# The Seminole Flyer

www.seminolerc.com



A chartered member of the Academy of Model Aeronautics AMA Charter #216, 1969-2011



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

**JULY 2011** 

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# Letter from the Editor- Fred Schmidt

If you've received this by email, then the backdrop is there to wish you the best, safe, July 4<sup>th</sup> celebration! If you are reading this online or on paper, chances are the 4<sup>th</sup> is a recent memory. Either way, enjoy the holiday week/month!

This month's feature article comes from a recommendation by Andy Greene. And what a great find it was – many thanks. The web site that this comes from also has a great amount of information. I recommend you visit it if for no other reason than to thank them for allowing us to use their material.

# **Chief Pilot - Jim Ogorek**

All I can say is June was a "HOT" month. Let's hope July is a little cooler. Not a lot has been happening, other than the notice I sent out about LIPO fires. The grass is basically a tinder box and will ignite if you look at it wrong. If you crash out on the field, grab an extinguisher just to be safe. That said, if you do have to use an extinguisher, please let the exec board know so we can replace it ASAP. There is nothing worse than needing it and it's empty. Bill has found a place that can recharge our units, which is cheaper than buying new. Also as a reminder, if you need to call in the experts, aka Tallahassee Fire Department, the field address is 7550 Apalachee Parkway. Don't be a hero and think you can put it out if it has a good start. CALL!

I have made this request in the past for donations toward the flag pole. The Greens and I have donated \$40.00 to the cause. If anyone else cares to make a contribution, please give it to Bill when paying your dues. I have had a number of you tell me the flag has been a positive addition to our site.

Looking forward, not much is planned for the rest of the summer. Just enjoy the chance to fly. Now that we worked together to get the electric, you can both charge at the field and run your fan to stay cool. How sweet is that?

Fly safe.

Jim.

# **Chief Copilot- Jeff Owens**

The summer heat has set in with a vengeance, with several temperature records being set recently. Nevertheless,

the weather was great at Hodges Hobbies field in Americus, Georgia for a Senior Pattern Association contest on June 25-26. If you haven't been to Hodges Hobbies before, you should make a point of going for one of the many events held there. It is a gorgeous flying site with well-manicured grass – and it is Mac Hodges's airport, as well! It really is hard to beat – an airport, model flying, an air conditioned hobby shop, and a well-shaded area with electricity and tables! I have flown in there before in my Cessna 182 and there is plenty of room. But the drive isn't a bad one – it is about 120 miles or so.

Mac owns a new Legend Cub – a modernized and updated J-3. He flew it early in the morning and did one wheel touch-and-goes (just like Ed Budzyna



does with his Cub model!) It was a pretty sight, flying low over the surrounding corn fields. On Sunday morning a visitor flew in with his son in his RV-8 homebuilt. A very nice looking plane! I was calling for one of the contestants and we saw the RV circling the field just above the pattern height we were using. Sure enough, as soon as the model landed, so did the RV.

As far as the contest was concerned, there were 20 contestants and a great time was had by all. I was fortunate enough to place first in Expert, so that made the ride home a bit nicer.

Check out the schedule of events at Mac's web site: www.hodgeshobbies.com

Until next time – keep cool!

Don't forget to keep current with club activities by checking the event listings in the Newsletter and on the web site.

<u>Club Calendar</u>- The schedule reflects current Club events planned for the year to date. Check monthly for additions and deletions at the meetings and in the newsletter. For regional, sanctioned AMA events, see your AMA magazine or visit the AMA website section "Calendars".

No planned events for July

# **Chief Scribe- Chris Bailey**

SRCC Meeting Minutes June 2, 2011

The meeting opened at 7:02pm

No guests were present for this meeting.

Motion was made and second received to accept the Treasurer's report as presented in the May newsletter. Motion passed.

It was announced that the club raised \$692.00 during the Fly For a Cure event. The club will make arrangements to present a check to the American Cancer Society.

Work on fence was completed: special thanks to Tristan, Charles, Gordie, and others.

