The Seminole Flyer

www.seminolerc.com

SEMINOLE RADIO CONTROL CLUB TALLAHASSEE, FL

A chartered member of the Academy of Model Aeronautics
AMA Charter #216, 1969-2010

AMA SINCE 1936

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

JULY 2010

/\ Geoff Lawrence's Taylorcraft on Floats.

< Samantha Bastos with her electric P-47.

INDEX

Letter from the Editor- Stephen Warmath

I was at the field the other day unloading, prepping my planes, thinking about the things I needed to tend to prior to my first flight while, at the same time, listening to the background banter of other pilots sharing information about this plane, that motor or the problems with this plane or that and how they solved the issues at hand. I thought to myself, this is one of the reasons, aside from building and flying, that I love this hobby. The exchange of ideas, opinions and tips we exchange with each other is very helpful. This is why we are such a close knit group. The RC Forums on-line are the pinnacle of this open exchange of information. I guess that is one reason I enjoy doing the newsletter every month, to share information.

OK… moving on. Taking off is optional, landing is mandatory. So this month, I'm including a refresher primer on "**Landing Tips".**

Also included are a couple of simple tips in **"Tips and Tricks"** to tuck away in the cerebral vault. Jeff Owens adds to his previous articles on Pattern flying with **"Rolling Around".** Finally, Jim Ogorek, of HobbyTown, chimes in with some new stuff we can't live without. A big thanks to Rick Rice for having Club members over for a great dinner June 19th. The food was great and hosting was first rate. Thanks Rick!

Safe and Happy Flying- Steve.

Warbird Fly-In June 12, 2010 **Photos by Steve Warmath**

Chief Pilot- Mike Atkinson

In Memoriam:
It is with great sadness that I report of the passing of Richard Buzinski. He passed away June 12, 2010. Richard was a long time member of SRCC and regular at the field for many years. Recently, failing health did not allow him to come out to the field very often. Our condolences go out to his family and friends. His name will be added to our memorial plaque at the field within the next few weeks.

July report:
Man, is it HOT!!! The recent weather has forced us to discuss that elephant in the room……electricity, or lack thereof, at the field. If we had electricity at the field, large fans at each side of the pavilion could be positioned to provide a regular breeze going through the area all the time. Additionally, the need for the solar charging stations to be upgraded/ enlarged could be avoided. Although the prospect of "going green" at the field sounds nice, without outside financial sources, it is not real cost effective.
Our options at this point include:

1. Have Talquin bring the line to the edge of the property and run an underground line to our pavilion.
2. Purchase a propane generator and place it in the metal storage container with an underground propane tank.

The Talquin option is the best long-term option IF we can get it done. Jim Ogorek is looking into that possibility and will give us an update at the club meeting. If it's able to be done, I'd recommend moving forward immediately.
Earlier in the month, we hosted an aviation camp for some kids from Tallahassee Museum. The kids were great and, despite the heat, everyone had a great time. Thanks to everyone who helped out, especially Geoff Lawrence for assistance with the buddy box trainers. That activity has led to a larger endeavor. Tuesday, July 13th, beginning at 4:30, we are hosting a group of high school kids attending an aviation camp at Florida State. We should have about 20 students who will need time on the trainers. We have 2 club trainers and Jim Ogorek is bringing out a third. We could use a 4th for the event if someone has one to bring out to the field that day. Like the Museum event, we'll have about an hour of open flying with maybe a couple of demonstration flights, followed by buddy box time. If you can help out, let one of the officers know.
The running trail has been repaired and the grass has been mowed. We can expect more runners/ walkers over the next several weeks. We have safety procedures in place to avoid/ minimize risk. Please "play nicely" with others and we can all coexist at our facility.
See you at the field,
Michael Atkinson

Chief Copilot- Mike Kinsey

Club Calendar- 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".

July

- 1- Monthly Meeting at the Field 7:00
- 13- Aviation Camp FSU 4:30 pm
- 17- Float Fly

August

- 5- Monthly Meeting at the Field 7:00
- 11- Aviation Camp 12:00- 2:30

September

- 2- Monthly Meeting at the Field 7:00
- 25- Club Fly-In

October

- 7- Monthly Meeting at the Field 7:00
- 9- Field Closed for Runners
- 16- Float Fly

November

- 4- Monthly Meeting at HobbyTown 7:00
- 20- Toys for Tots

December

- 2- Monthly Meeting at HobbyTown 7:00
- 4- Field Closed for Runners

Chief Treasurer- Theo Titus

This month has been a short month due to the timing of the calendar. With the club meeting scheduled for the first day of the month, no bank statements have dropped so the report is collected from online data and the records of the treasurer.

