## Inspired heritage operation

You have to admit it: Italy really has style. The new Torino heritage route is a superb example of a functional operation delivered with panache. Mike Russell reports.

he new Torino heritage tram route that started full operation on 28 March 2011 (TAUT 882) is no mere decorative superimposition upon the existing route network. It offers new direct connections not otherwise achievable and brings back into regular use track that in recent years was relegated to diversionary use. The heritage service is intended to increase the city centre public transport offering by reducing car usage, which as elsewhere in Italy, at times chokes the urban area and brings parts to a standstill.

Line 7 is a circular route, with a nominal terminus at Piazza Castello. As with most Italian circular services, its route number attracts the suffixes CD (Circolare Destra) or CS (Circolare Sinistra) to indicate clockwise and anticlockwise circuits respectively. For those who have difficulty remembering this terminology, it may be convenient to know that the Destra involves right-turn movements, whilst the Sinistra involves left-turns.

Starting from Piazza Castello, CD travels along Via Po, right into Via Accademia Albertina, right again along Corso Vittorio Emanuele II (passing Porta Nuova railway station), right into Corso Vinzaglio along the tracks used by route 10, left into Via Cernaia to Porta Susa station, then continues northwards along Via San Martino, through Piazza Statuto and right along Corso Princ Eugenio to Rondo' Forca to join the main east-west artery of Corso Regina Margherita. Passing through Porta Palazzo and Piazza della Repubblica, it leaves the main road to travel along Viale 1 Maggio through the grounds of the former royal palace (Giardini Reali) to re-emerge at Piazza Castello. Line CS follows an identical itinerary in the converse direction.

The timetable in each direction is identical (see summary panel, right) and requires three cars each way in off-peak periods and four in peaks, providing nominal 15 and 12-minute services with round-trip running times of 35 and 38 minutes respectively. Some 12 cars are currently available to meet the peak requirement and all are kept at Venaria depot in the extreme north-west of the system, remote from the route. Crew reliefs occur mainly at Piazza Statuto but observations over the first three weeks imply that a number of shift changes take place by running cars in and out of Venaria depot – a necessary but expensive procedure given that the running-time between Venaria and Piazza Castello is 42 minutes.

## Varied stock

Rolling stock for line 7 is varied. Four of the first-series articulated cars, rebuilt in 1958/59 from earlier Peter Witt cars (see *TAUT* March 2007), 2807/15/52/55, are clearly intended to be workhorses, relieving pressure on the older historic cars, but the traditional two-tone livery worn by all line 7 cars differentiates them from the orange of those on other routes.





An enterprising reconstruction is car 2847, a further example of the first series of articulated units. Their further reconstruction in the late 1970s and early 1980s, along with the later rebuilding to similar design of 92 of the remaining 100 Peter Witt cars, disguised their origins. A treasured objective of the ATTS has been to rebuild one of the first series of articulated cars back to its 1958/59 form, in which they were quite clearly amalgamations of Peter Witt bogie cars.

The rebuilding of 2847 has been a major operation for the GTT workshops; when originally restored it was fitted with 1976-style inward opening doors but has now been re-equipped with 1958-style wooden outward-opening doors. Whilst the car is obviously a recent reconstruction rather than the 50-year old version, the result is an excellent representation of a type that dominated the city for over 20 years.

Four Fiat bogie cars are available for line 7 and most have been smartly renovated. Three were fully described in our March 2007 article: 3203, the survivor of the second (1958) series; 3279, one of 30 built in 1959; and the unique 3501, reconstructed in 1948 using parts from war-damaged 3001, one of the original order for six such cars. Since then, they have been joined by newly-restored 3104; this 1949-built car is from the first production series, mounted on TIBB 97E bogies built under licence from Brill. Its restoration includes removal of the modified lantern windscreen fitted during the 1976-1977 renovation programme.

The gems of the operation are three Peter Witt bogie cars of 1932/33; these are not confined to a strategic reserve or mere peak-hour use but can be habitually found in all-day service, where their lively performance belies their age.



1 First series articulated car 2807 is one of four repainted into two-tone green to act as basic workhorses for new circular line 7. On the first day of regular operation, 28 March, it departs from Piazza Castello into Via Po.

2 Car 3279 is one of 30 Fiat-built bogie vehicles of the last batch dating from 1959. It represents their condition following the mid-1970s reconstruction programme. The side windows have been adorned with images depicting the work of the costume designer at the city Opera House.

3 Car 3501 is a unique specimen, rebuilt locally from one of the 1943 Fiat bogie cars that sustained war damage. Beautifully turned-out, the car is seen in the Giardini Reali, the grounds of the former Royal Palace of the House of Savoy.





Eight cars (2592-99) survived the cull of 1982/83, when the remaining 92 were rebuilt as articulated cars 2858-2903; these eight lasted as works cars and later became candidates for inclusion in the heritage fleet, of which 2595 has been part since 1999. It is regularly seen around the city on private hire duties and is in 'as withdrawn' 1983 condition.

