General Electric's nimble 70-ton diesel was a popular choice for short lines seeking to modernize in the post-World War II era

SHORT LINES

All three 70-tonners owned by the 29-mile Lancaster & Chester ("The Springmaid Line") team up on a freight at Chester, S.C., in fall 1963.

# for the little guys

TTAXABLE IN COLUMN IN COLUMN

**BY RUSSELL TEDDER** 



Claremont & Concord No. 11 skirts Lake Sunapee at Newport, N.H., in 1956. One of the first 70-tonners built (in October '46), the unit came to New Hampshire from New York's Saratoga & Schuylerville in 1954 upon Pinsly-owned C&C's start-up on a 57-mile former Boston & Maine line. B. L. Stone, Krambles-Peterson Archive

> eneral Electric's 70-ton, 660 h.p. diesel-electric locomotive was a savior for many short lines that would have been abandoned in the post-World War II economy. Investing in that diesel model, almost always to replace steam power, provided

substantial returns for beleaguered small railroads, enabling many of them to stay in business.

The builder conceived its 70-tonner during the war. When the hostilities ceased, GE was ready to transfer its new design from the drawing board to the production line. After a prototype in spring 1946, the first 70-tonners came off the line at the big plant in Erie, Pa., in October 1946. (The prototype, No. 7001, went to Quebec to become Thurso & Nation Valley No. 5.)

At this time, the term "road-switcher" had not yet entered the railroad lexicon, but the lightweight newcomer was just that, a "shortline road-switcher," as the term would be defined. GE advertised the model as suitable for freight, switching, and passenger service, all duties that larger "general purpose" or "road-switcher" diesels were also designed to perform. Indeed, GE's 70-tonner would see service in all those categories, plus others such as work and mixed trains. Many short lines' 70-tonners would make up the train they would then haul over the road. They were equally at home switching industry tracks or drilling in (usually small) classification yards. Optional multiple-unit controls enhanced the 70-tonner's utility, and the model even sold to a handful of Class I roads. They were ideal for lightrail and/or short-consist branch lines.

After the war, many shortline presidents saw their revenue plunge owing to the loss of war-related business. At the same time, traffic was being lured away by highway carriers. This trend added to the rising costs in labor, equipment, and fuel that short lines were facing.

Excluding costs of maintaining a right of way, the expenses of operating locomotives directly affected the ledgers of small railroads more than any other cost. In the mid-1940s, nearly all short lines still relied on steam power. By their design, steam locomotives required maintaining an enginehouse and other facilities, a costly endeavor. If a short line had several engines, usually one out of every three was out of service to have its flues washed out and/or running repairs made. Moreover, many steam locomotives on short lines were old, obsolete, and worn out. A constant watch on locomotive fires and steam pressure generally required one or more employees to perform hostler duties around the clock.

In short, after the war, steam-powered short lines needed a savior.

#### **MIDDLEWEIGHT CHAMPION**

As things developed, GE's 70-tonner was such a savior for many small railroads. The model had two four-axle trucks with a per-axle weight of 35,000 pounds. Length over couplers was an even 37 feet, and the units could negotiate a 75-foot-radius curve. The prime mover was a moderate-speed, continuous-rated, railroad-type diesel engine. Its trucks were suitable for both switching and medium-speed road service. It pos-



Several former interurbans opted for 70-tonners after they ended electric operation. Two work on Virginia's Washington & Old Dominion in April '59. **Richard Baldwin** 



Norwood & St. Lawrence, an 18-mile line from Norwood, N.Y., to the St. Lawrence River, had two 70-tonners; like many, they ended up in Canada. C. A. Detwyler, David P. Oroszi collection



Exhibiting the original 70-tonner front end - round headlight casing and solid nose - Belfast & Moosehead Lake No. 50 is at Burnham Junction, Maine, in July 1957. Soon she'll leave the depot, shared with Maine Central, with a mixed train for Belfast.

B. L. Stone, Krambles-Peterson Archive

sessed a power plant covering the widest possible speed range of horsepower utilization, and a high thermal rating of traction motors and generators. The 70-tonner's continuous tractive effort rating was 23,600 pounds at 7.9 mph.

