Woodson, a distance of 12 miles. A 6½-mile branch was to extend from a spot



Towering piles of aplite ore dwarf Blue Ridge No. 7 at Piney River as the diminutive ex-Army engine begins its switching chores at the Dominion Minerals plant.



designated simply as Junction, to Massies Mill. Engineering crews started surveying out of Tye River in early 1915.

A few days after marker stakes were hammered through a pasture, Leftwich approached the owner with an offer for the land. Well, the owner drawled, running the track through this spot would just ruin a perfectly good pasture. But there was some



A fireman's-eye view from VBR No. 7 shows the engine positioning covered hoppers under the loading towers of Consolidated Feldspar's plant at Piney River.

No. 7 jockeys tank cars in front of the American Cyanamid titanium plant at Piney River. Established in 1931 by Southern Mineral Products, this was VBR's first on-line industry.

land over here he'd let the railroad have right cheap. Not one to haggle, Leftwich bought the proffered land, even though it was some distance from the original survey.

The construction supervisor was a man named Howes who had considerable experience building logging railroads. His orders were to build the road as cheaply as possible. Consequently, tracks were frequently laid not where the survey had been run, nor even where land had been bought, but simply where Howes thought they should run.

Howes' undoing was a bit of real estate just north of Woodson known as Jacks Hill. The right of way had been surveyed across it, and Chief Engineer Arthur Murell recommended that the hill be tunneled.

But Howes had a better idea. He'd just load enough dynamite in there to blow it off the map. Several months were spent drilling holes and loading them with dynamite. It is said two carloads of explosives were stuffed into the hill.

When the air cleared after the blast, it became apparent that the dynamite had succeeded only in lifting the top of the mountain a few feet, and the whole works had then settled back in place. Not only had the construction supervisor failed to daylight Jacks Hill, but he had so split and cracked its innards that tunneling was no longer practical. Howes soon left for parts unknown.

Meanwhile, back at Tye River, Track Foreman Beverly Ponton was having troubles of his own. It was those Italian track workers Mr. Lathrop had hired. Barely a word of English did they understand. Ponton complained to Lathrop, but Lathrop held firm and the Italians stayed.

The matter was finally settled by the track crew going on strike for the \$1.50 a day prevailing wage. Lathrop offered them \$1.25 a day if they would go back to work, otherwise they could leave for good. The Italians chose the latter alternative, and replacements were recruited from the local black population. Thereafter work advanced more rapidly.

Surveying parties in the woods around Massies Mill also operated under difficulty. Some of the mountain folk were in the moonshine business, and strangers were suspect.

According to R. A. West, who succeeded Murell as chief engineer, "When I first went to Massies Mill, these people would follow me around like dogs, thinking I was a revenue agent. Once they were sure I was all right, they quit. Then I could go and watch them make whisky. They'd give me all I wanted — and more too!"

On March 1, 1915, the Blue Ridge took delivery of its first locomotive, No. 1, a 2-8-0 built by H. K. Porter. It was the only new engine the railroad ever bought.

By summer 1915, the road reached Piney River. September of that year saw the rails in Lowesville, and a month later the track was completed to Woodson, 2 miles to the north. Finally in October 1916, the branch to Massies Mill was completed.

Shipment of chestnut timber, plus apples from the local orchards, began immediately. Passenger service was inaugurated in late 1916 with a secondhand wooden combine; it ended in 1936.

Six months after the road started operating, America entered World War I. In December 1917, the nation's rail lines came under the control of the U.S. Railroad Administration. Chestnut timber was deemed not essential to the nation's defense, and the VBR was ordered to cease operating. By the time the armistice was signed, the chestnut blight had ravaged the Blue Ridge Mountains. There was scarcely a live chestnut tree left in Virginia.

What does a railroad do when its only reason for being no longer exists?

Gone was the founders' dream of a quick killing and then abandonment. They were left with no choice but to keep operating to recoup their losses.

The Blue Ridge hauled everything it could to keep from folding — apples, pulpwood, cows, and chickens. But the going was rough for many years. Flash floods in 1923 washed



With the Blue Ridge's ex-Southern bay-window caboose trailing, engine 7 switches covered hoppers at Dominion Minerals' Piney River plant under threatening summer skies.

out bridge after bridge. Dwight and the Cobb cousins dug into their own funds and borrowed where they could. Abandoning the Junction-Woodson trackage helped some but not much.

In 1929, one of the worst floods on record struck the Piney River area, washing out large segments of track. Powell managed to secure a Government loan for \$106,000, saving the road from oblivion. By 1931, not a good year to be in the railroad business anyway, Howard Cobb had borrowed from banks in Ithaca, Elmira, and Syracuse, N.Y. The Syracuse Trust Co. was on the verge of foreclosing and selling off the entire railroad for \$30,000.

Back in those days, three or four derailments a week were considered normal, and the 30-mile round trip from Tye River to Massies Mill frequently took 8 or 9 hours. Hogger William F. "Billy" Napier, at that time head-end brakeman, recalls a particu-

larly star-crossed trip back in 1920.

"We left Tye River a little after noon with 24 cars and reached Massies Mill at 9 p.m. with only the locomotive and tender," recounts Billy.

The first derailment occurred before the trip had fairly started. Three freight cars plus the combine — with passengers — went on the ground at Tye River wye and were left there. Five more cars hit the ties at Tye River bridge. Another six derailed on Carter's curve and five more at Parr's siding. Finally, 1 mile out of Massies Mill, the remaining four cars left the track.

The VBR's first on-line industry arrived in 1931 when Southern Mineral Products Corp. built a small plant at Piney River to process titanium dioxide from a nearby deposit of ilmenite ore. However, during its early years the plant shipped very few loads of titanium, for the process of ex-

tracting the mineral was new and costly. Neither plant nor railroad prospered.

Then in 1935, aplite, an ore of quartz and feldspar used in the manufacture of glass and roofing material, was discovered at Piney River. The aplite vein was found to extend some 10 to 12 miles along the track, making it the largest such deposit in the U.S.

The first of three aplite processing plants at Piney River — Dominion Minerals' Division of Riverton Lime & Stone Co. — began shipping ore out on the VBR in 1939. Meanwhile, Interchemical Corp. had purchased Southern Minerals in 1936. By this time the bugs had been worked out of the titanium extraction process and the plant was expanded.

With a brighter future assured, the road splurged on a secondhand 2-8-0 from the Southern to supplement the One-Spot. No. 2, with 56-inch drivers and 175 pounds boiler pressure, started burnishing Blue Ridge rails in September 1938. By 1940 the road grossed a staggering \$77,796, and its operating ratio stood at 63 percent.

On the eve of World War II, the road took delivery of locomotive No. 3, an ex-Georgia & Florida 4-6-0. About the same time, a second aplite plant, Carolina Minerals — later International Minerals & Chemical, Consolidated Feldspar Dept. — began processing the white rock at Piney River.

During World War II, both titanium and glass were considered important to the war effort, and the Blue Ridge prospered. Purchase and expansion of the titanium plant in 1944 by American Cyanamid was a key factor in making the road into one of the nation's more affluent short lines.

The VBR emerged from the war somewhat in the position of the village idiot who had just struck oil in his back yard — suddenly prosperous but certainly bumbling and unaware of its potential.

A meeting between Powell, who was then VBR president, and Tom Milstead will illustrate the point. Milstead was with the Norfolk & Western's motive-power department and also handled locomotive maintenance for the little road. He later gave up a 28-year career with the N&W to become VBR master mechanic.

Powell and Milstead were standing outside the Piney River enginehouse as a west-bound freight consisting of the entire motive power roster, plus a dozen or so freight cars, hove into view. The engines belched black smoke like a trio of dyspeptic dragons. Clouds of steam hissed from a half dozen cylinders almost entirely innocent of packing.

"My, my," said Powell beaming in the manner of a new railfan with his first Brownie. "What a beautiful sight."

Tom Milstead laughed. "Mr. Powell, there ought to be just one engine slipping along with them 12, 14 cars, like nobody's business."

Powell turned on him severely. "Oh, you can't do that here," he snapped.



Yes, the camera is level! The 3 percent grade up to Tye River is apparent in this view of 44-inch-drivered No. 7 pulling hard for the Southern interchange. This engine differed from VBR's other Army 0-6-0s in having one large sand dome instead of two smaller ones.

Little did either man think that one day a single engine on a routine trip would be moving as many as 40 cars from Tye River to Piney River.

Finally in 1946 the Cobb family realized that the road was in need of modernization. In that year, Howard Cobb asked his son Kenneth to assist in the management of the road. Kenneth R. Cobb was thereupon appointed vice-president of operations, with an office at Piney River. He was elected president in 1957, following the death of Powell.

It is difficult to imagine anyone less predisposed to be a rail executive than Kenneth Cobb. A 1932 graduate of Rutgers, he had built up a thriving insurance business in Ithaca when his father asked him to go down to Piney River.

Cobb was the first to admit he was no railroad man at the start. "I didn't know a darn thing about railroads," he later recalled. "But I did think I had common sense enough to know when things were being done wrong and when they were being done right.

"When I first came down here, the equipment was in terrible shape, so I got a good man. I hired him from the N&W and in five years we had our road in pretty good condition."



A crewman on 2-8-0 No. 6 (ex-Southern 385) coaxes a wayward cow off the wye at Tye River on a hot July 1954 day. This engine and 0-6-0 No. 5 went to New Jersey tourist pike Morris County Central and now are at the Whippany (N.J.) Railway Museum. H. Reid

Cobb's "good man" was trackwork specialist E. A. Gooden. In getting the road in "pretty good condition," the two men spent nearly a half million dollars between 1946 and 1950. For this sum, most of the line's rotting, untreated ties were replaced with new creosoted ones; 70-pound rail was installed throughout the main line; and two 0-6-0s, Nos. 4 and 5, each with 40,000

pounds tractive effort, were bought from the War Assets Administration in 1947 to replace the older and lighter engines. That was the end of double- and triple-heading.

No. 4 flipped over on her side one day. There were no casualties, but the engine crew was somewhat leery of her after that and she was eventually sold. Her replacement was No. 6, a relatively heavy ex-Southern 2-8-0.



VBR No. 9 eases alongside the Southern's Washington-Atlanta main line at Tye River with loads of titanium and aplite and a couple of empty boxcars for interchange.

Floods plagued Kenneth Cobb, too. Tye River trestle went out in a flash flood in the late '40s. High water severely damaged Jones trestle in 1950. However, Gooden cribbed ties into place to support the structure, and service was resumed in 10 hours.

But Kenneth Cobb's modernization program and common sense paid off. Gross revenue for 1950 stood at \$244,253, while the operating ratio had sunk to a low of 56 percent.

Business continued to improve, and in April 1956, the Blue Ridge purchased 0-6-0 No. 7 from the Norfolk & Portsmouth Belt Line, allowing retirement of No. 6. The new engine was identical to No. 5, and like it, was an Army Transportation Corps veteran of World War II vintage. In 1958, two more Army 1942 0-6-0s, Nos. 8 and 9, were added.

Let's visit the Blue Ridge on a typical operating day.

Entering Piney River from the north on Route 151, we breast a rise in the road, pass the general store of George F. Hilbish, and before us is the track.

To the left on the near side is the VBR's neat brick office building, erected in 1953. On the far side is the sprawling American Cyanamid plant, a gray pall of smoke hanging over it in the still morning air.

To the right are the enginehouse, shops, and coal dock. One of the 0-6-0s — No. 9 today — steams quietly in front of the enginehouse, the *chung, chung* of her pilot-mounted air pumps breaking the silence at

intervals. Promptly at 8 a.m., engineer Billy Napier compares watches with older brother Parker, the conductor. Billy and fireman Dickie Lawhorne mount to the cab, and the little engine, with cylinder cocks open, goes chuffing up to her huge ex-Southern bay-window caboose.

Engine and crummy then back westward almost a mile to Dominion Minerals. Two or three times a week, Buffalo Mines, the newest aplite plant (built 1959), is the first stop. However, Buffalo has no ore to be moved today. Tracks, ground, buildings, and trees are covered with the powdery white aplite dust.

Perhaps 20 minutes are spent spotting and loading hoppers, cutting out those to be forwarded to the Southern, and leaving the empties behind. Six or seven loads are finally pointed east with No. 9 pushing.

A few minutes later, the train-in-the-making arrives at Consolidated Feldspar, where three more loads are added to the string. Returning to Piney River, the hoppers are uncoupled on the fly and allowed to coast into a passing siding. No. 9 uncouples her crummy, runs around the string, and couples up in the customary fashion. The switcher then works the four American Cyanamid sidings, shifting coal hoppers, boxcars, a tank car or two, and more covered hoppers.

About 9:15, No. 9 with perhaps 14 cars heads for Tye River at a leisurely 8 or 10 mph. The track winds through lonely stretches of scrub pine and oak interspersed with cornfields and pastures.

Three miles out of Piney River is the line's

highest point, Rose's Mill. A relatively straight stretch allows Billy Napier to open her up wide and run for the grade, hitting all of 25 mph as the ascent is begun. Raising a smoke plume that would have gladdened John Powell's heart, No. 9 goes clattering across the Piney River on a girder bridge, and finally tops the hill at a crawl. From there into Tye River, it is mostly downgrade.

Just west of the Southern main at Tye River is a scale house. A section of track in front of it forms the platform of an old-fashioned beam balance. The 0-6-0 carefully jockeys each car onto the platform in turn so that its weight can be checked without breaking up the train.

From the scale house to the junction with the Southern lies a stretch of curving 3 percent grade. Skillful working of steam and sand is needed to keep from spinning the wheels. Once on Southern tracks, the cars are dropped. No. 9 nuzzles her front footboards up to whatever the Southern has set out for Piney River (westbound traffic consists of coal, sulphur, limestone, and scrap iron), couples up, and whistles off, tender first, for home.

A wye near the scale house allows No. 9 to make the return journey pointed forward. There is a brief stop just outside Tye River, while the engine takes on water from a crude tank fed from a local spring.

On the westbound run, the 0-6-0 doubles the hill at Rose's Mill if there are more than 15 loads, which is frequently the case. In fact, conductor Parker Napier remembers occasions when as many as 40 cars have made up a train.

At the top of the grade is a passing siding. When doubling, or tripling, is necessary, the first cut is hauled to the summit and left. If tripling is to be done, the second cut is dragged up and positioned in front of the first. No. 9 finally comes upgrade pulling what's left, and noses up to the cars ahead. With two toots, she's off walking her tonnage — half or more in front, the rest behind — to home. The deafening crack of exhaust and a veritable blizzard of cinders mark her going.

Once more in Piney River, the engine again turns on a wye, this one formed from one of the American Cyanamid sidings. Cars are distributed, and No. 9 goes panting back to the enginehouse.

The time is only a little past noon and the day's work is done.

Yes, the years ahead look really golden now. True, the Piney River-Massies Mill trackage now accounts for a negligible amount of revenue. However, management maintains it in hopes of luring an industry to settle in the area. By contrast, all four of the Piney River plants have promising futures.

Time has wrought many changes in the Blue Ridge country — paved roads, automo-



Virginia Blue Ridge No. 7 meanders along the Piney River in June 1962, about 4 miles from the Southern connection at Tye River.

biles, radio, television, and consolidated schools have opened up the area and ended its isolation.

But some things haven't changed — such as VBR's reliance on steam.

What makes the Virginia Blue Ridge stick with steam power?

Partially the answer is proud Billy Napier who sits in his locomotive cab and states, "I always liked the steam locomotive era and I'm glad to still be part of it. I dare say you'll never see me behind the throttle of a diesel."

Partially it is resourceful Tom Milstead, who has devoted most of his life to steam and could probably keep the VBR's engines going on baling wire and string until the final lump of coal is dug out of the West Virginia hills.

But mostly it is a matter of economics. As Kenneth Cobb put it shortly after the purchase of 0-6-0s Nos. 8 and 9, "We've got four engines exactly alike. All were built to Gov-

ernment specifications and the parts from one engine can be used for another engine. If it gets to the point where we are in really bad shape, we can start cannibalizing one of the engines.

"Besides, we were able to buy all these engines at a very reasonable price and they were hardly ever used by the Government. On the other hand, we'd have to spend \$250,000 to dieselize and change our whole shop over. We're not equipped for diesels here."

On November 27, 1961, death claimed Kenneth Cobb at the age of 52. His place was taken on February 1, 1962, by his younger brother, John W. Cobb, a former Chicago regional sales manager for the Ditto Corporation.

Kenneth Cobb's death unleashed a flood of speculation on the future of VBR steam. Fortunately, fears of early dieselization appear groundless. Shortly before he took of-

fice, the incoming president was questioned regarding the fate of the four 0-6-0s.

"We plan to keep them," said John Cobb. "We have 20 years of good steam transportation in our shop."

Twenty years more of steam is a long way to go. Billy Napier is 65 years old. Tom Milstead is among the last of a vanishing breed of steam master mechanics. Younger men, men less dedicated to steam, must replace them eventually. What will happen to the 0-6-0s then? ■

WILLIAM E. WARDEN JR. (1928–1994) was a railroad photographer and author from Waynesboro, Va. He wrote the books Buffalo Creek & Gauley and West Virginia Logging Railroads and contributed articles and photos to TRAINS beginning in the mid-1950s. VBR replaced its steam locomotives with two secondhand SW1s in 1963; it was abandoned in 1980 and the roadbed now is a recreation trail.



UNINVITED GUEST

Do you remember anyone inviting General Electric to the locomotive party? We don't. The domestic diesel market had peaked and was in a predictable, relentless decline in 1953 when GE dissolved its relationship with Alco and went searching for an engine it could call its own. And by 1959 when GE lowered Cooper-Bessemer V-16's onto the frames of a couple of prototype hood units numbered 751 and 752 the whole railroad business was in bad shape. There wasn't room in the locomotive trade for one builder, much less Alco, EMD, *and* GE. Besides, the future of the business obviously lay in replacement units, and there were no old GE's to trade in on new ones. And more to the point, what could novice GE teach veterans Alco and EMD? Too many roads already possessed too many diesel "orphans" on their rosters to risk investing in yet another newcomer for second-generation units. But the uninvited guest had guts. GE pulled an end run on conventional design with an uncomplicated but high-horsepower four-motor locomotive, sweated the bugs out of its power plant, and kept on barnstorming, advertising, demonstrating, and talking until the orders came. Today more than 300 GE's are rolling off more than 2½ million miles a month on 17 U.S. railroads. — *David P. Morgan*

CLASSIC TRAINS collection







Last of the **PRAIRIE MIXEDS**

In 1964, milk cans outnumbered passengers on a Soo Line combine

BY **BOB JOHNSTON** • PHOTOS BY THE AUTHOR

Thick fog had been burning off for a couple of hours after sunrise on that Thursday in early July 1964. All was quiet at the main railroad station in Bismarck, N.Dak. Northern Pacific's over-night local No. 3 from St. Paul wouldn't arrive until later in the morning, soon to be followed by eastbound No. 2, the *Mainstreet-er* from Seattle, two of six NP passenger trains serving North Dakota's state capital on most days. But a couple of blocks away, things were bustling at the city's other terminus, a stub-end, two-story, red-brick affair owned by the Soo Line.

Here the thick air was spiked with an unmistakable dairy scent, the smell of fresh milk dominating a potpourri of agricultural fragrances drifting into the city from surrounding fields. It didn't take long to figure out where the aroma was coming from. Out on the platform were several turn-of-the-century baggage carts loaded with shiny milk cans tagged for the Beaver Valley Creamery in Wishek, N.Dak., 79 miles to the southeast. The carts were positioned in front of two vintage Soo heavyweight combination coach-baggage cars, a.k.a. "combines."

The interiors of these 12-wheel maroon monsters were split about equally between a passenger compartment, with brown vinyl walkover seats, and the merchandise area, labeled RAILWAY EXPRESS AGENCY on the outside. A potbelly stove, its jaunty stovepipe pointing skyward, was centrally positioned to heat the coffee and take the chill off of

people on windswept winter days should the car, which was equipped with steam lines, be isolated from the locomotive, or should the assigned diesel not have a steam-generating boiler.

The venerable cars would soon rumble off in different directions to junction towns on Soo's transcontinental route, its main line linking Chicago and Minneapolis-St. Paul with Portal, N.Dak. Portal was the point on the Saskatchewan border where connection was made with parent Canadian Pacific for Calgary and Vancouver. One combine would bring up the rear of Soo train 92 to Drake, 140 miles north, while the other would carry the markers of train 76 — and us three visiting railfans — to Hankinson, 216 miles east.

These locals were 2 of 18 mixed trains Soo Line still fielded in 1964 in North Dakota to fulfill a mandate by the state's regulatory commission to maintain passenger service wherever the railroad operated. Even Drake and Hankinson were linked directly by mainline locals operated as mixeds, although the 214-mile westward trip required two 18-hour layovers, at the division points of Enderlin and Harvey. That accommodation had been instigated upon the discontinuance of trains 13-14, the St. Paul-Portal coach-

Soo Line's Bismarck depot is bustling with activity in July '64. The maroon combines will head off in opposite directions, north to Drake (left car) and east to Hankinson.







Forty miles out of the capital, RS3 372 has sputtered and died, so the crew has gathered in the combine for a game of poker, awaiting the arrival of the Bismarck mechanic.

and-sleeper remnant of the through Soo-CP *Mountaineer*.

Otherwise, the passenger-accommodation railroad map of North Dakota hadn't changed much since 1960. In the interim, only a half dozen branches — of Great Northern, NP, and Soo — in the state had lost even mixed-train service, although the situation wouldn't last much longer.

"Don't bother getting up too early. You won't leave until after 8," a hostler had offered the previous afternoon at the three-stall roundhouse where Alco RS3 372 and an EMD F unit cooled their heels after arriving with inbound mixed. The schedule in *The Official Guide of the Railways* said train 76 to Hankinson was scheduled to depart at 6:30 a.m., but Soo Line's public passenger time-

table didn't bother to detail *any* of its service in and out of Bismarck, perhaps because the carrier was too embarrassed to admit the trains were anything more than local freights with a combine instead of a caboose.

Of course, that was the allure that had attracted me, fellow Chicagoan Gerry Widemark, and Dave Korkhouse, a mutual friend from South Bend, Ind., out here onto the prairies in the first place. It was one thing to complete an exotic itinerary just to get to Bismarck, but quite another to sample the branchline railroading still available in this sparsely populated land.

Exotic? Our conveyances to Bismarck from Chicago had been Soo's *Laker* from the Windy City to Owen, Wis.; its connecting through coach to St. Paul; and NP's *Main-*

streeter, with a side trip in between from St. Paul south to Dodge Center, Minn., on Chicago Great Western. After hitchhiking from Hankinson up to Fargo, we would return to Chicago on the GN-CB&Q *Empire Builder*.

The branchline world into which we were about to embark had remained essentially unchanged since 1898, when John H. Wishek convinced the Soo Line in Minneapolis to spike its rails through his settlement on the way to Bismarck. Back then, the Soo, GN, NP, Milwaukee Road, Chicago & North Western, and their predecessors had crisscrossed their way into the Dakotas to put tracks only a day's wagon ride away from most farms. Spindly rail capillaries helped supply mainline arteries with freight and passenger sustenance on the Great Plains just as branches had done elsewhere throughout the country.

Here in the Dakotas, though, the light population density rarely warranted more than a single train for both human cargo and commodities, except at harvest time. Generally, the trains ran daily except Sunday. Even back in 1933, Soo's two trains between Bismarck and Hankinson (one round trip operated three days a week) were mixed.

OFF INTO WAVING GRASSES

"Tickets? You don't need any tickets," No. 76's overalled conductor advised us on the platform as his brakeman coupled up the three tank cars and a boxcar we would be hauling out of town. Milk cans would outnumber passengers by about 5 to 1; no one else would be riding today. "The [Interstate Commerce Commission-regulated] tariffs for this milk business are real cheap," explained the conductor, one of five crewmen on No. 76. "That's the main reason we haul

so much of it.” After a quick stretch of coupler slack and an air-brake test, the burbling Alco and its five cars bounded away from Bismarck through waving prairie grass.

The heavy combine seemed as comfortable on the light rail out here as its full length coach cousins had on the *Laker* back in Wisconsin, with only a moderate bounce over road crossings. The morning was heating up quickly, but a breezy crosswind and open windows kept everything cool inside; the fresh air was exhilarating. Now, if we'd only done this about 15 years earlier when coal smoke and chuffing sounds would have been a part of the mix . . .

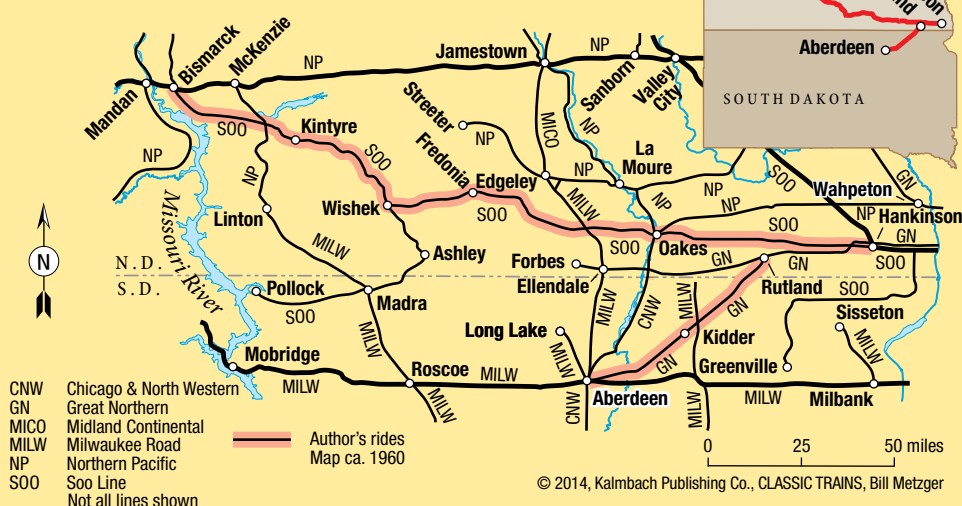
Such daydreaming would have to wait, though. About 40 miles out, approaching a slight rise west of Kintyre, we started slowing. The brakeman and conductor looked out the window, then at each other, and put down their newspapers . . . as we rolled to a halt. The burbling up front had stopped. Silence. Now it was just the sound of the wind and some cows protesting from a nearby pasture. After not much more than an hour's run, the 372 had died, and neither the train's engineer nor fireman could get the old girl cranking, so a crewman hiked over to the nearest telephone pole and tapped into the dispatcher's line to relay the bad news.

Not to worry. Although the nearest locomotive, we were told, was the unit leading train 80 up a branch from Pollock, S.Dak., rattling toward a rendezvous with 76 at Wishek, 30 miles ahead of us, a mechanic from the diminutive Bismarck roundhouse was on his way. Without missing a beat, the crew set the hand brakes, then retreated to the combine for an impromptu poker game.

Whether it was a battery- or fuel-induced failure was unknown, but after an hour of waiting and another half hour of tinkering by the mechanic, the Alco coughed to life and 76 was on the move again, much to the relief of the curious cows. After picking up more milk cans at a rural outpost and another hour of bobbing and weaving across the prairie, our eastbound mixed swung around a curve into Wishek, where westbound counterpart 75 and the Pollock turn had the station track switches lined for our tardy arrival. More milk cans were loaded, but again no other passengers, as the crew switched out the three tank cars for the South Dakota branch train and picked up a couple of wooden boxcars and a gondola of scrap metal the Pollock turn had left on the interchange track in front of the station.

