



CSX CONQUERS THE WESTERN ALLEGHENIES

SAND PATCH

BY STAN TRZONIEC/PHOTOS BY STAN TRZONIEC AND SCOOTER HOVANEC

LOCATED IN SOUTHWESTERN Pennsylvania, the CSX Keystone Subdivision is a vital conduit for freight. The high point of the operation lays at the pinnacle of the Allegheny Mountains. At its peak, the famed Sand Patch sits at an elevation of 2258 feet above sea level. All trains departing west from Cumberland, Md., or east from Connellsville, Pa., encounter this famous grade. Noted for its twisting roadbed and steep grades that tax even the most modern high-horsepower prime movers, the ride west seems to be favored by many as the most exciting, demanding ribbon of rail around the eastern part of the country.

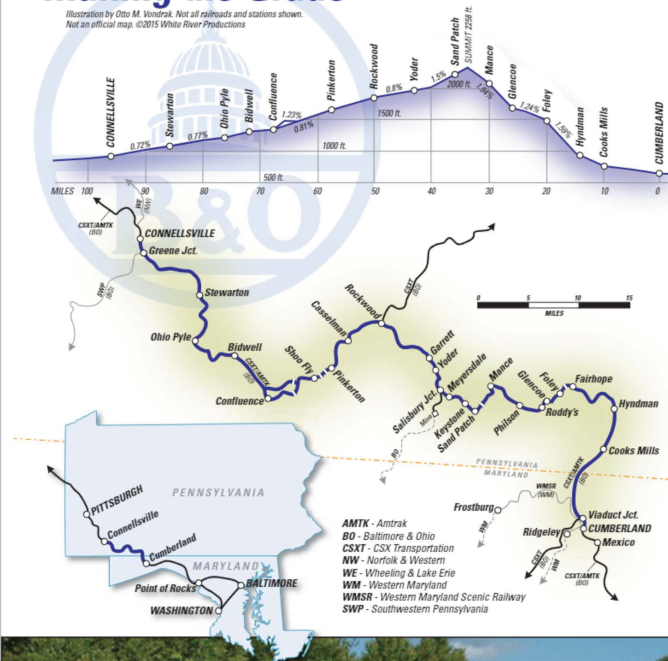
The Baltimore & Ohio was the caretaker of this impressive line that jumped into the forefront of railroad history in the first third of the 1800s. Going back to the mid-1950s as an impressionable young railfan, I still can remember one elderly gentleman telling me the B&O was "a railroader's railroad" simply because of its personality, charisma, and romance. Even today, I can still remember watching its crack passenger train, the *Diplomat*, flash by me on the then-four-track main line of the Central Railroad of New Jersey running west out of Jersey City with sleek diesels on the head end.

The Pittsburgh & Connellsville Railroad was the driving force behind conquering the mountains and started to build east from Pittsburgh in 1847. In 1853, a four-line piece in the *New York Times* notes that on May 13, "a bill authorizing Baltimore City to guarantee the stock of the P&C which had previously passed the House, was ordered by the Senate to a third reading." The whole process must have gone the right way, because in 1854 a contract was awarded for the construction of Sand Patch tunnel, an effort that lasted more than 17 years; when you look at the fine print, however, in actual work time, total man hours to-

ABOVE: With most of its train hanging downhill to Manila, CSX GE ES44DC No. 5352 will pause at the "Summit of the Alleghenies" to drop helpers and resume its trip with 4400 hp on the head end. STAN TRZONIEC OPPOSITE: Cumberland-to-Indianapolis manifest train Q359 swings below the former Western Maryland Railway Keystone Viaduct on July 22, 2007. The WM bridge was built in 1913 as part of the Connellsville Extension and saw service into the early 1990s to access the Blue Lick mine near Meyersdale. SCOOTER HOVANEC

Making the Grade

Illustration by Otto M. Vondrak. Not all railroads and stations shown. Not an official map. ©2015 White River Productions



taled only half that number. In any event, in 1875, the P&C was leased to the Baltimore & Ohio for 50 years for what would be known as the Pittsburgh Division.

Thunder in the Alleghenies

When it came to steam power, the B&O worked as hard as any other railroad to conquer the mountains. Early on, the B&O was using smaller 2-8-0s to pull freight over Sand Patch grade. With one pulling and two pushing, they made the crest with trains that weighed 2000 tons, not much by today's standards.

One of the superintendents of the line, J.E. Muhfield, introduced the Mallet type locomotive in 1904 in the form of a compound, articulated locomotive with an 0-6-6-0 wheel arrangement called "Old Maud." However, because the engine had no front guiding wheels, it was tough on track at speed and served its remaining time as a pusher engine on the steep Allegheny grades. The popular Pacifics were also available as both lead and pusher engines, and B&O's P-1 class handled everything that was thrown at them with aplomb.