Motion was made and second received to approve the minutes as published in the May newsletter. Motion passed.

#### **Old Business**

It was reported that 38 votes had been received regarding the decision to amend the club's bylaws. There were 37 votes in favor of adopting the proposed changes and 1 vote opposed.

Members discussed their understanding of "voting members" used in current by-laws. Long term members informed officers that they understood it to mean 2/3rds of members that vote, not of the total members.

Motion was made and second received for approval to mean those members that actually voted. Motion passed.

Civil Air Patrol - Dan no response

Fly for a cure - Jeff will get with the American Cancer Society

#### **New business**

Fire retardant – Due to recent incidents at the field that required use of the fire extinguishers, it is requested that members either replace (for reimbursement) extinguishers when they use one or inform a club officer so that the club can replace the unit.

Dues: Bill will send out Paypal invoices for \$31.16.

As a reminder, the club's new flagpole was provided and installed using individual member funds. Member donations can be given to Bill Ashbaker.

Meeting adjourned.

# Chief Treasurer- Bill Ashbaker

We received a dues payment from one new member, Michael Benjamin. Please welcome Michael at your first opportunity.

Our net cash flow is positive for June due to membership renewals. However, as of June 28, only 48 of our 110 members have renewed their membership for July 1 through December 31. Dues are delinquent after July 1; so, get those payments in by cash, check or PayPal. If you have any questions about dues, please ask or email.

We spent \$161.16 on three new fire extinguishers (listed as field maintenance, above). Two are in the pavilion and one is a backup in case an extinguisher at the field needs to be replaced. The new extinguishers are refillable. This will reduce future cost. However, use the sand buckets if the situation is appropriate. Sand is less expensive than refilling an extinguisher.

#### Seminole RC Club

Financial Statement for May 28 through June 28, 2011

#### Accounts

Premier Bank Checking Premier Bank Money Market Savings PayPal Talquin Electric

#### Cash on Hand

#### Total Available Funds at End of Month

Income

Dues/New Memberships

**Activity Sales** 

Meeting: Food Reimbursement

Contributions/Donations

Interest: Savings Merchandise Sale

Total Income

**Net Cash Flow** 

#### **Expenses**

Mower: Maintenance Field: Improvements Field: Maintenance

Field: Lease Publications Donations Fees: AMA

Fees: State of Florida

Fees: Bank

Meeting: Food & Refreshments

Insurance: Mower Miscellaneous Utilities: Electric

**Total Expenses** 

# **Feature Article**

# Flying With Flaps

Reproduced with permission from: http://www.modelairplanenews.com/Media/MediaManager/flaps.pdf.

BY KLAUS RONGE · PHOTOS BY GERRY YARRISH & DAVID WIGLEY · ILLUSTRATIONS BY FX MODELS/CHROME CITY STUDIOS

ooner or later, many RC modelers try their hand at a scale subject, and since most full-size aircraft use flaps, their scale model should include them as well. A scale model with the flaps fully deployed is an impressive sight. This will most likely be the pilot's first exposure to flaps since most of our sport models don't use them. Flaps are

terrific; they can transform that hot P-51 from a bear to a pussycat on landing. They can, on the other hand, present problems if misused.

Next time you fly in a large commercial airliner, take note of the transformation of the wing prior to takeoff and landing. Airliners or other fast aircraft achieve their eye-popping performance

Increase scale realism and improve your plane's performance by putting down the "barn doors" through the use of small, thin wings. The problem with this type of wing is that they stall at high speeds and consequently the takeoff and landing speeds are also very high. When flaps are lowered they change the wing's lift and drag characteristics and lower the stall speed.

By changing the camber of the wing, the lift and drag are increased for a given airspeed. As a result of these changes the aircraft can land at a slower airspeed, fly a steeper landing approach and use more power on landing,

## Do's

- Learn how your plane reacts to flaps at a safe altitude before attempting the first landing.
- Reduce the throttle to around 1/3 and let the plane slow before dropping the flaps.
- If used for takeoff, use only partial flaps.
- Adjust the power to maintain the approach path. Flaps add drag and require more power.
- Add power on a go-around and begin a climbout before retracting flaps.

