

Glitch Busters

Delaware R/C Club, WWW.DelawareRC.org



Safety Officers Named, Committee to be Formed

Delaware R/C Club – General Membership Meeting – January 4, 2005

The Meeting was called to order by Brian Pasternak at 7:33pm

There were **3 guests** at the meeting: **Joe Napolski** from Newark. He flies electric; **Ethan** from Wilmington. He flies electric; **Greg** from Prices Corner. He flies helicopters.

Show & Tell: **Stan Michalski** demonstrated a mini helicopter.

Dick Stewart showed his Super Chipmunk. **Jim Schlapfer** showed a small electric P-40.

Safety Environmental Reports:

John Kirchstein and Stan Michalski have been appointed as Club **Safety Officers**. Due to the diversity and size of our Club a single Safety Officer would be overburdened.

John and Stan will recruit members for the safety committee.

The safety officers will have full authority over all safety concerns at the Flying Site and will report any violations or concerns to the Board.

Safety Report: We are missing some frequency pins; worse yet, some people were flying on these frequencies without leaving AMA cards in the rack.

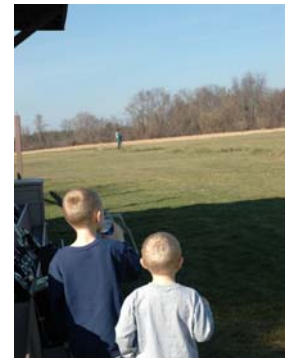
Trash is still being left at the field. Please be considerate and clean up after yourselves.

Suggestions from safety officers: Want to make rules simple and enforceable.

Old Business:

2005 Club **dues are now due**. Remember the deadline for early renewal is Jan. 15. The **prizes for the early renewal drawing are: GMS 76 Engine, a large Dremel set, and a Delta band saw**. You do not need to be present to win.

The Club held its annual **Freeze Fly** on Saturday, January 1, 2005. Warm temps and nice weather resulted in a large turnout of about 100 people.



Someday...

The following members have been appointed as “**Board Members-At-Large**”: **Carl Hauger, Jim Schlapfer, Tony Albence, Pete Malchione and Dan Weick**.

(Continued on page 3)

Next Club Meeting: Feb1, 2005

- Location: William Penn High School Cafeteria 2
- Raffle: TBA
- Program Topic: By-Laws
- Next Club Event: Two Tony’s Memorial: May 22,22

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Delaware RC Club Welcomes New Members:

Zachary Sharpless, Gregory Schock and Joseph Napolski

Mike’s Tips

More tips from Mike Evans:

Fly With a Purpose

What’s next after you’ve soloed? Sometimes it is fun to go to the field to fool around and just bore holes in the sky, but “flying with a purpose” can help make flying more enjoyable and keep it fresh and interesting over the long haul. “Flying with a purpose”

simply means that you make a mental flight plan built around improvement of the plane’s performance (tuning) or improvement of a specific flying skill.

A **trim chart** helps take you through the setup and adjustment steps to get the most out of your plane.

A good trim chart from the NSRCA is included with this newsletter. It has shown up in manuals from a few of the better aerobatic kits. Tinkering is necessary to get the best performance from your plane. This chart gives you a coordinated approach to trimming.

More from Mike next month...



7:45: Mike flies his Goldberg Sr. Falcon ARF

Freeze Fly

New Year's Day!

Maybe we should have called it the "Thaw Fly." Temperatures soared to near 70 degrees. People came out of the woodwork to visit! Estimates of a hundred people in attendance include spouses and kids, Your Editor counted 80 cars parked in the lot at noon.

I got there at just before 8:00AM and Mike Hudak was flying, Earl McMullin had already crashed a plane, and others were beginning to arrive.

