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Message from the President

Stan Fletcher

Chairman Mark Walker writes:

Welcome to this issue of Icon. We have had a very busy few months, and things show no signs of slowing down. Our biggest event though, and one we have been looking forward to for a long time, was the 100th birthday of our President, Stan Fletcher. To mark the occasion, we invited Stan to write a few words to introduce this issue.

It gives me great pleasure to be able to write a few words for the newsletter of a group that only a few years ago was a dream of very few but which has now turned into a reality. It is truly amazing the progress you are all now making towards the Phoenix which will be 10000 reborn.

It seems a very long time ago now, when as a young English Electric electrical engineer I was working on the birth of the first mainline diesel in Derby. It was therefore an enormous honour that in December last year, I was able to return to the very same spot, where now stands the Porterbrook head office building, Ivatt House. I was delighted to be able to present a work plate to the Porterbrook Company for all their help and support so far in giving us a sleeper car to help accommodate our work teams as we move to the recreation of 10000.

Many of you will have heard me say that I think that it is inconceivable that a decision to scrap 10000 was made in 1968. 10000 had not only played such an important part in the history of rail in UK but also around the world. I am sure that many of you will know that I was lucky enough to travel to many countries, such as Australia, Malaya, South Africa, Rhodesia (Zimbabwe) and Kenya, as the commissioning engineer and also to set up training. Australia certainly didn't have the same attitude to diesel, as the 'Lady Norrie' has pride of place in their railway museum.

The commissioning and training experience had come about through the development of 10000 and 10001. I used to be invited by British Rail to go and speak on their courses at the School of Transport at Derby to explain the work being done on the development of diesel and to answer any questions they had from the course. At a similar time, English Electric developed a further course run in Newton Le Willows for their engineers and from that I got invited to travel overseas.

But now we are where we are, and it is no help to look back, but I now have the feeling that it may be that some good will come out of that scrapping. When I look around at the hard work that is now being done, and the enthusiasm that there is to recreate 10000, I strongly believe that whilst this will undoubtably be hard graft, we will end up with a locomotive that will be loved and used and not one that sits in the museum in York. 10000 is now likely to have far greater visibility and prominence in the railway community than it would have had.

I have been very humbled by the way that you have all treated me and the honour that you have bestowed on me – not only in allowing me to be your President but also by naming the new workshop at Wirksworth the 'Centenary Works' in recognition of my age. It was a great pleasure to be able to open the shed in December 2019, which only a few months before had been a derelict building and which has now been transformed into an excellent engineering facility. I highly commend all of you who have been involved in its acquisition, refurbishment and commissioning. What we must also not forget is the amazing generosity of those who are also contributing to our funds and making our rapid progress possible. This is unfortunately the tip of a very large iceberg but we can all now see that this will be a reality. Please do what you can to make the reality of 10000 sooner rather than later by helping in whatever way you can to help with the fund raising that is required.

Finally, it would be remiss of me not to mention the fantastic team of trustees, led by Mark Walker, who all work tirelessly to make such magnificent progress. I know that we are all realists and do not underestimate the work that is still required, however I don't think that anyone can visit and look at the progress and not be highly impressed. The great work both behind the scenes and physically on site is quite outstanding. As I near my 100th birthday, I could not ask for a better present than to see what you are all doing to recreate what was the major part of my working life, 10000.

Thank you to you all, Stan

AGM Cancellation Notice

Sadly, the onset of COVID-19 proved the downfall of our AGM in March. The trustees were ahead of the game on this, with political decisions catching up later!

Although the outbreak was in its early stages at the time of the decision, much of the country is now closed down for the duration, and it seems to have been the right decision. We were unwilling to risk the wellbeing of our members, a high proportion of whom are retired and so in the 'at risk' category.

We are required to hold an AGM within 15 months of the previous meeting, and we have contacted the Charity Commission to discuss the situation. We hope to hold the AGM in Autumn 2020 instead, and we will let you know as soon as we see how the situation develops.

The Annual Report for 2019, which should have been presented at the AGM, will be sent out by email to members. If you would like a paper copy posted to you, please let us know.

Visit to view Porterbrook buffet cars

Tony Ellershaw

As you will have seen elsewhere in this issue, our friends at Porterbrook have agreed to donate a Mk 3 catering vehicle to us. Back in January, when arrangements were starting to come together, Tony Ellershaw took a trip to Liverpool Street Station to have a look at some of the coaches.

On Friday 10th January I took the London train from Nuneaton to Euston, and then the Tube on to Liverpool St, where I met Gary Webb from Porterbrook. The plan was to have a look at some of the TSOB2 buffet cars currently used on the London to Norwich services.

When we visited last year to look at the sleeper coach, we had the luxury of waiting for them to be brought to us at the Wembley depot and we were able to spend time looking at them from the ground up. This time it was a little different, as the coaches are in service during the day. Greater Anglia use 10 trainsets for the service, using both TSOB2 and TSOB buffets. At Liverpool St it was a matter of finding the right platform for an incoming train, and then seeing what type of buffet it had. We were able to inspect the coaches internally and externally from platform level, before the train left after a 30-minute turnaround.

There are 6 TSOBs and 7 TSOB2s in service. They were all built in the 1970s as standard open coaches (B) and Kitchen coaches (B2) and converted between 2005 and 2015. The two designs are very similar, having only a different counter design, and a larger kitchen / food preparation area in the TSOB2. Our long-term aim is for this coach to become a 10000 support vehicle, so the kitchen will be very useful.

We were in luck with the first train we saw, as it had a B2, 10417. First impressions were that it is in good condition – no ripped seats, carpets not worn, no broken panels or lights. There were no





water marks, so hopefully no leaks. Neither type of coach has toilets, so the only plumbing is behind the buffet counter. There is a water boiler, an oven and a coffee maker. They have corner doors, exactly the same as our sleeper coach, and all the droplights worked. The seating is a mixture of tables and aircraft style, and there is no disabled space, although this could easily be changed, as the seats can be moved or swapped around. Outside, the coach has the expected minor scratches from lineside vegetation, but there was no damage or rusting. As we were looking at platform-level I couldn't fully inspect the services below or the wheelsets, and could only see one side.