# Don'ts

- Deploy flaps at high speed. The flaps may depart the wings or cause serious structural or servo damage.
- Use flaps on the first takeoff and test flight. You must first determine how much deflection is correct for your model.
- Use full flaps on takeoff. This adds a lot of drag.
- Let the plane balloon and lose its airspeed. Adjust the elevator to keep the proper approach path.
- Retract flaps when low and slow or you could settle onto the runway.

which is a good thing if you have to "go-around" with your model.

#### FLAP VARIETIES

There are four basic types of flaps: plain, split, Fowler and slotted. The plain flap is simply a hinged portion of the trailing edge. Split type flaps are hinged at the bottom of the wing and create much



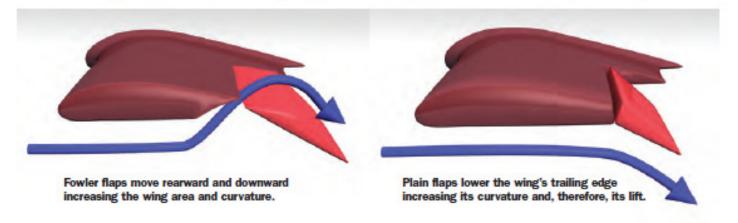
# Flaps also impart a large structural load on the plane and should only be used at a lower airspeed

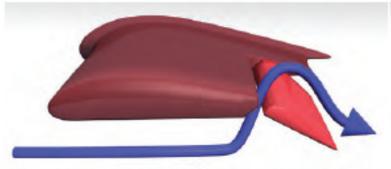
more drag than plain flaps. The slotted flap is similar to a plain flap, but has a slot between the wing's trailing edge and the flap. The air passing through the slot delays the airflow separation and creates a greater increase in lift with a smaller increase in drag than a plain or split flap. Fowler flaps extend aft and down increasing the wings area and provide large increases in lift with a minimum of drag.

Deflecting flaps will cause a twisting action to the airplanes' wing. The type of flap as well as the wing's design will determine the amount of twisting action, with the split flap generating the least amount. Deploying the flaps may result in the plane The elevator must be used to compensate and keep the plane on the desired approach path. Another characteristic of flaps is that the first half of the flap's deflection results in a greater increase in lift while the second half results in a greater increase in drag. Flaps also impart a large structural load on the plane and should only be used at a lower airspeed. Full-size planes have their airspeed indicators marked for safe flap operating range.

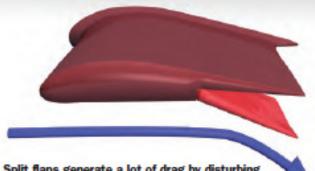
#### FLYING WITH FLAPS

Since every aircraft reacts differently to flaps, it's important to learn how yours reacts before committing to landing. The safest





Slotted flaps allow high-energy air to flow from underneath the wing up and over the flap to help prevent airflow separation.



Split flaps generate a lot of drag by disturbing the airflow on the underside of the wing.

way is to do a no-flap takeoff and fly your model around to get comfortable with it. At a safe height, reduce the throttle to about 1/3 and let the plane slow down. Next, add 1/2 flaps and see what your plane does. If it balloons (pitches nose-up), apply some down-elevator to help maintain the airspeed. Once the plane is under control again, add full flaps and be prepared to adjust

the elevator pressure on the stick. You may be surprised how much elevator it takes to compensate for full flap deflection and how much the plane will slow down. With today's radio systems, it's easy to program a mix for the proper amount of elevator trim when the flaps are dropped. This will greatly ease the pilot's workload. Once you are comfortable with

flying the plane with the flaps

You may be surprised how much elevator correction it takes to compensate for full flap deflection

down, it's time for the landing. If you have your flaps set up to drop in increments, such as a dial or slider switch, add about 10 degrees on downwind after the plane passes your position and then add about 1/2 (20 to 25 degrees) on base leg. After turning, add full flaps and use power to adjust the flight path. Remember, you will need more power with flaps and the approach descent rate will be steeper. With a little practice, you will be rewarded with pictureperfect landings.

