

AS THE CROW FLIES

AERIAL ADVENTURES IN THE BALLARAT DISTRICT

One of the most exciting developments in photography in the last few years is the drone – high flying cameras that enable you to capture unique viewpoints of common subjects. Recently the cost of getting a camera into the air has dropped dramatically and if you decide to venture down this road I guarantee you won't be disappointed. Apart from the amazing images you will capture, they are also tremendous fun!

As with most modern technology there is a vast range of drones, or UAVs (unmanned aerial vehicles), on the market. Similar to camera equipment in general, how much you're prepared to spend will determine the quality of camera on-board, and the flying characteristics of the drone itself. There are low-cost models that will take very basic images, up to the big boys toys that will happily lift your prized DSLR up into the heavens. You can even add your GoPro on to some units that will take advantage of camera gear you may already have. One company has a range of models that has a large percentage of the market – DJI. Their Phantom and Mavic range of drones are the first choice for many, and though they do make some high end-models, the Phantom 4 series and Mavic Pro are the most popular drones in the world, for good reason.



Getting Started

One of the big advertising features of most drones these days is their ease of operation. "Fly Straight Out of the Box" is a common term you'll see, and in fact it is also very true. Charge the battery, download the app to your smartphone, fire it up, and away you go.

However, it must be mentioned that as easy as these are to fly, common sense and care is a big part of aerial flying. It's suggested you start with some limitations in place, easily set up on the smartphone app that runs the drone. This is usually along the lines of limiting the maximum height you can fly, and also how far away you can send the drone.

Always start somewhere wide open, such as a local oval or park, and spend time getting a feel of the controls before you even think about pressing the shutter button. Always be aware of your location in relation to what's around you. As these cameras usually have a wide angle lens (20mm equivalent) it's easy to mis-judge your positioning when in close proximity to objects such as trees and buildings, especially if viewing on your smartphone screen. Trust me, I know!

Rules and Regulations

There are some basic rules to follow, and while they can't all be mentioned here, usually they are along the lines of these:

- Drone must always be in Line of Sight (LOS) – that basically means you should always be able to see it
- Maximum Height 133 metres (400 feet)
- Never fly over groups of people
- Respect others privacy
- No flying anywhere near airports and other no-fly zones as specified in each country

It's suggested you check with your local air safety authorities for particular details in your area as there are quite a lot of No-Fly Zones around the country, especially in major cities and around airports. There are apps you can use on your phone or tablet to show you these areas.

A while back I was flying above my local railway station, looking for the perfect image at dusk, just as the lights came on that illuminate the tower every evening on this historic building. Happily flying for five minutes or so, I looked down to see two local policemen coming over to me. My first reaction in these circumstances is to gauge their reaction to drone flying, and if there are any concerns I bring the machine down immediately. Unfortunately drones have been getting some negative publicity in the press, certainly not helped by the person that crash landed one on the front lawn of the White House in Washington earlier in 2015. Luckily these two policemen were very interested in what I was doing. By showing them exactly on-screen what I was seeing, and explaining the whole procedure and the care I was taking in not flying directly above any people, they left with a very positive attitude.



I think it's very important to fly with this attitude in mind. And one other thing about flying in public places... you will need to be prepared to become the centre of attention as people are generally quite intrigued by what you doing!

It's also tempting to think that aerial imaging is going to be a great new avenue for making some money from your photography. Once again this is another area where the rules vary from country to country, and you should look into the certification you may need in your area to undertake paid aerial work.



Amazing Technology

Today's drones have some amazing technology on board that has revolutionized aerial photography:

By connecting your smartphone or tablet to your handheld remote control unit, you can see on-screen exactly what the drone is viewing. This makes for perfect compositional adjustments.

Camera controls are extensive – auto or full manual control, RAW capture, even time-lapse and many more.

The drone will hover in the one spot with incredible stability, almost like an aerial tripod! You can take your hands off the controls and the drone will stay in that position.

With an average 20 plus minutes flight time per battery charge, the drone can detect when your battery is getting low and will go into RTH mode (automatic return-to-home), ensuring the drone comes back to you! If for some reason the lightbridge connection between the remote control and the machine itself is lost (this can happen when flying behind buildings or trees), once again RTH is activated. Another great use for the RTH feature is when you have lost sight of the drone, which is quite easy to do once it gets some distance away from you, by pressing the RTH button your flying camera will happily return to you before you know it.



It's Still All About the Light!

When you first start flying, it's very exciting to get home, load your images, and marvel at the amazing scenes you have captured. In my first few weeks of flying, everything I took was thrilling. However, I quickly realized that aerial photography is no different to other forms of photography – it's still all about the light! So rather than just heading out randomly, I once again started to chase the light and conditions, which has always been the strength of my landscape photography.

As a landscape photographer I am always aware of weather conditions and what they might offer. Now even more so, as a drone pilot you will have to also take into account the wind forecasts. Drones are not something you fly in high winds (unless you have to get that amazing once-in-a-lifetime scene in front of you!) and you will find yourself looking for calm weather more than any other condition.

At present the in-built cameras on most drones are nowhere near the quality you are used to with your ground level camera. However, I have found the images I have been able to capture are surprisingly good. Though only 20mpx, the fact that you can shoot a RAW file gives you more options to work with later on. The jpg files are also surprisingly good, especially if you have been flying in good light.

Even when shooting in low light the quality has been amazing for such a small camera unit, and the stability of the camera at 300 feet can be quite astonishing. You can also shoot panorama images just as you would when down at sea level, once again creating something very unique. And why not try a time-lapse from 300 feet?! I have had images printed up to A3 size (roughly 12x16) and you would be hard pressed to tell they were taken with a drone camera.



I should also mention that most drones these days shoot high quality video, usually up to 4K, which produces stunning aerial footage. In fact, at 4K resolution it's possible to take a high quality frame directly out of the video.

Unique Views

One thing you will love is the amazing patterns you find in the landscape when viewed from above. Drones allow you to get into the area that most planes and helicopters are not allowed to – below 300 feet. Google Maps makes a great starting point for finding locations that look worth visiting.

It certainly beats putting your camera on the end of a ten foot pole (yes, I did that a few years ago).

As a landscape photographer for a number of years now, I can't recommend highly enough aerial photography as a unique way to add that extra aspect to your photography. Everyone you share your images with will be amazed and intrigued, and don't forget how much fun it is. If you ever tire of it, you may like to try herding sheep with your drone – yes, it's been done!

Have you tried out any drone or aerial photography yourself? You are welcome to contact me at

atd@ncable.net.au

