The Seminole Flyer

www.seminolerc.com

SEMINOLE RADIO CONTROL CLUB TALLAHASSEE, FL

A chartered member of the Academy of Model Aeronautics
AMA Charter #216, 1969-2007

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

JULY 2007

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Waco YMF-5 at TOPGUN 2007- Lakeland. Florida

Letter from the Editor- Stephen Warmath

There has not been a lot of activity in the news department lately. I guess we blew our wad the last two months with so many events, but that won't stop us from having something to mull over. To continue from last month in looking at the more unusual aspects of our hobby, a short primer on **RC Blimps** and **RC Skydiving** is offered. If you are real detail nut and need to see those up close and personal pictures of real aircraft cockpits, check out the web site Theo Titus sent in. http://uscockpits.com/ Also in the **"Geeeezzz…..Can you believe it?"** category, watch this video of flying an RC plane through a tunnel while following along in your car. I figure it took three people for this little stunt. One to drive the car, one to fly the plane and one to shoot the video. http://www.wservernews.com/070618-RC-Place On the more technical side, some information on understanding landing gear stresses and how to beef up that wimpy set up you get with some aircraft is offered. To finish out for the month, a list of some interesting **Tips and Tricks** are included. The use of Glad Cling Wrap for paint masking is a great idea and I have used it with great results.

Happy Building and Flying- Steve

Chief Pilot- John Hall

Just in case you haven't noticed, summer is here and IT IS HOT! If you must fly in the early afternoon, be sure to use plenty of sun block and bring something to drink so you can stay hydrated. The Saturday morning work crew showed up at 9am to build the new flight line, but the heat was already there to greet us. The volunteers pretty much worked up to their physical limits given the extreme heat and unrelenting sun. Special thanks to Gordie Meade, Chris Bailey, Shannon Black, and Joe Satterwhite for braving the heat and helping to get this done. Next on the work list will be the new tables to be built and installed under the pavilion. At least much of that work can be done in the shade.

The new frequency pins have been placed in the pin box out at the field and they look great. Thanks to Sam Varn and Brad Sharp for their efforts on this project. Some of the pins are not on the pegs because the first aid kit that is mounted on the box door gets in the way when you shut the door. We will be rearranging this, and perhaps even moving the pin box up under the pavilion in the near future... stay tuned.

See you at the field.

John Hall

Chief Copilot- Brad Sharp

Upcoming Club Events

Club Meeting at the Field- July 5, 2007 at 7:00 pm.
Float Fly July 28, 2007- Lake Surovec 9:00am- 2:00pm

Upcoming AMA Regional Events

Dixie Nats

FL
7/07/07-7/08/07 - Palm Bay, FL (AA) Dixie Nats for 102-103, 104-105, 102-103C, 104-105C, 120, 128, 150, 151, 152, 153, 154, 155(JSO), 101, 101C, 124, 140(J)(SO). Site: Club Field. Joe Clawson CD, 401 Almansa St Palm Bay FL 32907 PH:321-984-8718 email: claw3132@netzero.net. All National Cup events. Sponsor: FLORIDA MODELERS ASSOC

Gateway RC Club 4th of July Picnic

FL
7/07/07 - Jacksonville, FL (C-Restricted to Club members) Gateway RC Club 4th of July Picnic. Site: Lannie Rd Flying Field. Patrick Lanfri CD, 4743 Sappho Ave Jacksonville FL 32205 PH:8904-387-2202 email: lanpc@comcast.net. Lunch provided. Membership $38. Visit www.gatewayrc.org. Sponsor: GATEWAY RC CLUB

Summer Sizzler

FL
7/14/07-7/15/07 - Palmetto, FL (C) Summer Sizzler. Site: Club Field. Raymond Thompson CD, 3307 5th Drive West Palmetto FL 34221-6256 email: rbt430@msn.com. Open flying until 11am each day then 3 events, Saturday; Timed Touch and Goes, Bomb Drop and then 60 seconds of spins. Sunday; untimed 2 minute flight, carrier landing and 3 loops & 3 rolls with spot landing. Visit www.manateerc.com. Sponsor: MANATEE COUNTY R/C

Big Bird Fly In Fun Fly

AL
7/20/07-7/22/07 - Huntsville, AL (C) Big Bird Fly In Fun Fly. Site: Club Field. Wayne Gladden CD, 105028 Ashmont Cir Huntsville AL 35803 PH:256-881-6048 email: wgladden@hiwaay.net. Hope to see you there! 80" minimum wing span monoplanes & 60" biplanes or true ¼ scale. Visit www.rocketcityrc.com for further info. Sponsor: RCRC

Hodges Hobbies SPA Championship Classic

GA
7/28/07-7/29/07 - Andersonville, GA (C) Hodges Hobbies SPA Championship Classic. Site: Hodges Hobbies Field. Scott Sappington CD, 204 Misty Hill Trail Dallas GA 30132 PH:770-335-4468 email: scott-sappington@lmco.com. Visit www.hodgeshobbies.com. For additional info: Mac Hodges PH:866-924-9505 email: mac@hodgeshobbies.com. Sponsor: HODGES HOBBIES

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.

