

NICKEL PLATED RESTORATION

By Kelly Lynch *TRAINS*, June 2006

The midnight sky of last October 28th was cold and clear, chilled with an imminent frost and illuminated by faraway stars. In the darkness, atop a set of gleaming rails, sat a slumbering giant, Nickel Plate 2-8-4 no. 765, fresh out of the shop. The towering steam locomotive cut a powerful silhouette as it captured an interlude beneath the late night heavens. Steam rose and swirled around its glossy black skin. The headlight cut a steady stark white path through the air. On its smokebox, inscribed on a diamond shaped plate, read the year of her construction: 1944.

For anyone caught in the shadow of the 14-wheeled superpower steam locomotive, it might as well have been an October 1944 night, instead of 2005. But it wasn't. It was the end of a long slumber for this giant, the conclusion of the most extensive overhaul she's been through since she was last shopped by the Nickel Plate, and the beginning of a new adventure, a third career on the rails, if you will, that begins in 2006. Or as Fort Wayne Historical Society President Tom Nitza put it: "This is the payoff."

Say the words "Nickel Plate *Berkshire*" and a lot comes to mind. To some, it's the image of a high-speed freight and passenger engine on a Midwestern railroad. It's a group of 80 engines competing against diesels and winning, giving an underdog line an edge against formidable competition, and running so well and so efficiently that if not for a late 1950s recession, they could have been the ones in the history books as the last U.S. mainline steam in regular service.

To others, it's the thought of one of the 1980s and early 1990s favorite fantrip engines. It's a locomotive that became a mainline star from New Jersey to Georgia and across the Midwest and a staple on the famous New River Trains that saw 30 car passenger consists roll through the heart of West Virginia in autumn.

But the 765 had looked like a thoroughbred frozen in midstride when she entered the historical society shop in New Haven, Indiana, in 1993. Her last trip to West Virginia took place under the guise of a Chesapeake & Ohio *Kanawha*, as "No. 2765," in honor of her kissing cousins on the C&O

(and there were others in the family on the Erie, Missouri Pacific, and Pere Marquette, including preserved 2-8-4 no. 1225, which also sees excursion service in Michigan). Her 69-inch drivers were ready to cool after 14 years of excursions. Since her restoration in 1979, the 765 had operated 277 days, pulled 140 revenue trips, handled more than 100,000 passengers, accumulated 22 million passenger miles and made cameo appearances in two feature films.

"I never took any trip for granted," confided crewmember Jerry Feicht. "Each one of them was great. I lived them like they were the last. Then one day, it was the last trip."

To say that 765's retirement to the shop for overhaul was well timed is an understatement. She rolled in just as the climate for steam excursions was changing with tornado like forces. Liability insurance costs skyrocketed. Host railroads became disenchanted with steam excursions as their lines became packed with profitable freight and crews were stretched thin. And then, on top of that, in 2001, the Federal Railroad Administration, reacting to a 1995 accident and concerns about the safety of steam locomotives, enacted an entirely new set of regulations on steam locomotives. It was a great time to be out of the game, in the shop.

"What was known was that the locomotive was due for repair. What we didn't know was that the railroads would decide against hosting excursions," Nitza said. "For the railroads, it was an understandable business decision, but for us it was like our mother had come along and taken our Lionel.

"It put us in a tailspin," Nitza explains, noting that the new regulations did come at an opportune time to apply them to 765.

"People would ask me what was wrong with the 765," recalls Operations Officer Rich Melvin. "When we first began running the 765 in 1979, the wheels and running gear were in pretty good shape, but they were not freshly rebuilt." After running 50,000 miles in her second career, the locomotive had seen substantial wheel wear.

The work, which involved removing the drivers and contracting





for specialized help, would require substantial cash at a time when the historical society's funds were going to pay off its new shop on 15 acres just west of Fort Wayne. Every engine, you see, especially the big ones, needs a permanent home.

"Getting the building was a major achievement," Nitza said. "We were gypsies up until then, but our source of funds were drying up. There was a point where we only had a few hundred dollars in the bank and with our mortgage on the building hanging over us, our first reaction was to sell our four passenger cars in the early 90's. We had to protect the engine." Steve Winicker, now chief mechanical officer, launched a mortgage fund drive, and within a few months, volunteers had raised \$10,000 of the \$81,000 needed. The Society was still trying to find ways to do what it did best: run mainline excursions.

