

TROLLEYBUS

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December 2022



The Magazine of the British Trolleybus Society



*Prague's New Trolleybus System
Marrakech
Platinum Jubilee*

TROLLEYBUS

The magazine of the
British Trolleybus Society

No. 737 December 2022

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BTS NOTICE BOARD

Reading Meetings

Held at the Reading District Oddfellows' Hall, 118b Oxford Road, Reading RG1 7NQ. Admission: Adults £2.50, Juniors £1.50. Non-members £3.50. Meetings commence at 19.30. Organised by the BTS. NTA members welcome (Please note that there has been a small increase in the admission charge but that there will now be no charge for tea and coffee).

Meetings Organiser Graham Bilbé, 12 Belle Avenue, Reading RG6 7BL. Email grahamebilbe@btinternet.com

Friday 6 January 2023. Mike Russell presents 'British trolleybus special and short-workings'. A revised version of the show first given in London in December 2021.

London Meetings

Held at The Model Railway Club, 4 Calshot Street, London N1 9DA (nearest Underground station: King's Cross). Organised by the NTA. BTS members welcome. Start 19.00 – doors open 18.30.

Meetings Organiser John Parkin, 59 Beechwood Court, West Street Lane, Carshalton SM5 2QA. Email trolleybus654@aol.com

Wednesday 21 December. Mike Russell presents Trolleybuses in Bulgaria - development, expansion and contraction over 25 years.

West Midlands Transport Circle

BTS members are invited to attend WMTC meetings, which are held on the second Wednesday of every month at Bradmore Community Centre (Main Hall) in Wolverhampton. Doors Open 19:05, Start presentation : 19:30 prompt!, Break (around) 20:30 - 20:45; Finish 21:45: Out of venue by 22:00 Visitor fee £3.00, just turn up and bring others with you.

Wednesday 14 December. Signalling on the Welsh Marches area lines. A look at operations from Newport to Shrewsbury on the north and west line, encompassing the very latest equipment and also components well over a century old remaining in current use, from a Network Rail signaller on the line with over a decade's signalling experience - Jamie Green

Organised by Mike Richardes. michael.richardes64@btinternet.com

MONTHLY PRIZE DRAW.

The winners in the November Prize Draw were:

£80 Dave Chick, Purley on Thames
£55 Keith Burbidge, Bournemouth

New Members

We are delighted to welcome new member:

Nathan Duffy, Doncaster

Front Cover: A line of preserved Škoda trolleybuses arriving at the Letňany terminus after five historic trolleybuses had made their first journey on Prague's new system on 15 October. Praha 494 (8 Tr) leads Pardubice 358 (9 Tr) and Hradec Králové 311 (14 Tr).

[D G Chick]

Cardiff Christmas 1962

by Tony Belton

This was a view you could capture in Cardiff exactly 60 years ago, in December 1962. There were two of the 1942 AECs decorated in this fashion: numbers 201 and 206. Illustrated is 206 on route 6 to Pier Head.

It was my first visit to Cardiff and after a great day I decided to have a meal and then get a train back to London. However, imagine my surprise when I then saw an illuminated trolleybus approaching – this vision altered my plans completely.

There wasn't a grapevine in those days, so I had no idea at all that the Corporation decorated trolleybuses especially for the Christmas season. Fortunately, I had my flash gun with me but only one PF2B flash bulb! After spotting the second illuminated trolleybus, I decided to find a camera shop, hopefully to purchase a supply of PF2Bs to enable me to cover the occasion thoroughly – this I fortunately achieved.



Above: Cardiff 206 on route 6 to Pier Head, illuminated and decorated for Christmas

Monthly Prize Draw 2023

**Make a difference to Bournemouth 301.
Help us to complete the restoration of
301 and you could win prizes!**

The application form was included with last month's edition of Trolleybus and is also available to download from the BTS website www.britishtrolley.org.uk.

Please complete and return it as soon as possible. It must be received by the Prize Draw Organiser, Andrew Barton, by 31 December.

Website Upgraded

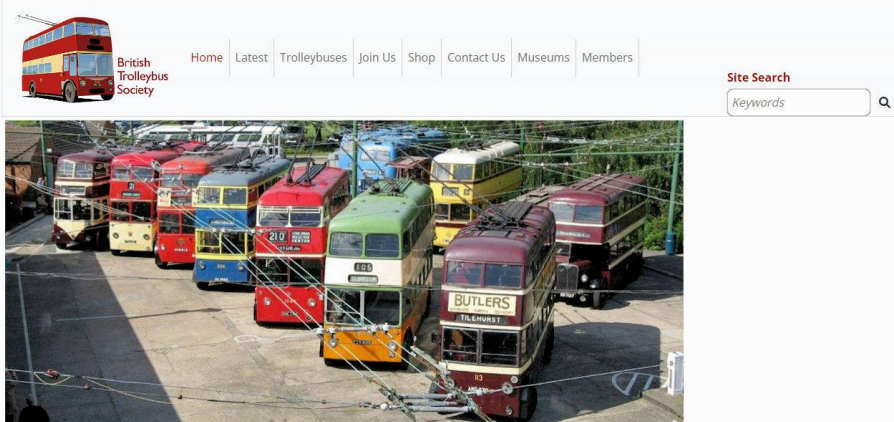
After a lot of work behind the scenes the Society's website has been relaunched with a new design. It is now easier to navigate and care has been taken so that similar information is not spread over different pages.

In November, Webmaster Peter Short met with the team which administers the

website to run a training session so that all concerned understand the relevant procedures.

