

# Steam Railway Photography

## 1. Introduction

### Brief history

Practical photography was still a thing of the future in the early days of public railways, but the subject matter proved to be of considerable interest to artists of the day. By the time 'railway mania' had reached its peak in the mid-19<sup>th</sup> century, early photographers were able to capture the seismic effects that railways were having on the landscape and society of Victorian Britain.

So for more than 150 years people have been photographing trains and the railway environment, capturing the changes in technology, and the consequences of the commercial and political pressures to which our national railway network has been subjected.

From being the preserve of only the wealthy few, railway photography is now open to anyone with even the most modest of cameras and an inclination to get involved.

### Styles

*Action photographs* - it is natural to want to concentrate on the action side of railway photography - a steam engine in full cry pulling a heavy load makes an impressive sight, which is more or less guaranteed to produce a successful image. The 'three-quarter' angle is accepted as the standard view to take, providing a relatively close view of the locomotive action at the front and a general indication of the train it is hauling. Side-on views while 'panning' the camera are good for creating the sense of motion, but provide only a limited field a view and little contextual detail.



*Landscape photography* - if you apply those skills you already have to a landscape which includes a railway with some noticeable civil engineering like a bridge, especially a viaduct, or an embankment, it is relatively undemanding to include a passing steam train at the greater distance involved. The 'steam in the landscape' view is a classic which many think represents a harmonious combination of the natural world and man's industrial endeavours.

*The railway scene* - more general photography of people, places, infrastructure, etc with a railway theme. Busy mainline stations, for example, have a place in classical railway art and photography, although they represent a difficult proposition for the modern photographer! You need to be up to date with the latest advice from Network Rail and the British Transport Police on this subject!

*The 'new' approach* - steam traction was phased out of day-to-day use on British Railways during the 1960s and the replacement diesel and electric locomotives displayed little of the immediate visual appeal of their forebears. This forced a number of photographers to adopt less traditional techniques (some would say gimmicks) to continue to produce images with impact - necessary for some as it was

their livelihood. Characteristic of this approach are the use of more extreme focal length lenses, grimy/industrial/run-down locations, atmospheric/grainy shots in low light or poor weather, unusual angles, character portraits and candid shots of people at work.

This guide is principally aimed at people who wish to take action photos of steam trains working on the main line, like the example shown (which I took in 2004 with a Pentax Optio compact camera).

## **2. Planning**

For the most part, photographs like this do not happen by chance. They require a degree of planning to be in the right place, at the right time, with suitable equipment and with a practiced technique which will give you the confidence to get a successful shot first (and only) time.

### **Where to photograph steam trains**

The mainline routes in this area are either 2-track or 4-track. British trains drive on the left just as we do on the roads - for a 2-track section as long as you know which direction the steam special is coming from you should be able to work out which track it will be on! This is necessary information when you are composing your shot.

For historical reasons the GW mainline out of Paddington is configured as two parallel 2-track routes. The leftmost pair looking west are designated the 'main' lines for faster traffic and the other pair the 'relief' for local passenger and freight workings. Steam specials usually travel on the relief. This scheme continues through Reading in our area of interest to Didcot where the Birmingham route diverges to the north. Any 4-track sections west of Didcot across the Vale of White Horse to Swindon are treated like a road dual-carriageway, with the inner pair as the 'main's and the outers passing loops. If in doubt ask one of the other enthusiasts on the spot. You are unlikely to be alone!

In principle, the rail network is open access so a promoter of a steam special train can opt to follow any route, subject to technical limitations and the ability to pay the track access charges. If you are based in Hungerford the 'local' options would be:

### **Reading, Newbury, Westbury – the Berks & Hants line through Hungerford**

suggested locations: Newbury Racecourse, Kintbury FP bridge (SU383671), Hungerford Common, Hungerford Station, the Bedwyns, Bridge 99 on the K&A canal for 'down' trains in the morning (SU270630), Crofton curves, Wolfhall FP bridge (SU245625)

### **Reading, Didcot, Swindon – the original Great Western main line to Bristol**

suggested locations: Lower Basildon (SU610789), N Goring (SU603824), Didcot, Steventon Level Crossings, Denchworth (SU375908), Shrivenham Stn site (SU239876), Bourton (SU228875)

### **(Reading,) Basingstoke, Andover, Salisbury – the L&SWR route to the SW**

suggested locations: Devil's Highway nr Calleva (SU657625), Whitchurch Stn/yard, Bourne Valley Viaduct (SU430490), Andover footbridge (SU359462)

NB. Reading – Swindon, Reading – Newbury and eventually Reading – Basingstoke are being electrified and the infrastructure of masts and wires makes successful photography challenging!