After acquiring a special contract with CSX and the Maryland Area Rail Commuter in 1994, a successful run with North Star Rail's Milwaukee Road 4-8-4 no. 261 was completed but the Society had to begin searching for other sources of revenue. "We had assets that we didn't realize we had," Nitza said. "We started caboose rides, train rides with Santa, and began having an open house every year."

The historical society worked hard to sell more memberships, ask for donations, and increase its merchandising. Fundraising programs and grant applications were another source of revenue that hadn't been utilized since the locomotive was first removed from a city park 19 years ago. But now it was time to chase them. And hard.

Officially, the rebuilding of the 765 would take place over 10 years. The first step was to secure the 765's place on the list of National Register of Historic Places because without it, no federal funding could be secured.

Once the 765 was listed on the National Register, the historical society put together cost estimates and began making applications for government funding.

On the Society's fourth attempt to secure a grant from the Transportation Equity Act for the 21st Century, it won \$449,5000. 80 percent would be covered by the Act, while the remaining 20 percent would be matched by the Society itself.

The federal program, better known in bureaucratic shorthand as TEA21, was enacted in 1998 to fund transportation programs for highways, highway safety, transit, and historic preservation projects related to transportation. The project funding flowed through the Indiana Department of Transportation and it was managed by the Allen County Highway Department. This was certainly not the typical highway project that they were used to. As it turned out both departments were entirely supportive of the project and the change orders that would come as the





During the attempts to secure major funding, the historical society's board decided that the 765 would be restored to a condition as close as possible to new. The breadth of such an undertaking would remain unknown until the locomotive was in a dissembled state. In addition to wheel and boiler work, repairs would take place on every appliance, not because it wasn't operational or up to specification, but because the opportunity to renew the entire locomotive was there.

In November 2001, the physical work began. Volunteers reduced the 765 to "kit form," removing both front and back flue sheets and superheaters for replacement. They removed all the external piping, fittings, and brackets so they could painstakingly needle gun firebox surfaces. They removed the cab for rebuilding. They took apart the spring rigging, chalked a grid of one-foot squares across the firebox and boiler surfaces, and set in with ultrasound testing and other diagnostic procedures.

When faced with ill-fitting machinery or quirks in equipment, historical records often became like an instruction manual. With over a thousand original NKP, Advisory Mechanical Committee, and Lima Locomotive Works prints to work from, history was providing a literal blueprint for the volunteers.

While standing alongside the 765 during one of her phases of reconstruction, Project Manager Glenn Brendel, a founding member of



the Society, proudly confided, that despite the intensive rebuilding, "she's still the same engine." Glenn's sentiment can be backed up by the usage of the Nickel Plate drawings, which were utilized every time machine shop work was outsourced.

"We were able to furnish complete drawings for the driving wheels, crankpins, and bearing boxes. These were invaluable to shop personnel [at the Tennessee Valley Railway Museum.]"

In February 2002, jacks lifted the locomotive to allow the driving wheels to be removed for the first time since 1956. Workers removed the driver tires and sandblasted the wheel sets before shipping them to the Tennessee Valley Railroad Museum wheel shop in East Chattanooga. The pistons went to Grinding Equipment Machinery in Youngstown, Ohio, where they were microhoned to a smooth finish, over 800 new rigid, flexible, and crown staybolts were fabricated and installed, and volunteers rebuilt, painted, and outfitted the cab with mirror like wood paneling.

Faced with the same boiler shell and assortment of tools and pipes every Saturday, it was difficult for the volunteer workers to gauge progress. Meticulous tasks such as needle scaling or driving staybolts filled the gap between the more noticeable landmarks in the Berkshire's rebuild. For many, though, it was business as usual, but work on the 765 has always been anything other than routine.

"We may not have known when it would be done," Nitza said. "But





we knew when we arrived at the end, we'd arrive with a rebuilt locomotive."