The next train in, an hour later, also had a B2, 10413, which is identical to 10417, and was found to be in very similar condition. Shortly following this train, one of the new Bi-mode class 755 'flirt' units arrived, so I took the opportunity to have a nose around that. They are quite impressive, especially the raised floor on the centre power car where you can see over the top of the seats in the first 5 coaches. Apparently, they have some teething problems, with the trains not triggering the train control sensors, and issues with the pantographs. The week of my visit was the first week of passenger running into London, and just one set was being used.

The next train had a TSOB, and although it isn't what we were after, it was interesting to see the difference. The coach was in the same good condition. The major difference with this was the configuration of the buffet, which has a counter but no kitchen and an increase in standing room, so fewer actual seats.

This was a quite different visit to our look around the Caledonian Sleeper stock, but once again we received a top-class welcome. My thanks to Gary Webb, for another informative and entertaining visit.

GBRF parts donation

Mark Walker



As some of you will know, GBRF have a project underway to re-engineer redundant class 56 locomotives into class 69 locos. As part of the rebuilding of the locos, many of the original parts are no longer required. I am very pleased to be able to tell you that GBRF have very generously offered to donate some of these parts to our project. This includes alternators, cooler groups and electrical cubicles.

Members who have been with us for a while will remember that our original plan was to re-use the electrical cubicle from 58022. The difficulty with this was that some parts were missing, and would be difficult to replace. There was a possibility of adapting class 56 items to do the job, but this would have been expensive. Being able to use a complete class 56 cubicle will solve all these problems. Spare parts are also more easily available, which will be important further down the line.

The alternator in 58022 is damaged, although not as severely as first thought, and this was the reason we spent a lot of time pondering whether we should go with a class 37 generator or stick with an alternator. The offer from GBRF makes that choice much easier. We can now confidently go down the alternator route, and we have the added bonus that it will perfectly match the electrical cubicle.

We had always intended to re-use the cooler group from 58022, albeit in a modified form. 10000 only had one cooling fan, not 2 as in the 58. The 58 system was also too large for 10000, and is narrower, because of the design of the loco. We planned to both shorten and widen the 58 system to use in 10000. A big benefit of using the 56 system instead is that it is built to the full loco width, meaning that it needs significantly less alteration. Although one of 10000's problems in service was cooling, we are confident that the shortened system would be more than adequate for the recreated locomotive.

So as you can see, this fantastic offer from GBRF has really jumped the project forward, and will save us a lot of money as well. I would like to thank Bob Tiller at GBRF for this generous offer, and his patience in dealing with all my questions!

This offer was one of the reasons we launched the 'lift and shift' fund. Although the parts are being donated, we still have to move them. Transport and crane hire are expensive. If we can't raise the transport costs, the bottom line is we will lose these items. If you are able to help with a donation to the fund, please do!

Parts from Holland

Some time ago, we reported that we had come to an agreement with Werkgroep 1501 in Holland regarding the purchase of some bogie spares, including traction motors, and we had hoped to have purchased and collected the parts by now.

Werkgroep 1501 are a preservation group based in Holland, who have six locomotives in their care, including EM2 loco 1501, the former 27003 Diana, which has identical bogies to those that we will use under 10000. When the group acquired 1501, it came with a large amount of spare parts, and it is a portion of these spares that we hope to purchase. Unfortunately, several issues have arisen which have delayed progress.

The biggest of these issues is that the group have recently been told they are not able to stay in their current accommodation, and are in search of storage space for their locos, which as you can imagine is taking up a lot of their time. In addition, the future of 1501 itself is not certain. There are those that would like to see it returned to mainline use, which will be an expensive project, and others who would like to see it preserved as a static exhibit.

Should the decision be made to return the loco to operation, some of the bogie spares will be needed for that project, but at this point it is not known what will be required. The group have told us that in this eventuality, they will still be willing

Mark Walker



to sell us any spares that are not required for 1501.

The other complication is that the bogie spares are stored with all the other 1501 spares, and with spares for five other locomotives, and have been for some time. Added to the need to move everything to new accommodation, even making an accurate list of what spares are there is a challenge. The good news is that we are still in contact with the group, and have already made a visit to Holland to discuss the possibilities going forward. Whatever happens, it is very likely that we will be able to purchase a significant quantity of spare parts. The bad news is that it may be some time before this happens. We will keep you posted as soon as the situation develops.

Visit to Mandene

You may remember from the last issue of Icon that back in December, we visited Ivatt House, Porterbrook's head office, to present them with a replica 10000 worksplate in appreciation of their support. Following the presentation, we met Neil Foster, one of the Porterbrook Directors, who said that if there was anything else they could do, to just ask. We have learned to be prepared for such

Tony Ellershaw

conversations, so naturally we had a short shopping list to hand, and were very pleasantly surprised to receive an invitation to visit the strategic spares store, to see if there was anything we could use.

So it was that we came to be in deepest Derbyshire on a bitterly cold January day. Due to a



slight misunderstanding about the location, we very nearly ended up on a train to Euston, but fortunately disaster was averted just in time.

We were met by Stuart Benson, who kindly took time out of his day to show us around. It soon became clear what it takes to keep a large fleet of vehicles going, with the shelves filled with everything from bogies and axles to first class seats and tables, and even a couple of spare Turbostar front ends. The main items that we hope to be able to purchase from Porterbrook are parts for the E70 braking system that we will be using on 10000, which is currently used on class 43 power cars. As the majority of these are still in use or storage, these parts aren't yet available, but we did find some items of interest, and have put the process in motion to request them.

All being well, we will be able to show you some of the items in a future issue of Icon, but for now we have to wait to see what is available.