Contents are managed and updated by Paul Dicken, Dave Hall, Simon Guppy and Paul Weal, with backup when necessary from Dave Chick.

www.britishtrolley.org.uk



The British Trolleybus Society - what we are and what we do

The British Trolleybus Society owns a collection of historic trolleybuses, you can read about in the [Trolleybuses](#) pages. We contribute to the management and operation of the Trolleybus Museum at Sandtoft, which houses the largest collection of preserved trolleybuses in the world.

We educate and promote the importance of trolleybuses in UK public transport history and the advantages of trolleybuses as a green and sustainable transport mode for the future.

Our flagship publication is *Trolleybus* magazine and we publish *Bus Fare*, a newsletter for Reading and the Thames Valley. Members receive a lively email monthly newsletter and monthly meetings are held in Reading and London to which all are invited.



Auction Boosts 1812 Fund

The paintings which were reproduced in the September edition of *Trolleybus* all sold in our auction and raised a total of £375 for our London Q1 1812, to help to replenish the fund after the major expenditure this year on a full mechanical overhaul.

The Committee wishes to thank artist Stanley Osment who created an original painting for us of 1812 and two others showing vintage London Transport buses to help to raise funds for 1812. Thanks also to

member Branimir Pantaleev who facilitated the donations and that of a limited edition print of a working steamship.

Subscription Rates 2023

The Committee's motion to increase the Adult membership rates by £1 per annum to £36, with others being raised pro-rata, was agreed by the membership and will take effect from 1 January 2023.

All the new rates may be viewed on the Society's website and will be included in renewals reminders.

Page 229: A member of the 1952 batch of Q1s, 1881, is followed by 1768 of the 1948 delivery, at Shepherd's Bush. 1768 is now part of the London Transport Museum Collection and is housed in the Acton Store.
[R F Mack, courtesy NTA]

Platinum Jubilee: The Trolleybus scene in 1952

In the same way that at the beginning of 1952 no one could have predicted a change in the monarch that year, at the beginning of 2022 it did not seem possible that the Elizabethan era would come to an end this year.

In 1952 the operation of trolleybuses in this country was still quite secure, although as has been seen in this Platinum Jubilee review, one system did close, and closure for another was already planned. Even in London, by far the largest operation in the country, it had already been announced that no new trolleybus services would be introduced and that the resumption of tramway replacement after the war would be by motorbuses and this programme was completed in 1952.

This review has recorded the introduction of new trolleybus services in a number of towns and cities and even after 1952 new services and new trolleybuses (including those not intended as replacements for pre-war vehicles) would still continue to enter service for a few years yet.



From this article's point of view, the most significant event of 1952 was the entry into service of London's last trolleybus. Back in May the entry into service of the first of this order of 50 trolleybuses had been noted, and these final BUT 9641T units were numbered 1842-1891 (LYH 842-891).

The chassis were eventually constructed in the former Crossley works at Errwood Park in Stockport before delivery to Birmingham for bodywork fitment. Ken Blacker records that 1891 was in fact the final delivery and (perhaps a little poetic licence here) was delivered to London on the first day of 1953.

Article by Bob Rowe



Prague Celebrates

By Dave Chick

Dave Chick reports on the Czech capital city's celebration of the trolleybus

Photos by the author except where shown

Prague's new trolleybus system was officially launched on 15 October. The date had been chosen so that celebration of a new start could be combined with commemoration of the city's original system, which closed on 16 October 1972. However, the worldwide shortage of computer chips that is affecting the manufacture of new cars, buses, lorries and much else is delaying the delivery of the 15 new articulated SOR TNS18 trolleybuses.

Trolleybuses in the Czech Republic

The early years of the twentieth century saw some very limited operation of trolleybuses in the territory which is now the Czech Republic. Although there were a number of Mercedes-electrique-Stoll systems (known as Cedes-Stoll in the UK) in Austria-Hungary the only example in Bohemia was a short route in České Budějovice operated by two vehicles between 1909 and 1914. The first system of this type opened in Gmünd, Austria, in 1907 and closed in 1916. When Czechoslovakia was founded in 1918 the northern end of the former trolleybus line was located in the new country.

It was not until 1936 that the first trolleybus system opened in Czechoslovakia, in Prague (Praha) on 29 August 1936. This also saw the start of the manufacture of trolleybuses, with Prague's first three vehicles being supplied by Škoda, Tatra and Praga. These days the Czech Republic is a leader in the trolleybus industry.

Orders were placed with all three manufacturers for the supply of further trolleybuses and by the outbreak of the Second World War in 1939 the fleet comprised the sole Škoda 1 Tr and the only five 2 Trs to be produced, twelve Praga TOTs and six Tatra T86s. The Praga company still builds cars, karts and aircraft

but produced no more trolleybuses. The T86s were the only trolleybuses of that type to be built.

The earliest vehicles were built for left-hand running but in November 1938 parliament decreed that the rule of the road would change to right-hand running from 1 May 1939. However, following occupation of the country by Nazi Germany an earlier change was ordered and was implemented over a few days, with Prague being the last area to change, on 26 March 1939. The vehicles which had been designed for left-hand running were rebuilt.

After the War, Prague's trolleybus system expanded rapidly and a total of 136 three-axle Tatra T400s was purchased, with another eight being bought second-hand from the Most-Litvínov system, which closed in 1959.

The only Tatra T401 to be produced saw service in Prague from 1958 to 1961, but the government decided that all trolleybuses would be produced by Škoda in future, with Tatra continuing to manufacture trams.

