

Review: The bigger the drone, the bigger the fun for beginners

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I've reviewed a few quadcopters over the past year, but they've been on the tiny side.

Today I'm looking at the Swann Xtrem Gravity Pursuit 1080p Video Drone (\$299 at swann.com), which is a much bigger quadcopter that carries an HD video camera.

The smaller quadcopters I've tested, including the Axis Aeries and Axis Vidius, fit in the palm of your hand and were quite a handful to fly.

If I've learned anything about flying drones, it would be that bigger is better. The larger the [drone](#), the easier it is to fly stably - at least for me.

The Gravity Pursuit is what I would consider to be a medium-large drone.

It measures 19.69 inches by 19.69 inches by 7.48 inches and weighs 1.34 pounds.

Operators of drones weighing more than .55 ounces and less than 55 pounds need to register their Unmanned Aircraft System with the FAA if they're going to fly outdoors.

The registration costs \$5 and can be done online at faa.gov/uas/registration.

UAS registration is for the operator, not the aircraft.

You'll be issued a number that needs to be displayed on each drone you fly. There is no limit to the number of drones a registered operator can fly.

I registered and printed out my number and affixed it to the Gravity Pursuit on the belly. I could have also put the number inside the battery compartment, as long as it can be opened without tools.

The registration is good for three years and covers recreational or hobby use only.

If you intend to fly outdoors for business purposes or compensation, you'll need a different license.

The drone video footage we used for our review video was shot indoors, as I don't have the commercial license. Indoor [flight](#) is not regulated by the FAA.

The Gravity Pursuit ships with a 2.4 GHz wireless remote control with a nice LCD screen that shows the drone's control status.

The range of the Gravity Pursuit is listed at 100 feet, but I ventured farther. My outdoor flights were limited to my mother-in-law's back yard.

I'm quite sure I flew at least 200 feet out, but the last thing I wanted was a flyaway, so I kept it within a comfortable range.

The drone comes with a 7.4 volt 2000 mAh battery that gave me between 12 to 15 minutes of flight time, depending on conditions.

The included charger took about two hours to charge the battery. Additional batteries are available from Amazon for \$15 each. I'd get a few extras.

The Gravity Pursuit includes a 1080p HD video camera that mounts on the copter's belly.

The camera is very light. It has no internal battery; instead it gets its power from the battery in the quadcopter via a short USB cable.

The video quality is pretty good, but the camera's lightweight and static plastic mount mean sudden movements look a bit jarring on video. There's also a fair amount of Jell-O artifacting, especially when the copter is rotating.

At times, the video image appears to wiggle (like a bowl of Jell-O).

A heavier camera or better mount would help. There are videos online of people who mounted GoPro cameras to the Gravity Pursuit with better results. There are also YouTube videos showing how to make a more stable mount for your camera.

The camera, which is included, points forward and there is no adjustment to be made, either manually or remotely. To change the camera's view, you rotate or move the quadcopter.

More expensive drones have a gimbal, which is a mount to keep the camera steady as the quadcopter moves around.

The Gravity Pursuit is a drone for hobbyists and beginners.

If you're serious about wanting to use a drone for commercial video production, you'll want one that has more features and a better camera.

The Gravity Pursuit does not provide a live video feed. You can't see what the camera sees until you land and copy the video off the camera's microSD card.

Swann includes a four gigabyte card that holds about 30 minutes of video.

You start and stop video recording via a switch on the remote control. A light on the camera flashes red when the video is recording.

The camera also has a microphone to record audio, but the close proximity to the copter's blades and motors means very loud screeching on all footage. You want to mute the audio during playback or you'll be sorry.

LEARNING TO FLY

I'm lucky that we have several very large rooms at work where I could practice flying. Indoors with no wind, the Gravity Pursuit is very simple to fly.

Outdoors is another story.

Flying in the wind is no fun at all. It's a constant fight to keep flying where you want to go.

I had several days off over spring break, and I was ready to do some serious outdoor flying, but one look at the gusty winds killed that plan.

You'll want to wait for light or still winds to take it outdoors.

I really don't recommend the Gravity Pursuit for indoor flight in a normal house.

If you happen to have an indoor basketball court, go right ahead, but it's too big to fly in your living room.

There are two speeds for flying - low and high.

The high-speed mode uses more severe angles of flight to take a bigger bite out of the air. It's quite a big jump in speed, and it gets your attention.

On a windy day, I recommend using high-speed mode.

LEARNING CURVE

Flying a quadcopter is all about knowing which direction is forward.

Beginners should stand behind the copter because the flight of the quadcopter moves in the direction you push the control stick.

Move the stick right and the copter flies right.

But if you rotate the drone during flight, the stick directions change and moving the stick right might move the drone away from you. It's very easy to become disoriented and lose control and crash.

Believe me, I know.

The Gravity Pursuit comes with blade guards to keep you from doing damage to the drone's blades if you should land hard or run into an object.

I broke two of the blade guards the first week of flight.

HEADLESS MODE

There is a mode of flight, however, called headless mode, that will keep the direction of the flight oriented with the direction of your controls no matter what direction the drone is facing.

Headless mode is quite helpful for a beginner to minimize crashing. Its enabled by pressing a button on the remote. You'll hear beeping to confirm the change of flight modes.

If you set the drone on the ground, facing the direction you want to fly, and enable headless mode, you can rotate any direction in flight and the controls will always be oriented correctly.

More expensive quadcopters have features such as GPS assist, first person video view, automated object following and automated flight plans, where you can tell the drone where to fly by touching a map.

I mention this because the Gravity Pursuit has none of these features that simplify flying.

With the Gravity Pursuit, you're actually flying and learning every time.

It's a great drone to use to see if flying larger aircraft is right for you.

I think of it like learning to drive with a car with a stick shift and no cruise control.

Once you learn to fly the Gravity Pursuit, moving to more advanced drones will be easy.

CONCLUSIONS

I really like flying the Gravity Pursuit. I actually looked forward to my flight time each day while I was learning to fly for this review.

My time with the tiny quadcopters prepared me for the difficulty of drone flight, but the size and stability of the Gravity Pursuit made the transition to larger aircraft an easy one.

Controlling the Gravity Pursuit (in a calm

environment) is almost too easy.

You'll get a bit more flight time if the camera is not attached, so I left it off when I was flying for fun.

It flies a bit differently with the camera attached and didn't quite seem as nimble.

I recommend starting with a cheaper, smaller drone (under \$75) and then working your way to the larger ones.

Do your research and shop around. The Gravity Pursuit retails for \$299, but I checked the Fry's website and the store and found it for \$179.99.

I also get Fry's weekly deal emails, and it was listed there for \$79 in early March for a few days.

Prices can vary wildly. Look around for a deal.

Oh, and buy a few extra batteries and an extra charger so you can keep the fun going longer.

Pros: Inexpensive for its size. Easy to fly.

Cons: Video quality is mostly good, but Jell-O effect is obvious.

Bottom Line: The most fun I've had on a review in a very long time.

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