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# This is a MCKEY MOUSE railroad!

## All about Disney's Florida railroad

### by Bob Withers

antasy rules at Walt Disney World's Magic Kingdom theme park in central Florida. I mean, where else can you see grown men walking around, singing "Yo ho ho ho, a pirate's life for me" while toting zonked-out toddlers on their shoulders?

But there is reality amid the fantasy — four venerable stars of steam railroading rescued from their Central American obscurity by the Disney people to add to the mystique and mayhem of magical family holidays.

Roger E. Broggie, a precision machinist and Walt Disney's original "Imagineer" who headed his studio machine shop, did well when Disney asked him to save money by finding and rebuilding two vintage locomotives for Disneyland in Anaheim, Calif., instead of constructing them from scratch. He then

Ten-Wheeler Roger E. Broggie at Main Street Station on Jan. 9, 1972. Bob Withers decided to do the same for Walt Disney World in Lake Buena Vista, Fla.

In 1969, Broggie discovered a fleet of Baldwins stored in Merida, Mexico, on the Yucatán Peninsula. He arranged a trip, taking along Transportation Superinten-

dent Earl Vilmer termine the the locomotives.

Officials of the fast Ferrocarriles Unidos Railway took Broggie to a storage yard, where Baldwin Ten-Wheel-274 and 275, both built in May 1925; Mogul No. 260, built in September ed a trip, takuperintento help decondition of

dieselizing de Yucatán and Vilmer they selected ers Nos. 1928; and still-in-service American-type No. 251, built in February 1916.

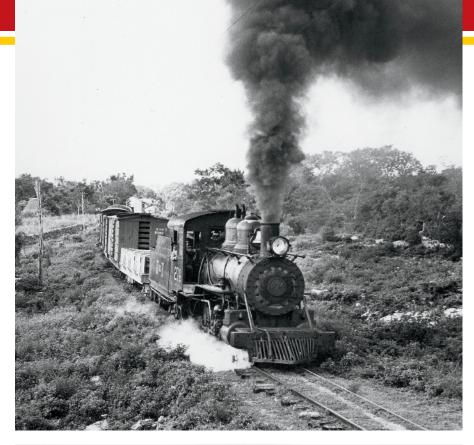
For more than 40 years, the engines had hauled bales of sisal (a strong fiber obtained from the leaves of Yucatán's agave plant that's used in making rope), other cargoes, and passengers to the docks in Progreso.

The four 36-inch gauge wood-burners cost Disney \$8,000 apiece. Broggie and Vilmer were permitted to select half a standard-gauge boxcar load of brass bells, whistles, light housings, and other fittings.

The locomotives were loaded on five freshly painted flatcars and moved via an all-rail route of more than 2,600 miles — via the Yucatan railway, the Del Sureste Railway, the National Railways of Mexico, Missouri Pacific, Louisville & Nashville, and Atlantic Coast Line — to the Tampa (Fla.) Ship Repair & Dry Dock Co. for restoration.

#### Bringing back the prizes

At the shipyard, Broggie and Vilmer met George Britton,





Before they were stars: United Railways of Yucatan's steam power was nearing the end of regular service when these images were made. No. 274 (top) was powering a mixed train at Tecoh, Yuc., on Oct. 4, 1964, two days before dieselization, while No. 260 posed for the camera at Merida, Yuc. on March 9, 1963. Top: Frank Barry; bottom: Henry Bender Jr.

the machinists' boss. "The first thing I told them was that I didn't know the first thing about railroad engines," Britton, 68, says. "But I also told them I was willing to learn."

And learn he did. The temporary job became permanent with Disney; Britton was Disney George Britton World's roundhouse foreman Larry K. Fellure from three months before the

park opened on Oct. 1, 1971, until his retirement June 6, 2006.

Britton had a huge job in rebuilding the engines. The tenders were nothing more than rust buckets; the only salvageable material was their trucks. The engines fared little better; they were torn down to their frames and everything had to be rema chined or replaced. Dixon Boiler Works of



crafted cabs from a carbon-resin material to replace the wornout wood-and-steel ones. Original domes, bells and other accessories were used, and the fireboxes were modified to burn low-sulfur reformulated diesel oil No. 2. New pistons had to be hand-lapped to fit old cylinders. All of the brass had to shine like the sun,

Los Angeles supplied the boil-

ers. The park's fiberglass shop

without scratches or blemishes. "If we found a problem, we redid it,"

Britton says. "That's the way it had to be. The locomotives had to look beautiful as well as function perfectly. And that's still the way it is today."