After 35 Škoda 8 Trs were delivered in 1960 no further trolleybuses were purchased. Road reconstruction and the availability of comparatively inexpensive diesel led the city to abandon trolleybus operation and the last trolleybus ran on 16 October 1972. By this time the trolleybus was in decline in Czechoslovakia, despite the country's success in exporting Škoda trolleybuses in large numbers.

After Prague, new systems had opened in Plzeň in 1941, Zlín in 1944, followed by another eleven new systems opening between 1946 and 1952, but Most-Litvínov closed in 1959, České Budějovice's second-generation system in 1971 and Děčín in 1973.

It may have been the oil crisis in 1973 that prompted a rethink, because no further systems have closed and new installations opened in Ústí nad Labem in 1988, a third-generation system was started in České Budějovice's in 1991, and the interurban Chomutov – Jirkov began in 1995.

During this time there had been serious plans to reintroduce trolleybuses in Prague, but the project did not reach fruition.

The game-changer for Prague was the development of trolleybuses equipped with a small battery that could be charged while the vehicle is connected to the overhead wire, known as In-Motion Charging, then running on battery power on unwired roads.

Many of Prague's bus routes use steep hills which would be very taxing for battery-electric buses. The city has an extensive tram network with an established power distribution system that could help to reduce the installation costs of a trolleybus system. It was decided to have a trial to research the viability on introducing a new system.

The Trial

The trial line over part of bus route 140 was opened on 15 October 2017 and this date was chosen because of its proximity to the 45th anniversary of the closure of the first system. Preserved Tatra T400 431 ran on this day.

A charging point was installed near the Palmovka metro station which was used by the hired trolleybus, a SOR TNB 12 that had been on trial in Brno, and battery buses that were also being tested. The trolleybus ran on battery power to Prosecká and then used new overhead wiring for the steep ascent. At the end of the wires the route levels off before climbing steeply again, and the vehicle's performance was noticeably less lively in battery mode. It continued to Letňany in battery mode and then returned until meeting the wired section again. Route No. 58 was used as it had been part of that route in trolleybus days.

Subsequently a Hradec Králové Škoda 30 Tr was hired and for a short period a 27 Tr from Plzeň was used to test an articulated trolleybus on the line. The only trolleybus to be built by Ekova was used in 2019 and 2020 and in May 2020 a 24 Tr built in 2005 was purchased from Plzeň and numbered 9508.

By this time it was proposed to convert several bus routes to trolleybus operation, starting with the 140 (Palmovka – Letňany – Čakovice – Miškovice).

October 2022

The first phase of the electrification of bus route 140 was completed at the beginning of October. On 6 October trolleybus 9508 was used to test the overhead line from Letňany to Čakovice. Subsequently, on 12 October, the Railway Authority formally tested the line and authorised the planned trial operation. This test used Hradec Králové 38, a Škoda 30 Tr which had been newly hired and given Prague fleet number 9506. It was due to remain in Prague until the end of November.

Friday 14 October

The five historic trolleybuses that were to be used over the weekend were tested on the line. On the same day, Libor Hinčica, Director of Sales Development and Marketing of Cegelec a.s., the French company which is providing the electrical equipment for the trolleybuses on order, led a walking tour of the former trolleybus route 58, examining the remaining traces of the earlier trolleybus operation. Ostrava Irisbus/Karosa 1969 was used as transport for



Above: Walkers following the line of service 58, Prague's last trolleybus route, were shown photographs of certain locations showing them as they were in trolleybus days.

some of the longer sections that had no remaining evidence of trolleybus days.

Not long after the walking group had reached Klíčov Garage, Tatra T400 431 arrived back from its test on the new overhead. Plzeň 21 Tr 488 then emerged from the Garage and the group was invited to board. These trolleybuses were equipped with diesel generators to permit off-wire operation and we were taken in diesel mode to Letňany. The booms were

raised, seemingly to benefit the photographers, but we were then invited to board again and 488 set off in trolleybus mode for a trip to Čakovice and back, with photo stops at every bus stop! This was quite unexpected and had been deliberately kept quiet so that the trip was not oversubscribed with people who only wanted to ride.

Saturday 15 October

By 9 o'clock on a wet morning crowds were arriving at Letňany, where they were greeted by the sight of nine trolleybuses. The five historic trolleybuses were in a line, ready to carry invited guests. In the queue behind them was 9506, which would be operating to and from Palmovka, using the new overhead for service runs instead of using battery power at the Letňany end. The first of the new SOR TNS12s for Jihlava was on display masquerading as a Prague trolleybus to compensate for the absence of the fleet of TNS18s. It had not been completed electrically and so was a static exhibit. Next to it was the 24 Tr No. 9508. Completing the static display was Praga TOT No. 303, one of Prague's original 1936 trolleybuses. Some parts have still to be remanufactured to make it operable, but it looks wonderful.

Local politicians and officials and senior managers from the transport authority gathered next to a tape reading "Zprovoznění nové trolejbusové tratě" (Commissioning of the new trolleybus line). Each one said a few words and then the tape was cut and guests were invited to board the trolleybuses. BTS member Jan

Spousta had kindly facilitated invitations for the four British enthusiasts present.

The trolleybuses each had a number in the front window and they were numbered in age order. No. 1 was Praha 431, 2 Praha 494, 3 Pardubice 358, 4 Hradec Králové 311 and 5 Plzeň 488. Guests were given wristbands with three numbers on them. Mine was endorsed "5-1-2", meaning that my first ride was on 488, the second on 431 and finally 494. Each ride was a round trip from Letňany to Čakovice and back, 3.3 km in each direction, with no stops. There were also refreshments and souvenirs available at Letňany.

