

Tower 17

BY KEVIN EUDALY/PHOTOS BY THE AUTHOR

SUMMER 1985 FOUND ME in Houston in the midst of a major project studying the efficiency of the removal of asbestos from schools in the Houston Independent School District. There is only one way to describe Houston summers — hot; well, actually two — hot and humid. I can tolerate hot, but humid usually gets the better of me. It looked to be a long, miserable summer.

But it turned out not so bad. The work schedule had a lot of free time built in, and that meant a fair share of railfanning. During the summer I got quite familiar with the Houston rail scene, and among the photographs across the city,

I somehow found my way to Rosenberg, on Houston's far southwest side. Rosenberg at the time was where the Southern Pacific main line between Houston and San Antonio (i.e. the Sunset Route) crossed the Santa Fe route between Galveston and Temple. Additionally, there was an SP branch line that left the junction and headed southwest to Victoria and a little-used branch that once went south a short distance through Guy to Damon known as the Damon Mound Branch.

The 16 miles of branch line between what was called Guy Junction in Rosenberg and Guy were abandoned in 1986, a

year after I was there in 1985. The branch between Guy and Damon had already been gone for more than four decades.

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TOP: The first train of the afternoon of July 28, 1985, was a westbound drag behind SD45T-2s 9223, 9361, and 9385. This freight stayed on the Sunset Route. I'm standing on the porch of the tower.

ABOVE MIDDLE: Tower 17's panel was this fairly simple affair. This photograph was taken between the SP freight at upper right and the Santa Fe train above.

LEFT: SP westbound Train HOVID (Houston-Victoria Drag) has eased up to the interlocking and is waiting for the Santa Fe eastbound to clear so it can get routed past Tower 17. The train orders for the SP freight are already hanging on the hoops to the left of the tower.



Tower 17. I left with that "I gotta get back here" promise to myself. After the rest of the week shooting in Houston, I was homeward bound for a short break, and upon my return to Houston the first image was in Sugarland, Texas, on my way to Rosenberg, fulfilling that promise to myself. I got there late in the afternoon on August 14 with enough time to shoot

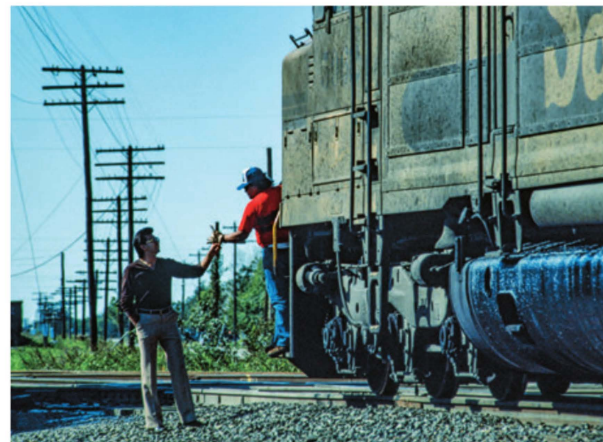
a pair of SP GP20Es parked on a siding, and catch two Santa Fe moves and one on SP. It was late in the day, and the images were less than ideal, except for a distant Santa Fe southbound coming out of the sunset.

The next gap would be longer — I didn't get back to Rosenberg until later that year on November 3, by now on

assignment doing the follow-up testing after the asbestos removal projects were complete. Tower 17 was a serious draw for me, as train lineups from the friendly operators enhanced the experience.

First up was a westbound (going geographically east through Rosenberg) Santa Fe manifest behind a pair of F45s, which was enough to send me west up the line to intercept it coming in. The pair of F45s was a nice catch, but the crew had some work to do and switching with cowl units wasn't ideal. Both the head-end crew and the crew on the caboose got copies of the orders, which was standard fare with interlocking plants with a tower operator.

After the visits in 1985, it was 13 years before I managed to get back to Tower 17. Fortunately, it had gotten some maintenance in the interim, and even at that late date I managed an interior view of the 27-function machine.



LEFT: A Santa Fe crew had some work to do at Rosenberg on November 3, 1985, and the sharply dressed tower operator is handing up orders to the crew as the power makes a reverse move back to its train. The shadow of Tower 17 is at left.

BELOW: Just a bit earlier the two F45s, 5978 and 5962, power that same westbound Santa Fe manifest, coming into Rosenberg from the northwest.



But the real attraction at Rosenberg in 1985 was Tower 17. Even from the perspective of 1985, I knew at the time this was a relic of the past. It was a 27-function electric plant with equipment built by Taylor Signal Company, and it was opened for business on July 23, 1903. Even better, this was the era when a camera-toting railfan could simply climb the steps, invite himself into the tower, strike up a conversation, and be greeted with a friendly smile and information on what trains were headed toward the tower. I met two tower operators, and both were friendly and accommodating. The tower itself was suffering

TOP: The Santa Fe westbound has cleared and Southern Pacific westbound Train HOVID bangs across the diamond. The head-end crewman is set to snag orders from the top hoop; the bottom hoop's orders will be grabbed by the conductor in the caboose. Power was GP20 4063 and GP9Rs 3317 and 3733, easily the motive power catch of the day. Shortly after passing Tower 17, this train took the southwest diagonal to the branch line to Victoria.

ABOVE LEFT: Next up on July 28, 1985, was a Burlington Northern eastbound coal train running on Santa Fe (timetable westbound) behind SD40-2 7925, U30C 5370, C30-7 5101, SD40-2 7880, and C30-7 5510. A BN caboose trailed.

ABOVE RIGHT: After the eastbound BN coal train passed, this drag freight headed west on the Sunset Route with SD45T-2 9315 in the lead, finishing the day's action. Orders weren't necessary on the CTC territory on the main line.

a bit from lack of maintenance — how much longer could it last, anyway? By 1985, towers were fast becoming a

disappearing piece of railroading's past. That first afternoon saw five moves through the interlocking controlled by





ABOVE: This is the 27-function machine as it appeared on December 13, 1998.

RIGHT: A Santa Fe westbound is about to clear the interlocking as the tower operator ambles over with orders to hand up to caboose 999757 rolling past on November 3, 1985.

RIGHT MIDDLE (AERIAL): A BNSF rock train behind ES44DC 7270 comes off BNSF's former Santa Fe route and heads eastbound on UP's former SP Sunset Route on May 14, 2022. The mechanical buildings just to the left of the diamond are where Tower 17 sat.

RIGHT BOTTOM (AERIAL): This would be the view if you were on the roof of Tower 17 looking east. A southbound KCS intermodal train behind ET44AC 5022 is about to cross the BNSF main line at the diamond in Rosenberg, and will take the diverging route once past the diamond to get onto KCS' route to Victoria and eventually Laredo. This was taken on May 14, 2022, and is nearly identical to the view of SP Tunnel Motors taken from the porch of Tower 17 almost 37 years before (page 27, top right).

FACING PAGE: On August 14, 1985, the headlight under the sinking sun is Santa Fe SD40-2 5026 with what is technically a westbound, though it is traveling southeast toward Tower 17. Trailing EMD's standard high-horsepower freight locomotive of the era is a pair of GP20s, 3007 and 3001. Tower 17 lasted almost another two decades after this was taken.

I've been back to Rosenberg several times in the last several years, and while Tower 17 no longer sits at the diamond regulating traffic, it was saved and is now a short distance to the east at the Rosenberg Railroad Museum. The railroads through Rosenberg are still moving traffic, and BNSF Railway, Kansas City Southern, and Union Pacific freights regularly roll through. With good access on both sides of the railroad in Rosenberg, it's a pleasant place to spend a day trackside. 📷

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Through My Lens

TRACKSIDE ADVENTURES AND MEMORIES



BALTIMORE & OHIO THE LAST OUTPOSTS

GEORGE HIOTIS/PHOTOS BY THE AUTHOR

On the night of July 22, 2000, Paul Swain gives a highball to a westbound freight at Miller Tower (R) in Cherry Run, W.Va. One of an operator's duties is to inspect a passing train for defects. Even in an age of advancing defect detector technology, eyes on the ground are a valuable asset.





SO, WHAT SPARKS A BOY'S INTEREST IN railroad interlocking towers? Is it his first sight of one in a 1955 Lionel toy train catalog, or in a moody Edward Hopper painting? Is it the distinctive boxy shape with the big overhanging hip roof and long stair to the second floor?

Does he wonder what's inside as he passes by, or is it the vision of a lone operator in a lonely place in the dark of night? Does he hope that he will be greeted by a friendly operator who says, "Come on up!" Is it about the ancient tradition of copying dictated train orders and setting a signal? Towers may be second only to steam locomotives as instantly recognizable symbols of American railroading.

In the 1960s and 1970s, I had photographed towers as I ran across them, rather than actively seeking them out. After all, they were going to be around forever, right? It was not until reading an article in *Trains* about CSX's last string of active towers along the former Baltimore & Ohio Cumberland Division in West Virginia that I felt a sense of urgency; there's nothing like the threat of extinction to get me moving. At the outset, my goal was to emphasize the human element slowly disappearing from American railroading, for where else can an employee work an entire shift without a manager breathing down their back, their only contact with the outside world a remote voice link to a dispatcher or train crew?

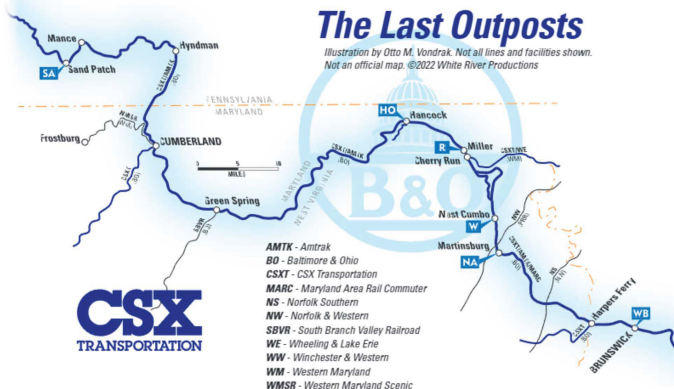
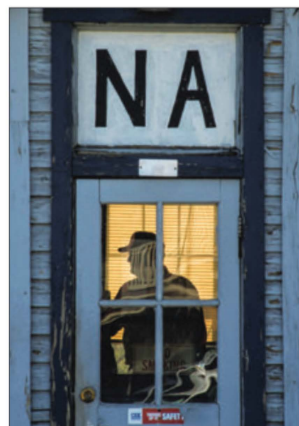
B&O had been slow to modernize its facilities, but when CSX took over, things would eventually change, with the towers being the first to go in a push to bring modern centralized traffic control to the entire system. This push began in 1983 when the then-Maryland Division had 32 interlocking towers. Somehow, the four towers in eastern West Virginia — the last string, or "Gang of Four" — with in 23 miles of each other, survived the

ABOVE: An eastbound MARC commuter train passes WB Tower in Brunswick, Md., on November 11, 2021. The restored B&O station is on the left. WB Tower has been preserved and was moved across the tracks to a new site in April 2022.

RIGHT: Operator Don Moss is seen through the door of NA Tower in Martinsburg, W.Va., on October 21, 2000. NA was a single-story structure, making it stand out among the classic two-story towers on the B&O. Despite its lower physical stature, it was no less important.

onslaught into the 21st century. Miller (R) closed in September 2000, West Cumbo (W) in December 2000, Martinsburg (NA) in July 2003, and Hancock (HO) in September 2007.

From 1995 to 2001, what began as a curiosity turned into 21 trips from my home in New Jersey to West Virginia and Pennsylvania, totaling 86 days. I had caught tower fever.