Broggie, Vilmer, Britton, and a fivemember crew produced four Magic King-

dom trains two years ahead of schedule and under budget. No. 274 became Walt Disney World Railroad No. 1, the Walter E. Disney; the other Ten-Wheeler became No. 3, the Roger E. Broggie. Mogul No. 260 became No. 2, the Lilly Belle, named in honor of Walt's wife, Lillian Disney; and American 251 became No. 4, named Roy O. Disney after Walt's brother and business partner.

The locomotives were dolled up in bright colors with red drivers. No. 1 was given a red cab and boiler; No. 2 a green cab and boiler; No. 3 a red cab and green boiler; and No. 4 a green cab and red boiler.

Twenty open-sided "excursion cars" were built for the locomotives and arranged into four matched sets also stunningly adorned - 101-105 (red), 201-205 (green), 301-305 (yellow), and 401-405 (blue). Stung by the original enclosed coaches in California being difficult to load and unload through end doors, Disney's people gave the new coaches rows of varnished fullwidth benches so passengers could enter or exit from the right side of the train.

Crews built a loop of track - 7,809 feet, to be exact — around the Magic Kingdom and began running all trains in a clockwise direction so no sidings were necessary. When the park opened, Main Street Station, said to be a replica of one at Saratoga Springs, N.Y., was the only stop, with passengers making the complete trip in 20 minutes. Today, trains also call at Frontierland and Mickey's Toontown Fair. Thus the trains are functional, moving passengers from one crowded area of the park to another.

#### Taking the tour

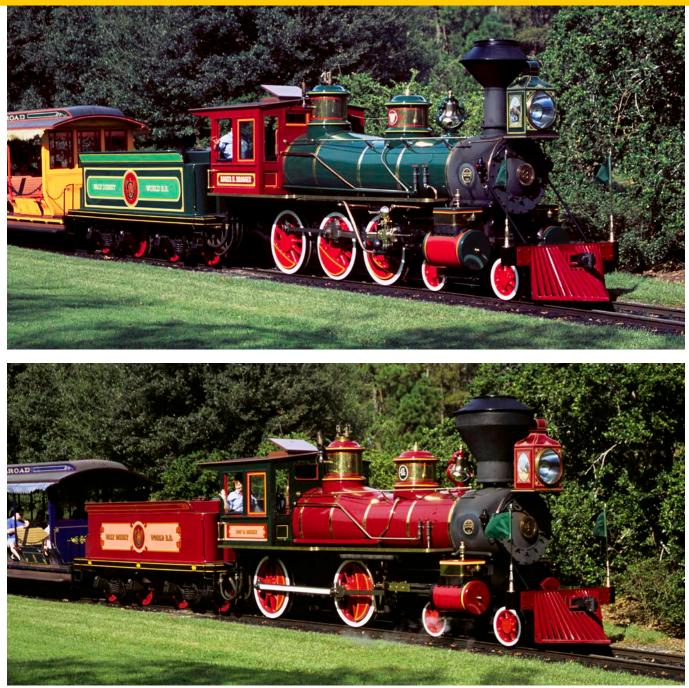
The steamers star in their own backstage show in a little-advertised treat on Mondays, Tuesdays, Thursdays, and Saturdays. More than 3,000 people have taken the behindthe-scenes tours since they started in 1999.

For \$40 apiece, people meet in front of Main Street at 7:30 a.m. and listen to one of the 70 or so train crew "cast members" not mere employees, since their mission is to entertain — tell about Walt Disney's love for railroads and how he transformed his interest into real-life operations.

Each guest (the park has no "visitors") is given a nifty name badge and a classy pin to take home and show to friends.

Our host was Jack Blanchard, a jolly 73year-old former Air Force intelligence officer. And that's not unusual. Many of Disney's train crews are retirees, working one or two days a week. Blanchard says some of his colleagues were chief executive officers, ministers, and detectives in their careers.

