

"The Seminole Flyer" is a publication of the Seminole Radio Control Club of Tallahassee, Florida

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### Letter from the Editor- Stephen Warmath

Man it's Hot! Even with the fans blowing in the shop, I still work up a sweat. This month's offerings include the usual news and reports and a couple of articles on Weight and Balance and Sheeting Foam Wings. The video link sent in by Geoff Lawrence is pretty incredible and serves as a reminder that when things go wrong mechanically, try to fly your aircraft all the way to the crash site. http://media.putfile.com/Wing-Failure It just might save your prized possession. We also received the above Certificate of Appreciation from the EAA chapter for our participation in Airfest 2006. John Hall and helpers have set us up with a new pavilion work bench/ buffet line. See Field Notes. I would like to include in future issues reviews of your newest aircraft. Just send me a short write-up about the good, the bad and the ugly so our readers can benefit from your experience. Also I'd like to invite **anyone** to contribute to the Newsletter. Send in a picture, a web link, a how-to article, anything. There is a lot of knowledge in this Club, let's share with each other. Happy Building & Flying- Steve

### Chief Pilot- Mike Atkinson

The Apalachee Parkway Regional Park planning committee met earlier this month to review the citizens' survey results and move forward with our plans. I'm happy to report Radio Control Activities was, by far, the number one requested activity. Using a weighted point system, RC Activities received 738 points. Playground activities were second with 326 points. Baseball and, surprisingly, soap box derby followed at 289 and 288 points respectively, with picnicking and football 5<sup>th</sup> and 6<sup>th</sup>. What does all this mean? Well, not a whole lot right now. The committee is to take into account the survey results and provide the landscaping architect with our suggestions on activities at the park. It's obvious that organized sports will have to be at the park. There is just too great a demand in the area with an overload at virtually all of the community parks. The question will be what "special interest" groups, RC included, will also occupy space at the new park, as well as what facilities (concession stand, restrooms, etc.) we'll have. At the earliest, however, we still have about 2 years before any new flying site will be ready.

That brings me to my second point. We still have at least 2 years left at our current site. John Hall, as field marshal, is beginning a table replacement/update project at the field. Last year, the club approved the addition of a 24-foot table extending between support posts under the pavilion. John is developing a 12-foot prototype, which will be in place soon. If this works well, we are looking at adding several of these tables. The layout planned will give us more table space under the pavilion, without disrupting the flow of traffic between tables. <u>CONSTRUCTIVE</u> suggestions will be appreciated.

Because of the downpour during our last club meeting, you may not have heard the upcoming club events. Our next float-fly will be August 12, at Francis Surovec's lake place, north of town. The Fall Fly-in will be October 14, sponsored by Hobbytown. Also, the local train society is having a swap meet at the fairgrounds Saturday, July 29. The club is manning an information booth. If you can help, please let one of the officers know.

Finally, I want to encourage everyone to support our local Hobbytown USA. Most club members have no idea how much Frank Bastos gives back to our club. But, in a leadership position, I see it every week. I've been around 2 previous owners who didn't care about the club, and we all suffered. Think about it. Support those who support you!!!

See you at the field,

**Michael Atkinson** 

### Chief Copilot- Geoff Lawrence

Upcoming Local Events: July 29,2006- Train Show, Fairgrounds August 3, 2006- Monthly Meeting 7:00 at the Field August 12, 2006- Float Fly- Lake Surovec

#### Upcoming Regional Events-5th Annual Hot 'Lanta Combat Meet

#### GA

8/05/06 - Loganville, GA (C) 5th Annual Hot 'Lanta Combat Meet. Site: Club Field. Rick Schedule CD, PO Box 715 Snellville GA 30078 PH:770-979-4166 email: <u>rick\_scheule@hotmail.com</u>. Welcome all AMA Pilots. SSC Combat with AMA/RCCA rules. The temperature will be HOT and so will the competition. Registration at 8am, entry fee \$20. Combat starts at 9:20am minimum 8 rounds. Trophies 1st thru 4th. Please visit www.hilltopflyer.com or www.rccombat.com for more information and registration. Sponsor: HILL TOP FLYERS