After a snack for us passengers and a crew change, 76 was off again to the east, with a set-out for the grain elevator at Lehr and a pickup at Fredonia. But a stretch of sustained running after those stops brought out the worst in one of 76's newly acquired wooden boxcars. The engineer spotted a wisp of smoke about four cars back and sounded a stop signal, but by the time the brakeman

RIDING COMBINES IN THE DAKOTAS



Train time at Wishek: The back-to-back combines at the depot belong to the turn from Pollock, S.Dak. (right), powered by F3A 203A (above), and Bismarck–Hankinson train 76.



On Soo 76 east of Fredonia, an old railroading lesson is relearned: When non-roller-bearing cars sit for a time, make sure there's enough oil in the journal boxes.

ran forward from the combine, flames were licking from a trailing-truck journal box.

Armed with a long poker, he deftly flipped up the faceplate, then jammed the metal tong into the flames to extract oily waste that had ignited from the overheated bearing. Flames lapped at the car's wooden side panels for 10 seconds or so, which seemed like an eternity to us observers, but gradually they were subdued. The car was set out and 76 was under way again, but not before an old lesson of period railroading was relearned: when non-roller-bearing cars sit for a long time, you better make sure there's enough oil in the journal boxes.

Sunlight streamed in through the rear vestibule, reflecting off the tops of the seat-backs as the Alco picked its way between windmills and barbed-wire fences. As we enjoyed the reverie, it was easy to visualize travelers sitting in the same car 20, 30, or 40 years earlier, perhaps talking about the latest wheat prices or the weather while wiping cinders out of their hair and clothes.

No one got on or off at Oakes, but as late as 1952, eight mixed trains from three railroads served this Great Plains junction town of 1,800 people. Oakes had rail links not only to Bismarck and Hankinson on the Soo, but to Jamestown, N.Dak., and Staples, Minn., on the NP, and Aberdeen and Huron, S.Dak., on the Chicago & North Western. Some were mixed trains, some were motor-car "doodlebugs." Making mainline connections to or from them may have entailed arduous nocturnal waits, but at least there was train service, and "you could get there from here" without an automobile. Now Oakes had only Soo 75 and 76 and freights, and less than a year later, Soo's accommodations would be gone too.

A SOUTH DAKOTA FAREWELL

A year later, in August 1965, we were back in the region for another branchline ride.

This time, we drove up in Gerry's car, and friend Rick Burn joined us. Having the car was handy, as it enabled us to chase as well as ride the trains.

Great Northern hadn't gotten around to turning all of its old combines out to pasture, so there was still time for pilgrims to ride train 326, which (with westward counterpart 325) in early 1966 would ring down the mixed-train curtain in South Dakota. They operated between Aberdeen, S.Dak., and Breckenridge, Minn., a town on GN's Minneapolis-Willmar-Fargo main line across the Red River from Wahpeton, N.Dak. The GN mixed trains were almost South Dakota's last rail passenger service, an honor that went to Milwaukee 15 and 16, the Minneapolis-Aberdeen coach-only remnant of the *Olympian Hiawatha* that came off soon after its Railway Post Office was dropped in October '68.

This time there was actually another passenger along, a woman traveling from Aberdeen to the Twin Cities, but the mood was just as laid back as on the Soo trip a year earlier. Train 326, officially carded out of Aberdeen at 3:25 p.m. for the 140-mile trek, would stop for 15 or 20 minutes at each town where it needed to switch at grain elevators, lumber mills, or cement plants, leaving the combine on the main until the work was done.

Still, when the car would slowly creak ahead, there was a sense of adventure about what was around the next bend. A summer storm blew in off the prairie as the mixed shuffled into Rutland, N.Dak., for a rendezvous with the local from Forbes, 63 miles due west. Soon 326 would be off into the misty night to Breckenridge, where the "real" passenger would be able to step out of the past and onto the *Empire Builder*.

Accoutrements of another era — train-order boards at stations, telephone pole-driven communication, baggage carts, five-man crews, and the oily waste that packed



journal boxes — were still around when North Dakota's mixed trains ran off their last miles in the late '60s. But these artifacts, too, would all disappear shortly thereafter. Today the Soo branch to Pollock is gone, and the initials on the locomotives that jounce their way on freights between Bismarck and Hankinson read "DMVW" for Dakota, Minnesota Valley & Western.

"I still think of it as the Soo Line," volunteered Wishek Mayor Jonna H. Hochhalter in 1999, granddaughter of the man who got the railroad to come through town. "Three creameries closed here in the '60s, but our livestock market, Wishek Steel, and the grain



elevators are going strong, although the population is down to 1,125 from about 1,400 in the '30s."

The mayor remembers when the maroon cars disappeared. "We all fought to keep the train on, but it was always so much faster to drive. You know, it's too bad I never rode it."

For those of us who did, the memories are priceless. ■

BOB JOHNSTON, a Chicagoan now retired from a career in broadcast advertising sales, has been writing about passenger trains in TRAINS, for which he has long served as a correspondent, since 1991.



In August 1965, a year after his Soo adventure, the author and friends are on Great Northern 326, from Aberdeen, S.Dak., to Breckenridge, Minn., as it meets the local from Forbes at Rutland, N.Dak. With them is one "real" passenger (left), a woman bound from Aberdeen to Minnesota's Twin Cities.



OUT WHERE A TRAIN IS A TRAIN

In his own caption for this masterful photograph, Richard Steinheimer says, “The silent desolation of the Smoke Creek Desert of Nevada yields momentarily to a 75-car westbound freight of the Western Pacific drawn by four GP35’s.” We think the scene is a rare pictorial definition of the train *per se* — an assembly of coupled cars, each with the built-in guidance system of flanged wheels tracking to steel rails, propelled by independent motive power units. Which is why the railroader and the gallon of locomotive fuel oil both produce up to five



Richard Steinheimer

times more transportation than their counterparts in trucking. Trouble is, we so seldom see the pilot-to-caboose miracle of the freight train east of the Mississippi. Curves, cuts, buildings, and bridges preclude our witnessing simultaneously the cab and the bay window. But beyond the Rockies and the Wasatch there is room on the desert floor to economically absorb the train, all 10,000 h.p. and 3,500 or 4,000 tons of it.

It is ironic that buzzards, rabbits, and snakes are thus afforded daily demonstrations of a principle that eludes the eye of so many human beings. Perhaps it would be in order to park campstools here in the sands of Smoke Creek Desert and to seat thereon all of the members of the Congressional committees on interstate commerce. Perhaps then they would comprehend that, unlike Americans, all modes of transportation are not created equal and that one mechanism of carriage in particular is intrinsically more efficient than its fellows. Professor Steinheimer, please brief the Congressmen. — *David P. Morgan*



RIO GRANDE

revisited

In and out of the mountains in 1965, it's uphill for D&RGW

BY DAVID P. MORGAN

Before the decline and fall of naiveté, and in a season when strong men were unembarrassed to admit of being possessed by vocations, a cavalry veteran wrote to his sweetheart about a utopian vision: "I had a dream last evening while sitting in the gloaming at the car window. I mean a wide-awake dream. Shall I tell it to you? I thought how fine it would be to have a little railroad a few hundred miles in length, all under one's control with one's friends. . . ." He deemed his railroad "usefulness on a large scale," run by profit-sharing employees to whom the idea of a strike would never occur, and he promised to roam it with his bride in a private car built for two.

Insofar as any dream can be realized, this one was, and it exists today as the 2,132-mile Denver & Rio Grande Western. If *Zephyr*-fast freight, continuous dividends, dome seats for passengers, and an ability to convert more than 20 cents out of each revenue dollar into pre-tax net can be equated with ideal railroad-ing, then D&RGW has arrived. Three generations of managers were required to create this utopia, however, and some fancy foot-work will be needed in our time to preserve it.

The fact that Rio Grande has survived at all as a solvent and separate entity may be attributed to successive and often painful metamorphoses. Gen. William Jackson Palmer, our idealistic letter writer, made the first two basic mistakes himself in 1870 before a mile of track had been laid. He selected the wrong gauge, 36 inches, and mapped his line south from Denver toward the wrong destination: Mexico. The narrow gauge, chosen after an inspection of the 23½-inch Festiniog Railway in Wales, was cheap to build but ultimately expensive to operate and isolated the road from carload interchange. So far as direction went, Palmer set out to connect rather than compete with the transcontinentals, but that aim became academic when the Santa Fe beat him to Raton Pass, thereby barring the gateway to the Southwest.

So off to the mining camps steamed the 4-4-0s and 2-8-0s, probing the most tortuous canyons and highest passes in search of silver and gold, charging all that the traffic would bear, and — in the absence of competition more effective than stagecoach and oxen team — grossing revenues sufficient to expand the system to 1,644 route-miles and into Salt Lake City and Ogden, Utah, by 1883.

Even when the early errors of construction were corrected by standard-gauging the main line and relocating it over Tennessee Pass instead of Marshall, the Rio Grande had long since lost its grasp on utopia. Its circuitous, harshly profiled path through the Rockies confined it to being a local road rather than a true transcontinental link (as late as the 1920s overhead business received from and delivered to connections would amount to less than 5 percent of D&RGW tonnage), and overexpansion made it easy prey for outside raiders.

ENTER GOULD AND MOFFAT

As the 20th century dawned, another man dreamed of an ideal railroad, but instead of a few hundred miles his would stretch almost 14,000 — from the Atlantic at Baltimore to the Pacific at San Francisco. George Gould dreamed of a true transcontinental in which the Rio Grande would serve not only as a link across the mountains of Colorado and Utah but also as a bankroll to pay for rails beyond to the Sierra and down the Feather River Canyon into northern California.

"No railway combination in the United States is so loaded with possibilities. . . . Here is material for dreams," exclaimed Frank Spearman in 1904 about Gould's maneuvers. Who then — Spearman the writer or Gould the expansionist — could have foreseen the panic of 1907 or Western Pacific's twice-budgeted construction costs or the opening of the Panama Canal or World War I?

In retrospect it is clear that the ambitions of absentee ownership were dispatching Rio Grande straight down the drain. The money spent on WP would unglue D&RGW's treasury, postpone internal betterments, and render the road a jointly owned stepchild of Missouri Pacific and the very line D&RGW's credit had been ruined to build, Western Pacific. Surely the only way to reconcile history in hindsight is to observe that minus Gould's dream, D&RGW in 1965 would be without a valuable interchange in Salt Lake City and thus left with only Southern Pacific in Ogden as a gateway to and from the Bay Area.

Now bring to bear a third and final forma-

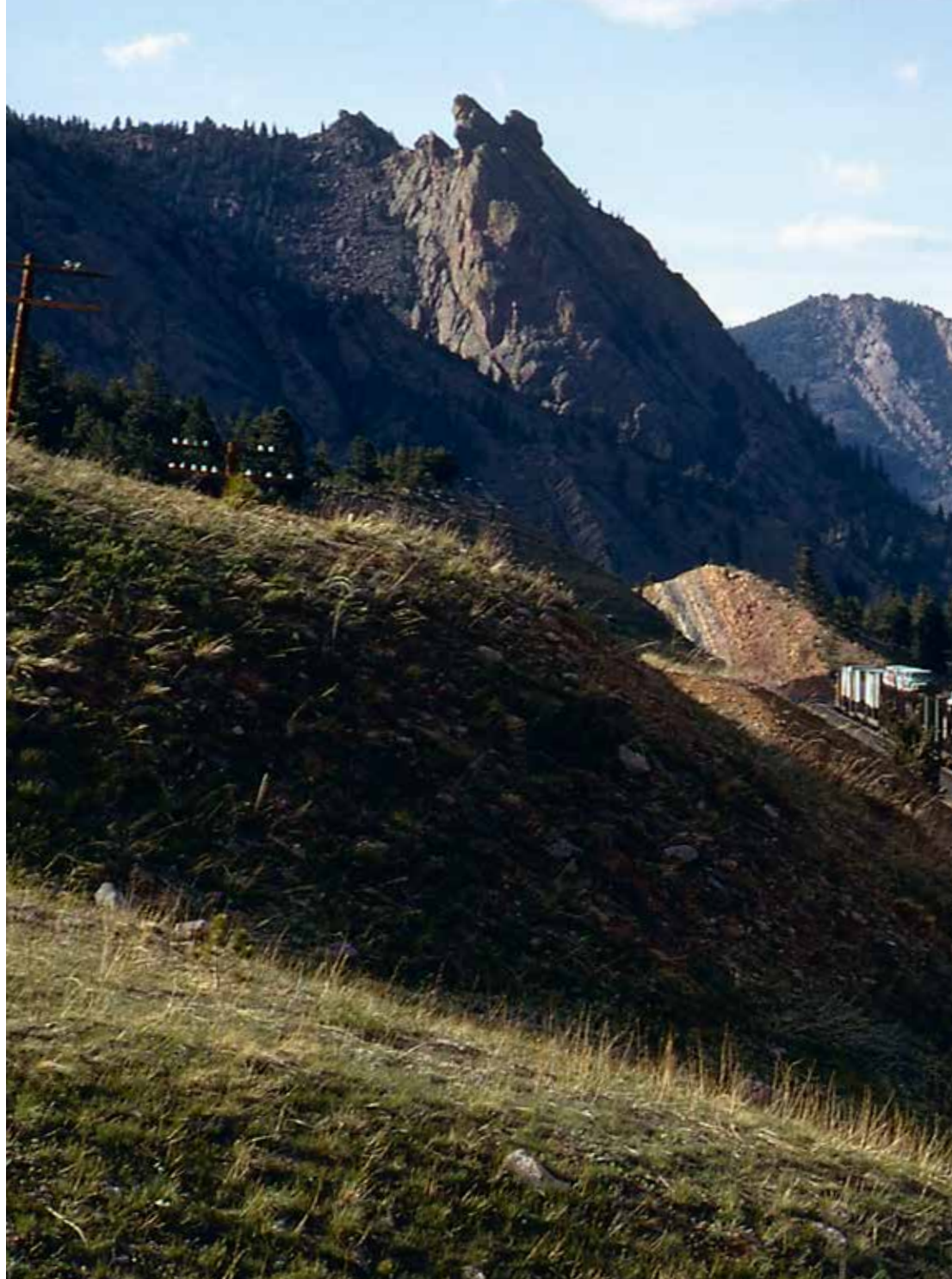
New GP30's roll freight through a typical Rio Grande setting in artwork by George A. Gloff, who was TRAINS' art director in 1965.





On the narrow gauge, a K-37 Mikado approaches Carbon Junction, just south of Durango, Colo., with a freight for Chama, N.Mex., in summer 1967. Craig Willett

tive influence upon Rio Grande: the dreamer who wired a friend in 1902, “I have decided to build a steam railroad from Denver to Salt Lake City,” and soon thereafter muttered, “By God, the road will be built, if I have to go out and drive spikes myself.” Rio Grande resisted its savior with all its might. When David H. Moffat was D&RG’s president after Palmer, he urged a frontal assault on the Rocky



Mountains west of Denver. Ignored, yet unable to contain his ambition, Moffat built his own line — not to Salt Lake as he planned, but at least deep into the consciousness of Gould and Union Pacific’s E. H. Harriman and, most important, of Denver. Moffat died in 1911, out of health and money if not spirit. But in death he won out. For Denver and Colorado got caught up in the dream, too, and public funds were secured for Moffat Tunnel, the completion of which in 1928 at once relieved Moffat’s Denver & Salt Lake from its economically prohibitive Rollins Pass cross-

ing of the Continental Divide and made of the moribund D&SL a genuine threat to D&RGW.

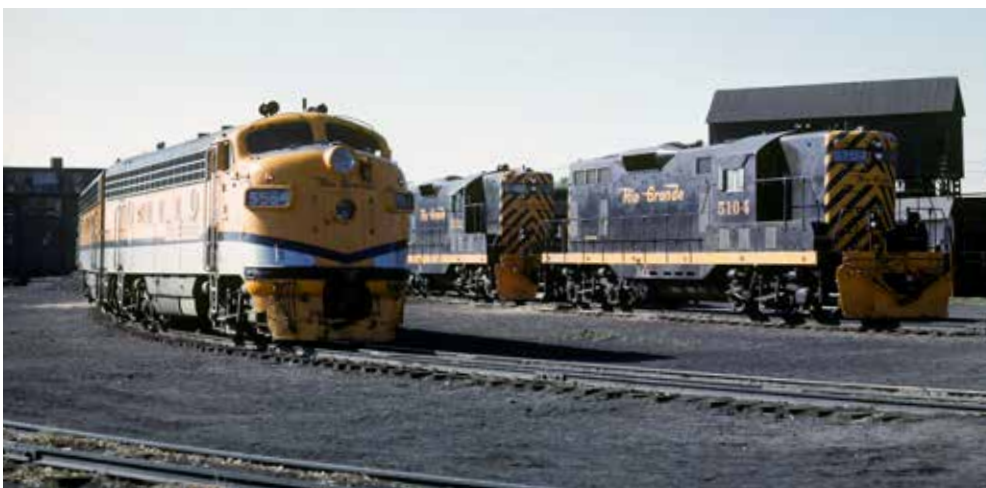
Never mind that what followed cost Rio Grande its solvency. Simply concede that construction of the Dotsero Cutoff and purchase of D&SL, thereby placing Denver on a transcon main, was inexorable. “By God, the road will be built,” Moffat had said, and when the Cutoff opened on June 16, 1934, it was.

RECIPE FOR A COMEBACK

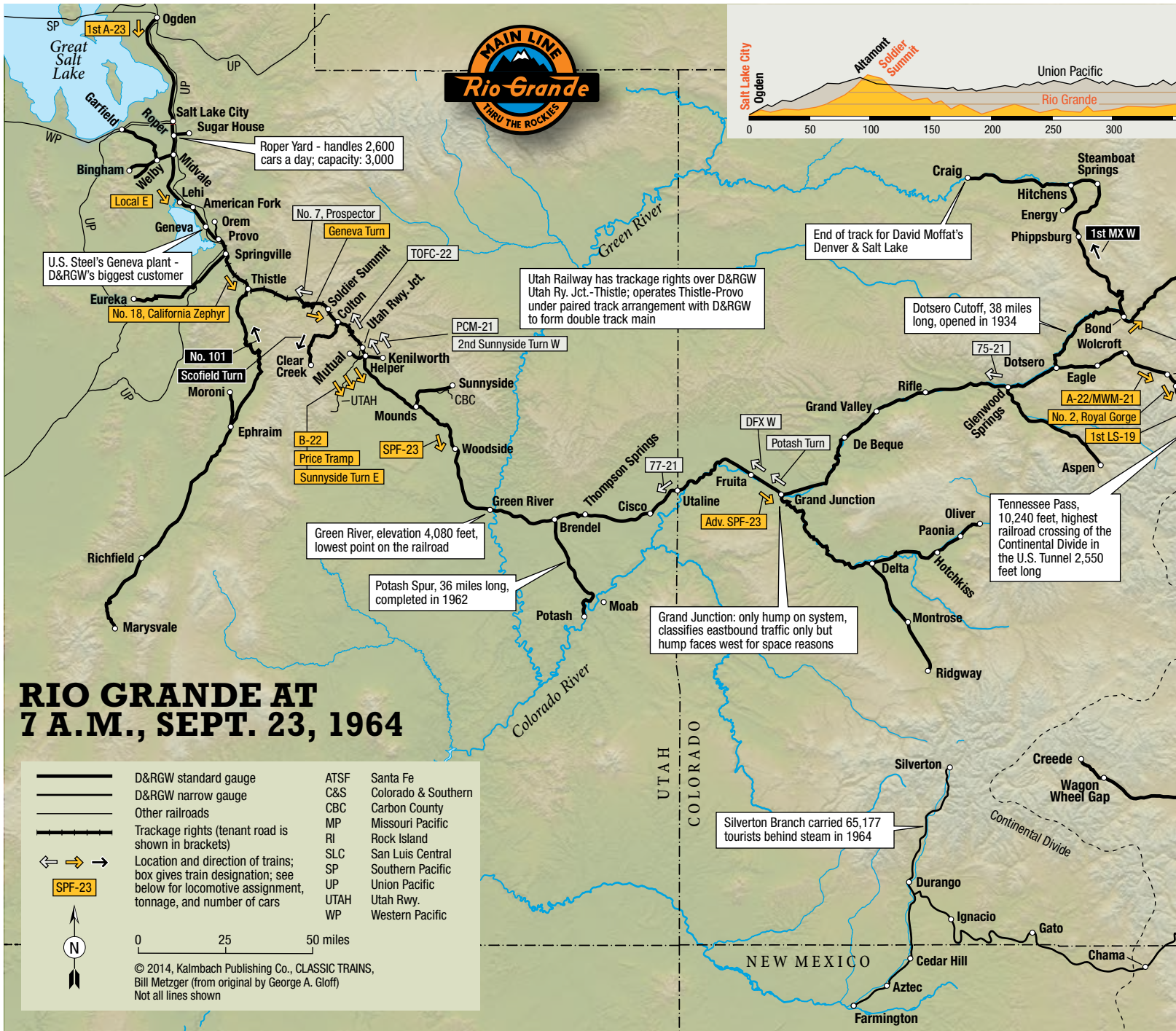
Witness now the birth of Rio Grande as we know it. What was the substance of its



Two GP35's usher one of Rio Grande's characteristically short freights, mostly piggyback and auto-rack cars, down the Front Range of the Rockies in May 1967. The train is passing the siding at Plainview, 20 miles west of Denver. K. C. Crist



At Alamosa, the eastern limit of D&RGW's narrow-gauge system after 1951, F7's and GP7's stand on dual-gauge track in May '63. Three-rail track extended down to Antonito, site of the famous END OF STANDARD GAUGE sign. Alvin Schultze, Dave Oroszi coll.



RIO GRANDE AT 7 A.M., SEPT. 23, 1964

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|--|---|
| <ul style="list-style-type: none"> D&RGW standard gauge D&RGW narrow gauge Other railroads Trackage rights (tenant road is shown in brackets) Location and direction of trains; box gives train designation; see below for locomotive assignment, tonnage, and number of cars SPF-23 | <ul style="list-style-type: none"> ATSF Santa Fe C&S Colorado & Southern CBC Carbon County MP Missouri Pacific RI Rock Island SLC San Luis Central SP Southern Pacific UP Union Pacific UTAH Utah Rwy. WP Western Pacific |
|--|---|

© 2014, Kalmbach Publishing Co., CLASSIC TRAINS, Bill Metzger (from original by George A. Gloff) Not all lines shown

Main Lines: Eastward

1st A-23 (called to depart 7:30 a.m.)
5912, 5901, 5308
81 loads, 49 empties – 7,782 tons

Local E
5724, 5604, 5664
21 loads, 61 empties – 3,352 tons

No. 18, California Zephyr
5544, 5543, 5532, 5531
13 cars

Geneva Turn
5564, 5582, 5561
83 empties – 2,158 tons

B-22
5644, 5643, 5682, 5692, 5562
60 loads, 4 empties – 3,830 tons

Price Tramp (called to depart 7:30 a.m.)
5301, 5304
13 empties – 324 tons

Sunnyside Turn E (called to dep. 8 a.m.)
5714, 5633, 5632, 5732
4 loads, 39 empties – 1,681 tons

SPF-23
3001, 3002, 3019, 3003
26 loads, 11 empties – 2,275 tons

Adv. SPF-23
5554, 5553, 5572, 5612
46 loads, 6 empties – 3,541 tons

AD-22/MWMD-21
3013, 3011, 3012, 3009
24 loads, 13 empties – 1,917 tons

Main Lines: Westward

No. 7, Prospector
5481, 5482, 5583, 5571
7 cars

TOFC-22
3026, 3025, 3030, 3031
34 loads, 7 empties – 2,479 tons

PCM-21
5741, 5742, 5722, 5743, 5744
58 loads, 15 empties – 3,874 tons

2nd Sunnyside Turn W
5621, 5732, 5652, 5714
56 loads, 1 empty – 6,517 tons

77-21
3007, 3032, 3033, 3034
72 loads, 14 empties – 4,841 tons

DFX W
5551, 5713, 5711, 5691
61 loads, 3 empties – 5,627 tons

Potash Turn (called to depart 7 a.m.)
5641
16 loads, 1 empty – 1,727 tons

75-21
3014, 3027, 3028, 3036
61 loads, 7 empties – 3,645 tons

FMS-22
3015, 3010, 3008, 3016
42 loads, 3 empties – 1,776 tons

RMS-23
3037, 3035, 3038
19 loads, 11 empties – 1,844 tons

Branches

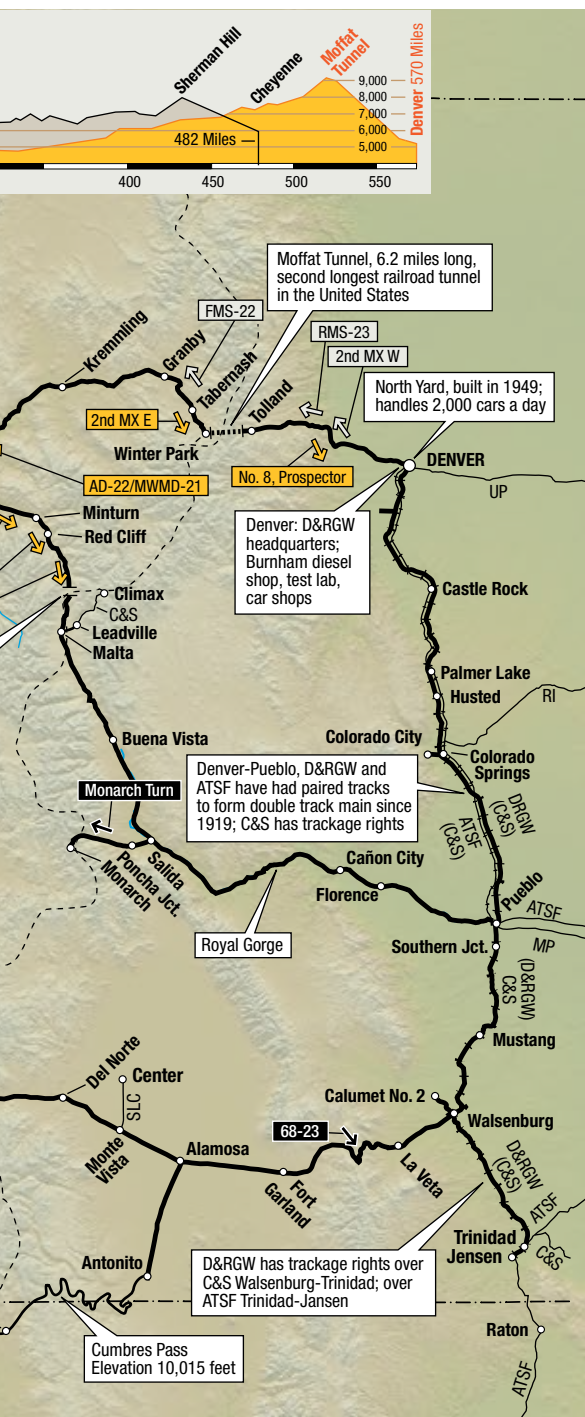
No. 101
5313
21 loads, 9 empties – 1,798 tons

Scofield Turn
5312
15 empties – 449 tons

Monarch Turn
5934
13 empties – 349 tons

1st MX W
5684, 5683, 5682, 5681
1 load, 61 empties – 1,772 tons

68-23
5591, 5592, 5584, 5613, 5634
42 loads, 15 empties – 3,070 tons



| | |
|---|---|
| A-22/MWM-21 3020, 5703, 3018, 3017 34 loads, 7 empties – 2,446 tons | 1st LS-19 5761, 5762, 5723, 5763, 5764 78 loads, 15 empties – 5,639 tons |
| 2nd MX E 5721, 5663, 5602, 5672, 5671 64 loads, 2 empties – 6,220 tons | No. 2, Royal Gorge 5581, 6012 3 cars |
| 2nd MX W 5774, 5773, 5772, 5771 3 loads, 41 empties – 1,220 tons | No. 8, Prospector 5534, 5533, 5552, 5614 8 cars |

reformation? Looking back today, Al Perlman (who resigned D&RGW's executive vice-presidency in 1954 for the top job at New York Central) cites four basics of comeback: abandonment of the narrow gauge; divorce from MP-WP control so as to insure free interchange with all other connections, notably SP at Ogden; physical modernization, mainly through dieselization to reduce helpers; and equalization with competition of UP.

