Why Trolleybus?

WHY TROLLEYBUSNUT?

By Jeff White

Some readers may wonder why I have such a strange e-mail address. Quite simply this was bestowed on me by my youngest son at the dawn of e-mails. It is very fitting, as I do have a passion for this form of transport.

It began when my brother was in hospital in Gray's Inn Road. The journey from the family home in New Cross to the hospital was straightforward as the 171 bus went very nearly door to door. However, this route was notoriously unreliable and, after one visit, Mum an I had waited almost an hour, during which time, a seemingly endless flow of trolleybuses came and went. Mum finally gave in and we boarded one for the short journey to Holborn where we would have a choice of 2 buses home. Although the journey was short, it left an impression on me something akin to the conversion of Saul on the Road to Damascus.

So it was on almost every Saturday henceforward, armed with a suitably enthusiastic friend and a 2/6d Red Rover ticket, I set about travelling on as many of these wonderful machines as I could. Sadly, they were not long for this world – and just over a year later, they were gone. Even more sadly, my brother's death preceded theirs by 3 weeks.

Nine years later, 1971, I found myself at London Transport's Chiswick training school applying for the job of a bus driver. LT were chronically short of staff and the interview was very casual, but I was surprised by one of the

interviewer's questions "As you were working for a chartered accountant now, why pick a rubbish (not his exact words) job like this? I explained that I was never going to achieve much in the world of accountancy and I fancied a career change.

Soon after I started on the job, I learned of the plans to re-introduce trams in the Croydon area, which seemed to me a common sense move and I thought may increase the chances of the reintroduction of trolleybuses. There were a couple of false dawns which ushered in no sunrise. The trams themselves took a further 28 years to enter service, mainly due to internal wrangling between LT, Croydon Council and British Rail. However, they have proved an amazing success, but the advance to other forms of electric street transport, or even the extension of the Croydon system, have come to nothing.

Transport for London have been quite loudly heralding the new Chinese-built battery buses as the first electric buses in London. Really? They have the disadvantage of weighing in at around 18 tonnes, with a capacity of 90 passengers. London's trolleybuses weighed a mere 8 ½ tons and carried 80 passengers. Trolleybuses would seem a much better option, but TfL have an unwritten policy of 'anything, but trolleybuses'.

Throughout the civilised world trolleybuses are making a modest comeback. India has just opened its' first ever system and European operators have started to take them on board, and a lot of existing systems have been expanded.

We have 10 battery buses in our garage. They have to be on charge for at least 4 hours every night, which delivers 12 hours in service. As most of our buses work between 16 and 20 hour shifts, this is obviously totally inadequate; so there is much substitution with diesel/electric hybrids. The lithium/ion batteries deteriorate over time and a deteriorating level of charge is maintained, As far as I have been able to tell, recycling of the batteries is not economically viable and one of the components they contain is

cobalt, much of which is mined in the Democratic Republic of Congo, often using child labour. These batteries also have the added problem of being highly inflammable if they exceed their heat range or the lithium in them comes into contact with air.

Modern day trolleybuses only require a minimum of 60% of route mileage to be wired up. On board super capacitors can charge whilst under the wires, and then drive the bus for the unwired sections. One of the main benefits of this is the reduction in the need for special work like points where 2 or more routes diverge. Super caps are made up mainly of recyclable metals, which are a lot lighter than lithium/ion batteries and cheaper too. A full set of batteries for a battery bus costs in excess of £100,000 and, although calculated to last for ten years, seldom last less than half this time in London's punishing conditions.

This country has not had any trolleybuses operating on its streets for over 50 years and the vehicles themselves were over 30 years old when finally withdrawn, which means the technology is now 80 years old. Technology has moved rapidly on, and all the drawbacks thrown at trolleybuses by their opponents have now been ironed out. Most of the opposition comes from tram supporters who fear history repeating itself, as trolleybuses were used to replace trams in the 20th century. Supporters of trolleybuses have no such animosity towards trams, as both modes of transport should be worked together to make a highly efficient, clean and environmentally friendly public transport system. Salzburg, in Austria, is often held up as a city with a first-class transport system which embraces trams on its most heavily used routes, trolleybuses on it's less busy routes and hybrid/battery buses on its least busy routes. It is a system that is cheap and reliable.

Opponents hold up dewirements, which although rare, used to bring traffic to a standstill and caused great inconvenience. Modern overhead equipment is much better at preventing de-

wirements, and re-poling is a matter of just pressing a button and the optical guidance system does the job that used to be carried out by a struggling conductor with a 14-foot pole.

A couple of years ago, I had the distinct pleasure of driving a trolleybus at Sandtoft Trolleybus Museum. As you will no doubt have noticed, I am heavily biased in favour of this mode of transport, but even I was surprised at the acceleration and smoothness and also the smooth braking of this particular vehicle, which is now almost 80 years old. My only problem was taking the corners much too wide. Buses were much smaller in those days and can be driven much closer to the kerb.

In conclusion, I would like to hope that someone in a high managerial position realises just how great a contribution trolleybuses could make towards a highly efficient and environmentally friendly transport system. Alas, the current system of public transport operation, which is dominated by the need to make a profit with the least amount of investment, will have to be replaced by a more customer and environmentally friendly one and that would require some bold political changes of policy… and, unfortunately, I cannot see that happening any time soon.