#### Warbirds Fly In 2006

#### AL

8/12/06-8/13/06 - Huntsville, AL (C) Warbirds Fly In 2006. Site: Club Field. Robert Walls CD, 110 Timberland Trace Madison AL 35757 PH:256-830-2352 email: <u>r.walls@mchsi.com</u>. Warbirds any size any type (no turbines, field restrictions). Awards 1st-3rd WWI & WWII, CD's choice. BBQ dinner Saturday for pilots. 600' x 50' asphalt runway & 100' x 50' grass runway. A/C clubhouse, food on site. RV's welcome, no hookups. No vendor setup or sales. Entry fee \$20. Sponsor: ROCKET CITY RADIO CONTROLLERS

#### 2006 NCFFA Championships

#### GΑ

8/12/06-8/13/06 - Andersonville, GA (A) 2006 NCFFA Championships for 705(JSO). Site: Hodges Hobbies. Mac Hodges CD, 428 Neil Hodges Rd Andersonville GA 31711 PH:229-924-9505 email: <u>mac@hodgeshobbies.com</u>.

#### War Bird Fly In

AL

8/26/06 - Morris, AL (C) War Bird Fly In Site: Club Field. Stephen Box CD, 6554 Letson Lake Rd Hueytown AL 35023 PH:205-425-9849 email: <u>boxpinenott@netzero.net</u>. All welcome. \$5 landing fee that includes lunch. Peoples choice awards. See www.birminghamrc.net for info, RULES and directions. Sponsor: BIRMINGHAM RC ASSOCIATION

#### **Gulf State Annual**

#### FL

8/26/06-8/27/06 - Pensacola, FL (AA) Gulf State Annual for Car III 102-103C, 104-105C, 124, 153(JSO). Site: Navy Sity 8A. Carl Bakay CD, 118 Gentry Circle Lafayette LA 70508 PH: 337-504-4363 email: carl.bakay@scientificdrilling.com. SAM events: small stick, large stick, Comm Rubber, FAC Dime Scale, Grede Mass Launch, 2-Bit OT Rubber, AMA Coupe, P-30, ABC No Gas. \$15 flies any or all events. Sponsor: CLOUD CLIMBERS

#### **Pop Purdy Event**

GA

8/27/06 - Whitesburg, GA (A) Pop Purdy Event for Cat III 101, 102, 103, 104, 101C, 102-103C, 124, 140, 142, 150, 154, 156, 160, 161, 162, 163, 164(JSO). Site: N GA Turf Farm. David Mills CD, PO Box 12306 Atlanta GA 30355 PH:404-509-4209 email: <u>davidmillsatl@comcast.net</u>. Visit www.thermalthumbers.com. Sponsor: TTOMA

#### No regional IMAA events listed for August.

#### Chief Treasurer- Sam Varn

# *Editor's Note: The Treasurer's report is published for Members only. The public version of the Newsletter does not include this information.*

As many of you know and may have experienced, I had a little difficulty with PayPal. Well, after about 10 days of beating my head against the PayPal wall, I finally got through to a real person. Four emails later, he resolved the issue we had with a "sorry for any inconvenience", which I guess he thought made it all better. To make a long story short, our account with PayPal is once again active.

However, during this frustrating period all outstanding invoices were automatically cancelled. If this happened to you, it does not mean that (a) we dropped you from the roster or (b) you don't have to pay your dues. It simply means that the invoice for your dues was cancelled before you could pay it.

In the meantime, I sent a regular email reminder to those that had not paid. Some have responded and some have not. If you haven't paid your dues, you need to do so pronto!

On that note, I will say that as of this writing we have 102 members on our rosters and 39 that have yet to pay their dues. I have been contacted by a few that say "the check is in the mail" but so far I haven't seen them. I also know that at least 3 or 4 of them will not be renewing. If you know someone that needs to renew, please remind them.

Now for our numbers: Cash -	Checking -	Savings -	CD -	Total Funds –
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I also have \$ to deposit from dues, which have come in, and money for a new sign.

As mentioned above, we have a new sign sponsor, D&P Support Services, Inc. brought to us by club member Mike Dee. Mike's company does air conditioning & heating service/repair and other things that mechanical contractors are prone to do. Watch for his sign at the field soon.

Geoff Lawrence had the mower repaired to stop the oil usage. I will have to reimburse Geoff the \$191.46 for the bill. That is not reflected in the numbers above.