I concentrated on five towers — from east to west, Martinsburg, West Cumbo, Miller, and Hancock in West Virginia, and Sand Patch in Pennsylvania. WB tower in Brunswick, Md., which closed in December 2011, was the last manned tower on the former B&O, and escaped my attention because the other towers were closer together. Looking back on it, that was an oversight, which was corrected during a visit in 2021. WB may have

outlasted the other towers on account of MARC movements, as the MARC engine terminal is there. Since its closing, it has been earmarked for preservation, and recently relocated across the tracks to its new permanent home.

The Gang of Four

The easternmost West Virginia tower is NA in Martinsburg, which, along with WB, is closed but still extant. Unlike

traditional tower design, it is a small, one-story structure, but still interesting as an architectural oddity. Its call letters "NA," which in B&O practice are usually displayed in black letters on white in a second-story window, are a holdover from the days of Morse code telegraphy. NA was easy to access, as all one had to do was knock on the front door. Operators Don Moss and Randy Beall had no problem with my presence.

It is the duty of all operators to come out of the tower to give a "roll by" inspection to all passing trains, looking for any obvious problems, and this provided another opportunity for interesting picture possibilities. In the case of NA, that was good, as there were very limited possibilities in the cramped interior.



LEFT: Randy Beale inspects a MARC commuter train as it departs Martinsburg on September 23, 2000.

BELOW: At West Cumbo Tower, in Hedgesville, W.Va., on September 3, 2000, Carl Kief gives a friendly wave to the crewman on the caboose of a westbound train. At this time, cabooses were only used on locals. W Tower is looking a little worse for wear in autumn 2000, but unfortunately, it would not see a new coat of paint before its demise.





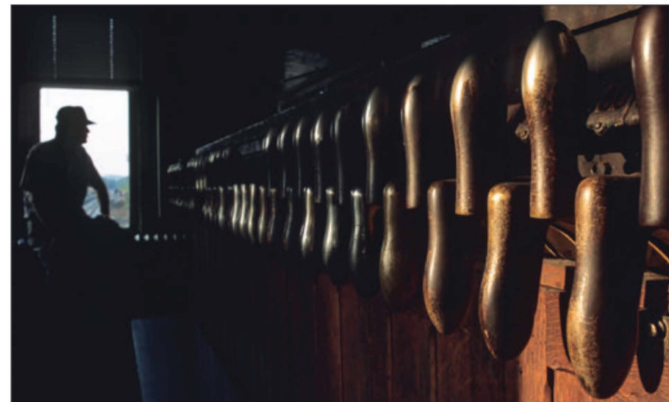
ABOVE: At West Cumbo, Carl Kief demonstrates the use of the B&O's unique order board on August 1, 1997. If a train is to stop for orders, a red light is turned on and a red metal plate is hung on the board. For orders on the fly, a yellow light and yellow plate are used.

RIGHT: In towers that did not have external stairs, a spiral stairway was used, as seen in W Tower on September 8, 2000. By this time, the only other tower to have a spiral stairway was SA at Sand Patch, Pa.

BELOW: CSX 8453 West passes West Cumbo on November 4, 1996. The track on the left is the Low Grade line, which will rejoin the main west of here at Miller Tower in Cherry Run, W.Va. A lone operator is seen in the window of the tower.

Moving westward, the next tower was West Cumbo (W) at milepost 105 in Hedgesville, built in 1913, that controlled the east end of the Low Grade Line (which had been the original main), crossovers, and an industrial spur. Its clapboard siding, never having received a fresh coat of CSX gray and blue, still retained its original B&O faded yellow, bringing peeling paint to a high art. It did, however, have a new roof and floor tiles, which one of the operators speculated meant its closure was near. One of its unusual features was a cast-iron spiral stairway to the second floor. A personal touch was a bird-feeding platform. The interlocking was electrically controlled via pistol-grip levers.

I became friendly with the first trick operator, Carl Kief, who demonstrated the use of the peculiar-to-B&O order board — a wooden board with red and yellow lights mounted on the outer wall, on which the operator would hang either a red or yellow metal plate to indicate whether a train should stop for orders or pick them up on the fly. At this date, the board may have been obsolete. As the call-letter "W" on the west-side window had virtually disappeared with age, with Carl's permission I went to the local Staples office supply store and bought white poster board and a black broad-tip marker, and together we made and put up a new sign. W also had a woman operator, Doris Sharar.



Next along was Miller Tower (R), the most secluded of the group, of all-wood construction built around 1912 at mile 113.6 in Cherry Run. It controlled the west end of the Low Grade line, the connection with Western Maryland, and some crossovers. For me, it was the jewel of the collection, a true anachronism as it was a mechanical interlocking operated by 20 hand-thrown levers directly connected to the switches by steel rods, some of which were more than a hundred feet long. One had to be strong of back to pull and push those levers, hence the term "armstrong."

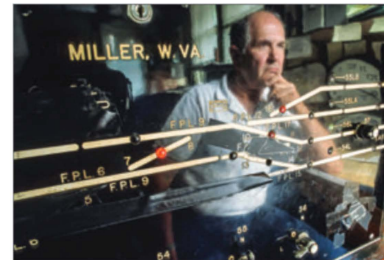
At that time, there were very few American towers of this type. That building housed technologies spanning two centuries — hand-thrown levers and a computer. It was of classic B&O design, with distinctive mitered shingles on its second story. Miller never received the complete CSX gray and blue paint scheme, showing some of its original B&O yellow on its second story. The story goes that the painters who were working on Hancock tower set the ladder too close to the track, and it was demished by a passing train, so they couldn't use it to finish. Miller was also home to a stray cat.



LEFT TOP: A relatively modern touch in the last string was the pistol-grip levers at West Cumbo. Operator George Speis is framed by a window there on August 25, 2000.

LEFT: In contrast to West Cumbo, the hand-thrown "armstrong" levers of W Tower, also known as Miller Tower, are a throwback to another era. Paul Swain works the night shift in Cherry Run on August 22, 2000.

BELOW: Reflected in the model board at Miller Tower, Jim Vargo seems to be reflecting on an uncertain future on July 20, 2000. Indeed, Miller Tower would close just two months later on September 24.



The first trick operator was Jim Vargo, a B&O veteran and a real gentleman who welcomed me upon my first visit on October 26, 1995. Little did I know that I would still be photographing him at work for another five years. My usual routine was to pick up a sandwich at the Sheetz convenience store in Hancock, sleep nearby in the back of my car, then go to Miller to wash up and find out what trains were running.

Jim is a woodworker by avocation, and his knowledge of the world was very wide. Indeed, I missed a few trains while we had discussions on a number of different topics! As my main focus was the human element, I am grateful for his generosity and patience in granting my requests. We became friends and still stay in touch to this day.

Two other operators at Miller were Allen Brougham and the late Paul Swain. Allen was the second trick operator and author of *The Bull Sheet*, a monthly CSX newsletter. Paul was another great gentleman who always wore a dress shirt to work and looked like he could be president of the railroad.

TOP RIGHT: Tower operators would often adopt and care for strays that showed up at their doorstep. On November 7, 1999, Miller Tower's cat relieves the loneliness of an eight-hour shift, seemingly checking Jim Vargo's penmanship.

RIGHT: At Miller Tower on August 25, 2000, Jim Vargo hands up orders to a work train — an ancient railroading ritual at an ancient location, soon to become history.

BOTTOM RIGHT: In a scene spanning the technologies of two centuries, Jim Vargo enters data into a computer against the backdrop of Miller Tower's armstrong levers. That this practice still endured on August 2, 1997, late in the era of technological progress, was nothing short of astounding.

BELOW: On November 6, 1999, performing a ritual that would fade into history along with the towers, Jim Vargo records the details of a train's passage by Miller Tower, a practice known as "OS" or "On Sheet." Impeccable penmanship was a necessity and a point of pride.

Allen had presided over previous tower closings, and he was determined to make Miller's last day, September 24, 2000, a solemn occasion. He had composed the "29 Song" in honor of the westbound *Capitol Limited*, and assembled a railfan chorus, complete with libretto and guitarist, to perform it as Train 29 passed. Fortunately, Miller was preserved and now sits in nearby Martinsburg.

Next up the line and last of the string of four was Hancock (HO), built around 1902 and another true relic — a mechanical plant with 28 levers. It oversaw crossovers and a small yard with a weigh scale for silica sand cars coming off the Berkeley Springs Branch. A near-twin of Miller, HO was another B&O classic of all-wood construction, with a beltline of mitered shingles and an order board. Its levers controlled only the switches, with the signals controlled from a subsidiary panel. It did make it into the CSX gray



ABOVE: On July 7, 2000, the operator at HO Tower in Hancock, W.Va., gives a roll-by to Amtrak's westbound *Capitol Limited*. HO Tower, like Miller, was a "rod plant," and its linkage is evident here.

LEFT: Situated in the Potomac River Valley, Hancock was often bathed in morning fog. On July 14, 2000, CSX 8134 West passes the classic B&O color position light signals in a scene that, aside from the SD40-2 leading the train, hadn't changed much in decades.

Sand Patch

Although it wasn't one of the gang of four, Sand Patch (SA) Tower, on the Pittsburgh Line at the summit of the Alleghenies, had long held my interest as a special place, as it has figured prominently in B&O lore. It was at the west end of Sand Patch tunnel, occasionally a helper base, and trains from both directions worked hard there.

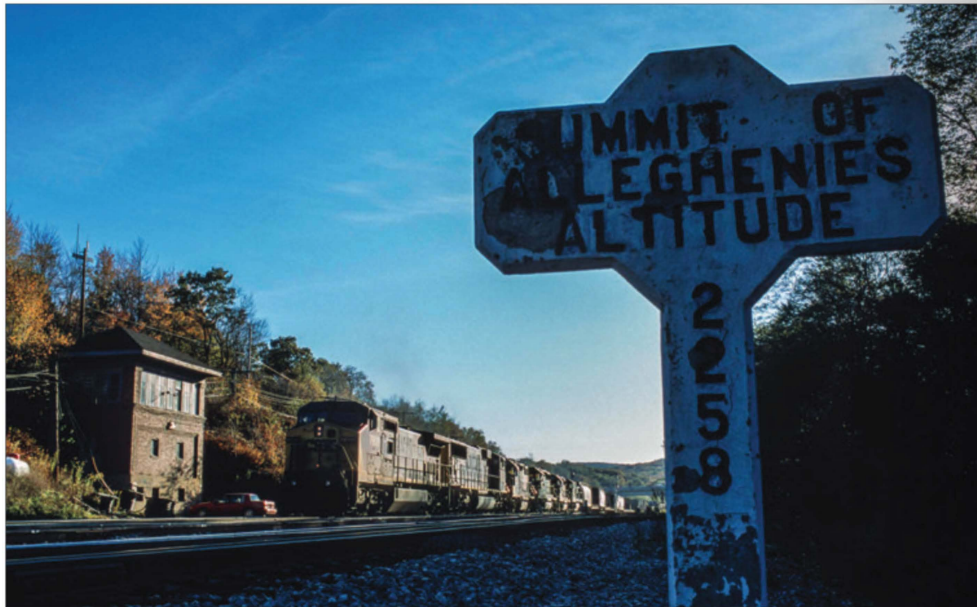
Unlike the other towers in this story, it was built of brick and tucked into a recess in the summit cut. Across the tracks is a cross-shaped cast concrete sign in the B&O style reading SUMMIT OF ALLEGHENIES — ALTITUDE 2258.

