

TROLLEYBUS

Vol. 60 No. 724

November 2021



The magazine of the British Trolleybus Society



London Buses for Trolleybuses Stage 12

A Development Plan for Sandtoft

Trolleybuses of the Humber Project

TROLLEYBUS

The magazine of the
British Trolleybus Society

No. 724 November 2021

Editor: Dave Chick

23 Pryor Close, Purley on Thames,
Berkshire RG31 6UG
editor@britishtrolley.org.uk

Production Editor:

Philip Jenkinson

32 College Street, Crosland Moor,
Huddersfield HD4 5EB
blindlemonjenkinson@btinternet.com

Preservation News Editor:

Jody White

20 Cunningham Crescent,
Chatham, Kent ME5 0ES
museumnews@britishtrolley.org.uk

World News Editor: Bruce Lake

11 Greenfinch Grove, Netherton,
Huddersfield HD4 7LH
worldnews@britishtrolley.org.uk

Distribution: Derek Pearson

25 Caldbeck Drive, Woodley
RG5 4LA
distribution@britishtrolley.org.uk

Subscriptions and Membership:

Andrew Barton

2 Josephine Court, Southcote
Road, Reading RG30 2DG
secretary@britishtrolley.org.uk

Website:

www.britishtrolley.org.uk

Printed by Barden Print
Birkby, Huddersfield
Telephone (01484) 422522

*Trolleybus should be regarded as
overdue to subscribers if not received
by the 20th of each month*

© The British Trolleybus Society
Registered Charity No. 1033666

B T S NOTICE BOARD

BTS MEETINGS – BY ZOOM!

Meetings will continue to be held by Zoom on the first Friday of the month until the end of the year. Join the meeting from 19.15 and the presentation will start at 19.30.

We are expecting to restart meetings at the Oddfellows Hall in Reading with effect from January 2022, and an announcement will be made next month.

Friday 3 December Review of the year - bring your own slides! It's easy to share your screen. Please contact the Editor for advice on this and to set up a trial run before the meeting.

Use this link to join the meeting:

<https://us02web.zoom.us/j/86593498831?pwd=azhXWkp0eWlWbM5kK202MXkrczJ0UT09>

Meeting ID: 8659349 8831

Passcode: 854824

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

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 17 November Keith Farrow: A London Surprise

MONTHLY PRIZE DRAW

The winners in the October Prize Draw were:

£70 **P J Smith**, Cardiff

£50 **C Hayler**, Long Eaton, Derbys

NEW MEMBERS

We are pleased to welcome the following new members to the Society

Keith Burbidge, Bournemouth

Trevor Hall, Newcastle upon Tyne

On The Cover

Ústí nad Labem 601, the second prototype Škoda 22 Tr is seen on 8 October following its test run after almost eleven years off the road. See World News for details of its refurbishment.

Petr Šašek

TROLLEYBUS 724



Monthly Prize Draw 2022

Make a difference to Mexborough & Swinton 34

Monthly Prize Draw No. 52 will benefit our Garrett trolleybus. The restoration fund is building and there is a very real prospect that in 2022 we will join with the Long Shop Museum to have essential parts manufactured for our respective Garretts.

Changes to Draw rules

We are making some changes which we hope will make the Draw easier to join and raise more funds for restoration.

Following feedback from members the closing date will be much later than usual.

The payment arrangements have been slightly modified and are detailed in full on the application form.

The application form is included with this edition of *Trolleybus*. Please complete and return it as soon as possible. It must be received by the Prize Draw Organiser, Andrew Barton, by 31 December.



British Trolleybus Society 2022 Calendar

Trolleybus Tours: Photographs and captions by Tony Belton

BTS Calendar 2022

Featuring 13 photographs and captions by Tony Belton on the theme of trolleybus tours, our latest calendar is selling quickly, so make sure of your copy by ordering now. They make great Christmas presents, so buy lots - all profits go towards trolleybus preservation! £12 including postage and packing by post from BTS Sales 1 Mentmore Road, Leighton Buzzard LU7 2NY. Order online [Other Publications from the British Trolleybus Society](#)

BTS EGM Friday 7 January

A ballot form was to have been distributed with the October edition of *Trolleybus* seeking support for the Committee's nominee to fill one of the Custodian Trustee vacancies and setting out a motion to increase subscription rates.