Many short lines operated their 70-tonners at typical speeds of 20 to 35 mph. Others restricted running at speeds as low as 10 mph. GE advertised the 70-tonner as capable of speeds up to 55 mph, although this was seldom if ever achieved. Any short line with track that could withstand 55-mph speed would be exceptional. Also, the 70-tonner's trucks, which lacked swing-motion control, rode poorly at higher speeds.

GE promoted the 70-tonner as its "Middleweight Champion," thus casting the model between its popular 380 h.p. center-cab 44-tonner (the "Little Giant") and the Alco-GE model S1 end-cab switcher, which, though it shared the 70-tonner's 660 h.p. rating, weighed 99 tons. GE also coined the term "building block" in promoting the 70-tonner's optional multiple-unit capability. This made it ideal for small roads that needed a high

tractive effort but couldn't handle heavy axle loads or found it impractical to have several sizes of locomotives on their rosters. Consists of up to four or five 70-tonners were possible.

While designing the 70-tonner, GE believed that when the war was over, a significant market would develop for a lightweight diesel-electric unit for short lines with light rail and/or light axle loadings on bridges. The builder also believed that virtually all rail operations in the U.S. and Canada, small or large, would be active sales prospects, as such a locomotive could be used on Class I branch lines as well as in industrial applications.

Five major factors contributed to GE's projected postwar demand for its new model:

1. Steam operation, with its worn-out and obsolete engines and facilities, was costly, and short lines badly needed more economical operation with more dependable motive power.

2. In many cases, short lines were buying secondhand steam in good repair, and scrapping their older engines rather than overhauling them.

3. Shortline managers acknowledged that this practice couldn't last and knew that eventually they would have to buy modern power. Additionally, secondhand steam was in short supply after the war.

4. Most short lines were laid with rail that was light by the standards of the day. Further, 12 percent of the Class I railroads' 250,000 miles of mainline track was lighter than 75 pounds per yard. All that lightweight rail, combined with limited bridge and roadbed structures, created a demand for a diesel-electric with a combination of relatively high horsepower and light axle weight.

5. Of the 35,000-plus steam locomotives on U.S. railroads, about 20 percent, or more than 7,000, were used in light road or yard service. GE conservatively estimated half that number could be replaced by its 44- or 70-ton diesels.

The builder expected to sell at least 1,000 units, 750 of which would be 70-tonners and the remainder 44-tonners. At prevailing prices, GE's market projections represented a business of \$6 million a year over a 10-year period, a handsome sum in 1946 dollars.

# Short lines – Central



Ahnapee & Western ran 34 miles from a junction with the Kewaunee, Green Bay & Western to Sturgeon Bay, halfway up Wisconsin's scenic Door Peninsula. With "Route your freight Ahnapee and Western Railway" emblazoned on its hood, A&W 600 is at Sturgeon Bay in August 1964. F. E. Butts, Krambles-Peterson Archive

#### **COMPETING 70-TON MODELS**

General Electric's construction of diesel-electric locomotives at its massive plant in Erie, Pa., was often the envy of its competitors. Whitcomb Locomotive Works, Baldwin's small-locomotive subsidiary, made an unfortunate choice with the Sterling engine and was reported considering the National Supply engine in 1949. It also sent up a trial balloon with a Buda engine but never produced a competitive model. H. K. Porter, Inc. apparently prepared to manufacture a 70-ton unit. Although this maker of small diesel-electrics bought a couple of the old FW-type engines from Cooper-Bessemer, it never came out with a competing model, and Porter was reported to want to sell the two FWs. None of these half-hearted efforts resulted in a model that seriously competed with GE's 70-tonner.

GE did lose some orders to Alco, Baldwin, and EMD, all of which offered standard 99-ton, 660 h.p. end-cab models — Alco's S1, Baldwin's VO660, EMD's 600 h.p. SW1 — beginning in 1940–41, long before GE even thought of its 70tonner. Those builders of 99-ton switchers still received orders for years after GE's 70-tonner was introduced. Although the big builders' offerings were heavier than GE's target market of lightly built short lines, a modest number of pikes ran 99-ton diesels on 60-lb. rail, even lighter on some roads, without incident.

General Electric was well positioned to build the new 70-ton model, as it had been in the forefront of development of the first diesel-electric locomotive in the early part of the century, including technology for multiple-unit operation and the "wheelbarrow" or "nose" type of traction-motor mounting. A refined version of this motor design is still used on today's diesel-electric locomotives.