Replacing an earlier wooden structure, SA was built around 1912, following the

and blue colors, which I like better than the old B&O solid yellow. The operator there was Owen Stanley, the patriarch of a B&O family.

HO's life was extended because Hancock wasn't a choke point, so CSX didn't consider it a high priority for replacement. Also, there was consideration that MARC might extend commuter service to

Hancock, which might also require eyes on the ground, but that never came to pass. Alas, having outlasted most of its brethren, HO closed in September 2007. Although there was some interest in preserving the historic tower, there was considerable termite damage making it unsalvageable, so it was demolished in fall 2008.



ABOVE: On October 9, 2001, an eastbound crests the Alleghenies at SA Tower in Sand Patch in a scene peculiar to B&O, which placed these concrete markers at mountain summits, state lines, and elsewhere. Today, the tower resides in a landfill and only the marker remains.

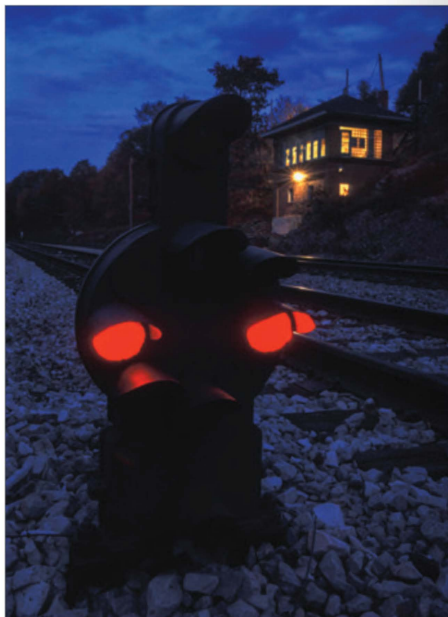
RIGHT: At dusk on October 10, 2001, a color position light dwarf and SA Tower are both living on borrowed time at Sand Patch. Less than a month later, on November 7, the tower would close.

completion of the Sand Patch tunnel. In contrast to Miller and Hancock, it had an 80-lever GRS pistol-grip electric plant, which controlled crossovers and a helper pocket at the summit. In 1953, it took over the functions of the former Manila (GR) Tower, which was on the east side of the tunnel, where three tracks narrowed to two.

Due to its tight fit in the mountain-side, SA had a cast-iron spiral stairway, a space-saving feature. Another unusual feature was clear-glass blocks on its east and west sides. The operator there, Ed Karfelt, was most accommodating, providing me with lineups so I could plan my shots. It did occur to me that I might have been one of the few, if any, visitors during his shift, and may have been a welcome respite from boredom. SA closed on November 7, 2001, and was subsequently demolished.

Recording the End of an Era

What had begun as an effort to make some pictures of vanishing towers

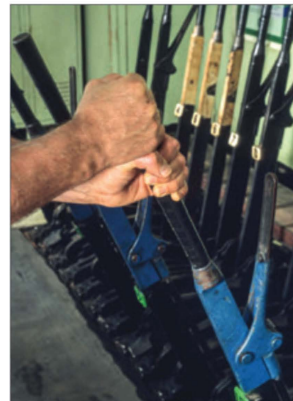


RIGHT: Paul Swain inspects a westbound at Miller Tower on July 23, 2000. Any defects he may find will be noted on his pad and reported to the dispatcher and train crew. Operators were an extra set of eyes, adding to the safe passage of a train.

BELOW: In the company of pistol-grip levers, fuses, and track torpedoes — the paraphernalia of old-time railroading — Jim Vargo works W Tower through the evening hours of October 24, 2000.

BELOW RIGHT: It takes more than brute force to operate a mechanical plant, as an operator comes to understand the "personality" of each lever, and how it can be coaxed, little by little, into position. Jim Vargo puts this technique into practice at Miller Tower on July 13, 2000.

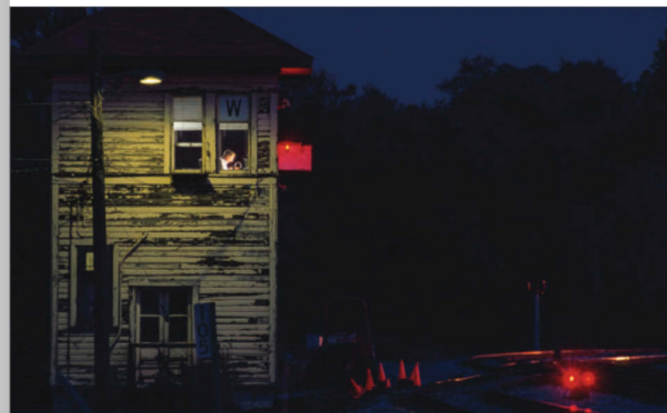
BOTTOM: Paul Swain holds down the night shift at West Cumbo on September 16, 2000, as the rails glow with the headlights of a westbound. For me, in the end, it comes down to this — a lone operator in a lonely outpost in the dark of night.



gradually grew into a major labor-of-love project, as each visit presented new picture possibilities. I was also encouraged by the friendly reception from the operators, who gladly accommodated me; the human element could not have been captured without their cooperation. To have four towers within 23 miles was like a smorgasbord, as I could move from one to another to take advantage of the best lighting for a particular season and time of day.

I was, as is often the case, just a few steps ahead of the executioner, but now have a document of a bygone era. These towers represented the technology of their day, which would in turn be replaced by another technology — electronics, which railroads (some sooner than others) would ultimately embrace. That these anachronisms escaped extinction as long as they did is remarkable in an era of rapid modernization.

Today, these locations are but icons on a dispatcher's touch screen in Jacksonville, Fla. Where a person once coaxed a lever into place, a light finger's touch now throws a switch nearly a thousand miles distant. Efficient, yes. Romantic, not so much. My vision will always be of a lone operator, in a lonely outpost in the dark of night. ■





METRA

CHICAGO'S TOWERS

MARSHALL W. BEECHER

PHOTOS BY THE AUTHOR EXCEPT AS NOTED

THE WINDY CITY. The City of Big Shoulders. Player of railroads and the nation's freight handler, as Carl Sandburg described Chicago. Within its boundaries, the Chicagoland rail scene is a bustling web of intersecting lines that host both freight and passenger traffic by the several hundreds on a daily basis.

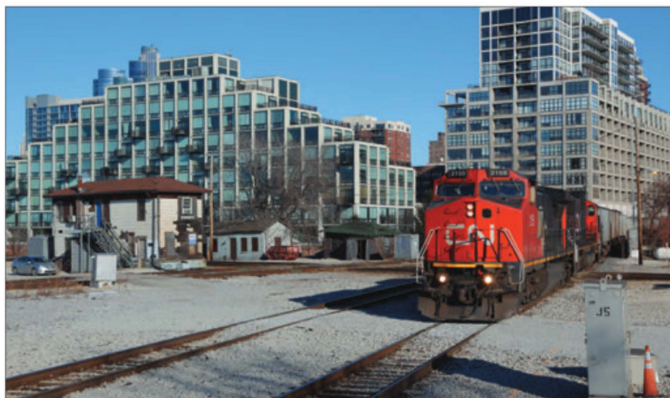
On a late night in March 2016, third shift operator Tim Valliquet keeps track of passing moves at Blue Island Tower, a key junction point between the Joliet and Beverly subdivisions on Metro's Rock Island District. Now retired, Tim's extensive railroad career began with working as a tower operator on the east end of the former Elgin, Joliet & Eastern Railroad.



Among this vast network of intersecting lines around Chicago are the various routes of one of the largest commuter carriers — Metra, an arm of the Regional Transportation Authority. Comprised of fallen flag operations from storied roads like Burlington, Rock Island; Chicago & North Western; Gulf, Mobile & Ohio; The Milwaukee Road; Illinois Central; and Wabash; Metra is responsible for running a reliable and on-time network of lines that span six counties around the Chicagoland area.

While many miles of these steel rails are operated and dispatched behind modern computer screens located in distant places like Omaha, Fort Worth, and Minneapolis, a few busy territories are still right here in Chicago. Some are even operated from an actual manned tower, having avoided the cut-over to a central dispatching center (unlike many others have over the years). These towers still operate in a 24/7/365 capacity, and remain vital links to Metra's System Operations Management.

Three towers are still continuously staffed by Metra on two different districts. Metra's Rock Island District wins the count, with two of the three area



towers under its care. The third is under the direction of Metra's Chicago Union Station District, which directs passenger moves primarily on former Milwaukee Road routes. Each is unique in its own way, and all still serve as a vital link in Metra's suburban operations today.

16th Street Tower

Built in 1901, Metra's 16th Street Tower stands at mile 1.1 on the Rock Island District, directly south of downtown Chicago and LaSalle Street Station. Here, the former Rock Island's Joliet Subdivision has diamond crossings with the

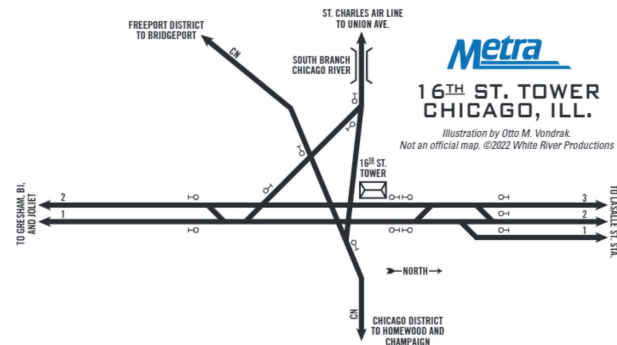
Rock Island District Train 509 departs Chicago LaSalle Street Station on September 25, 2017, passing the aging 16th Street Tower. At the time, Electro-Motive F40PH-3 100 was wrapped in tribute to the old baby blue, brown, and salmon colors originally used by the Regional Transportation Authority.

Westbound Train G88991-17 trades Canadian National's (former Illinois Central) Chicago Subdivision for the Freeport Sub at 16th Street Tower. Now over a century old, the tower's unassuming appearance has it "hiding in plain sight" among the high-rise residential lofts and buildings surrounding the near South Loop interlocking.

Just shy of the midnight hour, 16th Street Relief Operator Madelyn Gonzalez jots down the passage of the last inbound Rock Island District train of the operating day. Various pieces of technology work side by side here, from early pistol-grip levers to more contemporary push-button hardware, as seen in the upper right of this November 2013 photo.

St. Charles Air Line and Canadian National's Chicago/Freeport subdivisions, which change name designations here.

Once manned by New York Central in its heyday, which had two of its own mains running from LaSalle Street Station to Englewood, the tower was



relinquished to Rock Island control when Penn Central moved the last of its former NYC passenger trains to Chicago Union Station in October 1968.

The ramshackle wooden tower stands in stark contrast to the surrounding high rises and residences that have come about in gentrification of the near south side of the Loop. Inside, the 1901-vintage Taylor lever machine still lines some routes for the interlocking, where an average of 120 Metra moves and 10 Canadian National plus a number of Amtrak trains rattle the tower's foundation in a 24-hour period.

Aside from Canadian National and Amtrak cross-traffic, 16th Street is responsible for the funneling of three main tracks from the Rock District's LaSalle Street Station down to two mains on its Joliet Subdivision. Because the 47th Street Coach Yard is another couple miles to the south, all revenue and coach yard moves must pass the aging structure, with the operator working under the direction of Metra's Rock Island

Terminal Dispatcher located at Metra's Consolidated Control Facility.

