NEW STOCK FOR THE ISLE OF WIGHT

by Daniel Wright

A report of the LURS meeting at All Souls Clubhouse on Tuesday 9 October 2018

Daniel began the meeting by informing the audience that by training he was a transport planner and had also been a transport journalist. He has family on the Isle of Wight and has lived on the island which gave him his interest in the subject.

What is the Island Line (IL)? It's the Isle of Wight's railway – part of the National Rail network. It's 8.5 miles long (down from 55.5 miles at its peak) and has eight stations (down from 35 approx.). It runs from Ryde Pier Head to Shanklin. It's now home for second-hand London Underground (LU) rolling stock. The London & South Western and The London Brighton & South Coast Railways ran steamers to Ryde Pier and jointly ran the track to Ryde St. Johns Road. This replaced a pier tramway. The Isle of Wight railways then built the rest of the network themselves. Most of the railways were in the north of the island where most of the population is and because the terrain in the south is a lot hillier. A slide was shown with a map of the railway as it is today.

Smallbrook Junction station is one of the new stations and was built to link with the Isle of Wight Steam Railway (IoWSR). Lake is also a relatively new station built by Network SouthEast (NSE) to serve a large area of housing. The current trains consist of 1938 Tube Stock. A slide of Ryde Esplanade station was shown and Daniel commented that this was the only station in the world with interchange between bus, train and hovercraft! From Ryde Pier Head to Ryde Esplanade there are two tracks but only one is operational. It is then double track from Ryde Esplanade to Smallbrook Junction, then single line from Smallbrook Junction to Sandown, where there is a passing loop, then single line again to Shanklin.

The Isle of Wight has had a long relationship with London's railways starting with some Metropolitan rigid eight-wheel carriages which were brought over in 1914. An image of a beach hut was shown, where under the clapboarding one of these carriages still exists. The island has always had second-hand stock.

What's left of the Isle of Wight railway has a history of constraints which have made it an unusual part of the national rail network. Ryde Tunnel, just south of Ryde Esplanade Station was originally built with a height of 4.26m. Unfortunately, early on, repairs were made which involved putting beams across the crown of the tunnel. This took 0.7m out of the height reducing it to 3.56m. This is 0.25m (approx.) less than the height of standard mainline stock. It has also suffered flooding issues due to its proximity to the sea.

There are also weather and sea related issues on Ryde Pier. It is basically half a mile of railway track sticking out into a highly saline environment which is also pounded by gales in the winter – not a good place for railway infrastructure! The pier is actually three piers in one: the promenade, the old tramway in the middle and the railway. At Ryde Pier Head there are weather screens on the west side of the station to protect from the prevailing winds. Daniel showed some slides of the battered screens which highlighted the harsh environment at the end of the pier.

Daniel then went back to 1967 and the issues that the end of steam raised. How much line would be retained? You've got to keep the line to the pier to meet the arriving passengers so you've got to keep the line to Ryde St. Johns Road where the engine sheds were. The question was how far to go after that? The only part of the network at that time making money was between Ryde and Shanklin so that was kept too. There was much discussion about keeping the line to Ventnor, but in the end, it was decided to close that as well. Then there was the question of what motive power to use on a very small section of isolated railway with a height restriction in the tunnel. There was discussion on cutting down the cabs of Class 17 Clayton diesels with modified carriages but in the end, they decided on electrification, as at the time, the Bournemouth main line was being electrified. The equipment needed would be close by to be brought over to the island. At the same time the trackbed in the tunnel was raised by 0.25m in the hope of alleviating the flooding problem. This didn't work completely but the smaller floods were less traumatic for the line. They were, however, left with an unusual rolling stock problem. The clearance in the tunnel was now 3.31m or 0.5m

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shorter than mainline trains. They were now looking for rolling stock that would fit through a very small tunnel. The key requirements were:

- It's got to work off the electrified third rail.
- Maximum height is 3.31m.
- It must be cheap!