Because of the late delivery of the printed version of the magazine it was decided to omit the form and so it is included with this edition.

Part of the January meeting, to be held in the Oddfellows' Hall, Reading will be an Extraordinary General Meeting (EGM) to consider these resolutions. Members may return this form by post or email or may hand-deliver it at the

EGM. Details are shown on the form, which may also be downloaded from the Members' Area of the website.

*Dave Chick
Chairman*

Late Delivery of Magazines

My apologies to members for the late delivery of the October editions of our magazines. The package containing *Trolleybus* and *Wheels* was delivered to our distributor, Derek Pearson, two weeks late following a problem with the courier company. I am grateful to Derek for posting them immediately on receipt so that most members received their magazines within 24 hours of Derek taking delivery. DGC

Development Plan for Sandtoft

DAVE CHICK

An historic agreement was reached on 29 August when the directors of the Trolleybus Museum at Sandtoft met with the BTS Committee to discuss the Joint Working Group's (JWG) ambitious expansion and improvement plan to create a vastly improved visitor experience with accessibility and inclusivity at its heart.

The Plan in Detail

The Burntwood gateway will be rebuilt to provide a main entrance from Belton Road leading to a new public car park, freeing the Museum from its dependency on its neighbour for access. Visitor entry and exit will be through a new combined reception and shop.

The trolleybus running line will be considerably extended, with overhead wiring along a new road leading to a long continuous run from the north to the south of the site. A powered line which will be provided

for the operation of the Cedes-Stoll replica trolleybus will be the first Cedes-Stoll line to be built since 1921. Sandtoft will be the only place in the world where a trolleybus can be seen operating with an over-running trolley.

Two new exhibition halls will be constructed, one housing the replica and a permanent exhibition called "The Birth of the Trolleybus". The building is being designed to be suitable for visitors with a variety of disabilities, with space for wheelchair users to view the exhibition comfortably.

In the longer-term a spacious new building will house a selection of trolleybuses which tell the story of the trolley vehicle in the UK and of the people and trades needed to service a trolleybus system.

The 7¼" gauge Sandtoft District Railway will run from a station near the tram shelter, then crossing the ditch and heading north. Detailed planning work is under

The volunteer team at the Long Shop Museum, Leiston, is making good progress with the long-term restoration of Ipswich Garrett No. 26 in the workshop. A similar facility at Sandtoft will allow major restorations to be undertaken.

(D G Chick)



The Trolleybus Museum at Sandtoft and British Trolleybus Society Joint Working Group

Outline Development Proposals Initial Discussion Draft 1.4 (15 October 2021)



KEY — Trolleybus route extension — Railway — Cedes line

EXISTING BUILDINGS

- | | |
|-------------------------|-----------------|
| 1 RECEPTION | 9 CYCLE SHOP |
| 2 FAMILY ROOM | 10 CAFE |
| 3 TOILETS | 11 GIFT SHOP |
| 4 WORKSHOP | 12 TOY MUSEUM |
| 5 MAIN DEPOT | 13 REGAL CINEMA |
| 6 STORES | 14 BURNWOOD |
| 7 1950s PREFAB & OFFICE | 15 ANNEXE |
| 8 TRAM SHELTER | |

PROPOSED NEW BUILDINGS

- | |
|----------------------------|
| 16 NORTH DEPOT |
| 17 EXHIBITION HALL |
| 18 RECEPTION AND SHOP |
| 19 RESTORATION WORKSHOP |
| 20 FAMILY ROOM |
| 21 BIRTH OF THE TROLLEYBUS |
| 22 RAILWAY SHED |
| 23 TRACTOR SHOWROOM |

way including the preparation of a planning application

The excellent family facilities currently provided in the Skegness building will be transferred to a new structure within the relocated play area.