Blue Island Tower

A relatively "new" structure when compared to the two others, the Rock's Blue Island Tower is situated near the convergence of Metra's Beverly and Joliet subdivisions at mile 15.9. Operating continuously since it was built new in 1968 to replace an original 1929 structure, Blue Island Tower sorts Metra's Rock Island District traffic that splits toward two operating subdivisions to the city of Chicago.

Blue Island Tower is situated near the convergence between the main line that provides expedited service to the stops west of Blue Island, and the high-ridership "Suburban Line" which serves many riders from Chicago's residential Beverly neighborhood with closely-spaced station stops along the way.

Adding to the activity, Metra has a medium-sized layover yard immediately east of the tower where local suburban

trains that serve the Beverly Subdivision are staged and serviced during the overnight hours. Additionally, freight traffic from Iowa Interstate and Chicago Rail Link comes and goes from the old Rock Island Burr Oak Yard that sits adjacent to Metra's coach yards.

A peek inside this facility, which sits between Vermont Street and Metra's Blue Island Vermont Street Station finds a 1960s-vintage route-style machine which was installed as part of a major project widening of the Cal Sag Channel. The tower controls train movements through four plants within a mile of the facility, and replaced a tower that housed the world's first all-relay interlocking plant dating back to 1929.

With technology and signal enhancements come change. In the near future, the individual interlocking plants controlled by "BI" will one by one be moved onto the control screens of the Rock Island Road Dispatcher's territory, which is anticipated to be completed within the next year.

One distinctive aspect of Blue Island's job, in addition to lining trains at the control points at CP Vermont, Western Avenue Junction, Interchange, and Robbins, is the operator's role in raising the crossing gates behind passing moves for street traffic at the neighboring gates on busy Vermont and Grove Streets. If one thing hinders the complete cutover of Blue Island Tower, it is this role of the operator's duties, but Metra is confident it will find a solution.



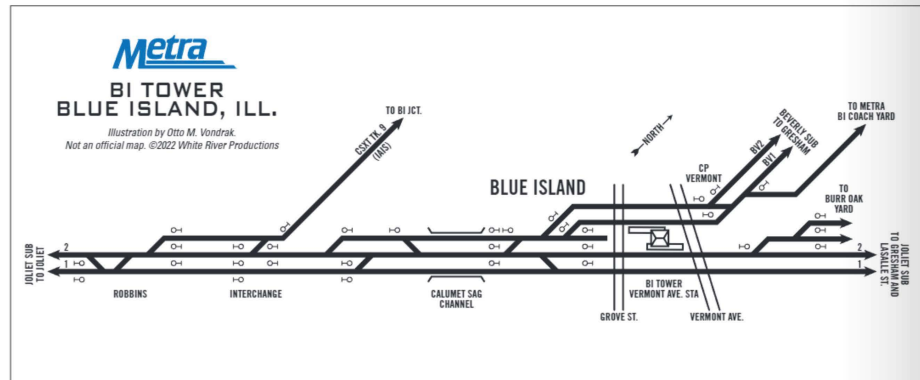
RIGHT: A relatively new structure by comparison, Metra Rock Island District's Blue Island Tower sits at the confluence of two suburban service territories and a secondary coach yard which helps feed commuters from the popular Beverly neighborhoods into the Chicago Loop.



ABOVE: Tim Valiquet gets his trainsheet completed on Third Trick (overnight). Other paperwork on the desk includes mark-up sheets for the normally nocturnal CSX moves that utilize Metra's Rock Island District between Blue Island's interchange to its home rails west of Joliet, Ill., some 25 miles distant.



LEFT: MP36PH-3S 406 departs Blue Island with an afternoon train on May 14, 2014. The terminal of the Metra Electric District Blue Island Branch can be seen in the background. OTTO M. VONDRAK PHOTO



Tower A-2

Last, but certainly not least in terms of importance and function to Metra's suburban train operations, is the Chicago Union Station District's Tower A-2, located almost three rail miles west of Chicago Union Station. This tower, which sports a 1938-built Union Switch & Signal Model 14 lever machine, sits at the crux of several Metra lines that serve the west, northwest, and north suburbs, and

is the centerpiece of Metra's North Joint trackage between Canal Street just north of Chicago Union Station and Tower A-3 at the leads to Metra's Western Avenue Coach Yard.

More complex than the diamond and crossover plants on Rock Island, A-2's crossing of former Milwaukee Road and Chicago & North Western lines is extremely maintenance-intensive and uncommon on many accounts. The eight

diamonds are movable point frogs that line the diamond crossings for one route at a time and eliminate stress on rigid frogs from the endless parade of trains using the plant.

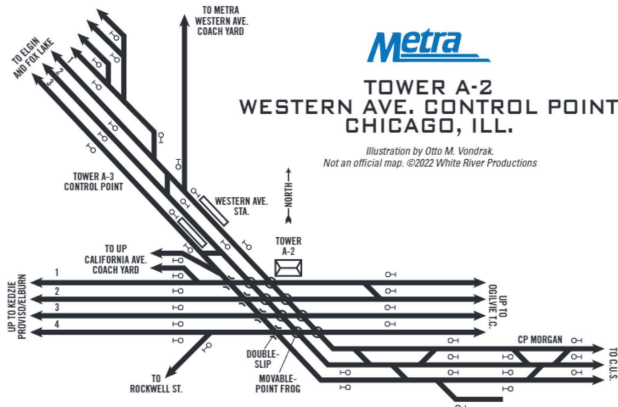
Adding to the complexity are four movable-point double-slip switches, which assist in any move between the CUS and Union Pacific districts. Further complicating matters, all turnouts on the A-2 (and A-3 plant) are moved pneumatically, a practice preferred by Pennsylvania Railroad with the plant's "modernization" in the early 1930s. With this arrangement, all points and frogs within the plant must be maintained to the highest of standards, as a failure of any point or frog will result in trains waiting for a maintainer to address any problems. Because of this, all of the foremen-



TOP: On Metra's Chicago Union Station District, Tower A-2 Train Director Erik Johnson keeps the moves orchestrated as Leverman Alfred Kozmel lines up routes through the busy crossing between former Milwaukee Road and Chicago & North Western territories. Differing train movement hardware varies from CPU controls for CP Morgan Street to older "control box" controls for Tower A-3 (seen on the desk) to the 1930s-vintage Model 14 US&S lever machine in the far background.

ABOVE: On May 30, 2009, westbound Milwaukee West Line Train 2719 heads past Tower A-2 with weekend service to Elgin, Ill., under the care of aging EMD F40C 614.

tioned switches lack any function of dual or local control to get indications, should they fail to line and lock in their intended position, which in essence can bring a busy rush hour to a grinding halt in a matter of minutes.



Wintertime brings additional challenges, with freezing cold Midwestern temperatures and the associated issues they can present to a plant with so many movable parts. To help combat the cold, gas-fueled lines are individually lit to keep each movable point warm and free of ice. The wintertime practice is a thing of beauty, contrasting the cold, snowy rail scape with fire throughout the plant.

Tower A-2 (colloquially known as "Western Avenue" on the Union Pacific

side) was originally staffed by Milwaukee Road (and later Soo Line) operators until Northeast Illinois Regional Commuter Railroad Corporation (the operating arm of Metra) took over staffing in May 1993. Back in the facility's infancy, Tower A-2 was jointly owned by The Milwaukee Road and Pennsylvania Railroad, whose Panhandle line reached its final terminus of Union Station from the north — rather than the south — side of the depot as other Pennsylvania passenger traffic

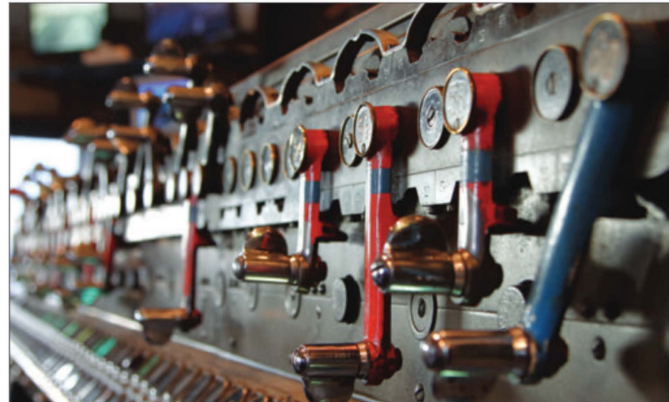
once did. Fast forward to the present and the Penny is as faded a memory at A-2 as the aging position light signals that were removed and upgraded in 2017, leaving UP as the only railroad providing any semblance of freight traffic there with a short local running most weekdays.

In pre-COVID traffic levels, at least 358 daily (compared to 2022's 194 daily) revenue and equipment moves plied the

points at A-2 from a variety of Metra operating territories. Union Pacific's California Avenue Coach Yard is the daytime servicing point for its equipment serving all three former C&NW lines, and equipment moves to and from UP's downtown terminal at Ogilvie. Adding to the count are the revenue moves for Union Pacific's West Line to Elburn, Ill.

To aid in the efficient movement of this traffic, UP has four tracks that feed the

corridor between Kedzie and its Ogilvie Passenger Terminal (former C&NW Station) downtown. The "Milwaukee" side is no slouch either, with its three-track main line that comprises this section of its North Joint Trackage between Tower A-3 (which closed in 1961) at the east end of the Western Avenue coach yard and the north end of CUS at Canal Street. Passenger traffic includes three sets of equipment from Metra's Heritage Corridor every morning and evening, with the bulk of moves of equipment and revenue traffic from the Milwaukee West Line to Elgin, North Central Service to Antioch, and Milwaukee North Line to Fox Lake. Throw in Amtrak's Hiawatha Service trains and the appearance of long-distance *Empire Builder* trains, and there



LEFT: Afternoon light reflects off Tower A-2's 1932-built Union Switch & Signal lever machine. Blue stripes on the red-handled signal levers refer to the blue foreground signal timer lever, which is used when a signal needs to be taken away from an impending move in the control point.

BELOW: Metra C&NW heritage unit F59PHI 90 leads an M7901-07 passenger extra into UP's California Avenue Coach Yard, situated just west of Tower A-2. The purpose of some of the plant's double-slip switches is shown in this westbound move from UP Track 2 into the Fence Track for the yard.





are more than enough passenger wheels picking their way through the A-2 points on a daily basis.

A-2's complicated traffic patterns require two tower operators working together in the facility on day and afternoon shifts each weekday. At the desk sits the train director, who is responsible for movements, radio calls, and train orchestration, while the leverman, who essentially acts as the train director's hands, lines switches and signals on what is now a 42-lever machine, as routes and directions of moves are called out. During weekday rush periods, it's a constant symphony of clacking tracks and dinging annunciator bells, as

Metra's CUSD Operators make moves responsible for getting thousands of commuters into or out of Chicago in a safe, efficient manner, day in and day out, in any type of weather.

What Does the Future Hold?

At the time of this writing, the future of each of the three towers is constantly bordering on the point of extinction, although some factors prohibit their obsolescence altogether. Rock Island's 16th Street and Blue Island Towers, originally slated for closure in the 1990s, have thumbed their noses at modernization and miraculously continue their intended day-to-day functions. The tower at 16th Street is currently in the middle of a South Loop renaissance that has the surrounding areas constantly under construction for new development. Canadian National's decision to single-track its Freeport to Chicago Sub occurred a few years ago, further slimming down and simplifying the trackwork in the plant. A long-term St. Charles Air Line project has kept train traffic off those diamonds for several years, and the line has been reduced to single track across the Rock Island District. Rumors abound that

the lift bridge carrying the Air Line over the South Branch of the Chicago River is currently forced to stay raised and needs extensive work to make the early 1900s-vintage span again usable for rail traffic. If one were to hedge bets, both towers on the Rock Island District could be retired within a year's time.