GE started building small diesel-electric locomotives, ranging from 25 to 80 tons, in the early 1930s. Although they were designed for industrial users, some short lines also bought and successfully ran these. By the mid-'30s, GE was sending a representative to annual meetings of the American Shortline Railroad Association to discuss internal-combustion engines. At one of those meetings, the president of the group and a number of interested members met privately with the GE representative and requested that the builder develop a locomotive that would be equally suitable for short lines and industrial users. The next year, the GE rep returned and introduced an improved range of models that weighed between 25 and 80 tons, depending on the intended service. By courting short lines at their meetings, GE had an advantage over prospective competitors.

With its many years of designing and manufacturing small diesel-electrics, GE was well positioned to develop a shortline road-switcher. The builder's 44-tonner, introduced in 1940 and its first small locomotive tailored for railroad use, had earned GE an excellent reputation that gave it credibility in the marketplace for the heavier model.

GE conducted exhaustive studies to illustrate the financial benefits of 70-tonners to prospective customers. The builder analyzed operating conditions of each potential buyer to determine the quantity of locomotives required to replace steam and, most important, to project a realistic estimate of expected financial savings.



GE 70-tonners were common on the "Salzburg" family of short lines. The Arkansas & Ozarks reactivated 69 miles of the hardluck Missouri & North Arkansas southeast from Seligman, Mo., in 1950. Wearing standard Salzburg colors, A&O 800 and 900 work at Harrison, Ark., in May '59. Al Chione collection

The most common 70-tonner face — a rectangular twin headlight casing above a louvered radiator intake — was introduced in September 1949. Iowa Terminal Railway 76, built for WP subsidiary Tidewater Southern, is at Charles City in January '76. David P. Oroszi collection



The studies showed that the 70-tonner provided great savings in labor, fuel, and repairs all ranging from one-fifth to onethird the cost of steam power.

#### **GE'S ADVANTAGES**

The model proved to be logical for many small railroads. By supercharging the prime mover, GE's new model developed 660 h.p. with drawbar pull generally exceeding that of the old steam locomotives it replaced. Important to any railroad was that the diesel's full power was available at starting speeds in contrast to a steam locomotive developing its greatest power only at higher speeds. This fundamental advantage meant a diesel-electric could pull anything it could start, with the added advantage of a high drawbar pull for heavy loads.

General Electric enjoyed several important advantages over competitors:

• It was the largest and most experienced manufacturer of 70- and 44-ton locomotives.

• Its service was more complete, and its parts and unit exchange network was better distributed than any competitor's. • GE was outstanding in the motive-power field as a builder of electrical equipment.

• The Cooper-Bessemer engines GE selected for the 70-tonners were the best available at the time, and the firm had the only railway service organization among the independent engine builders.

• GE's engineers had more than a generation of design and manufacturing experience, unequaled in the industry.

• The company's locomotive school had excellent training facilities for its customers as well as its own personnel.

#### **GROWING PAINS**

General Electric admittedly had growing pains in the early years of 70-tonner production. These included difficulties with everything from engine cylinders, crankshafts, and turbochargers to fan bearings, radiators, riding quality, trucks, and oil seals on motors. Although the problems were discouraging, GE became experienced in fixing them. When the problems were corrected, the company was happy that its current production was so refined that it would take any

#### **GE 70-tonner production**

Qty.	Category	Percent
Domestic		
126	U.S. short lines	29%
33	U.S. Class I railroads	7%
39	U.S. industrials	9%
198	Total domestic production	45%
Export		
38	Canada	9%
193	Mexico, Cuba, and Central and South America	45%
5	Philippines	1%
236	Total export production	55%
434	TOTAL PRODUCTION	100%

competing builder a long time to catch up. A testament to GE's solving the problems was that new and repeat orders were still rolling in.

Among design improvements were automatic hatch control and improved air

### Short lines - West



Ventura County Railway No. 1, bought new by the 10.5-mile road in 1948, switches at Oxnard, Calif., on July 22, 1970. Many 70-tonners wore variations of this three-stripe scheme devised by GE. Founded in 1905, the little line is now Genesee & Wyoming's Ventura County Railroad.