A new workshop will be built to permit major restoration projects to be undertaken at the Museum. Dedicated archive facilities will be provided, eventually to become a research centre.

Street scenes will be created and the JWG has looked at the way that the East Anglia Transport Museum has put false fronts on some buildings to give the impression of a street scene.

Paying for the Improvements

The funding strategy is partly based on guidance from a heritage consultant. An important recommendation was that the first funding application should be for a small scheme so that the Museum could demonstrate its ability to manage projects and start to build relationships with funders. The Trolleybuses of the Humber exhibition, reported elsewhere in this edition, will provide an additional attraction and pave the way to submitting bids to fund other elements of the plan. Probably the best known of the great many funding bodies is the National Lottery Heritage Fund.

Increasing the number of days' opening is an important part of this strategy, because funders will not commit significant amounts of money to a museum that only makes its collection available to the public on 30 days a year. It is unlikely, at least in the short-term, that the number of trolleybus running days will increase significantly. However, with new attractions being added it will be possible to open on some occasions without running trolleybuses. The Didcot Railway Centre provides a model for how this could work. It is

open for around 200 days every year but has locomotives in steam on fewer than 45% of those days, with the others being marketed as "Exhibition Days".

The JWG paid study visits to the Tramway Village at Crich, East Anglia Transport Museum and the British Motor Museum at Gaydon. Others had been planned but could not proceed because of lockdown, but we will continue to learn from museums of all sorts.

To keep members informed of and involved with these exciting developments, the first joint Sandtoft/BTS newsletter has been distributed by email, with more planned, so if you have internet access but you have not registered your email address on the BTS website, please sign up, to be kept informed. *Trolleybus* will continue to provide in-depth coverage of the progress. A series of briefings is being held, including one following the BTS AGM.

Plans for 2022

A contractor is being sought to widen the Burntwood entrance gateway. Construction of the railway will begin when planning permission is received and in the meantime preparatory work will start.

We are all volunteers and between us we have a wide range of abilities and experience. By working together we can achieve all these improvements and give the Museum and its collection a sustainable future. If you would like to comment on or help to achieve these plans please get in touch with me.

Let's create something we can be proud of!

The Joint Working Group Team

Appointed by BTS: Graham Bilbé, Dave Chick, Roy Fawcett, Francis Whitehead.

Appointed by STCL: Helen Cross, David Hanchett, Kieran Proctor, Jason Spencer. (Jason resigned from the team during 2021 and was replaced by Ian Wilson).

Buses for Trolleybuses Stage 12

Tony Belton wrote the article and took all the photographs

8 November 2021 will be the sixtieth anniversary of Stage 12 of London Transport's "Buses for Trolleybuses" conversion programme.

Two depots were involved: Finchley (FY) and Wood Green (WN)

For Finchley (FY) this was the first of two conversions with the loss of routes 521, 609 and 621

It was the final conversion at Wood Green (WN) with the depot losing route 641.

The following four routes were involved in stage 12:

521 operated by FY from North Finchley to Holborn Circus via Wood Green. Route 521 arrived at Holborn Circus via Grays Inn Road and departed via Farringdon Road (anti-clockwise);

609 operated by FY from Barnet to Moorgate;

Highgate (HT) also lost their Routemaster (RM) Sunday allocation on route 609;

621 operated by FY from North Finchley to Holborn Circus via Wood Green. Route 621 arrived at Holborn Circus via Farringdon Road and departed via Grays Inn Road (clockwise);

641 operated by WN from Winchmore Hill to Moorgate.

NB: the first photograph illustrates experimental chassissless trolleybus 954 which was the forerunner of an order for 175 similar trolleybuses numbered 1355 to 1529. Also note the cream band below the driver's cab; it was the only standard vehicle in the fleet with this feature.



A quiet Sunday morning in Holloway Road at Nags Head gives the crew of tower wagon DGJ 175 (83Q) the opportunity to check the overhead without causing too many traffic problems. Passing the tower wagon is 954 on route 521 which will shortly turn right into Camden Road and then left into Caledonian Road on its way to Holborn Circus.