Stan's birthday



March 16th, 2020 was a date we have looked forward to for a long time - the 100th birthday of our President, Stan Fletcher. His hundredth year has certainly been a busy one! Sadly, as the day approached, it became clear that during the Coronavirus outbreak, a large gathering presented too much of a risk to Stan. Hopefully we will be able to rearrange the planned party soon.

Stan is in good health and sent us this message:

"Many thanks for all the very kind Birthday wishes on my 100th Birthday. I received a fantastic card from the Trustees on behalf of you all and this was very much appreciated. It sits proudly alongside the one from the Queen! I am very honoured to be your President and hope that I will be able to see more of the fantastic progress that has been made recently. My Birthday wish is that this amazing enthusiasm continues to grow and we see the re-birth of 10000 soon. Good luck to you all."

Sleeper Coach – progress report

Mark Walker

Since our last issue, when we announced the great news about our sleeper coach, kindly donated by the nice people at Porterbrook, Ben Field at the Ecclesbourne Valley Railway has been a busy chap getting it ready for use. The coach will be available to volunteers from our group, and also from the EVR. We agreed with the railway to split the cost of alterations 50/50, and as soon as the payment was made Ben got to work.

There is now a new fire door fitted at the far end. Individual door locks are being installed, and work is ongoing to connect up the electricity and water supply. All the rooms have sinks installed, and because our coach is of the SLEP variety, it also has a small kitchen, with a boiler and microwave installed. Once the initial work is complete, we





will be costing up the additional work required to get the kitchen fully working and perhaps even install a shower in the space currently occupied by one of the toilets.

There will be a small charge for use of the rooms, which will cover the cost of the electricity and regular visits from a cleaner. We have had a lot of interest from people wanting to stay a night in the coach, and have agreed with the EVR that before the volunteers move in, we will have a couple of open weekends where you will be able to rent a room in the coach and try out the Mk3 sleeper experience for yourself.

Oops...

Eagle-eyed readers will have noticed that an error crept into the last issue of our newsletter. On the front-page article it should of course read 'December' not 'January'!

Make sure you get our email

Members are reminded to check their junk mail folder for emails from us. We encourage you to add <u>info@lms10000.co.uk</u> to your contact list and 'safe senders' list.

Exhauster dismantling

Mark Walker

One thing I have learned, as I have mentioned elsewhere, is always to be on the lookout for opportunities to pick up parts for 10000. They are often things we don't need right now, but aren't too common, so we try to grab them when we can. Towards the end of 2019, just such an opportunity presented itself and we became the owners of four Reavell exhausters. These are was the steam heat boiler. Something had to give, and we took the decision to drop down to one exhauster on the loco to make space, so one of the units will likely be sold on to another group at some point in the future.

Three of the units are identical, with English Electric motors. The fourth has a Brush motor.



basically giant vacuum generators that are the heart of the vacuum brake system. Three of them came from Andy Gillett at the Heavy Tractor Group, owners of 37714, and the other from Andrew Briddon at Darley Dale.

The original plan was for the loco to have two exhausters, with two as serviced spares. Although the vacuum brake system will work with just one exhauster, having two would have meant less stress on both units, extending maintenance times. In addition, a failure of one unit wouldn't stop the loco being able to haul trains. I say would have. When working on the GA drawing for 10000, it became clear not everything we wanted to put in there was going to fit, and the final straw This wasn't a major issue, but another chance conversation led us to meet Chris Baily, the owner of 9537, the Class 14 loco which lives just down the yard from our shed at Wirksworth. He had a spare EE motor that he was going to fit to his loco, but what he really wanted was a Brush motor, so we took the opportunity to standardise our units and swap our Brush unit for an EE one. Sadly the Covid-19 outbreak has delayed the swap, but this should be sorted soon.

The current situation is that the brush motored unit has been completely stripped down, and is awaiting a good clean. These exhausters contain a lot of oil, and although they have been drained, this has left behind a sticky sludge that will all need to be washed out. Fortunately, the maintenance manual for these units is still available, which includes detailed information about the allowable tolerances in the impeller mechanism. When time and viruses allow, all the units will be thoroughly inspected, and the best of the four will be fully serviced and stored ready to go into the loco. Of the remaining three, one will likely be sold, one will be serviced to serve as a replacement when needed, and the third is likely to remain disassembled as a source of spares.

We have a huge amount of stripping, cleaning and rebuilding to do, so if you fancy a challenge and have a little free time on your hands, we would welcome your assistance, whether it be once a week or once a year. Whatever your skill or experience level, we will have a job for you.



If you are interested in volunteering, please email us: info@lms10000.co.uk

Bogie progress

Some of our readers will remember that we purchased our ex-EM2 bogies on the very last day of 2018. Since then the casual observer would be forgiven for thinking nothing had happened to them at all, but this is far from the truth.

There have been a variety of delays that have held us up since the purchase of the bogies. Initially we were waiting for track to be re-laid so that they could be moved to an easier location for loading and removal. Then it was discovered they couldn't be moved as the class 40 bogie in front of them was seized and wouldn't move. These delays worked to our advantage, as in the meantime we had been advised that the approvals process for the bogies would be much easier if we stuck to the original brake design rather than our previous plan to graft on the class 58 braking system.

The bogies will be completely stripped by a contractor, and thoroughly inspected to check what work is required. Originally the contractor

Mark Walker

planned to remove the bogies complete, but it was decided it would be easier to dismantle the major components where they are.

Originally it was thought that some parts of the brake rigging would have to be cut with a gas axe due to the corrosion of some of the fixings. However, the delay has again worked for us as it has given our Engineer, Paul Etherington, time to regularly clean and lubricate the many bolts and split pins, and with the assistance of a heavy-duty impact wrench, he has been very successful in getting things freed up.





Extensive discussions have been held with our contractor, and a workable way forward has been agreed to minimise the damage to brake rigging. Initially work has concentrated on bogie number 139. The plan is to dismantle one bogie first to identify all the potential issues, before starting on bogie 140.

