

May 2010

AMA #197

IMAA #687

Glitch Busters



Next Club Meeting:

TBA

@

Newark Senior Center

7:30pm

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Please keep our flying site

clean by removing all

trash and debris when you

finish flying for the day!

The Prez Sez

On April 16th a few inconsiderate guys were flying in a park in Tampa, Fla. They created an incident that may have serious repercussions on the hobby. And yes, they were AMA Members! The park had rules against RC flying, which they ignored. They seem to have been chasing a 17 year old girl with a 450 size electric heli, when somehow they ran into her. <http://www.youtube.com/watch?v=5KDVBk2Sunk> describes the incident and shows the injuries she suffered by this foolish act.

AMA President Dave Mathewson wrote a response on the AMA website <http://www.modelaircraft.org/aboutama/TampaHeliAccident.aspx>

Local Tampa AMA members and expert heli pilots responded to the media and softened the impact of this tragic accident on the RC community. A fund was established by a helicopter forum member <http://www.helifreak.com/showpost.php?p=1998251&postcount=94>

And as of this writing, they have raised about \$12,000.00 to defray her costs. No charges have been filed against the pilot, since the police judge that she was in the "wrong place at the wrong time."

Aside from the outrage and disgust I have for these clowns, I think it is an object lesson for all of us to be even more aware of safety when we fly.

The clean-up day was moderately attended. Some came to fly and were pressed into service. The grounds have been cleaned up, some winter damage repaired, and the PA speakers permanently mounted to the roof of the pavilion. Greg Schock says that he should have the safety benches assembled within two weeks. Design work on safety barriers is underway.

I hope all of you enjoy the improved weather and get out to fly and remember to fly safely!

John

3-D Aerobatics

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

By Jeremy Chinn

Learning to 3-D and 3-D Well: A building blocks approach.

Part 4 of 5: Hovering and Torque Rolling.

In the past installments, you got the appropriate virtual and real airplanes to fly, as well as practiced methods to help speed your learning. During that time you also built two of the fundamental building blocks necessary to learning 3-D aerobatics—the Harrier and High Alpha Knife Edge.

It is now time to put those skills together to learn an advance level 3-D skill—the Hover. Why is the Hover an “advanced” level 3-D skill, and why did you learn to Harrier and fly Knife Edge first?

When hovering or flying a torque roll, you must use the tail of the airplane to control the model and keep it in a state of balance or equilibrium while hanging from the propeller disk. To do so, you must be very competent with the rudder and elevator to steer, or correct, the airplane. Learning to fly the Harrier and the High Alpha Knife Edge teach those skills rapidly and effectively.

The other reason is based on safety and airframe longevity. When an airplane falls out of a Hover or Torque Roll, it always passes through an attitude similar to a Harrier or a High Alpha Knife Edge. Since that attitude also generally requires slower movement to maintain altitude, it is generally best to “catch” the airplane as it falls out of a Hover or Torque Roll when it reaches Harrier or High-Alpha-Knife-Edge.

Once again this maneuver is much easier to learn on a simulator first using the “reduced time” method and then transfer the skills to real life.

The optimum conditions to learn to Hover start on a day with a mild constant breeze. Start with the airplane in a low (one to two feet off the ground) upright Harrier flying into the wind. I like a distance of about 40 feet away from myself for this exercise. Chose a spot over the field and gradually increase the throttle while initially increasing the elevator back pressure at the same time until the airplane is totally supported by the propeller disk. Inevitably, the airplane will begin to wander or lean left, right, or another direction.

Once the airplane gets out of Hover position, you have two choices to exit the maneuver:

1. Go to full throttle and climb up and out of the Hover. This is most pilots’ gut reaction and is fairly effective; however, if the airplane is totally out of shape, or in an orientation the pilot is not comfortable with, going to full throttle in that position can be scary or even downright dangerous.
2. The better alternative to the full throttle exit is to allow the airplane’s nose to fall until the airplane is either upright or inverted on the wing. The pilot can then fly out of the maneuver easily in either an upright or inverted Harrier, which was mastered earlier. Exit-

ing in this manner is generally safe and also allows the pilot to get back into Hover position more quickly.

Some things to avoid for the person learning to Hover:

- Many people try to enter a Hover by flying in at high speed and pop the nose up rapidly to enter the Hover. Unfortunately, in this case, the airplane has a large amount of energy to bleed off before it can hit the “sweet spot” and initiate the Hover.
- Don't waste time trying to learn to Hover two, three, or even four mistakes high. When at that altitude, there is no way you can see the airplane well enough to make the right corrections and keep in the Hover.

Continue this exercise until you can enter a Hover at will and enter and exit the Hover safely and fully under control. For extra practice, try entering a Hover from a High Alpha Knife Edge or Inverted Harrier.

Part 5 of 5: Rolling Harrier.

Learning to 3-D and 3-D Well: Rolling Harrier

The next 3-D maneuver in the series, the Rolling Harrier or Harrier Roll, relies heavily on the basic aerobatic skills you have built prior to learning to fly 3-D. If you can't fly the basic aerobatic rolling maneuvers, such as a slow roll, four-point roll, or rolling circle, you will have very little success attempting to do a Rolling Harrier or a Rolling Harrier Circle. Take the time to learn those skills first.