The five historic trolleybuses operated this service until late afternoon, while 9506 ran through to Palmovka. As it approached the roundabout at the Čakovice shopping centre the booms were lowered and it continued on battery power, connecting with wires again at Prosecká. On the return journey it repped using the overhead funnels at Čakovice.

Sunday 16 October

For most of the day the weather was much improved. The six trolleybuses were again in service but only the SOR TNS12 was on static display. As well as 9506 operating through to Palmovka, Plzeň 488 operated one through journey, using its diesel generator for the unwired sections.

A large number of enthusiasts either walked the route to take photos or used the bus services. A curator from one of the museums drove his motorcycle up and down the route while his wife filmed the trolleybuses from the sidecar.

Developing the network

It has been suggested that as the new trolleybuses arrive they will enter service on bus route 140, which will become trolleybus line 58, and that a formal launch will be held in the Spring.

The conversion of bus route 119 between Václav Havel Airport and Nádraží Veleslavín metro station is expected in the first quarter of 2024. Elektrizace železnic Praha a.s. has been awarded the contract to electrify the line and work was expected to have begun by the end of November. A total of 11.6km of overhead line is to be installed, covering about 50 % of the existing route. Charging points are also to



Above: Cutting the ribbon to declare the system open.

be installed at the Airport terminus, the Nádraží Velešlavin terminus and at the Řepy garage, where adequate facilities will be created for the 20 Škoda-Solaris double-articulated trolleybuses.

Part of the overhead line will also be supplied from the new Dědina substation, which DPP is building for the new Divoká Šárka – Dědinská tram line. DPP will equip it with the appropriate technology so that it can serve trams and trolleybuses at the same time.

A tender has been announced for the purchase of up to 70 12m trolleybuses equipped with batteries that are expected to have a range of 15km with a fully-loaded vehicle. The framework contract will allow the continuous purchase of new trolleybuses up to 2028 as the new electric services are introduced on current bus lines Nos. 131, 137, 176, 191 and 201. The winner of the contract is expected to be announced before the middle of 2023.

The contract should also include up to 70 traction batteries, 20 portable chargers and 35 sets of hardware and software for

fault diagnostics. The evaluation criteria will be weighted 68% by cost, other criteria being the length of the warranty for trolleybuses (20%), the length of the warranty for the traction battery (7%) and the delivery date of trolleybuses (5%), while the maximum period should not exceed 14 months from the order.

The vehicles serving line 201 will use Klíčov Garage, where the SOR TNS 18 trolleybuses for line 58 will also be garaged from next year.

The Ekova Electron 12T is to return to Prague for a six-month hire to replace the Hradec Králové Škoda 30 Tr. It will be used on line 58 at weekends and for driver training at other times. Ekova Electric was once a subsidiary of the Ostrava Public Transport Company but following takeover by the Škoda Group now trades under the name Škoda Ekova.

Some of the information for this article has been obtained from Československý Dopravák magazine.

Below: Seen on the first test journey to use the new overhead line from Letňany on 6 October, Škoda 24 Tr 9508 is being followed by an overhead crew. [Libor Hinčica]







Page 234, upper: Plzeň 488 was used during the walk to provide participants with a tour of the new line on the day before it opened.

Page 234, lower: on static display were the Jihlava SOR in Prague livery, Praha 9508 and the 1936 Praga TOT, 303. Only the SOR was displayed on the Sunday.

Above: Lined-up, ready to start operating the service of historic trolleybuses are (left to right): Praha 431, Praha 494, Pardubice 358, Hradec Králové 311 and Plzeň 488. On the far right is the Škoda 30 Tr which is on loan from Hradec Králové to operate service 58. It has been given fleet number 9506 and was about to operate the 58 using the new overhead for the first time.

Below: Plzeň 488 and Praha 494 turn at the roundabout outside the Globus supermarket. To the right the road is wired for a short way for service 58.











Page 236, upper: The Praga TOT attracted a large crowd when it was winched onto a low loader ready to return to the transport museum.

Page 236, lower: 431 arrives back at Letňany towards the end of the day.

Page 237, upper: For the second day of operation the trolleybuses no longer needed their running numbers. Pardubice 358 and Hradec Králové 311 wait at Letňany where they are about to be joined by Plzeň 488.

Page 237, lower: The weather improved considerably on the Sunday, as witnessed by this view of Hradec Králové 311.

Page 238, upper: A packed Praha 431 arrives at the Globus roundabout.

Page 238, lower: After arrival from Palmovka 9506 has rewired and will continue to Letňany under wires.

Above: Souvenirs. Top to bottom, column 1:

50 let poté (50 years later) leaflet produced by the Prague transport authority about the new trolleybus system; 86. výročí zahájení provozu trolejbusů v Praze (86th anniversary of the start of trolleybus operation in Prague) commemorative leaflet produced by the Prague transport authority; badge depicting a Tatra trolleybus with the words "Trolleybus the best electric bus. Prague comeback 15/10/2022". Column 2: fridge magnet with Tatra and words "Prague no more without trolleybuses"; wristband for first three trolleybus rides; key ring and bottle opener with same wording as the badge; Po Praze opět trolejbusem (Around Prague again by trolleybus) 12-page booklet by Libor Hinčica published by Cegelec. Column 3: card model of a Prague SOR TNS 18 trolleybus, Trolejbusem na Zbraslav (By trolleybus to Zbraslav), 40-page booklet by Libor Hinčica published by Československý Dopravák magazine.