Work carried out has included inspecting as many parts as possible and cleaning and lubricating all the brake pins, bolts and plates that will have to be removed during the overhaul. Although the bogies are almost identical to those used on 10000, the footsteps are not, and will be removed. If anyone would like a footstep for a small donation, please let us know. Although many of the fixings in the bogies initially appeared to be in poor condition, things are actually much better than we thought. Due to the bogies being kept fit for use and well maintained by Dutch Railways, it has transpired that the vast majority of the brake rigging will probably be fit for future use.

As you can see from the pictures, the regular cleaning and soaking in lubricant means that all the brake pins are ready for a final wash down before removal and dismantling by the contractor. The recent warm weather is probably also doing its bit to help the penetrating oil work its way into the joints of the bogies.

CAD images by Iain MacIntosh – for as built EM2 bogies rather than our revised arrangement.







To make access to the components contained in the bogies easier, the 'spiders', which transfer the load of the loco onto the four load bearing points of the bogie, have been removed.

Once the lockdown restrictions are lifted, there will be a lot of work to do to clean up the fittings on 139 and bring 140 up to the same standard. You may be wondering why we are just cleaning up the pins and fixings, and not the whole bogie. The reason is that we are planning to apply for Heritage Lottery Funding for the restoration work, and we can't do this if work has already started.



However, we also have to provide a costing for the work, and we can't estimate that until the bogies are dismantled, so we are doing the minimum required to carry out an examination and costing. The various parts will then be put into storage while the funding application is done.

If you would like to help us with the dismantling work on the bogies, please get in touch, at: info@lms10000.co.uk





The Engine move

Mark Walker



Back in 2012 the original trustees of the group were successful in acquiring our original 1947 Mk 1 16SVT engine, identical to the one used in the original locos. This was the start of our story. Having an original engine to put at the heart of the new loco was the turning point that made it all possible.

The engine was stored at Peak Rail, outdoors but wrapped in several layers of tarpaulins, where it was joined in 2016 by our donor loco 58022. One of the priorities of the relaunched group was



to get the engine moved to undercover storage. A location was found, and plans were made for the move, but as is the way with these things, fate turned up with a bag of spanners and proceeded to throw them into the works at every point. Fast forward to September 2019, and we had found ourselves a workshop, and by December it was clean and ready to go. The new plan was to move the engine to the side of the new workshop, and then build an extension alongside the shed, neatly bringing our engine safely indoors.

Having spent a couple of extremely cold months cleaning up the workshop, we decided to delay the move until the end of February, because the weather would be much improved by then, right? Wrong. The morning of the 28th was bitterly cold, and the driving rain turned to snow as I drove up the Derbyshire hills towards Peak Rail. Tony Ellershaw and I had arranged to meet at Rowsley,



but fate had found more spanners and we were both late. The crane had, naturally, turned up bang on time, and a new problem had arisen. At the entrance to the Rowsley site is a wooden bridge, and standing in front of it was a 90-tonne crane with a dubious looking driver. Because of the layout of the site at Wirksworth, the crane had to lift our 19-tonne engine at a radius of 24 metres, so a bigger crane was required. Not being



aware of this, and the size of our crane, Peak Rail had said it would be no problem to come on site. By this time I was on the way, so I said we would have a think about it on arrival. However, clearly the crane driver had had enough of fate, and by the time I arrived, the crane was onsite and getting set up. Hanson and Paul, two of our trustees, were busy getting things in place ready for the lift when we found out that the trailer to move the engine had also been delayed.

Having realised that my nice, warm, and more importantly waterproof safety boots were back at Wirksworth, I was keeping a safe distance and busying myself taking photos. By this time the snow had been joined by a biting wind, and I found shelter next to a storage unit with Tony and Bernard, one of our hard working volunteers, who looked like he was starting to question his life choices by this point. Before long, the trailer arrived, and soon the engine was safely loaded, so Tony, Bernard and I made an executive decision – Bernard was dispatched to Wirksworth to open up and get the heaters and the kettle on, while Tony and I retreated to our cars and chose suitable points to video the engine leaving site.

The wooden bridge was successfully crossed once again, and the short journey to Wirksworth went without a hitch, including the very sharp left turn in the town centre that some of you will know, and before long the engine was ready to lift into its new home. The engine had been supported on wooden sleepers at Rowsley, but Paul wanted to take the opportunity to do something better while the engine was up in the air. Sections of 250 x 250 x 16mm box section had been prepared, with M24 threaded holes on one side. Large bolts were passed through mounting holes in the base of the engine and the box section pieces attached, so



now the engine is supported on 4 steel feet, well clear of any damp ground underneath it. The area alongside the new workshop is, very conveniently, a level concrete surface, and the engine was placed far enough up the side of the shed to leave space for our spare engine, which will hopefully be joining its sister later this year. Before we knew it, the job was done, tea was drunk and the crane and lorry were gone, just in time for the school run who take over the carpark at Wirksworth each



afternoon. To finish the job off, the engine was rewrapped in its nice new tarpaulins. A tough day all round, but a very successful one.

Finally, a few thank you's. Firstly to FLG Services Ltd who very kindly loaned us the lifting eyes and straps free of charge, and Steve Foster Cranes and T.W. Bowler who both did a very professional job on a very difficult day. I'm sure we will be seeing both of them again before long, and also to our longstanding trustees Paul Etherington and Hanson Hague, who kept everything organised at both ends, and made the whole thing run very smoothly. Thanks chaps!

Our new Treasurer and Trustee



Mark Walker writes: I'm very pleased to introduce our new Treasurer Tony Brown. Tony took over the role early this year year, and should have been officially appointed at the AGM, but due to the current situation, that unfortunately wasn't possible. Tony brings a wide range of experience

to the role, and I'm sure he will do very well. I asked Tony to write a few words to introduce himself.

Hello everyone, my name is Tony Brown and I've been Treasurer for the charity since the beginning of 2020.