Federal Judge J. Foster Symes, into whose court Rio Grande came seeking relief from its outlandish debt of \$177 million in 1935, first cleared the air. D&RGW had appeared in his chambers before, in the control of — the man on the bench noted — “a group of financial institutions in New York City, the officers of which have never willingly ventured west of the Hudson. . . .” Yes, he'd grant relief under Section 77 of the Bankruptcy Act — but control would go to a couple of local boys. Utah judge Wilson McCarthy and Denver banker Henry Swan were railroad neophytes compared with the names suggested from the ranks of co-owners MP and WP, not to mention D&RGW itself. But they were homegrown and amenable to the court's advice that they overhaul the road, keep it free of outside influence, and operate it in the interests of the mountain habitat it served.

The package with which they left court possessed 771 miles of narrow gauge, a string of unbroken deficits since 1930, a 77 percent operating ratio, all the deferred maintenance anyone could comprehend, and a failure to respond to the serum of the Dotsero Cutoff.

What McCarthy and Swan managed between 1935 and 1947, when Rio Grande was released from the court's custody as a free and healthy independent, is an oft-told tale of modern American railroading. One might say that they force-fed the patient with technology. Centralized Traffic Control . . . train radio . . . lab analysis of fuels and lubricants . . . off-track M/W equipment . . . piggyback . . . even a brand-new 115-pound rail design — anything that could do the job better and/or cheaper. The new team was as scornful of sentiment as the road's fresh, lightning-lettered herald. Perhaps its immediate, wholehearted acceptance of EMD's original FT diesel symbolized its attitude as much as the adoption of any other single new tool.

World War II both hurried and hindered the Rio Grande's comeback. Swollen revenues lowered the operating ratio and paid for improvements. War also proved that technology could triumph over terrain; too much tonnage and too many troop trains were shoved into Moffat Tunnel and over Tennessee Pass and Soldier Summit to dispute the point. But war gave the narrow gauge a new lease on life and obscured a true assessment of the road's ability to hold its own against UP.

Judge Symes was still riding the bench on April 11, 1947, when Rio Grande emerged from bankruptcy, and Wilson McCarthy

switched hats from trustee to president. Year after year Symes had held off the regiments of lawyers whose clients would have throttled rehabilitation, settled more generously with creditors, and/or restored former absentee control. When he finally released the railroad, it was indeed light of debt, combined with Denver & Salt Lake, muscled with \$58 million worth of capital improvements, and free of outside control.

And since 1947? Rio Grande has been, in the words of Chairman John Evans, “free to pursue its own destiny.” That pursuit makes for one of the more intriguing stories in Western railroading today, for while Rio Grande's postwar conduct has been exemplary in the view of both customers and stockholders, the road now finds itself rolling into an era in which it may be difficult indeed to hold to General Palmer's dream of “a little railroad a few hundred miles in length.”

AYDELOTT'S CHALLENGE

Today the pressure for preserving Palmer's dream falls upon Gale Benton Aydelott. At 49 he's young as railroad presidents go, also tall, friendly, articulate, sure of himself and his property. The son of a Burlington official, “Gus” Aydelott joined D&RGW as a section-hand following graduation from the University of Illinois in 1936. He knows what it means to freeze in Tabernash (unofficial low: -66 degrees) and bake in Green River (official high: 112 degrees), and he is a fair hand at holding tonnage with a 26L automatic brake. By instinct and experience an operating man, he now faces non-mechanical complexities of the character that once tried the souls of Palmer and Moffat — namely, mergers.

The plant Gus Aydelott has presided over since the death of Judge McCarthy in 1956 is small, modern, mountainous, and bracketed by competition. When the new boss took over, Rio Grande was completing the rehabilitation program begun in 1935 by the trustees, and its economic shift from local carrier to transcon link was complete.

As of January 1, 1963, Rio Grande was operating 649 route-miles by signal indication without train orders (*i.e.*, CTC), enough to protect all heavy-density single track. CTC will be installed next between Salt Lake City and Ogden (which might be termed a heavy-duty branch since crews all operate to the SP interchange on a turnaround basis out of Roper Yard); and within two years between Salida and Pueblo (where improvements are tied in with a 20-mile line relocation occasioned by a new dam). Traffic is too light on D&RGW's ancestral main from Denver to Pueblo, between which Colorado & Southern and Santa Fe join in a paired-track contract, to justify CTC, at least in Rio Grande's eyes.

“The Grande” began dieselizing its yards in 1941, received its first FT road units the following year, and ushered out standard-gauge steam at the end of 1956. Attentive to



From F-unit cab or Vista-Dome, the *California Zephyr* (here climbing the Front Range) offered superb views of the Rockies. Jim McClellan



The diminutive Denver-Craig *Yampa Valley* — an Alco PA, a heavyweight baggage-RPO, and a dome-observation built for C&O's stillborn *Chessie* streamliner — is pictured in October 1965. Ron Burkhard

the informed enthusiasm of his test lab, Aydelott in 1961 imported three diesel-hydraulics from Germany, but the newcomers had trouble inhaling at 9,000 feet-plus and were sold to SP in '64 with no regrets. Electro-Motive now is threatening to monopolize a diesel roster it has dominated since NW2 No. 100 went to work in 1941. Locomotive replacement (using FT's as trade-ins) began in 1962-64 with delivery of 28 2,250 h.p. GP30's and 10 2,500 h.p. GP35's. This year 12 more GP35's will join the fleet and 10 SW1200's will begin supplanting a yard-unit fleet previously divided up among Alco, Baldwin, Fairbanks-Morse, and GE. Rio Grande doesn't believe in re-engining older power, finding it cheaper to junk the unit and buy new.

Exposition Flyer, San Juan, Scenic Limited, Shavano — Rio Grande has several famous if not classic passenger trains in its scrapbook of the past and not a few in its present, notably the domeliner *California Zephyr*, whose Chicago-Oakland passage D&RGW shares with Burlington Route and WP; and the summer-only, steam-powered *Silverton* on the narrow-gauge branch out of Durango, Colo., which the road gave up trying to abandon and began exploiting. The CZ pays its out-of-pocket expenses, is sold out in summer, and makes friends, some of whom are shippers. The *Silverton*, often running in two sections, carried 65,177 tourists in the 1964 summer season. This leaves: Nos. 7 and 8,

the Denver-Salt Lake City *Prospector* — plush, but with too many empty seats and berths, revenues spiked by mail and piggyback; Nos. 1 and 2, the Denver-Salida (since a cutback this year from Grand Junction) *Royal Gorge* — two Alco PA's, three cars (including an ex-*Chessie* dome), lots of scenery, no profit; Nos. 9 and 10, the Denver-Craig *Yampa Valley* — one PA, two cars, lots of scenery, no profit, but impossible to kill; and Nos. 3 and 4 — what's left of MP's *Colorado Eagle* from St. Louis (handled by D&RGW north of Pueblo), nicknamed the "Sparrow" since MP dropped the sleepers, lounge, and diner last year. Add excursions (for Air Force Academy football games, skiing at Winter Park, boat races down the Colorado River, rodeo at Kremmling, state fair at Pueblo) in ex-Northern Pacific coaches and you have a passenger business that, with mail and other allied revenues, grosses something over \$4 million a year, loses a bit over \$5 million under the ICC formula, and causes management no panic if no particular fiscal pleasure.

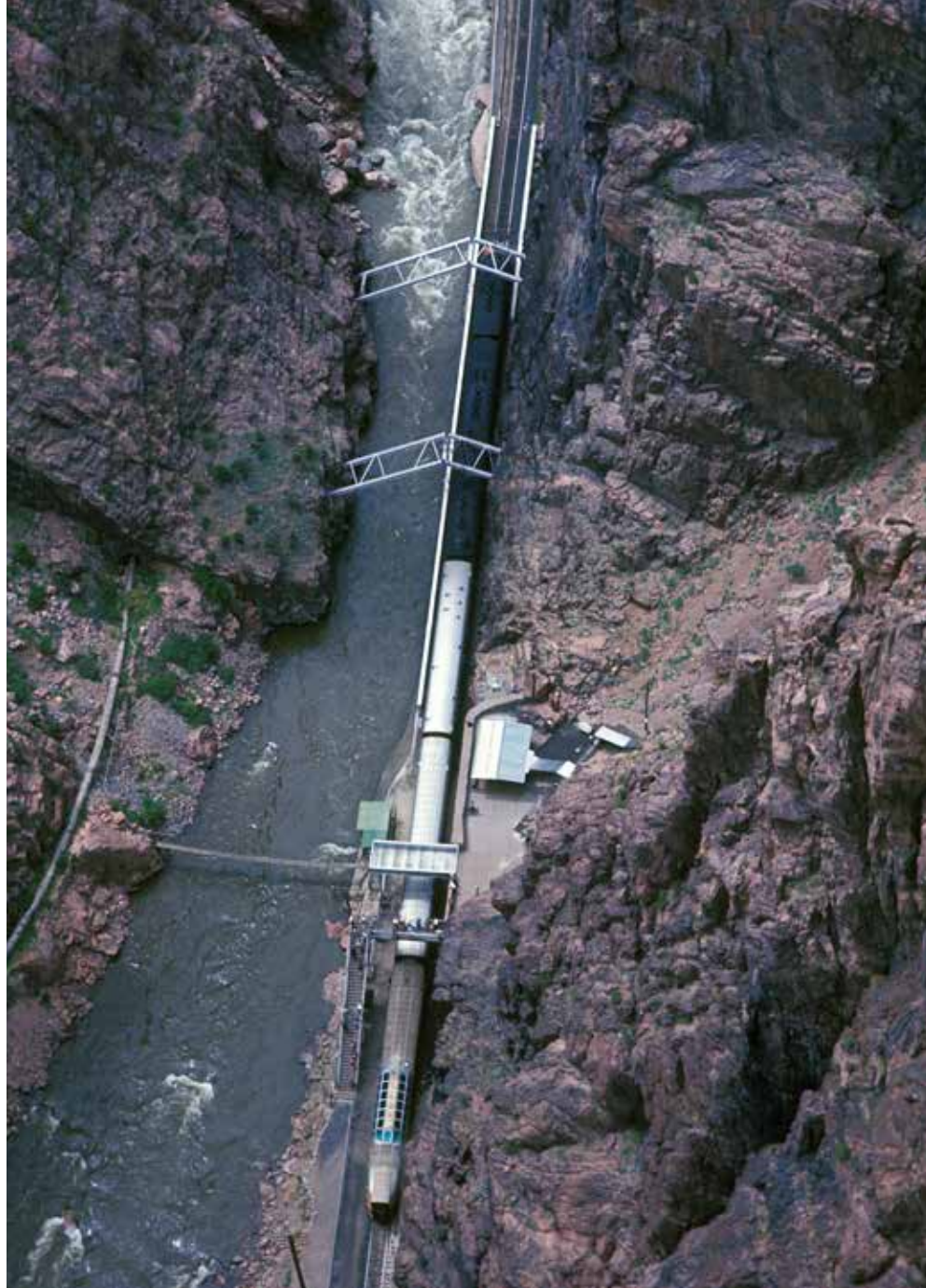
There are two fundamentals about the complexion of D&RGW's freight receipts and ton-miles: Bridge or overhead traffic accounts for more than a third of system tonnage and, because of its high-rated nature, approximately half of freight revenues; and bituminous coal is far and away the most important single commodity on the railroad, accounting for a third of all tonnage and 13

percent of freight revenues. D&RGW won and keeps the bridge business by solicitation (it maintains 30 off-line sales offices) and over-the-road performance. Being a small middle link in a transcon chain, Rio Grande has a relatively soft voice in ratemaking, a situation not much to its liking but beyond its control. As for coal, it has been part and parcel of Rio Grande since before the road existed. Coal is the reason more than half of D&RGW's standard-gauge freight cars are hoppers or gondolas. And coal is what feeds the furnaces at U.S. Steel's Geneva plant at Provo, Utah, a World War II installation that now easily ranks as the road's No. 1 customer, as well as at the older (Palmer founded it) Colorado Fuel & Iron complex in Pueblo. Add to that an expanding electric utility market. Someday Colorado-Utah coal mined on D&RGW rails may move overseas.

Any railroad is never finished in an engineering sense. True, Rio Grande can hardly alter the altitudes it attains (7,440 feet at Soldier Summit, 9,239 at the center of the Moffat Tunnel, and 10,240 atop Tennessee Pass) and its minimum mainline height clearance of 20 feet 5 inches is ample, so the road concentrates on reducing curvature and laying more 136-pound rail. Equipment naturally receives most of the "additions and betterments" budget, but as funds permit, the eternal rebuilding process goes on. In 1963, for example, the big job was done between Cottonwood and Agate, Utah, 3.6 miles; bulldozers eliminated 197 degrees of curvature and reduced overall length by 1,960 feet.

And strange as it may seem in our time, Rio Grande isn't through expanding its route-mileage. Vast mineral reserves are accessible to its property, and each one spells potential tonnage that is uneconomic for trucks. Consider Potash Spur. The name is deceiving, for this 36-mile heavy-duty line, completed in 1962, is almost as long as the Dotsero Cutoff and in places is much more scenic. It departs from the main line at Brendel, Utah, and runs south to the Colorado River, gouging through an 8,000-foot, 123-foot-deep cut and into a 7,059-foot, 23-foot-tall tunnel (on a 1.2 percent grade) on the last lap. The goal is Texas Gulf Sulphur's 2,788-foot mineshaft into the largest known potash field in the U.S. This fertilizer ingredient's market is as sure and expanding as the world population and its need for food. Initial mine production was estimated at 550,000 tons a year. Unfortunately, a construction accident in building the mine itself set back the target date for revenue rail potash movements from late 1962 to early 1965. The "spur," incidentally, cost \$7½ to 8 million, of which D&RGW paid outright only \$500,000 (for rail and ties). Texas Gulf Sulphur will get a \$10 refund per car shipped until the balance of the line's cost is retired.

To more people than Rio Grande cares to contemplate, its name spells not fast freight



The *Royal Gorge* pauses for passengers to take in the majesty of its namesake Colorado River canyon in June 1964. The Denver-Grand Junction train, whose three F's stand on the unusual Hanging Bridge, was soon cut back to Salida. Alvin Schultze, Dave Oroszi coll.

or even CZ but 264 miles of 3-foot gauge. This last legacy of General Palmer's era is steam-powered, indescribably scenic, rugged (24-degree curves, 4 percent grades, an elevation of 10,015 feet at Cumbres Pass), and — except for those *Silverton* tourists — hopelessly unprofitable. Two weeks might elapse between trains on the Alamosa-Durango line, yet major M/W expenditures are needed. Romance is expensive, too expensive, and the outlook for the narrow gauge exclusive of the *Silverton* Branch is bleak.

FREIGHTS ON ZEPHYR TIMES

Figures, facts, faces cannot reveal a railroad, much less a Rio Grande. One can ab-

sorb only so much from history, ICC reports, and Wall Street opinion. The men inside the converted department store that serves as D&RGW headquarters at 1531 Stout Street in Denver can bring the property into near focus, but the true image is west of the city, out in the Rockies and the Wasatch.

"Rio Grande?" exclaimed a Canadian railroader once. "That's the railroad where you reach for the throttle and the brake at the same time."

So climb aboard in the darkness before dawn on September 29, 1964, at North Yard, Denver, and ride west on an RMS (Rock Island Merchandise Special). Between the four GP30's on the point and the silver-and-gold



SD9 5313 and an F7B heel to a curve south of Littleton, Colo., under threatening skies in April 1966. This is the D&RGW-Santa Fe Joint Line, also used by the C&S. K. C. Crist

caboose of the symbol hotshot are 42 cars. They came into Denver from the east on the Burlington at 2:30 a.m. and on the Rock Island (which is a tenant at North Yard) at 2:35. North Yard received the CB&Q interchange at 3:55. By 4:30 the train has been tied together, inspected, given an air test, and is rolling. RMS is just 2,710 tons on the conductor's wheel report, less than half the units' rating, so we're OS'd without helpers and on almost passenger-train time.

RMS is bound for the Continental Divide on a grade of 2 percent, but the illusion is of the rails paralleling rather than approaching the frontal range of the Rockies until the train is almost 20 miles out of town. At Rocky Flats the line comes to grips with its opponent, describes a sort of elongated S-curve known as the "Big Ten" because of its 10-degree curvature, and bores upward. Speed on the Big Ten is the index of what a train will make on the balance of the climb to the summit; RMS rounds it at a steady 23 mph.

Speed . . . that's the controlling word on Rio Grande today. A year ago the road would have moved westbound freight via the Moffat in two 5,000-ton trains, each with helpers; today RMS will be one of five smaller, faster, helperless trains splitting up the same tonnage. (D&RGW's transportation ratio has not been materially affected by this switch to streetcar headway since the practice has reduced the deadheading required to equalize crews and power in the tonnage days. Anyway, the road has little choice. Not only piggyback and auto-racks require speed but even lumber now demands expedited handling.) Into the Moffat Tunnel at 6:25 a.m.; Rio Grande has almost doubled the elevation in 50 miles of almost continuous 2 percent and

in less than 2 hours, penetrating 30 tunnels in the process before the big bore itself. Dave Moffat has been vindicated once again.

Over the apex at 9,239 feet and then down the west slope rolls RMS, descending on 1 percent with the speedometer needle glued to whatever the timecard allows: 40, 55, or 60 mph. Now a sharp dispatcher and CTC resolve the old bugaboo of single iron by stitching together meets, mostly running meets, 1-2-3, just-like-that. RMS, holding the main, meets the *Prospector* at Winter Park — a running meet. . . . In the hole at Tabernash is LSD-25 (Lumber Special via Denver, out of Oregon on September 25) with four F7's on the point and a three-unit helper (Tabernash to Winter Park). . . . In the hole at Flat another brace of four F7's with an RBX (Red Ball Extra). . . . RMS is into Bond at 8:38, changes crew, departs at 8:42, meeting MWMD (Midwest Merchandiser) and overtaking an RBX. . . . At Lacy RMS takes siding for SPF-29 (SP Forwarder via Pueblo) and holds the main at Grand Valley to meet SPD-29 (SP Forwarder via Denver). Both hotshots are operating with GP30 and/or GP35 teams. . . . Yet another SPF is in Grand Junction, and the eastbound *California Zephyr* is just arriving as RMS stops at 12:17 p.m. for fuel and a crew change. Dead time: 8 minutes.

The morning of outrageously beautiful vistas — the frontal wall of the Rockies, James Peak, then Beyers, Gore, Red, and Glenwood canyons along the Colorado River — is as old as time. The morning of exploiting a 175-mile short cut to Utah — credit that to Dave Moffat. The morning of 6- to 8-inch slag ballast, 115-pound rail, and CTC is owed to Symes and McCarthy and Swan and Evans and Perlman. But the morning of



Five F7 cab and booster units hoist tonnage around Little Ten Curve, 19 miles west of Denver, in October 1964. Just ahead is the more dramatic Big Ten Curve. R. R. Malinoski, Frank & Todd Novak collection

highballing, GP30's, and light tonnage belongs to Gus Aydelott as does the resulting hike in gross ton-miles per freight train-hour.

West of Grand Junction the relentless race continues as 9,000 h.p. shoves the miles behind. It's down, down, down to Green River, Utah, which at 4,080 feet is the lowest point on the system (Pennsy tops the Alleghenies at a shade more than 2,200 feet above sea level), then the climb resumes. The ruling grade to Helper is 1 percent; thereafter to Soldier Summit atop the Wasatch the pitch tightens to a maximum of 2.4 percent. On the back of the assault out of Castle Gate on 8.3- and 9-degree curves the speed declines to 21, then 20½, finally 20 mph.

Then, descending on 2 percent double track and after describing two enormous horseshoe curves above Gilluly, comes the sight of sights: an "A" train (for Advance) is climbing the mountain, its 114 cars urged upward by four GP30/35's up front and two F's and an SD9 cut in on the rear.

On to Roper Yard, Salt Lake City. Arrival



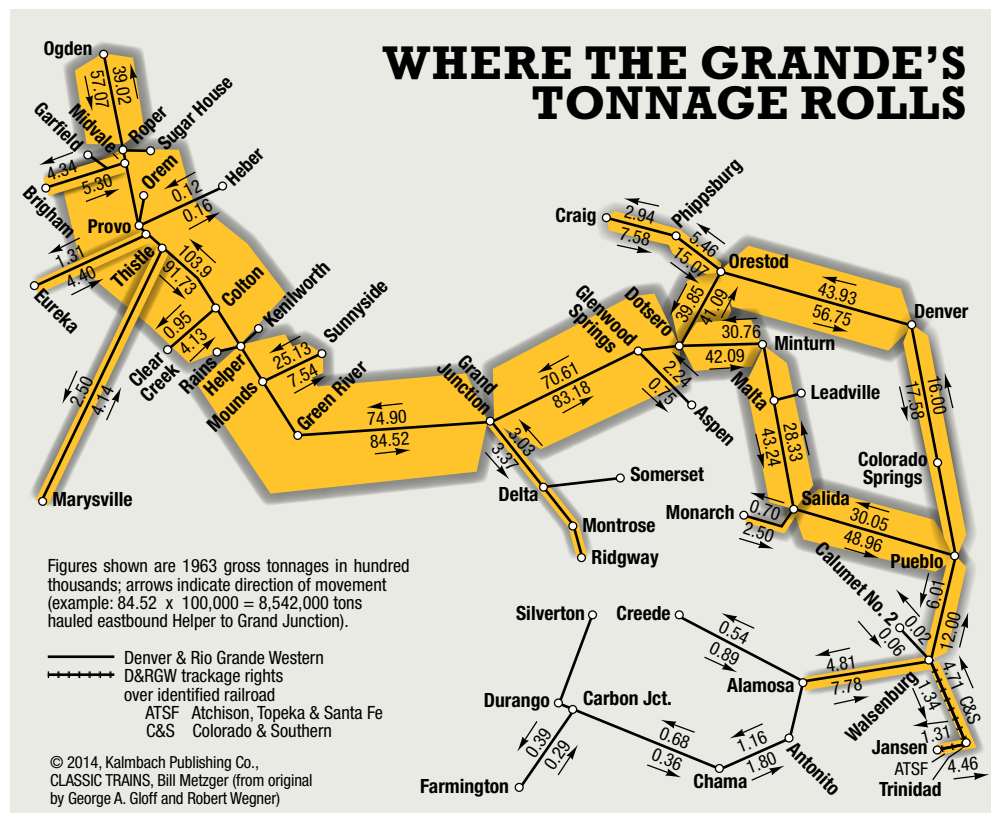
time: 7:35 p.m. In spite of a succession of slow orders in Utah because of flawed rails turned up by a Sperry rail inspection car, RMS has approximated the fastest freight schedule published by Rio Grande between Denver and Salt Lake City as recently as 1961; yet its performance constitutes a base rather than an optimum. The hottest of the hotshots today makes the same run in 13 hours 10 minutes, and you don't get there any faster in a CZ dome seat.

INDEPENDENT STREAK

So we ask you: Isn't it sufficient for Rio Grande to push tonnage through the mountains as fast as streamliners, hold its operating ratio in the 60s, maintain the property, mail regular dividend checks, and otherwise corporately and publicly behave itself today?

The dismaying answer is No.

To make money in our time D&RGW had to convert itself from a local road into a bridge line, which automatically made it dependent upon its connections. So far, so good in a status quo situation. But in 1965 every one of Rio Grande's connections is involved in a control or merger negotiation. First there were Santa Fe and SP jockeying for control of Western Pacific. Caught uncomfortably in





A quartet of GP30's and GP35's, paid for in part with FT trade-ins, lead a Denver-bound freight out of Plain siding in 1966. Steve Patterson

the middle, D&RGW wished aloud for WP's independence but sided with SP, its biggest single interchange. However, an ICC examiner has recommended that Santa Fe get WP. Next enter Rock Island, which Union Pacific wants. If successful, UP would thus lop off a valuable connection between Denver and the Missouri River. Finally, Rio Grande itself has been subject to outside scrutiny since Santa Fe approached its back door via WP, and both Burlington and UP have acquired D&RGW stock (9.2 percent in UP's case) for

"defensive" and "merely protective" reasons.

Obviously the merger pendulum is swinging, gaining speed, and will not be stopped. Just as obviously Rio Grande must expand too or lose its hard-won, cherished independence. Gus Aydelott intends to trade iron horses along these lines: If UP asks for merger with Rock Island, then Rio Grande will ask as a condition to ICC approval that it be allowed to purchase the RI lines between Denver and the Missouri River (at Kansas City and Council Bluffs) that duplicate exist-

ing UP routes. And Aydelott will argue that he wants an access to the Missouri River for the same economic reasons that UP requires admittance via RI to such gateways as Chicago, the Twin Cities, and St. Louis. Nobody, least of all Aydelott, assumes that such a boost in D&RGW size to 3,000 miles could be accomplished without some financial stress. Purchase price would be a rub. And once bought, the RI lines would need new diesels and cars as well as an M/W overhaul to bring the lines up to D&RGW standards.



An F7 waits at Rocky siding, just below Little Ten Curve, for two of D&RGW's three Krauss-Maffei diesel-hydraulics to pass with a westbound in February 1962. Note the dynamometer car, a former World War II troop sleeper, behind the K-M's. K. C. Crist



SD9 5304 is near the end of the Marysville Branch, which left the main line at Thistle. By the time of this March 1971 photo, service here was down to once a week. Keith Ardinger

But then, Rio Grande possesses as much experience in these areas as the next guy.