Above: FY's no. 1513 is also on the way to Holborn Circus on route 521. It is passing Wood Green Piccadilly Line Underground Station in High Road Wood Green at the junction with Lordship Lane. This was a major trolleybus to Underground interchange.

Below: An atmospheric view, taken on the final morning in City Road, shows L3 1498 about to turn short at Windsor Terrace whilst N1 number 1547 waits patiently to pass on a through journey to Moorgate; both vehicles are on route 609. There was no frog at this location so the crews had to change the booms using the bamboo pole whatever the weather!





Above: This is the infamous “Suicide Bridge” on the Archway Road at Hornsey Lane. Chaos for passengers ensued when somebody decided to jump as there was no suitable trolleybus diversion route. In this view 1520 on route 609 to Moorgate passes under the bridge whilst approaching Archway Station. Below: L3 no. 1512 on route 621 is in Charterhouse Street at Holborn Circus terminus. Although it is only three days before the conversion the vehicle is in excellent condition, which shows the pride that the FY depot staff had in their trolleybuses.





Above: Taken from the upper saloon of a passing trolleybus is 1491 on route to Holborn Circus on the 621. The view in Green Lanes shows the large forecourt of Turnpike Lane Underground Station

Below: Trolleybuses entering WN depot from the north had to use a mixture of battery power and gravity as there was no overhead connection; some Drivers could pick up a good turn of speed whilst carrying out this manoeuvre! An example is Class K1 no. 1098 which has just finished its day's work on the 641.





Above: In my youth I spent many wonderful evenings watching the stock-car racing at Harringay Stadium. The location is in Green Lanes and WN's 1252 on the 641 to Moorgate has just passed under the bridge at the railway station named after the Stadium.

Below: What a lovely line-up! RT1303 on route 171 from Holloway Garage (J) on a crew change, 1277 on a 641 short working to Baring Street New North Rd, 1472 going to Holborn Circus on route 521 with an unknown RM on the 269 (formerly trolleybus route 629) in Green Lanes at Manor House Station.





Above: Highgate depot (HT) had a route 609 Routemaster allocation on Sundays only from 30 April 1961 until 5 November 1961. RM583 on its journey to Moorgate is photographed circumnavigating the roundabout at Highbury Corner.

Below: I chose to travel on the last 609 from Moorgate as I lived at Upper Holloway and it was very convenient for me to get home, especially as I was working the next day. When I reached my destination I decided to carry on and went another stop and yet another stop until we reached East Finchley where I just had to alight! A long walk home followed! The driver of 1456 kindly posed the vehicle to allow me to take this photo.



London Transport “Buses for Trolleybuses”

Stage 12: 8 November 1961

Route 521 North Finchley to Holborn Circus via Wood Green

Route 609 Barnet to Moorgate

Route 621 North Finchley to Holborn Circus via Wood Green

Route 641 Winchmore Hill to Moorgate



The location is Moorgate terminus on 7 November 1961; it's the final evening with only three more trolley-buses to depart before the end! First is 1353, the last 641 through to Winchmore Hill, followed by 1323 the last 641 to Wood Green and finally 1456 the last 609. Sitting upstairs at the front are enthusiasts Norman Rayfield, Francis West, Dennis Hagarty and Sid Hagarty.

*Number one in the charts on 7 November 1961 was
Walkin' Back to Happiness by Helen Shapiro*

Trolleybuses of the Humber

Dave Chick

The Trolleybus Museum at Sandtoft Museum has successfully bid for funding from the Humber Museums Partnership (HMP) for a permanent exhibition called Trolleybuses of the Humber, which will feature the trolleybus systems of Grimsby and Cleethorpes, the only systems that ever operated in Lincolnshire, and of Hull. It will be launched when the Museum re-opens for the 2022 season.

The stories of these systems, the people who worked on them and travelled on them to work, school and for leisure will be told through a series of information boards, maps and photographs. An oral history project will help to bring the stories to life by recording the recollections of people who remember the systems. Dioramas with model trolleybuses will help visitors to visualise the operation of trolleybuses in the Humber region from the 1920s to the 1960s.