That's it for now. If you have any questions on our numbers, please let me know.

Sam



### Chief Scribe- Steve Warmath

The meeting was called to order at 7:00 pm, the same time a rather significant thunderstorm rolled over the field. Heavy rain on a tin roof made for some interesting acoustical background music for the meeting. **"What? Can't hear you, speak louder."** It was a short meeting. Then the rain stopped. Figures.

Visitor/ New member introductions-	New Members Present-
	Guests- Paul Reynolds

**The Treasurer's Report**- Sam stated the PayPal transition for dues paying was complete, however there has been a small glitch that will be fixed in the next day or so. He said it was working pretty well. He had received 29 payments before the glitch and asked if anyone experienced any problems. No one said they had. The CD account has been moved and will earn 5.15%. The current roster has 101 people on it with 55 paid up on dues. As of July 31, the no-fly list will be in effect. Sam indicated that after some previous discussion at one of the meetings, the no-fly list would <u>not</u> be published in the newsletter. The Treasurer's Report was accepted.

#### Old Business-

- Theo Titus brought to the meeting a Certificate of Appreciation from the EAA for Airfest. Mike Atkinson held it up for everyone to see.
- Mike received 50 new logo stickers from Steve Warmath that were donated by Apogee signs. The Club would be selling them for \$1.00 a piece. Steve was to arrange for a Corporate Sponsor sign for them for what they have contributed to the Club.
- Sam indicated he would propose a deal with Ed Perrine of Nettally (ISP) to host the web site and provide generic Officer e-mail accounts at no charge in exchange for a Club membership. This was put to a vote and accepted.
- Mike noted that last year the club approved a constitutional amendment to create a new membership category "Senior Plus Membership". This would be available to anyone 80+ years old and a previous member for the last 5 years. The membership would be offered at no charge to the member.

#### **New Business-**

- Russell Spenser asked if we could request the County to compaction roll our field to level out some of the bumps. Mike said he would be meeting with the County in two weeks and would make a request.
- Someone asked if the logo could be modified to include the word "Park". Mike suggested that we not change the logo itself but make a facility sign that would announce the "Seminole Air Park". He asked that this issue be deferred for discussion when everyone can hear better.
- Geoff Lawrence said the mower has been eating lots of oil lately and needed attention. The warranty had run out. It would be taken to Southside Mowers to be fixed.

#### Announcements-

- August 12 will be the next Float Fly
- October 14 will be the Fall Fly-in (Sanctioned Event)
- Frank Bastos, HobbyTown, announced he was donating his gas grill to the Club.

With no additional business, the meeting was adjourned at approximately 7:25 pm.

### Field Notes- John Hall

The field table is done and ready for use. Jay, Tristan and I put it together Sat. morning before noon. The whole job took us three hours and cost \$85 in materials. The design has turned out to be very sturdy and has received positive feedback from those who saw it this weekend. I put a single coat of grey garage floor paint (epoxy) over the Hardie panel surface to help keep fuel from absorbing into the top. Preliminary tests look good for fuel resistance.

Hopefully there will be enough time between now and the next club meeting for members to try the table and



provide feedback at the meeting. I know one chef who will probably appreciate having a nice service bar to put out the spread! :-) (Go Frank!)

John

### THE WEIGHT IN YOUR PLANE -- WHERE'S IT AT?

#### -By Clay Ramskill

Every kit we buy will show where the point of balance is supposed to be, and it's up to us to see that it gets there. The point of balance is the front to back measurement of where the center of gravity (CG) should be.

The CG placement is a VERY important part of how any plane is going to perform, essentially adjusting the plane's pitch stability. If the CG is too far to the rear, the plane will have marginal stability. That is, it will take very little elevator movement to effect a significant pitch (and angle of attack) change. A plane with an aft CG will be very quick to respond in pitch and will not be inclined to seek out a trim position.

With a forward CG, a plane may require some "up" elevator to fly -- and will require a lot of elevator movement to make any pitch changes. However, if upset from a trim attitude, it will very quickly try to regain that attitude.

In short, the farther forward the CG, the more stable the plane, pitch wise. A plane that is too stable will seem "sluggish" when maneuvering -- with a more aft CG, and a less stable plane, the terms might be "sensitive," or even "skittish." In some more extreme cases, the term has been "unflyable"!!