Certain Wall Street observers feel that Rio Grande has maximized its efficiency and now finds it increasingly difficult to keep in check its operating ratio (which stood at 69.5 percent for the first 10 months of 1964 vs. 67.9 for the same period of 1963) because of recent wage boosts and the demand for shorter, lighter freight trains. If so, acquisition of a line to the Missouri River could bring relief by spreading the overhead over more route-miles and virtually doubling the

average haul on bridge traffic. Question: Should Rio Grande have acted as soon as UP made a bid for Rock Island — as did North Western — instead of waiting until a few days before 78 percent of RI stockholders voted for UP control? UP now has momentum minus any agreement to share its prize other than to sell south-of-Kansas City trackage to SP. In a similar case — Seaboard Coast Line — the ICC turned down Southern's demand for certain duplicate Georgia

and Florida mains when approving merger.

Thus today the immediate future in a railroad world dizzy with merger fever is obscured for Gen. William Jackson Palmer's line of "a few hundred miles in length," and the visibility may be reduced to that inside Moffat Tunnel. Perhaps, though, there's an analogy to be found in the story of the small boy who in the dome of the *California Zephyr* declared with delight at East Portal, "Look, mommy, it's tomorrow already!" ■



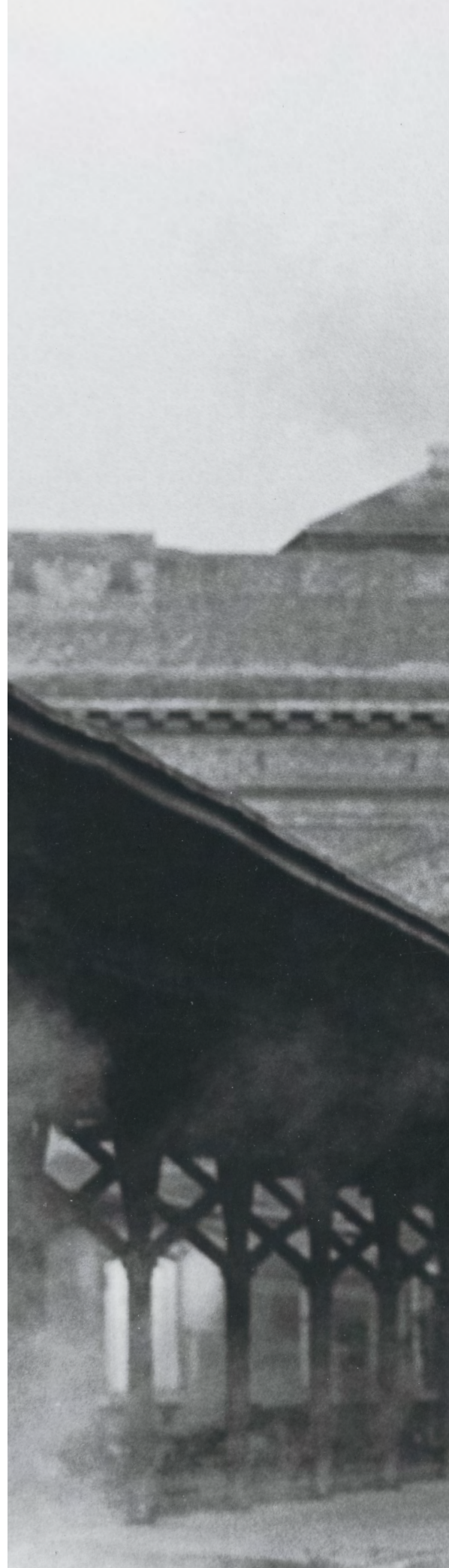
I COULD WRITE A BOOK

Allow me to introduce you to an old acquaintance, No. 4501 — 272,940 pounds of 2-8-2 of worthy lineage and seniority (Baldwin, Class of 1911). Glossy in sylvan green, gold leaf, vermillion, aluminum, and black, the Mikado steams in Terminal Station, Chattanooga, Tenn., on August 18, 1966, on the morning of a memorable occasion. For the engine shortly will whistle off on a nine-day, 1,450-mile journey to Richmond, Va., over a railroad that dropped its fires in 1953 and through a region where eighth-grade schoolchildren have no recall of pre-Electro-Motive railroading.

Extraordinary this day is because logic suggests, nay, argues, that the 4501 — Southern Railway's first Mike — shouldn't exist at all. She had been sold into shortline service, and she should have died in the backwoods, out of sight and unremarked. Ultimately Kentucky & Tennessee 12 (*née* SR 4501) had one friend left, a Du Pont researchist named Paul Merriman. He couldn't abide the thought of the 2-8-2 cold, much less dismantled. He appointed himself defense counsel for the Mikado, a formidable assignment that involved purchasing the locomotive out of personal savings, enlisting volunteers of the Tennessee Valley Railroad Museum in the cause to berth and overhaul her, *and* seeking the succor of onetime owner Southern, which assumed that it had discharged its obligation to steam by donating a Ps-4 Pacific to the Smithsonian.

The accompanying photography by John Gruber reveals that patience and persuasion prevailed and that SR was possessed of a heart as well as an operating ratio. For retubed and dressed in green (the first time an

No. 4501 stands at Chattanooga on August 18, 1966, ready to start a 1,450-mile journey to Richmond, Va. All photos, John Gruber





4501



Southern's first Mikado charges up Duncan Hill, west of Louisville, on a side trip into Indiana.



After widening out a notch, Walter Dove listens intently for the stack response.



The smokebox betrays the grime of a long journey as the Baldwin crests Blue Ridge, east of Asheville, N.C., in the rain.

SR freight engine has been accorded that honor), the 4501 set forth for Richmond and an appointment with the NRHS annual convention, trailing a consist of vintage passenger equipment identified in serif lettering and accented by genuine oil marker lamps. On the engineer's seatbox, left hand presiding over throttle, cutoff, and whistle chain, there ruled the action ingredient of the expedition: General Road Foreman of Engines, Western Lines, Walter Dove. In the final analysis it was he who coaxed drawbar pull out of those 27x30-inch cylinders, who gave her exhaust and whistle strength and dialect, who repealed dieselization for a glorious instant for thousands lured to trackside across five states. The sight and the sound of her were soul-stirring stuff — up Duncan Hill in Indiana, through the wide cuts and over the high bridges of the reconstituted CNO&TP, across the Blue Ridge in North Carolina, out of Salisbury on the old Danville Division, finally to the bank of the James River.

Why, a man could write a book about those 1,450 miles . . . and I think I may. — *David P. Morgan*



Richmond: end of one trip, start of another.

Christine and the MONGEES



“Mongoose” 425, one of RI’s five BL2’s, leads four F7’s west toward Council Bluffs, Iowa, early on Ground Hog Day 1962. Lou Schmitz

The Chicago, Rock Island & Pacific Railroad is perhaps one of the least remarked large carriers in the United States. Only lately has it become a topic of conversation because of the amorous designs of both Union Pacific and Chicago & North Western. Rock Island Lines operates a total route-mileage of just under 8,000, spread out over 14 states in the center of America — and possibly suffers from inattention because of this location. The “Rock,” in the colloquial, is also rather commonplace in its daily operating habits as it expedites piggyback shipments, hauls boxcars over endless miles of prairie branch lines, runs a moderate fleet of long-haul passenger trains, and carries commuters in and out of Chicago, quietly performing all the duties expected of a Midwestern trunk line.

Train-watchers are unlikely to spot anything particularly unusual about the motive power on a passing RI train except for the prosaic mismatch of unit types in any given consist. A glance at the Rock Island diesel locomotive roster [page 65] reveals many

common models — over 100 Geeps, a smattering of F’s, a small fleet of E’s for the *Rockets*, and so on. But further investigation reveals RI as possessor of one of the most interesting fleets of diesels in the land.

Repowerings, secondhand purchases, unique models, “firsts” and “lasts” in the diesel world — all are a part of the Rock’s roster. Even the giant Pennsy cannot match Rock Island in ownership of unique diesel-electric models — RI has six. Eight builders are represented by Rock diesel locomotives, a number few other railroads can claim.

Rock Island’s first experiences in the “non-steam” motive-power category came, naturally enough, with motor cars. RI acquired a 37-foot International railbus in 1925, then delved into gas-electrics in 1927 with the purchase from St. Louis Car of the first units of a 13-car fleet of 275 h.p. motor cars powered by Electro-Motive engines. In that same year emerged the first of the baggage-car motors, unique little critters that often were mistaken for shortened con-

versions of “regular” doodlebugs [page 71].

Five Mack-Cummings cars in the 240–270 h.p. range were built during 1928–29, two more EMC-St. Louis cars (of 400 h.p. each) in 1929, and a Standard Steel-Sterling-Westinghouse unit of similar power in 1930 to complete RI’s motor-car fleet of 21 units.

Like its granger brothers, Rock Island easily found use for the doodlebugs on lightly trafficked branch lines. The noisy, often undependable beasts prowled the weed lines, hopping between elevator towns solo, with a few freight cars, or possibly an extra coach now and then, plying the Rock’s more obscure trackage from South Dakota to Louisiana. By the early 1960s only a handful were left, and now all have been removed from the active roster, although some survive in maintenance service as self-powered weed-control cars. Rock later bought Budd’s Rail Diesel Car, successor to the old motor car, which in typical RI fashion got unique treatment [page 67].

Following the motor cars and baggage-car



No other road its size (and few larger) can match Rock Island's diesel diversity

BY J. DAVID INGLES • PHOTOS FROM THE AUTHOR'S COLLECTION



motors, a box-cab unit joined the roster in 1930. Numbered 10000, it was a two-power locomotive built for use around Chicago's La Salle Street Station, where it spent its entire life. Outshopped by GE, the 10000 contained an Ingersoll-Rand 300 h.p. inline six-cylinder engine and was identical to the three-power locomotives built for New York City service except for not having the third-rail pickup apparatus, unnecessary in the Windy City. Keeping 10000 company in Chicago during the '30s and '40s were six siblings: New York Central 1561-1562 and Michigan Central 7530-7533, all two-power locomotives of identical design. The 10000 came off RI's roster about 1950 and was scrapped.

UNIQUE CAB UNITS

Dieselization began in earnest on the Rock in 1937 when the first standard switchers and some not-so-standard passenger cabs arrived from Electro-Motive. The yard goats were 600 h.p. off-the-shelf Winton-engined units; 11 came in 1937 and 18 more the following year. One of the first batch, No. 510, was assigned to and carried initials for RI



"Christine's" roofline shows the results of 621's 1953 "operation" 10 years after the fact. "Mongeeese" BL2's 425/429 are in Peoria, Ill., April 2, 1960. 621, Ken Crist; BL2's, Monty Powell

SOME SAMPLE REPOWERINGS



Clockwise from top left: Rock's only FM's, Nos. 400–401, were repowered at age 10 in 1958 by EMD. No. 401 is at Chicago's 47th Street "Rocket House" diesel shop on June 15, 1955, and is in a suburban-train race with an RS3 out of La Salle Street August 1, 1963. Rock repowered five of its eight EMC NW1's with Alco 244's during 1956–62. No. 701, at Silvis in fall 1958, shows the unique result. No. 703, at Peoria, Ill., in fall '58, was not done. Clockwise from 401: Monty Powell, Tom Smart, Max Zimmerlein, Monty Powell

subsidiary Peoria Terminal, where it served until its remanufacturing in 1959.

The power units for the new Budd-built *Rockets* delivered in 1937 were EMC custom jobs known as model TA and numbered 601–606. These B-B's, which packed 1,200 h.p. through a V-16 Winton engine, lasted until 1958, though they had long been bumped from the *Rockets*.

Electro-Motive added a second unique model to Rock's fleet with the delivery of the two AB6's in 1940. Built for the Limon–Colorado Springs (Colo.) section of the *Rocky Mountain Rocket* (though one would go to Denver occasionally), these units resembled a standard E-type booster but had a baggage compartment in the rear end and were equipped with an operating cab in the blunted front end ahead of the single engine. Each unit had an A1A-3 wheel arrangement.

Common practice was to run the AB6's (numbered 750–751) through from Colorado to Chicago in multiple with other passenger units. This led in 1948 to the addition of a second engine in the rear — giving the AB's

the full 2,000 h.p. rating of a regular E6 or E7 — and an accompanying standard A1A rear truck. The AB's were taken off the Colorado assignment around 1960, after other E's had front-end m.u. receptacles added. They then ran in the regular passenger-power pool and were seen on the *Golden State*. In early 1965 they were rebuilt at the Rock's main shop in Silvis, Ill., and outfitted for the Chicago push-pull commuter cars. (Conversion includes installation of a small auxiliary diesel for train accessory power in place of the steam generator.) They can be found today on the bi-level trains between Joliet, Blue Island [page 70], and Chicago — the only two of their breed ever built.

44-TON PIONEER

In February 1939 the Rock Island recorded a first in dieseldom by putting to work a 44-tonner specifically designed to qualify for one-man operation. Davenport-Besler unit 351, the star, entered service on a two-trick industrial switching job at Muscatine, Iowa. This 88,000-pound design was developed

after the advent of the National Diesel Agreement of 1937, which required a fireman on all locomotives over 90,000 pounds (45 tons). The little center-cab goats later became common on short lines and were found on some Class 1 rosters. General Electric made the type famous, but RI forces teamed with Iowa neighbor Davenport to pioneer the concept.

The 351 had two 132 h.p. Caterpillar D-13000 inline six-cylinder engines, but unlike the later GE examples, 351 transmitted power through single-reduction motors instead of double-reduction. Davenports 361–366 soon followed the 351, though equipped with Caterpillar D-17000 series 180 h.p. V-8s, and Rock Island eventually added 11 other 44-tonners to its roster, including 5 from Whitcomb, a Baldwin subsidiary whose plant was in Rochelle, Ill. Six baby Davenports also were listed on RI's roster—little end-cab jobs of 180 h.p. each that rode on three powered axles. They were purchased in 1940–41 and strongly resembled later Plymouth-built industrial switchers often seen in gravel pits and at mine tipples.

CHRISTINE AND KIN

Although the Rock Island eventually had products from eight builders, EMD furnished the most, with Alco second. The Schenectady firm's first RI representation was No. 730 [page 68], a high-hood switcher rated at 900 h.p. Alco built about 185 high-hoods for more than 40 roads, but 730 was the only one the Rock ever owned. The hood configuration and builder serial number of 730, which was delivered in 1939, suggest that the unit was built in 1937 and sold later.

Much more glamorous machines than 730, and more notable from a historical viewpoint, were Rock Island's Alco passenger cabs, commonly known as the "Kuhler" units for the designer (Otto Kuhler) of their streamlined carbodies. Although New Haven got most of them (60 of 74 built), the first unit of this illustrious design went to, who else, the Rock. No. 624, a DL103b delivered in 1940, was the first of four on the *Rockets*.

Enter the future "Christine" in 1941. Brother of 624, DL109 No. 621 was the last (following DL107's 622 and 623) of the design to come to the Rock. No. 621 was repowered in 1953 by Electro-Motive and sometime later acquired in both railroader and railfan circles the monicker of Christine. [A New Yorker born in 1926 as George William Jorgensen Jr. had become the first widely known American to undergo sex-change surgery, in Denmark beginning in 1951. His transformation to Christine Jorgensen made her an instant celebrity. She died in 1989.] Real fame came the RI locomotive's way in 1962 when No. 622, last remaining RI brother and last Alco-powered Kuhler cab in operation in the U.S., was scrapped. This made 621 one of a kind, since the slant-nosed Alcos of the other five owners had been retired.

To watchers of Rock's diesels, Christine has become something of a *cause célèbre*. Although the true Alco sound is missing, the sight is there. She normally is assigned to Chicago-Des Moines No. 5 [page 66], the *Des Moines Rocket*, and the eastbound *Corn Belt Rocket*, No. 10, customarily in m.u. with E's and/or FP7's in the power pool. Christine is considered "just another E unit" by RI mechanics; she presents no special problems and should have a few active years left.

Christine's family was not the only notable group of Rock Island Alcos to be delivered in 1941. Four 1,000 h.p. B-B model RS1 road-switchers, Nos. 746-749, arrived and claimed the title of first true road-switchers delivered to an American common carrier. They were designed at the request of the Rock, but this original quartet was destined to serve on-line for only a few months. In early 1942 the Army drafted them for use overseas, and Alco equipped them with C-C trucks before they shipped out, numbered 8004-8007 (not in order). After the war, three went north for service on the Alaska Railroad, as Nos. 1031, 1041, and 1042 (again,



RS1 736 adds cars to train 10 at Des Moines, Iowa, on January 26, 1965. J. David Ingles



EMD prime mover is visible in RS2 453 at Little Rock on the last day of 1962. J. David Ingles



RI's newest of 18 Davenport 44-tonners works at Fairbury, Nebr., in July '59. J. J. Morrison

SECONDHANDERS



Clockwise from top left: RI SW8 839 still wears the colors of absorbed Wichita Falls & Southern while switching at Oklahoma City in December 1960. NW2 797, seen from Roosevelt Road in Chicago on July 24, 1964, is ex-New York, Ontario & Western 113. The Rock had only two Alco S1's, 598–599, both ex-Pullman Railway of Chicago; 599 is at Little Rock, Ark., on September 3, 1953. S2 732, in Kansas City's "west bottoms" on July 16, 1966, is the former Toledo Terminal 102. 599, J. J. Morrison; others, J. David Ingles

not in order). Rock Island received identical units 742–745 as replacements in 1944, and also added seven other new ones, 735–741.

The remaining war years saw Rock's diesel fleet swell mainly in the switcher department. As on many carriers, road freight units did not arrive until 1944. The first group was a dozen cab and booster sets of EMD FT's numbered 88–89 A and B; in 1945, eight more cabs and four boosters in the 70 series followed. The Rock's FT's were delivered in a red-and-black paint scheme that was to become the RI freight standard [page 68], and originally were equipped with the regular small numberboards, but modifications in later years gave many of the FT's deceptive anonymity. They lacked dynamic brakes, and so did not have the boxy roof hatches distinctive to most FT's. When standard F7 numberboards, Mars lights, and solid-maroon paint were added and the famed four-porthole side panels blanked out, the 1,350 h.p. freighters frequently were mistaken for younger F3 or F7 cousins.

Interestingly, despite the fact that Rock

Island's diesel roster was sprinkled with more than 100 conventional F-type cab and booster units, the most universal and first truly versatile production model, EMD's F3, was absent. Following the acquisition of the three dozen FT's, Rock took 12 1,350 h.p. F2's in 1946. Then it switched to Alco for its next freight cabs, not to return to Electro-Motive for road power until 1949 for the first of 45 F7's and 10 dual-service FP7's.

Along with the Alco FA's, the Rock made news on other fronts with its diesel purchases of 1948, its first volume buying year. Also from Alco came five RS2's, 1,500 h.p. B-Bs that were RI's first higher-horsepower, truly multi-purpose road-switchers.

THE MONGEES

From EMD came the "Mongee," five BL2's. The pug-nosed, wide-hipped Geep predecessors, RI Nos. 425–429, were standard catalog items but had steam generators for passenger service. Standard or not, only 59 BL's were built, so RI's quintet was notable for its mere existence. After serving on rural

locals, they became visible to all visitors to the nation's railroad capital as they hauled Chicago commuters (only RI's and B&M's did so) on weekdays and freights to Peoria or Silvis on weekends. Railfans soon gave the odd-looking units a nickname: Mongeese.

Also in 1948, Fairbanks-Morse made its one and only sale to the Rock: a pair of 1,500 h.p. B-B road-switchers, Nos. 400–401. The FM's, bought to keep the Mongeese company in the Chicago suburban zone, had m.u. controls and steam generators. Electro-Motive re-engined the pair in 1958, and the FM's continue to haul suburban trains despite the inroads of bi-level Budds powered by various stock EMD's.

In 1950, three groups of switch engines that were to become loners in diesel history were sold to the Rock Island by three builders. Lima-Hamilton built a pair of 800 h.p. units singular in carbody style which were among the few 800 h.p. models it sold. The Limas, Nos. 800–801, naturally enough, had an extra rear "step" for the battery box on the cab end, a feature lacking on the only

ROCK ISLAND'S DIESELS, 1930–1965

| Road No. | Quantity | Builder | Model | H.P. | Type | Built | Notes (Roster as of mid-1965) |
|------------------|----------|-----------|-----------|-------|---------|----------|---|
| 1-2 | 2 | EMD | LWT12 | 1,200 | B-1 | 1954–56 | Off roster |
| 10-23 | 14 | EMD | F7B | 1,500 | B-B | 1949–51 | Ex-100B-1009B, 120B-123B; 121B rebuilt to GP18M 123B, 1963 |
| 28-35 | 8 | Alco | FB1 | 1,500 | B-B | 1948-49 | Ex-145B-152B; renumbered 128B-135B when repowered by EMD, 1955-56 |
| 38-49 | 12 | EMD | F2A | 1,350 | B-B | 1946 | 38-41, 45-46 scrapped |
| 70-77, 88-99 | 20 | EMD | FTA | 1,350 | B-B | 1944-45 | Scrapped |
| 70B-73B, 88B-99B | 16 | EMD | FTB | 1,350 | B-B | 1944-45 | Scrapped |
| 100-127 | 28 | EMD | F7A | 1,500 | B-B | 1949-51 | |
| 128-143 | 16 | Alco | FA1 | 1,500 | B-B | 1948-49 | Ex-145-160; renumbered when repowered by EMD, 1955-56 |
| 200-238 | 39 | GE | U25B | 2,500 | B-B | 1963-65 | |
| 300-333 | 34 | EMD | GP35 | 2,500 | B-B | 1964-65 | |
| 345-350 | 6 | Davenport | 30-ton | 180 | C | 1940-41 | Scrapped |
| 351 | 1 | Davenport | 44-ton | 264 | B-B | 1939 | Scrapped |
| 361-366, 372-377 | 12 | Davenport | 44-ton | 360 | B-B | 1939-42 | 363-366 Scrapped |
| 367-371 | 5 | Whitcomb | 44-DE-5 | 360 | B-B | 1940 | 369-370 Scrapped |
| 400-401 | 2 | FM | H15-44 | 1,500 | B-B | 1948 | Steam generators; repowered by EMD, 1958 |
| 402-411 | 10 | EMD | FP7 | 1,500 | B-B | 1949 | |
| 425-429 | 5 | EMD | BL2 | 1,500 | B-B | 1948-49 | Steam generators; nicknamed "Mongeeese"; scrapped |
| 430-441 | 12 | EMD | GP7 | 1,500 | B-B | 1950 | |
| 450-454 | 5 | Alco | RS2 | 1,500 | B-B | 1948 | Repowered by EMD, 1957, with GP7 long hoods |
| 455-475 | 21 | Alco | RS3 | 1,600 | B-B | 1950-51 | 463 wrecked, rebuilt to 475; 456 repowered by EMD, 1958; 455, 457-462, 464-469, 475 scrapped |
| 485-499 | 15 | Alco | RS3 | 1,600 | B-B | 1951 | Steam generators |
| 500-528 | 29 | EMC | SC | 600 | B-B | 1937-38 | Rebuilt to SW900M and SW900, 1957-59, renumbered in 550 and 900 series |
| 529-546 | 18 | EMD | SW1 | 600 | B-B | 1942-49 | |
| 550-563 | 14 | EMD | SW900M | 900 | B-B | 1957-58 | Rebuilt from SC's |
| 598-599 | 2 | Alco | S1 | 660 | B-B | 1941 | Ex-Pullman Railway (Chicago) 20-21 |
| 601-606 | 6 | EMC | TA | 1,200 | B-B | 1937 | Only TA's built; scrapped |
| 602-604 (2nd) | 3 | EMD | E7B | 2,000 | A1A-A1A | 1946-48x | Ex-632B-634B; 632B scrapped |
| 607-612 | 6 | EMD | E7B | 2,000 | A1A-A1A | 1946-48x | Ex-637B-642B |
| 615-617 | 3 | EMD | F7B | 1,500 | B-B | 1949 | Ex-675B-677B; steam generators; 675B rebuilt to GP18M 1239, 1963; 676B scrapped |
| 621-624 | 4 | Alco | DL109 | 2,000 | A1A-A1A | 1940-41 | 621 repowered by EMD in 1953, nicknamed "Christine"; 622-624 scrapped; 624-621 built in reverse numerical order; later references label 624 as model DL103b, and 623 and 622 as DL107 |
| 625-626 | 2 | EMC | E3A | 2,000 | A1A-A1A | 1939 | |
| 627-631 | 5 | EMD | E6A | 2,000 | A1A-A1A | 1941 | 627 rebuilt to E8A 656 |
| 632-642 | 11 | EMD | E7A | 2,000 | A1A-A1A | 1946-48 | |
| 643-656 | 14 | EMD | E8A | 2,250 | A1A-A1A | 1950-53 | 643 ex-EMD demonstrator 942; 656 rebuilt, 1953, from E7A 627, later scrapped |
| 675-677 | 3 | EMD | F7A | 1,500 | B-B | 1949 | Steam generators |
| 700-707 | 8 | EMC | NW1 | 900 | B-B | 1938 | 702-704 scrapped; others repowered by RI with Alco engines, 1956-62 |
| 716-729 | 14 | Alco | S2 | 1,000 | B-B | 1942-48 | |
| 730 | 1 | Alco | HH900 | 900 | B-B | 1939 | Scrapped |
| 731-732 | 2 | Alco | S2 | 1,000 | B-B | 1946 | Ex-Toledo Terminal 101-102 |
| 735-749 | 15 | Alco | RS1 | 1,000 | B-B | 1941-44 | 746-749 to U.S. Army, replaced by 742-745 |
| 750-751 | 2 | EMD | AB6 | 2,000 | A1A-A1A | 1940 | Originally 1,000 h.p., A1A-3 wheel arrangement; only AB6's built |
| 758-759 | 2 | BLH | S12 | 1,200 | B-B | 1953 | 758 off roster, sold |
| 760-764 | 5 | Baldwin | VO1000 | 1,000 | B-B | 1943 | Scrapped |
| 765-774 | 10 | EMD | NW2 | 1,000 | B-B | 1948-49 | |
| 775-779 | 5 | EMD | SW9 | 1,200 | B-B | 1953 | |
| 795-797 | 3 | EMD | NW2 | 1,000 | B-B | 1948 | Ex-New York, Ontario & Western 111-113 |
| 798-799 | 2 | Davenport | 112-ton | 1,000 | B-B | 1950 | 798 scrapped |
| 800-801 | 2 | Lima-Ham. | -- | 800 | B-B | 1950 | Scrapped |
| 802-806 | 5 | BLH | S8 | 800 | B-B | 1952 | 802, 804 scrapped |
| 811-840 | 30 | EMD | SW8 | 800 | B-B | 1952-53 | 839-840 ex-Wichita Falls & Southern 801-802 |
| 900-914 | 15 | EMD | SW900 | 900 | B-B | 1959 | Rebuilt from SC's |
| 920-936 | 17 | EMD | SW1200 | 1,200 | B-B | 1965 | |
| 1000-1016 | 17 | Whitcomb* | 75-DE-12c | 650 | B-B | 1950-51 | Ex-CN (*see notes below); 1002, 1016 off roster, sold |
| 1200-1237 | 38 | EMD | GP7 | 1,500 | B-B | 1951 | |
| 1238-1239 | 2 | EMD | GP18M | 1,500 | B-B | 1963 | Rebuilt from F7B's 121B, 675B |
| 1250-1311 | 62 | EMD | GP7 | 1,500 | B-B | 1952-53 | 1301 scrapped |
| 1312-1332 | 21 | EMD | GP9 | 1,750 | B-B | 1957-59 | |
| 1333-1353 | 21 | EMD | GP18 | 1,800 | B-B | 1960-61 | |
| 10000 | 1 | GE | 2-power | 300 | B-B | 1930 | Scrapped |

NOTES: Roster as of mid-1965, some details updated. Road numbers and quantities for groups are as-built. In 1965 parlance, "rebuilt," as in from a cab unit to a hood unit, essentially means "traded in on." Key to builders: Alco, American Locomotive Co. (Alco-GE, 1949-53); BLH, Baldwin-Lima-Hamilton; Davenport, Davenport-Besler; EMC, Electro-Motive Corp. (through 1940); EMD, Electro-Motive Division, General Motors (1941 onward); FM, Fairbanks-Morse; GE, General Electric; Lima-Ham., Lima-Hamilton.
 *1000-series switchers: Canadian National in 1948 ordered 18 75-ton switchers of Whitcomb design from Canadian Locomotive Co., to be CN 7803-7820; order canceled after only 7803-7809 were delivered, in 1949; all 18 units were returned to Whitcomb and repowered with 500 h.p. Caterpillar engines; nominally 70-tonners, the units were sold in 1950, one to Washington & Old Dominion No. 55, the remainder to Rock Island Nos. 1000-1016.
 SOURCES: TRAINS, December 1965; *Second Diesel-Spotter's Guide* (Kalmbach, 1973).—J.D.I.