Many in the steam preservation community are painfully aware of the costs inherent with the work and how such costs skyrocket from their original projections, augmenting the time, effort, and mental strain involved. Expectations by those outside the shop are often blissfully unaware, but despite it all, the camaraderie between volunteers remains that of old friends. Everyone who worked the engine, whether it was several days a week or once a month, had one thing in common: a dear friend was undergoing intense surgery, and they wanted to help.

The temptation to hasten the project along came in many forms or another including invitations to the 2003 Fair of the Iron Horse (later canceled when the roof of the B&O Railroad Museum collapsed) or the 2004 Ohio Central Trainfest, a gathering of locomotives in Dennison, Ohio. Wayne York, secretary, another founding member, explained: "We realized we could throw this together and skip things and get the engine ready in time, but we didn't want to. We realized we weren't under any real time constraints and we didn't want to risk any breakdowns. We wanted to do it right so when it's completed, the 765 will give us good, reliable service."

While the 765 was the "queen of the fleet" in Fort Wayne, the Society was careful to remember that other valuable railroad equipment in the collection still needed attention. Nitza explains, "Everyone always asks

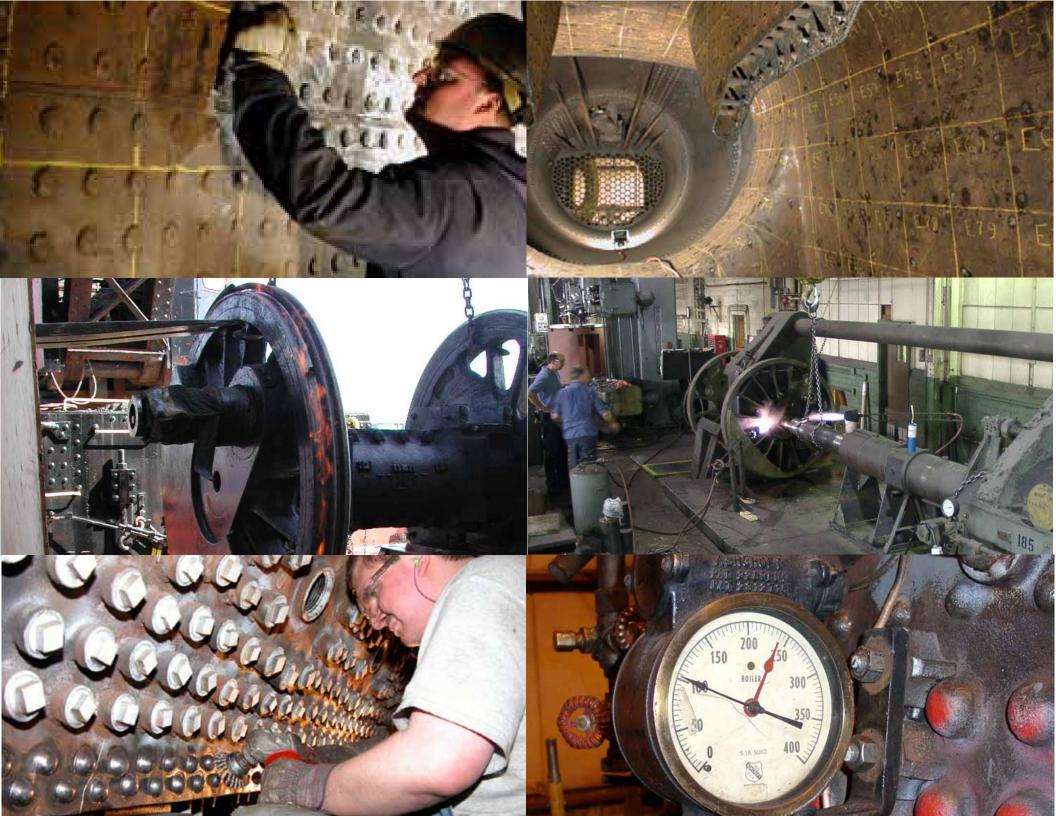
about the 765, but we have a responsibility to preserve these other historic items." This work would provide the public with a historical display that wasn't centered on one piece, but an entire restored collection.

