

SPECIAL ISSUE: SHORT LINES AND REGIONALS

Trains

www.TrainsMag.com • June 2017

THE magazine of railroading

PLUS
MAP: High speed in Japan p. 50
Big Boy update
p. 64

Short line of the future

From sleepy road to unit train host
p. 24



Aberdeen Carolina & Western hauls a unit ethanol train near Aquadale, N.C.

How Pinsly holds on to its franchise p. 42

South Shore Freight p. 32

OmniTRAX's rail and land strategy

Trains MAGAZINE

© 2017 Kalmbach Publishing Co. This material may not be reproduced in any form without permission from the publisher. www.TrainsMag.com

COVER STORY

SLEEPY SHORT LINE TO BUSY UNIT TRAIN HOST

Aberdeen Carolina & Western becomes short line of the future

by Jim Wrinn

IT IS DIFFICULT TO COMPREHEND, as you stand on the edge of a country road in central North Carolina, watching a long train behind six-axle power make its way along an undulating route of welded rail and deep ballast, that it hasn't been long since the rails of the Aberdeen Carolina & Western snapped, snagged, and even sank under much less tonnage.

This privately owned 150-mile short line, shaped like a wobbly Y resting on its side, is made up of the western portion of the original Norfolk Southern Railway's Charlotte-Raleigh-Norfolk main line through the Uwharrie Mountains and a branch with a surprising touch of passenger-train history.

A little more than three de-

acades ago, this branch was up for abandonment, was sold twice, and ended up in the hands of an unlikely out-of-state businessman who immediately realized he'd taken on a railroad with a daunting task: Keeping trains upright on the rails.

The story today is much different. The railroad has been expanded and transformed with newer power, heavy welded rail, and in addition to the smattering of single-car customers, you're likely to encounter unit trains. "Not that long ago, we were the short line of the past," founder Bob Menzies says. "But today, I like to think of us as the short line of the future."

Such talk is not idle bragging. On some days, the railroad is so busy with unit trains that it

becomes a chess game of finding places for them. A modern 100,000-square-foot shop is capable of handling not only the company's maintenance and rebuilding needs but that of contract customers, as well. After 17 years of work, the railroad broke even, and 20 years after its 1987 inception, it turned a profit. This is the story of how a short line goes from 800 to 16,000 carloads annually through perseverance, hard work, and just plain luck.

There's also an interesting and unexpected twist for a short line running through a mostly rural area. The railroad restored private passenger cars, and for good reason: It runs through the nationally known Pinehurst Resort golf course, a

frequent location for entertaining customers and visitors. The passenger cars are easy to spot in the railroad's signature magenta colors against the tall pines of the Carolina Sandhills.

HISTORY LESSON

Before we explore the railroad of 2017, let's review what came before and how it set up this short line's struggles and successes.

The Aberdeen Carolina & Western is made up of tracks from the original Norfolk Southern Railway. In the early part of the 20th century, that regional carrier bought short railroads to complete its line from Raleigh to Charlotte, getting numerous branches in the process.

According to Southeastern



Passing a Southern Railway whistle post, reflecting the line's past, an Aberdeen Carolina & Western freight rolls between Star, N.C., and Gulf, N.C., with six-axle power, heavy rail, and deep ballast. Alex Keith

railroad historian Richard E. Prince's landmark 1972 book on the original NS, the extension boosted the carrier to 900 route-miles. This included a branch between Aberdeen and Star, which originally operated under the name Aberdeen & West End, and later the Aberdeen & Asheboro. The branch had started as a logging and lumber road, and for that reason it was built quickly and cheaply and laid mostly on top of the area's undulating sandhills with minimal cut-and-fill work. Digging cuts or piling up fills would probably have been a waste of time anyway: The Sandhills area repre-

sents an ancient beach that has long been noted for its tall pines, peaches, golf, and its general inhospitality to railroads.

Operation of the Charlotte-Raleigh main line was remarkable for its use of five light, but modern-for-1940, Baldwin-built 2-8-4s in fast freight service. They were among the few Super-Power designs to operate in the Deep South. Sadly, none exist today: They were all sold to Mexico, where they operated and then were scrapped.

