

July–December 2003 • \$10.00 / ERA Tour of Traction in the Czech Republic

HEADLIGHTS



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The ERA spent nine days in the Czech Republic in May of this year. It was the most recent in a very successful series of ERA tours to former Soviet Bloc countries in eastern Europe where streetcar systems still form the backbone of transit. **John Pappas** has filed this comprehensive trip report and photo essay of a fascinating visit.

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The classic loop at the "end of civilization." Modernized T3 1517, contrasting with its as-built sister 1603 from a batch of T3s built between 1963 and 1972, take layover at the Obrany end of line 4 in Brno.

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On the Cover: A two-car train of Tatra T3 trams crosses the Manesuv Bridge en route to downtown Prague. The bridge, one of nine carrying tram lines across the Vltava River, is just north of the more famous Karlový (Charles) pedestrian bridge, which can be seen in the background. T3s form the backbone of the Prague tram fleet, including the last ones built in 1988.

JOHN PAPPAS

NEWS



NEW YORK, N.Y.

PATH Service to WTC Resumes



SANDY CAMPBELL PHOTOS

Two years after the attacks of September 11, 2001 destroyed the Port Authority of New York and New Jersey (PATH) World Trade Center terminal, a test train made the first trip back to Ground Zero on October 23, 2003. This followed major repairs to the two tunnels under the Hudson River that were filled with water from broken mains and fire hoses, and the building of a new PATH terminal. Wiring, water pipes and rails had to be replaced as a result of the damage. The new tracks rest on a concrete base instead of the stone ballast that had previously been in place. Welded rails will also provide a smoother ride.

On Sunday, November 23, PATH car 836 headed up a ceremonial train carrying Governor James McGreevy of New Jersey and Mayor Michael Bloomberg of New York City to formally reopen PATH service to lower Manhattan from New Jersey. This was the same car that was on the front of the last train to leave the World Trade Center on 9/11. After the ceremonial train completed its run, regular service was resumed.





TRACTION IN THE CZECH REPUBLIC

BY JOHN PAPPAS

Photos by the author,
except where noted.

T-3 6880 and train (left) are westbound on route 9 half-way between Hlavni Nadrazi (main railway station) and Wenceslas Square, the famed tourist and shopping area of New Town. Much of the center city tram trackage succumbed to Metro construction in the '70s, but this view shows that plenty of narrow winding streetscapes still remain.

(Top) Official logo of DpmP, the Prague "transit authority" carried on the side of all streetcars.

Starting in 1990, with a visit to traction systems in the former East Berlin and East Germany, the ERA began what was to become a very successful series of tours to former Soviet Bloc countries in eastern Europe where streetcar systems still form the backbone of transit. The most recent of these tours took place in May 2003 with a visit to the Czech Republic. During a nine-day schedule, the group of over 40 attendees visited four different city systems and one rural electric railway. The systems were Prague, Brno, Liberec (and the interurban to Jablonec) and Ostrava as well as a quick view of trolleybus systems in Ostrava, Hradec Kralove and Brno. This provided just the highlights of a country that still retains lots of traction interest. Other equally interesting systems in Plzen, Most and Olomouc were not included only because of time constraints.

May 2003 Trip Itinerary

Saturday, May 17 | Prague

Welcome dinner.

Sunday, May 18 | Prague

Prague historic tram charter.

Monday, May 19 | Tabor

Depart Prague at 9:17 a.m., arrive Tabor (via train) at 10:46 a.m.

Tuesday, May 20 | Brno

Depart Prague at 8:57 a.m., arrive Brno (via train) at 11:47 a.m. Early lunch in the dining car.

Wednesday, May 21 | Prague

Free day in Prague. Tour of Metro facilities.

Thursday, May 22 | Liberec

Depart Prague at 8:41 a.m., arrive Liberec (via bus) at 10:15 a.m.

Friday, May 23 | Ostrava

Depart Prague at 7:05 a.m., arrive Ostrava (via train) at 11:36 a.m. Breakfast and early lunch in the dining car.

Saturday, May 24 | Prague

Prague historic tram charter; group dinner in the evening.

Sunday, May 25 | Prague

Prague historic tram charter.