As Blanchard talked, the "show train," so named because it delivers costumed characters to Main Street to perform when the park opens for the day, chugged into view and made a rare stop with the loco-



Shining like the sun, Disney's locomotives navigate the 7,809-foot loop around the Florida park. No. 3 (top) is a 4-6-0 that was No. 275 when it operated in Mexico; 4-4-0 No. 4 (bottom) was No. 251 when it steamed on the Yucatan peninsula. Two photos: Jeff Terry

motive centered in front of the station for the photographers among us.

Blanchard misidentified the locomotive pulling the show train as the greenboilered *Lilly Belle* because it usually hauls the show train's green coaches. In fact, on the point that day was one of the Ten-Wheelers, the red-boilered Walter E. Disney. The Lilly Belle was back at the shop primping for a boiler inspection, which she aced two days later.

"I looked at the cars instead of the engine," Blanchard sheepishly admitted.

Soon, we boarded the show train for a private trip around the park. We took the



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for Disney watercraft.

2 **Trains** JANUARY 2010 rear seats in the last coach, because the protective railings on the left side of the first three cars had been removed to allow characters to disembark at Main Street later from both sides of the train.

After zipping by the Frontierland station at 7 or 8 mph, the train trundled across a swing bridge harvested from the Florida East Coast Railway at Wabasso, Fla. The span carries the railroad over a canal that connects the Rivers of America with the Seven Seas Lagoon and provides an out-of-sight maintenance area

We spotted a couple of Disney people

walking around on the Big Thunder Mountain attraction as we passed, and the sharpeyed Blanchard saw a third.

"There's a guy hiding back there," he grinned. "He didn't want to ruin your show."

The train continued to Mickey's Toontown Fair, where passengers were to get their backstage look.

Conductor Irwin Hamburger lined the switch behind us and we backed onto a spur leading to the park's rectangular "roundhouse," although no photos are allowed past the switch to preserve the mystery. We stopped long enough for Hamburger to hop



Here's the view from the fireman's seat on board Walt Disney World Railroad 4-4-0 No. 4, where the scents are of hot oil and wet steam but no coal smoke. Two photos: Bob Withers

off and activate the flasher signals for Floridian Way, a four-lane access road used by supply trucks and employees - er, cast members — coming to work.

"Most of them are usually late," Blanchard quipped, so there was plenty of whistle as we backed across.

#### At the Disney shop

The 1-spot shoved our rear car into the five-track shop (where 10 concrete beams usher Disney monorail trains in and out of the upstairs) far enough to give us a look inside while safely on the train. This is understandable since the tour takes guests inside a working railroad shop, after all, and there are safety and liability concerns. Outside again, we disembarked and the show train chuffed away to pick up its load of costumed cast members at Toontown. Once the performers arrived at Main Street, the show train would lav up for the day.

We were allowed to visit the cab of No. 4 as the engine was being fired up for the day's run. A hose carries compressed air from the roundhouse to the locomotive to provide a draft as atomized diesel fuel is sprayed into the firebox. Then a crew member lights a ball of cotton waste and tosses it in the tiny circular door. The resulting "whoomp" tells you that the engine has a working fire in its belly and will soon be ready to go.

Meanwhile, engine No. 3 had been shuttling back and forth as shop forces in a pit inspected the train's undercarriage. Once they were satisfied everything was in working order, we boarded that train and returned to Main Street just before the park opened. On the way, we got off and photographed the Broggie getting a



Geno Swagger Jr. fills the lubricator on No. 4 as the 4-4-0 makes a station stop.

drink from the railroad's only operating water tank. That's routine all day long on every third trip around.

"They don't have to take water that often," Blanchard said. "But it's a good show. Why not?"

Between Toontown and Main Street, passengers are treated to serious stack talk on a stiff 2-percent grade. In fact, when the Toontown station opened coincident with Mickey Mouse's 60th birthday in 1988, there were concerns about the tiny engines pulling fully loaded trains from a dead stop. Not to worry; they've consistently performed on that grade like stout articulateds. Britton says there are other grades on the loop, but they're all downhill.

Fact is, on our tour, No. 3 made two starts on the grade. Blanchard flipped a switch and sounded an old automobile horn in the cab, signaling an emergency. A rookie crew member was being tested in the engine. The newbie passed.

"I guarantee you, we do emergency stops," Blanchard says. He recalled an incident when a passenger dropped a camera off the train. The man dived off after it.

"He was back on the train before it had come to a stop," Blanchard says.