Heaters were set up in the Pavilion, the generator cranked up, and the coffee pot put on to perk, I didn't find the booklet to the pot until after the first batch was started, so it was twice as strong as the standard recipe. This error was corrected slowly as we kept diluting the brew until it was to most people's liking. Bright side—We didn't need



8:30: Dick Stewart flies his delta prior to a "woody" landing. Bill Bouchard and Earl McMullin help unload donuts, etc from Brian's car.

A few planes were damaged when they took unscheduled trips to the woods, but I believe all were recovered, despite wet and brambled conditions.

"Repair work on the road and pavilion roof needs to be completed in April ... Events start in May"



to make a second pot for a long time!

We found that the radiant heater donated by Bill Bouchard was more than enough to warm the room and even that was turned off before the day was over.

Soup and dogs were served up all day long by Brian and Barb. The abundance of goodies brought by members to supplement the faire left most of us not needing dinner that night.



"Fly Thaw?"

One strange effect of the warm enclosure was the thawing of *Musca Domestica*, the common house fly. Dozens were seen crawling out on the plastic pavilion wrap for their chance at an early spring.



What's Up?

9:30AM

Audit of Club Assets Held

The Club is currently in the process of performing an audit of the Club's financial and property records in accordance with the Club By-Laws and AMA recommendations.

The audit committee; Carl Hauger, Terry Blanch and Rick Scott met with Treasurer Dick Stewart, President Brian Pasternak and Vice-President Dave Moyer on

Wednesday evening January 19, 2005 to review the Club's records. The audit meeting was primarily to ask the Treasurer questions regarding his record keeping and to review the books including the property binder and the bank statements.

We had some very good discussions and recommendations. Overall, it was agreed by everyone that the Club's financial records are in excellent shape

mainly due to the fantastic efforts of Dick Stewart.

We have received recommendations from Carl Hauger and additional recommendations are to be submitted by Rick Scott and Terry Blanch by Tuesday, Jan 25th. Findings and recommendations will be discussed at the General Membership Meetings.

Minutes, Continued

The annual Delaware R/C Club bus trip to the 2005 WRAM Show in White Plains NY will be on Saturday, February 26, 2005. Contact **Diane Hudak** at 302-366-0246 or av8orsangel@delaware.net for additional info and reservations.

Repair work on the road and the pavilion roof needs to be completed April since the events start in May.

A suggestion was made to get walkie-talkies to use at the club for when members go in the woods to retrieve lost airplanes. The paths also need to be cut.

New Business

Holiday greeting cards were sent out to Warbirds over Delaware participants, vendors, supporters and volunteers. 9 or 10 pilots and vendors from last year have already registered for the 2005 Warbirds.

The Board is currently working on finalizing the **Club By-Laws**. Brian Pasternak and John Kirchstein are currently working on the project. John and Brian will submit their recommendations to the Board at the January Board meeting and then present the package to the membership at an upcoming General Membership Meeting for review and approval.

As stated in the Club By-Laws and in the AMA Guidelines, the Club must perform a periodic **audit of all Club assets and financial reports**: Four members have volunteered to perform this audit **Brian Pasternak , Carl Hauger, Rick Scott and Terry Blanch**

Treasurer's Report – Dick Stewart.

Raffle Prize Drawing: 50/50—\$25.50 was won by Dick Stewart.

The Meeting was adjourned at 8:42 pm

Respectfully submitted,

Diane Hudak, Secretary



After a long day it's good to sit back and sum it all up

Early Renewal Drawing to be held at the February Meeting

Those members who renewed their membership before the 15th of January, are eligible for the Early Renewal Drawing to be held at the next membership meeting (Feb 1st). While you don't have to be there to win, if you are present you will get your choice of the three raffle items: a **GMS 76 Engine**, a **large Dremel set**, or a **Delta band saw**.

Warm weather and eager pilots made for a great turnout and a good day of flying and eating



9:00 At the other end of the field Jack, Doug, Frank and Pat think about flying...

