

# Phoenix Photographic Group

## Newsletter from Meeting of 29<sup>th</sup> October 2018

### Introduction

Nineteen members (including three ladies – hoorah!) met at the hall for this event. By some quirk of fate, both Ian and Joe managed to be there at the same time. Something amiss with the holiday schedules, obviously. Ian tried valiantly to bring the meeting to order, but there was far too much chatting afoot. Eventually Joe's subtle-as-a-house-brick approach had to be wheeled into action and we then got onto ....

### News Items

Joe shared his personal experience with his Canon 600D in the hope it will help anyone else who sees a similar problem. Basically the camera became very slow to 'react' – to get ready for work, to focus when the shutter button was depressed etc etc. The fix was to reset the camera to factory settings through the menus. Why? No idea! But the underlying issue was resolved.

A lengthy debate ensued about taking 3 to 5 really good autumn pictures, to be sent to Ian 'straight out of the camera'. Seems like there had been various conflicting opinions – possibly because some thought this would replace 'Members' Pics' – which it won't. The conclusion was unanimous .... we WILL continue with this challenge and the photos should be mailed to Ian without being resized.

It was also agreed that during next week's – and future – Members' Pics we shall start with printed images (10" x 16"), followed by image files projected onto the screen. For next week only this will be preceded by the animation videos we made a couple of weeks ago.

{Further items that actually came up later, but which should really be noted in this section}:

Marie needs more photos for the hospital .. of local scenes and portrait formats would be especially helpful. Please bring what you've got next week. We generally need 10" x 16" prints to 'cycle' those currently placed at Sheepfair and in the village hall. These can be of any subject, so please bring them too; we can slot them into Members' Pics and then select the ones we want to place in these two locations.

Margaret has a terrific bit of software on her tablet to vocalise any text she types. So she can fully contribute to our group discussions, but we need to give her a few seconds to prepare what she has to say. If we can all get into the swing of this she will feel a full member of the group, able to be fully involved in everything we debate.

Ali Baba Express is the website for ... well ... everything really!

## **Activities**

Bob Southall then took the chair to help us better understand a number of more involved camera issues.

He first passed around a camera where the back could be held open to examine the action of its focal-plane shutter. For anyone who doesn't understand how a focal-plane shutter works, here's a brief explanation:

The shutter device includes a rectangular aperture (window, hole) that sits in front of the film, or the sensor. At "rest" this hole is covered by a "curtain", which means that no light can fall on the film – i.e. there's no exposure. When the shutter button is pressed that curtain moves to the right. As it does so light, through the lens, falls onto the part of the film that's not still obscured by the curtain. Almost instantly a second curtain appears from the left, also moving towards the right, covering up the exposed film and eventually completely obscuring it again.

The net effect of these two curtains moving is to allow light to fall onto the film for a period ... and the faster the second follows the first, the faster the shutter speed. So, for an exposure of 1 second, the first curtain will be fully opened, one second will elapse, then the second will fully close. As the speed gets very fast, the second curtain will start to move before the first has reached the right hand side ... thus essentially creating a 'moving strip' of light painting across the film.

Why is this of any interest? Because if you use a flash gun, the image is captured pretty much instantaneously, at the instant the flash fires. Bob showed exactly how long the flash will generate light by displaying an oscilloscope trace that itself picked up its signal from an RP12 light sensor exposed to that flash-light.

And if you select a shutter speed faster than  $1/50^{\text{th}}$  second – in conjunction with using your flashgun – that 'instant' may well occur when one or the other curtain – or both – is still covering the film/sensor. The result being that you'll end up with an image with black areas on the left or right – or both.

Bob showed a second oscilloscope trace of a flash that decayed more slowly than the first – i.e. there was visible light generated for a greater length of time. Luckily we had an ignoramus in the room – Joe – who didn't know that a flashgun could/did have a variable duration flash.

Bob explained that all proper flashguns automatically varied their flash duration by sensing the reflected light from the subject, thereby avoiding over- or under-exposure. Joe now a wiser man.

He then moved onto a description and demonstration of focus-stacking, applied to macro photography ... which is a common situation (but not the only situation) in which to use focus stacking to create overall sharp images.

So, what's that all about then? {for anyone who doesn't fully understand}. With macro photography the lens is focused on a point that is very, very close. Bob showed a number of techniques for making this possible, including bellows, special lens attachments, reversing the normal lens with an adapter ring etc etc. But whatever technique you use, the very near focusing will result in a very narrow depth of focus.

Net result ... you'll get a tiny portion of the image you're looking at crystal clear and sharp ... any areas in front of or behind that focal distance rapidly degrade into a blur.

Now, of course, by varying the focus of the lens you could pick any distance as that which you want to be 'clear and crisp'. But sadly not all distances at the same time.

To use focus stacking you create a number of images of exactly the same thing .... but such that each image is focused at a different point on the 'subject'. If there were just three images, one would be sharp at the front, one sharp in the middle, one sharp at the back. I'm sure you get the idea! For 'professional' results you take sufficient shots such that, at the very point one image starts to get less than crisp, the next is crisp etc etc.

