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INTRODUCTION

The locomotive has always been much more than a method of transport. For more than 200 years, painters, photographers, writers, and musicians have shared their visions commemorating the power and magnificence of the locomotive. Locomotive builders and designers have long shown their passion for these massive machines by producing not only functional engines but ones that make statements on energy, form, and style. As a result, locomotives endure as inspirational marvels of technology. Today, the locomotive remains as captivating and entrancing as it was in the early days of the 1800s.

As a young adult, I became fascinated with both locomotives and photography. That was almost four decades ago. Just as locomotive designs evolved over time, my understanding of light and appreciation for composition progressed, along with my artistic vision and photographic skills—first with film in the wet darkroom and later with the digital camera and the computer. I always wanted to learn and improve. As was Ansel Adams' objective, my goal as a photographer is not to just *take* pictures but to *make* fine-art images.

When I see a locomotive on location, I attempt to visualize how my final image will look. Where are the potential problem areas? What is needed to improve the image? Are additional shots of details or ones from other angles necessary? Do I have everything I need when I get to my computer to make the image I have visualized? Ultimately, my goal is to make a passionate and definitive statement about these locomotives—to present them with enhanced detail and vibrant colors, and to provide an uplifting and artistically idealized representation of each locomotive.

As a follow-up to my earlier book *The Art of the Locomotive*, I began to consider the possibility of producing an entire book with all of the primary locomotive images presented on a clean, simple, and uncluttered background. Background removal is an elegant approach for many photographic images, especially those with detailed and mechanical subjects like locomotives that are often set against cluttered backgrounds. For this book, I extracted more than 200 historic locomotive images from their backgrounds, leaving the locomotives as portraits on rails or roadbeds. This was a tedious but rewarding process.

My overall process involved much more than presenting the locomotives on clean backgrounds. While every attempt was made to take each photograph in the best possible light, locomotives can be challenging to photograph since they are reflective subjects and often characterized by dark shadows and bright shiny highlights. I have spent many hours retouching and detailing the images presented in this book to reveal the intricacy, uniqueness, and charm of each locomotive. Every bolt, linkage, and cable has been revisited and refined to assure that readers are provided with the best possible image of each locomotive.

Throughout the book, ancillary images accompany the primary images to provide insight and perspective that might be lost without the framework and context of a background. Some of these images also provide scenes with locomotives in operation and on location as a complement to the primary portraits. In

addition, I have included a few images of European locomotives to illustrate important connections to engineering developments across the Atlantic as American technology evolved.

Along with the photographic images, you will find basic information about each locomotive, such as dates of construction or rebuild and alternative names and numbers that were used over the years. I have also offered selective yet relevant commentary and observations about the locomotives, their operations, and the railroads. This book emphasizes the beautiful and amazing locomotives from the 1800s, but I have also included a sampling of 20th century locomotives.

Some images in the book were taken at the world's greatest transportation museums and these are credited. Other images are photographs taken at outdoor locations across the North American continent. Both original and historic-replica locomotives have been included to more completely convey the story of this remarkable machine.

Join me, as we reflect on the wonderful and remarkable visual history of the North American locomotive!

MY OBJECTIVE, MY GOAL AS

A PHOTOGRAPHER IS NOT

TO JUST TAKE PICTURES BUT

TO MAKE FINE-ART IMAGES.

A depot's directional weather vane

ATLANTIC/ANDREW JACKSON, 1832/1836/1892

The first of 20 locomotives built for the Baltimore & Ohio Railroad was the *Atlantic* in 1832. Although the *Atlantic*, like the earlier *York*, was an 0-4-0, vertical boiler, two-cylinder, anthracite coal machine, it was said to be a much-improved model. It was heavier for better traction at 6½ tons, and the boiler and firebox were upgraded. The *Atlantic* and the 19 subsequent locomotives all performed very well, were economical, and some continued in service for more than 60 years. (These engines were popularly known as “Grasshoppers” because the cylinder design and their linkage appearance looked somewhat like a grasshopper with long angular legs.) Cabs were also added on later models. Ultimately, they were replaced by horizontal boiler locomotives when larger and more powerful designs were required. The vertical boilers on the Grasshoppers were tall and top heavy and the locomotives were built on a short wheelbase, making them somewhat unstable at high speeds.