Marrakech in disarray

by Gunter Mackinger

A great idea, a TRT (trolleybus rapid transit system) for the city of Marrakech opened in 2017 - came to an abrupt stop, when a lorry damaged parts of the overhead as well as feeder cables on 22 March. There have been difficulties with the trolleybuses as well as with the infrastructure. Problems of overhead construction can be seen by experts with the naked eye and it would be no big problem to solve this. But the city of Marrakech as well as the management of the TRT system have refused help from international organisations and experts.

When visiting Marrakech in August 2022 there was no sign of repair works or other positive works towards rebuilding the system and bring it back to operate for the

benefit of the city, which suffers from a very substandard public transport system, with only a few bus lines. There is no replacement operation for the TRT system so people have to use taxis or other forms of transport. 6 of 15 Dongfeng Yangtse trolleybuses are stored at a small depot at Massira terminus, which is locked and closed.

It is to be hoped that the responsible politicians and managers use their chance to develop a modern, fast and clean transport system for the benefit of their wonderful, historic city.

Photographs taken on 18 August



Left: The reserved lanes are not in use while the trolleybuses are not running.

Right: All that can be seen of the six trolleybuses stored at the locked Massira depot.

BTS Calendar 2023



British Trolleybus Society 2023 Calendar
Trolleybuses in Company: Photographs and captions by Tony Belton

Trolleybuses in Company is the 2023 theme. Once again Tony Belton has picked out a fascinating selection of photographs that he has taken spanning more than 60 years. There are seven UK scenes and six from

around the world showing trolleybuses in company with trams, buses and other trolleybuses, with all the scenes described in Tony's inimitable style. He has kindly donated the cost of printing and so every penny from the sale is profit and all profits go towards trolleybus preservation.

They make great Christmas presents, so buy lots! £12 including postage and packing by post from BTS Sales 1 Mentmore Road, Leighton Buzzard LU7 2NY or online:

[British Trolleybus Society](http://BritishTrolleybusSociety.com)

MUSEUM & PRESERVATION NEWS

Edited by Jody White



Beamish, the Living Museum of the North

News from Beamish is that Teesside 11 arrived in early October, joining Newcastle 501 which still resides in the Tram Shed. Whilst trolleybus operation is still some way off, it is an encouraging sign for the future. Congratulations Beamish! Trevor Hall.

Black Country Living Museum

The trolleybus service will not be running for the rest of this year, but the Museum has much to offer.

Join Black Country Museum for their Christmas festivities!

- Glad Tidings 9, 10, 16, 17, 18 December – 6:30pm to 10pm

“Gather around our hearths, braziers and fires and enjoy the merry atmosphere as you take in carols and Christmas stories. Explore our historic village as you discover Christmas through time, from the origins of a traditional Victorian Christmas to the vintage crooners and TV specials of the 1950s and 60s. Hear carols around every corner as choirs and bands perform a host of jolly tunes and get a flavour of a Caribbean Christmas as our steel band brings classic winter songs to life. Bring a bit of the Museum home with you by creating some truly traditional Christmas

Below: Teesside 11 is seen parked outside the Tram Shed at Beamish on 9 October.

[Trevor Hall]



decorations and have a browse for some unique presents for friends and family. Plus enjoy a taste of all your Museum foodie favourites!"

(Recommended age for this event age 8+)

- Santa Hunts - Various dates and timeslots available until Saturday 24 Dec.

Please note that tickets can only be booked via telephone at 0121 520 8054.

Santa is playing 'hide and seek' this year! The Elves need the childrens' help to solve the clues and find him! So, visitors get on the bus and start looking around the village to find the jolly old man, so the children can meet Santa and get their gifts! Bring your camera! Of course, the museum won't forget the adults... they will be given a voucher for a complimentary mulled wine or non-alcoholic drink plus a mince pie.

There are many other festive tasks at the Museum to prepare for Christmas, so have fun and join in!

(Recommended age for this event is 3+)

Black Country Living Museum, Tipton Rd, Dudley DY1 4SQ

East Anglia Transport Museum Special Events

Ride the Lights 2022 2pm-6pm Saturdays and Sundays throughout December, excluding 24th and 25th.

The Museum brings visitors some Christmas cheer by opening their doors for some seasonal (and completely COVID-secure) tram, trolleybus and train rides, with lovely decorations especially for the occasion.

- No pre-booking needed
- All rides included in the admission price
Museum Shop & Cafe open for gifts and light refreshments
- Fascinating displays of vehicles and artefacts around the museum site

Happy New Year 2023 January 1, 12 noon – 4:30pm

Come along for a last chance this winter to ride on the vintage vehicle fleet, including a free bus service to Lowestoft, as well as the museum's many other attractions.

EATM Chapel Road, Carlton Colville, Lowestoft NR33 8BL

Longshop Museum

See Santa in his Grotto on Saturday 10 December from 1pm – 7pm! Tickets available only in advance at

<https://bit.ly/3gkdOq9>

For further details, please contact the Long Shop Museum at

info@longshopmuseum.co.uk

Tel 01728 832189

Main Street, Leiston, Suffolk, IP16 4ES

Netherlands

Stichting Trolleymaterieel Arnhem (STA)

Significant progress has been made since April. Three of the preserved trolleybuses are now operational, passenger rides have been given, the Arnhem city council has expressed its appreciation for the efforts and the results achieved by the STA, and the number of supporters has grown too.