This was the first time that LU came to the rescue with the 1923-34 Standard Stock. The island was subsequently to get a good variety of these trains. The good news was that they had already been withdrawn by LU so they were cheap, they were only 2.88m high and were robust and easy to maintain. They were formed into 6 x 4-car and 6 x 3-car trains plus one spare car = 43 cars. The four-car sets were called 4-VEC and the three cars 3-TIS in the Southern Region's naming scheme at the time. They were later reformed into 5-VEC and 2-TIS. They often ran as 7-VEC/TIS, Vectis being the Roman name for the island. They operated successfully until the late-1980s.

By 1989/90 it was time to get some new trains. The Standard Stock was now 65 years old and becoming unreliable. There was also an issue of lower passenger numbers. The requirements for the new stock was the same as in 1967 but with the need for a smaller fleet. NSE, as was, began looking for trains to meet these criteria. It was LU to the rescue again with 1938 Tube Stock. This time they were formed into 9 x 2-car units plus one spare 2-car unit. So this time there were only 20 cars which was considered enough to cope with passenger demand. They were classified as Class 483.

Privatisation arrived in 1996. The first round saw the IL as a micro-franchise. This was operated by Stagecoach from 1996–2007. After that it was part of the South West Trains (SWT) franchise from 2007-17. In 2017 it came under the South Western Railway (SWR) franchise, owned by First Group and MTR Corporation.

It has become obvious in recent years that something must be done about the IL. Today's issues are:

- The current rolling stock looks and feels life expired.
- Poor passenger experience.
- Uneven headways (20/40 mins.).
- Track is rough riding.
- Whatever happened to 4-car trains? The 4-car train was useful to meet the ferries and the larger passenger load
- Maintenance of Ryde Pier.
- Loss making, it has a high subsidy.

In advance of the latest franchise in 2015-16, the Department for Transport (DfT) was consulting on the specification and in that process, they suggested that the Island Line become a separate and self-sustaining business. There was talk of maybe a social enterprise taking it over. However, there was a threat of a judicial review to the consultation. A lot of people on the island were angry that their railway line had been singled out by the DfT. There were plenty of branch lines around the country that served a social need and the DfT were not proposing this course of action for them but seemed happy to pay a subsidy for them.

The Isle of Wight Council were very concerned about this and commissioned Christopher Garnett, the Chief Executive of GNER, to write a report on the current state of the IL and what might be done to make it sustainable. This was to be the council's response to the DfT consultation. The main points raised in the report were:

- Of the original nine trains, (not including the spare), only five were serviceable.
- There were power supply problems at the southern end of the railway (nobody seems absolutely sure what voltage the line is electrified at 630/750volts? The report stated that the voltage at the Shanklin end was only 350, but this is disputed).
- The revenue was estimated at £1 million p.a. with costs of approx. £4.5 million p.a.
- A micro franchise was looked at but got stuck on who would run it.

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• In terms of replacement trains he suggested the 1973 Tube Stock (Piccadilly Line) would be an option but they may be too long particularly at Ryde Esplanade which is quite sharply curved. Also he thought at the time that they wouldn't be available until 2023.

- He also looked at the 1972 Tube Stock but there was an issue with the traction equipment and they wouldn't be available until 2023+.
- He suggested T69 trams as used by Midland Metro driven by line of sight so signalling, which is also life expired, would not be required. This option would allow a 15-minute frequency. Plus, he proposed singling the line between Ryde St. Johns Road and Smallbrook Junction to let the IoWSR extend to Ryde St. Johns Road and allow them to attract more people.

In the end the report was rejected leaving the IL more or less as it was.

The new franchise awarded to SWR contained a commitment that there should be a consultation to put the line on a more sustainable footing. They did it but it wasn't a public consultation and only went out to stakeholders: the council, line user groups and the community rail partnership. However, Railfuture published it on their website so it could be seen by all. It was entitled 'Developing a more sustainable future for the Island Line'. They had a look at what was currently wrong with the line:

- Only three trains serviceable (but they are cheap, not leased).
- The trains fail to meet modern passenger expectations.
- The 20/40 minute headway doesn't work for passengers.
- There is a revenue protection challenge.
- There are issues with power supply, signalling and infrastructure. The third rail needs replacing.
- Leasing costs for infrastructure are rising. South Western Railway is vertically integrated and does the track maintenance. It leases the top 15cm of the ballast bed from Network Rail and looks after the infrastructure itself. The leases become more expensive towards the end of the franchise.
- Flooding in Ryde Tunnel.
- Stations are outdated. Some have ticket offices, not all, and some are little halts with few passenger facilities.