Part of the ERA tour group enjoying traditional Czech fare, which means, among other delights, pilsner beer.
JEFF ERLITZ

The present day Czech Republic comprises 30,450 square miles of land, just slightly smaller than the country of Austria or the state of South Carolina. The population, as of the official Czech census of 2001, is 10.2 million. Of that, 1.2 million, or about 12 percent, live in Prague. Brno is the second largest city at 366,000 inhabitants. While Prague is widely celebrated for its natural beauty, Brno is largely unknown in this hemisphere. That's a shame, because it too has a beautiful setting with a large and varied tram system and, unlike Prague, a large trolleybus network as well.

The Tatra (CKD/Praha) PCC is still king in the Czech Republic. The legacy of the 18,000 that were built on the east side of Prague for much of the Soviet Bloc between 1951 and 1999 is the immaculately maintained (and largely modernized) fleets of these cars in several models that provide all or a major portion of service on every Czech system. The ubiquitous T3, produced between 1960 and 1989, is represented on every system

in the republic. The T2, its predecessor (1955–62), still makes a showing on two systems (Brno, Liberec), as well as being part of the museum fleet in Prague. The T1, the model that started it all and owes its design directly to Transit Research Corporation design patents granted in 1946, was represented in museum cars in both Prague and Ostrava, the latter fully restored and operated for the delight of the group. Rounding out model types are the K2, basically the articulated version of the T3 (Brno and Ostrava), the more modern three-section articulated KT8 (Brno, Plzen, Prague, Ostrava) and the T6A2 single unit, the last of a great line of designs from Tatra/CKD. It was one of these that made its way briefly to New Orleans.

Besides the revenue fleet, most systems have one or more historic cars in their collections and a healthy assortment of work equipment, many of which were once revenue cars. The ERA group was able to enjoy a number of these. Others were seen during tours of depots, yards and shops. Prague has a magnificent collection in a now inactive depot in the northwest part of the city. This includes the “mother ship” T1, the one built reportedly as the prototype for the eastern bloc PCCs that followed.

The Czech Republic has recognized the benefits of tram operation, which manifests itself in renewed infrastructure, line extensions, often to light rail standards, new rolling stock and thorough modernization of the Tatras, to include padded seats, modern lighting and “next stop” indicators. In many cases, the improvements include conversion of propulsion systems to electronic chopper control. Two properties were also experimenting with low-floor center sections on their newer, three-section Tatra KT8s.

Considerable thanks go to long time ERA members Jeff Erlitz and Noah Caplin for their efforts in organizing and conducting this tour.

ERA MAPS | DESIGNED & ILLUSTRATED BY JOHN PAPPAS AND SANDY CAMPBELL

Czech Republic



R – Tram
 T – Trolleybus
 H – Historic Mainline Electrification





Prague

The tour greatly benefited from having an anchor hotel in Prague from which day trips were taken to visit outlying properties. Another benefit was the ability to spend more time in Prague, a city that begs for exploration on and especially away from the extensive tram system.

Stresovice Depot (opposite) is home to the Prague historic fleet. It is no longer an active depot, but at one time played host to both trams and a small trolleybus network. This view shows how varied the collection is and the excellent layout for viewing it. Not seen are examples of electric locomotives and a Skoda trolleybus.

Prague 412 (top), pulling two trailers, pauses in Zizkov Depot for a photo stop beside their T3M (modernized with chopper control) brethren. All told, the group rode on five different historic cars along with their trailers (plus an unexpected ride on the only T4) during the three days that were allocated to fan trips in Prague. The threatening skies seen here stayed with the group for much of the nine days.

Another two-car T3 train (bottom) arrives at Malostranske namesti (Square), on the left bank of the Vltava. 6790 is a 1971 product of the CKD factory across town. It retains its mechanical PCC controls in contrast to much of the fleet that has been updated with chopper electronics. In the background are examples of the superb restoration of the historic architecture that has been ongoing since Czechoslovakia became independent again in 1990. The peak of the roof of the Prague Castle can be seen just above the roof of the ivory building with the round turrets. The group had their welcome dinner near the castle and took the long trek down the hillside which provided an ideal introduction to the area and its history.