Now it is important to keep the momentum. The STA will have existed for five years in the second quarter of 2023. That calls for a party! More than a year later, in September 2024, the Arnhem trolleybus network will celebrate its 75th anniversary. The municipality of Arnhem as the legal owner of overhead wires and buildings used by public transport, the management of the public transport company Transdev-Hermes and the board of the STA have announced that they will work together to bring this milestone to the attention of the population.

Herman Wilmer

The Trolleybus Museum at Sandtoft

Marseilles 202 returned from storage at Keighley Bus Museum on 2 November and became the fifth trolleybus to be stored in the new David Croft Depot.

The final operating day of 2022 was the Twilight & After Dark Trolleyday on 20 November. The Museum will be closed to visitors over the winter but several working parties are planned, including some full weeks dedicated to building the Sandtoft District Railway. The dates for these will be announced in News & Events. There are also plans to have working parties on the last weekend of January, February and March to prepare for reopening for the Easter weekend, Saturday 8 – Monday 10 April.

A full programme of events is planned and will be published shortly. Following the success of the full week of opening in August the Museum will be continuing its strategy of opening more frequently by having three full weeks of opening in 2023. This will see a 50% increase in the number of open days compared to previous years. As part of its Forward Plan the Museum will be improving its offer for visitors with disabilities. A wheelchair lift is being purchased and the 2023 programme will include certain days when wheelchair users will be able to ride on a trolleybus.

Johannesburg 589/London SA3 Class

The Museum's major restoration project has made significant progress over the last twelve months, with most of the body's structural renovation complete, stairs and the platform area reinstated, destination and number blind boxes refurbished, windows and mechanism in place, both saloons received new ceiling panels, decorative wood trims have been shaped, stained and varnished.

The restoration is moving into the fitting-out stage. The interior has to be painted, the interior trims finished off and fitted, fabricating and fitting both interior light units and the bell system (which employs cords



New wiring has been installed.
[D G Chick]

and cord holders, not bell pushes), floor traps, floor covering and treads, rubber treads to the stairs, platform and front exit steps, and the major task of completely refurbishing and fitting the seats.

589 was part of the batch built as a replacement for the trolleybuses that could not be exported during the Second World War, and is almost identical to those vehicles, which became London Transport's SA3 class. It will be given the SA3 modifications and will be launched in London Transport livery, telling several important stories. After about five years



The restoration work is being carried out to a very high standard. This shows the mechanism for the full-drop windows which were necessary in the heat of South Africa.
[D G Chick]

those modifications will be removed and it will be given Johannesburg livery.

The project team estimates that another £50,000 to £60,000 is required to complete 589's restoration. Some materials and parts could yet be the subject of donations from specific suppliers or organisations. However, funds are almost exhausted now and the team is seeking help to keep the work going.

Can you help with this last push? If you are able to help, the team would be most grateful. The easiest ways to donate is using the Appeals page on the Museum's website – see the link below. Just select an amount to give (which can be Gift Aided).

Alternatively send a cheque made payable to "The Johannesburg 589 Fund" to TM@S Financial Director John Francis at 8 Cottage Fields, Eaves Green, Chorley, Lancashire, PR7 3QE.

[Appeals – Trolleybus Museum at Sandtoft](#)

World News

Edited by Bruce Lake



ARMENIA Yerevan

It has been confirmed that Yutong is to supply the 15 new trolleybuses reported in Trolleybus 735 and that they were under construction in mid-October.

AUSTRIA Linz

The Ministry of Transport has approved grants totalling €122 million for the procurement of electric buses across Austria, including 16 double-articulated trolleybuses for Linz, to join the 20 similar Van Hools in stock. The additional vehicles are intended for the introduction of new high-performance lines 47 and 48 in the east of Linz which will use the new railway bridge over the Danube. There are also plans to extend trolleybus lines 41 and 43, which will also require an increase in the trolleybus fleet.

CZECH REPUBLIC Jihlava

A new Škoda 26 TrNU, to be numbered 94, was delivered on 8 November.

CZECH REPUBLIC Praha

As described in depth elsewhere in this edition, special events were held on the weekend of 15 and 16 October to commemorate the 50th anniversary of the closure of the previous trolleybus system and to launch the new system.

Prague DP has announced a tender for the purchase of up to 70 12m battery trolleybuses. The framework contract will allow the continuous purchase of new trolleybuses up to 2028 as the new electric services are introduced on current bus lines Nos. 131, 137, 176, 191 and 201.

Elektrizace železnic Praha a.s. has been awarded the contract to electrify the line to Václav Havel Airport. Construction was to begin by the end of November and the company will have 15 months to complete it. A total of 11.6km of overhead line is to be installed, covering about 50 % of the existing route of bus line 119 from Nádraží Vevešlavín terminus to the Airport. Charging points are also to be installed at the Airport terminus and at the Řepy garages, where adequate facilities will be created for the double-articulated trolleybuses.

CZECH REPUBLIC Teplice

A tender has been published for the supply of ten new trolleybuses. Eight will be 12m and will replace diesel buses, leaving only line 110 diesel-operated. The other two will be articulated and will replace similar trolleybuses. The transition to exclusively trolleybus operation will happen in 2024, when the municipal transport company will take over operation from Arriva.

CZECH REPUBLIC Ústí nad Labem

Commencing next year, up to 33 Škoda 27 Tr battery-equipped trolleybuses will be delivered. They will have two traction motors and thus two drive axles. This solution will allow a smoother ride in the local hilly terrain, especially in bad weather conditions.

ECUADOR Quito

In October it was announced that the planned purchase of

10 new trolleybuses for this year had been reconsidered, and 25 new vehicles would be purchased. The new battery trolleybuses should start arriving in spring 2023.

