

# Adventures on the Austrian

The arrival of a new loco on a heritage line is a fairly rare event so how do footplate crews get to understand it? In *NGW* editor *Andrew Charman's* case, with a degree of difficulty it seems...

There was no warning. As a member of the Welshpool & Llanfair Light Railway's volunteer footplate crew, I was rostered on a couple of firing turns on Tuesday 3rd and Thursday 5th September, and following a mostly enjoyable day on Beyer Peacock 0-6-0T 'The Countess' on the Tuesday, I expected more of the same on the Thursday.

Then late on Wednesday evening, a post appeared on the narrow gauge groups on social media; "Zillertal will be running at the Welshpool & Llanfair Light Railway tomorrow. For anyone that might be interested..."

If you've read this issue's news pages you will be aware that the recently overhauled Zillertal is the latest locomotive to

**Photo: 'Zillertal' emerges from Llanfair shed to begin what will prove a trying but educational day for our editor...**

**All photos in this feature by Andrew Charman and Charles Spencer/W&LLR unless stated**

W&LLR, following a two-year hire agreement with its owners the Zillertalbahn in Austria. The 1900-built Krauss U2 class 0-6-2T arrived in Welshpool on 13th August – on page 6 we detail the superb effort by the W&LLR staff and volunteers that enabled the loco to pass a boiler test on Friday 30th August, just in time to be the star turn of the line's Gala that weekend.

Having been at the Gala and watched the loco in action, crewed by members of the team who had ensured it made the event, I was

confident that I would not be experiencing this particular

footplate until next season. So to discover I would be on it just four days later was a slight shock!

It's fair to state at this point that I am by no means a natural fireman – I did not first step onto a footplate until I was almost a half-century old. I watch in envy some of my fellow volunteers who when presented with any loco in any weather and traffic condition can fire a virtually perfect round trip to Welshpool without breaking a sweat. I have to think about the whole process and some of my colleagues believe I over-think things – I had a slight suspicion that the last-minute notification of my Thursday steed might be deliberate...

Something that certainly needs thinking about is ZB2 – this by the way is now the 'official' W&LLR designation of the loco, though some footplate crew at the Gala were calling it Bono – it's a U2, geddit? And my daughter





Megan, also one of the W&LLR footplate crew, dubbed it 'Flugen' for some unaccountable reason...

ZB2 boasts a host of technical features I'd never previously seen on a W&LLR loco, while I had also been sitting round the table in the volunteers mess when, over many cups of tea, the initial crews offered their first impressions. It went very well, they said, but the injectors (which literally inject more water into the boiler to replace that turned to steam) weren't really man enough. Okay so more use of the blower then to ensure you have enough pressure to keep the injectors on longer – "Oh the blower could be better, we will have to adjust that over the winter..."

**Above: Zillertal's controls – some similarities to the other W&L locos but differences too, such as the line of valves centre left for drenching and the pressure gauge marked in bar, not psi.**

**Below: Blowing down the loco to remove less than desirable particles that may have accumulated in the boiler in the shed overnight.**

So on Thursday 5th, I approached the running shed with some degree of trepidation. At least I was not having to learn how to light the engine up on this occasion. A normal, 'yellow timetable' day of three round trips involves two footplate crews. Crew 1 lights up the loco and takes the first two trips. Crew 2 babysits the loco while crew 1 has their breakfast and lunch, takes the final train and 'disposes' (puts the loco to bed). As I was F2, lessons in lighting up ZB2 were saved for later.

I rolled up to the shed just after 8am to find the loco raising steam and the first thing I did was to climb onto the footplate – because I hadn't previously stepped on it!

First impression – what appears to be a large cab basically isn't, because it's full of coal bunkers. They are both in the fireman's side tank (to the left) and on the cab backsheet, indicative of the rather higher mileage the loco ran in Austria between coal refills. We are only using the side tank one and storing items such as the oil cans and water treatment in the others.

Locating the obvious controls – the injector water and steam valves, the blower, the damper door lever (this engine only has a rear damper), is made more difficult by a host of extra equipment. For example there is a line of valves to spray water into the smokebox, the ashpan and even through a hosepipe to clean the cab floor. There is what looks like a huge point lever but is actually the handbrake, mounted directly ahead of the fireman and even a board of electrical switches for lights and stuff.