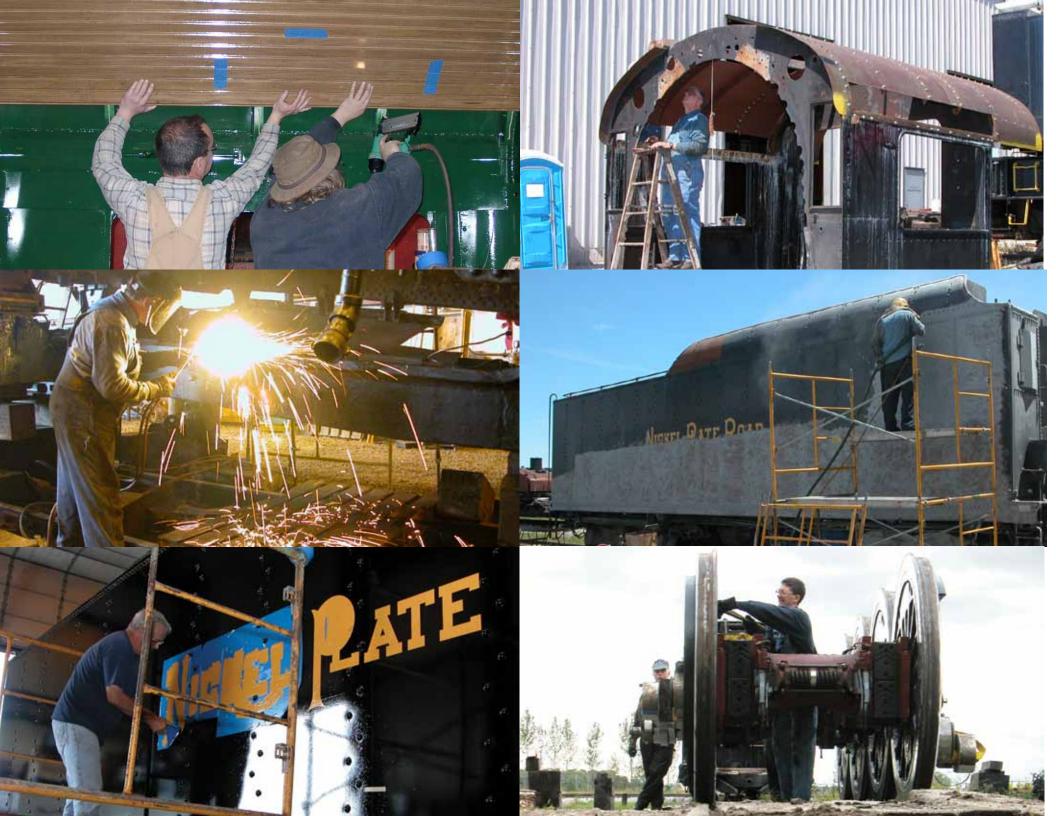
As the 765 project continued, ex-Lake Erie & Western/Nickel Plate Caboose 141 was undergoing its own rebuild, sponsored in part by a "Buy a Board" campaign in which donors could purchase new paneling for the caboose and inscribe their names on the backside. While not as public as the work on the 765, the caboose project was manned by steadfast members and master woodworkers Ben Sollenberger and Kevin Johnson who continue to devote many dedicated hours to the caboose restoration.