### **When to be able to photograph steam trains**

Apart from a very few tourist trains, steam traction is no longer used regularly on the main railway network. The promoters of steam specials advertise in their target markets, but fortunately for us they nearly all also share the operational routings and timings on a Web site - see

<http://www.uksteam.info/tours/trs18.htm> for details in 2018

Look out for services which start from Paddington or Victoria in London and head for the West Country or S Wales, or vice versa. Check the separate timing sheet (when available) for any likely looking specials to confirm what the routing is and when it is due to pass suitable viewpoints. Some specials travel out one way and back another. Excursions are usually day long, so photographing the return is only feasible in summer as *night time shooting with flash is prohibited* for safety reasons. And don't forget if business or leisure takes you to other areas of the country to check if you happen to be around for a steam special by a happy coincidence! UK Steam Info does provide links to the websites of the companies operating steam excursions so you may be able to get more info directly from them, especially if you plan to travel on the train itself (which limits your action shot opportunities).

In addition to mainline steam, there are a number of preserved steam railways (as opposed to preserved steam trains running on the public network) within reasonable travelling distance of Hungerford. They provide slightly more relaxed access for rail enthusiasts, and if you fluff your shot when a train passes you may only have to wait minutes until the next one comes, rather than weeks in the case of mainline steam. The Mid Hants Railway (New Alresford), the GWS steam centre at Didcot, the Cholsey & Moulsoford, the Swindon & Cricklade all publish their own timetables and in some cases run several trains per day, perhaps even daily at the height of the season. The atmosphere is different at these tourist-based enterprises, but they can provide practice for your steam technique in a more authentic 'steam days' environment

### **3. On the Day**

#### **Being prepared to photograph the train**

So you've done your homework and you're out at the right place in time to take your photo. You probably used UK Steam Info to get the timing sheet for the run, and for extra confidence you may have checked on Realtime Trains that your train (probably identified by a 1Z?? code) is in fact due to pass where you are standing. This web-based system uses feeds from Network Rail on the day and is the preferred tool for this purpose. Even better, Open Train Times has a Maps facility which relays the data picked up from the signalling systems. If you refer to the map for the Berks & Hants route, for example, you will see the block for 1Z?? advancing as it approaches, so there is no excuse for being taken by surprise. While you are waiting you should take practice photos of other services to check your camera settings and to 'limber up' for the main event.

#### **Taking the action shot**

Shutter speed is the most important setting to consider for action photography. I like to achieve a sharp image of the steam locomotive, and rely on a trailing plume of smoke/steam to show its speed. I usually work in the range 1/500<sup>th</sup> to 1/2000<sup>th</sup> second depending on the amount of light, the speed of the train, and the extent to which I'm shooting side-on. Faster shutter speeds have to be paid for in the other exposure settings (aperture and ISO) so moderation is called for. I keep my finger on the control wheel to change shutter speed as the train approaches, and may make last minute (second) tweaks if the train is travelling faster or slower than expected.

I shoot in 'Manual' mode (M setting on the PASM dial), also making a judgement about what aperture I need to use. Unless the light is very good I may not be able to get a depth of focus from the front to the back of a train which may be a hundred or more metres long. Clearly I need to concentrate on the front of the train and can let the rear carriages drift out of focus if necessary.

I've found by experience that the correct exposure for a steam train shot can be very different from that indicated just before it arrives – the sudden appearance of a pure white cloud of steam occupying half the frame can have this effect! Therefore I leave it to the camera to set the exposure level through its Auto ISO function, having been careful to check that it is not likely to choose a high ISO setting producing unacceptable noise levels on the image. These settings are very much camera-dependent and rely on you knowing how to get the best performance from it.

I use a zoom lens to get the best framing - I find that something in the range 70-90 mm equivalent focal length gives the best perspective for a  $\frac{3}{4}$  view when trackside, with perhaps a little more if shooting across a 4-track section. Where possible I use a tripod or I steady the camera with a bean bag resting on some piece of railway furniture - typically a bridge parapet, lineside fencepost, or the ground/platform for low views. This helps to achieve the sharpest overall image but importantly also guarantees that your composition does not drift as you are taken up in the moment and follow the approaching train. I hand-hold if I need to keep flexibility to adjust the shot or to take follow up shots.

If you have not used the location before you will need to take time to find the best standpoint. As well as taking note of the sun for the best lighting effect, you will also need to consider the wind direction! Make sure that it is not blowing strongly towards you to avoid having your view of the train obscured by a fog of steam. Shooting from the 'wrong' side of the train can work on dull days or if there is enough reflected light. Contre-jour (photographing towards the light source) can be very effective on cold days where the steam exhaust condenses quickly to produce copious artificial clouds. Getting there early helps you reserve your position as more photographers arrive on the scene - a problem in the more popular locations or with 'special' trains.