Even though the B&O desperately wanted new diesel power during World War II, the government nixed the idea, which led the railroad to settle on the next best thing in the form of handsome EM-1 2-8-8-4s. Simple engines by design, they checked in at 505 tons and were the biggest and the best the railroad could offer for the tough climb uphill.



By far, however, if you were looking for signature steam power, it just had to be the "Big Sixes" that ruled the roost to Sand Patch and through the 4475-foot-long double track tunnel. These 6000-class, 2-10-2 Santa Fe type engines were dynamic in all senses of the word. They were so good, in fact, that one single engine could lift 1600 tons unassisted up Sand Patch (and 3200 tons with a helper).

Modern Operations

Obviously, change has been made big time. Today, diesel is king in a constantly changing parade of power. When I first visited Sand Patch, EMD GP40s, SD40s, SD50s, and road slugs were in abundance, as well as vintage GE B38-7s, B40-8s, and C40-8s. Now we are looking at high-tech SD70MACs, AC4400s, and AC6000s plowing upgrade from Cumberland. Considering the thousands

of units that CSX has under its charge, nothing is impossible on the slopes of Sand Patch. In addition, while the usual manifest might use three or four units on the head end or as helpers, it is not uncommon to see consists that include eclectic power that can total up to eight units.

So what can one expect now from such a diverse operation? For one, railroaders and railfans alike will see any given

RIGHT: The West Slope of Sand Patch provides little resistance for a pair of Amtrak P42DCs leading the eastbound *Capital Limited* on January 17, 2013. The train is about to pass under the State Route 2006 bridge in Sand Patch, a few hundred feet from the summit of the Alleghenies. **BELOW:** Eastbound CSX manifest train Q358 rolls over the Baltimore Street crossing in downtown Cumberland, Md., on February 1, 2010. Baltimore Street marks the western end of Cumberland Yard and is often where trains are staged before heading west over Sand Patch or the Mountain Sub. The location is also home to the spartan Amtrak station, from which all the action can be easily viewed. SCOOTER HOVANCE PHOTOS



ABOVE: Heading east to Sand Patch, a coal train led by GE AC4400CW No. 514 is ready to drop its helper at the summit on its journey through the Keystone Subdivision. **LEFT:** Roddy's Sag is an anomaly that has to be seen to be appreciated as an EMD SD70MAC pulls hard to get its train up the opposite side of this marked depression. This eastbound will cross Wills Creek again at Milepost 203. STAN TRZONIC PHOTOS

week filled with a potpourri of assorted mixed freights, coal and grain trains, auto racks, intermodal, and the twice-a-day Amtrak's *Capitol Limited*. As an added plus, you'll get an occasional coal drag off the Salisbury branch located between Sand Patch and Meyersdale; to make it more interesting, a caboose is parked here to aid in the backward movement of the train to the mine. Aside from Amtrak, there seems to be no set

schedule from either the East or West Slope, but trains are required to call out signal aspects and locations on the radio.

To start the journey uphill, trains group in Cumberland for the trip west. In all honesty, there seems to be no rhythm to any day or time; it seems only to be a simple matter of making up a train and heading out. A huge classification yard and primary engine terminal fill the valley east of town, and for the

first 2.5 miles east trains are traveling on the old Cumberland & Pennsylvania right-of-way past Viaduct Junction (and the ND Tower site), along Wills Creek, and around the gentle curves at Eckhart Junction. Those looking to observe motive power or photograph this part of the line will usually find trains waiting at the "Bud Board" (nothing more than a billboard advertising Budweiser beer) within the confines of the famous Narrows (where the B&O, old U.S. 40, Wills Creek, and the former Western Maryland pass through a tight mountain gap) not far west of the Cumberland yard.

From here, the elevation is gentle, the curves easy. Westbound trains pass Mount Savage Junction as the tracks parallel Route 36 towards Corriganville,



ABOVE: Emerging from Sand Patch tunnel with the summit in sight, a GE AC4400AC starts to ease back on the throttle. The train will pause here to drop its helpers before proceeding west to Connellsville. STAN TRZONIEC RIGHT: The East Slope of Sand Patch may have the tougher grades, but the scenery on the West Slope is just as impressive. The massive cut at Pinkerton, just west of Markleton, Pa., is the product of the National Gateway double-stack clearance project which eliminated the tunnels at Pinkerton, Shoo Fly, and Benford. Eastbound train Q130 has a freshly repainted SD50 in the lead on July 1, 2014. SCOTTER HOYANEC



crossing famous Bridge No. 1 spanning Jennings Run as the line serpentine left and right to Ellerslie. Crossing the state line past Milepost 184, the tracks head to Cooks Mills and Pleasant Valley while all the time running along Wills Creek. From here most knowledgeable engineers will take advantage of the mild grade and make a run for Hyndman where, if you stand at the edge of town, you'll start to notice copious amounts of exhaust being generated as the elevation begins to change to an uphill angle of 1.25 percent; Sand Patch is still some 19 miles away.