Once captured, ALL these images are loaded into a focus-stacking utility. Could be PhotoShop, Corel PaintShop, GIMP (if you have a plug-in and some patience!), or you can go spend more money on a super-duper effort saving software like Helicon. Anything but Helicon requires a bit more than just importing your images. I'm not going to describe all the steps here since you can easily listen to some smart American telling you how to do it at:

<https://www.youtube.com/watch?v=QyMGIMhbLyk>

What more can I say? Bob S did a damned good job despite having to compete with a complicated lunch menu discussion at one point in his presentation. I'm sure he richly deserves our thanks.

## Next Meeting

Will be at the village hall. Member's Pics. Send them along!

## Members Pics

### Topics

Autumn Colours

Holiday Snaps

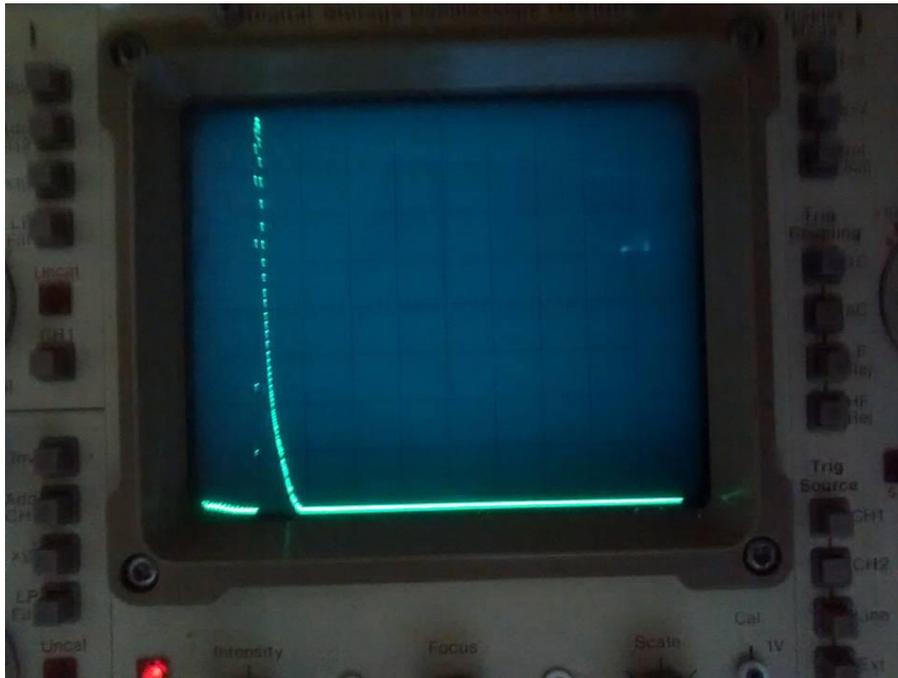
Transport

Dereliction

City Life

Please send your images to: -

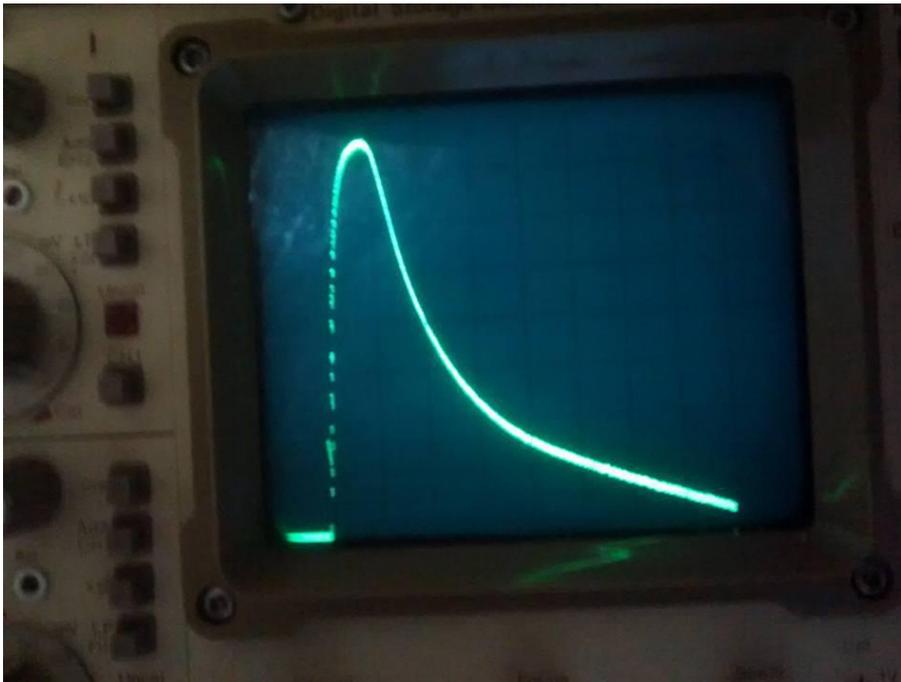
[ianchalstead@yahoo.co.uk](mailto:ianchalstead@yahoo.co.uk)



Short (1/10,000 second) flash



Focal plane shutter mid-operation



Longer (1,000 second) flash







The finished job!



Wall Art 1



Wall Art 1

**Don't forget Member's Pics! Paper Prints Brought Along and Images to Ian by e-mail**