Important Changes in Policy – Please Read Carefully

Speaking as the treasurer, I am going to have to enforce some new constraints on expense reporting and payments. Each expense will have to be submitted on an 81/2 by 11 inch sheet of paper with the appropriate receipts attached. The paper should contain a simple explanation for the charges and payments made by the member/officer being paid. I have recently been bombarded with payment requests submitted on little wadded up snips of cash register tapes with no explanation whatsoever. By the time I can round up all the receipts, the recollection of their source and payment has slipped away. In addition, no more payments will be made in cash. All payments will be by club check with an appropriate notation of the expense. I will try to provide a suitable, printed format for you to use in this process but I wont promise to have it readily available at all times. Please be prepared to do the documenting yourself.

With the meetings being at the field during the summer months, it is difficult to take care of the collections for the food as well as transact the normal business of the club. The payments for food and drinks for the meetings will also need to be documented in the same fashion as other expenses. I hate to be real hard nosed about this, but the rule is going to be "**Submit the proper documentation or you don't get paid**."

PayPal Issues Remain Unresolved

The PayPal account is still in limbo due to their thinking we are a charitable account. The process to resolve this is not simple and the account is presently unusable. Since Sam Varn opened the account, he provided some personal information which I cannot produce and I cannot change. This makes it doubly difficult to get the hold removed from the account. Additionally, we cannot open another account to circumvent this dilemma. As a result, I am going to have to ask that each member please pay ***directly*** for the next year's dues. I will send an email invoice to each member but it will have to be paid directly to the club via check which can be mailed to me or paid in person. I cannot accept cash for the membership dues for the same reasons given above. I realize this is a pain for all of us (and particularly **ME**) but it looks like it will be some time before the PayPal account is again accessible.

Please bear with me and help me out with these requirements. They are necessary to maintain proper control of the club's funds.

Theo Titus
SRCC Treasurer

Editor's Note: The Treasurer's report is published for Members only. The public version of the Newsletter does not include account balances.

Seminole RC Club
Treasurer's Report

Period Ending	June 26, 2010
Checking Accounts	
Capital City Bank	
Premier Bank	
Savings Accounts	
Capital City Savings	
Premier Bank CD	
PayPal Account	
Funds for Deposit	
Petty Cash	
Total	
Checks Outstanding	
Net Funds Available	

Income	**Expenses**
Dues / New Memberships	Plaques and Awards
Activities / Fly-ins	Field Maintenance
Sales (Hats-shirts-etc)	Repairs and Supplies
Contributions and Donations	Miscellaneous Expenses
Interest on Savings	
Interest on Checking	Bank Charges
Total	**Total Expenses for**

Income for Period **Period**

Chief Scribe- Geoff LawrenceThe June meeting was called to order at 7:10 pm on Thursday, June 3, 2010 by President Mike Atkinson. Welcome guests Bonnie Holbrook, guest of Ron Holbrook, Eric Klein, David Haynes, and Eric Hinton.

Theo Titus read the treasurers report. Theo reminded members that dues are up for renewal on July 1. Theo is working out procedures so we may renew via Paypal again. Motion to accept the treasurers report was made, seconded and passed.

Geoff Lawrence stated the minutes of the May, 2010 meeting were posted in the current newsletter. With no questions or corrections a motion to accept the minutes was made, seconded and passed.

Old Business:

- Frank Bastos reported the Club raised over $700 for the American Cancer Society at our Flying for a Cure event. Frank felt with more spectators and better marketing we could have done better. Special thanks to Dan Oullette, Jim Ogorek, HobbyTown Tallahassee, Frank, Susie and Samantha Bastos for their outstanding contributions and efforts.
- Mike Atkinson reported the new gate was purchased and installed for field access by big airplanes but because of the shed fire, was not needed at this time. Mike received permission from the County to use their extra fence posts to replace the portion of our fence burned in the fire.
- The installation of electrical power to our shed was again discussed. The point man in the County has not been available but the Club cannot do anything financially until after upcoming dues are paid. Mike A. expressed he did not anticipate any problems with the County but Talquin Electric fees will apply and our neighbors permission will be required. Don Dotson will look into the Talquin Electric costs and Jim Ogorek will work with the neighbor.