Particular attention will be paid to making the exhibition as accessible and inclusive as possible and I will be working with a disability consultant who will help to achieve that aim.

Several members are already helping with this project, including the two leading experts on the Hull system, Malcolm Wells and Paul Morfitt. Tony Belton has provided his photographs of Hull trolleybuses and of former Grimsby-Cleethorpes trolleybuses operating in Walsall. John Whipham has offered to supply photographs from his Hull collection.

Dave Hall and Ashley Bruce will be assisting with the oral history project. After an approach by Malcolm Wells, the Carnegie Heritage Centre in Hull has offered to host a session for this project and one of their volunteers has already provided a fascinating

memory of a wartime incident involving a Hull trolleybus.

Advising the Museum that its bid had been successful, the HMP Small Grants Panel described Trolleybuses of the Humber as "A well thought-out project that delivers both skills and audience development."

Hull's fleet of trolleybuses is the largest in the UK not to be represented in preservation and was the only trolleybus operator to survive into the preservation age with no example preserved. Sadly, our Society's offer to buy a Coronation (Roe-bodied Sunbeam MF2B) was rejected and the Hull trolleybus fleet was sold for scrap, with some of the Coronations being barely ten years old.

Fortunately two Grimsby-Cleethorpes trolleybuses survive, both originally delivered to Cleethorpes Corporation and both now preserved at Sandtoft. One is a 1937 AEC 661T/Park Royal which is being restored as Cleethorpes 54 and the other is the 1950 BUT 9611T/NCB that was sold to Walsall as its No.874 and remained in original condition. It will be restored as Grimsby-Cleethorpes 159.

Would you like to help?

I am seeking people who remember trolleybuses running in Hull, Grimsby or Cleethorpes and would be happy to share their memories. Do you remember these systems or know someone else who does?

Do you have any artefacts relating to these systems that you would be prepared to donate or loan to the Museum?

Are you a skilled modeller with the ability to either scratch-build trolleybus models or convert and/or paint commercially available models?

If you answered “Yes” to any of these questions, please contact me (details on page 202).

Humber Museums Partnership is a consortium of the three local authority museum services in Hull, North Lincolnshire and East Riding of Yorkshire. Its Small Grants scheme covers 100% of the costs rather than requiring match funding, and 85% of the total is paid in advance. Successful applicants work with a mentor, Sarah Oswald, who has wide experience of working in the heritage sector. Other purposes of the scheme are to help museums to recover from the effects of the pandemic and to help to build experience which will be beneficial when applying for larger grants from bodies such as the National Lottery Heritage Fund.



Above: Grimsby.

The first trolleybuses to operate in the Humber region were seven Garrett S types with Roe bodies supplied to Grimsby in 1926 and 1927. Grimsby 2 is shown in this colourised publicity view.



Left: Cleethorpes.

Two trolleybuses are preserved at Sandtoft which were delivered to Cleethorpes Corporation and transferred to the Grimsby-Cleethorpes fleet when the two undertakings merged in 1957. Cleethorpes 54 was one of ten Park Royal-bodied AEC 661Ts received in 1937 to start the town's trolleybus service. After withdrawal it was sold for scrap and suffered serious damage in the scrapyards, but after years of painstaking work the restoration is nearing completion.



Left: Kingston-upon-Hull

In the trolleybus era all Hull's main roads were crossed by at least one railway level crossing, which could badly affect timekeeping. 1945 Brush-bodied Sunbeam W 70 turns from Princes Avenue into Spring Bank at the Botanic Gardens level crossing.

(Tony Belton)

MUSEUM & PRESERVATION NEWS

edited by Jody White



Trolleybus Museum at Sandtoft

The Museum is set to receive some very valuable publicity next year when an episode of *Bargain Hunt* airs on BBC1. A film crew arrived at 7 am on 2 October and spent several hours at the Museum. London 1348 was used for most of the filming, with Sandtoft President Bob Rowe being interviewed by presenter Natasha Raskin Sharp. The Cedes replica was parked with its trolley on the Stoll overhead and was used as a backdrop while Bob was interviewed about the early history of the trolleybus in Great Britain.