Closing Tower A-2 is another major engineering feat altogether. The costs associated with a flyover, which has been suggested to the east of A-2 near Noble Street, are so extensive that any sort of progress in eliminating the level crossing at A-2 is still nothing short of an ultimate dream to transportation planners and Metra officials. Recent development on the near northwest side of the Kinzie Industrial Corridor has brought new life to neighboring areas just west of Ogilvie and Union Station, and enhanced joint station facilities between UP's West Line and Metra's Chicago Union Station District in that area may be the catalyst for the eventual closure of Tower A-2.

Until such time, two Metra operating districts will continue with the tradition of staffing three unique locations tasked with the sole purpose of moving fleets of silver bilevel coaches through some busy, congested chokepoints in Metra's vital commuter system. ■

The author extends special thanks to Dan Marinellie, Jon Roma, Tim Pitzen, and Rich Oppenheim for their help in preparing this article.



ABOVE LEFT: 16th Street Operator Dennis Fratamico makes an "OS" on his trainsheet. An OS ("On Sheet") is the recorded time a train makes a move past his location. All passing times will be provided to Metra's Rock Island terminal dispatcher for its timekeeping records during the course of every shift.

BELOW: On June 21, 2016, Amtrak Train 332, Hiawatha Service from Milwaukee, covers the last couple of miles to Chicago Union Station, passing over Union Pacific's Geneva Subdivision on movable-point diamond crossings. Red safety-striped cab cars on commuter sets inside UP's California Avenue Yard are staged in the background during the usual midday layovers in the city.



TOP: 16th Street Tower's unique Taylor pistol-grip machine is seen in the foreground with Operator Madelyn Gonzalez recording train movements through the plant at her desk.

ABOVE: The gas-fired switch heaters are doing their job as westbound Metra Chicago Union Station District West Line Train 2225 passes the bay window of Tower A-2 during a winter snow event on February 15, 2021.

RIGHT: To prevent the buildup of snow and ice on vulnerable switch points, gas lines provide the fuel for flame heaters designed to keep trains moving during the rough months of Midwestern winters, such as the evening of January 31, 2021.





SOUTHERN PACIFIC SOUTH BAY SENTINEL

TED BENSON/PHOTOS BY THE AUTHOR

OPPOSITE: Eighteen minutes off the advertised, the westbound Western Pacific *California Zephyr* passes Niles Tower on Saturday, March 22, 1969, gliding toward a 2:38PM station stop in Fremont. One year later to the day, a significantly delayed Train 17 called at Fremont for the final time. While lead unit 805D lost the red feather nose paint applied to WP passenger cabs in a previous shopping, the FP7 compensated for its decorative deficit with a Nathan S5D air chime — hands-down the most melodic horn on the railroad.

TOP: It's 6:35PM on Tuesday, October 29, 1985, and all seems right with the world as Southern Pacific's Hayward Turn picks up orders at Niles Tower. SP 3841 basks in the glow of five synchronized flashbulbs, fresh paint belying a harsh reality lurking in the autumnal darkness. Two nights from now, Niles will issue its final train order; Direct Train Control in non-CTC territory around San Francisco Bay will take effect at midnight on November 1. Two-and-a-half months later, dispatcher control of the Niles interlocking plant will close the tower for good.

FOR HOPELESS ROMANTICS unable to accept the demise of Southern Pacific's "Golden Empire" in the early 1980s, Niles Tower was a dream come true. Erected in 1908 by Western Pacific, interlocking tower Number 8 protected the intersection of WP's First Subdivision between Oakland and Stockton, Calif., with SP's Niles Subdivision, 17 miles north of San Jose. Entering full operation with the beginning of WP revenue freight service on December 1, 1909, Niles Tower stood watch across Alameda Creek from its namesake community for three-quarters of a century, outlasting its parent organization by three years.

The tower's strategic location ensured a long life for the facility. Beginning in 1910, Niles Tower played a key role for SP operations in the south San Francisco Bay area. Paired with a tower in nearby Newark, the Niles plant channeled traffic between two Oakland-San Jose main lines, funneling freight over Dumbarton's bridge route connecting San Francisco, Oakland, and the San Joaquin Valley. Though owned and operated by Western Pacific, WP towermen largely ignored the home road. SP paid 80 percent of the costs and at times seemed to run 99 percent of the trains. By 1931, SP employee timetables listed Niles Tower as a 24-hour train order and register station. Fifty years later, it was hard to imagine the facility as anything but SP property.



BELOW: Nick Laba posts train orders for the conductor of SP's East Pleasanton Turn at Niles Tower on July 18, 1982.

BOTTOM: Engineer Bob Walcott snags his orders off the stand at Niles Tower as Southern Pacific's East Pleasanton Turn departs for Niles Canyon and aggregate plants in the Livermore Valley on Monday, May 21, 1984. The East Pleasanton rock job was the last regular train to run over the original transcontinental main line between Sacramento and Oakland. SP began operating over the former WP east of Niles Tower in fall 1984; Niles Canyon Railway excursion trains use the historic SP line today.



Across seven decades of service for Niles Tower, the only constant was change. While WP was effectively dieselized by 1953, Southern Pacific steam continued to thunder over the diamond through 1956. Tower logbooks from the late 1950s reveal the passage of an intriguing array of locomotives, ranging from aging Harriman 2-8-0s to war baby Cab-forwards and demoted *Daylight* 4-8-4s. SP 4449's excursion visits in 1975 and 1984 merely added to the legend of a celebrated GS-4 whose first logbook entries appeared in 1955.



TOP: Nick Laba reads back an order to SP's Roseville-Coast dispatcher directing Extra "E-X-T-R-A 7555 figure Seven triple Five West W-E-S-T" to operate from Niles Tower to West Oakland via Mulford on October 21, 1975.

ABOVE: Repeating a task performed thousands of times over the course of his career, Niles Tower operator Laba slips running orders for SP's West Colton-Oakland Manifest into the double slip-knotted string of a train order fork on October 21, 1985.

RIGHT: Skilled fingers fly over the keyboard of an Underwood all-caps billing typewriter as Nick Laba copies a running order for SP Extra 7555 West at Niles Tower on Monday, October 21, 1985.

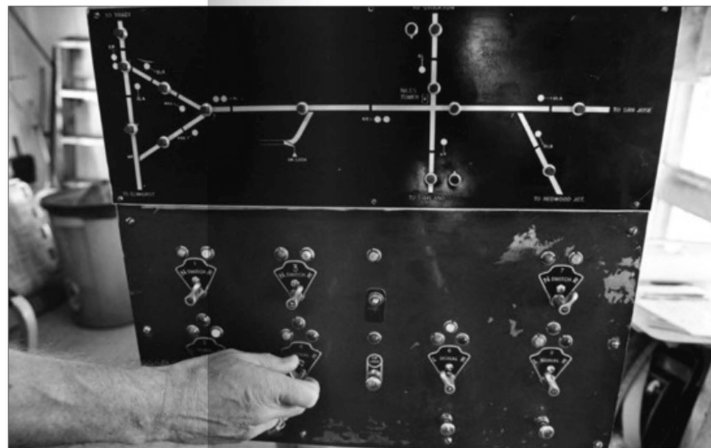




ABOVE: Wrapped in the comforting arms of evening, Niles Tower glows bright against the all-encompassing darkness, the world of 1984 fading into memories of twenty thousand yesterdays. For a split second the clock stops, and a greater truth sinks in — this is a time and place too pure to be preserved as anything beyond imagery. Years from now, long after the building and its servants have turned to dust, the witness will look back, and realize what a blessing Niles Tower truly was.

OPPOSITE TOP: “Niles Tower, copy three west.” Nick Laba prepares to fulfill a request from Southern Pacific’s Roseville-Coast dispatcher on October 21, 1985.

RIGHT: Niles Tower’s interlocking plant was a picture of simplicity, catering to the needs of Southern Pacific trains. The homemade CTC machine replaced an “armstrong” mechanical frame in the late 1940s, governing routes to SP’s Centerville and Tracy lines. As such, the facility was ripe for replacement by UP dispatcher control when new connections to SP were installed in 1984.



The diesel era at Niles was equally exciting. Southern Pacific provided a seemingly infinite array of makes and models compared to WP’s limited roster of four-axle units dominated by EMD. While SP’s diesel-hydraulics won the award for “most exotic,” WP had the honor of sending the first diesel power past the tower — Burlington’s barnstorming *Pioneer Zephyr* in summer 1934.

Two generations of diesels found an ever-changing set of waybills coupled to their drawbars. As three million new residents moved to the region in the 35 years following World War II, the economic focus shifted from agricultural products and manufactured goods to intermodal transport and automobile manufacturing. Increasing fuel costs, cheap imported vehicles, and the rise of Silicon Valley cast a pall over local car loadings by 1980 — computer chips didn’t ship in auto parts boxcars. Mergers, route consolidations, and changing technology sealed the tower’s fate.



Niles Tower issued its last train order at 9:01PM on October 31, 1985. Control of the interlocking plant was handed to Union Pacific dispatchers two months later. When operator Nick Laba went off-duty at 7:15AM on January 16, 1986, the door to history locked behind him.

Two arson fires that summer ended any hope for preservation. Laba took his pension without working another day in the operating department, passing away in 2020 at age 88. Three-dozen years later, photographs and memories of Niles Tower are all that remain. ■