Since flaps provide more lift at slower airspeeds, you must be





# FLAP ACTION

Flaps impart a tremendous load on the wing and require attention during their installation. Make sure you use enough heavy-duty hinges on each flap and a heavy-duty control horn. There are many ways to actuate the flaps, including torque tubes and bell cranks. For large, fast or heavily-loaded models, the best way is to use a servo for each flap. These planes will also benefit from the flaps being locked in the down position preventing the airstream from blowing the flap back to the up position. This basically means that the servo arm is directly in line with the flap horn at full deflection and this takes the strain away from the servo. This is accomplished by turning on the radio and selecting full down flaps and choosing a servo horn position that is in line with the horn. Now, retract the flaps and make up the linkage from the servo to the horn. The amount of flap deflection is determined by the length of the servo arm; for more flap deflection, place the linkage farther out on the arm. The use of ball links may be required for smooth action and to eliminate binding.

The modeler has several options for the transmitter flap actuation method. The least desirable is to use a two-way switch, which only results in flaps up or full down. This is not very scale-like and could result in large pitch changes when the flaps are actuated. A three-position switch will allow the use of half-flaps for more scale-like flight. A knob or slider switch is another way to go and allows an infinite number of flap settings. The only drawback is that it is sometimes difficult to tell how much flap deflection is selected.

aware that when you retract them in-flight you will lose the lift and the plane could sink. For this reason, if you must do a go-around, make sure you increase power before retracting the flaps. Failure to do so could place your plane very close to stall speed before you can accelerate to a safe speed. This also applies to takeoffs with

flaps. In most cases it is safer to take off with the flaps retracted or deflected no more than about 20 degrees. Larger deflections add more drag and can cause the plane to become airborne at too low of an airspeed.

Flying a scale model with operational flaps is a very rewarding experience. Not only do they look neat, but they also provide the same benefits as the full-size version. They take the anxiety out of landing your lead-sled WW II fighter or similar high-performance aircraft and provide a safer and more enjoyable RC experience.

# Seminole Radio Control Club Tallahassee, FL

AMA Charter #216, 1969-2010

SRCC Officers		Training Notes	
President	Jim Ogorek	To schedule a training time contact Mike Atkinson.	
Vice President	Jeff Owens	Flight Instructors	
Secretary	Chris Bailey	Primary/Advanced Flight Instructors	
Newsletter Editor	Fred Schmidt	Mike Atkinson	926-4692
Treasurer	Bill Ashbaker	Geoff Lawrence	942-9807
Field Safety Officer	Dave Settles	Jim Ogorek	766-2477
-		Chris Bailey	322-4047
Field Hours		Primary/Advanced Helicopter Flight Instructor	
Electrics/ Sailplanes	9:00 am till 9:00 pm.	John Hall	893-6457
Gassers and Nitro	12 Noon till Dusk.	Chris Bailey	322-4047
Electric Service	8:30 am- 9:15 p,m	Ground School/Airworthiness Inst. (Fixed Wing)	
		Jeff Owens	894-2504
		Hobby Town Flight Demonstrator	
		Frank Bastos	671-2030

# **Club Meeting Location and Time**

**November- March:** The regular club meetings are held on the first Thursday of each month at **7:00 PM** at **HobbyTown** on Thomasville Road. The Club offers food and drinks for a small charge at 6:30. **April- October:** The regular club meetings are held on the first Thursday of each month at **7:00 PM** at the Flying Field. The Club offers food and drinks for a small charge at 6:30.

**Newsletter Submissions-** Submissions are requested to be in M.S. Word format or via e-mail text. Photos should be in .jpg or .tif format. We will, however, accept anything to make it easier for those who wish to contribute. Submissions are due no later than the 28th of the month. Send your submissions to Fred Schmidt. schmidtfjs@gmail.com

SRCC thanks Graybar Electric in Tallahassee for its assistance in helping to upgrade our flying facility.



