

Radio Control Flyers Unlimited

Flight Plan

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Current News

The upcoming meeting, we will have a double raffle. This means that the raffle from last month and the raffle for the November meeting will be held at the November meeting. Further, there was interest in having a December Dinner party for club members and their guest. The date has been set for December 12, 2009 at 7:00 pm. You must RSVP to Jim Scott by November 20, 2009 by calling or emailing at fyinjimbo0816@gmail.com. He needs to get an idea of the type of dining facilities we will need. All gratuities will be paid by the club. There will be a raffle at the dinner, as well. A couple of restaurants have been suggested: Mimi's and Johnny Corino's, both at the Vintage Faire Mall in Modesto.

The IMAC contest has been proposed for June 5 & 6, 2010 to be held at the field. If there are no objections after the November Club meeting, then I will go ahead and firm up that date.

Also as a reminder, the Toys for Tots event is scheduled for December 5, 2009. Please plan to attend, at the field, and bring a toy.

I have sent out the annual billing. When you get your billing statement, please take time and put your email address on the form. If you do not, then please put on the form that you do not have one. The reason for this, is that I am going to streamline the newsletter by putting it only online. If you do not have

access to the internet (no computer, access, etc) you must let me know on the billing form, or I will assume that you have online access. I plan on implementing this new policy as of January 2010. Currently all members can access the web site and obtain a copy of the current newsletter and up to 4 years of archives.

As a reminder, duck season for our area, at the lake is from October 24, 2009 through January 31, 2010. During that time, the gates at the field will remain locked until 10 am.

PILOTS CORNER

Getting the Harrier Down: a building-block approach

by Jeremy Chinn

From the Mid Atlantic Radio Kontrol Society,
Snow Hill, Maryland

If you have followed along with the previous article, you now have a simulator to learn on as well as the right kind of airplane to learn with. This is a point at which many people just begin banging the sticks around and thrashing the airframe around the field. Not only does this not necessarily turn into the safest situation, but it does not often yield success.

To learn to 3-D well, you need to learn with a building-block approach that builds a good foundation of basic 3-D maneuvers and progresses from there. This progression will use much of the basic aerobatic knowledge you have previously learned to control the airplane in all attitudes and situations.

While most people think the core maneuver to flying 3-D is the hover, that is unfortunately incorrect. The most basic and fundamental maneuver for learning 3-D is the Harrier. The Harrier is a part of a majority of 3-D maneuvers and skills learned during training to help build rudder-control skills necessary for more complex maneuvers. To learn to Harrier correctly, we are going to use another simple maneuver called an elevator. Learning to Harrier this way initially allows this first maneuver to be flown at a higher altitude and with an easy escape route.

Start by climbing to an altitude of “five mistakes high.” Level the airplane at center field with the nose into the wind and cut the throttle to idle. When the airplane has slowed significantly, hold full-up elevator and allow the airplane to fall. If your airplane is set up correctly with an appropriate center of gravity and control throws, it should descend slightly nose down or level. An idle set too high will cause the airplane to descend nose high.

As the airplane descends, use the ailerons to hold the wings level. During the descent, the wings may rock back and forth. Careful correction with the ailerons will help correct this problem with most good designs.

When the airplane has reached an altitude of one mistake high, decrease the pressure on the elevator and increase the throttle to fly out level. You have just completed an Elevator. Congratulations! Continue practicing this maneuver until you are comfortable with the airplane descending in this manner.

Next up, prepare to fly an Elevator just as you did before, however for this round of exercises, you should begin to use the rudder to steer the airplane as it descends. Remember to use the ailerons to keep the wings level during the descent. Try descending while steering the airplane through a gentle circling descent and exit as before. Continue flying this exercise until you are comfortable using the rudder to steer. This exercise may feel odd to many sport pilots who are not used to using the rudder on a regular basis. In the next phase, we will begin the Elevator just as before and use the rudder and ailerons. As the airplane reaches the midway point of its descent, begin to increase the throttle until the nose rises slightly. The airplane will also move forward more

than in previous exercises and its rate of descent will slow. Do this repeatedly until you feel comfortable increasing the throttle and maintaining control of the airplane.

Once you are comfortable descending in this increased throttle state, allow the airplane to descend to one to two mistakes high and increase the throttle more while easing off the elevator backpressure. Your goal now is to find a point of equilibrium where the airplane maintains a nose-up attitude of approximately 30° to 45° while slowing the descent to no altitude change.

When you can complete this last exercise, you have successfully flown a Harrier. You can successfully control the heading of the airplane with the rudder and its attitude and rate of descent with a combination of elevator and throttle control. It's now time to take your efforts to the next level.

Once you feel comfortable finding that balance between elevator back pressure and throttle input, you need to take the next big step.

In the next phase of this exercise, you are going to fly at a very low level. This is a point at which many students get very uncomfortable. They reason that, since they are closer to the ground, they are more likely to hit the ground. That is not an unreasonable thought; however it fails to take all the factors into account.

Learning to fly 3-D, especially learning to Harrier, at a very low level is absolutely the best place to perfect your Harrier. Optimally, you'll fly with your tail one to two feet off the ground.

By learning to Harrier at a low level, you:

- Fly at an altitude and proximity to yourself that allows you to see every movement of the airplane no matter how small, and react to it promptly to keep the airplane flying the way you want it.
- Keep the airplane low so that in the event it does get into an “out-of-shape” attitude, it does not have enough time or altitude to build up momentum that will cause significant crash damage.
- Impress your friends!

Start this phase by flying low, level, straight-line runs down the runway into the wind. Remember

to be courteous to your fellow fliers and yield the runway to those who need it. Pilots taking off or landing always have the right of way. If you get uncomfortable with the airplane at this altitude because of a gust of wind or other factor, use the ailerons to level the wings, cut the throttle back somewhat and let the airplane drop to its landing gear.

As you get more and more comfortable flying your Harrier down the runway, begin to add turns into your exercise. Start with circles one direction, then the next. When you feel comfortable flying circles in a Harrier, modify your exercise to include figure-eights over the runway.

These simple exercises are a great way to build, refine, and improve your fundamental 3-D skills.

You now have a great foundation to begin building more 3-D maneuvers into your repertoire, so what is next? Before moving to an entirely different skill, you need to go back to the beginning of this Harrier lesson, but progress through it inverted. A

successful inverted Harrier is another important building block of learning to 3-D.

As you move through the inverted version of the Harrier lesson, remember that your rudder and elevator require inputs opposite of those you use in an upright Harrier. Most people find it extremely helpful to use their simulator at a slower time rate to build this skill before moving to the real world.

Becoming proficient at flying your airplane in a Harrier is one of the most important building blocks or fundamentals of becoming a great 3-D pilot. Don't be afraid to take your time moving through these exercises. Some pilots will progress through the Harrier lesson in a weekend. It may take others a month. You should also not be afraid to break this lesson out again when you have progressed past it.

Cash Flow Report

Income			Expenses	
Club Dues (including initiation fees, field assessment fees, and Donations)	\$50.00		Port-o-potty service	\$140.00
Event income	\$0.00		Newsletter	\$300.68
			Pest Control	\$40.00
			Field Expenses:	
			Fuel	\$40.00
			Service Charge	\$28.00
			Meeting Raffle	\$100.64
			Membership cards	\$162.78
Totals	\$50.00			\$812.10

Last Month's Total	\$1,898.77
Income	\$50.00
Expenses	(\$812.10)
Balance	\$1,136.67

**The November Club meeting is scheduled for:
 Wednesday, November 11, 2009 at 6:30 pm
 at the Police Station at 10th and G sts.**