In December 2022, the last vehicles from the first batch of 54 delivered in the mid-1990s are to end operation, leaving only the remaining trolleybuses from the second batch of 59, delivered in 1999 and 2000. At one time the fleet strength was 113 and now more and more buses are running under the wires of the Quito trolleybus BRT corridor. The city is considering converting some older buses into trolleybuses.

GERMANY Esslingen

The major expansion of this small trolleybus system has come closer with the award of



An artist's impression of the new Van Hool model A18.
[Van Hool]

a contract to Van Hool for the supply of up to 46 new battery trolleybuses, 12 of which will be 12m and 34 articulated. The present fleet strength is ten.

The vehicles will be from Van Hool's new "A" series, the A12T and A18T which was introduced at the end of last year and is to be produced at the company's plant in North

Macedonia, which has only produced touring coaches so far. The 12m vehicles will have 31 seats and 37 standing and the artic 46 seats and 75 standing. The latter should be delivered from May to November 2024 and the rigid trolleybuses in November 2024. All should be put into operation by April 2025 at the latest.

HUNGARY Budapest

The fleet now includes 60

Line 82 was extended to the metro station Mexikói út on weekends from 19 September 2020 and has operated every second journey daily from 12 March 2022.

The prototype and sole example of the Ikarus 411T No.400, built in 1994, is still in use and stands out with its green/orange paintwork.

HUNGARY Szeged

Trolleybus lines 7 and 7A were discontinued from the

decree confirming the safety of the new trolleybus system, and it was expected to open in November.

However, the city council has decided to reorganise bus services in connection with the opening of a new bus station, which is not served by the trolleybus line. The Van Hool trolleybuses, having been built some time ago, are equipped with auxiliary diesel engines and could serve the bus station in diesel mode, increasing operational costs and emissions. If trolleybuses do not serve the terminal they will attract fewer passengers, which will have a negative impact on revenues.

ITALY Genoa

In October a tender was announced for the preparation of project documentation and the subsequent construction of three new trolleybus lines as part of a system of four transport corridors, which will mainly have dedicated bus lanes and priority at junctions.

Originally, the plan was to operate trolleybuses on all four axes, but following some opposition some local politicians proposed that battery-electric buses would be used instead of trolleybuses. However, the Italian Ministry of Sustainable Infrastructures and Mobility (Ministero delle infrastrutture e della mobilità sostenibili), as a traditional supporter of trolleybuses, opposed the change, mainly on economic grounds, and so trolleybuses were retained in the plan for the eastern, western and central axes, the only exception being the Valbisagno valley lying to the north, which will use electric buses with fast charging.

The original plan, from about five years ago, was for the lines to be fully wired but the new plan is that trolleybuses will run only partially under the



Budapest Solaris Trollino 18 No. 9100 waits at Orczy tér terminus, outside the tram depot, on service 72M. Behind is 2007 Solaris Trollino 12 No. 607 on service 83.
[D G Chick]

trolleybuses with batteries, allowing some lines to be extended without additional overhead. Lines 72 and 73 were extended to Deák Ferenc tér from 7 March 2020. During the renovation of part of the M3 metro, line 72 was extended by a total of almost 5 km to Orczy tér from 2 November 2020, running from Nyugati station to Baross u for just under 3 km in battery mode. On the Baross u about 300 m of overhead has been erected. The extended line 72 became 72M to indicate that it replaced the M3. Line 73 terminated in front of Nyugati station on 15 April 2022 and returned to Keleti station in battery mode on the Teréz körút – Váci út – Ferdinánd híd route.

timetable change on 16 June, with line 9 now serving the western terminus of the former line 7 in Bakay Nándor utca.. Only Nos. 863 and 865 are still in use of the six Mercedes-Benz Citaros which were converted into trolleybuses, with the other four being cannibalised.

ITALY Avellino

Officials from the Italian Agency for the Safety of Railways and Road and Motorway Infrastructure (ANSFISA) visited Avellino in October to inspect the new trolleybus installation, which could not be opened due to technical deficiencies discovered by an inspection by the same agency in August. They were satisfied with the remedial work and promised to issue a ministerial

wires, so they will be purchased with batteries. Tenders for new vehicles will be announced later, involving 145 18m trolleybuses and electric buses. The work must be completed by 2026. The implementation of a fifth axis, using electric buses is being considered, and the city council applied to the Italian government last year for funds.

ITALY Pescara

The first of the six Van Hool Exqui.City 18 battery trolleybuses was presented on 7 October. Next year they will enter service on the new Pescara – Montesilvano line.

MEXICO Mexico City

The elevated BRT trolleybus line 10, "Trolebús Elevado", opened for passenger traffic at 05.00 on Saturday 29 October. The launch ceremonies and

be doubled in length when it is extended to Santa Martha. The Tulipán station is still being completed and is therefore closed to traffic.

The line requires 26 trolleybuses, of which 9 will be city-owned articulated Yutongs and 17 rigid Zhongtongs of type LCK6126E owned by private company IXTAPALLI RUTA 14 S.A. DE C.V., which was established by two companies owning most of the minibuses which previously provided services along the route.

Construction of the interurban 18 km trolleybus BRT corridor Santa Martha – Chalco is progressing. It will connect to the new elevated trolleybus line when it is extended to Santa Martha. Construction of a new depot in Chalco has started.