Obviously neither I or my equally ZB2 rookie driver Phil Ellis would be trying to get our heads around all this stuff on our own. Accompanying us would be fellow W&LLR crew John Travis and Joe Gunby, who had both been part of the pre-Gala team. Over Gala weekend Joe had fired ZB2 on five return trips and I acutely remembered him telling me; "This engine is like nothing else we have..."

It was quite ironic really, as Joe is one of our more recently passed-out firemen and it seems not so long ago when he was being instructed by among others, me. This time I would be very much the pupil...

Anyone who has ridden on the W&LLR will not be surprised to learn that it's by no means an easy line to fire (or drive, for that matter). Many believe that the trip from Welshpool to Llanfair, with its mile and a half of 1 in 29 up the Golfa bank directly on leaving Welshpool (a climb that halfway up also starts twisting through reverse curves) is the biggest challenge. But after that climb the rest of the journey to Llanfair is actually quite easy.

### Harder than it looks

Going the other way, from Llanfair, presents a series of sharp climbs (including a very short section of 1 in 24) with brief respites between. The fireman doesn't get a rest until cresting the summit of Golfa and heading down the bank into Welshpool. We have had visiting standard-gauge firemen, who had looked forward to 'playing with the toy train,' stepping off the footplate at the end of a run mopping their brow, their face bearing that rabbit-in-headlights expression as they recall the narrow gauge rollercoaster they'd just tackled. And of course, my initiation on ZB2 would be going from Llanfair to Welshpool...

First, however, there was lunchtime babysitting to be done, following the return of the first trip of the day, on which fellow but infinitely more experienced fireman Phil Crook had his ZB2 initiation. "It's alright," he told me. "It's a bit like firing the big Fin," – a reference to 'Orion' a Tubize 2-6-2T that ran on the W&LLR between 2000 and 2006 before returning home, just before my footplate career began.

First lesson I learn about ZB2? Coaling it up is bloomin' awkward! The coal has to be tipped into the bunker from above the side tank, and as we don't have a posh coal drop like that recently installed at the Vale of Rheidol, we have to use the water column steps to carry up our coal buckets. At least we can coal and water at the same time...

Running round with Phil to put the loco back on the train, I take my first proper look at ZB2's firebox. It's a swing door, which unlike the typically British sliding version rather restricts the fireman's 'swing space' when open, and when you open it the heat immediately hits you. The back (cab end) of the grate is very close to the firehole, but it is a good-shaped firebed with the back



corners visible unlike on the line's original Beyer Peacock locos.

### Under the arch

The front of the fire narrows into a very thin space due to the brick arch, a large slab of firebricks sloping upwards from the boiler tubeplate. Primarily designed to improve combustion by routing hot gases from the front of the fire back over the firebed before they enter the boiler tubes, this is another new thing to me as none of the other W&LLR locos I have fired have brick arches. I must be careful when shovelling into the front of the box to ensure the coal goes under the arch and doesn't land on top of it, where it will remain...

My moment of truth comes just after 3pm. I am on this loco and we are going to Welshpool. Joe tells me it's important to keep the grate covered, but the fire doesn't need to be too thick, and adds; "it takes a bit longer to react than our other locos..."

Oh prophetic words. Around 10 minutes to go and the pressure gauge is sitting obstinately just below 10 bar (Bar? What are bar? I'm used to psi...). Apparently the trick is to keep it between 10 and the red line at 12 bar where the safety valves lift.

The middle of the grate appears rather thin so I feed a round of coal to it. On a Beyer, or our Kerr Stuart 0-6-2T 'Joan', I can fill a gap as we pull away from Llanfair and by Heniarth halt, 1.5 miles into the journey and just before the heavy climbing starts, the fire will be roaring and the pressure gauge nudging the red line, providing me with plenty of steam to use the injectors and get the water gauge where I want it for the hard work ahead.

We get the 'right-away' from the guard and ease our train out of Llanfair station, but that gauge hasn't moved, so I feed in a bit more of the black stuff. As we amble along the gentle early route, around the Mill Curves and past Heniarth, it just sits there and I'm getting worried – I

should have the injector on by now...

The inevitable happens – as we cross the Banwy river bridge, just before the first stiff climb through what we call The Kink, John Travis opens the blower to a level I normally only see at a pre-season steam test and suggests to Phil that we should pause to recover the situation.

### Under pressure

Sitting stationary less than two miles out of Llanfair? I've never done that before, not even in my earliest training days. This is the stuff of nightmares – Bono 1, Charman nil and I want to be anywhere but here...