3062 and trailer (below) provided a delightful inaugural tour of the Prague system for tour attendees. Both are paused here at the Podbaba loop at the north end of lines 20 and 25.



Tatra 5001 (bottom right) is not only one of the 287 T1s built, but the first one. To contemplate that the success of this car, following on the US and Western Europe experience with PCC



Not unlike much of the eastern bloc, Prague too has its share of tall, boxy apartment "cities" (top right). These are in the west end of the city near the Sidlisti Repy terminal of tram routes 7, 9 and 10. As uninspiring as they may be, the high rise density helps support very frequent service on these three routes (a two minute headway during weekday peaks). Tram 7252 is nearing the end of its nearly one hour cross-city journey as it approaches the three track terminal loop.

technology, spawned close to 18,000 other examples, has to be one of the great transit equipment success stories of all time. Behind 5001 in Stresovice Depot is the second prototype T2, 6002, also immaculately restored.

T3M 7082 and train (opposite) are southbound alongside the east bank of the Vltava River and just south of the Stare Mesto (Old Town). The tower in the background is the old town water tower, originally built in 1489 and rebuilt several times since.









Brno

The Czech Republic's second city and the capital of the ancient region of Moravia is host to 13 tram and 17 trolley-bus lines. The warmth of the welcome accorded the group made up for the rainy weather that greeted us after our three hour train ride from Prague.

Brno 107 (opposite) looks older than it is. The car was fabricated with wood sheathing in 1943 due to wartime scarcity of metal. It is pulling a more classical (for its age) trailer, 215 of 1926. Here both are posed on non-revenue tracks along the Masarykova pedestrian area running through the heart of the city. The group generally didn't let the rainy weather keep them from enjoying the magic of a foreign traction paradise.

JEFF ERLITZ

The three section articulated model KT8D5 (top left) was offered between 1986 and 1993, with 149 vehicles built for both Czech and Slovak systems. 1720 is one of the last built in 1993, shown here at the Stary Liskovec end of line 8. The group experienced other KT8 examples in Prague.

Instead of adopting the RT6N1, Czech systems chose to thoroughly modernize their T3 and K2 fleets. These examples (bottom left) were rebuilt by CKD beginning in 1996, receiving modernized interiors, new front and rear end fiberglass caps and updated electrical equipment, including chopper control. The cars are seen operating on the high speed light rail segment of line 1 to Bystrc.



Tatra's attempt at a modern, 70 percent low-floor car (above) was the RT6N1 and it was less than successful. Brno has one of the few examples still operating. Prague's four operated only briefly and the group saw one other buried in the back of the depot in Liberec. The car is 26.2 meters in length and features GTO chopper control. It was designed to compete for orders in western Europe with the likes of Bombardier and Siemens.

K2 1073 of 1973 (top right) sports an updated front cap, but is otherwise unrebuilt. It is navigating the complex interchange station of Mendlovo nám (Mendlovo Square) where several tram and trolleybus routes intersect. Brno has the largest number of K2 artics still operating in the Czech Republic.

Brno's extensive trolleybus network contains both of Skoda's most prevalent models, the single unit 14Tr and the articulated 15Tr. A modern low-floor single unit version is the 21Tr, and an example is shown above along with its 14Tr follower at the Vychodilova terminal of line 146 (bottom right). The Czech Republic has no less than 12 trolleybus systems and there was only time to see three of them, much less ride and study them.

(Opposite) Brno KT8D5 1728 heads uphill and outbound on route 8 on one of three examples of newer alignments built to high light rail construction standards in the latter era of Soviet transportation planning dominance. The skyline of Brno is prominent in the background. Light rail extensions continue to be built, but much more slowly as funding is available.









Liberec and Jablonec

Pronounced Liberetz and Hablonetz, these cities reside in the extreme north of the country, only a few miles from the Polish border. The system has been in the process of modernizing since the early nineties, which includes converting from metre to standard gauge. The one major metre gauge element of the system remaining is the 11 km (6.8 mile), mostly single track interurban to the city of Jablonec. The Czech traction fan community considers this to be the best remaining example of traditional Czech interurbans, although the group got to experience a similar operation in Ostrava.