What is the IL really for? The NSE view was that it was part of its network. Since privatisation a different view has been taken. Many think it is for tourism and amusement value. The Isle of Wight County Press quoted the following in a railway feature: "Not only do you board a "step back in time" quirky old railway carriage but you bounce along the track with everyone springing up and down in their seats ... Island Line is one of our Unique Selling Points, let's make a feature of it". The Isle of Wight's official tourism website stated "... former London Underground electric trains which gives the Island Line its very own unique identity and appeal". SWT's approach was that it was a heritage railway. As Daniel pointed out with two slides the trains are not 1938 Tube Stock as built. Further slides showed British Railways type totem signs that had been installed on the line. These were neither the correct style or colour for the Southern Region. The Isle of Wight Council had a different view, namely a 'modern and extended Island Line that meets the needs of residents and cuts traffic congestion'. Daniel pointed out the things that were lacking from this 'modern' line:

- Ticket machines there's only one on the island.
- Luggage facilities.
- Wi-fi and power sockets.
- Air conditioning.
- Automated announcements (visual/audible).
- Cycle facilities.

Of course the IL isn't the only public transport option on the island. There is strong competition from the buses. There is a route that runs virtually parallel to the railway with a bus every 15 minutes. The buses are modern with USB sockets, wi-fi, and audio/visual displays. The advantage the train has is on the Shanklin – Ryde journey. By bus it is about 51 minutes, by car up to 28 minutes and by train 22 minutes (and then it takes you to the end of the pier). There isn't a more reliable and quick way to get up the east side of the island. It has a punctuality and reliability record of 98-99%. This is the one thing that's never mentioned in the marketing and strategy for the IL.

SWR's proposals in their consultation document suggested the following:

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• An enhanced service frequency to better connect with the hovercraft and ferries (presumably on an even 30-minute headway though this was not explicitly stated).

- Infrastructure improvements to allow better interchange between the IL and the IoWSR to generate revenue for both organisations. No specific recommendations were made.
- Better marketing and revenue protection.
- A 'self-powered', but not diesel train, accommodated on the existing infrastructure.
- A 25 year lease to help spread costs.

There are some outstanding issues that need sorting out fairly quickly:

- The PRM-TSI (Persons of Reduced Mobility-Technical Specification for Interoperability) applies from 1 January 2020. Some exemptions have been issued but not for IL trains. An exemption needs to be applied for or the trains will have to be replaced by the start date.
- Ryde Tunnel headroom issues. These are not as bad as they seem. Repairs in the early 2010s replaced the beams that reduced the headroom restoring the original height of the tunnel. This seems to have gone unnoticed and also was not mentioned by SWR. A full size train should now be able to go through.

A public meeting was organised on the Isle of Wight in December 2017 by a pressure group called 'Keep Island Line in Franchise'. Just before that happened the DfT published 'Connecting People', a strategic vision for rail. This was the report that said the DfT was interested in reopening lots of closed railway lines around the country. However the public meeting, instead of talking about what the options should be for the IL, turned into a discussion about reopening closed lines.

What are the next steps?:

- SWR submitted a costed option to the DfT in May 2018. This excluded Ryde Pier which is owned by Network Rail. The DfT has promised to give an answer by the end of 2018.
- At a May 2018 meeting of the Isle of Wight Council Policy and Scrutiny Committee for Regeneration, Planning, Housing and the Environment, SWR said they would be bringing over "significantly newer trains". These would have wi-fi, charging, visual displays and CCTV. There would also be a 30-minute frequency. That would involve either an additional passing loop or replacing the existing passing loops with a loop in the region of Brading, more or less in the middle of the line.
- Better hovercraft interchange would also be implemented but no specific details were given.