The second Peter Witt car is 2592 and this appears in the condition to which cars of this batch were rebuilt in 1953-55, with double-width folding rear doors and a single row of bucket seats each side in the rear saloon and opposite the centre doors. Sister car 2598 was converted to double-ended breakdown car T402 in 1971 and not withdrawn until 2002. In 2010 this car was the subject of painstaking reconstruction to 1933 condition involving extensive reposting, reversion to single-ended layout, single-width back door, nearside seated conductor's desk immediately forward of the centre doors, short longitudinal bench seating in the forward saloon and opposite the centre doors, 2+1 bucket seating in the main rear saloon and peripheral bucket seating at the back.

These variants illustrate the development stages of the Torino Peter Witt car; each features a panel behind the driver containing technical details and full descriptions of its layout and restoration work. Another Peter Witt car, 2593, is under reconstruction at Sassi depot to form a party tram.

From time to time other historic fleet members will appear, but their use is likely to be restricted to Sunday and holiday times.

## SUMMARY TIMETABLE FOR ROUTE 7

Departure times from Piazza Castello on both circuits (CD and CS)

Mondays to Fridays except Public Holidays

07.24 and every 12 minutes to 10.00 10.00 and every 15 minutes to 16.00 16.00 and every 12 minutes to 19.00 19.15, 19.30

Saturdays

07.30 and every 15 minutes to 15.00 15.00 and every 12 minutes to 19.00 19.15, 19.30

Sundays and Public Holidays

09.00 and every 15 minutes to 15.00 15.00 and every 12 minutes to 19.00 19.15, 19.30 4 Peter Witt car
2595 has been
regularly seen
around Torino
since joining the
heritage fleet in
1999 and now has
a more regular role
on route 7. It is in
1983 'as withdrawn'
condition and is
here seen on 28
March at Stazione
Porta Susa.

5 Articulated car 2847 has been reconstructed into 1958 condition; it along with 57 compatriots - was formed from two Peter Witt bogie cars. This view on 28 March in the central paved reservation of Corso San Martino compares the initial appearance of these cars with that to which they were later rebuilt. Car 2880 behind operating on trunk route 13 is from the second series of articulated rebuilds, dating from 1982/1983.

6 The interior of car 2592, restored to 1953-55 condition; with several passengers sampling the delights of a traditional Torino tram whilst it works on Circolare Destra.

7 Peter Witt car 2598 has been restored to its 1933 condition complete with large fleet numerals, singlepiece rear door and bucket seats. This view, as it turns from Corso Princ. Eugenio towards Piazza Statuto on the evening of 28 March, illustrates an unfortunate feature of route 7 - the bunching that arises through severe traffic congestion. Articulated car 2815 immediately behind should be at least 12 minutes away.





**Inspired** operation

Operation of line 7 suffers from considerable disruption, in this case not helped by the Torino track layout whose gutter-running layout and kerbside loading are excellent features from a passenger safety viewpoint but induce timekeeping havoc in peak-hour Torino traffic. This is particularly so with line CS, which involves making several left turns across lines of traffic reluctant to accord any tramcar rights, even with dedicated traffic signal phases.

Any reader familiar with Italian traffic conditions will attest that any concept of a 'box junction' is lost on many Italian drivers, who habitually block intersections and thereby prevent tramcars from making their designated movement. The writer observed the situation at the junction of Corso Vittorio Emanuele II with Via Accademia Albertina throughout a morning peak and witnessed one line 7 car lose its entire scheduled running-time for the section Porta Nuova station to Piazza Castello in attempting to make just this left-turn manoeuvre, in which it was repeatedly thwarted not just by private car drivers but by its own undertaking's bus drivers failing to give the tramcar its designated priority.

These problems play havoc with the schedule and long gaps in service arise in peak periods, with severe bunching. It was not unusual to find three of the four trams on line CS grouped within ten minutes of each other, with a more than 30-minute gap before the next car. This problem will have to be addressed if the public is to gain confidence in the reliability of the service.

Passenger acceptance of new facilities always takes time and it will be at least six months before a reasonable assessment can be made of the line's success. Initial impressions were of a slow but steady increase in ridership from a low base. Operation has been guaranteed up to 28 November and the position thereafter will be reviewed in the light of results. If the operation proves to be the resounding success that the promoters hope, the level of service may even be increased next year.

Aficionados of the Peter Witt car are strongly advised to visit Torino this year. Line 7 is a fascinating and inspired operation, worked by a variety of traditional rolling stock, and is well worthy of support. You need to be patient and allow plenty of time, for despite the operational problems, this line shines a beacon for heritage tramcar operations in Europe and deserves to become a permanent fixture in the Torino tramway firmament.