



DRONE PHOTOGRAPHY

Tony Wright 18th November

REMOTE AERIAL CAMERA SYSTEMS

- A look back and sideways
- Why we are in the age of the drone
- What drones are doing
- A look at drone/camera systems
- Legal bit
- Demos



CHANGING OUR PERCEPTION

A new visual media has evolved in
the last ten years

But first a look back



PRE DRONE IMAGING

Pigeon Camera Photography



PRE DRONE IMAGING

Aircraft mounted cameras



PRE DRONE IMAGING

Helicopter mounted cameras



PRE DRONE IMAGING

Kite and ballon cameras



PRE DRONE IMAGING

Aerial Pole Photography



WHY DID DRONES TAKE OFF (SORRY)

Processing power on small chips

Wireless communication

Orientation sensors

Battery power



WHY DID DRONES TAKE OFF

Small camera components, lens,
sensor, optical stabilisation

Large capacity but physically small
storage systems

New generation of action cameras
and users



WHY DRONES ARE CHANGING PERSPECTIVES

Cheap

Go anywhere in almost any conditions

Unobtrusive

Get in close

Easy to operate

Good quality, personal images

<https://weather.com/slideshows/news/2015-drone-aerial-photography-contest>

<http://www.bbc.co.uk/news/world-africa-37066738>



DRONES AS A PHOTO PLATFORM

Carrying capacity

Flight duration

Interchangeable batteries

Auto hover

Auto return

Auto follow

Internal flight mode

Collision avoidance



Karma: \$800 for the drone alone, or \$1100 with a new GoPro Black 5 camera.

GoPro recalls new Karma drone

DRONES AS A PHOTO PLATFORM

Camera quality

Video stream quality

Viewing devices

Camera control

One/two person operation



Syma X5SW-1 Upgraded Version of X5SW Explorers RTF Drone
RC Airplane Flight UFO - 2.4GHz 6 Axis 4 Channel 3D FPV
Quadcopter

by [Syma](#)



[35 customer reviews](#) | [48 answered questions](#)

Price: **£41.71** & FREE Delivery in the UK. [Details](#)

LEGAL EAGLES

Refer to the current Air Navigation Order for definitive information

<http://publicapps.caa.co.uk/docs/33/CAP1202droneawareNov15.pdf>

Popularly known as drones, but also referred to as remotely piloted aircraft systems (RPAS) or unmanned aerial vehicles (UAV) they come in a variety of shapes and sizes, ranging from small handheld types up to large aircraft, potentially a similar size to airliners.

Just like any other aircraft, an unmanned aircraft must always be flown in a safe manner, both with respect to other aircraft in the air and also to people and properties on the ground. The CAA's primary aim is to enable the full and safe integration of all UAS operations into the UK's total aviation system.

Guidance for keeping your drone flight safe and legal

Flying drones for fun (non-commercial flights)

Do you need a permission?

Using drones for commercial work

Find a commercial drone operator

- 🔗 [Regulations relating to drones and unmanned aircraft](#)
- 🔗 [Changes to the Air Navigation Order affecting unmanned aircraft](#)
- 🔗 [EASA Geo-Limitation Task Force Report](#)
- 🔗 [EASA Drone Collision task Force Report](#)

Reporting safety concerns

Anyone using a drone has to follow some [basic safety rules](#) to ensure that members of the public are protected.

Drone operators must also respect the privacy of people on the ground. More information on this is available from [the Information Commissioner's Office](#).

If you have any concerns about drones being used in your area, either from a safety or privacy perspective, contact your local police on 101.

The CAA does not investigate complaints of drone misuse.

DEMOS

Poor Man's Drone and a Starter Drone

POLE CAMERA EXAMPLES



POLE CAMERA EXAMPLES



TOY DRONE EXAMPLE



- <https://1drv.ms/u/s!AtF4WLmVbuoKisApbB9mo5Wqa7iMxg>

