Drone Skill Mastery

The ONE simple drill to take your skills from beginner to PRO

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WHY BOTHER BECOMING SKILLED?

Many people mistakenly think that they can get away with knowing only how to fly a drone with GPS, RTH and other assist features. The problem with this is two fold:

1. You are not really a well rounded pilot if you can't get out of risky situations. What if your GPS and/or altitude mode fails? What if the RTH function doesn't work mid-flight and you need to bring your craft back to you from a tight spot? Drones are not mere play things and if things go wrong, you need to be able to minimize the damage. It is your responsibility to be a competent pilot.

2. Knowing only how to fly in assisted mode will severely limit your flexibility. The ability to manuever where you want, however you want and when you want is the most important thing for drone photography and videography (getting the proper composition, for example), drone racing, aerial surveillance, mapping or any other application. Anyone can fly a drone with assisted modes. The one thing that will make you stand out from the crowd will be your piloting skills, if you have any.

If you want to learn how to maintain total control of your craft and avoid choppy movements from constantly trying to counteract the assist modes, you have downloaded the right piece of information. This is a PROVEN method that we've used to train many drone beginners!

Note

We recommend you buy a cheap, smaller quadcopter/multirotor for the purpose of training. The main reason for this is that you will most likely crash a TON before you actually master multirotor piloting. The second reason is that you need to be able to practice in a safe environment that you setup yourself. Smaller multirotors give you the ability to practice indoors, away from causing potential damage on things, people and pets during practice.

WHATS THE DRILL?

There are a myriad of different practice drills or exercises that you can do to improve your flying skills ranging from learning how to hover in place, "walking the dog" or following the drone as you fly it to maintain orientation, flying in square and circle patterns.

But what is the ONE drill that if practiced over and over will give you the most returns in terms of skill development?
The answer – Flying figure 8s.

While the answer is simple, there are different things you can do setup your practice environment and make the exercise drill easiser or harder (based on your skill level).

If your skill level is really lacking, you might not be able to fly the figure 8 at all, but that's okay. The goal is to eventually get there and THEN progress to harder variations.

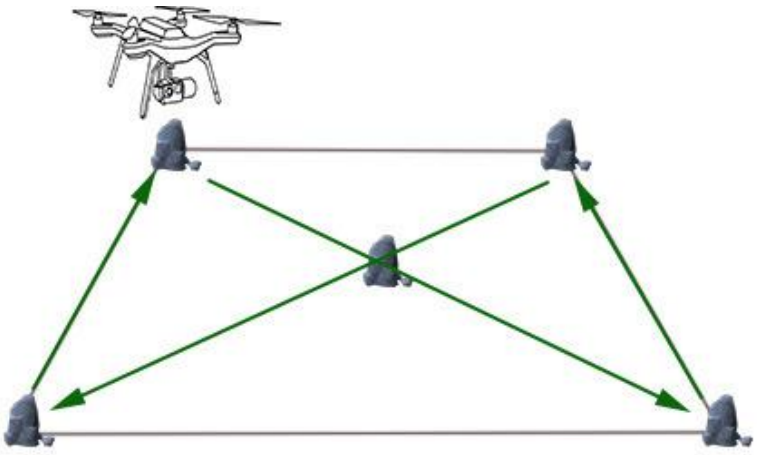
Below, you will learn how to setup practice environment and practice variations of the figure 8s for any skill level. Master the figure 8s in the hardest level and you will be competent enough to manuever your drone through most situations..

SETTING UP PRACTICE ENVIRONMENT

As we discussed earlier, the environment that you setup should be dependent on the skill level that you possess. If you are less skilled, you should give yourself more room to break the figure 8s as you may not be able to fly a perfect figure 8 in the beginning. As you gain more skill, you can setup the environment in a way that makes it more challenging.