Next stop is Hyndman, which has an interesting railroad history. The settlement was called Bridgeport, and later renamed in tribute to a gentleman

named E.K. Hyndman, who was honored for his efforts as a superintendent of the B&O. Looking at old maps one can see that Hyndman partnered with the Pennsylvania Railroad here in the form of an interchange yard that sported several water tanks and a helper pocket for the grind west. Not too long ago "Q" Tower took control of the area, but as CSX moved in, the transfer of power went to the main dispatching center in Jack-

sonville, Fla., and the tower was razed shortly thereafter. With its share of problems from Wills Creek that ran only yards from its east wall, this was likely the best thing to do, since the helper pocket and the related shop trackwork were destroyed by a derailment over a misaligned switch in the 1980s. All that is left now is an aluminum relay box set up to control the signals and the crossover at this location.

Out of town, the tracks run through Bridge No. 10, Red Hill, Hoblitzell, Brackens, Williams Curve, past the old Maxwell brickworks, and on to Fairhope where the grade eases somewhat to 1.40 percent. While only a very small town, Fairhope apparently recognized the value of railfan money and elected to build an observation platform on a sturdy rock face where one can relax and watch or photograph the action as trains ride by

Wills Creek, round a right hand curve, and continue on to Falls Cut Tunnel. Opened in 1897, this short 517-foot bore replaced an open trench that was 300 feet long and 60 feet high but was trouble despite thousands of feet of raw timber to shore up the mountain face.

Punching out of the west portal, the tracks ride the never-ending number of curves into Foley and past the location of FO Tower, crossing Wills Creek again

and again. Next is Glencoe, a sleepy village where not much is left after the flood of 1984. The mainline takes a breather in an area called Roddy's Sag, where for roughly a half mile the track is flat preceded by a downgrade of 1.5 percent, then followed by the same amount of incline on the opposite end.

Passing the site of Philson's NA Tower and going around a right-hand turn, the approach to Mance and the horseshoe curve is in sight. Measuring about 600 yards across, this fascinating part of the railroad was once called Bowman and approaching the curve via Mance Road, you can see the reason. You have to look hard, especially in the summer months, but there on your left is a little cemetery



LEFT: The Salisbury Industrial Track connects to the mainline at Salisbury Junction and is the site for some interesting train movements. Because trains run in reverse all the way to the mine, this caboose is left here so the conductor has a safe place to stand while he protects the back-up move across multiple crossings. BELOW: Falls Cut Tunnel is located between two bridges that span Wills Creek and will cross it four more times before arriving in Glencoe. CSX 7352 and his train are making good time heading east towards Fairhope. STAN TRZONIEC PHOTOS



with about two dozen grave markers lined up neatly in a row. On every stone, regardless of gender or age, the word Bauman is carved in, but on one dominant marker, it is spelled Bowman.

After completing the full 180 degree turn, the steepest part of the entire run from Cumberland will follow at an incline of 1.72 percent around Guard Rail Curve. It's not over yet, as a short section before Manila shows a grade elevation that comes very close to a full two percent before entering the east portal of

Sand Patch Tunnel.

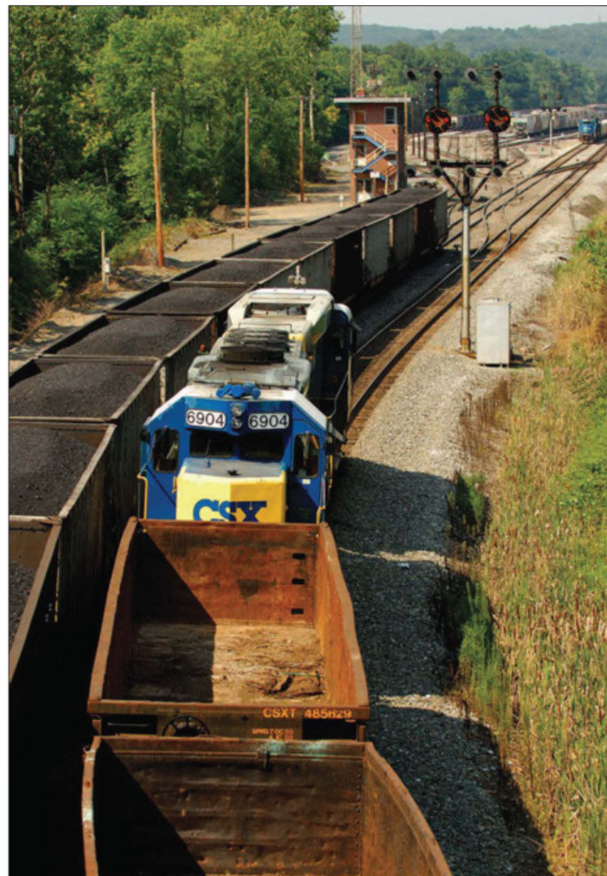
Inside the tunnel, throttles can be relaxed somewhat since here it all levels out to a calm 0.5 percent mid-way through the bore. However, this is not the place for complacency, since more than half the train is still draped over the hill and down into the Manila interchange. At one time, a tower called GR stood guard at Manila, a busy place for helpers, but in 1953 this tower was torn down and authority given to the operator at SA Tower located on the west side of