If at all possible we will let members know in advance the date when the episode is scheduled.

Long Shop Museum

In a previous edition of *Trolleybus* you will have read the news regarding the Garrett 'O' type trolleybus DX 5629 returning to the Long Shop Museum in Leiston, where it was manufactured. Consequently, I thought you might be interested in a bit more information regarding the Works and the Long Shop Museum, thanks to information from Long Shop's own website, plus other data.

It is an industrial museum dedicated to the history of Richard Garrett & Sons, a family business which operated from 1778 to 1932, manufacturing agricultural machinery, steam engines and trolleybuses.

According to the historic record, held by the Long Shop, the Garrett firm originated with the 1778 arrival of Richard Garrett in Leiston, and his subsequent purchase of a blacksmith's shop and forge. His son, also

named Richard, took over the forge in 1805, followed by his son, Richard Garrett the third, who expanded the business quite considerably. Indeed, the workforce increased from 60 people to 600+ by the 1860s.

The firm remained a family partnership until 1897, when it was incorporated as 'Richard Garrett and Sons Ltd'. At its peak the workforce numbered in excess of 2,000 and the firm exported agricultural machinery all over the world. Part of the works, including the pattern shop, was destroyed by fire in 1913 and some records were lost. A new works was built adjoining the railway station. The firm was involved in munitions work during the First World War, but it fell into financial crisis following the Russian Revolution, as the revolutionary government repudiated foreign debts. Garretts were forced into amalgamation with eleven other firms under the title of 'Agricultural and General Engineers' in 1920. In the early 1930s A.G.E. had financial difficulties and the constituent companies were sold off. Garretts were purchased in 1932 by Beyer, Peacock and Co Ltd. of Gorton, Manchester and re-named 'Richard Garrett Engineering Works Ltd'. In 1976 the Beyer Peacock equity was acquired by N.C.I. and in 1980, Garretts was sold again to the Nichol Industries Group in five divisions; the station works site was taken over by a company making box making machinery, but this went into receivership in 1985. The nucleus of the historic buildings, including the Long Shop, a Grade II listed building built in 1853, for the erection of portable engines on an assembly line

and the associated artefacts were purchased by the Long Shop Museum Trust and the surviving archives by the Suffolk Record Office.

So next time you want to visit another very interesting museum, consider a journey to the Long Shop Museum in Leiston, Suffolk. While discovering the town of Leiston itself, and the rich history of Richard Garrett & Sons, you will also be able to visit the Garrett 'O' type trolleybus DX 5629 under restoration, among plentiful other items. Main Street, Leiston IP16 4ES Telephone: 01728 832 189 Email: enquiries.longshop@gmail.com

Below: Bargain Hunt comes to Sandtoft! The film crew make their preparations while Sandtoft President Bob Rowe (left) talks to presenter Natasha Raskin Sharp.

Beamish Museum

After a number of years stored away from public gaze Newcastle 501 has been moved from the Regional Museum Store at Beamish back into the Tram Shed. Because the Museum Store needs the space and there is a new bus depot available, 501 was moved to reside in the shed in full view for visitors. *Thanks to Trevor Hall for the update.*



Above: Newcastle 501 seen on 16 September after moving to the Tram Shed at Beamish. (Trevor Hall)



D.G.Chick

WORLD NEWS

edited by Bruce Lake



ARGENTINA Córdoba

The operational trolleybus fleet has now largely been repainted to the uniform white-light blue paint scheme, including 63, the only BKM articulated trolleybus, the seven Trolzas delivered in 2015/16 and most of the older Russian ZILs, dating from around the time the system opened in 1989, some of which have undergone a fundamental renovation at the local manufacturer Marterfer in Santa Fe.

BULGARIA Khaskovo

The regional governor has rejected the municipal council's decision to approve a loan to improve the trolleybus infrastructure, allegedly because of missing documents and offers from potential contractors, and that the depot is owned by the municipality and not by the transport company.