Here are three different practice environment variations in increasing difficulty (Easiest to Hardest):

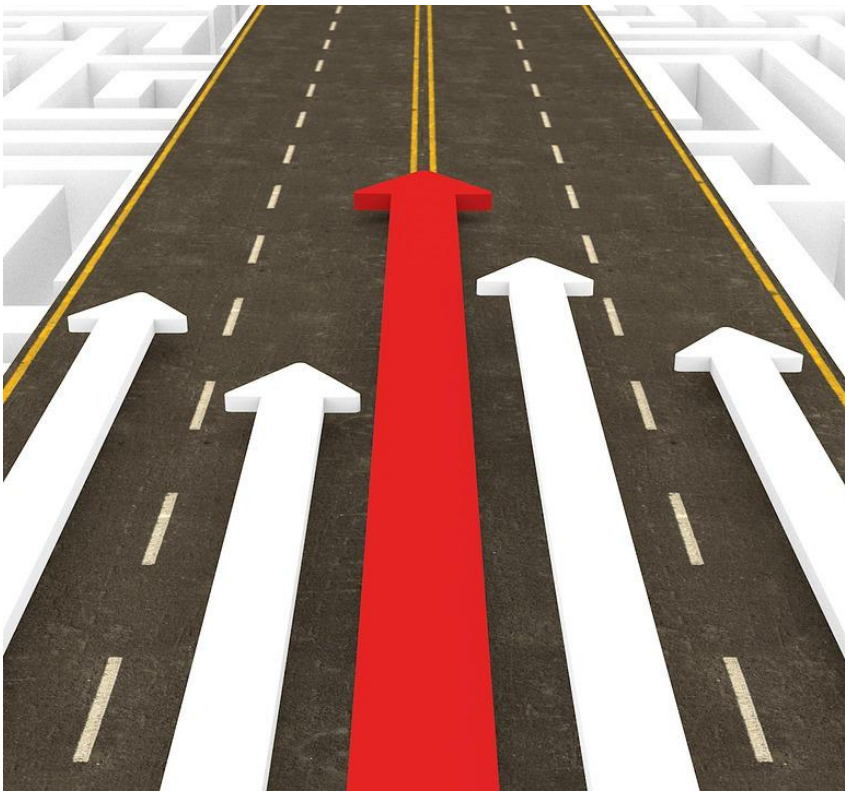
1. Open wide area, figure 8 marked with stones on every end point of the figure: This is the easiest variation. The figure 8 is marked by placing non-intrusive stones (or any similar object). Your goal is to follow the path marked by the stones as much as possible. You may not be able to fly the figure 8s perfectly at this point, but that is okay. In this step, your main goal is to learn how to control your drone in different orientations while it is in motion, but not just any random motion. Learn to stay in control of the yaw, pitch and roll of the craft while intending to move in the direction you want it to (figure 8 in this instance).



2. Open, wide area, figure 8 marked with a clear path: Once you are a little bit more confident, you mark a CLEAR figure 8 on the floor. You can do this with tape, a long enough rope, chalk or any other manner that is convenient for you and depending on the floor type. Unlike the easier version with the stones, you do not have much room for mistakes here. The goal with this drill is to follow the figure 8 path EXACTLY.

3. Make the figure 8 smaller: To make the previous drill harder, make the figure 8 flying area smaller. The smaller the flying perimeter for the figure 8, the more frequently you will have to make turns and twists to stay on the path.

4. Small figure 8s, but place a large enough object (like a construction cone) at every end point of the figure: The hardest variation is to setup the figure 8 with an intrusive object (like a construction cone) that your drone may crash into if you do not fly around it. Again, the smaller the figure 8, the harder it is going to be to fly because you will need to make constant turns to avoid crashing into the cones. Setup the figure 8 in as much a small area you can and learn how to fly around the objects that make up the figure 8.



PROGRESSIVE DIFFICULTY

The key to building any skill is progressive difficulty. Setting up your practice environment from easy to hard is one way to increase the difficulty of your training drill. Here are some more ways to improve your skill and become a Jedi multirotor master:

Speed : Increase the speed of your flight. Set up a timer and try to finish perfect figure 8s, avoiding obstacles as fast as your reflexes and multirotor allows. Aim to beat yourself every time. Try doing this drill with a racing quadcopter.

Vary the altitude: You've practiced how to fly after setting up an obstacle course on the ground. Now fly figure 8s at higher altitudes. Also try doing a figure 8 while actively changing altitude.

Now stop wasting time and get practicing. Time to kick some butt!

Note

Fly FPV figure 8s. Flying FPV is a completely different experience from line of sight flying. Use the same figure 8 drills and learn to fly FPV instead.

Also learn to control gimbal movements while flying figure 8s to improve your aerial photography and videography skills.