While on the subject of balance, let's not forget LATERAL balance. The plane should be balanced laterally, as well as longitudinally. Just an ounce of weight in a wingtip for lateral balance can make a big difference in whether your wings stay where you want them while maneuvering!



But there's more to weight placement than

CG. Weight DISTRIBUTION also can affect a plane's performance. The farther out in "the ends" (of fuselage and wings) weight is located, the slower a plane moves initially to control inputs. Imagine, for instance, putting a half-pound weight in each wing tip of a plane. That plane will eventually have the same rate of roll -- BUT, due to the inertia of the weights, it will take a while longer to achieve that rate.

The same goes for pitch -- if we have a heavy engine, well forward of the CG, we will have to compensate by moving servos and batteries (and maybe add lead) aft in the fuselage. Inertia from that weight distribution will cause a slower initial reaction to elevator control. The same reasoning concerning weight in the ends of the plane also applies to directional control, slowing down reaction to rudder inputs.

Note that overcoming inertia is applicable both when we begin or end a maneuver. The plane with weight "in the ends" won't be as "quick," but will tend to be "smooth." This isn't all bad -- in a trainer or pattern plane, for instance. But a plane that is too heavy out in the wingtips is another matter - we may be able to cope with having the plane respond slowly to start rolling; it's really tough to contend with a tendency to keep rolling when we neutralize aileron controls!

The same goes for spin entry and recovery; our "heavy ended" plane won't be nearly as quick to enter either a snap or spin - but more importantly, it won't STOP snapping or spinning as promptly, either!

So, by all means, keep your plane light, if you can - but remember, perhaps even more important is - where's that weight AT?

## Foam Wing Sheeting Author unknown

1.) There are 2 basic methods of preparing foam surfaces.

A.) Sheet all foam pieces, top and bottom, then cut out all control surfaces; elevators, rudder, ailerons, etc. (I use hacksaw blade or a small fine bladed keyhole saw.)

OR B.) Cut out all foam parts, and then sheet.

I recommend A . I find parts stay straighter with "A" method

Note: I like to use 3/8" to 1/2" balsa on both sides where control surfaces will be hinged; so you must cutoff additional foam areas to accommodate balsa thickness. Use Hobbypoxy Two or similar glue to attach balsa to foam. Pica white glue is another excellent product for this job.

- 2.) Since I glass all my balsa-foam composite parts, I sand all my trailing edges just enough to fair with fixed surfaces and they have a round radius edge of approximately 3/32"; not a critical measurement. Sheeting is generally 3/32" balsa or 1/64" plywood; 1/16" balsa is good on tail surfaces for lightness of construction.
- 3.) I cap exposed edges of foam surfaces, like ends of ailerons, elevator and bottom of rudder with 1/4" balsa and on fixed ends of stabilizer. This adds a little strength and allows easier fitting of moveable surfaces; by giving you a sandable surface without fear of getting into the foam.
- 4.) Install wing, stabilizer, rudder and leading/trailing edges on all surfaces as appropriate.
- 5.) Fit, slot and hinge all surfaces TEMPORARILY; do not glue yet. Fair moving control surfaces into the tips and adjoining areas.
- 6.) Horizontal stabilizer and wing I like to join my foam wing sections together with Pica white glue. From the bottom side, cut out balsa and foam to the length and width of respective dihedral braces. Try not to cut through the top side of the balsa, but it is no problem if you do. Use at least the front and middle dihedral braces. These braces can be used later to carry the landing gear loads

#### Sheeting - Wing, Tail, Rudder

Normally you will find that 3/32" or 1/16" balsa is widely used; 1/64" plywood sheeting is also being used. I like to use the balsa as it allows me to rough fit parts and sand them to fit. With the plywood, you need to be very accurate from the start.

#### Attaching sheeting to foam

The foam cradles that the parts come in should be used when attaching sheeting. This will help insure that parts will be a true match and built-in wing washout (2°-3°) will be maintained in finished part (wing). If using balsa-sheeting butt glue enough pieces so that you overlap all four sides of the parts to be covered. This can be attached with Hobbypoxy Two, sorghum, core bond or contact glue. I keep parts in their cradles and

attach top surfaces first. If dihedral braces, wire tunnels, servo boxes, etc., need to be cut out, I do this now. Then I attach bottom surfaces. Don't forget to mark bottom sheeting before gluing as to slot, box, etc., locations.