The Star-to-Aberdeen branch was notable for another unlikely reason: Pullman passenger cars delivered to the door



On May 26, 1984, in its first year of operation, Aberdeen & Briar Patch Railway GP7 No. 896 poses at Aberdeen, N.C., just feet away from its interchange with CSX's Hamlet-Raleigh main line. Jim Wrinn

of the Pinehurst Resort. NS worked with trunk line Seaboard Air Line, its Class I connection at Aberdeen, to shuttle first-class accommodations 6 miles between the interchange and the golf resort. Regularly

scheduled Pullman service between New York City and Pinehurst began in December 1929 with the appropriately named *Carolina Golfer*. The train was to arrive in Aberdeen, be handed off to the NS, and arrive in Pine-



With a handful of boxcars and hopper cars in tow, westbound Norfolk Southern Railway GP18 No. 5 pulls a short local between Aberdeen and Pinehurst, N.C., in September 1969. Warren Calloway

through the merger of Norfolk & Western and Southern, the new company announced plans to abandon the Star-Aberdeen section. By then, the line was a two-days-a-week operation, the old jointed rail was brittle, and the Sandhills easily swallowed ties. It was a slow go for the crews: 10 mph with some 5-mph sections. Long-time Carolinas rail photographer Robert Graham recalls stalking the train in its later days and finding it so slow that he set a personal record for most shots of one freight, photographing it 51 times on its plodding pace.

In August 1983, the new NS sold the Star-Aberdeen line to local businessman Willard Formyduval, who gave the line a whimsical name, Aberdeen & Briar Patch, even though there is no place called Briar Patch, though the line does pass through many of them. For power, Formyduval used former



Southern Railway GP18 No. 187, from the old Norfolk Southern Railway and rebuilt with a high short hood, hits 10 mph between Aberdeen and Star shortly before the property became a short line. Mike Small

hurst less than 30 minutes later, delivering golfers almost to the door. The trip between the interchange and the resort must have been a real show. A steep stretch of 1.8-percent grade going westbound lay between the two. Can you imagine the sound of an engine at work and the gleam of the Pullman cars?

But such glamorous work was not to last long, as golfers began driving or flying to the

Carolina course. Long after the last passenger train turned a wheel and steam gave way to diesel power, freight traffic on the 34-mile branch was worked out of Star with a single Geep or six-axle Baldwin. There was the usual smattering of commodities, recalls retired NS conductor John Grabarek: pulpwood at Biscoe, furniture at West End, sand and a carpet plant just outside Aberdeen, and a few other

customers here and there.

Southern Railway purchased the NS Railway in 1974, primarily for access to agricultural phosphates in eastern North Carolina. But deregulation in 1980 and a dwindling manufacturing base in the Carolina Piedmont and Sandhills regions changed Southern's thinking on its acquisition. Within the first year after the 1982 creation of Norfolk Southern Railway

Seaboard Coast Line GP7 No. 896, until he sold the railroad just three years later to Menzies. The first owner knew something about the railroad that the buyer would later come to know all too well — the property was worn out and in desperate need of rehabilitation. Before turning it over to Menzies, Formyduval sought and won a \$1.2 million FRA grant for track upgrades, but it was nowhere near enough to stabilize the line. He put a classified ad in *Railway Age* magazine, offering to sell the railroad, and waited to see who would call.

