

# ***Improving Your Helicopter Flying Skills***

By Bob Ackerman

From Fly Paper, March 2010

I have watched most of the helicopter pilots around the area over the past few years and I have seen great improvements with their flying skills. And this is great. But I have noticed that many helicopter pilots are rushing to get into forward flight and onto aerobatic flight without working on the basics. With any helicopter, every flight starts in a hover and ends in a hover (hopefully). Everything in between doesn't matter. To improve your flying skill you need to practice hovering.

If you watch most helicopter pilots at the field, they place their helicopter on the ground 20 to 30 feet in front of them, bring the helicopter up to a stable hover, then quickly turn and head off to fly around. For the most part that is OK. Approach to landing is another story. Many pilots come in too short or too long, and end up hovering backwards back to in front of the pilot and then landing. Other pilots enter a high hover in front of the pilot and then descend backwards to a lower hover for landing.

I propose to all the helicopter pilots out there to spend some time on the hover circles just hovering. There are a couple of skills you need to do while hovering. Some of these are real basic but they lead to harder elements of hovering.

Start in your normal hover with the nose pointed away from you. Don't watch the tail; you should watch the nose because that is the direction the helicopter normally flies in. Now turn the helicopter so that it is 45 degrees from you and hold that hover. Now turn back to the other 45 degrees. Work your way up to 90 degrees on both sides.

Now here is the hard part. Do you know where you just placed your helicopter on the ground for the first takeoff? Do you know where you stand all the time? Good. From now on you stand at the same spot. From now on you do NOT place your helicopter on the ground at the same spot. Spend your practice time by practicing taking off and landing at different spots on the field.

Next, take the two elements mentioned above and practice that 45 and 90 degree turns at different places around the field. Hard, isn't it? How about changing the altitude? Instead of 5 feet in the air, try the hovering at 3 feet, or 10 feet. Helicopter pilots get comfortable with their helicopter in a hover at a certain altitude and a certain distance in front of them. The idea here is to move around and try different locations. The above is all good but you would be surprised at the number of helicopter pilots that do not, or have not practiced any of the above.

Now we take hovering to the next level. Pick several points around the field. Hover the helicopter to that location and stop over the mark. This could be a clump of grass or an imaginary spot on the ground. Slowly bring the helicopter straight down and land on that spot, then back up into a hover. Move to another point. You will be surprised how really hard that is at first.

Next we make it more difficult. As the helicopter moves from point to point the helicopter MUST flying in a forward hover motion only. You must keep the helicopter pointed in the direction of flight. After stopping at a selected spot, turn the helicopter to face the new direction of flight and then fly at hovering flight to the next stopping spot. Yes, I know, it can be difficult.

If you think about it you should be able to come up with dozens of drills to practice your hovering. Flying side to side for most beginners is the first thing they learn. Turning the helicopter and flying in a forward direction is more difficult. Flying backwards, except when pointed away from you (the nose that is), can be very difficult. But the more you practice the better you get. And the more different types of practice you do, the better you become.

Another area I would like to discuss is flying the pattern. Many helicopter pilots start from a hover and head off almost straight up to have some fun. Helicopter pilots should concentrate on a hover taxi out onto the runway, just like our fixed wing friends do, turn to face down the runway, and fly out in a pattern.

When done flying around and after doing whatever you want to do while in forward flight, you should practice arriving in the pattern. Fly downwind just like the airplanes, turn onto the runway, and in a controlled approach descend and slow down so that the helicopter flies into a hover right in front of you. Once you have a nice hover in the middle of the runway, turn the helicopter to face the side of the runway, hover fly to the sideline, turn to face the runway, and land.

The general point of this entire article is to practice what you don't do, and practice what you normally do but in a little different fashion. Helicopters are all about the hover, and the helicopter can hover anywhere on the field. The problem is most pilots have not practiced hovering all over the field.