And then the pressure comes back, the needle climbing past 11 bar. We move off, and things start getting better as I learn another of ZB2's qualities. Once you have the pressure where you want it, so long as you keep an eye on things it just stays there – use of the injector and such does not produce nearly as sensitive a reaction as on our other engines.

Admittedly I'm taking much more instruction, from both Joe and John, than a fireman of my experience should – at times it feels like I'm on my first turn, not the hundred or more I've done since passing out back in 2009. But confidence is rising, especially when John comments "You have a good big fire in there now..."

There are extra jobs to do too, notably those drenchers. Both the ashpan and smokebox ones are turned on briefly on a regular basis – Joe suggests every third or fourth time I use the injector. Ostensibly it's to keep temperatures manageable and avoid potential issues such as the smokebox door warping, but later I will discover another major advantage of these. Joe meanwhile regularly washes the footplate floor with the hose activated by the third dial, and damps down the coal in the bunker, great on a dusty day.

I'm aware a big test is still to come – the return trip from Welshpool, and the ascent of the Golfa bank.



**Above: On the ZB2 coaling up the bunker is not the easiest of tasks...**

**Below: ZB2 crosses New Drive just outside Welshpool and heads onto the Golfa bank during the Gala. The plume of steam from the safety valve suggests plenty of pressure and the fireman will have the injector running.**

And of course I have less time to prepare for it, as due to that early pause we arrive at Raven Square station late, with a little over 15 minutes before we are due to depart again, straight onto the bank.

Joe kindly does the watering for me, while I set to 'clinker-hunting'. For raking the fire ZB2 has a huge fire iron that hangs off the side of the engine, which is fine before you use it but not so easy afterwards when the end is very hot and can easily blister the paintwork it sits next to. A dousing in fluid from the water tower helps matters but a better method of storing it will need designing.

I'm pleased to find only little bits of the dreaded clinker, easily broken up, and so I start rebuilding the fire. On our other locos we keep the front very thin in stations to avoid visible smoke and at Welshpool build up the rear quite heavily to ensure we have »





what we need for the Golfa. But I'm learning that the easiest time to feed that thin gap between brick arch and front of the grate is when the loco is at rest, so I do that and then build a fairly thick but quite level firebed.

Aware that with the modestly-sized injectors it's great if you have enough pressure to keep them on all the way up the bank, that's what I'm aiming for, and I almost manage it. Our ascent is fairly encouraging, and while we do have to stop briefly at Golfa halt (the acknowledged 'blow-up' point if the ascent has been less than perfect, and a point at which firemen allow themselves an inward smile if they sail straight through) it's only for less than a minute, so not bad for a first go.

### Awesome audio

The rest of the journey home is actually quite enjoyable, a case of filling holes in the grate as they appear – in fact close to home I insist

on bolstering what I see as a thin bit of the fire, against John's advice, and am rewarded minutes later by lifting safety valves. I also have more time to appreciate ZB2 – the loco rides extremely well, and possesses both a lovely deep-throated exhaust beat, especially when working hard, and a pleasingly well-tuned whistle note.

We arrive back in Llanfair not quite on time but not horribly late either, and I feel I am beginning to understand this engine a little better. I can't ponder this too much at this stage as there is still the disposal to be done, at which point I discover the big advantage of those drenchers.

Ashing out the front end in particular is usually one of the least appealing parts of the fireman's role, shovelling loads of ash into a wheelbarrow and getting covered in the inevitable dust that results. But not on this loco – open the smokebox door and you will find a layer of sludge on the floor, four shovelfuls



**Above left: "This really is fun you know!" Andrew and Joe Gunby at the end of their trip.**

**Above: Snapper Charles Spencer catches Andrew displaying a skill for 'observing' while Joe ashes out the front end...**

**Below: A very different loco in the Banwy Valley. Karl Heath took this shot during Gala weekend as Zillertal passes Heniarth on route to Welshpool.**

and a bit of scraping, job done!

So at the end of the day, I think it's an honorable score-draw between myself and Bono. Yes, I was likely too nervous when I first got onto it, but after those early traumas it got better – very much better.

No doubt about it, ZB2 is a loco that will prove highly interesting to the W&LLR's visitors. I'm not silly enough to believe I've fully mastered it yet, but I'm actually looking forward to my next go... **NGW**

■ The W&LLR is keen to attract new recruits for footplate training, so if this feature inspires you to have a go, more information is available from [info@wllr.org.uk](mailto:info@wllr.org.uk) or by calling 01938 810441. Despite the Ed's traumas detailed above he assures us it really is a great deal of fun!