Somehow, the *Atlantic* was mysteriously scrapped in 1835 just after the designer, Phineas Davis, was killed in a railroading accident. In 1892, the 1836 Baltimore & Ohio No. 7 *Andrew Jackson*, another Grasshopper locomotive, was modified to recreate the scrapped *Atlantic*. This locomotive was exhibited at the 1893 World Columbian Exposition in Chicago, at the 1939–1940 New York World’s Fair, and at the 1948–1949 Chicago Railroad Fair. The locomotive is now on display with period stagecoach-type cars in the roundhouse at the Baltimore & Ohio Railroad Museum. By some accounts, this *Atlantic/Andrew Jackson* hybrid is the second oldest locomotive in the United States.



Now at the Baltimore & Ohio Railroad Museum, *John Hancock*, 1836, was the first Baltimore & Ohio locomotive with a cab.



MINNETONKA, 1870 NORTHERN PACIFIC NO. 1

The Northern Pacific Railroad was chartered by Congress in 1864 to develop a rail line from Minnesota to the Pacific Ocean across the northern regions of the United States and to connect the Great Lakes with Puget Sound on the Pacific. This development would open vast new areas of the nation for farming, logging, and mining. *Minnetonka* was one of the first four locomotives purchased by Northern Pacific to be used for construction on the line.

The small locomotive was shipped in pieces around Cape Horn and reassembled in Washington for work on the western end of the railroad. Some accounts indicate that all or part of the locomotive may have actually been shipped by rail to San Francisco and from there loaded on a ship for transport to Washington.

The *Minnetonka* is an 1870 vintage Smith & Porter 0-4-0T tank-type woodburner that was built in Pittsburgh, Pennsylvania. In 1886, it was sold to a logging company. Ultimately, it was retired in the 1920s and abandoned somewhere in the Northwest. Northern Pacific personnel later found the locomotive sitting in a wooded area, recognized its value, and traded a working locomotive for it. It was apparently still operable and the railroad employed it for exhibitions over several decades.

Ultimately, the railroad found a final home for it in Minnesota where it is on display alongside the 1861 *William Crooks*. Since 1975, the two remarkable locomotives have been exhibited at the Lake Superior Railroad Museum in the historic Duluth Union Station.



William Crooks, Great Northern Railroad No. 1, 1861, is displayed with *Minnetonka* at the Lake Superior Railroad Museum.



TAHOE, 1875 VIRGINIA & TRUCKEE NO. 20

With the discovery of silver and gold in northwest Nevada, the corridor between Virginia City and Carson City quickly became overrun with rail traffic, and a number of locomotives were ordered by Virginia & Truckee. Nine of these locomotives remain today. *Tahoe*, Virginia & Truckee No. 20, is one of the survivors. It was built by Baldwin Locomotive Works in 1875. This 2-6-0 Mogul-type engine was a woodburner and relatively powerful for the time.

Tahoe was later rebuilt for coal firing in 1907 and then converted to oil in 1911. *Tahoe* went into storage in 1926 but was later sold in 1942 and used in construction during World War II. In 1968, it was purchased by the Railroad Museum of Pennsylvania.

About 11,000 Mogul-type locomotives were built between 1860 and 1900, primarily for relatively low-speed freight operations. With only two leading wheels and more weight distribution to the rear, Moguls tended to derail more frequently than their American-type counterparts, limiting the top speed for safety considerations.

Another famous Virginia & Truckee Mogul-type locomotive is *Empire*, or Virginia & Truckee No. 13. It was also converted to oil during the same period as the *Tahoe* conversion.



Empire, Virginia & Truckee No. 13, 1873, is on display at the California State Railroad Museum.



