

So you want to start up in Aerial Photography?

By Andy Crowhurst

Managing Director, Pulse Corporation Ltd

www.Pulsecorp.co.uk

www.Overshoot-Photos.co.uk

How to start up in Aerial Photography

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Introduction – why this Guide has been written

As a supplier of Aerial Photography, I often get asked about how to go about setting up in Aerial Photography. Up until now I have replied with a few tips, despite the obvious flaws that a) it costs me time and b) I'm effectively encouraging a rival to set up – someone that may well poach my business.

This may seem a bit strange but my rationale for writing this is firstly that if someone is going to set up then they will do this with or without my help. Secondly, most don't get further than discovering what it costs to set up and thirdly, I can benefit from a start-up as I will explain in due course.

I'm not going to tell you everything. In fact, there's no great detail here as you need to work it all out for yourself. There are, however, general guidelines to get you going or to at least put a feasibility study together.

This Guide has been written primarily for the UK Market where Aerial Photography is legal provided that you are licenced and insured. If you are looking to set up as an Aerial Photographer in a different Country then different Laws will apply and AP, in fact may not be Legal. However, the same principles still apply.

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Why should I become an Aerial Photographer?

A (fairly) niche business

There are Professional Photographers by the bucketload. Ground based. Most specialize in something such as weddings, studio, Marketing and so on. An aerial Photographer is just a photographer specializing in above ground photography. You need a platform that you can handle at the same time as taking the photographs, so there's a bit of a knack to it.

Still in its infancy

AP has come a long way. Realistically, it is only the last few years that Carbon Fibre Technology, battery technology and camera technology have evolved to a state that makes AP practical. Obviously cameras in full size craft have been around since WWI and WWII recce flights took place. We're not competing with that. We operate from the ground from 0-400 feet

Why not?

It's an interesting, different job. It can pay well, although it needs to due to the set up costs and the lack of available days to fly. Generally you are working outdoors on sunny days, being a bit creative and client subjects vary immensely. What is there to not like about that?

It's not that difficult, is it?

Realistically you need a helicopter or UAV so that you can point in a specific direction and shoot. Planes, Kites and blimps are all very well but you will find them quite restrictive.

Helicopters need building, trimming, testing etc. UAVs / Drones can be bought off the shelf, ready calibrated. But they cost an arm and a leg.

You need to price in the cost and lost time of a crash, however small. It **will** happen.

You need to get your licence – £2-3K

Once you have the licence you need to get CAA Certified – not expensive, but time consuming.

Once CAA Certified you need insurance

Oh, and did I mention that you need to drum up business as well?

Realistically, to set up a stabilised platform with spares, decent camera, downlinks, certification and insurance you need to set aside about £10K. Like most things, you can do it for less but are you going down the quality or cheap 'n' cheerful route?

Scared off yet? Nope? Well, you will have restrictions on where you can fly – safety is paramount. You can't fly over built-up areas, crowds or thoroughfares such as roads and railways. You can't fly when it's windy, when it's raining or snowing or foggy. That's the coast pretty much out, most of the Town Centres and terraced streets. Airports won't take kindly to you crossing their flight paths (descent paths are miles long)

What do I need?

- ❑ Platform – UAV, RC heli, RC ‘plane, kite, mast, blimp
- ❑ Camera – light enough to lift, good enough to take decent shots
- ❑ CAA Licence, which means that you also need to hold a BNUC-S or RPAS Certificate
- ❑ Insurance – Commercial insurance, not just BMFA membership
- ❑ Other – Video downlinks, GPS, gyros, image Processing Software, CD/DVD writing equipment. CDs/ DVDs,
- ❑ Safety equipment – cones, rope, hazard tape
- ❑ Qualifications – CRB check, ECS / CSCS card for Building Site work

And other stuff that you never realised that you needed. You’ll find out.

