



# ‘Sealing’ the future

**Tom Ingall ‘bunks the shed’ to see progress on two locomotives – being built in a new cathedral of steam engineering.**



**B**anking the shed was never this organised; painted walkways, interpretative displays, refreshment stands. Yet those who dived into grimy depots to purchase or pilfer souvenirs as steam died around them could not have foreseen that more than half a century later it would still be possible to witness similar scenes. Not just possible in fact, but with brand new numbers to underline in their combined volume – locomotives they might have missed out on entirely ‘first time around’.

Hundreds of people crowded into the assembly shop at CTL Seal in Sheffield in mid-April to do just that. Waiting for them, the distinctive front end of a British Railways ‘6MT’ (‘Clan’) and a London & North Eastern Railway ‘B17’ (‘Sandringham’).

“I think they’re beautiful, far better than the Standard Class 7s,” says ‘Clan’ project Director of Engineering Geoff Turner.

“They look far more streamlined – just a good all-purpose loco.”

For a long time, the ‘Clan’ has been a Cinderella of the new-build steam movement but now No. 72010 *Hengist* is making serious progress. In large part that’s

**“ The people we meet have a wealth of knowledge, the young men we’ve got are learning from them, so why not? ”**

CTL SEAL MD ANDY ENGLAND

due to the relocation to CTL Seal. Not long ago these projects were confined to heritage workshops, or the end of a rarely shunted siding.

This is far from slowly angle grinding an ex-Barry wreck at the wrong end of three extension leads.

“One of our members described it as a cathedral to engineering – and it is!” continues Geoff. “It makes all the difference, it has the space, it has the facilities. It’s what I consider a one-stop shop. There’s fabrication, a super machine shop – in fact the machine shop machined all the axle guides for us on one machine, in one process.”

A smokebox, door and deflectors sit at the front of the locomotive, a strong statement of intent. It isn’t just the frames taking shape. Cylinder patterns have been completed, a foundry lined up and funding earmarked.

The CTL Seal assembly shop comes complete with heavy-duty cranes, meaning components or indeed the entire locomotive can be moved as required. It also comes with neighbours willing to share and learn. Alongside the ‘Clan’ are the developing frames of ‘B17’ No. 61673 *Spirit of Sandringham*.

This is a younger project, and having left the Llangollen Railway its team set up in Sheffield not only for the facilities but also the growing expertise of their ‘co-new builders’.

“The ‘B17’ chassis is now certified for the main line,” explains Director John Pearson.

“We’re now collecting the parts to put it on wheels in the next 12 to 18 months.”



**TOM INGALL...**

...is an award-winning broadcaster and writer based in South Yorkshire. He’s had a passion for railways since an early age and has volunteered at the Great Central Railway since the mid-1980s.

The bogie wheel patterns have been produced but, better yet, the six driving wheels have been cast, machined and non-destructively tested.

“We started in 2011 with around 15 members,” says John, “and we now have over 200. Money comes from members, donations, legacies and grants.”

The trust even has Rod Stewart as its patron. “When we found this factory and there was one locomotive already here, it was the ideal place.

We work extremely well with the *Hengist* guys, we exchange ideas, it’s an excellent environment.”

### Mutual improvement

Both *Hengist* and *Spirit of Sandringham* have construction price estimates of £4m.

The ‘Clan’ has raised more than £700,000, with funding in place to cast cylinders. “Subject to fundraising,” says the project’s Director of Engineering Geoff Turner. “It could be completed by 2029, but the more money we raise, the sooner it gets built.”

John predicts a slightly longer timescale of a decade for the ‘Sandringham’ and is candid that costs keep rising.

Back in the 1950s, No. 72010 was intended to be the next ‘Standard Six’, before the order for the class was cancelled. Completion of the new engine will mean 1,000 BR ‘Standards’ have been built, but it will not be a faithful replica. Boiler pressure is being raised by 25lb/sq in to 250lb/sq in, which the team says will make the ‘Pacific’ more efficient and reduce the amount of greenhouse gases it emits.

A similar romance is attached to the ‘B17’. While considerably more were built than ‘Clans’ (No. 61673 will be the 74th), like the ‘6MTs’ none made it into preservation. More excitingly for some, later members of the class were named after prominent football clubs (those engines were referred to as ‘footballers’) with salvaged nameplates attracting an extra cachet. The trust also plans to modify the design to improve reliability and maintenance. Both groups are targeting main line running as well as heritage railway operation.

Mutual improvement has now been embedded into the DNA of both groups as they have become founder members of the recently established Main Line Steam Builders Group (MLSBG).