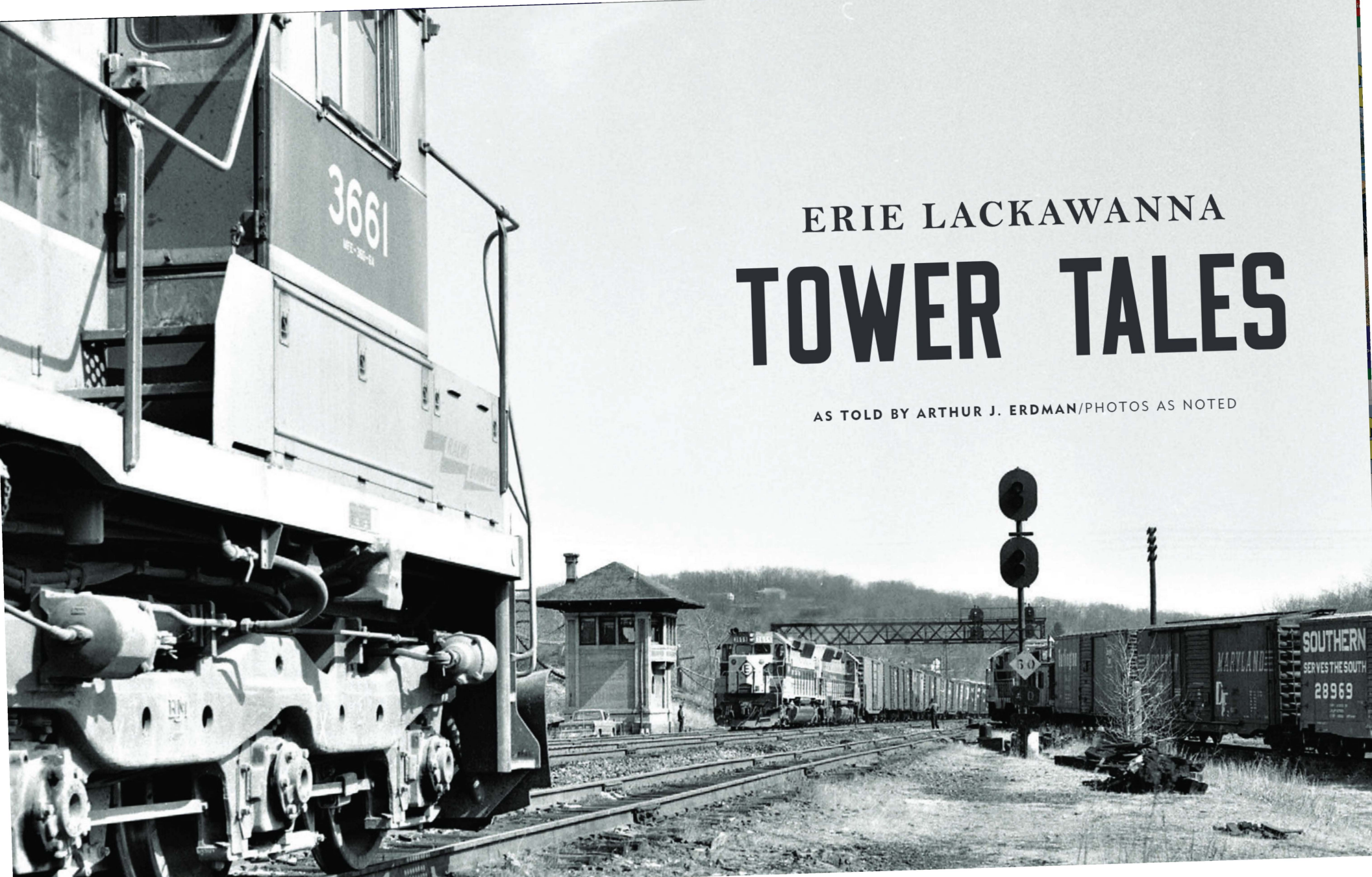


OPPOSITE TOP: Mid-afternoon at Niles Tower finds operator Nick Laba keeping an eye on Union Pacific's Hayward Local rolling into Fremont on May 21, 1984. Given the surroundings, it is hard to decide which antique was the most rare — the slant-nosed E-unit on the Missouri Pacific perpetual calendar, the caboose on the UP freight, or the tower itself. All are living on borrowed time.

LEFT: Southern Pacific 4-8-4 4449 takes 30 years off the calendar as the legendary Lima leads a 13-car New Orleans *Worlds Fair Daylight* excursion past Niles Tower at 1:01PM on May 8, 1984. This is the third time the resurrected GS-4 has traversed the interlocking plant at Niles following two visits on the *American Freedom Train* in 1975.

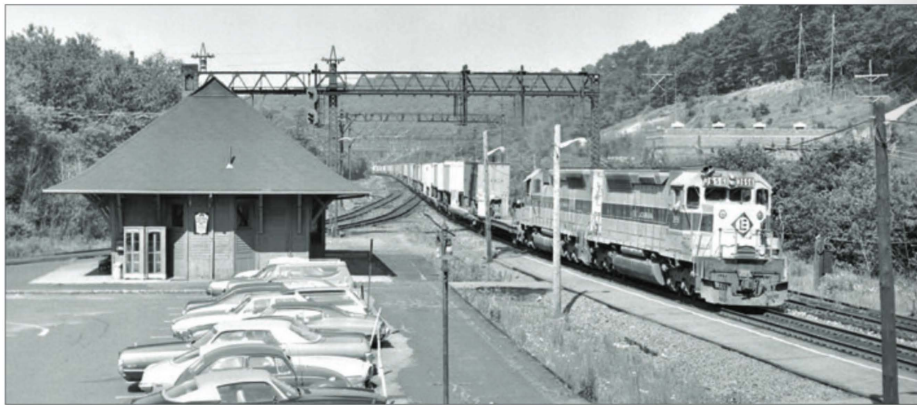
ABOVE: Moonset at Niles Tower. October 21, 1985.





ERIE LACKAWANNA
TOWER TALES

AS TOLD BY ARTHUR J. ERDMAN/PHOTOS AS NOTED



PREVIOUS PAGES: Two trains meet at busy UN Tower at Port Morris, N.J., in October 1974. At far right is the Dover Drill (also known as "The Sussex Local"), while the westbound freight is Train HB3 (Hoboken, N.J.—Bison Yard, Buffalo, N.Y.). JIM MARDIGLIANO PHOTO

ABOVE: As seen from the window of Denville Junction tower, an Erie Lackawanna piggyback train passes the station at Denville, N.J., in 1974. The station was demolished in 1992 after a fire. JIM MARDIGLIANO PHOTO

RIGHT: There's a lull in activity at Denville Junction on October 26, 1969. Denville was where the former DL&W Morristown Line crossed the Boonton Line. TOM NEMETH PHOTO



AFTER THE ERIE LACKAWANNA merger in April 1960 that combined Delaware, Lackawanna & Western with Erie Railroad, the eastern anchor of the combined new system was the busy New York Division, which encompassed the main line from Port Jervis, N.Y., into the waterfront intermodal passenger terminal at Hoboken, N.J., plus the associated freight yards around Newark and west toward Scranton, Pa. Not only did dispatchers and tower operators have to contend with a busy rush hour commuter schedule (and remaining long-distance trains to Chicago), but also a variety of hot priority and local peddler freight trains as well. Throughout my career, I had the catbird seat for all of the action.

DON'T STAB PHOEBE

I almost nailed Train 1, the *Phoebe Snow*, good at Denville (N.J.) Tower one morning in June 1966. I was covering the first trick at Denville Tower. It was around 10:40AM and things began to converge on this junction with the Morris & Essex Line and the Boonton Branch. It had always amazed me that when there

is more than one train on the railroad, they seem to meet where one has to wait for the other.

Train HS9 (Jersey City–Scranton) was approaching Rainbow Lakes on the Boonton Branch with a big set-off for Denville, and I had 25 cars for them to pick up off Track 3. Dover Tower reported Train SC2 (Scranton–Croton, N.J.) following Train 620 on Track 2 with a set-off in the East Side (General Box) at Denville. The *Phoebe Snow* was due at Denville at 10:55AM and I had to keep a "hole" open for the pride of Erie Lackawanna. HS9 had two GP35s and two U25Bs for power. I instructed HS9 to put his set-off in the Hole Track and leave enough room for an engine and three coaches on the west end for Train X-64 (Dover–Hoboken equipment train) to turn on the way later in the afternoon.

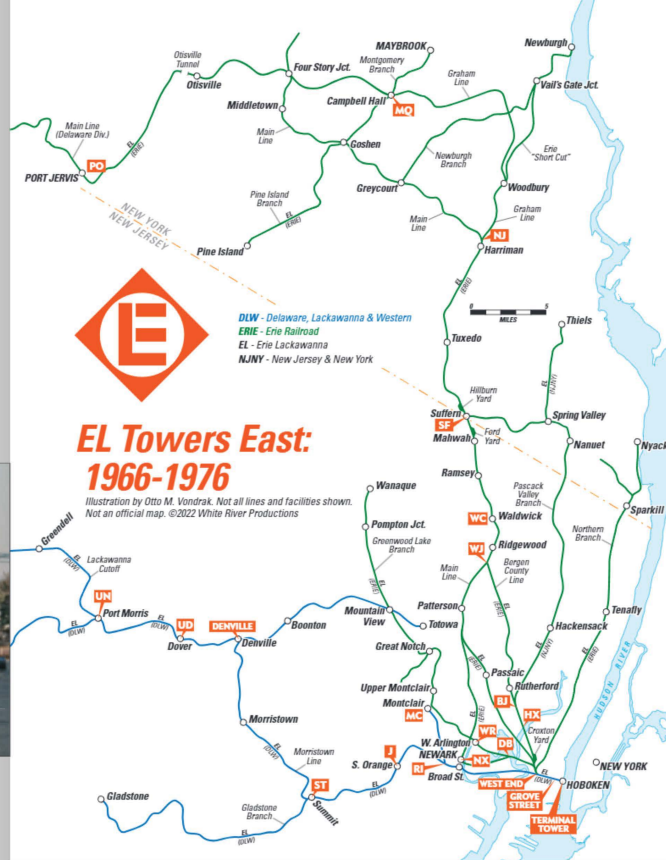
Train HS9 cut off the set-out and I let him pull up west to the signals at Estling Lake. There were 30 cars in the set-out, and after I lined HS9 to the Hole Track, I was unable to raise the crew on the radio to back up. Morristown Line Train 620 went east at 10:01AM. After I raised the crossing gates I tried HS9 on the radio

again. No answer. I was getting frantic. Train 1 was due any minute and I had no track to put him on.

Suddenly, Signal L40 tripped and HS9 was shoving back. Train 1 lit up the approach circuit on the model board. *Phoebe's* engineer called me on the radio and said he had an "approach" on the distant signal to Denville. Now I was really in a panic.

HS9 slowly shoved east toward the Hole Track as I dropped the crossing gates for Train 1. I positioned myself at the switch levers. The second the switch indicator lights lit, and I threw the switches over. Train 1 was slowly coming around the curve as I operated the last switch and displayed the signal for the train. As the signal cleared, the three EMD E8s on Train 1 revved up and accelerated past Denville Tower.

I was warned about not depending on the radio by the older towermen I broke in with, and this proved it.



EL Towers East: 1966-1976

Illustration by Otto M. Vondrak. Not all lines and facilities shown. Not an official map. ©2022 White River Productions



WIRES DOWN

I dreaded covering the third trick at HX Tower in East Rutherford, N.J., on bitterly cold nights. Walking across that bridge into the north wind really took the stuffing out of me. Plus, the nails that held down the wood planks of the walkway would work their way out and wait for an unsuspecting employee to trip on them. I tripped over a nail one night and my lunch went tumbling into the Hackensack River as I fell down. On really bad nights, at least I could stop at the bridge operator's cabin and warm up for a minute. One night, we had a really rough time with the wind and cold.

It was February 1967. I was ordered in to cover the third trick at HX Tower on a Wednesday and Thursday night. That Wednesday, the wind was really howling out of the north. I made it to the tower without freezing to death. NY99 (Jersey City–Chicago) was over an hour late leaving Croton; a broken rail at County Road delayed doubling the train together. After NY99 cleared the bridge, I gave the bridge lock to the signal maintainer out on the bridge; on third trick, the signal maintainer operated the drawbridge. I was just about to sit down at the desk when the small code machine for Bergen Junction started to click away. I watched as, simultaneously, circuits for both track 1 and 2 lit up and a big flash and explosion lit up the sky down by County Road. I reported this to Train Dispatcher Jim Crelin, who called out the signal maintainers.

An hour later, I get a call from the signal maintainer from The Boxcar (the Yardmaster's office at County Road). The maintainer reported that a set of Public Service Electric & Gas high-tension wires came down right across the tracks. High voltage got into the relay cases and fried many of the signal relays. At this point, it was just before 1:00AM and rush hour would start in less than four hours.

I reported all of this to the train dispatcher. Jim must have sounded the alarm as signal forces from all over descended on County Road. A line crew from PSE&G showed up and got the wires off the tracks, but the damage was done. Since I was unable to display the signals at the east end of the bridge, we were looking at a serious issue for the morning rush.

LEFT: EL 909 leads a commuter train past HX Tower at Rutherford, N.J., via the HX Draw bridge, which connects Secaucus to East Rutherford over the Hackensack River, on May 13, 1966. VICTOR HAND PHOTO, COURTESY CENTER FOR RAILROAD PHOTOGRAPHY & ART



ABOVE: As seen from HX Tower, a pair of Geeps leads a westbound commuter train consisting of steam-era Stollwies coaches over HX Draw on September 14, 1974. Secaucus can be seen in the background, and in the distance, the World Trade Center in lower Manhattan.