Alan Miller

circulation for varying ambient temperatures; a heat exchanger instead of an oil cooling radiator; a radiator of larger capacity; sealed beam headlights; new temperature and pressure gauges; better truck and center plate construction; enlarged cab roof hatch and taller exhaust stack; and a new turbocharger to provide greater engine reliability. Improvements to the prime mover increased its rating to 720 h.p.

#### **SELLING THE 70-TONNER**

Like its 44-ton companion, the 70-tonner was largely intended as a solution for the motive-power problems of shortline, switching, and terminal railroads as well as branchline needs of Class I carriers. GE reasoned that these light traffic lines were an important part of the railroad infrastructure and would remain so for years to come. The company also saw prospects for many applications in private industry.

General Electric got off to a good start with 70-tonner sales. From the time the first units shipped until June 1949, company salesmen booked 147 orders, scattered from Maine to California and from Canada to South America and Cuba. Most of these early customers were short lines. This initial sales record proved GE's 70-tonner to be the most popular locomotive under the 100-ton class, and that the builder's assessment of the market was right on target.

#### **VARIATIONS ON A THEME**

GE produced a number of variations on the basic 70-tonner design to meet certain customer requirements. Some industrial operations with robust track structures wanted heavier units for the greater low-speed tractive effort they produced. GE met this need with 70-tonstyle units ballasted up to as much as 95 tons. Narrow-gauge versions with a C+C wheel arrangement were built for U.S. Gypsum and South American customers.

Two big roads looked to the units' trucks to save weight. Canadian National specified special lightweight cast trucks instead of GE's standard welded type. Southern Pacific's units had standard trucks, but trimmed the corners of the side frames to keep them under 70 tons.

#### **DEMAND DECLINES**

The sales momentum enjoyed by the 70-tonner in the first few years was not sustained, and GE never realized its projected sales of 750 units.

In the early 1950s, changes were taking place in the railroad industry. The 40foot, 40- and 50-ton boxcars that once were the standard in the industry were being replaced by 50-foot, 70-ton cars. Heavier loads meant many roads had to upgrade their track structure. Officers of those roads that had not already bought 70-tonners reasoned that after upgrading their track and roadbed structures to handle heavier cars, they could also upgrade horsepower and weight on drivers by purchasing larger locomotives. Alco, Baldwin, and EMD readily accommodated their needs. The picture was not completely bleak, however, for as domestic orders for 70-tonners decreased in the 1950s, export orders increased.

While the 70-tonner was a godsend for many short lines, helping them make the transition from steam to diesel, it was short-lived, as the industry advanced to larger capacity cars and heavier payloads.



Up the coast from Oxnard, the 14-mile Santa Maria Valley runs east from Guadalupe, Calif. A 70-tonner owner since 1948, SMV even features one on its corporate emblem. Nos. 10 and 20 stand at Santa Maria in February 1971. G. Mac Sebree, Krambles-Peterson Archive





Timber-oriented Valley & Siletz went 40 miles into the woods west from Independence, Ore., where engine 7 (one of V&S's three 70-tonners) rests in 1973. Most of V&S shut down in 1978. Earl Johnson, David P. Oroszi collection

Oregon, Pacific & Eastern No. 10 passes Dorena Lake east of Cottage Grove, Ore., in 1971. Seven years later the road sold the unit; it's now in Canada. The last of the OP&E came up in 1994. Keith Ardinger

In order to participate in the national rail system, a short line had to be able to accept loaded car weights delivered by its connecting lines.

Although orders for 70-tonners gradually declined in the early 1950s, a brisk aftermarket developed as original buyers disposed of their units.

A network of brokers and dealers matched buyers and sellers of secondhand 70-tonners. Although a significant number of 70-tonners went from one short line to another, the majority of resales were to industrial users, some of which were overseas. In the end, a shortage of parts and the demand of hauling heavier trains forced most users to give up on the model.

# TALES OF 70-TONNERS ON SOUTHERN SHORT LINES

My first exposure to 70-tonners was in early 1947 when I was about 12 years old. Two affiliated short lines, the Live Oak, Perry & Gulf and the South Georgia, connected with each other in my hometown of Perry, Fla. The LOP&G and SG were owned by the Brooks-Scanlon Corp. of Minneapolis, which operated the world's largest southern pine sawmill at Foley, Fla., 5 miles east of Perry on the LOP&G.