I work as a Director for NHS Northumberland and as a Managing Partner at a GP Practice too, although I'm not a doctor so if you feel unwell, call 111 not me!

The last few years have been incredibly difficult in Primary Care and last year I wanted to find an organisation where I could use my various skills which would give me a chance to think about something other than healthcare twenty-four hours a day. I had joined IDRS as a member some months previously and after discussing with the Trustees how I could help with accounting and cashflow forecasting I was elected as Treasurer, which feels like a huge honour.

My interest in railways began in a typical fashion in the late seventies. Living near the ECML and Lamesly Marshalling Yard meant an afternoon on the grassy banks near the lines would see something of interest passing every few minutes. I was a Deltic boy through and through but always had a soft-spot for Class 40s and Peaks too. The real treat every so often was a Class 50 on a test run after maintenance at Doncaster works. With the Deltics gone, I kept an interest for a few years more, and had some wonderful times on Freedom Of Scotland tickets chasing Class 26 and 27 haulage. Then I fell in love with Newcastle United (I really do pick them don't I?) and travelling around watching them play (and lose) took over nearly all of my spare time and the bulk of my income.

In the 90s I worked for Inter-City in a management role but even with an office overlooking the south end of Newcastle Central I didn't rekindle any interest – all of the interesting stuff seemed to have disappeared.

Then, years later, driving to work around 2009 in Northumberland, I passed a freight service to Alcan Works being hauled by 55022. I had to pull over, I absolutely couldn't comprehend how that could be. After I'd taken a moment to consider whether I'd drunk too much the night before, I drove to work and started googling. There was so much to find out, it was quite amazing. Over the years I've dabbled in railtours, open days and bought lots of things that mean lots to me and nothing to anyone I know – the joys of living alone!

IDRS and I found each other through chance, and I'd like to ask you to tell as many people you can about our project – there will be many more people like me just waiting for their passion to be rekindled. While we apply for grants and funding, the success of the project will always come down to having as many people interested in it as possible, so tell your friends, share on social media and see if you can light a spark for someone. That's all it took for me.

Obviously with the Covid events my time has been even further limited and working very long weeks has been extremely tiring, but also challenging and rewarding. Seeing something take shape and seeing problems solved very quickly has been right up my street.

I hope you can help me spread the word and increase our monthly revenue as we work together to get LMS 10000 back on the rails.

Tony Brown

All steamed up?

Mark Walker on the hunt for a steam heat boiler

When the IDRS was relaunched a couple of years ago, there were a number of key decisions that needed making about the loco we were going to build. Will it have a generator or an alternator? What kind of traction motors should it have? Do we need another donor loco? All these issues were resolved, and we decided to produce the Engineering Overview document, which is now available on the website. Before we could finish it, there were some other questions to answer; will it have vacuum or air brakes, or both? Will it have train heating? What kind? At the same time as all this was being discussed, our lead engineer Paul Etherington was trying hard to accommodate all our requirements within the limitations of the 10000 bodyshell and produce a definitive general arrangement drawing.

We want 10000 to be as flexible as possible in use, to be available all year round, and to pull any kind of train. We soon realised that if the loco is going be of use to a heritage railway over the winter months, steam heating is a must. We looked at a modern steam generator, which would have the benefits of reliability and a compact design, and spoke to the owners of D5631 at the North Norfolk Railway, who have successfully fitted a modern equivalent to their loco.

The other alternative is to use a refurbished heritage boiler. Although we know that 10000 will not be identical to the original internally, the Trustees agreed that an older boiler, while not identical with the original, would be more in keeping with the spirit of what we want to achieve than a modern unit. The question then turned to where to find such a boiler, setting me off on another trail with, as always, an unexpected ending...

I was aware of a boiler stored at the Midland Railway Centre, which had been there for many years. Rumour was that it was a Spanner Mk 3 boiler from 55015 Tulyar, removed long ago when



the loco was resident at Swanwick. A little searching around and I was soon talking to the Deltic Preservation Society's Mike Hallam-Rudd. Mike turned out to be one of those really helpful chaps who keep turning up in the railway preservation world, and he patiently answered all my questions. He confirmed that boiler J972, the original as-built unit from Tulyar, was in fact safely stored at Barrow Hill. He also told me that Deltics had a Spanner Mk 2b boiler, not a Mk 3, but that they had a lot of spares that would be compatible with the unit at Swanwick if we were able to acquire it.

A little more asking around revealed that the mystery Mk 3 boiler was from Class 47 D1516, and unfortunately not for sale. At this point it looked like the trail had gone cold, but another chat with Mike and we were off on the journey again. Although the DPS didn't have a boiler for sale, they had a contact who owned three original bare boiler shells. Mike thought that if we could get a shell, the DPS would have enough spare parts not only to put it back together, but to provide us with a good supply of spares as well. This included an almost complete set of cladding, but Mike said that he would allow us to borrow any parts we needed from Tulyar's boiler, to have copies made. Things were looking up.



I was soon talking to the owner of the boiler shells, and things got better still. He did indeed have three shells, and one of them, removed from 55019, still had all its cladding present and intact. Even better news followed from the DPS; they had located not one but two complete sets of boiler tubes, which looked to be in good condition. A price was agreed for the boiler shell, and a date set for us to visit to inspect both the boiler and the tubes, to make sure they were both in a fit condition to be reused. Sadly, that is the end of the story for now, as that visit was set for 4th April, and as you can imagine, events have unfortunately overtaken us. So, a short delay, but once the world gets back to normal, the inspections will be carried out, and all being well

we will soon have a do-it-yourself boiler kit to start work on. Thanks to your donations, the funding to purchase the shell, tubes and other parts is all in place. Thanks to Mike Hallam-Rudd, we even have the manual. Another long and winding journey, but another piece of the jigsaw in place. Not only that, but with the bonus that a big identifiable lump of Deltic probably headed for scrap may yet one day make an unexpected and steamy return to life in 10000.