Spared from the solid maroon or red paint most Rock Island E's have suffered, Christine, leading FP7 404 and E7A 640 on train 5 out of Chicago on July 24, 1964, still sports the old maroon nose with some stainless-steel side panels. J. David Ingles



Same schedule, two types of trains: LWT12 No. 1 leads the *Jet Rocket* (left), about to leave Peoria, Ill., on the morning of May 13, 1956, while a year later, on August 25, 1957, E8A No. 654 is on train 502, a conventional-car morning *Peoria Rocket*. Two photos, Monty Powell

other 800 h.p. group, 21 units for NYC's Chicago River & Indiana.

Davenport, following its earlier 44-ton innovation, tried again with two 112-ton center-cabs rated at 1,000 h.p. each. These units, Nos. 798–799, were as tall as a boxcar [page 69] and had two 500 h.p. Caterpillar engines. One remains on the roster, assigned to the Quad Cities area (Davenport, Moline, East Moline, and Rock Island) within sight of both Silvis shops and its Iowa birthplace.

IMPORTS AND OTHER GOATS

The third batch of RI's unique 1950-vintage switchers are end-cab 75-ton Whitcomb units. Strikingly similar to GE's 70-ton version, they were built for Canadian National but were deemed unsatisfactory and were returned to the U.S. Rock Island picked up 17 of the 18 [page 69]; the other was bought by Washington & Old Dominion as its No. 55. Two of RI's have been sold to short lines and another leased to subsidiary Warren & Ouachita Valley, but the others are still active, assigned to various light yard jobs.

Yard engines also dominate RI's second-hand purchases, another quirk of note. The list includes former demonstrators, units picked up through acquiring short lines, and several outright purchases from other roads.

Four goats have been added to the Rock's fleet through shortline absorptions: SI's 598–599, the only 660 h.p. Alcos on RI, from Pullman Railway in Chicago, and SW8's 839–840, conventional EMD's that came with the Wichita Falls & Southern. The Alcos were sent away from their Windy City habitat and assigned to the Arkansas Division, a Schenectady-product domain headquartered in Little Rock. The WF&S SW8's have not strayed far; they're Southern Division units customarily employed in Oklahoma.

Five yard switchers have been picked up secondhand by the Rock simply to ease power shortages. Nos. 795–797, 1,000 h.p. EMD NW2's of 1948, were New York, Ontario & Western Nos. 111–113 until their purchase by RI in 1957. Toledo Terminal was the source for two 1946 Alco S2's; formerly TT 101–102, they became RI 731–732 in 1959. Early 1965 assignment lists show the NYO&W units on the Chicago Division and the TT's on the Missouri-Kansas Division.

One yard engine and one passenger unit owned by RI are former demonstrators, though builder records do not substantiate the claim for the switcher, Baldwin 759. Since the sale of sister 758 to Apache Railway in Arizona in 1958, No. 759 is at least the sole 1,200 h.p. Baldwin unit on the Rock. Electro-Motive passenger unit 643 began life in 1949 as E8A demonstrator No. 952 and was purchased by the Rock Island a year later.

LWT'S AND REPOWERINGS

The most famous of RI's adopted units were not switchers, however, and were unique

RDC'S THAT LOST THEIR ENGINES



The first three of RI's five RDC3's (9002–9004) live on as RPO-coaches 902–904. RDC 9002 (top) is on the *Choctaw Rockette* in fall 1958, while a 900 trails train 21 out of Sayre, Okla., in fall 1967 (above). Top, photographer unknown; above, Rodger Darling

Since Rock Island had so much experience with motor cars of various designs [page 71], it followed that it should also sample the Budd Rail Diesel Car. The road bought two of the RDC3 versions in 1953, Nos. 9002–9003. Containing a coach section, baggage compartment, and small RPO apartment, they normally were used on lightly patronized local passenger runs which required only a single car. Subsequently, the baggage compartment was eliminated in favor of a longer 30-foot RPO.

The Rock eventually wound up with five RDC3's, after buying the third one, No. 9004, in 1955 and two more, Nos. 9015–9016, in 1956. They rarely strayed north of Kansas City and usually were assigned to runs in Kansas and on the Choctaw Route from Memphis west through Arkansas and Oklahoma to Amarillo, Texas. On the latter route the runs were named *Choctaw Rockette*.

Several points concerning Rock's RDC operation were notable. During past years it was common to see an RDC leave Kansas City back in the consist of a southbound train (the Budds came north this way also), waiting to be dropped at a division point where it could take off on its own. A similar situation existed on the Choctaw run during Christmas season, when mail swelled the consist. A steam-equipped Geep would be used to pull the extra head-end cars, and the RDC would run at the rear as a coach.

After Rock Island's last RDC run was discontinued in 1964, the cars' engines were removed. However, the cars are still carried on the roster as RPO-coaches, and in fact, three — Nos. 902–904, ex-9002–9004 — see service as the regular passenger-carrying car, and RPO, on the remaining train between Memphis and Tucumcari, N.Mex.

Rock Island's *Choctaw Rockettes* claimed title as the longest RDC runs in the nation for about three years, from the time Western Pacific discontinued its 917-mile Oakland–Salt Lake City *Zephyrette* RDC runs until the RI trains were pulled off. The Memphis–Amarillo distance is 762 miles. NYC's Boston & Albany Beliner run of 200 miles held the U.S. long-distance RDC title until killed September 26, 1965, although Northern Pacific's international run to Winnipeg is somewhat longer. —J.D.I.



No F3's on the Rock: An F-unit trio — F2 48, F7 122, and FT 70 — rolls 126-car train 42 into Bureau, Ill., July 21, 1962. J. David Ingles



When built, Rock's FT's looked normal, as here at Council Bluffs, Iowa, July 7, 1953, but most would lose their portholes [top photo]. The "RF" is for "Rocket Freight." J. J. Morrison



Rock's only high-hood Alco, ready for trade-in at Kansas City, Kans., on April 16, 1965, is thought to have been built in 1937, two years before the railroad bought it. J. David Ingles

to the Rock after purchase. These were the LWT12 cabs, the GM power units built for the Aerotrains in 1954 and 1955. Under GM ownership they were numbered 1000–1001; they became 3 and 2, respectively, when the Rock acquired the trainsets in 1958. Meantime, RI had ordered an identical unit, No. 1, from GM to power the Talgo *Jet Rocket* between Chicago and Peoria. This unit was delivered in 1956 and was the first of the trio to be retired, to serve as parts supplier for 2 and 3. The former demonstrators remained in suburban service with the lightweight equipment until April 1965, when all were withdrawn in favor of the new bi-levels. The trains and the two remaining units are stored at Silvis, awaiting a buyer.

Along with secondhand units, repowered diesels have given a special flavor to Rock Island's roster. After the famed Christine operation on Alco 621 by EMD in 1953, RI did not participate in any conversions until 1957–58, when the second round of dieselization was about to get underway. Again EMD was selected.

In 1957 the Alco freight cabs and boosters, and the original Alco multi-purpose units, the 1,500 h.p. RS2's, were subjected to EMD repowerings. A single RS3, No. 456, and the two Fairbanks-Morse units were converted in 1958. Since the FA's lacked dynamic brakes and retained the Alco cooling system, the repowering did not give them a telltale bulge on the roof as it did Katy's EMD-ized FA's [Spring 2014 CLASSIC TRAINS]. Like Frisco's, RI's repowered FA units had to be heard to be detected. The RS units kept the Alco cab and short-end hood, as did similar repowered units on Katy and Frisco.

UNITS UNIQUE TO THE ROCK



Clockwise from top left: Lima-Hamiltons 800 (at Chicago May 4, 1962) and 801 had unique carbodies. EMC's 1,200 h.p. TA was a lighter version of the 1,800 h.p. EA, both built in 1937; RI 604 is at Omaha July 1, 1953. Whitcomb 1004 (at Rock Island in August '58) is among a group of Canadian rejects. Davenport-Besler's two 1,000 h.p., Caterpillar-engined center-cabs of 1950 were not repeated; RI 798 (at Silvis in April 1965) was the first to go to scrap. Clockwise: K.C. Henkels, J. J. Morrison, Bernard Corbin, Ken Crist

The Rock Island RS2 repowerings had an interesting sequel involving some Electro-Motive switchers. During 1957–1962, five of the eight EMC 1938-built NW1-model goats were converted by RI at Silvis by installing Alco 244 engines from the repowered RS2's and removing their Winton prime movers. To keep within the limits of the traction motors, the engines were de-rated to 900 h.p. by reworking the fuel injection systems. Because of clearance problems with the Alco prime movers, the hoods of the NW's were raised to a position nearly flush with the cab roofs [photo, page 62], and the Alco-ized switchers putter around resembling maroon piano crates.

This is believed to be the only group of Electro-Motive units repowered with Alco engines, although a few Baldwins have received the same treatment. The converted NW1's — Nos. 700, 701, 705, 706, and 707 — can be found working in Silvis and around the Quad Cities area. The remaining units in the series that were not repowered went to scrap in the early months of 1965.

VARIETY PER ANNUM

Not shown on Rock Island locomotive ownership lists but adding more flavor to its roster each year is the "Units Leased" category. During the 1950s, New York Central Baldwin Sharknose freight units appeared annually on the Des Moines and Western divisions, released from drag duties in Indiana and Ohio to help get the harvest west of the Mississippi to market.

The Sharks were followed regularly by aged Great Northern FT sets, itinerant laborers from the north which in their twilight years also went to Colorado & Southern and Missabe Road to fill in during power shortages. To complete the RI image, Alcos made the Iowa scene in the early 1960s, as Union Pacific FA1's, sometimes en route to or from stints in Canada, were leased to help out until new units arrived from EMD.

A look at the early 1965 list of leased units shows a new trend to yard power rather than road freight power in Rock's borrowing, but with nothing lost in novelty. This trend no doubt is a reflection of the appearance of new

road freight units. With delivery of RI's new switcher order, such borrowing may not go on, but it's worth savoring while it lasts.

Reading from the top of the list numerically, Alco switchers 20 and 21 lead off. These 1,000 h.p. goats are the property of the Galveston, Houston & Henderson, a Texas switching road, and wear black paint with heralds of GH&H owners Katy and MoPac adorning the cabs. RI assigned them to the Southern Division.

Two Kansas City Terminal units are next: another pair of black Alcos numbered 57 and 58. RI used them on the "Mo-Kan" Division and kept them within coupling distance of home rails in Kansas City.

A pair of road engines sneak in, SD9's from DM&IR assigned to the Rock Island Division. The seasonal nature and declining volume of Missabe Road's business have resulted in a scattering of its polished maroon C-C hoods. The SD's are newcomers to RI, but they've been leased in recent years by such varied roads as Norfolk & Western, Pennsy, and Canadian National, and some



On the *Rocky Mountain Rocket* as intended, an AB6 will be second unit from Limon (top, in 1960) to Colorado Springs, and in 1963 (middle) will lead out of the Springs. The AB6's now haul bi-levels (above, July 9, 1965) to Joliet. Middle, Ken Crist; others, J. David Ingles

have been sold to U.S. Steel cousin B&LE.

Almost inexplicably, one Baldwin C-C road-switcher from Soo Line is listed. Soo 384, assigned to the Rock Island Division and used alone because of m.u. incompatibility, is a burbling white monster that originally belonged to Duluth, South Shore & Atlantic. Almost as startling is the presence of Missouri Pacific 1023, assigned to the Rock's Southern Division. No. 1023, known to MoPac fans as the "Blue Piano Crate," is a rebuilt EMD switcher that looks akin to RI's 700's, even though it contains an EMD prime mover. Five Alco switchers from the 1100 class of aspiring RI parent Union Pacific complete the April 1965 roster of visitors.

SUBURBAN PRIZE-WINNERS

Rock Island yards may be dotted with oddities, but Christine is about the only unusual creature to grace the head end of the present *Rocket* fleet. Straight EMD products, from the two E3's to the dozen active E8's, represent the rest of the regular road passenger power pool. A few steam-equipped Geeps fill in occasionally. But to find the familiar RI unorthodoxy, one need only return to Chicago and check the suburban trains.

Perhaps even more than through train service, a commuter operation reflects a railroad's image. Admittedly the Rock Island was a bit tardy in applying the polish, but the bi-levels have arrived, and at least a portion of Blue Island and Beverly Hills dwellers can be content and comfortable riding to work in the fashionable Chicago push-pull style.

RI's commuter power takes the prize for all Chicagoland. The old roster was classic enough, with the 15 RS3's with dual controls and train-lighting equipment forming the bulwark of the fleet (Arkansas is home to the freight-only RS3's). Add in the two FM's, the Aerotrains, the Mongeese, and a couple of regular FP7's, and you had the picture — until the Budd bi-levels arrived in early '65.

The new line-up has lost little color. Only a small portion of the operation was taken over by the bi-levels. As a result, only the lightweights and the Mongeese have been replaced to date (the FM's and most of the Alcos are still busy). The new trains are powered by several recent conversions of former road power, and these units are an illustrious group. First to be converted for push-pull operation was No. 630, one of the four remaining long-nosed EMD E6's. Chicagoland fans have added an eagle ornament that now adorns the top of her front headlight, and she still sports the stainless-steel side panels, with maroon paint only on her nose.

Not satisfied with a mere E6, Rock next converted its only three straight F7A's equipped for passenger work, Nos. 675–677, and then added the only two AB6's in the world for good measure. If all this does not put every other Chicago push-pull operation in the shade, nothing will.

MUNDANE FREIGHT POWER

Although Rock Island's early diesel acquisitions are studded with rarities and variations on the conventional, the standardization of the second generation of diesels has somewhat eclipsed its pursuit of the unusual.

After acquisition of the Mongeese, RI had ordered 12 "plain vanilla" GP7's which came in August 1950, placing the Rock among the earliest Geep purchasers. From then on, RI was — with the exception of an order of Alco RS3's in 1951, including the commuter engines — a solid EMD customer for new road power until 1963.

That year ended the first round of RI's dieselization, but 1961 marked the initiation of the second, when 10 FT trade-ins went to EMD on an order for GP18's. (During 1957–60, RI added 32 GP9's and GP18's, but no older units were traded in or scrapped.)

At first RI stuck with normally aspirated road-switchers, following the model change from GP9 to GP18 and not sampling turbo-charged power. The low-nose option was shunned, too. But in 1963 RI joined the horsepower race with 12 General Electric U25B's with the standard low short hood but (as always on RI) minus dynamic brakes. This was its first non-EMD order since 1951.

In 1964 the trade-in arrangements on a second order of the popular "U-boats," as RI men tab the GE's, added a touch of the old Rock atmosphere. No units were traded in on these U25B's, but the remaining FT's were cut up at Silvis. Their trucks were saved and placed under certain of the Alco FA1's whose trucks went to Erie to keep the compatibility of GE traction motors on GE locomotives. Thus some of the EMD-engined Alco cabs were mongrelized even more, keeping only the Alco carbody and some components.

This year of 1965, well into the second round of dieselization, may mark the beginning of the end for the unique flavor of RI's diesel fleet. A recent order for 20 EMD GP35's resulted in the retirement of some of Rock's gems, including original 44-tonner 351, high-hood Alco 730, and the Mongeese. A second GP35 order, for 14, included 5 on trade-ins of a like number of F2 cabs, and a third U-boat order at the same time sent in 14 of the freight RS3's on a 1-for-1 basis.

The saddest order of all in the eyes of Rock diesel fans, though, was one for 17 SW1200's, which will undoubtedly result in the retirement of more of the older, odd yard switchers. Economics make sense, but those who mourned the passage of steam should understand the loss felt by the modernists as one of the most fascinating fleets of diesels in the land begins to disintegrate under the wheels of progress. ■

J. DAVID INGLES, senior editor of CLASSIC TRAINS since its inception (now part-time), served on TRAINS' editorial staff 1971–2007. This was his first story published in TRAINS.

BAGGAGE-CAR LOCOMOTIVES



"Baggage-car locomotive" 9006 lopes west near Mercier, Kans., with Horton–Fairbury, Nebr., mixed train 79 on May 12, 1962. Frank Tatnall [see Winter 2011 CLASSIC TRAINS]

In the same year Rock Island ordered its first big doodlebugs, 1927, its shops at Horton, Kans., converted two 1911 40-foot mail cars to stubby baggage-car locomotives of 550 h.p. rating. Two 275 h.p. six-cylinder distillate engines provided the power. One unit, No. 9000, was geared for 60-mph passenger service; the other, 9001, for 30-mph freight service. The power plants exactly paralleled those of the gas-electric cars ordered the same year. Likewise, when 400 h.p. gas-electrics came from EMC-St. Louis in 1929, RI took three more baggage cars and equipped them with twin 400 h.p. Electro-Motive power plants to make 800 h.p. units 9005–9007. Later in 1929 the same machinery was installed in seven more units, Nos. 9008–9014, based on all-new St. Louis carbodies instead of old baggage cars.

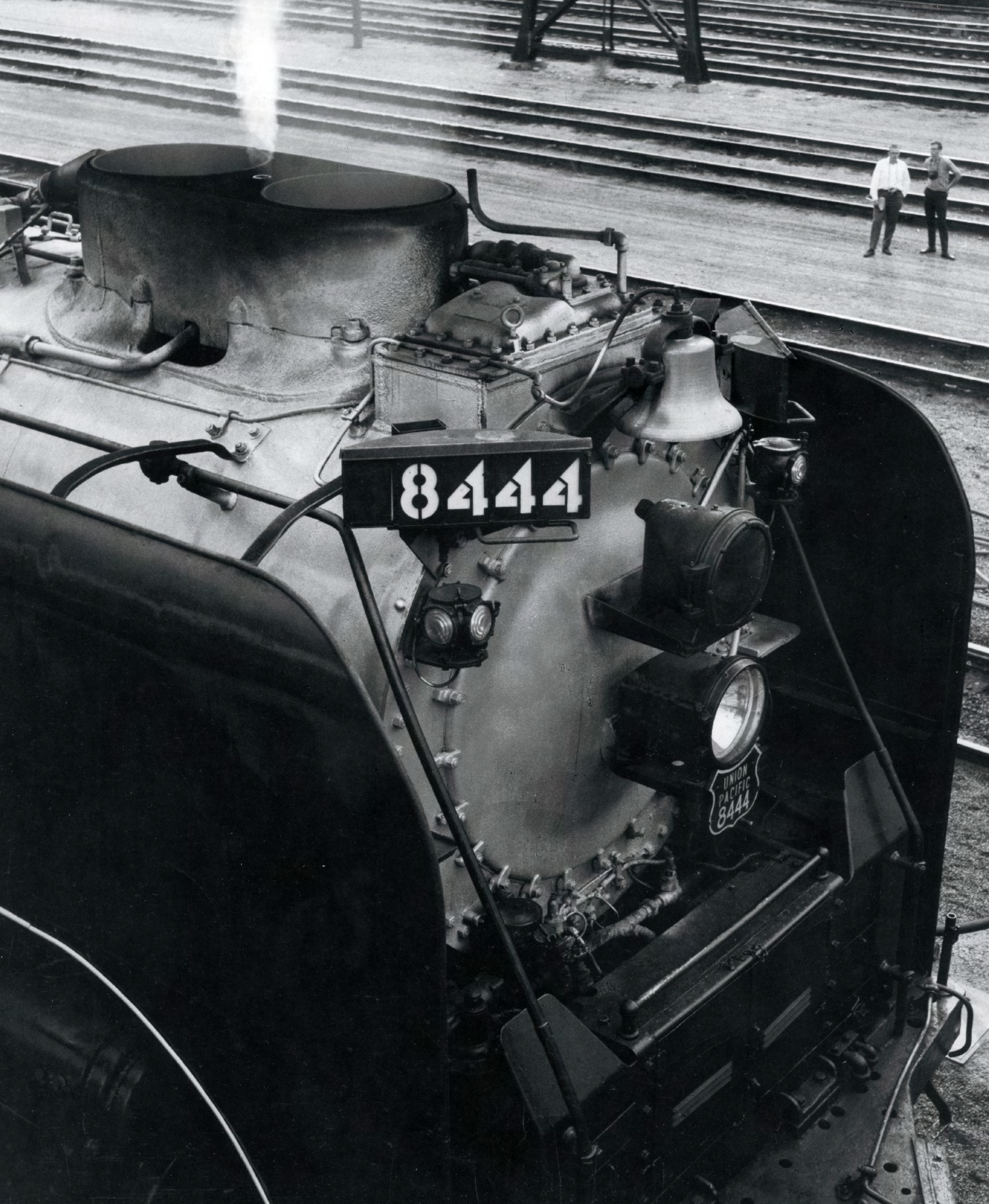
The RI motor baggage cars were converted to Hamilton and Caterpillar diesel-powered units during 1940–47. Although intended for dual service, as branchline passenger traffic waned they turned their energies more to local freight hauls.

Car 9008 was the first to leave the roster, about 1948; almost a decade later it was joined in retirement by 9009. By 1960, only 9006, 9013, and 9014 remained, although the body of 9012 was intact as the depot at Ellsworth, Minn. Nos. 9006 and 9014 last operated out of Fairbury, Nebr., in fall 1962 on branch runs to Horton, Kans., and Ruskin, Nebr. Then they went to storage at Des Moines, Iowa, and eventually to Silvis, Ill., by the backshops.

The final act starring the baggage-car motors came late in 1962 when No. 9013 was used on the Bucklin–Dodge City (Kans.) run during the fall harvest rush. By mid-1963 she was in storage at Liberal, Kans., then later in Kansas City. In early 1964 the three remaining units were retired, ending Rock Island's motor-car era. — J.D.I.



Rock's first 12 GP7's, in 1950, wore this simple red and black, as did the BL2's. Beginning in '51, RI Geeps had the fancy "barber pole" version, as on the unit at left. Monty Powell



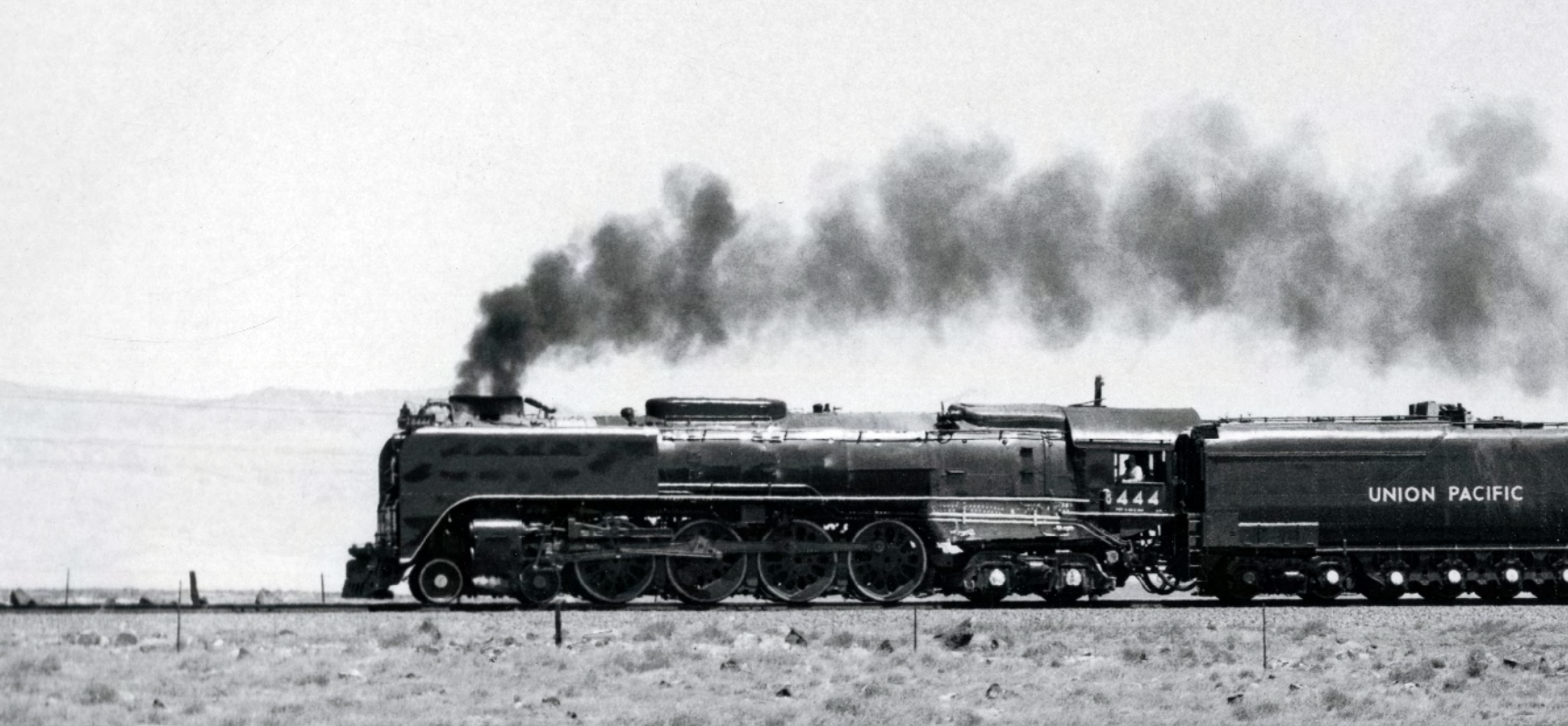
THE FOUR-DIGIT 4-8-4

Roundhouse historians will recall that Union Pacific took its time about adopting the ultimate steam locomotive wheel arrangement, evading the 4-8-4 until 1937. The 20 Northern's Alco delivered that year were modern enough but — at least for a road of UP's leanings — a bit modestly proportioned. From 1939 on they were known as the "little 800s," for that year UP truly exploited the possibilities of the 4-8-4 with a great Centipede-tanked, twin-stacked, 80-inch-drivered machine that could hold its own against the likes of, say, a Santa Fe 3776 class or a Southern Pacific GS-3. Happily, the newest 4-8-4 on the system, a member of the second batch of big 800s built in 1944, not only survives but thrives. Last year she received a major overhaul preparatory to an outing from her home base in Cheyenne, Wyo., clear to the Pacific Coast for the occasion of fantrips out of Boise, Idaho, and Portland, Ore. The accompanying

No. 8444 rests at Laramie after bringing a fantrip up from Denver. William H. McKenzie



At Denver Union Station with a special for Cheyenne, September 25, 1966. Ron Morse



photographs, taken of both the engine's normal Colorado-Wyoming junkets and the Far West expedition, reveal what all the shouting is about when "Extra 8444" (she acquired the last digit when a GP30 usurped her original number, 844) appears on a UP train sheet. For the huge elephant-eared Northern, possessed of the capacity in flat terrain to cope with 5,000-ton-plus freights or lift 20 heavyweight Pullmans over the 100 mph mark, is cast in the very best of last-generation U.S. steam locomotion. Temporarily she is the only active American 4-8-4, so it is particularly fitting that the singularity and importance of that role should befall such a suitable actress. — *David P. Morgan*

Twilight softens the contours of UP's final 4-8-4 in Rawlins, Wyo. John Gruber



The big Alco dwarfs her EMD companions as she crosses the desert at Reverse, Idaho, on July 29, 1966. Henry R. Griffiths Jr.