The LOP&G bought two (Nos. 300 and 301) of the eight 70-tonners that came off the first full production line in October-November 1946. In December, the SG took delivery of its first and only 70-tonner, No. 202. (The SG initially ordered two units, but could only afford to pay for one.) The two railroads operated their 70-tonners in a pool, so they could be seen on either one regardless of the lettering on the units. Since my boyhood home was nearby, I saw the boxy little diesels often.

In addition to watching trains pass at crossings, on occasion I would see them stopped to switch cars at a siding. Through the window of my high school civics classroom I could see SG No. 202 bobbing and weaving along the grasscovered track as it left Perry on its 48mile run to Quitman, Ga.

Lumbermen Thomas and R. L. Dowling organized the LOP&G in 1905. In the early 1950s, the road extended from



Author Tedder's 70-tonners (from top): South Georgia 202 in 1954; Live Oak, Perry & Gulf 300 in 1967; Valdosta Southern 655 in 1969.

SG, I. L. Swett, Krambles-Peterson Archive; LOP&G and VS, AI Chione collection



Southern Pacific had the biggest fleet of 70-tonners in North America, buying 21 during 1949–55. Many worked in Oregon and Arizona; others went to subsidiary San Diego & Arizona Eastern. Engines 5102 and 5119 are at the end of the SD&AE's El Cajon, Calif., branch in February 1964. Fred Worsfold, Alan Miller collection

Live Oak, Fla., to Springdale, Fla., 47 miles, with a one-mile branch to Foley and a 12-mile branch to Mayo, a total of 60 miles. Rail weight was 45-, 60-, and 90-pound.

Little could I have known in those boyhood years that in 1951, only five years after the first 70-tonners were rolled out, I would be employed as a clerk at the joint station of the LOP&G and the SG at Perry at the age of 16. Three years later, at 19, I was promoted to station agent. In 1955, I was assigned the additional duty of dispatching trains on both roads. This job led to a 46-year career managing short lines.

I worked at the station from 7:30 a.m. to 5:00 p.m., six days a week, for the first few years of my employment. The agent and I alternated staying after hours until the afternoon mixed train arrived and its crew received switch lists, train orders, and other necessary information. Many times this was as late as 10 p.m., especially when the on-line rock quarry was working.

One Saturday afternoon after I had only been on the job a few months, the

conductor on No. 3, the afternoon westbound mixed train, telephoned from the station at Day, halfway between Live Oak and Perry, to report that 70-tonner No. 301 had failed. After I passed the report to James H. "Willie" Kansinger, president of the LOP&G, he soon arrived at the station. Looking around and seeing no one else, he said, "You've never been on an engine before, have you?"

"No, sir," I replied, meekly.

"Well, come on," he said. "You're all I've got."

We climbed into his 1949 Lincoln, which he drove at breakneck speed from Perry to the shops at Foley, five miles away. At the shop, Mr. Kansinger started 70-tonner No. 300 and gave me a quick course on handling track switches. Soon we were bouncing along on my first ride on a diesel locomotive, running through San Pedro Bay, which ended just a few miles west of Day, our intended destination. Through the bay No. 300 was running 30 to 35 mph on 90-pound "relay" rails that were once burnished across the state by Florida East Coast streamliners. At Day, the crew took charge of the replacement engine and towed the dead unit to the shops at Foley. Mr. Kansinger and I rode the train back to Foley and returned to Perry in his Lincoln.

The LOP&G kept all parts for the 70tonners at the Perry station. In addition to my clerical duties, I was responsible for maintaining the spare parts inventory. Brooks-Scanlon maintained both the lumber company and the LOP&G and SG locomotives in the Foley shops. When the master mechanic needed spare parts for the diesels, he would call on the old hand-cranked, battery-operated, partyline company telephone and give me the parts numbers and descriptions. I completed a requisition form, pulled the parts, and dispatched them to the shops in care of the station porter in the LOP&G's three-quarter-ton freight delivery truck.

After Brooks-Scanlon closed its sawmill at Foley in 1952, the railroads moved the maintenance of the 70-tonners to a "shade-tree" shop at Perry and appointed one of the Foley shopmen as master mechanic. It was during this period that I observed the newly promoted master mechanic and the road foreman of en-



Canadian National received 18 70-tonners for its Prince Edward Island lines in the first half of 1950. The road apparently preferred the old-style headlight over the new twin-bulb type. Three units trundle east with five empty reefers for potato loading at Souris, P.E.I., on April 28, 1975.

gines strip one of the GEs down to the frame and rebuild it from the ground up.