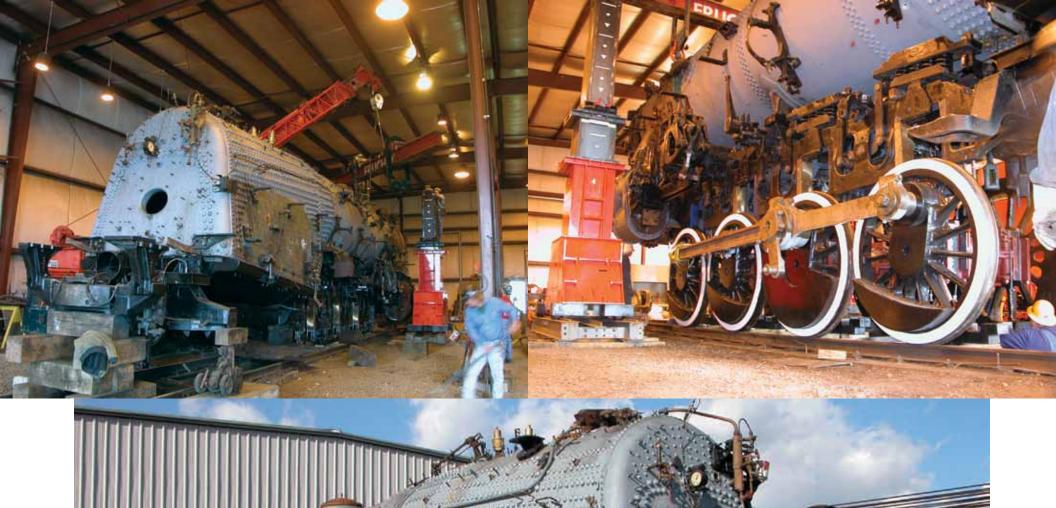
The Society's 44-ton Davenport diesel, No. 1231, continued serving the shop as the resident switch engine and classroom for the Engineer for an Hour program. The grounds were continually maintained, improved, and adorned with trees, and an official Fort Wayne Railroad Historical Society "world class sign" was added to the entrance driveway.

Another local park engine, Lake Erie and Fort Wayne 0-6-0 No. 1 (ex-Wabash no. 534), is in line for restoration. The cab and tender tank have been rebuilt. Regular maintenance and track work was performed when necessary around the facility. Whether it was scaling, welding, mowing, typing, or planting, the shop was never silent.

Finally, things began to take shape. After a successful hydrostatic test in the summer of 2004 the locomotive was re-wheeled in September. A











stationery fire up took place in July 2005. Volunteers installed rebuilt drivers, rods, and appliances.

"For those of us who were with the locomotive before, it was like this was the beginning of a new time. But, it was the first chance for the newer volunteers to see it under steam," Nitza said. "For someone who's never seen it run before, it's taken a lot of faith."

A public open house heralding the return of the 765 gave the historical society a chance to show off the results. On the morning of Oct. 27, 2005, the 765 was under steam for the historical society's Steam Up Celebration. A Nathan six-chime whistle, from the original Nickel Plate *Berkshire* no. 700, enlivened a tireless, thankful crew.

"It's 1944, all over again," York exclaimed, standing in front of the engine. York noted that the engine got back her original cast steel bell, painted yellow, as was Nickel Plate fashion. While some uninformed Nickel Plate purists may wince, the Chesapeake & Ohio style numbers (historically accurate due to common ownership of the Nickel Plate and C&O until 1947) were placed on the engine. Above the Lima Locomotive builders plates are a unique addition: copies of the 1944 trust plates that were removed in the 1950s as the Nickel Plate completed payment on the engine.

For the third time, the big Berkshire was alive and well.

"I'd forgotten what a crowd the 765 can draw," Nitza said of the event. The open house drew friends, families, and railroad officials alike, some of whom even picked up a wrench and worked right alongside the crew as they chased a few minor mechanical bugs. Their interest and assistance were heartening to the 765 volunteers because over the course of the rebuild, a sobering reality has set it in: When it comes to mainline steam operation, the world has changed.

The days of 200 mile round trips and 60 mile-per-hour running may be gone, but the countryside will still be enlivened by the 765's strident scream in the years to come. Over the winter of 2006, the crew prepared for the future with final adjustments to return the engine to the main line. The experience has been transforming for 765's caretakers. "Our whole business outlook is better," Nitza said. "We have attracted some young people, and that's important, and without that, the future is pretty limited."

As of press time, Fort Wayne officials were negotiating with Midwestern railroads to host excursions, photo outings, and displays in the

summer and fall of 2006. A Nickel Plate Berkshire may very will rocket hours to rebuild 765. Was it worth it? Ask those present on nights last through Indiana, Ohio, and Michigan very soon.

All told, it took more than \$772,000 and more than 13,000 volunteer

October when it felt like 1944, and they'll tell you they did what it took to propel soul-stirring steam back into the bright sunlight of 2006 and



Young and old have gathered to discover the 765. October 28th is named "Engine no. 765 Day" in Fort Wayne and Allen County to mark the occasion. Kelly Lynch