

## Aviation Action Photography

I have been taking photographs of aircraft for more than 50 years, during which time the quality of cameras lenses and film / digital processing has changed radically.

My early photographs were taken with cheap, often second-hand, cameras, initially on 120 black and white roll film. There was not an interchangeable lens in sight, let alone auto-exposure, auto-focus and auto everything else. I gradually switched to 35mm film and eventually to the cheaper end of the single lens reflex range.

As I became able to afford better equipment, I purchased an Olympus OM-2 and later an OM-4Ti camera and associated Zuiko lenses. I spent many years taking black and white photographs and developing and printing the photographs myself in a dark room set up in my smallest bedroom.

As colour negative film improved in terms of colour density and affordability of processing, I switched to that, relieving me of hours of dabbling with chemicals at home.

With the advent of digital, and the availability of some royalties from my first book series, *British Built Aircraft*, I upgraded to my current set up a Canon EOS7D with a 100-400mm Canon zoom lens for action photography.

This is great for aviation shots and a good example is this picture of Patrick Caruth landing his Pitts S-1T at Henstridge in January 2017.

In this instance, I have set the equivalent film speed to ISO320 and left the camera to sort out aperture and shutter speed, whilst I concentrated on manual zoom, panning and composition.



Now, one might say that there is nothing wrong with this photograph. However, with a shutter speed of 1/800<sup>th</sup> sec, the action is completely frozen – albeit with the benefit of a completely sharp image and not too much pressure on my competence in panning the camera.

During last year, I was having a conversation with some of my friends who have a particular interest in photography. They suggested that we collectively had a look at taking action shots to emphasise motion, which struck a chord with my interest in aviation photography.

Now there are certain aircraft that are hard to resist photographing – the Tiger Moths of Tiger Moth Training being one example. If, however, I just take my normal shots, I simply get a series of virtually identical looking photographs, which seems a bit of a waste.

I decided that the exercise of taking these shots to emphasise the aircraft's motion, which would inevitably have a higher than normal failure rate, was best practised on subjects like this, for which I already have plenty of coverage.

What does one do? Well, you need to force the camera to use a slow shutter speed. My technique is to go to Aperture priority and set a small aperture (typically f18-22). I then set a low effective film speed – ISO100 is the slowest available on the Canon. I then have a quick look at the scene to check what shutter speed the camera will actually use (I am taking advantage of auto-exposure) and I adjust the aperture as necessary to achieve a speed of typically 1/30<sup>th</sup> to 1/50<sup>th</sup> of a second.

I then pan as smoothly and carefully as I can whilst continuing manual zoom and take several photos as the aircraft passes by. One trick is not to zoom right in as it is easy to inadvertently cut off the tail of the aircraft; when panning fast, the natural tendency is to follow the nose of the aircraft, which can cause this problem. Using less zoom and cropping the image afterwards gives better results. My technique is getting better, but one has to accept a failure rate of 60 – 75%.

A gallery of my better photographs, mainly taken at Henstridge, is presented below. As well as providing an immediate sense of action, the blurring of the background reduces the impact of any background structures that intrude into the photo.



Tiger Moth take-off run - shortly before lift off.

Guimbal Cabri G2 in use for primary helicopter training at Old Sarum





Piper PA-32R Saratoga II HP N957T just after take-off at Henstridge.

Socata TB10 Tobago G-MRTN passing the hangars.



Yakovlevs Yak 50 '33' climbing away.



Brian Main's Groppo Trail accelerates for take-off. This shot, like that of Patrick's Pitts Special, was taken on January 5<sup>th</sup> 2017.