**DO NOT TRESPASS ON RAILWAY LAND - IT IS DANGEROUS TO DO SO, AND REFLECTS BADLY ON RAILWAY PHOTOGRAPHERS GENERALLY.** Other landowners' permission should be sought if not standing in a public place.

You should have your shot fully set up before you see the first signs of steam above the trees in the distance. When composing the shot, decide exactly where you want the train to be in your field of view and shoot for that spot only. If your viewfinder has a graticule, e.g. for positioning 'on the thirds', try using one of the intersections like the cross-hairs of a rifle sight. Taking several shots in burst mode is OK if you are not very confident in your ability, but is unlikely to yield the best result.

Don't frame the image too tightly - leave yourself a margin of error and throw away a few pixels after the event by cropping if necessary. Especially leave yourself enough headroom to allow for the steam exhaust.

The  $\frac{3}{4}$  view tends to produce a standard type of composition featuring strong convergence of 'parallel' lines leading the eye to points of interest. Other considerations include the use of thirds; framing the image with bridges, trees, etc; use of natural shapes in the landscape which complement the main image.

Finally, don't expect to be able to watch the train go by as well as take a photograph of it!!

## **Types of camera**

The main requirement arising from the above is some control over shutter speed - which only rules out the simplest of automatic compacts. Other compacts should have at least some 'action' setting (I think this is what I used for the sample photo above), if not shutter priority, and of course all more expensive cameras will have full control over exposure. Since taking the sample shot, I've progressed through a 'bridge' camera to Nikon DSLRs where I have the advantage of viewing through the lens and being able to exercise full control over the camera settings.

Clearly it is important to have an effective viewfinder - clear, bright, responsive, accessible - if you are going to be able to time the precise moment of taking the image. This takes practice with a particular model of camera - get it fully sorted before attempting that unrepeatable shot!

## **4. Post processing**

I always edit my digital photos - being able to do so rekindled my interest in photography after years of taking slides. The main effects I'm trying to achieve (in the order that I apply them) are:

**Perspective correction** - I always seem to be shooting from below (for effect) or from above (of necessity from a bridge perhaps) so I have to tilt the camera to fill the frame effectively. I like to apply

perspective correction to reduce the distortion of what in some cases may be a very distinctive shape of the steam engine.

**Cropping** - to remove any surplus pixels and produce a tight composition, BUT I like to leave some small space in front of the train for it to move into. Also I like to include the whole train with its full rake of carriages if at all possible – this is an absolute requirement if I want to get the image published in the Railway Press, although you can be more relaxed about this if shooting for your own satisfaction. I'm programmed now not to chop off after a couple of carriages.

**Exposure correction** – it is unfortunate that the type of photograph we are dealing with here can suffer from extremes of lighting with potentially white exhaust against a bright sky and interesting mechanical parts lurking in the darkness under the locomotive. The eye copes naturally with this for the viewer, but the photograph is less adaptable and I find it useful to be able to lift the detail in the dark areas and similarly hold back the steam effects in the sky. This can be achieved by selective editing, or in extreme cases merging two separate versions of the image at different exposure levels – easier done with Raw processing, see below.

**Colour correction** - I like to check for colour casts and play around with saturation and hues to get the most pleasing effect overall. I'm not too concerned about slavishly trying to achieve a realistic representation of the original scene. I like to produce monochrome versions of some of my images - for nearly a hundred years all railway photographs were black and white, so there is a well-established tradition for the genre!

## **RAW processing**

When taking photos with my Nikons, I produce both a raw and a JPG file for each shot taken. I keep the JPGs to produce a library version of each shot which I take but I go through RAW processing for selected images which I think may be usefully employed elsewhere. Nikon provides its customers with the software needed to process its NEF raw files and I use it in preference to general-purpose Raw processors like the Camera Raw plugin for Photoshop

I use the ability to adjust the exposure after the event to balance out the histogram of light levels. This deals with many of the light and dark area problems I used to have to tackle with camera-JPGs. For extreme cases I also have the procedure which involves developing the RAW image twice - once for the sky and steam with lower exposure and high noise suppression (lack of detail in this area is not a problem), and the other for the train and its surroundings with higher exposure and a finer trade-off between noise and focus. I then blend together the two TIFF files from separate layers in Photoshop.

Raw processing adds to the time taken to produce the final image – I still run the converted TIFF file through Photoshop (Elements in my case) for final tweaks – but I end up with an *uncompressed* full-resolution image file which, if necessary, I can reduce and compress to what ever level is required for the intended use.

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