Clearly the boiler is a long-term project, but if any of our readers have experience in such things, and would like a challenge, you know what to do...



HG lvatt: The forgotten genius

Mark Walker

This article is based on one originally included in an IDRS newsletter from Autumn 2012

HG Ivatt, known as George Ivatt, was born in Dublin in 1886, the son of the Great Northern Railway engineer HA Ivatt. He was proud to joke in later life that he had no formal qualifications, but through a family contact, he was apprenticed at Crewe from 1904. Significantly, his apprenticeship included a year on secondment with electrical contractors BTH.

He was married to Dorothy Harrison, who worked in a hospital in France during the first World War, while he gained promotion to Major on the staff of the Director of Transport, also in France. Ivatt's sister Marjorie was married to OVS Bullied, who at this time was working at Doncaster as the assistant to HN Gresley, who had succeeded Ivatt's father as CME at Doncaster. George worked at the North Staffordshire Railway Stoke works as Assistant Locomotive Superintendent from 1919 until closure of the works in 1928. The NSR was absorbed into the LMS in 1923.

Ivatt transferred to Derby works in 1928, and became firm friends with Robin Riddles, and together they much improved the running of the works, with Ivatt usually funding the Saturday afternoon drinks if less than 4% of the locomotive stock needed repairs, down from 10%. In 1931 Ivatt was promoted to Locomotive Works Superintendent, but in 1932 he was again promoted, and moved to Glasgow as Scottish Divisional Mechanical Engineer. He returned to England in 1937 as Chief Assistant to William Stanier, who retired in 1944. Stanier was succeeded as CME by Charles Fairburn, who unfortunately died suddenly not long after taking up the role, and lvatt took over the role in February 1946.

Ivatt and Stanier had got on well, although after his appointment Ivatt had the audacity to modify Stanier's Duchess Class locomotive with a new bogie truck, roller bearings, ashpan and grate, and smokebox, in order to compare the modified loco with his new diesels. He did however name the first of the two modified locomotives Sir



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William Stanier FRS. Despite these modifications, it was Stanier who recommended the board to select Ivatt as CME over Riddles, and together they put together an excellent team of engineers, and the interchange of ideas that they encouraged was what led to Derby really taking centre stage in British locomotive design for many years to come. Ivatt's father had brought Walschaert vale gear to the UK, and George went on to experiment widely with vale gear, fitting some Black 5 locos with Walschaert and Carotti systems, paving the way for the BR Standard 5. In the post-war austerity period, lvatt continued with standard LMS designs for which parts were readily available, and introduced new designs which allowed the replacement of life-expired 19th century locomotives. He was interested in making his designs as user-friendly as possible to those working on them, and introduced features including self-cleaning smokeboxes, rocking grates, self-cleaning ashpans and outside cylinders. He reduced the LMS fleet to just 12 standard designs, with the only remaining 0-6-0 being the Class 11 diesel shunter.

A Mr E Langridge recalls Swindon works joking that the Black 5 would be an excellent locomotive if only it had Stephenson valve gear. This led to an animated discussion at Derby, and a highly amused Ivatt when the first drawings appeared on his desk a week later. Ivatt copied the Stephenson design, but on outside cylinders. The resulting loco was named George Stephenson, and is now preserved. The whole episode is a testament to Ivatt's minimum fuss, maximum effect approach.

When British Railways was created in 1958, Riddles, who had been promoted to the board of the LMS when Ivatt had taken over as CME, became CME of the new British Railways, with Ivatt continuing as the CME of the London Midland region until his retirement in 1951. Although best known for his steam designs, our interest in Ivatt lies in his introduction of main line diesel locomotives to the UK. In 1946, a dinner with the Chairman of English Electric, Sir George Nelson, led to many fine engineers including Ivatt making a trip to the USA, bedded down on a troopship floor, to identify best practice, as the USA had by now overtaken Europe in the design of diesel electric locomotives. US designs had moved from fireprone steam locomotive type plate frames to bogie design, which is one of the most noteworthy features of 10000. Unfortunately, Ivatt's third diesel, the 4-8-4 Fell loco, returned to the plate frame design, and also met its end as a result of fire. The improved bogie design was a big step forward, and found its way onto many later designs, up to the last of the class 25 locos, built some 20 years later.

Our President Stan Fletcher recalls that Mr Ivatt and his colleagues visited the USA 'just to look at what they were doing', but by the time he returned to Derby, the decision appeared to have been made to build 10000 and 10001. The new locos were a success in their own right, but perhaps even more so in terms of the locos that followed. The twins laid the foundations for many later locomotives, most notably Class 40. The later Class 50 had a later version of the same engine used in 10000, and a similar 12-cylinder engine was used in class 37.

The twins were expensive to build, but more economical to run than a steam locomotive. In a time of austerity, the dynamometer trials carried out were specifically designed to show economy rather than speed on war-weary track. However, expensive modern traction in a post-war, coalbased economy would have to wait, and almost 1,000 more steam locomotives were built, partly at least in an effort to provide work and revitalise the economy.

Derby works were under strict instructions from Ivatt to ensure that 10000 was delivered before the end of 1947, and would therefore be an LMS engine. Stan Fletcher recalls working through the night several times to make sure this happened, and 10000 rolled out of the works in December 1947, with its large LMS letters prominently displayed. Following the creation of British Railways, instructions to remove the LMS letters were 'filed' until after Ivatt's retirement in 1951.

This wasn't the end of Ivatt's railway career though, and he went on to become a director at Brush, before passing away in 1976 at the age of 90, following an active retirement. He was heavily involved in the design of new locomotives. In a moment of déjà vu perhaps, in October of 1957, visiting dignitaries, including CS Bond, now CME of British Railways and ES Cox, both of whom were part of the 10000 design team, were shown around the latest Brush product, the first class 31 locomotive. D5500 ventured out onto the Midland mainline, wearing British Railways green rather than black, but still wearing that distinctive raised aluminium stripe.....