The SWR proposals don't sound like a Tube train. Does the island actually want or need ex Tube trains? Back in 1983, British Railways had suggested the third rail Standard Stock could be replaced by ex-Merseyside Class 503s. It was recognised, even back then, that it didn't have to be a Tube train, that you only needed a train that was small enough to go through the tunnel. Although the track in the tunnel would need to be lowered and there would be some platform height reconstruction required.

What train are we looking for on the Isle of Wight? Today's brief would be:

- Something that is cheap.
- Not diesel (but not necessarily third rail).
- An improved travelling experience.
- It could be approximately 3.7m tall.
- Needs to be available before 1 January 2020 unless exemption granted.

Only one train seems to fit the brief and it is LU to the rescue again, but not a Tube train. These are the ex D Stock trains which have been converted by Vivarail. A battery-powered train is being tested in Scotland which would fill the brief. Officially SWR can't say this is the desired option as the DfT hasn't decided to buy it yet. Daniel said that although officially we don't know, some work had taken place on the pier. He put up slides that showed rotten boards had been replaced on the disused track and a walled structure had appeared behind which was a diesel generator. This would be an ideal place for charging the batteries, on the end of the pier way out to sea. Daniel questioned SWR about it but 'we can't comment until the DfT makes its decision' was the reply. It's not just about new trains:

Infrastructure modifications are required for the new trains.

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- The third rail will have to be replaced or scrapped.
- The signalling is life expired.
- Track condition is terrible.
- The stations are antiquated and don't have the full range of passenger facilities.
- Ryde Pier needs renovation.
- · Still loss making.

Daniel's last slide showed the questions people ask about the Isle of Wight railway:

- Railway asks: What's the cost of not doing anything? SWR must be concerned that unless money is spent that there could be a major problem that's not fixable easily.
- Treasury asks: What's the cost of doing something? They are trying to avoid spending any money they don't have to.
- Politicians ask: What's the political cost? The DfT could say we'll let the IL close. The political cost would be very high.
- Transport Planners ask: What's the opportunity cost? This is a multi-million pound exercise.
 Ryde Pier will need millions spending on it, with some estimates putting costs at anything up to £40m.
- Tube fans ask: How soon can I get to the Isle of Wight? Daniel recommended you get there by the end of 2019!

Daniel was thanked for his excellent and very interesting presentation and appreciation was shown in the usual manner. Questions were then invited from the audience.

- Q. A diesel generator has been suggested to charge the batteries on the Vivarail train. What would be the range of a battery powered train.
- A. We don't absolutely know that the generator is the preferred option. You could keep part of the third rail and use that to charge up. The range should be fine for an 8.5-mile railway. There would be time to recharge at each end of the line. The tests running in Scotland will give more detail on this, but the short answer is that nobody really knows.
- Q. Surely whatever happens when Ryde Pier has to be replaced?
- A. It doesn't need replacing but does need some work. Only one third of the pier belongs to Network Rail. It would be possible to close the rail section and use minibuses on the promenade section, which belongs to the ferry operator, to reach the ferries.
- Q. Following on from the last question does the ferry operator have any interest in retaining the railway?
- A. Yes, I think they are interested but they would like a reliable train to meet the ferries. What they would really like is a train that leaves 10 minutes after the ferry has docked. My new job is with the Association of Community Rail Partnerships and the Partnership that covers the IL brings together the interested parties that are keen to see better use made of it. Wightlink Ferries are in that group and have said they are committed to keep the IL running. Obviously, they want to see improvements made.
- Q. Some time ago a Portsmouth/Gosport/Isle of Wight tunnel was proposed. Is this idea completely dead?
- A. I wouldn't say it's completely dead but I can't imagine a business case for it stacking up. Spending millions on this seems a bit fanciful in this current period of austerity. In the summer the roads are already jammed without a tunnel.
- Q. The questioner commented that he was on the island a few days ago and there was only one train running an hourly service. He was told they can't get the parts to make the trains serviceable.
- A. They are having to hand craft the parts, which in a strange way is good, as it's only possible because they are so old.

Maurice Lees