

Questions submitted to Andy ahead of Flight Plan briefing and his subsequent answers.

Can we shoot RAW?

Yes we can. There are actually lots of different RAW formats but if you have access to Photoshop or any other good image editing software then you shouldn't have a problem.

Can bracketing be undertaken?

I had to double check but yes I think it can. DJI update the app regularly and I haven't checked this latest version but it is certainly in the manual so let's give it a go! Annoyingly they do remove useful features in the updates but I will check this before we fly.

I have no idea whether you can shoot raw and bracket (it takes a lot longer to save RAW than JPEG ~4s as opposed to 3 or 4 jpegs per second). I will test this for you and let you know.

Can we shoot at the lowest possible ISO?

Yes - ISO is totally under your control. Obviously it depends on the conditions on the day and your other settings.

Can we walk behind the drone to maintain LOS.

Yes we can but it is hard to do over long distances/uneven terrain. Walking and maintaining consistent pressure on the sticks is difficult. One tiny knock and the aircraft will speed up or slowdown and that will really show in the footage.

How long is battery life?

There are two types of batteries for this aircraft. The smaller (TB47) gives you a comfortable 15 minutes in the air. The larger (TB48) will fly for a little under 20 minutes. 20 minutes is a very long time in the air!

How long to return to base?

It depends on how far the aircraft is and how fast I fly it. The aircraft can fly at about 45mph flat out. We would never do this at that location. There is also a Return to Home button (a legal requirement in the UK). We probably don't want to use this at this location either as the aircraft simply turns around and flies straight back to where it took off from. If you have objects/trees in the way then you will need to bring a bin bag to collect the bits and/or a set of ladders to rescue the aircraft :)

Return to home should be very quick for the types of distances you are flying but if you are trying to work out times then allow 1-2 minute to get back and land. Landing cannot be rushed I'm afraid. It is the most risky part of the whole operation other than take off.

Note that there is often a difference between the planned take off and landing (TOaL) location and the real one. You always take off from your planned location but sometimes it is easier to 'set down' somewhere else (provided it is clear and safe). I plan for this in my mission plans (you don't need to worry about it). This just makes flights simpler and usually gives you more airtime. I would certainly do this if we are going to walk behind the drone.

The main thing with timing things is to give yourself plenty of time for setup and relaxed flying. You don't want to rush as it leads to stress. If you tense up when flying or on the camera it is almost impossible to get the shot you want.

Can the images be speeded up/slowed down in post.

Sped up - yes absolutely. Slowed down you might want to increase the frame rate to compensate. This will give you more to play with in the edit. You will need to check that your edit suite can handle this footage.

Can the drone be carried and not unpacked?

Yes it can over short distances but the gimbal is very fragile so if you are considering moving from one part of the park to the other then we will probably want to remove the propellers and gimbal even if we don't break down completely. Preparation and moving always takes more time than you expect unfortunately. I will bring a trolley to carry the aircraft/kit so that will speed things up and keep everything in working order.

Based on our conversation yesterday I think we can achieve most of what you need but it will require a proper talk through at each location - especially for the more complex shots.

We didn't really talk about flight 3 but based on your printouts it looks very close to Riverside Drive. We need to establish a 50m no fly zone along this road AND we need to stay out of the view of cars (drones distract drivers = not good). It looks like a short flight so it is probably doable if we do have 50m separation between the flight path and the road.

Cheers,
Andy