Catering car donation Mark Walker

We are delighted to announce that our friends at Porterbook have kindly agreed to donate another coach to us: Mk3 TSOB2 catering car 10412. This coach was built as RFM 10203, but converted to the TSOB2 format to reduce the size of the kitchen and increase the seating capacity. Our aim is to use this as a support coach at a later stage in the project, but in the short term it will be going out on loan, to be used as a mobile buffet, waiting room and ticket office. More on that, and some photos, in the next issue! Once again, we are indebted to Porterbrook for their generous support, especially to Mark Merryweather for organising all the paperwork, finding drawings and patiently answering all our questions, and to Gary Webb for arranging for us to visit to have a look over the coaches.



Mk3 TSOB2 coach 10417 at Liverpool Street Station. Photo: Tony Ellershaw.

Upcoming events at EVR Andrew Hoseason

At the time of writing, many of us are sitting at home hoping that COVID-19 will pass us by soon. The Ecclesbourne Valley Railway has a number of events planned throughout the year, including a diesel gala on $7^{th} - 9^{th}$ August. The railway is currently closed, but we hope that the situation will improve enough for these events to take place.

If they do, Centenary Works will be open as planned. However, we don't currently know how the situation will develop, and events may overtake us, so if you anticipate visiting from afar please check on our website or contact us by email or phone.

You can also get the latest information from the EVR on their website www.e-v-r.com

In addition to the diesel galas, we also planned an open day for our donors in June, with the opportunity to have a look around the works and talk with trustees. If the railway is still closed, and it isn't practical to run this event, we will arrange an alternative event, hopefully later in the year. We will contact all members as soon as the situation is clearer.

In a recent meeting with Wirksworth Town Council we found that they have a particular concern about the air quality in the town centre; something we appreciate well during peak times when a long line of stationary traffic can fill the town centre. The Town Councillors would like to encourage our members to consider arriving at Wirksworth via train or bus to reduce congestion.

Benefits for donors

At the AGM in 2018 we decided to change the way that our membership arrangements work. We wanted to take the opportunity to clarify how it all works for our newer members, as it's one of the most common things we get asked about. Members pay whatever subscription they feel they can afford. Although monthly donations make it easier for us to plan our cashflow throughout the year, members can make lump sum payments instead, if they wish. Rather than paying membership annually, we developed the 'notch' system, based on the 8 notches on the twin's power controllers. We keep a running total of how much each member has donated, and which notch they are on. The higher your notch, the more benefits you get from membership. All donations made before the notch system was put in place have been totalled up, and added to members' cumulative totals.



NOTCH 1: £24 - £59. All donors are offered the opportunity to become members of the Society at no extra cost. As members they will receive copies of the Society newsletter, be able to do voluntary work toward 10000's re-creation, be invited to society events and have voting rights at meetings.



NOTCH 2: £60 - £119. In addition to Notch 1 benefits, members will receive a discounted ticket price on one of 10000's first trains.



NOTCH 3: £120 - £239. Members will be offered a free seat on one of 10000's first public trains in addition to Notch 2 benefits.



NOTCH 4: £240 - £499. Members will be offered a cab ride in 10000 along with Notch 2 and 3 benefits.



NOTCH 5: £500 - £1499. Members will be offered a free seat on 10000's first passenger train in addition to the benefits offered to Notch 2 to 4 members. (Those people who were Life Members in the previous annual membership system are automatically Notch 5 members.)



NOTCH 6 - £1500 - £9,999 - Members will be offered a driver experience package, including an opportunity to drive 10000 along with all benefits offered at Notches 2 to 5.

NOTCH 7 - £10,000 - £24,999. Members will receive all the benefits of Notches 1 to 6. In addition they will receive a limited edition replica worksplate that has been carried on the locomotive in service, and a framed and signed print of an original painting of 10000 that will be on display in our visitor centre when completed. These prints will be strictly limited, and will only be available to Notch 7 and 8 members.



NOTCH 8 - £25,000 plus. Benefits to be agreed.

Notes

Driving experience will not be on public trains, and it subject to arrangement, loco availability and conditions of third parties. You will find more information on our website, but if you have any questions about membership, or you want to set up a standing order for donations, email us at info@lms10000.co.uk

Security installation

Mark Walker



In January of this year Waveley Security fitted a first-class security and fire detection system at our new Centenary Works. The system was donated to us by John Miller, the owner of Waveley, who is a member of the Society, and has been a solid supporter.

Our thanks go not only to John for donating the system, but to the Waveley installation engineers, Scott & John, who did an excellent job. On their first visit, they said they wanted to work late to get as much done as they could. We gave them instructions about not making any noise after 6pm, as agreed with our residential neighbours, and left them to it. The next morning we were amazed to see how much had been done, and to find that they had signed out at 2.00am! The system is now up and running, and Waveley are also kindly providing an alarm monitoring service. The next stage will be to connect up the live feed so that Trustees can monitor and operate the system remotely. All being well, in due course we will be able to share some of the outdoor live camera feeds on the website.

Check out Waveley Security on their website: <u>www.waveley-security.co.uk</u>

Our workshop

We are now up and running at Centenary Works – even the flowers we planted are coming through. Apart from being a bit chilly at times, it is already proving to be a very useful asset. Inevitably now that we are using the workshop – socially distanced of course – we are accumulating a list of additional equipment that we need, which is eating into our funds. If you are able to assist with a donation towards things like benches, storage equipment, lifting gear, and the multitude of other necessary items, it would be much appreciated.

Donations can be made by cheque, posted to Ivatt Diesel Recreation Society, 46 Biddick Village Centre, Washington, NE38 7NP. Donations can also be made by bank transfer or Paypal– details are on the website. If you have any problems or questions, email us anytime at info@LMS10000.co.uk

On the railways – in 1966

Mark Walker writes: One of the most enjoyable parts of the project is meeting people and hearing their memories of the days when the twins were a regular sight. Our move to the Ecclesbourne Valley Railway has prompted a few stories about the old Wirksworth branch, and one of our members, **Vaughan Cole** has written this account of a typical day on the railways in 1966.