Others are the P2 Steam Locomotive Company (the arm of the AI Steam Locomotive Trust building ‘Mikado’ *Prince of Wales*), the Class G5 locomotive company, the LMS Patriot Company and the General Steam Navigation Locomotive Restoration Society (retro-converting an existing ‘Merchant Navy’ to as-built ‘air smoothed’ condition, see T7). ➔



▲ **Director of Engineering Geoff Turner prepares Hengist for the open day.**

Pictures by Tom Ingall unless stated

◀ **Fresh face: New-build ‘Clan’ 4-6-2 No. 72010 Hengist at CTL Seal’s open day.**

Paul Appleton



This MLSBG aims to share knowledge around gaining safety certification for the modern rail network and possibly sharing third-party costs.

CTL Seal has been involved in all of this, which begs one obvious question. For a company building bespoke components for the renewable energy and nuclear industries, why get involved with the long-term and emotionally led world of new-build steam?

Managing Director Andy England does not fit the stereotype. There's no misty-eyed recollection of hazy lineside afternoons: "About five years ago I got a call from the Standard Steam Locomotive Company asking if I wanted

to get involved in building a loco. It took me about ten seconds to say yes.

"I'm not an enthusiast, but I love engineering. However, the more I get into heritage locos the more enthusiastic I get, so much so I've now become the chairman of the group!"

At this point in my conversation with Andy, I

**“This is what I call real engineering, working from the old drawings, using old methods”**

**CTL SEAL MD ANDY ENGLAND**

can't help recall Victor Kiam announcing he liked the Remington shaver so much he 'bought the company'. Passion is one thing, but it remarkably still fits with CTL Seal's considerably bulkier bread and butter and its 110-strong workforce.

"This is what I call real engineering, working from the old drawings, using old methods and we bring technology into it as well," continues Andy.

"We're looking at the Class 6, it had some problems, we'll engineer those out and the locomotive will become more efficient. The word got out and I got the approach from the 'B17' group asking if they could bring their frames in – yep, not a problem."



◀ Hengist alongside the frames of the 'B17' Spirit of Sandringham at CTL Seal's open day.

▼ CTL Seal's MD Andy England does not fit the stereotype. There's no misty-eyed recollection of hazy lineside afternoons: "I'm not an enthusiast, but I love engineering."



▼ With the main components of the 'Clan' frames now brought together, work is progressing on adding other items, such as this slide valve bracket.



### Made in Sheffield

Sheffield does not enjoy the historic reputation for locomotive construction that near neighbours in Doncaster and Hunslet in Leeds do. However, the Yorkshire Engine Company was based in the city, building locomotives for pre-Grouping companies and overseas customers.

Later, the LNER had 'N2' 0-6-2Ts built in Sheffield and British Railways received GWR-style '94XX' 0-6-0PTs from YEC's Works. It closed in 1965.

The creation of two locomotives signals a quiet comeback for the industry in the city, but Andy is not done: "I would like four ➡



**The front bogie for Hengist under construction. The TRACKSIDE-supported open day attracted a wide variety of people, including many locals who were keen to see what goes on in the vast buildings. Paul Appleton**

locomotives being built in the works. It's a good market to be in. The people we meet have a wealth of knowledge, the young men we've got are learning from them, so why not? It's all experience."

It won't be too much longer until track will be required inside the assembly shop for the wheeled locomotives to sit on. Clearly any new-build groups who are interested will be leaning on an open door.

This feels like a moment when what started as a quirky side note to mainstream preservation begins the transition to become a major part of the story. As historic locomotives are either recalled for static display or become impractical to overhaul again, might a small new-build industry deliver steam for heritage lines in future?

**“ We started in 2011 with around 15 members and we now have over 200 ”**  
**'B17' DIRECTOR JOHN PEARSON**

It depends on appetite and funding of course, but here at least is a serious attempt to recognise that co-operation rather than competition makes a great deal of sense. Learning from the processes of others could help drive down costs as best practice is found and expensive detours skipped.

Meanwhile, a mutual understanding of today's regulatory environment makes everyone's life simpler. Let's stick to casting wheels, not reinventing them.

Of course, those are not the reasons why hundreds came to bunk the CTL shed. Rather it was the shock of the new and appeal of the 'underdog against the odds'. However they give these projects a solid base to work from and, whatever the challenges ahead, the chance to face them together in the best possible environment.

It's a future that was impossible to imagine when the 'Clans' and 'Sandringhams' went to the breakers' yard. ■

● Watch Tom Ingall's video of CTL Seal here [bit.ly/41PnxY3](http://bit.ly/41PnxY3)

● Read more about the Clan project in T10 – Order back issues from [www.tracksidemag.co.uk](http://www.tracksidemag.co.uk) or 01293 312241



**John Pearson of the B17 Trust explains the work to a group of supporters.**