How to start up in Aerial Photography

Summary of Platforms and their Pros and Cons

Method						
	Full Size Helicopter	Full size Aeroplane	Remote-Controlled Helicopter	Remote-Controlled Aeroplane	Platforms	UAV
Rough Cost (ex VAT)	£500 per hour	£300 per hour	£150 per hour	£150-200 per hour	£100-200 per day	£200 per hour
Pros	Can carry High End equipment Large scale surveying Can fly over any terrain	Can carry High End equipment Large scale surveying Can fly over any terrain	Budget Photography Fixed Location work Multiple shoots Can fly over any terrain	Budget Photography Fixed Location work Multiple shoots Smoother flight Can fly over any terrain	Rapid Deployment	Rapid Deployment 0 – 400 feet range Can fly over any terrain Stable flight – smoother pictures
Cons	Expensive, noisy Cannot descend below 500 feet	Expensive, noisy Cannot descend below 500 feet Hovering	Noisy Some flight restrictions Buffeted in winds	Some flight restrictions Buffeted in winds	Low level only Even ground needed	Some flight restrictions Buffeted in winds
Good for	Large Scale work	Large Scale work	Mixed terrain Economy shoots	Mixed terrain (if airstrip available) Economy shoots	Low level inspections	Mixed terrain Precise positioning Rapid deployment Unobtrusiveness Multiple Shoots
Bad for	Built-up areas Intimate (low level) work	Built-up areas Intimate (low level) work Fixed location work	Windy & rainy days Heavy cameras	Windy & rainy days Heavy cameras Fixed location work	High level photography Heavy cameras Multiple Shoots	Windy & rainy days Heavy cameras

Fixed Location – hovering over one specific place. Multiple shoots – photos taken from more than one place on site, easier (faster and thus cheaper) with flying platforms than, say a mast.

Conclusion

Aerial Photography is no longer in its infancy. DJI et al have brought Aerial Photography to the masses. There is room for new entrants but the UK climate makes business very hit and miss and you are well advised to have a second source of income. Other countries are still coming round to allowing commercial aerial photography.

If you are setting up as an entrepreneur then I wish you all the best, whatever – even as a competitor. The UK needs more people like you and me & more encouragement. Having tried and failed is a badge of honour in the US – at least you gave it a go, better luck next time. Over here in the UK it's something to be embarrassed about – a great shame.

Good luck, whatever happens.

Bye,



Andy Crowhurst

Glossary

CAA The Civil Aviation Authority. It licenses anything that flies (even if it is tethered) in the UK and, as of 1st January 2010, anyone that wants to take aerial photography as a business **has** to be licensed by it. If it is not, it is acting illegally and its insurance (if carried) will not be valid. See <http://www.caa.co.uk> for further information.

CRB Criminal Records Bureau. Many places now require staff to be CRB checked. This will also apply to Contractors. THE CRB undertakes (for a fee) this checking

ECS / CSCS Electrotechnical Certification Scheme / Construction Skills Certification Scheme. Bodies that organise the assessment of workers to ensure that they have a basic grounding in safety. Nowadays, a building Site (for instance) will not allow a worker to be inducted for work unless they already hold this card. If you are looking for photography on a Building Site, ensure that your Aerial Photographer carries a card

HSE The Health and Safety Executive. Overseeing body for all aspects of Health and Safety in the Workplace

PTZ Pan, Tilt and Zoom. Movement of a camera to bring the subject of the shot into the frame. Ideally, this should all be achieved remotely from the ground using a **Video Downlink** as feedback

UAV Unmanned Aerial Vehicle. A craft that flies but only takes cameras as payloads, not humans. This category includes Remote controlled Helicopters and 'planes, kites and blimps as well as the newer custom UAV devices such as the Draganflyer that are now available. In this document I sometimes distinguish between them. if I do not, then I am describing them all collectively.

Video Downlink. A method whereby the user on the ground can see exactly what is being framed by the camera before the shot is taken. For ground based systems, this can be via a radio link or cable link. For flying platforms this is achieved via a radio link.