The suburban town of Jablonec nad Nisou (on the river Nisou) features a loop and a stub siding with an inspection pit (top left). Jablonec, population 46,000, once boasted a five route system of its own, which was finally abandoned on March 31, 1965.

Leaving Liberec on route 11, the interurban to Jablonec (bottom left). 31 and 32 are metre gauge T3s, as the property thoughtfully reminds us with the round blue "1000" decal located just below the windshield. The line is mostly single track and, outside the city, almost entirely cross-country away from roads.



(Opposite page) Historic car 78 dates from 1920. It is seen here at the Lidovy Sady terminal of route 1 in the company of regular service cars 21 and 20. Note the red circle "1435" decal on 21 indicating these are standard gauge cars. The green with yellow trim is the current official scheme of the Liberec system, which is somewhat rare since most of the cars wear a variety of all-over ad colors.



The Liberec undertaking has completely renewed its depot and the track structure serving it (above and opposite page). The throat of the yard shows off the dual gauge that will still be needed for some time to come. Beyond here several parts of the yard feature standard gauge only track. As with all the cities the ERA visited, the facility is complete to the extent they can perform major rebuilding of the fleet.

Standard gauge T3 40 and 34 negotiate a dual gauge curve in front of the main railway station en route to Dolni Hanychov (top right), a temporary turnback loop being used while the line beyond is rebuilt with new track that will be standard gauge. Evidence of the infrastructure upgrading can be seen even in the buildings in the background.

T2 Trams 22 and 24 pass at a siding on the outskirts of Liberec (bottom right). Both are ex-Ostrava, built in the period 1959–62. Tram 24, a regular service car, is leading a two-car train. Tram 22 is doing the honors as the fantrip car and running single unit. The use of a separate fantrip car was only possible because we “platooned” in both directions just ahead of the regular service car and made use of the sidings at the same time. There aren’t many passing sidings, but enough to provide a 7–8 minute service frequency between routes 11 and turnback route 5. And thankfully, they are long enough to accommodate three cars. Future plans call for replacing much of this alignment with a modern standard gauge light rail line sharing track with the Czech Railways.









Ostrava

Ostrava is located in the far northeast of the Czech Republic. It is a highly industrialized city of 315,000, nominally considered the Pittsburgh of the Czech Republic, although coal production has ended and steel fabrication is winding down. A five hour train ride was required to reach it from Prague. But the system was worth the trip, just for the sheer variety of equipment and routes and the thoroughly equipped shops. The shops were busy modernizing the existing rolling stock and also playing host to Inekon, who produces modern 70 percent low-floor cars for both Czech systems and export. The Portland Streetcar and Sound Transit's Link in Tacoma use examples of cars they developed along with Skoda of Plzen. Ostrava also has an extensive trolleybus network, including a very rare trolleybus grand union in the middle of the city.

Ostrava, too, has a single track interurban line (albeit standard gauge) running largely through some lush woods (left). Here regular service T3s 907 and 905 disappear around a curve just west of the Dolni Lhota stop about two-thirds of the way to the end of the line at the remote village of Zatisi.

The "business" end of T1 528 (top left). Right down to the Bakelite gang switches on the dash, there is no mistaking the heritage of this car's design.

Among Ostrava's historic fleet is a working Tatra T1 (bottom left). The group was delighted to ride on this car over a variety of the system settings, including this example of modern, center roadway light rail. The stop is near the outlying Svinov railway station.

Some of Ostrava's historic trams (top right) pose in front of the central workshops.

This Ostrava KT8 (bottom left) has received a new low-floor center section replacing its standard floor original. This type of conversion is being looked at to extend the useful life of this model by several years. Some accessibility alternatives for the T3s could include low-floor trailers.

(Bottom right) Builder's plate on T1 528.

New Inekon low-floor trams take shape in the Ostrava central workshops (opposite page). These two are for Ostrava, but the possibility exists that the additional low-floor cars for the Portland Streetcar extension may be built here also. Across the transfer table from these sit brand new 100 point controller drums, and T3 bodies undergoing thorough rehab. It's as if St. Louis Car Company had suddenly come back to life in a European setting. ☺





