

Tram News Round-Up



A Karlsruhe Tram Visits Austria

Between 1 and 28 July 2015 the Karlsruhe dual-voltage tram-train ET 2010 930 made a series of test runs on the ÖBB network. The first tests involved measurement of disturbing currents in the vicinity of Salzburg and on the line from Salzburg to Steindorf bei Strasswalchen. These were realised by the ÖBB-Messgruppe (Measuring Group).

The tram-train then made empty test runs over the Salzburg - Villach - Wien - Laa an der Thaya (near the Czech bor-

der) and Wien - Wolfsthal lines. Following a break in Linz, the tram-train was loaded with ballast, to simulate a passenger load, then repeated the same route, the objective being to assess vehicle strength. These tests were conducted by Graz-based PJ Messtechnik. **This photo shows the tram-train, running with the test reporting number SPROB 91156, in Hainburg an der Donau on 23 July 2015.**

Kurt Feuerfeil



Freiburg Urbos Trams Enter Service

On 16 July 2015 Freiburger Verkehrs AG (VAG) presented its new CAF-built trams. In February 2013 12 Urbos 100 trams were ordered, this being the Spanish manufacturer's first-ever contract in Germany. The first batch consisted of six seven-section bi-directional vehicles, which have now all been delivered. It was originally planned to put them into service on 17 July, but it was needed to wait until each individual tram had received its authorisation documentation. This period was used for driver training, involving all around 400 VAG drivers. Finally, in late July the first trams entered passenger-carrying service. **The above photo, taken on 16 July, shows trams 301 to 305 in the VAG-Zentrum depot.** The remaining six Urboses will be delivered in 2017.

The Freiburg network is metre gauge, and electrified at 750 V DC. The new trams have a Bo' Bo' 2' Bo' axle arrangement, have 12 75 kW traction motors, delivering 900 kW, and are capable of a top speed of 70 km/h. Their monitoring and diagnostic control system is COSMOS, produced by CAF Power & Automation. Three braking systems are provided - friction, electrodynamic and an electromagnetic rail brake, supplied by Hanning & Kahl. The Ni-Cd battery was supplied by Saft, the doors by IFE, the air conditioning units, in both the passenger accommodation and cabs, by Merak, the pantographs by Schunk, and the public address and text panels by Trapeze.

41,975 mm long, the trams are 2,300 mm wide, and have a bogie wheelbase of 1,800 mm. Wheel diameter is 610 mm when new, wearing to 530 mm. Tare weight is 53 t, maximum gross loaded weight is 80 t, maximum axle-load is 10 t, and a minimum curve radius of 17 m can be negotiated. The front ends of the tram are fitted with a CAF-patented rollover system to protect pedestrians and other road users. Since this is still in the process of being

patented, no further information can yet be provided.

The 100% low floor passenger accommodation is accessed via entrance vestibules which are situated about 310 mm above rail top. The floor then rises to a height of 360 mm above rail top in the seating areas, which are provided with 66 fixed seats, and six tip-ups. There is space for up to 266 standees at a density of six per m², giving a total maximum capacity of 332 passengers. ACTIA supplied the CCTV system, which consists of ten interior cameras. The entrance doors, monitored by video, are fitted with passenger counters and emergency intercoms are provided in the entrance vestibules. The cabs are fitted with rear-view cameras to assist in monitoring boarding and alighting. Each tram is fitted with two ticket vending machines, which accept both cash and credit cards.

Arrival of the new Urbos trams in Freiburg will result in the demise of the last six Type GT8 K high floor trams still in service, and will facilitate network expansion. The first inauguration is scheduled for 11 December 2015. This involves the first part of the 38 million EUR Stadtbahn Messe project, a new stretch of line running from Robert-Koch-Strasse in the city centre northwards to the DB station at Freiburg Messe/Universität (four stops). The line will subsequently be extended in 2017 by two more stops to Madisonallee, adjacent to the trade fair centre.

Another network extension project involves the Rotteckring, with the construction of a new line from Siegesdenkmal on Line 2 to a junction between Reiterstrasse and Heinrich-von-Stephan-Strasse on lines 3 and 5. This line, which will have four intermediate stops, including an interchange with Lines 1, 3 and 5 at Stadttheater, will serve to reduce congestion on the city centre section of Lines 2, 3 and 5, and is scheduled for completion in 2018.

Jürg D. Lüthard



Olsztyn Tram Network Developments

In R 1/15, p. 70, we reported on the 15 Solaris Traminos to be delivered soon to Olsztyn, where a second-generation tramway is being built, the successor to the original metre gauge one, which survived from 1907 to 1965. The new 1,435 mm gauge, partially double track, 600 V DC line is to be around 10 km long, with two short branches. Five different consortia are now realising construction, the contract having been re-awarded to these in 2014.

By late August tracklaying had been realised on most of the network, and masts erected for the overhead wire. This section of the line in the outer southern suburbs of Olsztyn is to be single track, with a passing loop on Tuwima street at the future Osiedle Mleczna stop. Work on the stretch of line through the city centre was expected to be completed by 27 October 2015.

In late May one of the Traminos was sent to Franowo depot in Poznań for testing. Being 2,500 mm wide the Olsztyn Traminos are 100 mm wider than most other 1,435 mm gauge trams in Poland, so it was impossible to test them on the public network, since it would have fouled platform edges. However within the huge recently completed Franowo depot there are around 14 km of tracks available, where test runs could be made, so that authorisation procedures could be advanced. The first test run was in daylight hours on 28 May. By then deliveries to Olsztyn were expected to be completed by late September. **This photo shows the first Olsztyn Traminos - 3001 - at Franowo depot on 29 May.**

3001 was delivered to Olsztyn by low-loader at 04.00 on 12 June, after a 650 km journey from the Poznań district. The circuitous route was determined by the dimensions and weight of the load, the shortest distance by road

being under 350 km. The second Traminos, 3002, reached Olsztyn on 25 June. In mid-August the trams were moved to the new depot in Olsztyn, and on the 21st one of them made its first test run on the new network, within the confines of the depot, to test the power supply.

The test runs were performed satisfactorily, and are to be repeated with each new tram as it is delivered. The new system is scheduled for completion and inauguration in December 2015.

Mike Bent
Photo: Solaris