Although the 70-tonners were still maintained locally after the Southern Railway bought the LOP&G and SG in 1954, the new owner required that monthly oil samples be taken for testing. It was my duty to label and mail the cans containing the oil samples to L. Stanley Crane, engineer of tests for the Southern at Alexandria, Va. Crane, of course, was later to become president of Southern Railway and Conrail.

During my 15 years on the LOP&G and South Georgia, less three years in the Army, I watched 70-tonners in action on both roads, including riding on them from time to time. Engineers sometimes let me run the diesels, giving me my first training in operating locomotives and handling trains. On one occasion, I made an all-night trip on a South Georgia watermelon extra pulled by two of the plucky units.

#### PAPER COMPANY SHORT LINE

In late 1953 the Georgia & Florida Railway filed a notice of intent to aban-

don its 28-mile Madison branch from Valdosta, Ga., to Madison, Fla. At about the same time, National Container Corp. announced plans to build a new linerboard paper mill at Clyattville, Ga., 10 miles south of Valdosta on the branch. When the two companies discovered what each other was doing, they negotiated an arrangement in which the G&F sold the Madison Branch to the new Valdosta Southern Railroad Co., which National had organized as a wholly owned subsidiary for that purpose. Valdosta Southern connected with the Atlantic Coast Line, Southern Railway's Georgia Southern & Florida, and Georgia & Florida at Valdosta, and with the Seaboard Air Line at Madison.

Rail weight on the VS was 60-pound on the main line and 45 on sidings. The new owner upgraded the Valdosta–Clyattville segment with 90-pound rail surfaced and lined on a good granite ballast section. The remaining 18 miles continued using 60-pound rail on dirt- or earth-surfaced track, an acceptable practice at the time.

For the first 18 months the new rail-



## Industrial, logging, and export

Inspiration Consolidated Copper Co. employed three 70-tonners at its mine and smelter operation east of Superior, Ariz. In November 1974, No. 21 teams up with an EMD unit on empty hoppers and gons. Replaced here by bigger power, the GEs found their way to the Dominican Republic. Keith Ardinger

road continued to use G&F steam locomotives on a leased basis. The short line's first diesel was a new red GE 70-tonner, No. 655, placed into service in June 1955. Valdosta Southern also bought an early Electro-Motive switcher and sent it to EMD for rebuilding to a model SW900 unit, which the road placed in service in September 1955 as No. 955. Although the EMD unit did operate on the Madison end of the line from time to time, this 18-mile section was the normal habitat of the GE.

Sadly, no images of Valdosta Southern's colorful operation between Madison and Clyattville have been found. On several occasions in the late 1950s and early '60s I was privileged to observe the 70-tonner in its original red paint scheme working between Madison and Clyattville. This action was in the footprints of Lucius Beebe, noted author of *Mixed Train Daily*, the classic 1947 celebration of shortline railroading during the transitional era following World War II. The book features a picture of G&F Ten-Wheeler No. 211 on mixed train 17 en route from Valdosta to Madison with seven freight cars and a combine for passengers and mail.

In this same locale in the late 1950s and early '60s, the six cylinders of Valdosta Southern No. 655's Cooper-Bessemer engine gurgled and burbled as the 70-tonner bobbed and weaved through the cuts and across the fills of the hilly terrain in the piney woods north of Madison. The GE was running at 20 to 25 mph pulling trains of 15 to 20 cars of outbound paper products in gently oscillating boxcars, inbound chemicals, and pulpwood trailed by wooden caboose No. X-100. Surely Beebe would have agreed that these scenes were not far removed from the spirit of *Mixed Train Daily*.

#### **RUNNING FOR PILCO**

For several months during 1954 and '55, J. H. Kansinger, then the general manager of the LOP&G and South Georgia, sent me to Quitman as relief agent and train dispatcher of the South Georgia. This was during a period of turnover of agents who had to be terminated for violation of Rule G, the use of alcohol or narcotics while on duty. Although I handled the job satisfactorily, including train-dispatching duties, for several months each year, the boss said that I could not be assigned to the job permanently because I was under 21 years if age. I didn't feel particularly put down by that. Instead, I enjoyed the challenge of new experiences and every day was a pleasure. It was after I returned to my job as agent at Perry in April 1955 that train-dispatching duties were added to my job description.

