NARROW GAUGE DIESEL POWER EVOLUTION

White Pass IN TRANSITION

GORDON LLOYD JR./PHOTOS FROM THE LLOYD TRANSPORTATION LIBRARY

For locomotive lovers, Skagway, Alaska, is a rather far-flung destination, but one worth consideration, as it was for me in 2018. Besides wanting to claim the last of all 50 states visited, I also wanted to visit the narrow gauge White Pass & Yukon, a railroad known for its unique fleet of diesel locomotives and one that during that 2018 visit was in transition.

White Pass & Yukon is a survivor. The terrain is rugged, the winters difficult, and business is fickle. The competition provided by Highway 98 (its completion no mean feat itself) siphoned off significant traffic from the railroad. In the early 1980s, the last online ore mine closed down, eliminating the only regular source of traffic on the 110-mile route, and the railroad suspended operations in 1982. In 1988, WP&Y reopened as a passenger railroad, transporting thousands of tourists from Skagway-docked cruise ships into the scenic wonder to which the railroad provides access.

Alas, Skagway weather for the 2018 day allocated for White Pass & Yukon photography and train riding could hardly have been worse. Temperatures hovered in the 50s, though the "sunshine" was in liquid form and was measured in inches that day. I had several dozen WP&Y slides in my collection, all taken by others, which seemed to validate the climatic conditions which were encountered. Yet before boarding the train, I was determined to photograph the locomotives that would lead us through the scenic mountainous terrain, and into Canada.

A non-railfan friend and I braved the elements to record the train and locomotives digitally. For our efforts, hats, jackets, and shirts were wet for the remainder of the day, but the images of those narrow gauge MLW DL-535E locomotives were remarkably good. The auditory sensations were nearly as memorable — the unmistakable Alco engine cadence and then the seeming "last breath" being a treat to encounter. Although the weather was extremely challenging, I wouldn't have missed the opportunity for the world.

The following ride to White Pass, some 20 miles distant from Skagway, at an elevation of 2,888 feet, was both breathtaking and inspiring. Three trains were utilized to handle the crowds, as four cruise ships were in port that August day. Of course, at White Pass, the locomotives needed to be repositioned from the headend, to what had been the rear-end. Even with multiple trains, the effort was well choreographed.

The three trains required seven locomotives from the White Pass & Yukon fleet — three of the DL-535Es on our train, with two each of the heavily rebuilt GEX 3341 shovelnose units on the other two trains. Suffice it to say it was a treat to observe all the unusual locomotives firsthand, and although photography was virtually unavailable at White Pass (we did not leave the train), opportunities did present themselves for salvation.

Once back in Skagway, the rain tapered and the clouds began to break up. A mental note was made that a future visit would be worthwhile.

A significant milestone for White Pass & Yukon also occurred in 2018, when the railroad was sold to Klondike Holdings, a joint venture of Survey Point Holdings, Rail Management Services, and Holland America Princess Alaska Tours. This acquisition seemed to hold potential for future investment, and improvement.

OPPOSITE: By 2009, both GEX 3341s and DL-535Es were fully engaged in moving passengers. Regular freight operations ended by 1982. In spite of the obvious external differences, similar Alco 251-series engines powered both models of locomotives. At Skagway in August 2009, 94, 103, and 90 mix it up. PIERRE OZORÁK-LTL

LEFT: Eleven tank cars and a caboose trail DL-535Es 101 and 107 at Whitehorse, Yukon Territory, on August 21, 1978. Number 101 was the first of the Montreal Locomotive Works DL-535s on the roster, built in May 1969. Additional similar units were built in 1969 and 1971, followed by four wide-nose versions in 1982. J. DAVID INGLES-LTL

BELOW: The workaday appearance of the GEX 3341 units in the pre-tourism days is evident in this June 28, 1980, view at the north end of the railroad at Whitehorse. An Alco 6-251 engine purrs under the hoods of WPY 99 and trailing number 90. J.B. ERLITZ-LTL

A Sudden Transition

On August 31, 2021, opportunity and good fortune converged. I had planned and executed a return to Skagway. This time, bright sunlight was in the forecast, and that promise was fulfilled. However, the passenger train terminal (adjacent the cruise ship pier) sits next to and, more importantly, below a significant rocky hillside, shading the morning operations from sunlight. The previous soggy encounter did not prepare me for the early morning actuality of deeply shadowed sunlight.

The offset for the challenging sunny-day photos was found on the headend of the two passenger trains, which alternated trips to White Pass Summit every two hours. Of course, I had hoped for more opportunities and encounters with the remaining DL-535Es. I was aware that four had been sold to Durango &

ABOVE RIGHT: Significant upgrading occurred when the GEX 3341s approached their 50th birthdays. The Alco prime movers were exchanged for Cummins QSK45L diesels, and all associated components were updated as well. The Cummins engine has 45 liters of cubic displacement. At White Pass Summit, GE 95 runs around trains staged to return to Skagway in August 2018.

RIGHT: Heavy rain did not deter remarkably good digital images of DL-535E 107 at Skagway on August 9, 2018. Tourist season was in full bloom, as White Pass & Yukon employed three trainsets to handle the cruise ship loads, with 107 poised to head to White Pass Summit.

BELOW: Three DL-535Es lead passengers back into Skagway and the cruise ship pier, having made the 40-mile round trip from White Pass. The summit is 2,888 feet higher than this location at Skagway Junction. Since 1987, passengers had been the mainstay of these 1969- and 1971-built MLWs.

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ABOVE: Unique in the U.S., the White Pass & Yukon NRE-built E3000CC-DC locomotives are about 30 percent larger than previous fleet locomotives. The 130-ton units feature a partial roof overhang, a proven EMD engine design, and General Electric traction motors on three-foot gauge trucks.