BULGARIA Vratsa

Further to last month's report, the nine new trolleybuses entered service after the official presentation on 1 July. Line 1, which now runs every 30 minutes from 05.00 to 19.30, is the previous line 4. The former line 17 is now line 2 and also runs every 30 minutes.

CZECH REPUBLIC Brno

The first of 40 new Škoda 27 Trs commenced test running in Plzeň on 12 October.

CZECH REPUBLIC Opava

The trolleybus fleet is to be increased by three vehicles. A tender document published by the transport authority is seeking three 12m

trolleybuses without batteries, to be delivered in 2022. The deadline for bids was 11 October.

CZECH REPUBLIC Pardubice

Two companies have been awarded contracts for the expansion of the overhead line and power supply network. Two new routes will be built, one from Dukla Street to the main railway station will be 2.5 km long and will also provide a depot access route during road closures while Pardubice railway junction is modernised. This route will otherwise serve the extended line 7 (Nádraží - Dukla - Nádraží). The new line on Studentská will lead from Hradecka to the U Josefa roundabout and will serve increasing passenger demand from the Cihelna housing estate and the university campus.

Two new substations will be built, at Stadion and Trojice.

CZECH REPUBLIC Plzeň

Six new trolleybuses are due for delivery by Škoda Electric before the end of this year, comprising four 26 Trs and two 27 Trs. Two further 27 Trs will arrive next spring.

The new vehicles will have a slightly different appearance as they will use the facelifted Solaris New Urbino body.

CZECH REPUBLIC Ústí nad Labem

Almost eleven years after it was de-commissioned and following extensive refurbishment, Škoda 22 Tr No. 601 had its first test run on 8 October and was expected to re-enter pas-

senger service soon afterwards. Built in 1994, it was the second prototype 22 Tr and between 1995 and 1997 it was tested in passenger service in Plzeň, Ostrava and Brno before being taken to Ústí nad Labem, where it was tested until 2000. In 2002 it was joined by 22 Trs 602 and 603.

After a long delay and some false starts, in 2014/2015 local company ACIER refurbished 601's body as well as modernising some 15 Trs for the operator. There has since been a long delay in completing the required mechanical and electrical work because of staff shortages, the complexity of the work and difficulty in sourcing spare parts.

602 and 603 are also being refurbished.

ESTONIA Tallinn

The Solaris Trollino 24 double-articulated demonstrator has been on test here. It was photographed on tow on 11 October bearing the TLT logo and fleet number 451.

FRANCE St Etienne

The last six of the order for 23 Solaris Trollinos were delivered in July and entered service at the end of August with Nos. 148 to 153. Lines M3 and M7 can now be fully served by battery trolleybuses. The last Cristalis were withdrawn at the beginning of June.

Funding of €1.74 million has been approved for the conversion of further lines to battery trolleybuses. The "Chronobus M6 +" project will see the M6 line, which connects the La Métare campus with the city centre (Square Violette), extended by 2 km via Châteaureux to the Cité du design using reserved lanes.

The overhead line on around 4 km of the route is being renovated and will be used to charge the battery trolleybuses. 18 new articulated trolleybuses are to be procured by 2024 and will also be used on the M4 line.

GERMANY Eberswalde

On 16 August, Barnimer Busgesellschaft mbH (BBG) published a tender for the delivery of two articulated battery trolleybuses. The deadline for submitting bids was 30 September. The two new vehicles should arrive in 2023 to strengthen the current fleet of 12 cars and are primarily to be used on line 910 to Finowfurt, which is to be converted to battery trolleybus operation. This runs every 30 minutes for 4.5 km together with the two trolleybus lines 861/862 under overhead wire, with the terminal at Südend and Finowfurt being served in battery mode.

GERMANY Solingen

The first of the batch of eight 12m Solaris Trollinos was delivered on 17 September. For several years the trolleybus fleet has been composed entirely of articulated vehicles. The last new non-articulated trolleybus to enter service was No. 67 on 21 December 1987.