One of the most exciting experiences I enjoyed nearly every day during those two partial years was watching the northbound South Georgia local leave Quitman for the 28-mile run to Adel. In those years, before the track rehabilitation after the Southern Railway took over in 1954, motive power of the daily-except-Sunday freight was a pair of 70-tonners, with SG 202 in the lead and LOP&G 300 trailing. Upon arrival at Quitman, the crew left the train hanging over the ACL overpass while they performed their setouts, pickups, and other station work.

When finished switching, the crew coupled the cars they had picked up at



Nimble as Shays, 70-tonners found work on several logging roads. Weyerhauser Timber Co. acquired two from SP in 1961 for work on a former SP line out of Springfield, Ore. Pictured heading a log train in 1982, they departed when WTC closed its operations here. Keith Ardinger

GE sold nearly 200 70-tonners to operators below the U.S.-Mexico border, with others going as secondhanders. Anglo-Lautaro Nitrate got eight units for its 42inch railway at Tocopilla, Chile, in 1958. ALN No. 13 displays the model's post-March 1957 styling (sharp hood corners, flush headlight) plus extra side louvers, an option for dusty environments.



Quitman to the train from Perry in preparation for departure to Adel. A typical consist northbound was 50 or 60 cars including lumber from Perry, plywood from Greenville, and loaded woodpulp cars, empty tank cars, and empty pulpwood rack cars from the Buckeye Cellulose Corp. pulp mill at Foley, five miles east of Perry on the LOP&G. Other than woodpulp loads and empty pulpwood racks for the G&F at Adel, the cars were destined to the Southern at Adel.

Upon completion of the air test, the engineer opened the throttle, the two six-cylinder Cooper-Bessemer engines started loading up, and the GEs began to move the train forward. The more adventurous engineers took advantage of about a mile of 1.25- to 2.25-percent descending grade to gain the momentum needed to get the train over the 2.8-percent Okapilco (Pilco) ruling grade.

The twin 70-tonners gradually increased speed as the train passed the Quitman station. With its foghorn whistle blasting the standard crossing signal and the air-operated bell ringing for Screven Street, Quitman's main east-west thoroughfare, the 12 pistons were beating and reverberating near their maximum of 1,000 rpm and the train had already reached about 20 mph. By the time the banging and clanging empty woodracks just ahead of the caboose passed the station, the train was making better than 40 mph — considerably over the speed limit. From the caboose I could see the locomotives far ahead as the track curved right and then left as they hit the Pilco grade. The little GEs slowed but kept moving. Whenever this procedure was used, the train never stalled.

The tobacco auctions at the four Quitman warehouses ran for about eight weeks each July and August. In 1955, Live Oak Perry & Gulf Ten-Wheeler 100 was assigned to switch the warehouses during the auction season. Buyers were often not able to fill a carload of tobacco at one warehouse, so the cars had to be switched to the next warehouse as the sales progressed.

Ordinarily there would be a switching charge for this service. However, in the case of tobacco, the tariffs allowed for one free switch to another warehouse. During the season, the South Georgia used the tobacco switcher and its crew as a helper to get the northbound freight over Pilco Hill without having to violate the speed limit. It was a thrill to watch the billowing smoke and steam while listening to the rumbling and pounding of the 70-tonners in concert with the staccato exhaust of the Ten-Wheeler pushing on the rear.

RUSSELL TEDDER retired in 1997 after 46 years in the shortline industry, ending as director of corporate rail services and president of Georgia-Pacific Corp.'s lines. (His 464-page book on them, Forest Rails, was published by White River Productions in 2016.) He was affiliated with 13 short lines, leading 11 including 3 he started up, and was a longtime official in the American Shortline Railroad Association. Long a student of the 70-tonner. he was an adviser on Ronald D. Sims' book General Electric 70-Ton Locomotives (Shade Tree Books, 2013). Russ lives with his wife Carolyn in *Little Rock, Ark. His one previous article* in CLASSIC TRAINS was "The Bridgeboro Boogie" in Fall 2015.