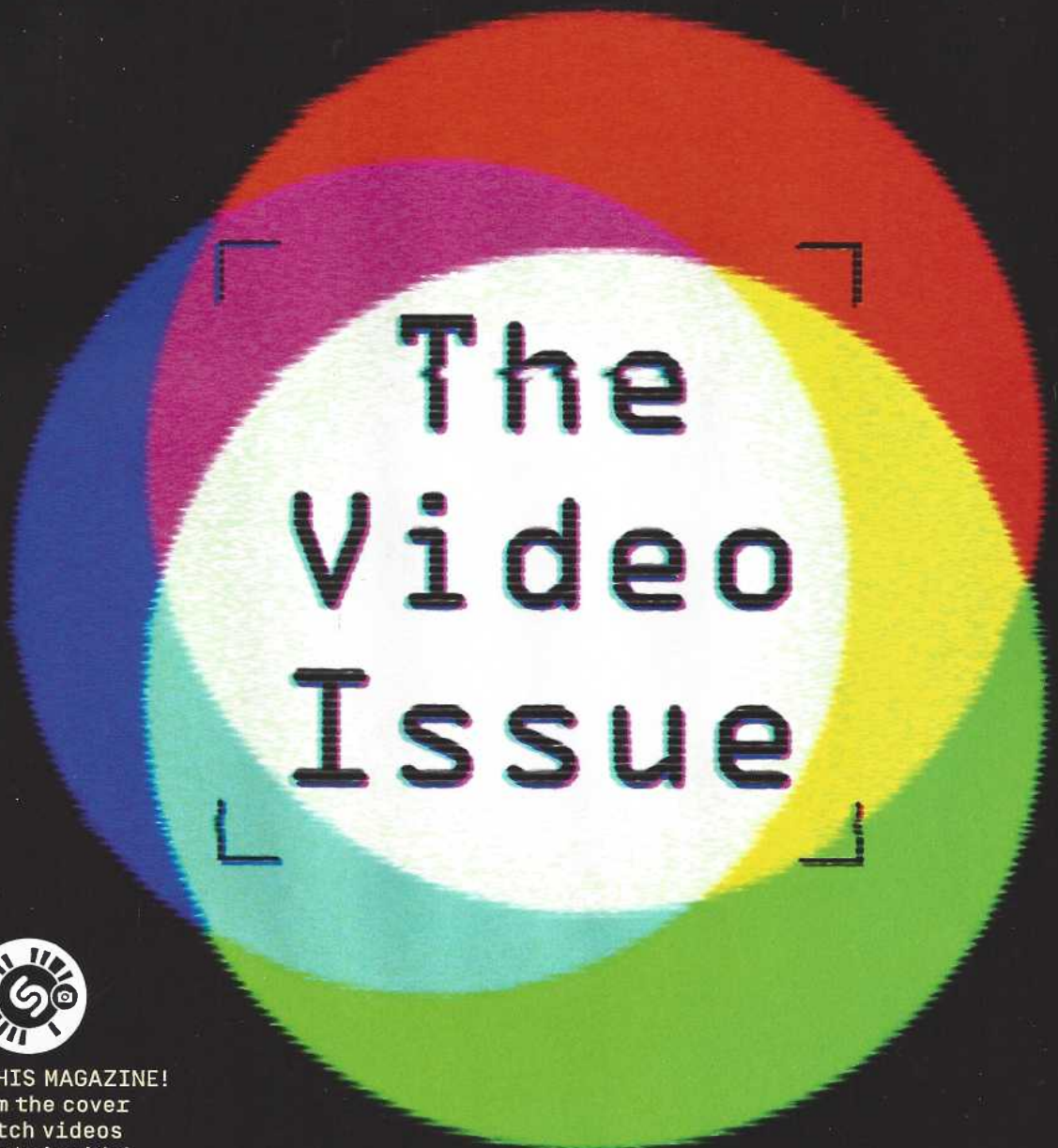


# POPULAR MECHANICS

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The  
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OCTOBER 2017

**HOW TO  
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# DRONES AND THE

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## The rules (and which ones to follow).

### Getting a License

If you plan to sell drone photos or video you shoot, you need a license. That means giving the FAA \$150 and passing a pretty difficult written test. Search for "FAA airman testing" for an official list of testing centers.

### Registering Your Drone

Unless you're flying a lightweight (less than eight ounces) training drone, register it. Seriously. The process costs \$5, takes two minutes, and could save you from \$25,000-plus fines if you accidentally fly somewhere you shouldn't. In the U.S., go to [registermyuas.faa.gov](http://registermyuas.faa.gov).

### Basic Rules

When you register your drone, you agree to a handful of reasonable rules—keep your drone in your line of sight, don't fly over traffic or big groups of people, stay at least 5 miles away from any airport or hospital

with a helipad. If you want to do those things, apply for a temporary FAA waiver. Other rules, anecdotally, fall into the same category as jaywalking. Technically illegal, but most people do it anyway. For one, you're not allowed to fly over any person, and you can't pilot a drone from a moving vehicle. (You mean like you see in drone advertisements?)

### Getting Caught

Yes, Dutch police have trained bald eagles to hunt drones. Yes, amateur tinkers have made radar guns that jam and drop them from the sky. But when police subpoena or fine a pilot, it's usually because the owner published a video or photo online and law enforcement saw it. One notable exception: The guy who crashed his DJI Phantom on the White House lawn. He just confessed and paid his \$5,500 fine. Be extra



Shazam the code for some video flying advice from a professional drone pilot.

### Where You Can Fly

The AirMap app will tell you of any special restrictions for the area you want to fly, or if there are airports nearby. Double-check the results with the FAA-developed (but buggy) app B4UFLY.

**Two summers ago**, I started a business taking drone photos of properties for real estate companies. A local paper wrote about me, and some drone publications picked up the story. Then people started commenting: "This is illegal." I was mortified, because I didn't mean to do anything wrong. I registered my drone like you're supposed to. But I had no idea I needed a pilot's license to sell my photos, and that the minimum age for that license is 16. The FAA emailed me, saying that they would take "significant regulatory action." I was 15 years old, and so scared that this government agency was contacting me. I apologized and completely stopped my business. A bit later, an FAA UAS—a fancy term for a drone regulatory specialist—named Marilyn spoke to me. She was really nice, and

## I WAS AN UNDERAGE DRONE PILOT

BY RYAN FELNER

so understanding. She said that shutting down my business was the right thing to do, and that she would help me prepare to take the test so I could get my license when I turned 16. I spent my spring break preparing for the FAA Part 107 Remote Pilot Knowledge Test. The day before my birthday, I passed. Now, I'm a licensed pilot continuing my drone business. But even if you aren't a professional, everyone should follow the FAA's rules. At least register your drone, because when you do, you learn the regulations, most of which aren't just rules. They're important: Stay below 400 feet, keep a line of sight—basics that everyone should follow, even if you're taking a drone out just for fun. Which I still do.

### TIP

Ryan Felner (right) used a site called Gold Seal UAV Ground School. You get tutorials for every topic, practice tests after each section, and a final review with hundreds of questions very similar to what's on the actual FAA test. "I barely had to look over anything else after watching all of their videos," he says.