A batch of Mexico City's Zhutong trolleybuses soon after delivery. [STE]

trial operation had been held on 11 September. A short section of overhead had yet to be erected near the western terminus Constitución de 1917 and also at the exit in the area of the current second terminal stop, UACM, which is now called Acahualtepec, meaning that there has been battery operation over part of the 7.4 km long route. The route is to

MEXICO Puebla

Feasibility studies have been commissioned for the possible introduction of a trolleybus system in this city with 1.5 million residents, situated 140km south-east of the capital.

POLAND Lublin

The past decade has seen huge investment in extending the trolleybus infrastructure

and the expansion of the trolleybus fleet. In 2021, when 15 Solaris Trollino 18 articulated trolleybuses entered service, the 30 Trollino 12s with Škoda electrical equipment purchased in 2011 and 2012 became surplus. Nine have already been sold to other operators in Poland, five to Gdynia and four to Tychy. Of the remaining 21 (3849-3857, 3859-3866 and 3870-3873), 20 have now been sold to Vinnitsya, Ukraine.

PORTUGAL Coimbra

The trolleybus service on the remaining lines 4 and 103 has been interrupted by road construction work since 23 March 2021. The possibility of resumption will only be considered after completion of the construction of the BRT "Metrobus" system, which will not be before the end of summer 2024. Four of the trolleybuses still in service will be 40 years old by then. Individual sections of overhead in the centre will be removed during construction work. Should trolleybus operation return the administration is suggesting, among other things, the possibility of historic operation for tourists.

ROMANIA Târgu Jiu

The first of the new battery-equipped Solaris Trollinos was delivered in early November.

ROMANIA Timișoara

From 29 August trolleybus lines 15 and 16 have operated as circular services, with line 16 running clockwise and line 15 running anti-clockwise.

RUSSIA Bryansk

Delivery of 36 trolleybuses on order from Trans-Al'fa has been very slow and the city has begun charging Trans-Al'fa penalties. A local independent transport expert has criticised the decision to purchase Avangards, because he says that 75% of the components are imported, in many cases from countries

that the Russian Federation has designated as hostile (eg Italy, Poland, Germany, Czech Republic). In addition, the local transport company does not have experienced employees to repair some components.

RUSSIA Chita

Trans-Al'fa delivered 45 new trolleybuses in 2021 but delays are expected to the delivery of another seven that are on order. Additionally, the local Sputnik Cultural and Leisure Centre intends to order three trolleybuses and Trans-Al'fa is expected to be the preferred manufacturer. It is not known why a cultural organisation is ordering trolleybuses.

RUSSIA Khabarovsk

Ten new battery-powered trolleybuses will be delivered by the end of December. Some defunct trolleybus lines are to be restored and the surviving network will be reconstructed to allow effective charging of the new trolleybuses. The overhead has remained in place on many of the trolleybus lines that have been abandoned in the last 15 years, so it is possible that lines could be extended using battery power.

RUSSIA Omsk

In October a tender was announced for 40 new trolleybuses. It is likely that they will be supplied by PK Transportnye Sistemy. This will bring the total of modern trolleybuses to 111 out of a fleet total of around 140. Omsk is one of the few Russian cities planning to build new trolleybus lines. The 9 Admiral trolleybuses do not have batteries and the vehicles being ordered will have only a small battery with a minimum range of at least 100m.

RUSSIA St Petersburg

Trans-Al'fa is to deliver 23 articulated trolleybuses by the end of this year. The first, the new VMZ-6215.01, arrived at the end of October. More than 50 of 166 rigid trolleybuses on order had arrived by October, with the rest due by the end of June 2023.

RUSSIA Vladimir

Five new trolleybuses ordered from Trans-Al'fa were due to be delivered by 6 October and an additional vehicle was added to the order for delivery by 20 November.

RUSSIA Yaroslavl

Four new trolleybuses ordered from Trans-Al'fa had not arrived by September when they were expected and are now due in December. However, they will not significantly rejuvenate the aging trolleybus fleet.

RUSSIA Yekaterinburg

A tender for the supply of 45 trolleybuses will see the city receive its first new trolleybuses since 2013. Yekaterinburg has about 200 trolleybuses that are capable of service, some of which were built in Soviet times. The average age of the vehicles is 24 years. It is hoped that the competition will drive down the unit price and that it will be possible to buy 50 new trolleybuses.

The vehicles must last at least 15 years and have an autonomous battery range of at least 20 km. Roughly half of the number of trolleybuses purchased should be delivered by the end of this year and the rest in the first half of next year. Following a poll organised by the local council, they will wear a new blue livery.

SLOVAKIA Prešov

A contract for four 12m trolleybuses has been won by SOR Libchavý, with electrical equipment to be supplied by Cegelec. They are to be delivered before the end of 2023. The tender, which was issued on 2 February 2021, also calls for six articulated trolleybuses. However, an error in the electronic bid submission process and the subsequent appeals and investigations has delayed both parts of the order and the contract for the articulated vehicles has yet to be resolved.

SWITZERLAND Lausanne

VMCV 805, a Van Hool Exqui.City, was demonstrated here in mid-October, but it is understood that it will not result in an order being placed.

SWITZERLAND VMCV Montreux

Exqui.City 805 was demonstrated in Lausanne in mid-October.

UKRAINE Vinnitsya

Twenty Solaris Trollino 12s with Škoda electrical equipment dating from 2011 and 2012 have been purchased from Lublin, Poland. The fleet currently consists of 162 trolleybuses, of which 103 are high-floor. 101 are of the type ZiU-682 (ZiU-9).

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Rear Cover: Praha 9000 is not a Prague trolleybus! Because the articulated SORs have not yet been delivered, the first of the 12m version for Jihlava was painted into the new Prague livery specially for the launch.
[D G Chick]