LEFT: White Pass & Yukon had been accustomed to four-cycle prime movers, but new E3000CC-DC units have introduced the two-cycle concept. A 16-645E3B engine idles under the hood of 3006, the highest numbered NRE unit delivered by the time of the August 31, 2021, photo taken at Skagway. Four of those six units wear this new paint scheme.

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Silverton Narrow Gauge Railroad, but what of the others? That answer became more focused when I found nearly new National Railway Equipment E3000CC-DC locomotives to be in command of the day's excursion trains. It was a simultaneous sensation of disappointment and euphoria (in that order), if those two emotions can be combined.

The best was made of the challenging opportunities near the cruise ship terminal. Again, digital photography is routinely accommodating. The early morning slides immortalized on Kodak Ektachrome were less accommodating, but trips to Skagway might only be counted on one hand, so the occasion was not spurned.

I undertook a brisk walk to determine the status of remaining MLWs, and the shovelnose GEs. It was perhaps two miles, anticipation mounting as the number of steps increased. Upon arrival at the WP&Y shop, the reality of new locomotives, travel restrictions, and decreased travel overall were immediately evident. The situation as presented found three MLWs cold, being stored outside the shop, along with two lines of the heavily remanufactured GE units. One of the two lines included seven of those GEs, along with the major attraction of my inquiry, wide-nose MLW 114. Photography took but a few minutes; then, deflated, I walked less enthusiastically back to downtown Skagway.

The disenchantment experienced at the White Pass & Yukon shop was not entirely unexpected. While delivery of the new locomotives was not exactly trumpeted, neither was it a secret, even though Skagway is about 1,500 miles from the Lower 48. For those who read periodicals or surf the internet, knowledge of the new generation of WP&Y motive power was available.

Bolstered by new ownership, improvements to White Pass & Yukon have been part of recent history. Track upgrades, including passing sidings and a new loop at White Pass summit, have been

ABOVE: The rugged views around White Pass Summit include Summit Lake and DL-535Es on a rainy August day in 2018. It appears the enduring beauty of the area will outlast the MLW era, and the need to run around the tourist trains at the summit will be reduced with the construction of a new loop track. Those who found either the scenery or motive power appealing — or both — crowded onto the vestibules of the narrow gauge coaches to savor both panorama and period.

RIGHT: The pug nose and custom truck frame are evident in this detail view of WPY 3001. Note that sandboxes are mounted on the truck frame. There is no capability to move between m.u.'d locomotives without first alighting to the ground. The veranda-style roof overhang is also evident in this right-side view.
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completed. WP&Y has scheduled additional new passenger cars for delivery, and has ordered up to 10 new locomotives. These should be viewed as the positive improvements they are.

Six new locomotives were delivered in 2020, but due to significantly reduced tourism, regular service was delayed until 2021. The locomotives were built as part of an order for Australia by National Railway Equipment at its Mount Vernon, Ill., facility, then shipped by heavy-duty flatcar to Seattle. Final delivery of the $2.5 million locomotives was by barge to Skagway.

The locomotives, known as E3000CC-DCs, have a pug-nosed appearance, the cab extending forward to nearly the front of the frame; there is no front platform or drop m.u. step in this location. Behind the cab, a roof overhang, mildly characteristic of Union Pacific's "veranda" turbines, protrudes over the external walkways. The locomotives utilize custom-made trucks to accommodate the three-foot gauge combos (traction motors and wheelsets). General Electric 764-series traction motors power all three axles of the rigid-frame trucks, thus these are C-C locomotives. The trucks have frame-mounted sandboxes, an uncommon characteristic on domestic locomotives.

Under the hood, an EMD 16-cylinder 645E3B engine provides 3,000 traction hp through an AR10-D14 alternator package. These are microprocessor-controlled locomotives, utilizing the N-Force electronics of National Railway Equipment. Locomotive weights are in the 130-ton range (lighter than many GP38s). Ideally, they will be able to replace older locomotives on a two-for-three basis, in spite of the 4 percent grades encountered en route to White Pass Summit. The first two locomotives (3001–3002) were delivered in the traditional yellow and green paint featured on the GE and MLW predecessor units, while the last four (3003–3006) are adorned in a less flashy, but nonetheless handsome, black and red scheme.

While the paint did not smell new, the immaculate locomotives matched many characteristics present during other encounters with nearly new locomotives. Aurally, my initial impression was that these locomotives did not sound like other 645-engined units, but the close proximity to the dock and hillside could have muffled the sound of the exhaust. Afternoon sunlight remained strong, with opportunities to photograph both trainsets — a bonus being the 3001 positioned for ample views.

What the Future Holds

Original plans were for 10 of these new locomotives. In comparison with 2018 traffic, the business conditions witnessed on this recent trip — although trains were relatively full of eager passengers — were that the crowds were capably handled by alternating single train departures, and required but four members of the new fleet. If or when business returns to previous levels, additional traffic could be handled by putting some older members of the fleet back in service, or complete replacement could occur when all the E3000CC-DC locomotives are delivered.

As the torch is passed, time and traffic will ultimately play into that decision. ■

LEFT: White Pass 96 and 95 slow to enter trackage at the downtown Skagway passenger station on August 9, 2018. The distinctive shovelnose locomotives were thoroughly modernized by this time, the overall exterior design is the only link to their historic past.

BELOW: Contemporary images of White Pass & Yukon at the cruise ship terminal would be foreign to visitors from earlier years. Gone, at least temporarily, are the GE and MLW locomotives that have carried tourists to White Pass Summit for more than 30 years. This current early morning view of nearly new E3000CC-DC locomotives is from August 31, 2021. GORDON LLOYD JR. PHOTOS-LTL