CLASSIFIED AD CHANGES ALL

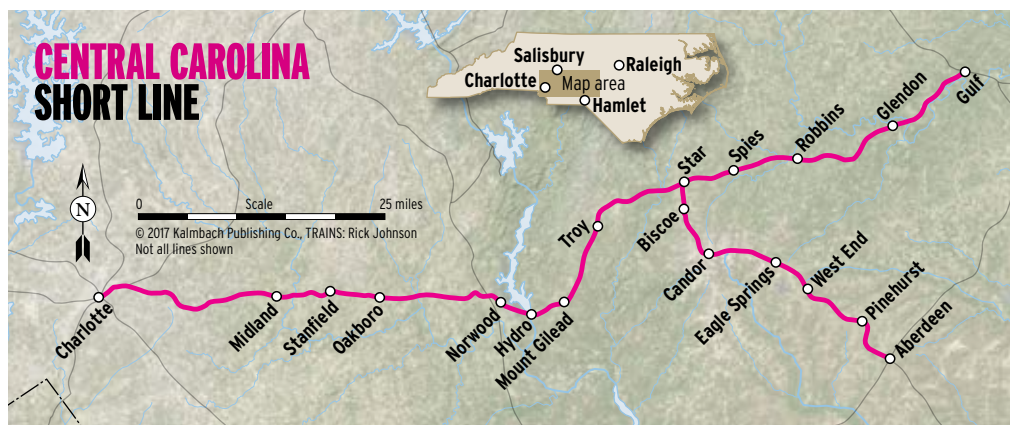
Menzies almost didn't become the owner of the Aberdeen-to-Star line. A Michigan native, he'd studied transportation logistics at Arizona State, had taught at universities in Indiana and Kentucky, and in 1972 had launched an industrial-uniform business, serving automotive plants and steel mills. But he always wanted to use his education, and one day in summer 1986, he was reading *Railway Age* when Formyduval's classified ad jumped out at him.

Knowing that he was already set to take a trip to the North Carolina coast, he contacted Formyduval and arranged a meeting. After nine months of negotiations he purchased the railroad and renamed it Aberdeen Carolina & Western.

Thus, with one locomotive, two customers, and 34 miles of decrepit track, Menzies started his new venture. Ahead lay profitability, the title of the largest short line by route-miles in North Carolina, and a busy railroad with 18 customers, including two major chicken-feed plants that would devour giant unit trains of corn. But first, he had to struggle with track, let a



Soon after taking over the Charlotte-Gulf section of the former Norfolk Southern Railway main line, a pair of hand-me-down Geeps prepares to run from Star to Charlotte on March 1, 1990. Jim Wrinn



lightning bolt of good luck strike, and learn by trial and error how a short line can utilize a big railroad tool at a profit. It was a steep learning curve. "If you're in the railroad business, you have to have a lot of perseverance," Menzies says. "It's one of the most important qualities to being in this business."

That's easy to say today, but 30 years ago, it must have been tough on the days when Menzies would settle into No. 896's engineer's seat and notch out the throttle, wondering if he'd make it across the railroad without a derailment. The railroad had few good crossies, and the 70-pound rail was long past its prime, having been installed in 1912 when the average loaded freight car weighed 35-40 tons. Derailments were so frequent

that the local newspaper stopped covering them. Menzies looked at his traffic base of two customers, a J.P. Stevens carpet plant in Aberdeen that received three or four cars of limestone and latex each week, and a sand plant that produced 10 heavy cars for interchange with NS at Star. He wasn't generating a profit, let alone the money to plow into the railroad's rehabilitation. Fortunately, money from the Federal Local Rail Assistance Program was available, and it began to flow from the North Carolina Department of Transportation to help upgrade track. Over the years at least \$6 million in federal track grants has been invested in the railroad, and another \$40 million of Menzies' own money has gone into the track.

"It never failed that every week when we took those 10 cars the 34 miles at the required 10 mph over the expected track, that we got on the ground at least once and often more times. Only one train out of the 51 that year made it back without a derailment," Menzies recounts in an unpublished essay he provided *TRAINS* called "So You Want to Own a Railroad." It is a realist's view, laced with a touch of humor, of the struggles of starting a short line. In the essay, he recounts the derailment of a sand hopper, and how he hired the neighboring Aberdeen & Rockfish short line to rerail it.



Bob Menzies

MAGENTA

The railroad got its signature colors when a printer returned letterheads with what was supposed to be red. The difference was eye-catching enough to keep, and so it stands.