At Laramie, Wyo., a crewman checks the reserves of a tender that holds 6,550 gallons of fuel. John Gruber

1960s
COLOR





Bright light of the East: Formed by merger in 1960, Erie Lackawanna was a colorful note of optimism in a region dominated by failing giants. In this September 1968 photo, three GE U25B's and three EMD GP35's lead a hot westbound freight across the Delaware River at Mill Rift, Pa. Robert R. Malinoski, Frank & Todd Novak coll.

Alcos under wire: In June 1969, less than six months after the New Haven became part of Penn Central, an Alco FA, FB, and RS3 pass Fresh Pond Junction on the Long Island Rail Road. The catenary is for NH and LIRR freight motors serving the Bay Ridge carfloat yard. Post-merger traffic patterns virtually ended New York carfloat operations, and the wires would soon come down. Krambles-Peterson Archive

On borrowed time: Two Baldwin 1,500 h.p. "Babyface" freight diesels pass the Jersey Central station (once shared with Lackawanna) at Phillipsburg, N.J., with a westbound on a November 1960 afternoon. Few such 1940s-vintage minority-make cab units survived the 1960s. Bob Krone





Passing phase: Boston & Maine was one of three U.S. buyers of ultra-lightweight Talgo intercity trains in the 1950s. The New Haven's train of 1957 lasted barely a year, but those on Rock Island (1956) and B&M ('58) operated until 1965 in suburban service. Here's B&M's train, in Boston not long before retirement. The articulated consist was powered by two Fairbanks-Morse P12-42 "Speed Merchant" diesels, one at each end. Dan Pope collection

1960s COLOR

Keeping the faith: The windows of the dining car in Northern Pacific's *North Coast Limited* are cleaned during the train's stop at Livingston, Mont., on June 23, 1962. With fewer trains and longer hauls, Western roads tended to uphold standards longer than those in the East.

George Krambles, Krambles-Peterson Archive

EMD nose, Budd tail: Late in the life of the *California Zephyr*, which ended on March 22, 1970, the celebrated Chicago-Oakland domeliner's observation car stands across a Chicago Union Station platform from a Gulf, Mobile & Ohio F3, in from St. Louis with the *Abraham Lincoln*.

Robert A. Caflisch, Helen Caflisch collection





Great Steel Fleet in port: New York Central E8's rest between runs at the Englewood engine terminal on Chicago's South Side in October 1966. Although clean, the diesels wear the austere "cigar-band" paint scheme that replaced NYC's dashing "lightning-stripe" livery. Craig Willett



Faded glory: The lounge area in the sleeper-observation car bringing up the rear of the Pennsylvania Railroad's *Broadway Limited* is not crowded on this October 10, 1967, trip. Two months later, the U.S.'s last truly all-Pullman train would be discontinued and its name transferred to an existing coach-and-sleeper schedule. George Krambles, Krambles-Peterson Archive

1960s
COLOR



Mountain meet: Rich Mountain, Kansas City Southern's tough grade in far western Arkansas, is the scene of this May 31, 1969, vignette of '60s railroading. We're aboard the northbound *Southern Belle*, whose colorful E8 has taken siding for the future: three brilliant white SD40's tackling the hill with time freight 77. Tom Hoffmann



1960s COLOR

Historic locale: Rakish Santa Fe E6A No. 13 and an E6B, presumably power for the evening's *Chicagoan*, mingle with baggage carts at Dallas Union Terminal. The photographer and date of the scene are unknown, but the slide was processed in December 1963 . . . the month after President Kennedy was shot from the Texas School Book Depository, the brick building beyond the B unit. Dan Pope collection

Beware the buzzsaw: Long controlled by Missouri Pacific, the Texas & Pacific increasingly resembled its parent during the '60s as T&P's diamond emblem gave way to MP's circular "buzzsaw" and "Jenks blue" coated both roads' diesel fleets. On October 23, 1967, a MoPac F7 leads Extra 838 West at Ranger, Texas, on T&P's Fort Worth–El Paso main line. Tom Hoffmann





At sea on the prairie: Somewhere between Stamford and Albany, Texas, Katy GP7 No. 95 with train 74 parts the vegetation obscuring the rails of the road's line northwest out of Waco. The date is July 21, 1969, less than four years before the branch was abandoned. Tom Hoffmann

1960s
COLOR



Berkshire in blue: Nickel Plate 2-8-4 No. 759, one of the first big steam engines restored for excursions by a non-railroad group, leaves Kansas City Union Station on May 14, 1969, St. Louis-bound via N&W with the return leg of the New York–Ogden (Utah) *Golden Spike Centennial Limited*. Riders attended the event at Promontory celebrating the 100th anniversary of the first transcontinental railroad. Don Wood



Shortline steam mixed: When the Reader Railroad, based at the Arkansas town of the same name, changed hands in 1956, the new owner chose to stick with steam. By 1962 the 23½-mile pike had become a magnet for fans, prompting it to begin mixed-train service using an ex-Milwaukee combine, visible at left in this 1967 view of 2-6-2 No. 11 at work. Ron Burkhard

Mainline steam mixed: Burlington 4-8-4 No. 5632, an early '60s fantrip star, accelerates west from Waterman, Ill., with the "Oregon Turn" wayfreight out of Eola, Ill., on June 23, 1962. Coupled behind 10 freight cars and the Turn's short combine are a baggage car, five coaches, and a drop-end gondola for railfans. Robert Milner





JUNE
1967



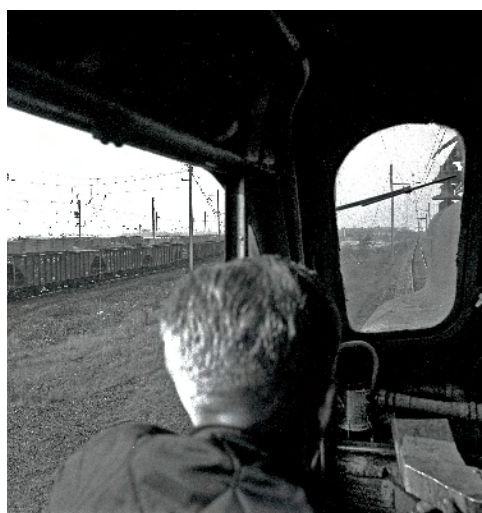
GG1 CURTAIN CALL

Twilight is falling upon the most famous electric in all of Western Hemisphere railroading, Pennsylvania's GG1. On the passenger front, Northeast Corridor Project planners have vetoed locomotive-hauled trains in favor of multiple-unit cars capable of 160 mph; and E44's, with all axles motorized, are taking over tonnage beneath PRR catenary. In any case, the GG1's themselves are old . . . in technology and in age (the newest are nearing the quarter-century mark). And as retirement looms, the inevitable cannibalization is beginning to consume those units whose repairs can no longer be justified. Thus the curtain descends on a unique machine whose performance (including short-time rail horsepower ratings exceeding 8,000) was matched by its classic Raymond Loewy-styled carbody.

But mourn not quite yet. First, in 1967 the demise of the GG1 is simply inevitable, not immediate. Second, the Corridor Project will embrace a speedup of conventional trains, and it is expected that the arbitrary lid of 80 mph placed upon GG1's will be raised to 100 per.

So curtain calls remain for the grand madame of electric traction. On hand in the fall of 1965 for such a bow to posterity was a Westerner, Richard Steinheimer. With camera in hand, he boarded the business end of manifest CB-1 on a cold, hazy Saturday and rode through from Trenton, N.J. (Morrisville [Pa.] Yard), to Harrisburg, Pa. (Enola Yard). It is apparent from the surrounding photography that he found the cyclops-eyed motors as engrossing as we east-of-the-Mississippi types had led him to believe they were.

Stein remarked upon the GG1's "long and trim look . . . incredibly narrow cab doorway . . .



Getting a roll out of Morrisville Yard, the GG1's head down the Trenton Cutoff.

All photos, Richard Steinheimer



Engineer E. A. Branyan employs a 22-notch throttle to tap his m.u.'ed motors' horsepower reserves.

GG1's 4835 and 4801 at Morrisville Yard
— war-marked and dusty.



A different view of the Loewy styling as the camera looks toward the rear east of Downingtown, Pa.



GG1 engineer's seat — smaller than you'd think.



End of catenary at Enola — brakeman and engineer.

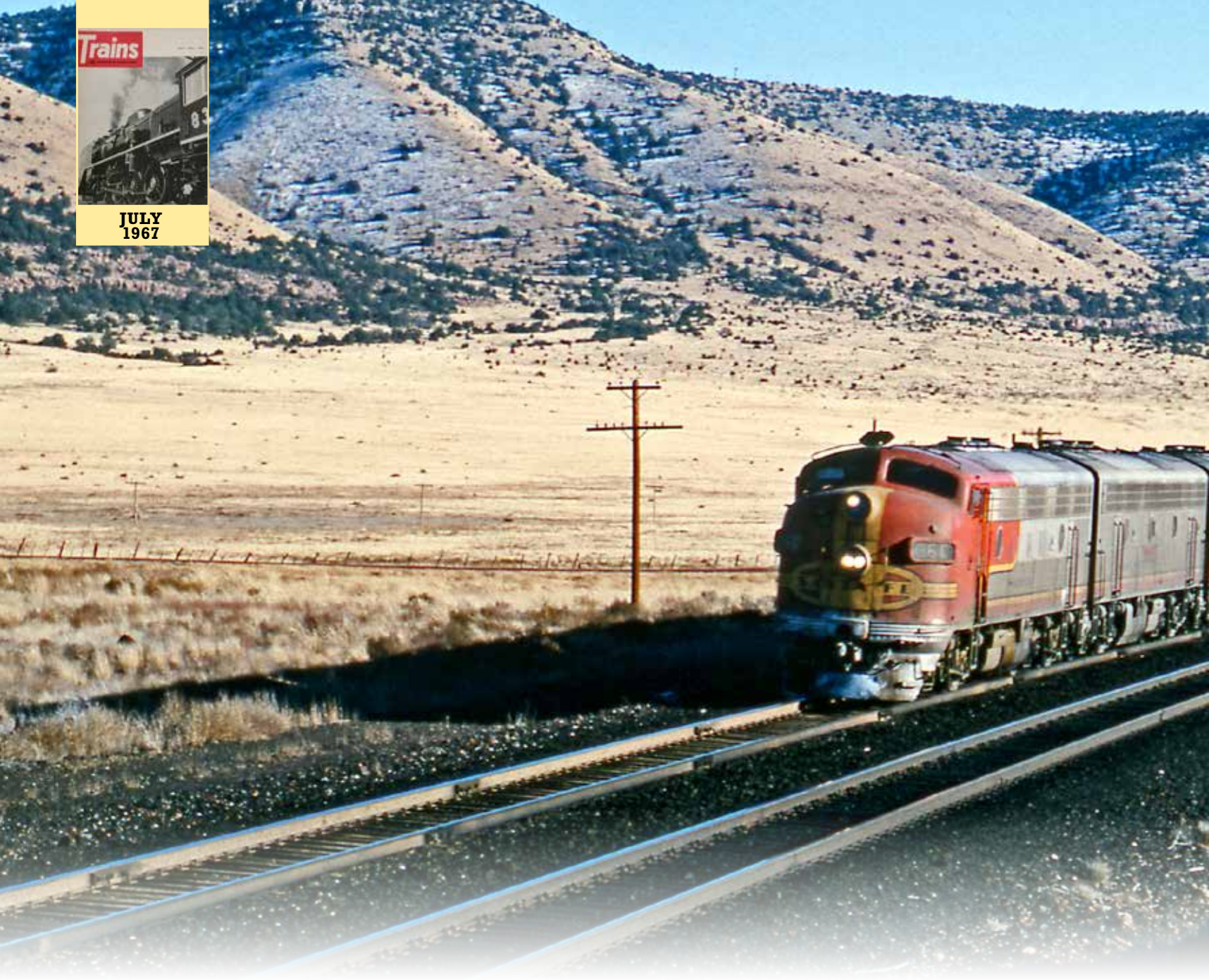


surprisingly tight and plumbing-filled cab. . . . The super-power effect was still there.”

Yes, the super-power quality of the 79½-foot 2-C+C-2s is still there, and not in image alone. The GG1 is not self-contained, hence remains as strong as the current she can digest from that 11,000-volt trolley — power that eclipsed steam in her youth, power that embarrasses diesel partisans in her old age.

So thanks, Stein. Thanks for reminding us anew of the splendid machine that resulted when Pennsy, GE, Westinghouse, and Mr. Loewy put their heads together. — *David P. Morgan*

Another day's work done. The head-end crew departs between aisles of old and middle-aged GG1's (including prototype No. 4800) and their E44 nephews.



GO WEST, *middle-aged man,* GO WEST

Belen-Pasadena: Santa Fe's venerable *Chief* rolls toward Los Angeles at Audley, Ariz., on November 26, 1965. No. 19's full-length Budd dome "quenched the thirst and soothed the eyes." Gordon Glattenberg



In 1967, it's last call for the long-haul limiteds

BY **DAVID P. MORGAN**

When I was young, the only rail circle route that was in jeopardy was that thousand-miler out in Colorado that bore one from Denver to Durango and return over those rarefied passes: Marshall, Lizard Head, and Cumbres. The Circle was a fragile curio, for the Depression was on, the route was mostly narrow gauge, its proprietors were bankrupt, and Rio Grande Trailways was poised to supplant the steamcars. Extinction was nigh and the faithful knew it.

It never, never occurred to me that the *big* circle route, the one that threw a steel lariat

around the West, would ever verge upon a freight-only status. It didn't occur to me in the 1930s in the twilight of the steam-and-steel limiteds, nor did it in the early 1950s when Budd stood like a shining knight against the competition.

I suppose in retrospect that we were simply too preoccupied by domes and diesels to acknowledge the implications of a threefold increase in motor vehicle registrations between 1940 and 1966; the introduction of domestic airline jet service in December 1958; and the paving of 23,000 miles of Interstate Highway by 1966. Regardless, it is conceivable that by 1970 one will not be able

to circle the West by rail. The indispensable link, Southern Pacific's San Francisco Bay Area-Portland Shasta Route, is down to single-train service; and that schedule — the overnight *Cascade* — can scarcely escape the consequences of the company's belief that "the long-haul passenger train has outlived its usefulness."

And when and if the passenger train does return, its format will not be recognizable. The airliner configurations of CN's Turbos and Pennsy's Northeast Corridor M.U.'s make no allowances for the trappings of old — for Pullman porters and table meals and drawing rooms and full-length lounges and



shoe lockers and E units and all the other implications of the noun “limited.” Thus it behooves us who recall and rejoice in the old order to renew acquaintance with the orthodox passenger train as often as we can . . . while we can.

The urge to flee the office and go west by rail proved irresistible for me in February 1967, perhaps because the season coincided with the advent of that middle-age span Webster’s defines as “the period of life from about 40 to about 60.” There’s precious little to choose from in today’s *Official Guide*, but, in the company of my wife Margaret and friend George Weiss, I managed to squeeze 9 railroads, 16 trains, and 6,585 miles into a 15-day schedule between the 32nd and 54th parallels, albeit with the inconvenience of some dawn departures.

Such as 6:07 a.m., which was when the EMD units of Milwaukee Road’s *Pioneer Limited* got a grip on their charge and moved out of our town into the thick of a snowfall predicted to attain 3½ to 4 inches. It was weather in which you wouldn’t want to drive and couldn’t fly; but Milwaukee Road train 4 was warm, close to time, and offered a breakfast menu. Other trains were not perturbed by the snow either, for on arrival in Chicago I found the *Broadway Limited*, *Denver Zephyr*, and *General* all posted O.T. on Union Station’s arrivals board.

The consist that was eventually parked on Track 16 that morning evidenced what happens when a railroad’s best laid plans go wrong. When CB&Q completed its Kansas City Short-Cut back in 1953, it put on a double-daily domed *Zephyr* service to oust Santa Fe from its No. 1 slot in the Chicago–K.C. market. The splurge ultimately proved too splashy for Q’s pocketbook. The trains were combined with other schedules between Chicago and Galesburg, Ill., and lost their separate identities, hot timings, and certain domes. So, hung on the rear of the No. 11/35 that I boarded was the articulated *Nebraska Zephyr* and on the front was a remnant of the *Kansas City Zephyr* (from the NZ forward: a heavyweight coach, a dome coach, the prewar parlor-diner-observation *Silver Fountain*, and head-end cars). It was not a happy marriage. *Silver Fountain* had to be operated up front in an obs-first manner not conducive to sightseeing, and moreover, she took a violent dislike to the baggage car ahead. In Galesburg the switch crew broke a steam line in separating the two trains.

Neither the weather nor the railroading improved west of Kansas City. We boarded

Chicago–Kansas City: Burlington Route train 11/35, the combined *Kansas City Zephyr* and *Nebraska Zephyr*, curves through Mendota, Ill., in June 1966. “It was not a happy marriage.” Craig Willett

the *Golden State* with no illusions that the train was anything but a ghost of its former luxurious self. Its co-operators, Rock Island and Southern Pacific, don't roll out the red carpet for passengers, or can't afford to, nowadays; and besides, the Golden State Route was never any great shakes for scenery. I caught No. 3 simply because it's not apt to be in the *Guide* tomorrow, and because I wanted to satisfy an odd personal wish to set foot in the unlikely division point of Tucumcari, N.Mex.

Despite a late departure, my qualms were eased for a spell, for No. 3's consist included, instead of the club-diner listed in the timetable, separate and famous meal and lounge facilities: *El Cafe*, that red-and-yellow-canopied diner originally intended for the still-born postwar *Golden Rocket*, and *Lake Shore*, the 1948 *20th Century Limited's* midtrain lounge that contained a shower and barber-shop as well as the "Century Club" bar. Just as well, too, for the size of the Arizona vacation crowd aboard that wintry day would have overflowed a club-diner. Of course, the *Lake Shore* had long since dispensed with the services of a train secretary, a barber, and a valet; even the bar attendant was a dining-car waiter who served drinks between meals. Nevertheless, these cars gave class to No. 3, the train was warm, and we were eventually rolling west, even if 1½ hours late.

I'm ashamed to admit that I didn't predict and locate the trouble that developed beneath my sleeper, SP 12-double-bedroom No. 9402, ex-*Golden Orange*. After all, I've been obliged to hurriedly evacuate sleepers on two previous post-midnight occasions — once on the New York Central when a car suffered an electrical fire, again on the Louisville & Nashville when the brakes went bad. No. 9402 was afflicted by an excessive vibration, but the car tracked well through turn-outs and around curves, so I assured Margaret in the bunk below that all was well and dismissed the oscillation as the result of small flat spots on a wheel tread caused by brake grab.

At 3 a.m. in zero weather at Waldeck, Kans. (no population), I discovered otherwise. No. 9402 had a hotbox, so bad a one in fact that I suspect that either the axle end or a roller bearing or two were disintegrating — hence the vibration. The passengers were herded into the lounge, the 9402 was set out on the nearest siding, and we progressed to Texas more than 3 hours late. Interestingly, the patrons took it all in good spirits. Those of us left on the rails these days expect the unusual and meet it with equanimity.

Tucumcari? Just what you'd expect.

In El Paso next morning we came upon the casualties of what might have been a long love affair between Santa Fe and the Budd Rail Diesel Car. Back in 1952 the road bought a pair of RDC's to supplement con-



Kansas City–El Paso: Five SP units head up the westbound Rock Island-SP *Golden State* at the "unlikely division point" of Tucumcari, N.Mex., in July '63. Richard J. Anderson



El Paso–Albuquerque: Santa Fe's sole RDC's are working train 14, the *El Pasoan* (a.k.a. the "Juarez Flash"), at Belen, N.Mex., in November 1965. Gordon Glattenberg

ventional streamliner service between Los Angeles and San Diego, and managed to run off more than 15,000 miles a month with them on a 129-mile route. For a season Budd even talked to the road about transcontinental RDC service on bus frequency.

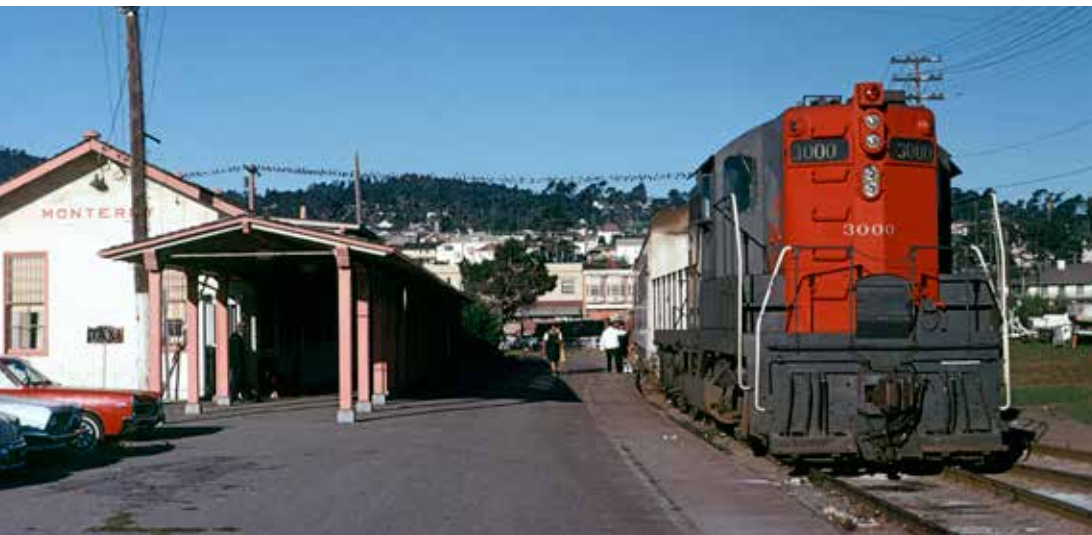
Alas, the flirtation ended abruptly on January 22, 1956, at Redondo Junction, Calif., when the twins — DC191 and DC192 — were involved in a violent high-speed derailment that killed 30. Banished from California, the Budds were ultimately overhauled in the Topeka Shops. The 192 was rebuilt with a baggage compartment and both were repainted with flashy red-and-yellow ends. For a time they ran singly or together between Newton and Dodge City, Kans., on trains 311

and 312, since discontinued. They obtained their present name-train assignment between El Paso and Albuquerque when the *El Pasoan* lost its mail contract and no longer required a locomotive-hauled consist.

Only four other passengers besides us were on hand for the *El Pasoan's* 5:15 a.m. departure, but Santa Fe didn't stint on the service, what with coffee bar, high-back seats, ashtrays, and a uniformed conductor. The crew was uncommonly proud of their little "Juarez Flash" and took pains to point out that the RDC's run off 505.6 miles a day, seven days a week, with all maintenance necessarily confined to the 5-hour 55-minute layover in Albuquerque. Their enthusiasm for the Budds and for the remote, barren,



Glendale–Oakland: SP's *San Joaquin Daylight* nears Caliente, 15 miles north of Tehachapi Loop, in February 1966, a year before Morgan's "relaxing" ride. Tom Gildersleeve



San Francisco–Monterey: Passengers board SP's "civil and cosmopolitan" *Del Monte* at Monterey for the trip up to San Francisco in October 1967. Gordon Glattenberg

oddly appealing terrain they traverse was contagious, and I found myself forgiving of the early departure.

Of course, even John Santa Fe can turn on only so much service aboard an RDC, for the vehicles are essentially spartan creatures. It remained for the *Chief* next day to renew acquaintance with a limited of the quality we once took for granted. Today's No. 19 employs no barber, has no shower bath, charges no extra fare, includes coaches in its consist, and carries one lounge car instead of three; yet there is still something of its 1926 inaugural quality of a train "frankly designed for people who want the best." The five F units up front afforded a handsome power-to-weight ratio, Fred Harvey still runs the kitchen, and the full-length dome quenched the thirst and soothed the eyes.

So west the *Chief* rolled, bounding over the Continental Divide at 85 mph, sewing together those most romantic of names (Gallup, Winslow, Flagstaff, Needles, Barstow, Cajon), explaining once again what a vast and varied land the American West is.

Especially do I commend to you the experience of occupying a rear seat in the dome while descending from Cajon Pass — it's like riding some giant 45 mph escalator. It's strange and it's fun.

As No. 19 braked into Pasadena for a dead on-time arrival, I wished the passengers on board had been greater in number and younger in median age, with perhaps a film or TV personality or two to turn heads in the diner and leave a silver dollar in the change tray. And I wondered if whatever it is people do with all the money they tell me they save by driving and all the time they conserve by flying are really worth the price of omission of trains such as the *Chief*.

Now here's a question for you: How many of Southern Pacific's critics actually ride its passenger trains? The cab driver who drove us to Glendale for the 6:20 a.m. departure of the *San Joaquin Daylight* expressed his dislike for the SP, but it developed that (1) he had ridden the train only because of an airline strike, and (2) he didn't know where the depot was.

It's not that the No. 51 that bored through the morning mist into Glendale had much but name in common with its prototype. Absent were the diner, coffee-shop car, parlor-observation, red-orange-black color scheme, through cars to Sacramento, and convenient departure hour. The point is that the spartanized 1967-model *San Joaquin Daylight* was on time, was scrupulously clean and staffed by a friendly crew, was serving warm food and cold beverages, and was provided with 6,000 h.p. to lift its seven cars over the mountains ahead. Which is to say, this train was a lot more for the money than one would ordinarily encounter east of the Mississippi on a railroad running a train under duress



Portland–Seattle: Nameless train 457, Union Pacific's contribution to the GN-NP-UP Portland–Seattle pool service, “put a bright face back on the journey.” Geeps in A-B-B-A formation lead the train out of Tacoma circa 1967. Gerry Bolinsky, Tom Hoffmann collection



Seattle–Vancouver: GN's *International* departs Vancouver in fall 1964, its clean F7A-F3B power a contrast to the “dirty F3’s” on Morgan’s northbound train. James A. Brown

and the 204-foot triple-unit lounge-diner of nationwide fame. On the minus side were an inattentive, argumentative dining-car crew, high-priced food, and a steward in an ordinary business suit. That night, at least, the *Cascade* appeared to have lost its spirit, to be just going through the motions of behaving like the train SP once called “a world of quiet luxury on wheels.” The vinyl chairs that were gradually supplanting the genuine plush articles in the lounge seemed to be an earmark of the operation. If the men at the top have lost interest, the morale at the bottom often collapses.