Southeastern Keystone State R/C Sale & Auction

The first annual Southeastern **Keystone State R/C Sale & Auction** sponsored by the Cloud Kings R/C Club will be held on Saturday, January 29th at the [Kennett Area Senior Center](#) in Kennett Square, PA.

Attractions

- Local R/C Vendors
- Raffles & Door Prizes
- Food and Beverages Available
- Model Displays
- Ample Parking Onsite

Vendor Information

- Tables are available for \$5 each.
- Setup starts at 8:00 AM.
- For table reservations and information please contact: Dick Plyler (610) 268-2156 or Henry Bohe (610) 857-5669

Event Details

- Doors open at 9:00 AM.
- Auction starts at 11:00 AM.
- Admission will be \$4 at the door, with no admission fee for children under 12.

<http://www.chesco.com/~lt>



Field repairs Taking care of that inevitable "hangar rash"



11:00; things were really starting to get going



Delaware R/C Club,
WWW.DelawareRC.org

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Additional Waypoints of Interest	
Sat. ,Jan 29 ,2005	Cloud Kings Auction, Kennet Square http://www.chesco.com/~lthomson/HomePage.htm
March 3-6, 2005	Florida Jets, Lakeland FL franktiano.com
March 12, 2005	24th Lebanon R/C Flea Market www.cpaa.us
April 1-3, 2005	51st Toledo R/C Expo www.toledoshow.com
April 27-May 1, 2005	Top Gun 2005, Lakeland FL franktiano.com
May 11-14, 2005	Joe Nall 2005, Woodruff SC www.joenall.com
June 3-5, 2005	WWII Weekend, Reading (PA) Airport www.maam.org/maamwwii.html
June 5, 2005?	New Garden Air Show, Toughkenamon PA
August, 2005	Atlantic City Airshow
October 15-16, 2005	9 th Annual Rotor Fest, Brandywine Airport, West Chester PA

Set Your Course for Upcoming Club Events	
Saturday, February 26, 2005	WRAM Show – Club Bus Trip – White Plains, New York www.wram.org
Saturday-Sunday, May 21-22, 2005	Two Tony's Memorial Fly-In (AMA, IMAA)
Saturday, June 18, 2005	Fun Scale Contest (AMA)
Thursday-Sunday, July 7-10, 2005	14 th Annual Warbirds Over Delaware (IMAA, AMA)
Friday-Sunday, July 22-24, 2005	Helis Over Delaware (AMA)
Sunday, September 18, 2005	Club Picnic
Sunday, October 02, 2005	Volunteers' Day
Saturday, November 05, 2005	Club Auction

Delaware R/C Club
 106 DeWalt Rd
 Newark, DE 19711-7631

Notice: The WRAM trip is presently below the minimum to cover the cost of the bus. If you are planning to go Call Diane Hudak at 302-366-0246 or av8orsangel@delaware.net

Trimming Chart

These tests assume that the plane has been built perfectly aligned, wings square to fuse, stab in line with wings, vertical fin is exactly 90 Deg. to horizontal stab. Thrust, incidence, and balance (CG) are set according to the designer's recommendations. The wings are not warped as checked with an incidence meter, and the elevator halves are moving together as checked by a "Throw Meter". These flying tests should be done in near calm conditions. Double check each of the following tests before making any changes.

The most critical component of aircraft setup is finding the proper Center-of-Gravity. It must be correct for each airplane, regardless of differences due to building variables and weight. Because of this requirement, it is important that this trim chart be followed in the order in which it is written.