Earlier in the series, you learned the Upright and Inverted Harrier as well as the High Alpha Knife Edge. To simplify matters, a Rolling Harrier is simply harriers and hakes strung together end to end and flown with a particular rhythm. Additionally, varying that rhythm allows you to steer the Rolling Harrier straight, left/right, or up/down.

There are a few common mistakes that many pilots make that you should try to avoid:

- Don't practice this maneuver in only one rolling direction. That will build a bias into your flying and make later maneuvers more difficult.
- Always fly the maneuver with both rudder and elevator inputs for altitude and heading correction. Flying with only one or the other results in a choppy-looking maneuver that is much harder to control.
- Try this maneuver on the simulator first and then transfer to real life. Flying Rolling Harriers comes from properly building muscle memory and rhythm, which can be done much more quickly on the simulator using the 'reduced time' method.

To begin the Rolling Harrier, start with the airplane in an Upright Harrier flying into the wind two to three wingspans high. With full control of the airplane, use the ailerons to roll the airplane to a High Alpha Knife Edge and hold it there. Next, roll the airplane to an Inverted Har-

rier and again hold it there. Follow with a roll in the same direction to High Alpha Knife Edge. Complete the sequence by rolling the same direction back to Upright Harrier. Practice this sequence of events repeatedly until you feel comfortable transitioning from one position to the next.

Next, decrease the amount of time you hold the airplane at each position and practice the sequence again. Continue practicing the sequence and reducing the hold time at each position until you can roll the airplane through each position without stopping the roll. Congratulations, you've just done a Rolling Harrier.

To build this skill, practice it in both directions and from starting points of upright and inverted harrier as well as from both orientations of High Alpha Knife Edge. Practice stringing Harrier Rolls together seamlessly until you can fly the entire length of your runway without stopping the Rolling Harrier.

For extra credit, learn to steer the Rolling Harrier by changing the timing of your rudder and elevator inputs. This aspect of the Rolling Harrier is learned most quickly on the simulator using the 'reduced time' method.

Delaware R/C Club Dues for 2010 are payable online

We have setup the website and our membership application so that you may now download the application, fill it out on-screen, mail it to Mark and pay the dues by PayPal.

Presently, you must go to PayPal and send the money to the dues address:

dues@delawarerc.org

Park Passes for 2010 are payable online

The State of Delaware is now providing Park Pass purchases online (there is a \$2 handling fee). You can go to www.destateparks.com and follow the links.

Park Passes are required from March 1st through November 30th.

LUMS POND IMAC

June 5 & 6, 2010



**Delaware R/C Club
Lums Pond State Park
Bear, Delaware**

All Classes Flown / Freestyle on Saturday
Pilots Fee: \$35 - \$10 discount for IMAC members
Pilots Meeting at 9AM / Flying to Start at 9:30
Field Open for Practice on Friday

Contact: Mark McQuaide - markmcquaide@verizon.net
Hotels in Newark, DE at the I-95 - 896 interchange, and in Middletown, DE
For Add'l Info: www.mini-iac.com > Regions > NE > NE News & Events

State Park entrance fee of \$3/day (\$6/day for out-of-state)
Out-of-state pilots will receive a \$6 discount on pilots fee.



The field is open Friday, although, some contestants may be practicing. The field is closed Saturday and Sunday. All club members are invited to participate in the contest. Anyone looking for coaching in flying the IMAC sequence should contact Mark McQuaide or Jake Ruddy.

Toledo 2010

Delaware RC was well represented at the Weak Signals Expo (Toledo Show).

I'll try to recall what impressed me at this year's event:

Last year, Steve Eves displayed a 1/10th scale Atlas Saturn V rocket, which was subsequently launched to 4400 feet and recovered intact. It now resides under the full-size rocket in the museum at Huntsville. This year he brought a 1/5th scale Saturn 1B two-stage rocket, which he hopes to launch to twice that altitude.



This view is from the display area and the Jenny in the foreground is 1/3 scale – a beautiful piece of work.



Toledo 2010

There were several “fantasy” versions of the Gee Bee



Check out the detail on this FA-18C Aggressor



Dave Platt built this Senior Skylark from archived plans of this never produced model, and displayed it with Orbit reeds control

Toledo 2010

Castle Creations showed this ELECTRIC powered monster heli.



A folder with all the pictures I took at Toledo is available for a limited time at <http://www.dropbox.com/gallery/6213057/1//Toledo%2010?h=c7a093>

Submitted by: John Kirchstein, Contributor



Glitch Busters
is a monthly publication of the
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Set Your Course for Upcoming Events	
Massey Airfield Heli-Fun 2010	May 7 - 9 @ Massey, MD
Joe Nall	May 8 - 15
Armed Forces Warbird Fly-In	May 15 @ Andover, NJ
SKSS 3D Fly In	May 29
Lums Pond IMAC Challenge	June 5 - 6
SKSS ESL Thermal Duration	June 12 - 13
SKSS Electric Warbird Fun Fly	July 3
Warbirds Over Delaware	July 7 - 10 (Wed. through Sat.)