



SIGNAL UPGRADES CLAIM ANOTHER CLASSIC

End of an era for ALTO Tower

BY NICHOLAS ZMIJEWSKI/PHOTOS AS NOTED

AN ERA IN MAIN LINE freight railroading in Pennsylvania came to a close on June 16, 2012. "ALTO" tower, located in the heart of downtown Altoona, was closed and the interlockings formerly under its control remoted to Pittsburgh. This was the last manned interlocking east of Cleveland (where a moveable bridge is still controlled from an open tower) on Norfolk Southern.

The tower has guarded the western side of the city for almost 100 years and has seen numerous changes, both to itself and the surrounding area. As con-



structed, it was equipped with one of the earliest Union Switch & Signal Model 14 machines. These machines were more efficient than armstrong levers and were electrical and pneumatic in operation rather than purely mechanical. As traffic control changed two other Model 14s were brought in, one from 14th Street Tower and another

from FG Tower located at 10th Street. These machines were of a slightly more modern design than the original machine; the machine from FG would later be removed from ALTO.

The Model 14s and the antiquated CTC gear eventually spelled the doom for ALTO Tower. The last maintainer with significant experience working on Model 14s has been retired for over 25 years and in its final days personnel were simply hoping it wouldn't fail prior to cutover. While the CTC gear was installed primarily in the 1970s, this

was not a factory built system. Rather, it was assembled by Penn Central and Conrail from components. The CTC cabinets on the second floor are relatively empty. The office units that transmit the code to the remote points, which are typically located in these cabinets, are instead located in a rack in the center of the first floor relay room. While inspecting this unusual system with a maintainer, he pointed out work he did installing the system when he hired on; he is now nearing retirement. Ansaldo STS, the successor to Union Switch & Signal, no longer supports the system and parts are refurbished in Ohio. The signal bridges are also showing their age and would have needed replacement in the relatively near future in any case.

The structure itself is an interesting collection of eras and designs. Having been built in 1915, the building was already a bit of an architectural anachronism. While the exterior design was similar to that found in armstrong lever towers, this building never fea-

tured them. However, the design is perfect for holding up the several tons of machinery located on the second floor.

Over time, the exterior doors, stairs, and the windows would all be changed. The installation of additional traffic control machinery also necessitated the bump out on the east face and the enlargement of the south bay. The inside of the operator's room on the second floor of the tower features a dingy drop ceiling, with the walls a mix of wooden paneling and drywall. The floor is likely from the same era as the drop ceiling, being linoleum tile. Littering the walls are remnants of previous systems that had been a part of the tower's functions over the years. A telephone call box from the Pennsylvania Railroad's internal phone system with labels for long departed towers sits on the operator's desk while disconnected Western Electric boxes hang on the west wall. Next to a 90 year old machine is a state of the art cabinet full of communications gear. The first floor is literally full of relays on racks that stretch from the

floor to the ceiling. In the center of the room is a steel column that supports the massive weight of the machines that rest above it. In the southeast corner a small desk full of rodent droppings and spare parts from systems no longer in place serves as a workbench for the signal maintainer. A small table also sits near the steel pole to unroll drawings and rest a few spare relays waiting for the next failure. On the opposite side of the column is a rack full of the brains of the CTC gear, the office units that transmit commands and receive acknowledgements from the field locations that the operator's wishes have been carried out successfully. The rest of the wall space has lesser relays and power supply equipment. There is also a sink and a couple of lockers. On top of the lockers is a pile of outdated drawings ranging back the whole history of the tower, allowing those initiated in signaling to track the modifications to the interlockings and their configurations for well over 50 years of change.

Rather than try to repair or directly

OPPOSITE: Norfolk Southern's SD40Es are the latest locomotives that have provided assistance for trains traveling around Horseshoe Curve. These helpers provided the activity that has kept ALTO busy for its nearly 100 year service. — STEVE BARRY **BELOW:** NS SD40E 6328 moves west by ALTO Tower after having helped a coal train down the mountain. The sign dates to the Conrail era and is at least the fourth to have graced the side of the building, which followed Pennsylvania Railroad's "JK" and "ALTO" as well as Penn Central's "ALTO" label. — NICHOLAS ZMIJEWSKI