MAGENTA PASSENGER CARS AND F UNITS

Short lines, private varnish, and cab units are not supposed to co-exist, but this trio is coming together inside the Aberdeen Carolina & Western's spacious shop building in Candor, N.C. Two of the three elements are already in place: the railroad and the private cars. The pride of the office-car fleet is the 1917 *Roamer*, acquired in 2012 in anticipation of special events during the U.S. Open Championship golf tournament in Pinehurst. The car, which had been stored inside, still required extensive work: More than 30 layers of interior paint came off, and it took the efforts of a Smithsonian-trained conservator to revive the car's beautiful oak interior, complete with gold leaf. Private car *Pinehurst* is a Pullman with a 24-seat dining room, a lounge, and a kitchen. A third car, *Mission Santa Ynez*, was completed in 2015. Other cars in the fleet include two diners, two domes, and two flatcars with railings, which the railroad describes to outsiders as "patio cars." The railroad's Geeps or SDs currently pull the passenger cars, but that is about to change. After all, a passenger train isn't truly complete without appropriate power, so the railroad acquired and has been slowly rebuilding an A-B-A set of former Milwaukee Road F7s that came via Ohio Central. The only problem with getting the units rebuilt and on the road is the pace of business. "We're just so busy. It's hard to find time to work on them," laments Vice President-Mechanical Dale Parks. A 2016 visit showed the F units rebuilt inside and getting new exterior panels. In the coming years, whether it needs to impress visitors or business people, the Aberdeen Carolina & Western will have itself one spiffy executive trainset in the Carolina Sandhills. — *Jim Wrinn*



Shop crews have been slowly working on an A-B-A set of F units for use on special trains. At right is a former Southern Pacific office car under restoration. Two photos, TRAINS: Jim Wrinn



Three restored heavyweight private cars in the fleet, solarium *Mission Santa Ynez*, parlor *Pinehurst*, and observation car *Roamer*, shine in the railroad's trademark magenta color.

Menzies and his crew of four were soon joined by eight members of the Aberdeen & Rockfish track gang. "As we were on sandy fill, I watched day after day as they tried to jack up this car using crossties as their jacking pad. The only problem was, the more they jacked, the more the ties disappeared into the fill, and the railcar didn't budge. All told, over 100 crossties were jacked into that fill with no results. It took over a week in 95-102 degree weather before we called it quits. As there was no way to unload the car because of its inaccessibility, I learned the hard way to just call in a couple of high-rail cranes and get the pain over with. That car cost between \$30,000-\$40,000 to pick up with no insurance to cover those costs."

SUCCESS IS JUST CHICKEN FEED

The turning point in the railroad's future came in 1987 when Perdue Farms located a giant chicken-feed mill in Candor, N.C., about 22 miles from Aberdeen. While Menzies and his crew struggled to move covered hoppers of corn across the railroad without derailments, he focused the railroad's efforts on the worst parts of the track — the curves where super-elevations from the steam era were highly exaggerated. Menzies brought in others to consult, and they admitted that the railroad might be too difficult and costly to rebuild.

Menzies kept on. His first step was to get fresh ballast, but he couldn't afford new rock. He bought used ballast instead, after CSX pulled up the second track on its Hamlet-Raleigh main line. Used rock cost \$2 per ton vs. \$8 for fresh ballast. Colleagues advised him against the move — a lot of it might be sand, they said — but Menzies pointed out that his railroad was already laid on sand. The recovered rock would still be an improvement.

Then, he went looking for rail, at least 100 pounds per yard or more. As more heavy rail went in at the cost of millions, derailments became fewer and less frequent. By the time a second chicken-feed mill, Moun-



Ed Thum

tainaire Farms, located its own plant in Candor in 2000, the railroad was starting to look and feel more like it was going to

survive.

But with every opportunity comes a challenge. This time it was one that would transform the railroad into what it is today. It is a universally accepted method of operations on main-line railroads for decades but a rarity in the shortline world: Unit trains.

Menzies recalls that Mountaintaire began bringing 50-car unit trains from the NS interchange at Gulf, N.C. That was the good news. But instead of earning a profit from the trains, they were costing the railroad big money. After unit trains pounded a wood bridge so hard it required a \$250,000 fix, Menzies began studying why unit trains were costing him more to run than they earned.

He soon learned that each unit train, just to go 40 miles, cost the railroad \$8,000 to \$10,000 more in fuel, labor, and track maintenance than it earned. Traction motors on his older locomotives were also punished on these heavy trains.