Union Pacific 457, the morning pool train from Portland to Seattle and the only non-name train in our circle route, put a bright face back on the journey. UP has the money and knows how to disburse it in a passenger sense, which in the case of No. 457 meant a brace of high-class coaches, a full-length lounge, a lunch counter-diner-lounge, and a pair of 2,400 h.p. E9’s on the point. And hands down, the combination breakfast/luncheon menu programmed the finest, yet least expensive food on the entire trip. I don’t know what sort of deficit UP incurs each time it serves up tenderloin beef



Vancouver–Edmonton: Morgan’s *Panorama* had a consist similar to that of its sister CN transcon, the *Super Continental*. The eastbound *Super*’s ex-MILW Super Dome is just out of the trees in this 1970 photo at Cheam View, B.C. James A. Brown

tips for \$1.90, but I’m not inclined to ask. Some things should be taken on faith and accepted with gratitude.

Great Northern 36, the afternoon *International* that relayed us beyond to Vancouver, mixed dirty F3’s with a clean five-car consist terminated by a 29-seat, 1-bedroom parlor-lounge-observation, which is fine for sight-seeing even if beverage service inexplicably required an hour to initiate after departure.

Canada, of course, is the land of absolute contrast in passenger-train affairs. Canadian National, on the one hand, wants passengers; believes that ultimately they will contribute to net income in



intercity markets of decent density; has scoured the United States for secondhand lightweight equipment to expand its fleet; and now has brand-new trains entering service in the east. Canadian Pacific, on the other hand, tried the aggressive tack in 1955 when it purchased an unprecedented 173 stainless-steel cars from Budd, only to become disillusioned when even domes couldn't contain passenger losses.

This CN vs. CP passenger debate is the rail equivalent of the Quebec separatist movement. I tried in my schedule to give both roads equal time so that I could (1) sample CN's best-foot-forward strategy, and (2) determine whether CP's negativism had impaired its famous service standards.

I'll say this for CN and the Vancouver departure of transcontinental No. 6, the *Panorama* — I can't recall a waiting room's being filled so full by the departure of one train since World War II days in Dearborn



Edmonton-Calgary: CP's *Stampeders* — RDC's through whose wide windows one learned of the region's grain economy — approaches Calgary in late 1969. Doug Phillips



Winnipeg-St. Paul: E7's lead the St. Paul-bound *Winnipeg Limited* out of GN's Minneapolis station in 1968; the previous year, there was "little need for advance reservations" in No. 8's sleeper or lounge. At right, the *Empire Builder* waits to follow. Ken Crist

Station, Chicago (remember the crowd the *Kansas Cityan* used to attract?). Yet the consist parked beyond the gate looked capable of absorbing all the souls that Red, White & Blue fares could persuade aboard. Behind the diesels were coupled 3 head-end cars, 1 heavyweight sleeper-dormitory, 1 lightweight coach-lounge, 1 lightweight coach, 3 heavyweight *Pointe*-series sleepers, 1 full-length

"Sceneramic Lounge" full-length dome (ex-Milwaukee Road), 1 diner, 1 lounge, and 3 lightweight sleepers — a long train that looked even longer because of CN's new-image black-and-white colors.

It occurred to me that the rationed power — an FP9 cab and F9 booster totaling just 3,500 h.p. — was going to have its work cut out for it, even allowing for CN's low (eleva-

tion, 3,717 feet) and easy (0.7 percent grade) crossing of the Continental Divide; and that the number of technicians roaming the train hinted at the "mechanicals" that can delay things when you arm a passenger comeback with old, obsolescent, and/or secondhand equipment.

I was wrong on the first count, right on the second.

The *Panorama* moved out 1 hour 6 minutes late because of generator troubles beneath the old *Pointe* sleepers. During the following 765 miles to Edmonton, Alta., No. 6 managed to hold to time, even if it wasn't recovering any of the lateness, and the train handling was excellent despite the mini-locomotive. Acceleration from 0 to 40 or 50 mph wouldn't have riveted Donald Steffee's attention, but the starts, stops, slack control, and curve negotiation were as good as a Santa Fe or a UP could have managed with twice the horsepower plus dynamic brakes.

Outside next day the snowy Rockies were cloaked in sub-zero weather. Inside, the train was warm; the complimentary meals (for sleeping-car patrons) were first rate as well as fast and courteously served; and there were the diversions of a revamped, ultramodern-format lounge for those who tired of the scenery on Yellowhead Pass. An electrical short circuit in the diner blanked out lighting in the car, requiring an early (4:30 p.m.) dinner call, but the passengers took the trouble in good humor.

The huge train slipped into Edmonton 1 hour 10 minutes late. We disembarked into snow and 4-below-zero cold, which was compounded by the absence of umbrella trainsheds and heated platforms at CN's otherwise new and modern 24-story combination station and office structure.



Calgary-Winnipeg: CP's *Canadian* upheld "a service standard infrequently encountered" in 1967. In this October 22, 1964, view, three F units dash west across the prairie at Gull Lake, Sask., with an impressive 17 cars. James A. Brown

Time was when one of the more interesting passenger-train concepts in North America was invoked on Canadian Pacific's north-south Edmonton-Calgary (Alta.) line. Rejecting both the *Zephyr* and *Hiawatha* approaches to the intercity market, conservative CP opted instead for lightweight, almost English-style cars and Jubilee 4-4-4s to pull them. Somewhat frill-less by U.S. standards, such trains were nevertheless economical, swift, and popular. Alas, today's *Stamperder* from Edmonton south is simply a pair of shopworn Dayliner

RDC's bereft of food service.

Still, the 194-mile afternoon run through rolling, snow-laden prairie tells much about a grain-elevator and red-boxcar economy that has fought off famines again and again in countries as remote as China and India. I suppose that the clerks in Montreal could total up the wheat tonnage CN and CP have moved off Canadian farms, and I further suppose that the figure would be gigantic and quite incomprehensible. The wide windows of the Budd cars enable the visitor at least to understand the source and the distribution system.

When the Dayliners rolled into Calgary, No. 2, the eastbound *Canadian*, was standing as promised in the timetable. CP's last transcontinental was running 2 red head-end and 12 stainless-steel cars long behind an FP7 and a pair of road-switchers. A quick stroll-through of the train before finding an upstairs seat in the dome-observation indicated, at least to me, that "CP" still implied a service standard infrequently encountered. True, CP remained traditional, with none of the airline-era motif that increasingly characterizes CN these days; but one couldn't fault the equipment or the service in either the lounge or the "Dining Room Car." Balky steam generators in the diesels ahead did begin acting up that night, and 40-mph

running the next 16-degrees-below-zero morning ultimately set us 3½ hours off the timecard. Notwithstanding, No. 2 was a pleasant experience.

There was plenty of company aboard the *Canadian*, too, which — alas — was not true on Great Northern's overnight *Winnipeg Limited* from its namesake city down to St. Paul. Maybe we encountered the Saturday night lull. Certainly there was little need for advance reservations for space in the Pullman *Rogers Pass*, still less for a table in the *Manitoba Club* lounge on the rear. Incidentally, you can believe in that "beverage-snack" service promised on the *Limited* by the GN timetable. It's that, but no more. Mixed drinks aren't served until the U.S. border is reached, 2 hours out; and the food ranges from 10-cent crackers and butter to a 90-cent hot corned beef sandwich.

I think I underestimated my old friend the Milwaukee Road on the last lap from St. Paul back to Milwaukee. The route was old hat, as was No. 6, the *Morning Hiawatha*; and a tardy departure, plus the prospect of "Buffeteria" meals, scarcely improved the odds. I had reckoned without the exhilaration of whipping through fresh, heavy snow at 90 mph and the splendid riding qualities and excellent visibility of Milwaukee's inimitable Skytop parlor-observation car.

Three decades after its debut, the *Hi* still sprints with the best of 'em and is far faster than most. Especially consoling on the approach to Milwaukee through all those once-unpronounceable towns — Ixonia, Oconomowoc, Okauchee, Wauwatosa — is the knowledge that trains that ramble still connect one's home with the outside. ■



St. Paul-Milwaukee: The *Morning Hiawatha* is 14 miles from Milwaukee as it whips through Brookfield, Wis., in February 1967, the same month Morgan savored No. 6's 90-mph running through snow in its "inimitable Skytop parlor-observation car." Tom Hoffmann



HOW TO EXIT IN STYLE

In the passenger game, some railroads had the touch and some did not. Santa Fe did. Consider California. To overcome an intolerable mileage handicap between San Francisco and Los Angeles, AT&SF responded to Southern Pacific's *Daylights* with a high-speed, high-frequency rail/highway *Golden Gate* service and later took on the faster *City of San Francisco* and the multi-domed *California Zephyr* in the transcon trade with a *San Francisco Chief* with which Lucius Beebe could find naught to quibble.

Today, only the *SF Chief* remains on the rails that bore the streamliners that ran like streetcars up and down the San Joaquin Valley. Yet Santa Fe exited as it had entered — with style. The camera focuses upon No. 7, a nameless mail train that lost its mail and that now, on the evening of October 31, 1967, awaits both a meet in Fresno with sister No. 8 and discontinuance the next month. The handsome, glistening Alco PA on the point, No. 68, and the equally clean Budd stainless-steel coach behind, No. 3144, reveal a service standard that was (and is) a way of life with their owner.

If you must get out, do it like this. — *David P. Morgan*



Two photos, Bruce Heard







**OCTOBER
1967**

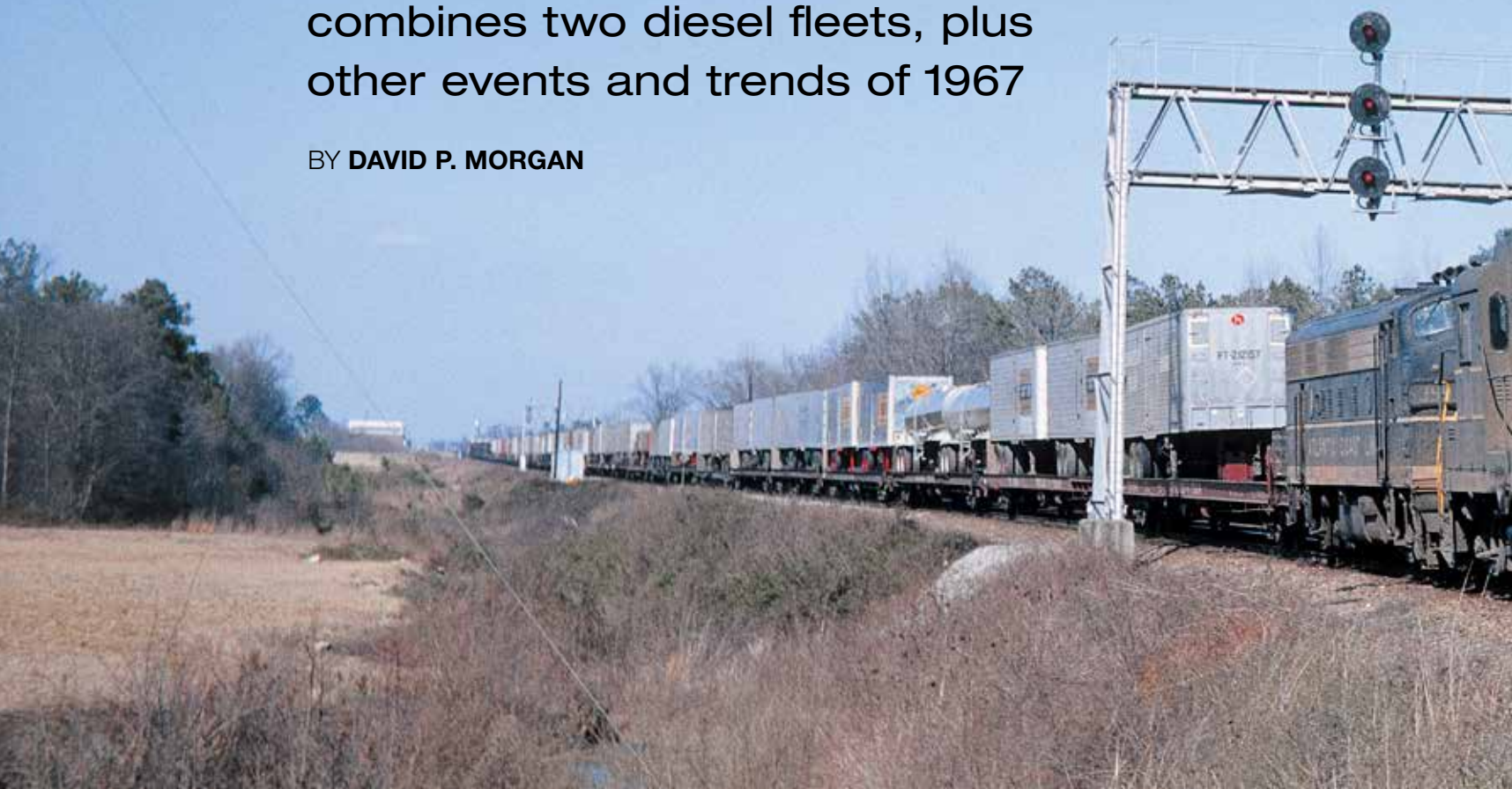
In late March 1966, 15 months before their owners merged, diesels of Seaboard (right, at Hamlet, N.C.) and Atlantic Coast Line (below, at Wilson, N.C.) roll south with piggyback trains.

Two photos, J. David Ingles

Merging **MOTIVE**

Brand-new Seaboard Coast Line combines two diesel fleets, plus other events and trends of 1967

BY **DAVID P. MORGAN**





POWER





Both Seaboard and ACL were early E-unit buyers. Top, an E4 and E7 handle SAL's *Silver Comet* at Atlanta in 1964. Above, two Coast Line E6's are on the *Everglades* at Fredericksburg, Va., in February '67. SAL: David W. Salter; ACL: C. G. Parsons, Tom Hoffmann collection



SAL's roster was diverse, ACL's more conventional. Top, a Baldwin Centipede, EMD F3, two Alco RS3's, and an Alco FA1 depart Montgomery, Ala., in 1959. Above, four Coast Line F7's arrive Birmingham's Elyton Yard in '66. SAL: David W. Salter; ACL: J. David Ingles

For all of their commonality in gauge, couplers, brakes, and purpose, railroads are uncommon individualists — even two parallel carriers competing for the same market and/or bent on merger. Locomotives alone can evidence the difference. As the July 1, 1967, merger date of Atlantic Coast Line and Seaboard Air Line approached, mechanical officers of the two roads were keenly aware that more than color schemes differentiated their EMD-dominated, look-alike diesel rosters totaling 1,232 units. Jumper cables didn't match. SAL employed air sanders, whereas ACL had electropneumatic systems. ACL's locomotives were equipped with automatic train control; SAL's were not.

The differences were minor and reconcilable, and more than offset by a plus mark in fixed plant: the Coast Line maintains a large back shop in Waycross, Ga., but is weak on modern outlying running repair depots; the situation is vice versa on the Seaboard. Again, since both lines entered the merger comfortably solvent, their locomotives were reasonably well-maintained and modern.

The locomotive philosophies of Seaboard Coast Line's two founders — often divergent in the past — have tended to mesh in recent years, and there is cause to expect fresh thinking from SCL's Jacksonville (Fla.) headquarters. A generation ago Coast Line entrusted its Pacifics with varnish and tonnage, whereas Seaboard relied on a 4-8-2/2-8-2 split. SAL beat ACL to the draw on diesels, although both roads were pioneers in the sense that they rostered E6's and FT's. During post-World War II steam-replacement days, Coast Line favored a straight-vanilla EMD E/F/GP lineup, while Seaboard seasoned its roster with numerous Alcos and even Baldwin Centipedes. Both unaccountably eschewed dynamic brakes for years. Recently ACL has more than compensated for its tardy diesel debut by nationally pioneering widespread non-mountain usage of high-horsepower six-motor units of all three builders, allowing SAL only the credit for first employment of EMD's dual-service SDP35.

What's ahead (other than the adoption of Coast Line's yellow-striped black dress for all new and repainted units)?

It is unlikely that any one builder will dominate SCL's roster, despite the complexities of parts inventory and repairs implied by purchase of more than one make of power. SCL is as nostalgic as the next road about the good old days when a couple of standardized engines — V-12 and V-16 — fitted one or more of all the passenger, freight, road-switcher, and yard locomotive models on the roster, but feels that innovation should be indiscriminate and must be exploited, regardless of the manufacturer responsible.

Drawbar pull on the lead car of SCL's high-tonnage phosphate trains out of Florida has attained the acceptable ceiling, hence

midtrain slave units (radio-controlled, SCL thinks) are in the offing if such trains are to be lengthened.

Electrification is a possibility. After all, merged roads are supposed to be able to concentrate enough tonnage on one main instead of two to justify consideration of catenary. And SCL is no Erie Lackawanna. Its traffic has been rising so rapidly that Coast Line has been obliged to backstop its growing fleet of high-horsepower hoods with a conglomeration of secondhanders from the likes of the Burlington; Katy; Pennsy; and Richmond, Fredericksburg & Potomac. An SCL officer notes that utilities are beginning to run out of right of way for their power lines, thus what would be more logical than their towers marching along above rails and feeding the trains below? After all, utility-owned traction lines thus meshed years ago.

MERGER DELAYS: NOT ALL BAD

The common complaint about mergers is that they take too long to consummate. SCL, for example, was in the works for almost seven years. If there be a silver lining in this clouded picture, it is this: the longer it takes for roads to merge, the more likely it is that their motive power will be compatible, for today's second-generation diesels have much in common regardless of make. They tend to produce 3,000 h.p. or more, place all their weight on driving axles, multiple with each other, incorporate dynamic braking, transmit their power to the rail through A.C./D.C. electric transmissions, and thrive on high mileage and minimum maintenance. Gone from the builder catalogs are the streamlined passenger units, the exotic wheel arrangements (from 2-D+D-2 to D-D to B-B+B-B), the in-line and opposed-piston engines, and the low-slung units for Train X/Talgo trains. Union Pacific runs but no longer blurbs or reorders either gas turbine-electrics or twin-engined jumbo diesels. Southern Pacific is



Both roads bought EMD's six-motor, 2,500 h.p. road-switcher. Top, a dual-service SDP35 leaves Birmingham with Seaboard train 6 in 1966. Above, Coast Line shows off two of its SD35 freight units at Rocky Mount, N.C., in 1964. SAL: J. David Ingles; ACL: Wiley M. Bryan

mum on diesel-hydraulics, either the imported or the domestic product.

Indeed, the locomotive *per se* no longer makes motive power news, and hasn't since 1965, when Electro-Motive established the pattern with its 645-series-engined, 3,000/3,600 h.p. A.C./D.C. road-switchers and Alco and General Electric tightened their production in reaction. The talk today is about the *application* of the locomotive, which implies in 1967 pooling and/or midtrain slave units.

There's nothing new about pooling. It

dates from steam days, and one of its early and more evident diesel applications was earmarked by the three heralds on the nose of the jointly operated (C&NW-UP-SP) *City of San Francisco's* 1,800 h.p. E2's in 1937. The impetus today for interchanging power (and cabooses) is not so much to maximize locomotive mileage as to minimize terminal delays. Judging by the power-pooling roll call to date, such delays are fiercest at the traditional Mississippi and Missouri river gateways: thus one encounters gray SP units descending Horseshoe Curve on the Pennsyl-



ACL pioneered C-C freighters, sampling from all three builders; SAL stuck with B-B's. Left, two Alco C628's and an EMD soak up the Florida sun in '65. Right, U30B's, at Jacksonville in April '67, wear SAL's final paint scheme. SAL, Keith Ardinger; both from Tom Hoffmann coll.



SCL adopted ACL's black-with-yellow livery for all its diesels. During the image change, SCL tastefully applied its emblem to ACL and SAL units. From top: E6 510 (ex-ACL) at Hialeah, Fla., 1968; E7 549 (ex-SAL) at Hollywood, Fla., July 1967; and SDP35 618 (ex-SAL) on freight at Petersburg, Va., 1968. E6, E7: Tom Hoffmann collection; SDP35: Bob Krone

vania, black New York Central locomotives easing into Cotton Belt's Pine Bluff (Ark.) yard, and UP's yellow diesels appearing seemingly everywhere. Assuming pooled power remains pooled and none of the partners scrimps on running repairs on somebody else's units — previous causes for pool dis-solutions — we can expect more of the same.

Likewise with midtrain slave-unit operation. Southern is no longer the solitary practitioner of the art of splitting power throughout the consist. Last year PRR managed to move more than 30,000 net tons of ore in 299 jennies from Morrisville to Altoona, Pa., in a single train by coupling three six-motor units on the point and inserting five more two-thirds deep in the train under radio control from the head end. Kansas City Southern has since joined the radio act, along with Great Northern, and other roads are expected to follow suit. The practice relieves the lead drawbar of the locomotive's total tractive force, thus reduces train break-in-tuos. Also, midtrain power places a set of air pumps deep in the consist, reducing the time required to pump off the brakes.

TRAINS WITHOUT LOCOMOTIVES?

It is conceivable that by 1975 we may in retrospect view slave units as the primitive ancestors of true integral trains — huge capacity, self-propelled creatures that dispense with formal, independent locomotives in favor of midtrain powerhouses feeding current to traction motors spread out through the train beneath the car units themselves. Question: Why ballast locomotives up to axle-loading limits, raising tare weight in the process, when the payload itself can supply all the weight necessary for adhesion?

If and when railroading gets serious about implementing the integral-train theory (and both Canadian Pacific and PRR have already mentioned the concept publicly, if quietly), the builders will be confronted with a revolution perhaps as total as the one occasioned by the diesel. The statistical trends all lead upward. In the steam-powered 1930s the average revenue freight-train load was less than 800 tons, by 1955 the figure was 1,359, and last year it stood at 1,716 — an all-time high. On some roads the index soars; ore-hauling Missabe Road, for example, carries more than 3,200 tons in an average train. Midtrain power can lift train tonnages for a spell, but if jumbo jets, jumbo trucks, and jumbo ships imply anything at all for railroading, at least one omen must be this: the industry must re-examine the concept of "train" so that the rails practice what they preach.

SPEED BY JET AND PANTOGRAPH

Once upon a time in railroading the word "speed" connoted first steam, then diesel. Unofficially, New York Central & Hudson



Practiced since the 1930s on transcontinental streamliners, the pooling of diesels mushroomed in freight service during the '60s. Four GP30's and a GP20 of mixed Burlington and Union Pacific ownership ride the CB&Q west from Chicago in March 1964. Bob Krone



High-speed tests made headlines in 1966-67. Left, U.S. DOT electric M.U.'s attained 156 mph on PRR in New Jersey on May 24, 1967. Right, NYC M-497, an RDC3 fitted with jet engines, hit 183.9 mph west of Stryker, Ohio, on July 23, 1966. PRR: Don Wood; NYC: Tom Miller

River 4-4-0 No. 999 first lifted a train over the fabled three-figure mark — to 112½ mph in 1893. In 1905 a Pennsylvania 4-4-2 unofficially elevated that record to 127 mph. In 1938 Britain's London & North Eastern officially laid claim to the speed record for steam by extending a streamlined Pacific named *Mallard* up to 126 mph — and there the fully authenticated timing for reciprocating

steam power is apt to stand for all time.

For its part, the diesel tended to expand the endurance of high-speed runs rather than touch extreme highs — a natural trend for locomotives that could get through curves faster and required far fewer service stops.

World War II blacked out speed exploits on rails, and thereafter the airplane seemed to render train speeds academic. Then the

French took everyone by surprise by topping 200 mph with a conventional B-B electric locomotive in 1955. That record, 207 mph, still stands, but the U.S. has finally broken its unaccustomed nonchalance about not being in first place. This time around, though, the source of horsepower has been neither steam nor diesel. Even the formal locomotive has been dispensed with. In July 1966 New York



Surprise of the season: EMD's unprecedented 3,600 h.p., 20-cylinder SD45 was a big seller from its introduction in 1966. Demonstrators 4352–4354 roll a Norfolk & Western freight west out of Detroit through Romulus, Mich., on the old Wabash in April '67. J. David Ingles

Central posted the official and still reigning U.S. speed record by whooshing a jet-propelled Budd RDC up to 183.85 mph. On May 24, 1967, four electric multiple-unit test cars of the Department of Transportation managed 156 mph on the PRR in New Jersey.

These dashes concern a federal government seeking alternatives to highways and airways, as well as carbuilders anxious to supply that wanted passenger alternative; but unlike in the old days, the runs are of scant consequence today to 87.1 percent of American railroading. That's the slice of the rails' annual cash intake accounted for by freight; and, as the Southern is forever admonishing its employees, "Jobs follow freight." So do locomotives. The day when Alco spent as much money advertising a couple of 4-4-2s for the Milwaukee Road's *Hiawatha* as it did scores of black 4-8-4s, when Electro-Motive linked itself inseparably with streamliners, when a builder could ask for no higher endorsement than to have its engines rostered for the *20th Century* . . . that day is done.

SOME INFORMAL MOTIVE-POWER TITLES

Summing up the contemporary U.S. motive power scene, a few informal titles suggest themselves:

Surprise of the Season: Electro-Motive's unprecedented 3,600 h.p. V-20-engined SD45, a top-seller despite its size, a fine performer from the start regardless of the fact that its 20-cylinder power plant is unique to our shores.

Railroad Newsmaker: Who else but 56.4-mile Gainesville Midland, which as an independent prior to 1959 stabled hand-me-down 2-10-0s, but which under Seaboard adoption now owns a 3,000 h.p. EMD SD40.

Most Unremarked Locomotive News Item: That a Union Pacific EMD DD35A roamed Pennsy electrified territory last year so that observers could check the tracking of its four-motor, four-axle trucks with a view toward designing a straight electric of the same type.

Horatio Alger Award Recipient: General Electric, which entered the domestic road locomotive business after everyone had dieselized, now has more than a thousand of its "U-boats" abroad in the land. GE most recently has managed to sell its units to previously all-EMD Illinois Central and all-Alco Delaware & Hudson.

Idea of the Season: Fully automatic couplers for diesel locomotives incorporating both air and electrical lines to reduce terminal hostling time.

Unresolved Esthetics: Whether diesels should look like "big, black workhorses," as Seaboard Coast Line puts it and paints them; or be as bright as Big Sky blue or burnt orange, as GN and IC display them.