the tunnel. SA Tower was, in all probability, one of the most famous on either the East or West Slope, but it was torn down in October 2001. Walking the narrow access road south of the tracks, one can look down and see the depression in the side of the cut where this proud structure once stood.

Operation at the summit is as varied as it is interesting. Lighting is difficult for photography at the east portal, as it sits in a deep cut and only sees the sun first thing in the morning on long sum-



RIGHT: Western Maryland's impressive Salisbury Viaduct carried its last train in 1975, but it still provides a great view of the Casselman Valley and the former B&O line. CSX Office Car Special P902 makes a rare appearance on Sand Patch, rolling west on August 7, 2008. The old WM viaduct is now part of the Great Allegheny Passage Trail. **BELOW:** While not as common as coal trains, eastbound grain moves on Sand Patch are not unusual and offer a good show climbing the West Slope. The hard work is over for a couple of veteran EMDs though as they roll train G388 through the S-curve just west of Fairhope during fall foliage season on October 18, 2008. SCOOTER HOVANEC PHOTOS



ABOVE: All trains mounting the east slope of the Keystone Subdivision start their assault at the main yard in Cumberland, Md. Here a merchandise train waits for clearance to enter as a coal train moves east. Mexico Tower stands as a silent sentinel over the junction. The old B&O-era color position light signals have since been replaced with new hardware. Time marches on. STAN TRZONIEC

mer days. Depending upon the train, crew, and makeup, helpers could be released at the entrance to the bore, but it's more likely they will cut off at the Manila crossovers and return to Cumberland.

On the west side of Sand Patch Tunnel, freight trains stop almost dead at the sign marking the summit and patiently wait for the helpers to secure three-step safety procedures, uncouple, leave the train, and check the air. This is afternoon viewing and the action here can be intense, since the front-end power has to give its all to overcome the drag

of a train still hanging down slope to the other end of this tunnel. Eastbound freights will drop their helpers at the same location, and then pull ahead for the trip down to Cumberland while the pushers will move forward, back through the crossovers and head downgrade to Connellsville. Lighting at the west portal is best in the afternoon.

Looking at the landscape at Sand Patch shows that it's a mere shadow of what it was in its heyday. In the 1920s and according to Baltimore & Ohio road maps, the town boasted a station and not less than three water towers spread

out past an old plank bridge, complete with its own bank of traditional semaphore signals, west of the original SA tower. Today, a small yard west of the new overhead bridge is there, but as far as the town goes, one house remains. The Connellsville & State Line Railroad had only a track connection here with the Western Maryland (they interchanged at Keystone) and the facilities at this high profile location included a wye, turntable and numerous sidings to keep traffic and helpers on duty pointed in the right direction.

The new SA Tower was completed in 1914 and placed into a cut in the hillside was the high-tech marvel of its time. Housing a General Railway & Signal electrical installation, it was built at a cost of over \$63,000; some 40 years later, it went to full CTC installation after the demise of GR Tower in Manila. As mentioned earlier, it was reduced to rubble almost 90 years after it was built.

Diverse History and Operations

Of course, this is only part of the story of CSX's struggle to battle the Allegheny Mountains. From Sand Patch west, the line goes in the opposite direction, downhill all the way and through the likes of small towns like Meyersdale, Yoder, Salisbury, Garrett, Rockwood, and Casselman, ending up in the well-known railroad town of Connellsville. Sand Patch grade has found its place in the chronicle of American railroads; to the casual observer or photographer, this area offers much in the way of history, varied consists, and photogenic geography from one end to the other. To be there is good for the senses, since to miss the Keystone Subdivision would be a mistake.

Seize the moment, enjoy the surroundings, and take it from me... If you listen close, you may even hear one of those remarkable "Big Sixes" charging upgrade. And that is what it's all about. Sand Patch is an incredible piece of railroad steeped in times past, yet full of today's modern action and drama. ■

Stan Trzoniec is a full-time outdoor writer, photographer, publisher and frequent contributor to outdoor, photographic and railroad magazines. This is his second byline for RAILFAN & RAILROAD magazine.