Unit trains are cost-effective for Class I railroads, he surmised, but they can be costly to a short line if they're not managed carefully. In his own railroad's case, each unit train required as many as eight elderly GP7s or GP9s because of the roller-coaster profile.

"This required us on the day of a unit train to round up all our locomotives, then run light the 40 miles, wait for NS to show up, haul the unit train to our customer, then after he had finished unloading, take the empties back to the interchange, then run light again back to our terminal to disperse our locomotives back to their normal chores of bringing in 10 or 20 cars at a time on a daily basis," Menzies wrote in his essay. "Unit trains at 6,600 tons are hard on your locomotives and hard on your track structure. In



The engineer aboard Aberdeen Carolina & Western SD40-3 No. 6909 is all business as he leads five additional units and his train past a church and into Candor, N.C., on June 4, 2014. Unit trains are the basic operating component for the railroad today. Steve Smedley

fact, we found our 90-pound rail, which was made in 1924, was starting to crumble under the weight of these trains.”

Menzies brought in a Sperry car to test his rails for flaws every six months, and with each trip, more than 150 defects would be revealed. The solution was buying 114-, 132-, and 141-pound welded rail — and making a change in operations.

Another 5 miles of welded rail was installed in 2016. Today, all of the Sandhills section of the railroad between Aberdeen and Star is made up of welded rail, and the section from Star to Charlotte that sees less tonnage has been upgraded from 85-pound jointed rail to 100-pound jointed rail.

But track upgrades were not all that changed to make unit trains work. At the start, unit trains required the short line’s power at interchange, but now,



With six-axle power as well kept as the neighboring golf resort, Aberdeen Carolina & Western moves a unit rock train through Pinehurst, N.C., on Oct. 3, 2011. Note the thick ballast under the train. Kenneth Lehman

CSX power operates through, onto the short line. Dedicated Aberdeen Carolina & Western crews handle unit trains, and normal operations aren’t disturbed. Keeping the Class I railroad’s six-axle units on the point saves significant time.

Unit trains themselves have changed since the railroad began handling them. Mountaineer has expanded its plant five times to become the largest feed mill in the region, and that has meant a constantly hungry facility that can devour one unit train of corn after another. The

trains themselves grew from 50 cars to 65, and recently to 95, weighing in at 10,000 tons and making good infrastructure vital. The pace is a challenge, too. Sometimes as many as five unit trains can be on line at one time. That’s when track space becomes a problem, and the railroad finds itself in a chess game, moving one train out of the way of another.

“You have to plan your moves in advance,” says Operations Vice President Ed Thum. The railroad can get backed up quickly with one misstep. “If the

Class I connection doesn’t pick up your cars from the interchange and you’re blocked, you’ve got a problem,” he says.

Leaving the CSX interchange at Aberdeen, loaded trains face that slow climb on 3 miles of 1.8-percent grade. A pair of ES44ACs, front and back, gets down and grinds its way up the hill, topping out at 10 mph if the crew is lucky.

In addition to corn for chicken feed, the railroad hauls unit trains of outbound aggregates and inbound ethanol. The latter go to a Cargill plant on



In a classic shortline terminal scene, an Aberdeen Carolina & Western train switches Star, N.C., where the Aberdeen branch and the former Norfolk Southern main line intersect. Kenneth Lehman

the Charlotte section for distribution to gasoline makers. Unit trains make up 60 percent of the railroad's business.

Having survived the bad-track era and the learning curve for unit trains, Menzies says that the recipe for a successful short line is to have one or two anchor customers, like the chicken-feed mills, that support the railroad and allow it to grow and expand.

"When I first bought the railroad, we had three or four small customers," Menzies says. "When Perdue came along I knew that would be an anchor. It would not make us completely profitable, but it gave us a base to build from, and without that we wouldn't have made it." Today the railroad also hauls plastics, outbound dimensional lumber, wood chips, brick, inbound butane, and propane.

Menzies is also adamant about finding new customers in the six-county region that the railroad serves, from the fast-growing suburban Charlotte area, to the rural central part of North Carolina, and the golf resort area of the Carolina Sandhills.