HUNGARY Budapest

Two new Solaris Trollino 18s with the facelifted New Urbino body and Škoda electrical equipment were being tested in the second half of September.

LATVIA Riga

Trolleybus operation of line 1 has been discontinued since 16 August because of roadworks. It is hoped that operation will resume by next year for its 75th anniversary.

The Solaris trolleybuses with fuel cell range extenders purchased in 2017/2018 are usually used on Line 4. The chairman of Riga City Council, responsible for traffic, transport and infrastructure issues, has expressed dissatisfaction with the ten hydrogen trolleybuses. The vehicles did not go

into operation until spring 2020 due to problems with the construction of the filling station and up to four vehicles with technical problems are still out of service, only six vehicles being in regular use. The problems relate to both hydrogen systems and vehicle construction. Repairs are currently being carried out within the scope of the guarantee.

MOLDOVA Chisinau

A contract was signed on 27 September for Belkommunmash to deliver a further 20 BKM 321 battery trolleybuses, to be assembled on site. Some of the delivery will be used on new line 38, which was opened on 30 June. The planned procurement for 2023 will be 90 rigid trolleybuses.

The current fleet of 434 trolleybuses still comprises more than 80 high-floor vehicles, including 44 ZiU 682 built between 1986 and 1995.

POLAND Tychy

Six new trolleybuses with In-Motion Charging are to be delivered soon. The power distribution system is being modernised, with substations being re-equipped and supervision and control to take place remotely.

Another element of the project is the installation of an additional buffer power supply, which will power the traction network at the time of increased electricity consumption by trolleybuses and electrobuses. All section insulators installed on the overhead line will be replaced by diodes.

TLT Tychy officially presented its historic Škoda 14 TrM on the occasion of European Mobility Week and also offered some trips with passengers. Built in 1996, it was originally Opava 78 and was purchased by Tychy after withdrawal in 2019. Today it serves as a reminder of the only vehicle of this type to have been used in Tychy. In 1998 a 14 Tr was used on a trial basis and given fleet number 024, but it did not lead to orders being placed. The vehicle was later sold to Riga, where it was numbered 1-131 and

later renumbered 14261.

ROMANIA Vaslui

The city administration has published two tenders, one for the construction of a new trolleybus depot and the other for the construction of three new sections of overhead line, on Gheorghe Doja in the Koket area in the north, on Traian and Str.Cast-anilor (Trajan Street and Kastanienstraße) and between the intermodal hub and the industrial area.

SLOVAKIA Bratislava

Following the order for 16 double-articulated Trollino 24s (reported last month), Solaris has won the order to supply 23 articulated Trollino 18s. The result of the tender for 11 12-metre vehicles is awaited.

SWITZERLAND

La Chaux-de-Fonds

Trolleybus operation will resume in 2023 after the delivery of new vehicles.

SWITZERLAND

St Gallen

St.Gallen's citizens accepted the proposal for the second stage of the fleet renewal of the VBSG in a referendum on 26 September. The turnout was around 55% and the proposal was supported by 84.1% of the voters. 16 articulated and 2 double-articulated trolleybuses can now be ordered from the framework agreement with Hess. Twelve vehicles are for the conversion of lines 7 and 8 to electric operation, with the remainder intended for lines 3 and 4, which will be extended to Wittenbach.

With thanks to: Dave Chick, Jan Spousta, *Cambridge Day*, *Československý Dopravák*, TransPloiesti, Trolley:motion, sustainable-bus.com, *Urban Transport Magazine*, *zdropravy.cz*, Internet sources



Ústí nad Labem 601, which is seen in its newly refurbished condition on the front cover, in service on 7 July 2007, when it wore a non-standard livery.

Below: The first of 40 new Škoda 27 Tr NUs for Brno is seen turning in to Průmyslové ulice on its first day of test running in Plzeň, 12 October. Delivery of these vehicles will see the eight 22 Trs eliminated from the Brno fleet, leaving the three in Ústí nad Labem as the only examples of the type in service.