In early 1965, 48641 slowly moves its train past Derby Midland station with the famous loco works clock tower and original round house as a backdrop. The train includes heavy steel sections probably originating from Sheffield and bound for the Birmingham direction. With only three years to the end of steam these locos continued to perform important front line duties. 48641 was one of the batch of 68 built at Brighton works between 1943 and 1944.

Toward the end of my training in Derby Carriage and Wagon Works, about January 1966, I was allocated to the DMU test team. This team took overhauled DMU sets for a test run to Wirksworth and back. I joined the team early one morning for one of the weekly runs with the unit prepared and standing at the works exit onto London Rd Junction.

No problems had been found in running up the unit and at this time none were anticipated. We contacted London Rd box, and as our move was of low priority, we had a bit of a wait before we were given a clear signal to proceed. Passing the station, we took the main line north and were soon at Duffield, signalled into a siding so that a trackside examination of engines, transmissions and other under floor equipment could be conducted. Once again all was found satisfactory and after contacting the signal box, arrangements were put in hand to proceed down the branch. This done, we were on our way to Wirksworth. On arriving, we passed a waiting 8F with a loaded loose coupled mineral wagons train bound for Derby. At this time the test team had a lunch break, so with the team leader's approval, I walked down to the 8F and requested a footplate ride to Duffield. Approval was given, so I climbed into the cab where the fireman indicated where best to stand, near the door.

The fireman expressed in no uncertain and 'robust' language his concerns regarding the descent of this fully laden limestone train into Duffield.

He requested that I did not close the 'door' on his side. He was uncertain regarding the ability of his driver to maintain control on the steep decent to Duffield and indicated he needed to be prepared for a fast footplate exit in the event of a runaway. Despite his reservations, with the brakes pinned



1965 and an unidentified 8F slowly moves coal empties under the Derby Loco Works access footbridge past Derby Midland station. I would guess the empties are from the loco shed, gas works or loco works power station and are bound for Chaddesden sidings. Diesel shunter D3832 awaits its next shunt move in the foreground. London Rd signal box and junction are to the right.

on the wagons and the loco handbrake screwed well on, we arrived at Duffield in one piece.

With the token securely delivered, we awaited the right away to Derby. I would guess we had 20 x 20 ton plus wagons, and there was always the uncertainties of the load not being fully understood, the driver not being on the ball and the loco brake being in poor working order. After delivery of the token and departure of the 8F, I sat in the classic MR mechanical lever box to observe events awaiting the arrival of the returning DMU. With DMU testing complete I returned to Derby, a little more educated regarding engineering testing and railway operation. A typical day on the railway.

THANKS

We are happy to acknowledge the support and help in kind from a growing range of companies. More companies will be added to the list after they themselves publicise their assistance over the winter and spring period. We are grateful for the support offered to our project from the following companies:



Waverley will provide security to our workshop www.waveley-security.co.uk Unit 13, Stadium Close, Cardiff, CF11 8TS



TAS have scanned the original loco's end cap forging, provided castings, estimates for construction along with storage space.

Unit 1, Grain Warehouse Yard, Millers Lane, Burton upon Trent DE14 2NS

porterbrook

Porterbrook have provided the Society with a sleeper coach which will enable volunteers to stay affordably at Wirksworth.

www.porterbrook.co.uk

Ivatt House, 7 The Point, Pinnacle Way, Pride Park, Derby DE24 8ZS



Serco have provided technical drawings. www.serco.com/uk/sector-

expertise/transport/rail-technicalservices

RTC Business Park, Derby DE24 8UP

Tail light

Mark Walker

I've learned a lot in the two years since becoming Chair of the IDRS, and one of the most important lessons has been an old one 'relearned' – if you don't ask, you don't get. Many of the things we have achieved have started with me saying, "I don't suppose..."

Along with the big pieces of 10000 like the engine, bogies and chassis, we are going to need a huge number of smaller bits and pieces to build the loco. Some of them we are going to have to have built from new, because they are impossible to find, but now and again, you literally trip over something useful. Such was the case with our newly acquired exhauster strainer, a small but useful item that filters dirt out of the air entering the exhauster, which creates the vacuum for the train brakes. When I first read the manual for the Reavell exhausters we bought last year, it referred to accessories that could be added, and one of these was the exhauster filter. At the time I assumed we would be able to pick up a modern equivalent without too much trouble and thought no more about it.



A few months later, on a cold, wet and muddy day in January, Tony Ellershaw and myself were moving the contents of my storage container at Swanwick into Tony's trusty van, to be taken to the new workshop at Wirksworth. Even from where we were, we could hear the sound of escaping steam coming from the direction of the West shed and went off to investigate. When we arrived, we found the Duchess of Sutherland, making a noise the like of which we had never



heard coming from a steam engine. As we watched we realised the source of the enormous noise was that the safety valves were being checked – not a job for the faint hearted! Before long the rain started again, and we headed back to the container. On our return, I stepped over a tarpaulin on the floor and tripped over a piece of 2" pipework, which was attached to an interesting looking lump of metal. On closer inspection we saw that it had the words 'Davies and Metcalfe Exhaust 2" Strainer Unit' cast into it and realised it was the filter unit referred to in the manual, and in very good condition too.

This led to another old but important lesson – it really is all about who you know. Speaking to Mike Kerry, the Chair of the Peak Loco Group and an old friend, we discovered that the strainer belonged to one of the Class 20 groups based at Swanwick. A couple of phone calls were made, and 2 weeks later we were back, talking to Lester French, who turned out to be a very pleasant and knowledgeable chap, and after handing over a very reasonable amount of money, the strainer was safely in the back of the van, and another piece of the jigsaw was in place. While talking to Lester, we noticed some class 20 injectors another part we need for 10000. "I don't suppose you have any of these spare?" "I don't know, but I know a man who will", and off we go again