RIGHT: Commuter trains fill the yard at Suffern, N.Y., in 1970. The freight yard at Hillburn can be seen in the distance. JIM MARDIGUIAN PHOTOS



Russ Robinson, the first trick man, arrived at HX on Train 1150 from Suffern around 7:15. I suggested that I remain at HX to help by running up and down the stairs giving the trains verbal permission past the stop signals at the east end of the bridge. The train dispatcher approved, and that's what we did. All the signals were treated as "stop and proceed" from HX to Bergen Junction and the rush hour was in shambles, but at least the trains moved.

We later found out that PSE&G had recently strung those high-voltage wires across the railroad using a new type of splice that could not hold up to the bitter cold. They let go and down came the wires.

Although I was allowed to work only nine hours due to the Hours of Service Law, I stayed two hours past my relief time and that paid off for the train movements. I was glad to hit the pillow when I got home.

HAPPY NEW YEAR

On Sunday, December 31, 1966, at 8:45PM, I was getting dressed to attend a New Year's Eve party at a friend's house when the telephone rang. It was Carl Hansen, the second trick chief train dispatcher in Hoboken. Carl, almost apologetically, asked me to cover the third trick at Denville Tower. Being a fairly new extra operator, I dared not turn down an order to work. I reluctantly said I would cover the job. It was almost 9:00 so I decided I would leave my home on

Long Island and head to Denville in my new 1967 Ford Mustang.

I arrived at Denville at 10:30, gave Jimmy Morris an early relief, and settled in for the night. At midnight, a few fireworks went off down by Estling Lake to welcome in the New Year. I decided to add to the celebration by sounding the tower emergency whistle. I went over to the interlocking machine and pressed the button for the whistle. When I pressed the button, something inside the mechanism broke and I could not stop the whistle from blowing. The din from the



TOP: Operator Jim Mardiguan hoops up orders to Fireman Bobby Devore on 2-NY100, on August 16, 1974, at WJ Tower. CURT CARLOUGH PHOTO, JIM MARDIGUIAN COLLECTION

LEFT: WJ Tower at Ridgewood, N.J., on July 17, 1970. TOM NEMETH PHOTO

ABOVE: BJ Tower at Rutherford, N.J., as seen on January 29, 1968. RICH TAYLOR PHOTO

whistle was overpowering. I frantically tried to pull up the button but it would not budge.

Suddenly, the low air pressure alarm sounded, adding to the din (maintaining constant air pressure was the only way to throw the switch machines powered by compressed air). Then all the home signals went to "stop" as the air pressure went below 45 pounds. I was panicking. *How will I explain this to my boss?* I finally took out my pocket knife and was able to pry up the button, and the whistle thankfully stopped blowing. The only sound was the air compressors dutifully pumping up the depleted air system.

Train 15, *The Owl* carrying mail and express, was due any minute. All the home signals were still at "stop." But the air pressure reached 45 pounds and the clicking relays signaled the home signals returning to "clear." Train 15 lit the approach circuit and I lowered the crossing gates at Estling Road for the train. As

Train 15 passed Denville Tower, I realized I had broken out in a sweat. The first day of 1967 was almost my last day on the railroad.

Another time, I was passing through Hoboken Terminal when I decided to stop and get a haircut. It was the morning of New Year's Eve 1971; I was on a rest day but scheduled to work New Year's Day. There was a barbershop on the second level, at the top of the stairs in the back of the waiting room. I was in the barber's chair getting my hair cut when I happened to look in the mirror and outside was Assistant Chief Dispatcher George Wright, looking in.

George came into the barbershop and said, "So there you are! I have been trying to call you. I need you to cover the second trick Morris & Essex dispatching district today." I was trapped. I said okay, and there went my plans for New Year's Eve — one of the "pleasures" of working the extra list.

LIKE RIDING A BRONCO

I got a call from George Wright, the assistant chief dispatcher, instructing me to report to Rutherford Junction (BJ) tower in Rutherford, N.J., to the post and qualify so I could cover the first trick there when John Tulino went on vacation. It was October 1967 and I had four days to complete my training.

I qualified and then reported at 5:30AM on that Monday to open the tower. BJ was only open Mondays through Fridays with two shifts. The first trick was an early report at 5:30AM, made interesting because the fast freights made a run for Croxton Yard ahead of the rush hour, just as you opened the tower and went to work. At that time, there were four tracks between HX and BJ. Passenger trains stopping at Rutherford crossed over at BJ from the Bergen County Line to Track 2, and express trains went east on Track 4. Freight also used Track 4 to HX.

BJ had two signal maintainers, John Hanley and Andy Arendas. John was the lead maintainer and a crackerjack signalman. He was an older man and very gruff, but a lot of fun to work with. During rush hours, John sat in the northwest corner of the tower by the casement window. He chewed tobacco and spit out the window in such volume that there was a stain down the side of the tower that remained for years after his retirement.

When rush hour ended, John would ask for a lineup of trains so he and Andy could take their motor car to HX to deliver company mail and check out the signal equipment. MC 69, the motor car, had a history; one night, kids broke the chain securing it to the shed and pushed it onto the tracks. NY99 came along and whacked it, sending it into the lot next to the railroad. It was repaired, but from then on it had a nasty habit of derailling occasionally.

I got John the lineup from the dispatcher to go east. John and Andy set MC 69 on Track 2 and went east to HX. I placed a block on Track 2 behind them to protect them coming back.

A couple of hours later, the block line rang and I answered it. It was John and MC 69 ready to go back to the shed. I lined them up over the crossovers and gave them the signal to proceed. I was watching them negotiate the crossovers when suddenly MC 69 derailed, bouncing along on the ties until it finally stopped. I saw John doubled over so I ran downstairs to see if he was injured.

RIGHT TOP: You'd hardly know Hoboken was an electric terminal with all the diesel-powered trains coming and going in this scene from Terminal Tower in 1976. The GE U34CH diesels and Pullman-Standard "Comet" coaches were financed by NJDOT and arrived in 1970. JIM MARDIGUIAN PHOTO

RIGHT BOTTOM: The center panel of Hoboken Terminal Tower as seen in 1977. MARTIN K. O'TOOLE PHOTO

BELOW: Terminal Tower at Hoboken, N.J., as seen on the afternoon of February 16, 1969. TOM NEMETH PHOTO

When I got there, John was doubled up laughing. Poor Andy was clinging to the handrail with a look of horror on his face. John looked at me and said, "Why did you throw the switch under me?" I said, "I did not throw the switch!" He laughed and said, "I know you didn't; just derailed. It was like riding a bronco." John and Andy got some wood blocking and soon MC69 was back on the track.

John told me that when the frame of MC69 was straightened out after NY99 hit it, the motor car must not have been set square so it would sometimes derail on a switch frog. It was just a little excitement to spice up a day at BJ.

POSTING AT HOBOKEN

By July 1967, I was really getting the hang of working the towers on the New York Division. I was intrigued with the complexity of Hoboken Terminal so I



asked my boss, Joe Conboy, the chief train dispatcher, if I could "post" (get training) at Terminal Tower. Terminal Tower had a 155-lever electro-pneumatic interlocking machine that was operated by three levermen under the direction of a train director. The train director called out the moves, which the levermen performed to move the trains.

Joe said that the training period for Terminal Tower was 90 days. Since I was qualified in most of the towers, he might have to divert me to cover other towers so he couldn't guarantee that I would have 90 uninterrupted days posting; I said that I could handle it. Joe wrote a letter of introduction to first trick Train Director Frank Reagan, and I reported to Terminal to begin my training.

I worked at Hoboken Grove Street Tower many times with Frank; he knew me and we got along well. Grove Street reported eastbound trains to Terminal



ABOVE: Newburgh Junction (NJ) Tower near Harriman, N.Y., on September 4, 1970. TOM NEMETH PHOTO

LEFT: An outbound train of electric multiple-unit cars built in 1930 trundles past Hoboken Grove Street Tower in November 1973. Grove Street sorted passenger movements between Terminal Tower and West End Tower, and also controlled access to the Hoboken freight yard. MICHAEL FINFER COLLECTION

BELOW LEFT: A local freight with EL 920 in the lead passes MQ Tower at Campbell Hall, N.Y., on November 21, 1970. Located on what was then the freight-only Graham Line, MQ controlled the crossing of the branch to Montgomery and Pine Island. Today, this is operated as Metro-North's Port Jervis Line; only the branch to Montgomery survives. TOM NEMETH PHOTO

most complex tower on the railroad. After that, I got lots of work at Terminal Tower (and made a lot of money, too).

ROLL-BY INSPECTIONS

Early in my career as an operator on the New York Division, I carefully absorbed like a sponge everything I was told. Early on, I recognized the importance of obeying the rules and procedures to ensure the safety of my fellow employees and the equipment. One important procedure I followed religiously was inspecting trains passing the tower; this was particularly important for passing freights. I also counted the freight cars passing the towers, so if I observed something amiss I could tell the crew the exact location of a defective car or other unusual observation.

One night in summer 1967, Train DN90 was passing me at MQ Tower around 2:00AM when I observed a wheel and brakes on the west truck of a boxcar glowing cherry red and making a racket, 61 cars from the engines. DN90 had to be traveling at least 50 mph and I called them on the radio and reported what I had observed. DN90 had three U25Bs and good radios, so they were able to act on my report and set off the car with stuck brakes in Clark's Siding. I remember the car was there for at least two weeks, so it was not an ordered Ford car.



and Terminal reported the westbound trains to Grove Street. There was a tradition at Terminal Tower that when a poster reported there on his first day and was offered a cup of coffee, he was "in." If he was not offered coffee, he may as well turn around and walk out the door. When I arrived at 7:00AM my first day, a cup of coffee was waiting for me.

The first two weeks, I started my training beginning on the west end of the machine. I was just ready to start the middle of the machine when I got pulled out to cover first trick at NJ Tower (Newburgh Junction, N.Y.) for a week. I then went back to Terminal for one more week when I was again pulled to cover the third trick at MQ Tower (Campbell Hall, N.Y.) for a week. It went this way for most of the summer until early September when I was ready to qualify on the entire machine. Frank said I was ready and made arrangements with Joe

Conboy to have a trainmaster report to Terminal to qualify me.

The day arrived. It was on a Friday and I reported early at 6:30AM. Around 7:30AM, Trainmaster Bob Casper came into the tower and said he was going to watch me work the rush hour. He asked me which part of the machine I was comfortable with. I told him the entire machine. He then asked Frank, "Which is the most difficult?" Frank replied, "The middle of the machine," and that is where I was told to work.

I was particularly happy he did that as I liked working the middle of the machine. The rush hour went picture-perfect that morning. After Train 6, *The Lake Cities*, arrived and the yard crew pulled its train out of Track 12 to release the engines; it was 9:00AM. Bob Casper said to Frank that he felt I was qualified, and Frank agreed.