Another time he saw an infant crawl off the left side of the train and a grandmother jump over the handrail and roll to the ground after it.

"More likely, though, I'll see somebody hanging out of the train," he says. "If they're still doing it after three announcements, we stop. We take those things seriously. We don't talk about it, but we have to be trained to do it."

Engines Nos. 3 and 4 would haul all of this day's guests. But when crowds are heavy, all four trains run: the show train for the



Walt Disney World Railroad 4-6-0 No. 3. the Roger E. Broggie, lets off steam as a monorail passes overhead. Larry K. Fellure

first two hours; and the other three all day. That's possible because the loop is separated into six signaled blocks. Engineers who encounter a vellow-over-green indication know that the block ahead is clear; a green means the next two blocks are clear. A red signal indicates an occupied block ahead, and if the engineer doesn't stop the train, the automatic train control will.

#### Safety first

There are other safety mechanisms, too. To avoid rough stops, the engines are not equipped with air brakes, but the coaches are. When an engineer makes a reduction in air pressure, the brakes apply on the coaches and literally drag their engine to a smooth stop. If the locomotive water glass drops below a specific point, the engine shuts off its own fire, a handy aid that can also kick in if the locomotive stops suddenly on a downgrade and the water sloshes inside the pressure vessel.

Conductors serve for six months before they can qualify on the engine. For that, they go to school for four days then operate under the watchful eye of a senior colleague for a couple of days — with no more than a single recruit training at any one time — to learn the operating quirks of every locomotive. Engineers are recertified at least once a year.

"Every engine has its own personality," Blanchard says. "Even the twins (the Ten-

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Walt Disney's only other steam power not manufactured from scratch are Disneyland Railroad's Baldwins 3, 4, and 5. No. 3, the Forney-style 0-4-4T Fred Gurley, was built in August 1895. Converted to a 2-4-4T, the engine was named for the Atchison, Topeka & Santa Fe's chairman and a close Disney friend. No. 4, an 0-4-0 switcher named Ernest S. Marsh, dates from April 1925 and was converted to a 2-4-0. The Gurley was originally Godchaux Sugar Co. No. 1 in Hammond, La. Disney obtained it from a railroad photographer; it entered Disney service in 1958. The Marsh originally belonged to Raritan River Sand Co. in Raritan, N.J., then went to an amusement park in Freehold, N.J. Disney acquired it from a scrap metal dealer and placed it in service in 1959. They didn't look like much when they arrived in California, but Walt Disney was pleased that their purchase and restoration had set the company back only \$94,000, instead of the \$100,000 it cost for the park's first two steamers. No. 5, a Forney-style 0-4-4T, converted long ago to a 2-4-4T, was built in September 1902 for a Lafourche Crossing, La., plantation. Disney acquired the engine in 1999 and put it into service named for Disney animator and rail enthusiast, Ward Kimball, in 2005. Operation of the two original engines was so successful. Broggie was inspired to "go for the old" again when it came time to power the trains at Walt Disney World. - Bob Withers

Wheelers) don't drive the same."

in recent years by the Tweetsie Railroad shop in Blowing Rock, N.C. The locomotives travel to and from Western North Carolina via flatbed truck.

One long and one short blast of the whistle announces the train's approach, and the fireman or firewoman rings the bell until the train stops. After a minute and a half, the engineer blows one short; after two minutes another short. At two-and-a-half minutes, enough time to get 360 passengers off and 360 more on, the engineer checks for a green or yellow-over-green signal and blows the traditional two shorts. If the conductor gives a highball, the engi-

# Walt Disney's other genuine steam

All four engines have been overhauled

Station stops are honed to a science.

neer answers with one and departs.

For almost four decades, the obscure little engines have hauled Magic Kingdom visitors, carrying 6.8 million in 2008. They've remained accident-free and in tiptop shape - a nostalgic touch of reality amid the fanciful fantasy of Walt Disney World.

BOB WITHERS is a Baptist pastor and retired newspaper copy editor in Huntington, W.Va. He is the author of The President Travels by Train (TLC, 1996). This is his 11th TRAINS byline. He wishes to thank Disney cast members George Britton and Jack Blanchard as well as Michael Broggie, Roger's son, and the author of Walt Disney's Railroad Story (Pentrex, 1997), for their *help with this article.* 