New Business:

- Mike Kinsey discussed the upcoming Club Warbird event at our field on June 12.
- Theo Titus discussed the upcoming dues process and Paypal requirements for paying dues. Dues renew July 1 with the No-Fly list to be published August 1.
- The new windsock has been installed and mounted higher than before. Thank you Bill Rogers.
- Frank Bastos suggested a Toy for Tots date of November 20, 2010.
- Fred Schmidt set a Float Fly date of July 17 at Lake Monkey Business.
- Jim Ogorek suggested some flight line changes that were discussed. Discussion to continue next month.
- The need for a replacement rubber boat and boots was discussed and the need to secure them, yet still give all members access when needed. Discussion to continue next month.

Announcements:

Rick Rice invited all Club members to his home for barbeque and drinks on June 19.

With no more announcements and no more business, the motion was made, seconded and passed to adjourn at 7:43 pm.

Landing Tips

Written by: Dr. Bob Motazedi

Pilots are usually judged on how well they land, which requires a special finesse that takes time to master. This finesse comes from developing a feel for the landing sequence. In part, developing this feel comes from better understanding the aerodynamics involved with landing. So in this section I'll go into a bit more detail about aerodynamics. Then I'll explore different techniques that will help you smooth out your landings, including how to correct common landing problems.

Ground Effect.
When an airplane approaches the ground a new aerodynamic factor comes into play. This new factor is called ground effect, and its location is within a wingspan above the ground. When an airplane flies in ground effect, two aerodynamic changes occur. The first is an increase in total lift. The second is a decrease in drag. Together these characteristics allow the airplane to fly farther at a given airspeed along the ground, decreasing tremendously the stall speed. This effect allows your airplane to continue to fly at speeds that would normally cause it to stall at higher altitudes.

Following a gentle descent on final approach, your model airplane will enter ground effect after you've begun a gradual round out to about one or two feet. You'll need to apply only a little up-elevator to maintain this altitude, probably less than you needed to begin the round out. If you apply too much up-elevator, the increase in lift that follows can launch your airplane into an area of less lift above ground effect. This phenomenon, called ballooning, can cause your plane to stall very quickly.

Enter the ground effect zone cautiously and at a lower airspeed. Once in it, remember that to continue flying at a level altitude you will need less lift, which means less up-elevator. As your plane begins to slow down, gradually increase the amount of up-elevator to provide just enough lift to maintain a level altitude. Your airplane will seem as if it can float forever, but don't forget to keep the wings level (More lift!). With the airplane slowing down even further, the effective airflow will decrease, making the controls feel "mushy." This is a signal that a stall is imminent, and you should prepare for the final descent of your airplane, which will occur shortly thereafter because of the anticipated stall, decreased elevator effectiveness, or both.

At this point, give immediate up-elevator to provide the final amount of lift needed to touch down softly on the runway. Since the controls are mushy, you may need a lot of up-elevator to obtain the proper angle of attack for a gentle flare. In some models, even full up-elevator doesn't provide enough control to soften the landing. In these cases, one or two notches of throttle above idle can provide for enough flow over the elevator to effectively raise the nose. Apply this throttle when the airplane begins its final and short descent. With practice, you can make smooth, mains-first landings. Once on the ground, hold up-elevator until the airplane slows down. The nose wheel will gradually come down and meet the runway. This really "wows" them at the airfield, and it will translate into more points at the pattern contests in your future.

Crosswind Landings
You'll need to make only slight changes when landing with a crosswind. As I discussed in the last chapter, you must first establish a crab angle to compensate for the wind. When you are landing any airplane that weighs less than six or

seven pounds, you may continue this crab angle all of the way to touchdown. You perform everything as you would on a normal landing as long as the crosswind is no more than five to 10 mph. With a high lift wing, land directly into the wind to prevent possible upsets.

If your airplane is equipped with ailerons, and if the wind permits, make an aileron turn into the wind upon touchdown. This is the same deflection that was used when practicing ground handling and crosswind takeoffs. For example, the crosswind is blowing across the runway from left to right. The crab angle is adjusted to the left, into the wind. Once the airplane touches down and is rolling, give left aileron control to keep the wind from lifting the left wing.

When flying heavier airplanes, you must employ a more difficult landing technique. When these airplanes touch down while you are holding a crab angle, their heavier weight can cause the landing gear to bend or even break because of the side loads that are generated. To prevent this you need to employ a slip or cross-control method that uses the ailerons and rudder together, but this is an advanced technique that goes beyond the scope of this article. For this reason, I recommend you stay away from heavier planes, not enough side loads are involved to cause damage to the landing gear.