Test for	Procedure	Results	Adjustments
Control Neutrals	test response to each control	Adjust trims for straight & level flight	adjust clevises to center xmttr trims
Control Throws	Apply full deflection of each control	Check for response; Aileron hi rate 3 rolls in 3 secs. Elevator, square loop corners Rudder, 35 to 40 Deg.	Change control horns, ATV, and Duel Rates as required
Center of Gravity Method 1 Method 2	1. Roll into a vertically banked turn 2. Roll into inverted flight	1. A. Nose Drops 1. B. Tail Drops 2. A. lot of down required to hold level flight 2. B. up elevator needed to hold level flight	A. Add tail weight B. Add Nose weight (see Note A at bottom)
Up/ Down Thrust, test 1	Fly model straight & level, then cut throttle Note Either change B or C requires retest of Decalage and Verticals	A. Model continues level flight with a gradual drop B. Model abruptly dives C. Model abruptly climbs	A. No Change B. Increase down thrust C. Reduce down thrust
Up/Down Thrust, test 2	Fly model straight & level, then pull up Note Either change B or C requires retest of Decalage and Verticals	A. Model continues straight up B. Model pulls to canopy C. Model pulls to belly	A. No Adjustment B. Increase down thrust C. Reduce down thrust
Decalage, Angle of Incidence	Power off vertical dive from high altitude (neutralize elevator)	A. Model continues straight down B. Model pulls to canopy	A. No change needed B. Increase wing or stab incidence

Trimming Chart

	(see Note B at bottom)	C. Model pulls to belly	C. Reduce wing or stab incidence
Knife Edge Pitch	Fly model on normal pass, roll to knife edge, left and right, use rudder to hold model level	A. Model does not change pitch B. Model pitches to canopy C. Model pitches to belly	A. No adjustment needed B. Either move CG aft; or increase wing incidence; or mix down elevator with rudder C. Reverse of B;
Tip Weight - Test 1	Fly straight; level, roll inverted, release aileron stick	A. Model does not drop a wing B. Left wing drops C. Right wing drops	A. No adjustment B. Add weight to right tip C. Add weight to left tip
Tip Weight - Test 2	Fly model towards you / away from you, pull tight inside loop, repeat with outside loop	A. Model comes out with wings level B. Model comes out with right wing low C. Model comes out with left wing low	A. No adjustment B. Add weight to left tip C. Add weight to right tip
Side Thrust	Fly model away from you and pull up to vertical	A. Model continues straight up B. Model veers left C. Model veers right	A. No Adjustment B. Increase Right thrust C. Reduce Right thrust
Aileron Differential	Fly model toward you, pull into a vertical climb before it reaches you. Neutralize controls then half roll .	A. No Heading Changes B. Heading change opposite to roll command C. Heading change in direction of roll command	A. Differential settings OK B. Increase differential C. Decrease differential
Dihedral	Fly model on normal pass, roll to knife edge, left and right, use rudder to hold model level	A. Model does not roll B. Model rolls indirection of rudder C. Model rolls opposite to rudder	A. Dihedral OK B. Reduce dihedral C. Increase dihedral

Trimming Chart

Note A: These two methods for determining the C.G. of a model will give approximate results only. Start out with the C.G. where the Designer suggested, or somewhere between 25% to 35% of the Mean Aerodynamic Cord. The optimum C.G. for your model will require further testing while performing maneuvers. The results will only be an approximation at best.

Note B: This portion of the trimming chart may be unclear for the following reason; In order to maintain level upright flight, the wing of a plane with a symmetrical airfoil wing needs to have a positive Angle of Attack (AOA, usually less than 1 degree). This positive angle provides the lift required to cause the plane to fly level. If the plane is balanced slightly to the nose heavy side (required for pitch stability), it will require a slight up elevator trim to hold level flight. A plane with a zero/ zero wing to elevator angle will also need a slight amount of up elevator trim to hold level flight. Therefore, a plane trimmed in this manner will have a tendency to pull to the canopy on a straight, thumbs off, down line because the elevator is controlling the AOA of the wing.

This positive AOA may also be achieved by a positive incidence change, which requires an offsetting down elevator for level flight. Thus, a power-off down line should fall straight down, with neutral controls. There are significant interactions between wing incidence changes and CG, therefore it is most important that the C.G. of the airplane be established first.

In the final analysis, flight trimming an airplane is a personal preference issue after you have taken care of the basic essentials.