"You have to always be looking for new business," he says. "Now that the railroad is in good shape, we can focus on that." It's important, he says, be-

cause no industry is guaranteed. Not one of the railroad's original handful of customers is still a shipper or even in business. And there's room to grow in other areas: The company has become a contract maintenance vendor for industrial locomotives in the region, says Vice President-Mechanical Dale Parks.



Dale Parks

Today, the busiest part of the railroad is the Star-to-Aberdeen branch with the Star-Charlotte line operated every other day. The Star to Gulf section is run as needed with the NS interchange at Gulf dormant. Cars going to NS are handed off at the yard on the north side of uptown Charlotte. The railroad also interchanges with the Winston-Salem Southbound Railway, a

16,000

Number of carloads Aberdeen Carolina & Western handles each year. Annual carloads when Bob Menzies bought the railroad in 1987: 800.

regional that's jointly owned by CSX and NS, at Norwood.

TRANSITIONS IN POWER AND PEOPLE

The railroad shifted over the years from older secondhand Geeps to newer-but-used four-axle power. Then it made a big switch to six-axle power that became available during the Great



Carl Hollowell

Recession, Parks says. Today, the line stables 20 locomotives, including seven wide-nosed GP40-2s of Canadian National heritage, 12 SD40-3s of various lineages, and one slug. The six-axle units are especially useful on frequent, short, steep grades, and their Spartan cabs give them great crew visibility during switching. Their pulling power is unmatched. "With the six-axle units, two of them can do the work of four GPs," Parks says. You'll find all of the locomotives neatly attired in the company's green, cream, and magenta paint scheme.

The units are cared for in the new shops the railroad acquired in 2015 in Candor, just down the tracks from its two biggest customers.



The shop complex also houses freight car repair and a place to work on the company's 12-car passenger fleet. It also houses the headquarters offices for Menzies, Parks, Thum, Vice



Jennifer Harrell

President of Operations and General Manager Carl Hollowell, and recently named President Jennifer Harrell — a family member who was in charge of marketing and became president last fall in a move to ensure continuity. Menzies continues to serve the company as chairman, and he says he plans for the railroad to continue as an independent operator for years to come. "I get a call about once every week wanting to know if we'd like to sell," he says of shortline holding companies that have proliferated and come to dominate the business in the last 20 years. "We've no interest in selling the railroad."

What Menzies does have an interest in, besides keeping up



Symbol of success: At the end of a long day, an Aberdeen Carolina & Western unit grain train ties down at the Perdue Farms chicken-feed mill in Candor, N.C., one of the line's two major customers.

the infrastructure and wooing new customers, is his passenger car fleet. The railroad uses its passenger cars for business recruitment and special excursions. The cars were highly visible during the June 2014 U.S. Open Championship golf tournament at Pinehurst as a stationary hospitality suite.

In a story in the Moore County newspaper, *The Pilot*, Menzies described how his company did not need to rent a hospitality suite for the event — he brought his own. “This has some of the best views,” Menzies said in the story, describing how he stood in a flatcar equipped with railings and a canopy car overlooking the driving and practice ranges at the Pinehurst Resort clubhouse. “It’s our corporate tent.”

The passenger train became a place to entertain the short line’s guests as well as state and local economic development of-



A set of Aberdeen Carolina & Western units moves covered hoppers for switching at Aberdeen, N.C. Grain for chicken feed is one of the railroad's principal commodities. Two photos, AC&W: Chris Auman

officials seeking to bring business to the area and to the railroad. Freight trains were scheduled to run at night in order to avoid the tournament and its crowds. The U.S. Open is set to return to Pinehurst in 2024, and you can count on the Aberdeen Carolina & Western to be ready to serve as a willing host once more.

In the meantime, trains of grain, rock, ethanol, and general freight move across heavy rail and deep ballast where there once was none. There’s always more track work to do. Menzies likes to say that his perseverance kept him in the business during the Aberdeen Carolina & Western’s early, dif-

icult, derailment-prone days. Years of hard work, learning from mistakes, and investing heavily in the franchise have paid off. It has led him and his team to an era of stability and profitability on a most unlikely railroad plunked down in the Piedmont and Sandhills of North Carolina. **I**