Dead-Stick Landings

When an airplane's engine quits, the airplane is referred to as being "dead-stick." You can use one of several techniques to land an airplane after its engine has stopped. Engines most frequently quit on takeoff, usually because of a lean mixture adjustment. When the airplane is level, there is enough fuel flow for the engine to continue running, even if it is lean. Once the nose is raised on takeoff, though, the effects of gravity and acceleration pull the fuel back toward the tank. Without this fuel, the engine can abruptly quit.

When this happens, immediately apply down elevator until the airplane is in a slight nose down attitude. This will avoid a stall and will get your plane into a nice glide. You should make a landing straight ahead if the airplane is still below 75 feet. Don't attempt a turn back to the runway if your airplane is at a lower altitude, instead keep the airplane directed into the wind for a slower touchdown. Perform the round out and flare as usual since there's little difference between the way a dead-stick airplane flies and one that is running at idle. You'll probably have to walk some distance to retrieve your plane, but at least it will unlikely be damaged.

Now let's assume your airplane has reached a high enough altitude (above 75 feet) to begin a turn to the crosswind leg. You can safely make a turn back toward the runway by using a 270-degree turn toward the landing pattern followed by a 90-degree turn in the opposite direction (this is called a procedure turn). When this turn is made properly, you can bring the airplane into good alignment with the runway. Because it's now flying with the wind, the actual ground speed at landing will be higher than usual, so stay alert.

Only use the procedure turn when you're sure your airplane is high enough to make the turn back to the runway safely. If you have even a shred of doubt, land the airplane straight ahead into the wind. In the next example, let's assume the engine quits on the downwind leg. The airplane is usually close to the proper pattern altitude when a turn to the downwind leg is made. To make a dead stick landing from this point, fly the base leg sooner than usual. Then make a turn to

final approach that is closer than usual to the touchdown point. Finally, perform a round out and flare into the wind. This will result in a safe dead-stick landing.

If the engine quits closer to the end of the downwind leg, make a turn directly to the end of the runway. Similarly, if the engine quits on base, make a small turn. If the engine stops while flying on final approach, land as usual. For the last example, let's assume the airplane is at a higher altitude when the engine stops. Fly the airplane in a large circle over the runway as it descends. When the pattern altitude is reached, fly the plane onto the downwind leg, base leg, and final approach, adjusting your course as needed.

The more you fly your airplane, the better your dead-stick landings will become, especially your ability to judge just how far you can fly your plane on the downwind leg before making a turn to base. With experience, and the use of the above techniques, you will eventually start making smooth dead-stick landings.

Tips & Tricks

Gluing on Canopies
Before gluing on your airplane's canopy put a small hole in some
obscure place to allow air circulation under the canopy. This will keep your canopy from popping off in the summer when the air inside expands or from collapsing in the winter when the air shrinks.

Soldering Wires
Unless you have nerves of steel, it's difficult to hold two wires still while you solder them together, even if one is clamped to your workbench. An easy solution to this problem is to glue two wooden clothespins to a wooden base, about an inch apart. Now, slip the wires to be soldered into the clamping part of the clothespins, and they will be held together without jiggling. You can put the clothespins side by side rather than nose to nose. This keeps them from interfering with longer wires. You will probably have to sand the gripping part to create a larger grip area.

Rolling Around by Jeff Owens

My last article about pattern maneuvers focused on looping maneuvers. The next logical step is to learn how to master the rolling phase. This will then enable you to stitch together rolls or roll segments with loops or loop segments. At that point the possibilities really start to multiply.

The basic roll is rather easy to do, especially if you have ailerons on your plane. It is possible to roll a three-channel plane using a combination of rudder and elevator, but it is a lot easier with ailerons. Most folks are somewhat apprehensive at first, since they have been practicing keeping the airplane *upright* and a roll requires you to spend some time *inverted.* So, it pays to start with some small steps. The first step is what I'll call a ballistic roll. Enter the maneuver slightly nose high – say about 20-30 degrees. In other words, in a slight climb. Now, smoothly apply full aileron (left or right) and neutralize the aileron control as the plane completes one roll. It will exit the maneuver in a slight dive, but don't worry. The idea of this first step is to simply get you used to seeing the plane roll and to build up some confidence in seeing the plane in an unusual attitude.

After you are comfortable with the ballistic roll, the next step is to remove the arc and make the rolling axis parallel to the ground. This is actually easier than it sounds. As the plane rolls to the inverted position you should feed in a small amount of down elevator to hold the nose level as the plane becomes inverted. As the plane continues to roll upright you slowly reduce the amount of down elevator.