Notes: 1) Consider putting a piece of wax paper in cradle to keep from sticking to cradle if glue seeps out.

- 2) Weight part down in cradle if not using contact cement; as you want cradle to maintain parts shape.
- 3) Insure that you have cradles on level building board, door, etc.
- 4) This same technique is used on the tail surfaces.
- 5) Next attach leading/trailing edges, tips and end caps.

#### Wing Dihedral Braces

When installing, make braces a tight fit to insure good bond on foam and to lessen areas for epoxy to pool up, generate heat and melt some of the foam. Always install from bottom. My preference is to install after sheeting, but before is okay too. We use dihedral wing braces of 1/8" aircraft plywood and tail braces from 1/16" or 3/32" aircraft plywood. Hobbypoxy Two or Pica white glue is my choice. However, other epoxy glues are acceptable, but try to use those with 20 minutes of curing times or greater. This results in a stronger bond and prevents foam melt down. A word about dihedral angle. You may take a little out if you want a faster rolling ac. I wouldn't add more dihedral.

As you determine the amount of dihedral you want, sand the abutting wing ends (Root ends). If reducing dihedral, I let middle of dihedral brace hang below wing and sand even with wing bottom. Use Hobbypoxy Two to secure in place. Apply Pica or Hobbypoxy Two at the butt joint and dihedral brace area. I like to add some cotton flocking, cab'o'sil or micro balloons to thicken Hobbypoxy Two.

Notes: With a foam wing that is sheeted and glassed the dihedral brace adds some strength, but its main purpose is to spread the landing gear load throughout the wing. Wing strength is derived mainly from the sheeting, balsa or plywood, and the application of fiberglass cloth to make a composite unit. Therefore I usually use 4-ounce cloth from the wing root to just beyond the landing gear area on the top and bottom of the wing. I then cover the entire area with Dan Parson's light fiberglass cloth. I put the finish layer of glass on while the 4 ounce structural glass is still wet. This technique results in excellent bonding of the materials. The West epoxy resin is used for the wing and tail finishing process.



### Seminole Radio Control Club Tallahassee, FL

#### AMA Charter #216, 1969-2006

#### SRCC Officers

President – Mike Atkinson Vice President – Geoff Lawrence Secretary/ Newsletter Editor – Stephen Warmath Treasurer - Sam Varn Field Marshall – John Hall Field Safety Officer- Gordie Meade

#### **Field Hours**

12 Noon till Dark- These hours apply to **all** aircraft, gas **and** electric.

#### **Training Notes**

To schedule a training time contact Mike Atkinson.

#### **Flight Instructors**

Mike Atkinson- Primary/ Advanced Fight Instructor (Coordinator)	926-4692
Geoff Lawrence- Primary/ Advanced Fight Instructor	942-9807
John Hall- Primary/ Advanced Helicopter Flight Instructor	893-6457
Jay Leudecke- Primary/ Advanced Helicopter Flight Instructor	508-7135
Jeff Owens- Ground School/ Airworthiness Instructor (Fixed Wing)	894-2504
Steve Warmath- Ground School/ Airworthiness Instructor (Fixed Wing)	509-0672
Frank Bastos- Hobby Town Flight Demonstrator	671-2030
Don Coon- Leon High Aerospace Club Instructor	488-1971 x 2750

#### **Club Meeting Location and Time**

# Please Note: Club meetings from April 2006 though September 2006 will be at the Flying Field at 7:00 pm. A cookout is planned for every meeting.

The regular club meetings are held on the first Thursday of each month at 7:30 PM at the Grace Lutheran Church on Miccosukee Rd. Head out Miccosukee Rd., cross Capital Circle NE, and the entrance will be the first one on your right. Once you park, follow the sidewalk around the left side of the building and go down the hill. We meet in a room on the first level.

**Submissions-** Submissions are requested to be in M.S. Word format. Photos should be in .jpg or .tif format. Vector art accepted in Corel, Illustrator and AUTOCAD format. We will, however, accept anything to make it easier for those who wish to contribute. Submissions are due no later than the 23<sup>rd</sup> of the month. Send your submissions to ssw@nettally.com or by phone, Steve at 509-0672.

