



Photo by Dwight Caswell

Martin Adams shows the “caustic embrittlement” that doomed the old boiler.



Photo by Dwight Caswell

Jim Smith works to peen stay bolts inside the boiler. The flattened bolts have been peened.

For more information about the Astoria Railroad Preservation Association and Number 21, and a record of the work done so far, visit www.astoriarailroad.org. You'll also find information about how to contribute money (ARPA is a 501c(3) nonprofit) and to volunteer. Or just go down to the Quonset hut any Saturday after 10 a.m.

Astoria dreams OF A SCENIC railroad

The Astoria Railroad Preservation Association has been working for more than 20 years to make that dream a reality

Story by DWIGHT CASWELL

You may be surprised to know that there is a connection between Gilbert and Sullivan and Astoria. It is this: The duo’s comic opera “The Mikado” premiered in 1885, and when in 1897 the Baldwin Locomotive Works built a group of 2-8-2 steam locomotives for the Nippon Railway of Japan, the 2-8-2 came to be known as a “Mikado.” There is a Mikado in Astoria.

The 2-8-2 designation stands for the wheel arrangement of two leading wheels on one axle, eight driving wheels on four axles, and two trailing wheels. This arrangement allows the locomotive’s firebox to be placed behind instead of above the driving wheels, making it possible to have both a larger firebox and greater diameter driving wheels. As a result, the Mikado was capable of higher speeds with a heavy train, and the locomotive was one of the most common in the first half of the 20th century.

In 1925 the Santa Maria Railroad, in southern California, fell on hard times and was purchased at a sheriff’s auction for \$75,000 by oil tycoon and philanthropist George Allan Hancock. He immediately ordered a new Baldwin Mikado locomotive, which arrived two months later. It was given the number 21, and it became Hancock’s “pet engine” that he liked to drive himself. Number 21 spent the next 37 years of its life hauling produce and petro-

leum on the 23-mile railroad, until the days of steam came to an end. In 1962 Hancock took the throttle for the last time, with Walt Disney joining him in the cab.

Number 21 fell on hard times. It was dismantled and trucked to Snoqualmie, Washington, but the plan to restore the engine for an excursion service was never realized. The classic locomotive began to rust away, but at last Number 21 is being given a new lease on life in a Quonset hut a block from the Astoria trolley barn.

In 1990, a group of Clatsop County railroad buffs came together to form the Astoria Railroad Preservation Association and began looking for a steam engine that was both restorable and not too heavy for the old bridges along the Columbia River. John Niemann was the driving force behind the effort. “You can blame me,” says the ARPA president, adding, “Garibaldi has a locomotive. So does Vernonia, Longview, Portland. Why not Astoria?”

In 1991, ARPA found Number 21, purchased it for \$27,000 in community donations, and completed the Augean task of moving 81 tons of disassembled locomotive from Snoqualmie to Astoria. “It wasn’t too difficult,” says Niemann, “It was already in pieces.”

It took another five years to catalog all the parts, and then began the real work of the ARPA volunteers. They stripped the engine’s paint, sandblasted and cleaned it, and painted it with primer. Their goal: to

rebuild Number 21, “to the same condition as when it departed the Baldwin shops in 1925.” Once that goal is reached the locomotive will haul tourists instead of freight along the shores of the Columbia River for the new Astoria and Columbia River Rail-

road. The round trips will last one to two hours and cost less than \$20.

That’s the plan, but a lot of work remains. Perhaps this will give you an idea of just how much. The boiler and firebox were pretty much worn out before they



Submitted photo

The Astoria Railroad Preservation Association is working to restore Number 21, a Mikado steam locomotive, pictured in here in its former glory, to create a scenic railroad along the Columbia River. The endeavor has been ongoing for more than 20 years.



Photo by Dwight Caswell

Shown here is the interior of the Quonset hut, where the Astoria Railroad Preservation Association volunteers work.



Photo by Dwight Caswell

This 58-ton Spokane, Portland & Seattle Railroad combination coach and baggage car, purchased by the Astoria Railroad Preservation Association in 2000, has seen better days. But though it looks a wreck, the car is solid underneath, where it counts.



Photo by Dwight Caswell

This fully restored tender car will carry the locomotive’s fuel.

began to rust in Washington, so a whole new unit had to be constructed — under the watchful eye of the Federal Railroad Administration — using the original as a model. This one job required reaming and tapping both ends of 1,700 large stay bolts, and finally peening these bolts (hammering the bolt ends to flatten them, which hardens the metal and makes it more resistant to cracking and abrasion). Recently, volunteers Mark Clemmens and Jim Smith, working together, peened one end of 15 of these 1,700 bolts in three hours of hard, very loud work. Do the math: that’s 1,360 man-hours to peen both ends of all the bolts, the equivalent of 34 40-hour weeks by one man. And there’s the rest of the locomotive to restore, right down to the cowcatcher.

A locomotive needs more than a boiler, of course. It needs to ride on an undercarriage and driving wheels, too; that should happen this summer. A steam locomotive also requires a tender; that’s already been restored, including the construction of a new riveted water tank identical to the original. The locomotive and tender also need a car or two to carry passengers, and

in 2000 ARPA acquired a 58-ton combination coach and baggage car, which had been built for the run to Astoria on the Spokane, Portland & Seattle Railroad. It looks a wreck, but it’s solid underneath, where it counts. Niemann looks at the rusting sides and roof, and says, “That’s just sheet metal. It’s easy to replace, and we can borrow another car until it’s done.”

ARPA needs contributions and volunteers to reach its goal. ARPA secretary Martin Adams points out an interesting difference in the law regarding stationary boilers, which requires workers with various certifications, and locomotives, for which the only stipulation is “competent persons.” Says Adams, “We’ll teach you to be a competent person.”

If you had walked into the Quonset hut in the late ’90s and asked how long the restoration would take, you would probably have heard, “two years,” and you would have been told the same a decade later. Today you’re more likely to hear, “It’s done when it’s done” or “Two years and \$80,000.” After 20 years Niemann says, “It’s really getting close. It needs to get done. It’s time to play with the thing.”

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