How much down elevator is required? That depends on your plane, its speed, its CG, your control throws, and more. But, you can easily figure this out. Do a half loop to inverted and then give enough down elevator to hold the plane inverted. Practice varying the amount of down elevator and watch what happens. Do this maneuver up high and exit it by chopping the power and adding enough up elevator to complete the loop.

Start with a short inverted segment and then lengthen it as you gain confidence. Try flying a turn while inverted. It is the same as when you are upright only now you add down elevator to keep the nose up.

Now go back to the horizontal roll. You know how much elevator is required in order to keep the nose up. Just add that amount as you roll inverted. Soon you will do this automatically as you get used to seeing the plane roll.

Once you get used to doing one horizontal roll you can start trying various modifications:

- Try doing two consecutive rolls. This requires some timing on the elevator since you may need a bit of up as the first roll is completed. Try doing one, pausing a second, then do the next. After a while you can remove the pause as you get the feel for it.
- Next, add another roll so that you do three axial (or horizontal) rolls. It may help to slow the aileron rate down since the three rolls should take about 5 seconds to look best. Slowing the rate also helps you learn the timing.
- Do an Immelmann – this is a half inside loop (use up elevator) followed by a half roll. It is a turnaround maneuver developed by Max Immelmann in World War I. It enabled him to get away from a pursuing plane and was one of the first combat maneuvers developed for air-to-air combat.
- Do a Split S – climb at 45 degrees, do a half roll followed by an inside loop back to level flight. This is an easy way to turn around.
- Do An English Bunt – go up high and slow down. Then roll inverted and do a half loop to up right flight. This is the reverse of an Immelman. You can also do this in the opposite order. Push down to do a half outside loop and then do a half roll to level flight.
- Do some hesitation or point rolls- These include 4-point and 8-point rolls. You simply pause the rolling at 1/4 or 1/8 increments. Doing these well requires some rudder correction at various points, so these are more advanced.
- Do a slow roll – this is one axial roll stretched out to take 5 seconds. So, you are rolling at about 1/3 the rate you used for three axial rolls. To do this well requires rudder correction to keep the nose up as the plane goes on its side.

This list just scratches the surface, but you can see that once you master the looping and rolling maneuvers, all sorts of combinations become possible. These can be both fun and satisfying. Learning them will improve you flying skills, make you a better pilot, and provide hours of enjoyment. Next time we'll look at some more advanced maneuvers.

Hobbytown Corner by Jim Ogorek

Ever wish you had the perfect tool for the shop, well I found mine.

G.T. Power has come out with a CCPM Servo Consistency Master, now that is a name for a simple box that allows you three modes to check servos or ESC.

Manual Mode ---- Turn the knob at different speeds to check reaction time.
Neutral Mode --- Makes the servo center itself. Great for new installations, you don't need to turn on your transmitter.
Automatic "window wiper" mode --- Makes the servo swing back in it's largest angle.

Having the capability of attaching three servos or ESC at once you can match their consistency and/or reaction time.

Also from G.T. Power is their ***A6D7 7 Amp, 80 Watt Balance Charger/Discharger***.

This charger is capable of charging NiCd/NiMH/Lithium/PB batteries, employing circuitry that has a maximum output power of 80 watts. This charger can safely handle 15 cells of NiCd/NiMH or 6 series of Lithium batteries with a maximum current of 7 amps.

Having built in balance ports for 3,4,5, or 6 ports, you don't need an extra external balancer.

For additional information stop in and have a look. We at Hobbytown are always willing to assist you with your hobby needs.

Seminole Radio Control Club
Tallahassee, FL
AMA Charter #216, 1969-2010

SRCC Officers
President – **Mike Atkinson**
Vice President – **Mike Kinsey**
Secretary – **Geoff Lawrence**
Newsletter Editor – **Stephen Warmath**
Treasurer – **Theo Titus**
Field Safety Officer- **Jim Ogorek**

Field Hours
Electrics/ Sailplanes- 9:00 am till dusk.
Gassers and Nitro- 12 Noon till dusk.

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
Jeff Owens- Ground School/ Airworthiness Instructor (Fixed Wing)	894-2504
Frank Bastos- Hobby Town Flight Demonstrator	671-2030
Jim Ogorek- Primary/ Advanced Fight Instructor	766-2477

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. 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 28 th of the month. Send your submissions to Stephen Warmath sswarmath@comcast.net