Most Embarrassing Thought: If nobody knows how to overhaul, maintain, and operate reciprocating steam power today, and if dieselized railroads can't cope with solid fuel, water supply, and ash disposal, how come ex-Southern Railway 2-8-2 No. 4501 showed up in steam in Chattanooga, Louisville, Cincinnati, Knoxville, Asheville, Atlanta, Richmond, Birmingham, and Washington, D.C., in 1966–1967? ■

On the Southern, the leader in slave-unit operations, a coal train is eastbound at McCloud, Tenn., in 1969. The radio-receiver car and midtrain diesels are about five cars to the left of the barn. Ron Flanary





From a start in 1960, GE by mid-decade was selling diesels to roads previously loyal to other builders. Left, U33C's tackle Ararat Summit on Alco stronghold D&H, and U30B's depart Homewood, Ill., on EMD-friendly Illinois Central. D&H: Jim Shaughnessy; IC: Ron Plazzotta





WE'LL ADJUST, BUT IT WON'T BE EASY

Replace the high-backed wooden benches with pews, add an altar or a pulpit, and you could have turned the waiting room of Missouri-Kansas-Texas' San Antonio passenger station into a church. That's how well its architects and builders managed to blend functionalism with mission-style construction native to the region when the facility was completed in September 1917. It was a beautiful, serene place, a civilized transition from one's taxi to the observation-lounge of the *Texas Special*, a building Katy itself once extolled as "one of the most distinctive stations in the Southwest."

When photographer Hastings came upon the depot in 1948 he found therein Mrs. S. A. Agnew, "a lovable, kindly Southern lady" who had been station matron in San Antonio since the waiting-room doors were first unlocked. So here is Mrs. Agnew, presiding beneath the arches and chandeliers of a classic, a gem, a monument. Those are Katy President John W. Barriger's words of definition. It fell to him to demolish the building in 1967 when a fallen-from-grace, freight-only Katy required the real estate for other occupancy. But gentleman John could not bring himself to dismiss the place without a suitable epitaph in the company's annual report. He wrote, "The [passenger station] at San Antonio, built in 1917, was renowned throughout the United States as a gem in the finest tradition of classical mission-type architecture. Much of the material and nearly all of the fixtures used in the construction of this beautiful building had been imported from Spain and Italy. As in the case of other railroad monuments, most notably the Pennsylvania Station in New York, the San Antonio depot had to give way to the necessities of contemporary progress with its demands to transfer increasingly precious space within the heart of growing cities from lesser to more important assignments."

So we'll take Mr. B's word for it; we'll remember his kind farewell; we'll adjust, but it won't be easy. It never is when friends part for good. — *David P. Morgan*





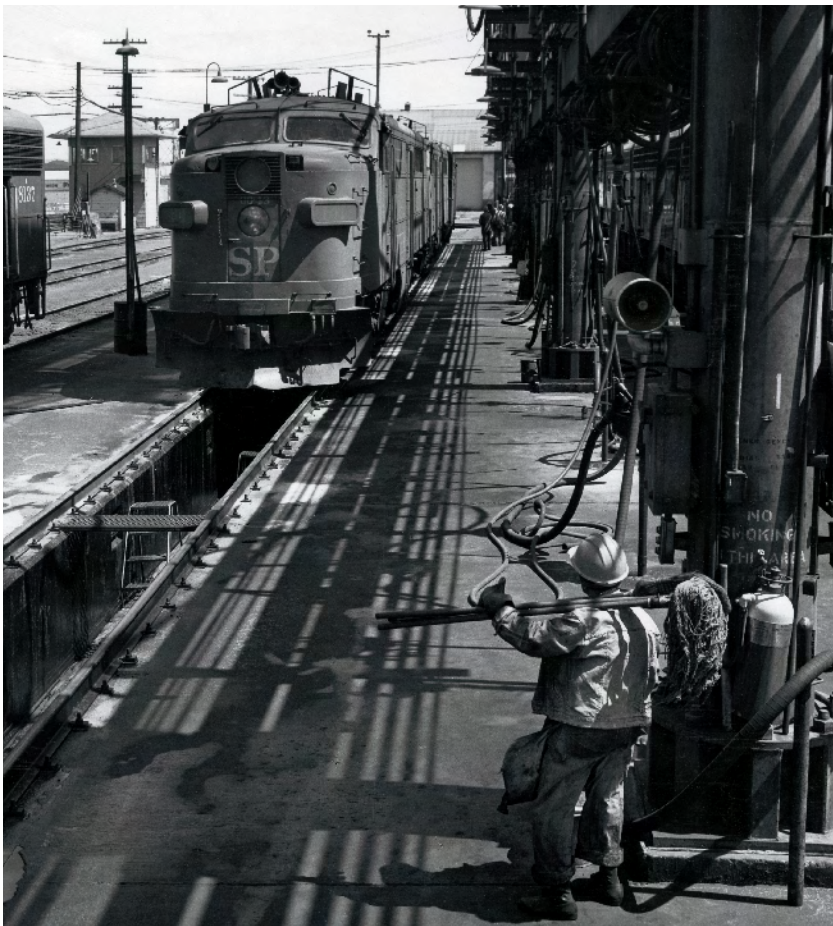
PA *postlude*

Southern Pacific's big Alco passenger diesels were running their last miles in 1967. In a composite series of photos grouped to show a single day's activity, crews at Oakland service and dispatch power for the *City of San Francisco*

PHOTOS BY **RICHARD STEINHEIMER**



1 Five battle-scarred PA's arrive at Oakland's 16th Street Station with train 101, the *City of San Francisco* from Chicago. Two roundhouse men wait to cut the units off the train and send them to the servicing tracks. The time is 1:20 p.m.



2 Most of the crew of laborers, machinists, and electricians are already gathered at the pad before 101's power stops moving.



3 Hoses deliver fuel, sand, and steam-generator water to the units. SP had the biggest fleet of PA-family units: 66 PA cabs and PB boosters.



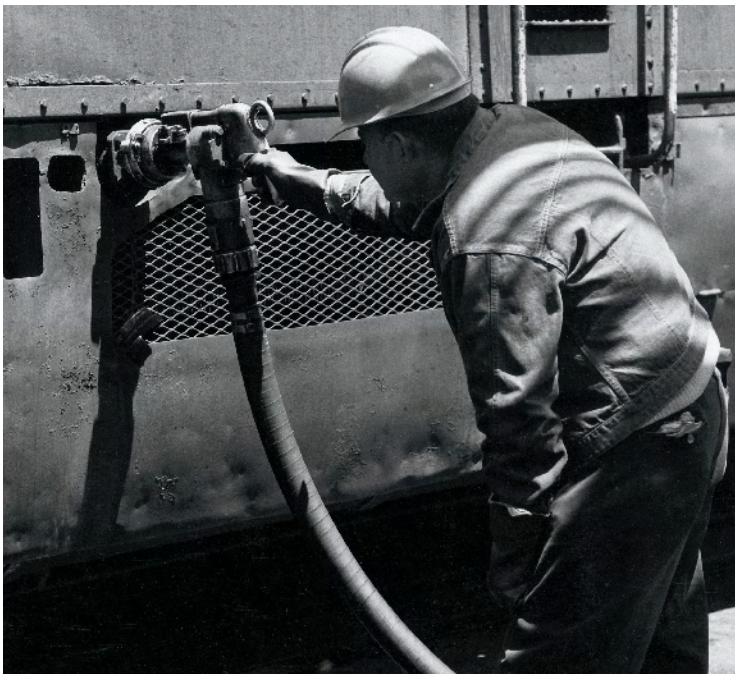
4 Laborer W. M. King sweeps out the cab of the lead PA.



5 The windshields of the outbound lead unit, its train indicator boxes already set for No. 102, get a good dousing.



6 After hosing down the windshields from the ground, King gets up on the expansive nose to scrub them with a brush.



7 Laborer Louis Himiniz keeps an eye on the fuel gauge as he fills the tank of one of the diesels.



8 A machinist checks out a bell ringer, which has been giving trouble, and calls for help.



9 A big glass bottle of drinking water for the engine crew is brought aboard as hosing off the front end is completed.



10 Roundhouse foreman Gordon Stokes (left) talks with George Guido as servicing proceeds under blue flag protection.



11 In the darkness of a locomotive's interior, a boiler-machinist checks the performance of a steam generator for train heating. SP's fleet of 66 PA/PB's, which included the 2 inherited from Cotton Belt, dated from 1948–53. Santa Fe's fleet of 44 ranked second.



12 Electrician Ed Robinette renews an m.u. jumper cable between units, affixing its new date tag.



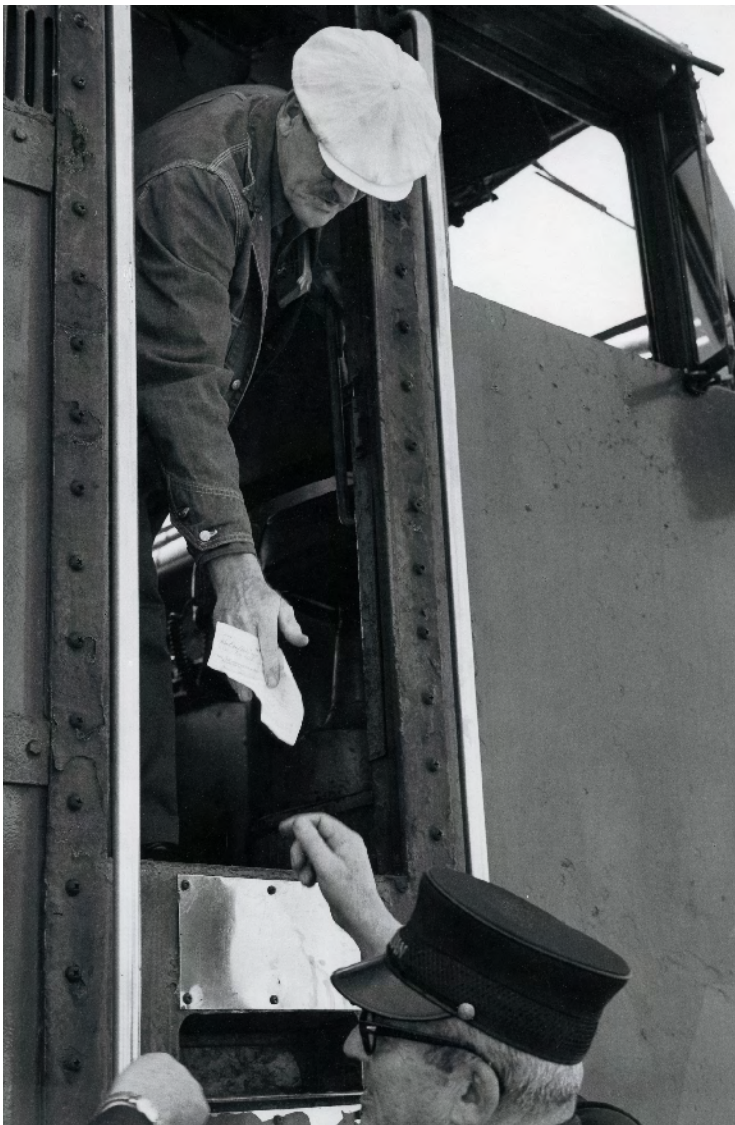
13 With servicing nearly complete, foreman Stokes (center) makes a final walkaround with his electricians.



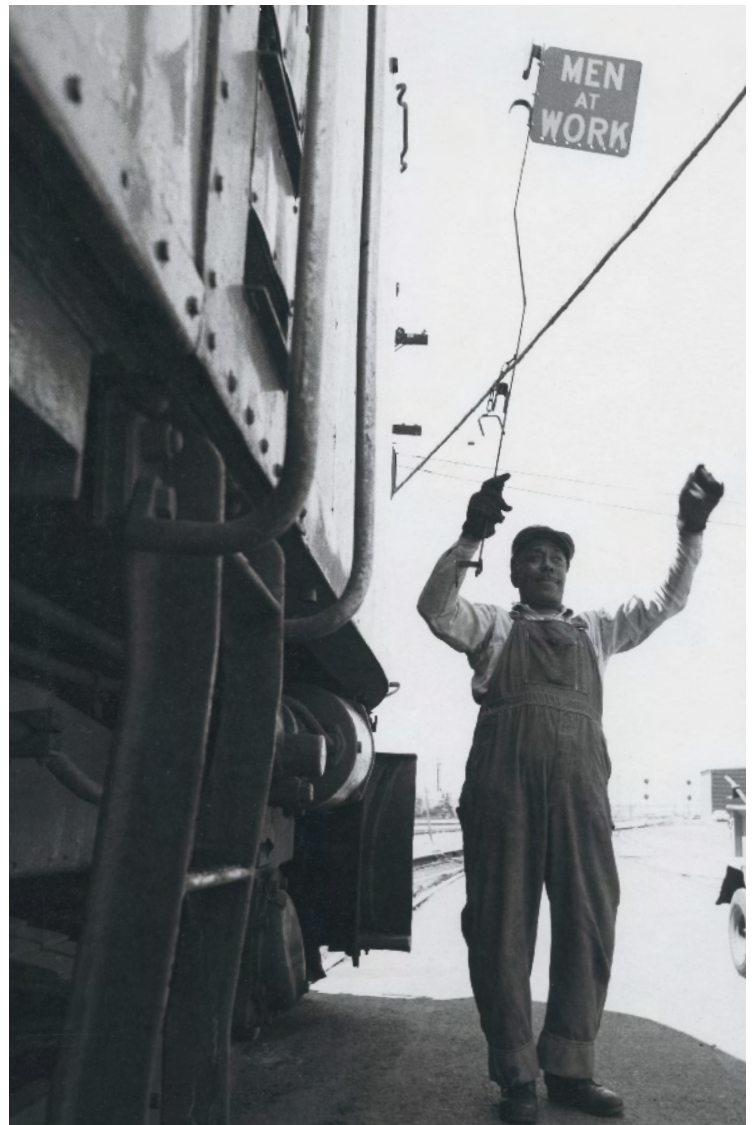
14 In the cab, a hostler prepares to move the power out of the service area as EMD F's and GP's look on.



15 The conductor who will go out on 102 signals the Alcos to back against their train in the coachyard.



16 After coupling onto his train, No. 102's engineer receives train orders from the conductor, who checks his watch.



17 The blue flag comes down, and 102 is ready to head to 16th Street. It's 2:25 p.m. — 65 minutes after the units arrived.

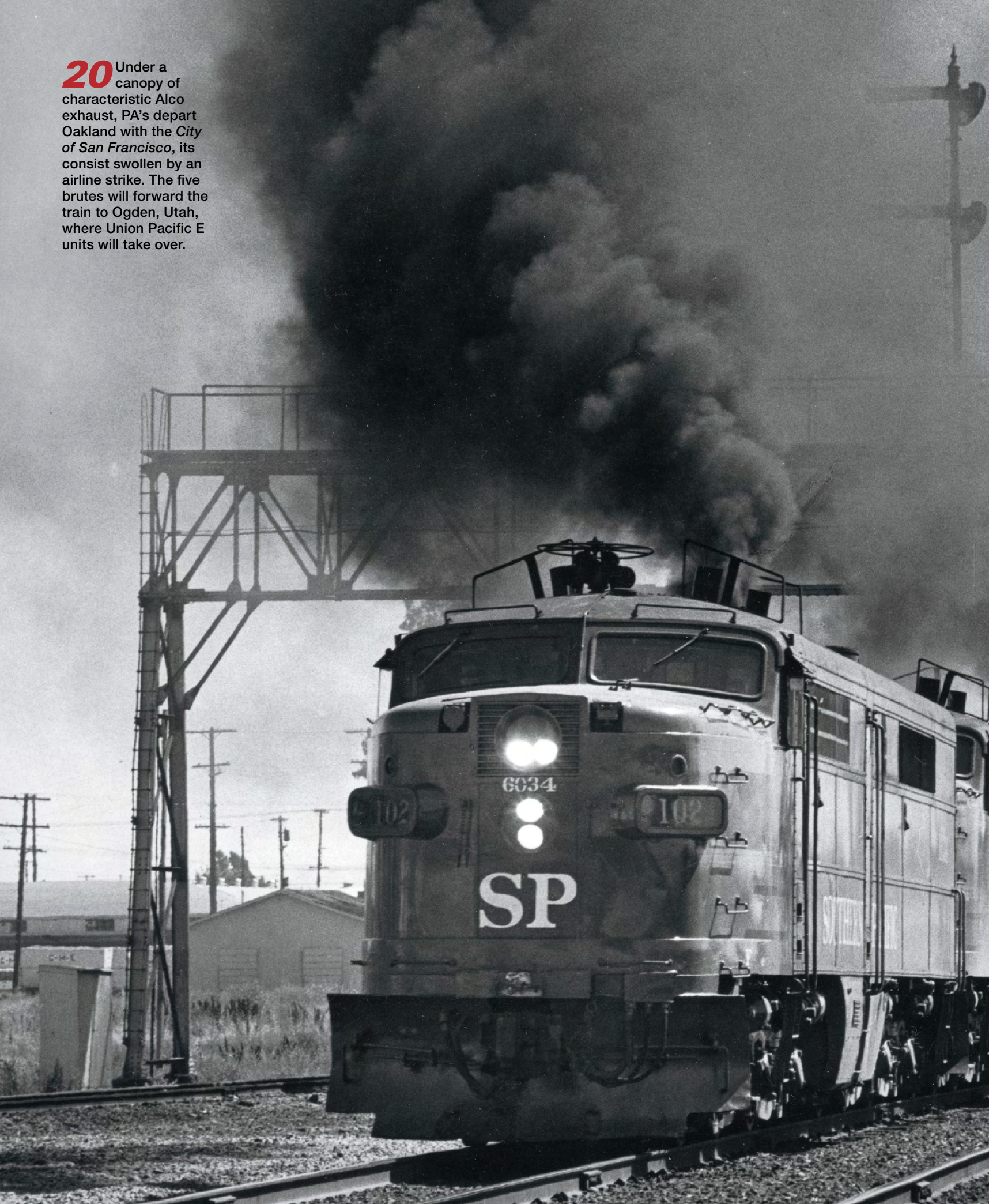


18 Showtime! Locomotives and train begin moving out of the coachyard toward a 2:50 departure from 16th Street.



19 The train pulls into 16th Street as a man holds a child up to witness the spectacle.

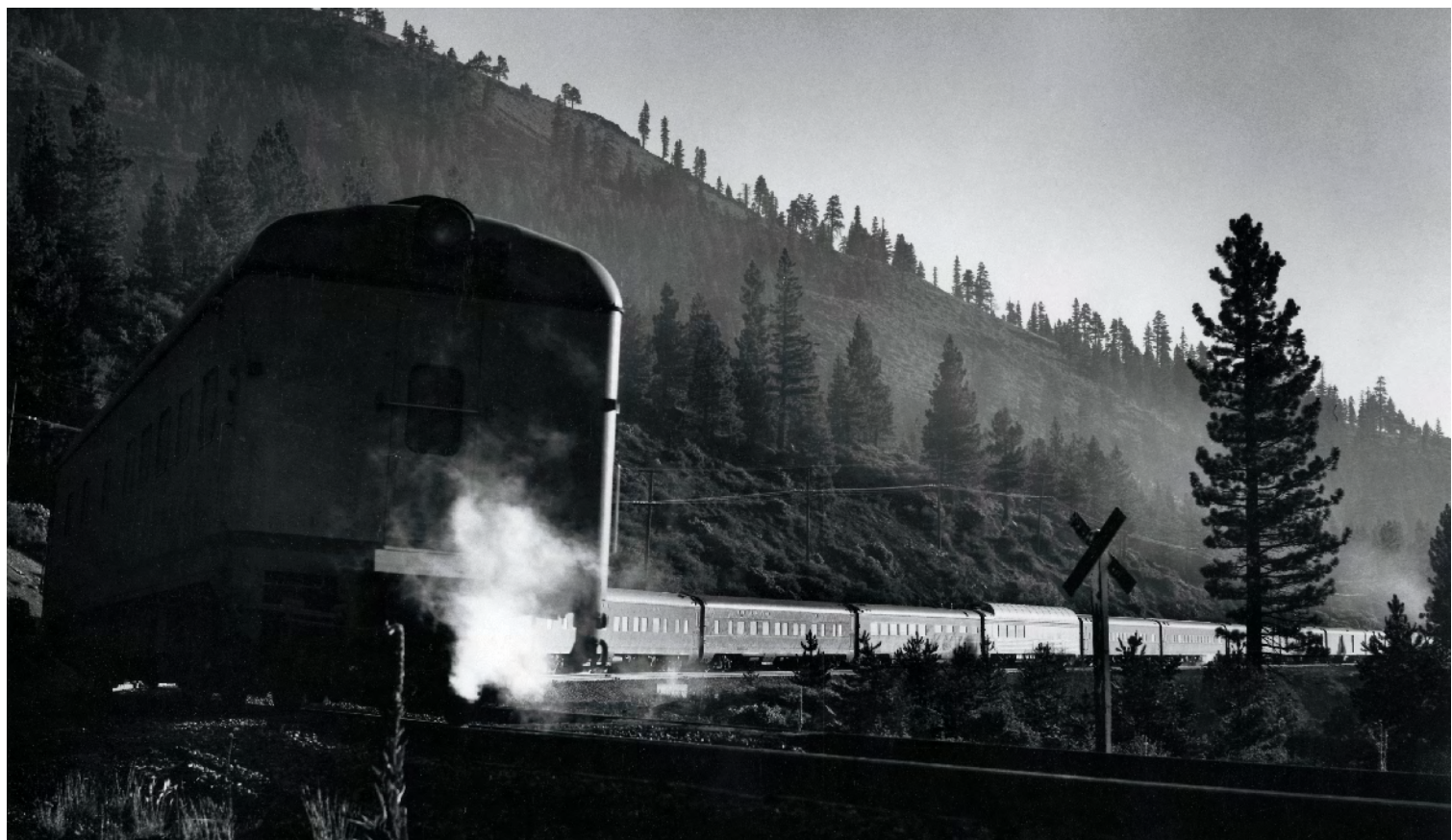
20 Under a canopy of characteristic Alco exhaust, PA's depart Oakland with the *City of San Francisco*, its consist swollen by an airline strike. The five brutes will forward the train to Ogden, Utah, where Union Pacific E units will take over.







PA's with the westbound *City of San Francisco* climb into the Sierras at Stanford Curve on the east side of Donner Pass.



Smoke from the Alcos hangs in the early morning air as No. 101 exits Stanford Curve; just after lunch, the train will be in Oakland.

TIME TRAVEL to the 1960s



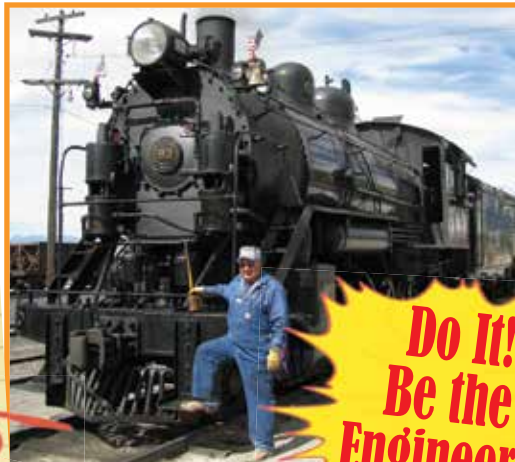
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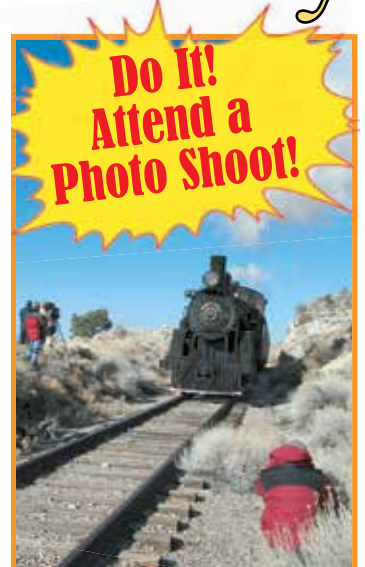
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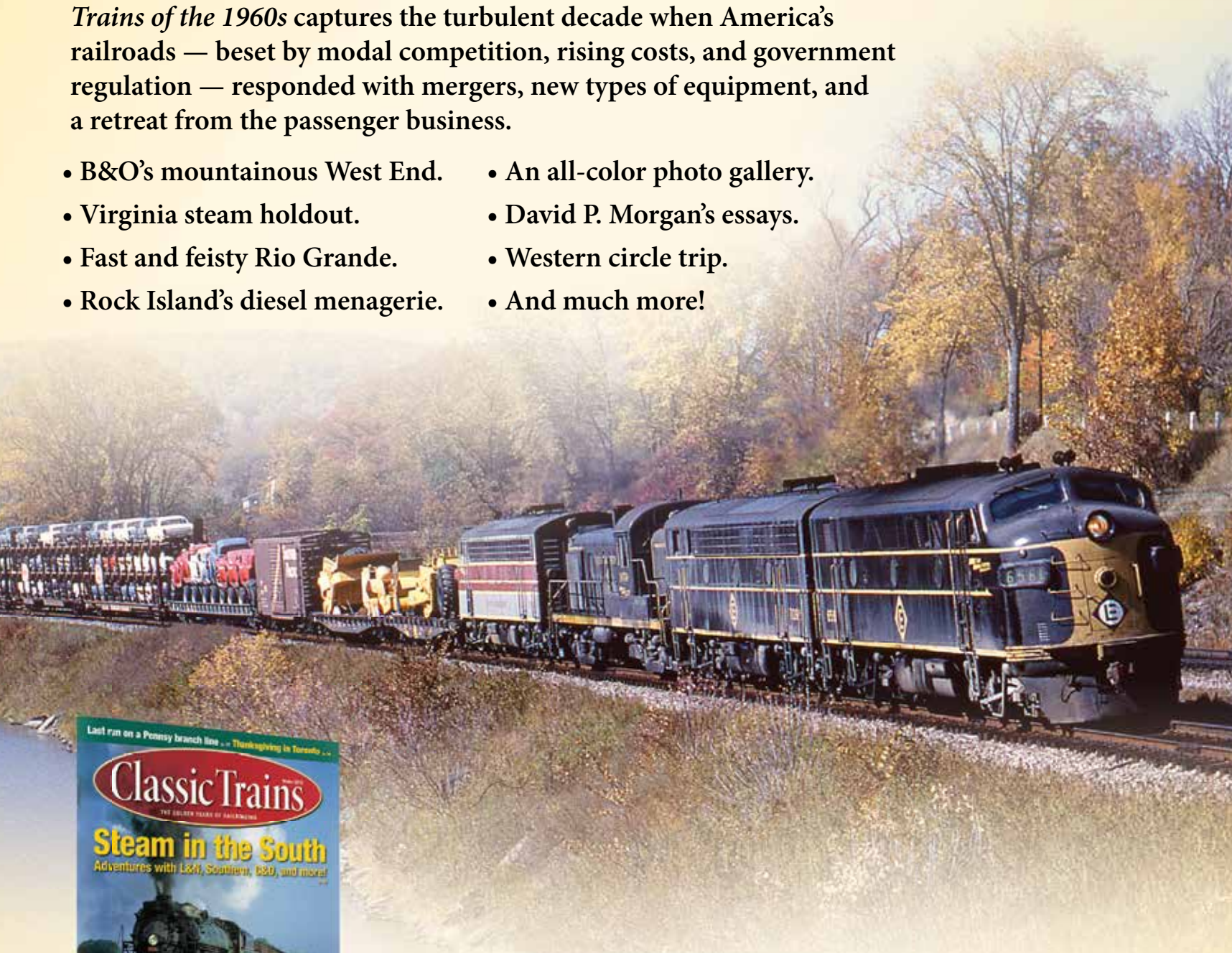
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