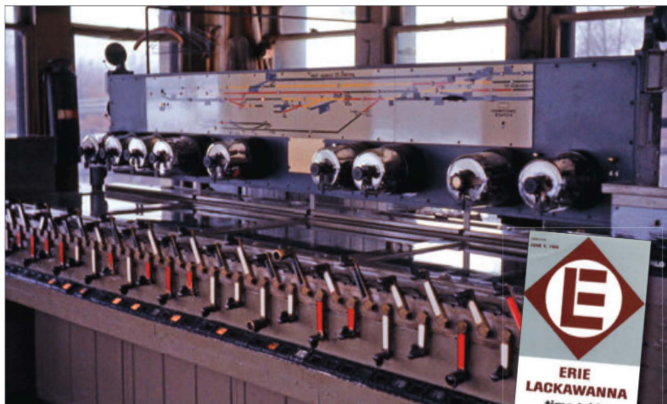
I was now qualified at the busiest and



ABOVE: The view from inside UN Tower at Port Morris, N.J., as a local freight passes by on September 11, 1974. JIM MARDIGLIAN PHOTO

RIGHT: The lever machine inside UN Tower, January 24, 1965.

BOTTOM RIGHT: Train 1, the Phoebe Snow, speeds past UN Tower on January 23, 1966. RICH TAYLOR PHOTOS



In late 1968, I was covering the first trick at HX Tower when the afternoon Westbound Ordinary was passing the tower. It was just before 3:00PM and I was counting cars when, 87 cars from the engines (two new SD45s), was a man's body on an empty flatcar. I called the train on the radio and reported it to the train dispatcher. Bob Wands was the train dispatcher and he could see the evening rush hour on the Bergen County Line going south in a hurry.

Covering the first trick at Hoboken Grove Street Tower one Saturday, just at noontime, I had an eastbound multiple-unit train passing the tower when I noticed the pantograph on the next-to-last car folded across the roof of the car. Quickly notifying Terminal Tower, they stopped the train before it entered the train shed and really did some damage. That set off a panic on the M&E Lines to find where that happened so the catenary wires could be inspected.

Many other events ended favorably due to inspecting and counting cars, but it would take too long to note them. In today's centralized operation of the railroads, with all the towers and stations closed, no one is out in the field to look over the trains. I guess that is called "progress."

MEET AT GREENDELL

I was covering the second trick leverman's job, middle machine, at Hoboken Terminal Tower near the end of October 1968. This position was off on Saturdays and Sundays. I was having dinner around 6:00PM on a Saturday when the telephone rang. It was Rudy Appeld, the chief train dispatcher in Hoboken, asking if I could cover the third trick at

Port Morris (UN) Tower that night. I had nothing going on, so I agreed.

I left my home at 9:30 and headed for UN. Getting off Route 46 and onto Interstate 80 outside Denville, I noted that fog was settling in. By the time I got off I-80 at Ledgewood, it was a real pea soup fog. Passing Lake Hopatcong, I barely made the turn for the road to UN Tower; if it were not for the two big concrete arch bridges of the Lackawanna Cutoff and the wye, I would have missed the dirt road to the tower. I pulled in behind UN and went up the stairs to relieve the second trick man.

Since it was Saturday night, Train 15, *The Owl*, did not run. Train 17 operated in its place, departing Hoboken with U.S. Mail piggyback trailers that were loaded at the Henderson Street ramp. Because of the piggyback cars, Train 17 operated via the Boonton Branch from West End to Denville. This night, Train 17 was late

out of Hoboken due to a problem with securing of one of the trailers.

Train 17 and eastbound Train 10, the *New York Mail*, normally meet at Stroudsburg, Pa. This night, since Train 17 was running late, the M&E Train Dispatcher told me to meet trains 17 and 10 at Greendell, N.J. That was fine with me, but I became concerned with the heavy fog blanketing the Cutoff. I called Stroudsburg and asked the towerman to tell Train 10 that I was putting it into the passing siding at Greendell to meet Train 17. I told Train 17, which had two GP7s that night, that it would hold the main track at Greendell and meet Train 10. I further advised the crew to be careful in this dense fog.

It was about 1:45AM and the two opposing trains were closing in on Greendell. I was watching the CTC machine that controlled Greendell like a hawk. As soon as Train 10 cleared West Greendell, I

immediately threw the switch and lined up Train 17. Train 17 took longer than usual to pass West Greendell, but with the fog you could not blame them. I lined Train 10 out the east end of the siding and cleared the signals all the way to UN. After the trains made the meet, I breathed a sigh of relief, and I am sure the crews on 10 and 17 did the same.

THERE'S A FORD IN YOUR FUTURE

When the Ford Motor Company assembly plant opened at Mahwah, N.J., in 1955, Erie Railroad had a lucrative business handling automobile and truck parts from the Midwest. New cars and trucks were also shipped out on Erie. Some of the 177 acres purchased by Ford to build the plant were sold to them by

the second trick operator at SF Tower in Suffern, N.Y., who owned a tract of land needed to build the complex.

Ford Yard in Mahwah was a large freight yard built to serve the assembly plant. A five-track staging yard was built in Hillburn, N.Y., half a mile from Ford Yard, to handle additional cars. The layout of the Ford plant was built to accommodate rail delivery primarily from trains arriving from the west. This arrangement went very well until 1974.

Erie Lackawanna inherited the Ford business after 1960. All was going fine until Hurricane Agnes struck in June 1972, and the resulting floods dealt a mortal blow to EL (although it took until 1976 to close the coffin). Between 1972 and 1974, EL filed for bankruptcy and embarked on a program to single-track the Delaware Division between Port Jervis and Binghamton, N.Y., and between

Port Jervis and MQ (Campbell Hall, N.Y.), to reduce operating costs. Most freights, including the Ford Mahwah traffic, would be run via Scranton, Pa., to Croxton Yard in Secaucus, N.J., and then timetable west to Mahwah. While the single-track program was progressing, Train DN90, the dedicated Ford train out of Bison Yard in Buffalo, N.Y., still operated via Port Jervis. When the required track and bridge work was completed, DN90 was rerouted via Scranton. Ford was not happy with this routing.

Train DN90 was operating on the new Scranton route for about a week and was arriving at Croxton in the early morning hours. But one Wednesday in 1974, DN90 hit a brick wall when it passed Slateford Junction and entered the Lackawanna Cutoff at 3:30PM. Facing the upcoming evening commuter rush hour, we had no other choice but to hold DN90 at Port Morris (UN).

I had just come off my rest days on the second trick chief train dispatcher's position in Hoboken. As I took the transfer from Chief Joe Conboy, I knew we were in trouble. One of the first phone calls I received when I sat in the chair was Ford Traffic at Mahwah. They were furious, but I explained to them what we were up against and told them I would get DN90 to them as soon as I could, probably around 10:00PM. Not good enough they said, but I told them that was the best we could do.



LEFT: With long-distance passenger trains canceled in 1970, EMD E8s were demoted to commuter service, usually handling the trains to Port Jervis, as seen on August 8, 1971.

BELOW: A commuter train rolls past West Arlington, N.J., on September 1, 1970. WR Tower is built into the depot, which closed in 1966 and burned in 1976. TOM NEMETH PHOTOS





ABOVE: EL 2403 leads a trio of diesels across the Delaware River with loaded automobile carriers at Millrift, Pa., on February 6, 1966. VICTOR HAND PHOTO, COURTESY CENTER FOR RAILROAD PHOTOGRAPHY & ART

RIGHT: Looking south over Hillburn Yard in Suffern, N.Y., on September 4, 1970. The New York State Thruway crosses over at the far end of the scene. TOM NEMETH PHOTO



Train DN90 had three U36Cs and 85 cars for Ford. Those three big GEs would do its best. I discussed the plan with the Morris & Essex (M&E) and East End dispatchers and we decided to take a chance and run DN90 to Denville and be in position to go east on the Boonton Branch after Train 1013 — one of the last evening rush hour trains departing Hoboken — cleared.

Train 1013 cleared Denville right on time at 8:07PM and off went DN90. I made arrangements with Croxton to hold HB3 (Jersey City–Buffalo) in the yard until DN90 arrived. Train 1043 arrived at Great Notch at 8:57 and DN90 cleared with just a five-minute delay to the commuter run. I had a Port Jervis

crew standing by at County Road to step on DN90 and take it to Mahwah. DN90 made it around the New Loop, recrewed at County Road, and off it went up the Bergen County Line. Arriving at Suffern around 10:00PM, the train was now facing the wrong way to enter Ford Yard so it had to be slowly yarded from the east end, a cumbersome operation. Ford was incensed. We did the best we could, even risking the tail end of the commuter run, but it did not soothe Ford.

The very next day, Train DN90 was operating via Port Jervis again, from which it never should have been diverted in the first place.

PENN CENTRAL'S PELLETS

During the last few months of Erie Lackawanna's life in 1976, conditions were quickly deteriorating on the railroad. Headquarters in Cleveland, Ohio, stopped purchasing supplies unless they were vital to operate trains, such as fuel oil. Since conveyance day to the new federally funded Consolidated Rail Corporation on April 1 was quickly approaching, the company did not feel the need to spend any more money than it had to before Conrail and Uncle Sam would start paying the bills. This created a problem one night in March 1976 at Croxton



ABOVE LEFT: The interior of SF Tower in Suffern, as seen in 1974. JIM MARDIGUIAN PHOTO

ABOVE: SF Tower sits in the shadow of the New York State Thruway on April 23, 1972. TOM NEMETH PHOTO

LEFT: Pulling loaded automobile carriers from the Ford Yard at Mahwah, N.J., in 1974. JIM MARDIGUIAN PHOTO



Engine Terminal.

I was covering the second trick chief dispatcher's position that Tuesday night in Hoboken. We barely had enough road power to run the regularly scheduled freights. After NY99 left, I had two SDP45s left to run Advance Croxton 99 (ACX99) to Chicago. The nearest road power was at Suffern on Train DN90, and it was down in Ford Yard at Mahwah delivering ordered production cars for the assembly plant. DN90's power would turn to run Croxton 99 (CX99) later in the morning. I was keeping my fingers crossed that ACX99's power would not develop any problems.

Around midnight, I got a call from Paul Segrow, the engine foreman at the Croxton roundhouse. One of the SDP45s for ACX99 developed a radiator leak and could not go out on the road. I asked Paul if he could put a box of leak-plugging pellets in the radiator so we could use the engine. Paul replied that he would have,

but he had no pellets left — or any other supplies, for that matter.

We were down to one SDP45 for ACX99. I thought about it for a while and I called the Penn Central engine foreman at the Meadows enginehouse in nearby Kearny, N.J. The foreman answered the phone and I told him who I was and asked if we could borrow a box of radiator pellets for an SD45. He said sure, come on out and pick them up. My relief walked in at that moment and I gave him the transfer. I got in my car and drove out to the Meadows.

When I arrived at Meadows, I met the foreman — who, coincidentally, would later become an engine foreman I worked with on New Jersey Transit — and got the big box of pellets. I drove to the Croxton roundhouse, delivered the radiator pellets, and drove home.

The next day, I was working the third trick chief's job. I was talking to the chief at Hornell, N.Y., and asked him how last

night's ACX99 made out. He told me that when they arrived at Hornell, one of the units blew out a radiator pipe and they had to swap power with another freight.

Oh, well. At least EL's ACX99 made it as far as Hornell on Penn Central's pellets. ■

Born in 1947, Arthur Erdman grew up near Long Island Rail Road in Queens, N.Y. Hanging around the railroad and getting many cab rides, he eventually hired on with Erie Lackawanna in 1966 as an extra operator, working various towers in the New York Division. He was promoted to train dispatcher in 1969, and chief train dispatcher in 1974. He would go on to work for Conrail and NJ Transit, holding various management roles. In 2001, he became an operations inspector for the Federal Railroad Administration, retiring in 2008. Since then, Arthur has authored several books about LIRR, EL, Conrail, and NJ Transit.