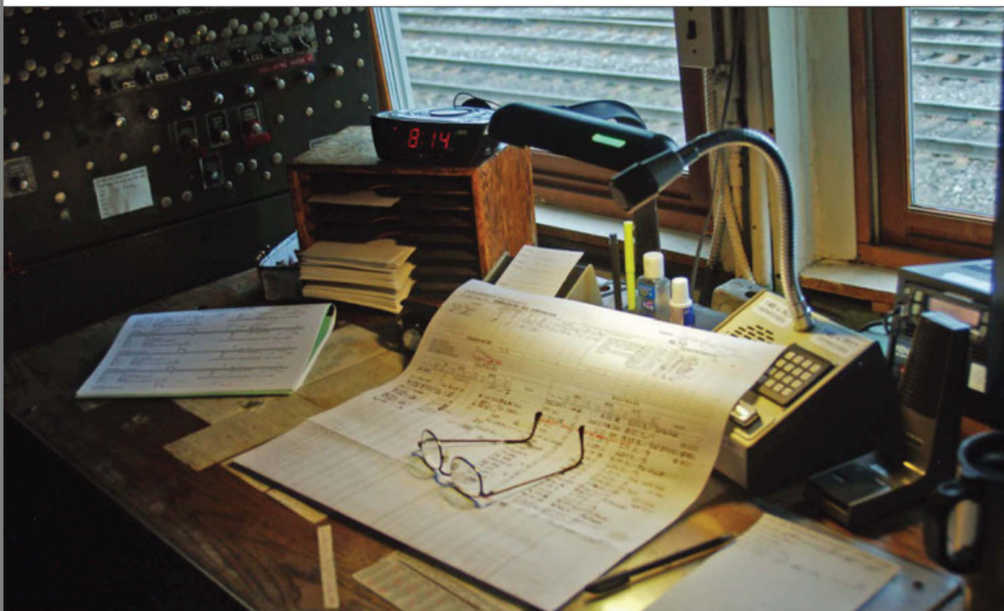
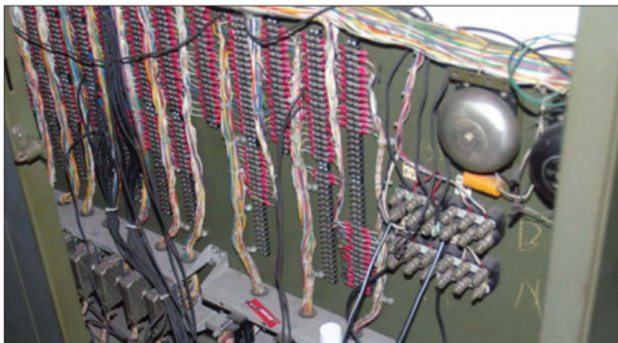
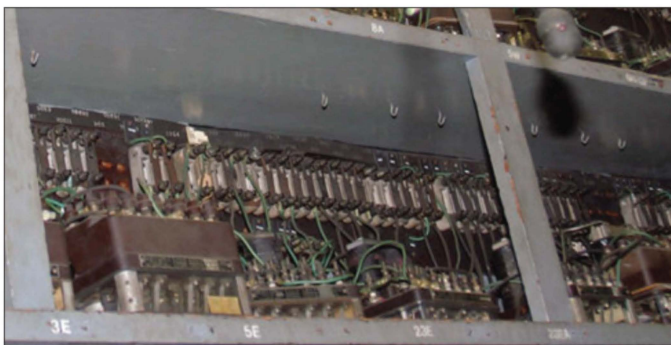


cut over the interlocking Norfolk Southern has reconfigured all of the interlockings that make up the former plant of ALTO and its related control points. These new and rebuilt interlockings will be controlled by NS's Pittsburgh East dispatcher directly as opposed to locally by operators working under the direction of the dispatcher.

The Changes

ALTO has been split into two control points, CP Cove Junction and CP Altoona. CP Slope is being eliminated and will become part of CP Altoona. This is another loss to history, as Slope Tower was where the first lodge of the Brotherhood of Railway Signalmen was founded in 1901. The cutover was begun on June 11 starting in the east with CP Antis, CP Homer on June 13, reaching CP Works by June 14. CP Rose had already been reduced to several hand throw switches rather than being powered and remotely operated.

TOP: There are several hundred of these US&S relays in addition to miles of wiring on racks that dominate the space in the tower. When a command is sent or information is received back from the field, they come alive with a flurry of clicks before awaiting the next call to duty. **MIDDLE:** The inside of the Conrail-built CTC cabinet. At right is the bell that warns the operator that a train is approaching. **BELOW:** The operator has momentarily stepped away from his desk leaving his glasses on the train sheet. Behind is the front of the CTC cabinet pictured above. — NICHOLAS ZMIJEWSKI



ABOVE: A former Conrail SD80MAC brings a coal drag past the darkened tower as viewed from the 17th Street overpass. — STEVE BARRY
LEFT: Track workers work on reconfiguring the new "Cove Junction" while the omnipresent helper drifts by. The operators were able to watch the progress of the reconfiguring of the former "ALTO" plant, now "CP Cove Junction" and "CP Altoona" from their desk. — NICHOLAS ZMIJEWSKI

EDITOR'S NOTE: The fate of ALTO Tower remains very much in limbo as we go to press. Norfolk Southern is aware of the tower's history and the only thing obvious at this point is the railroad is in no hurry to demolish the structure. Various reports, all unconfirmed, have the tower's internal machinery going to the Railroad Museum of Pennsylvania in Strasburg to become a part of an interactive display that will allow visitors to experience what it's like to operate a CTC-controlled railroad. Other reports have the structure itself moving to the nearby Railroaders Memorial Museum in Altoona. Whatever the outcome, it usually isn't long before a vacant building is the victim of vandalism and theft, so here's hoping that a positive decision is made soon on the future of ALTO Tower. —S.B.

As with all operational changes employees are directly effected. In this case the displaced operators had a choice to work out of the shops at Juniata on the clerk's seniority list or move to Pittsburgh and become dispatchers. One operator had already relocated from Ohio to Altoona as towers closed. Being near to retirement he chose to stay local. Needless to say, he will always be a towerman at heart, having

part of a lever from an M14 on his keychain. Another employee said to me that the employees had tons of good stories and that they should write them down for posterity. Here's hoping they do. ■

With thanks to the Railroad Museum of Pennsylvania, Norfolk Southern, Jim Rose, Rich White and Tom Kozub.