Here are our current numbers: Cash - **$0.00** Checking - **$0.00** Money Market - **$0.00**
Savings - **$0.00** Total Funds **$0.00**

Remember DUES ARE DUE! We have received quite a few dues payments but many more are still outstanding (more than HALF of the membership roster!). When you see this report and if your dues are not paid, then you are now officially late!

Don't forget you can pay through PayPal or by sending a check. But however you pay, please pay today!

Please forward your dues to me as soon as possible. If you need to mail them, please send to:
Sam Varn, SRCC Treasurer 2668 Wharton Circle Tallahassee, FL 32312
Thanks!
Sam

Chief Scribe- Steve Warmath

The June meeting at the field was called to order at 7:00 PM.

Sam read the numbers from our accounts. He said that we had paid out a lot of money in the last month. We spent $887.75. Sam thanked every one for their efforts to raise money for the American Cancer Society. Dues are due. Payment can be made using PayPal or by sending in a check. He said he would be sending out e-mail notices in the next week. Memberships expire on June 30. Motion was made to accept the report, seconded and approved.

Old Business:

- The Frequency pins were shipped to Sam the day of the meeting. He had out-sourced the work and ordered two sets that will be fuel proof. They were due in the next day.
- John thanked those who showed up and helped out at Airfest and the Fly-In. One observation was the attendance was rather low for both events for a Club our size and encouraged everyone to support Club events.
- Mike gave an update on the new field. They reviewed three plans last month. All three had an RC Flying field. Mike clarified for them some layout issues he noted. In one week a final plan will be prepared to get community input. The final plan would then go to the County Commission. It is looking like RC flying, Soapbox Derby and RC cars would be part of the final plan. Mike will let everyone know when the next community meeting will take place. As for future money, there will probably be no immediate funding for the project from the County. The proposed orientation of the field will be East-West, facing North. This fits pretty well with the plan. The best fit will be on the flat part of the site. There have been no negatives so far and that RC Flying was #1 in the polls.
- John stated the power system (batteries and charger) was being expanded. He did get the second battery and also installed a lock. The lines have yet to be run.
- John noted the decision had been made to move the pilot stations to the edge of the runway at the last meeting. There was some discussion of reusing existing station posts. It was preferred the stations would have new wood and more discussion was heard regarding leaving the existing stations as a second layer of protection. A drawing was going to be prepared for the new pilot stations. The general consensus was to use 4x4 PT wood in a "**_____/**" configuration. The design would be presented at the next meeting for final approval from the membership.

New Business:

- Mike Atkinson said he had received some e-mails from people indicating their willingness to help with flight instruction. He said more were needed with the recent number of new members. New

pilots and trainers need to get in the habit of taking off and landing outside the “box” for added safety. If everyone will use a landing line-up “in the valley”, it makes landing approach and line-up easier. Moving the pilots stations closer to the runway will help.

- There will be a large Boy Scout retreat of about 800 in October at Lake Talquin and there was some interest in us doing a demo. No decision was made since there was no information available about the logistics of flying at the site. This will be explored further.
- Frank indicated we need to think about a schedule for the Fall Fly-In in September or October. We also need to pick another Float Fly date.
- Liaison with the Sharps (field neighbors) was discussed. If a plane is lost in their area, we are to knock on their door, introduce ourselves and ask permission to retrieve our aircraft. As they have been good neighbors, a suggestion was made to maybe, once a year at Christmas time, show them our appreciation in some way. A motion was made to put something together such as a gift basket, restaurant gift certificate or gift card for $100.00 every year and give to the Sharps. The motion was seconded and passed. Dave Sellers would be the coordinating person from the Club.

Announcements- None

With no additional business, the meeting adjourned at 7:45 PM.

Tips & Tricks

Measuring Washout

Washout, the downward twist in wingtips that improve low-speed flight, is sometimes used in airplanes with flat-bottom wings. A good way to make sure each wingtip has the same amount of washout (or any at all) is to get two straight dowels or carbon rods. Tape each to the bottom of the wing near the tips.
Set the wing on something so you can see both rods, and sight down the wing so you can see each rod in relation to the other. The rods magnify any angle that might be present in the wing.
Correct the wing twist until you have the angle you want. This doesn’t work too well with wings that are rounded on the bottom, but is an excellent way of making sure the flat-bottom wings are true.

Propeller Hang

This is probably one of the more difficult maneuvers to master, but once you get it right, it is probably one of the most spectacular. The object is to fly along slowly then pull to a vertical position, allow the speed bleed off giving it throttle to keep the model in a stationary vertical position.

Keeping the model in a vertical state while hovering still requires a lot of work with throttle, rudder, elevator, and a little aileron, the torque from the motor tends to make the model start torque rolling.

Practice this at a safe altitude and once you can hold your aircraft in a stable propeller hang as well as be able to fly out of the maneuver without losing any height, you can slowly start practicing at a lower and lower altitude. This maneuver requires enough power to be able to climb vertically out.
—both from the Suffolk Aero Modelers, Bay Shore, New York

Scrap Aluminum

One of the most useful and inexpensive tools in the workshop are pieces of scrap aluminum angle iron cut to various lengths and of various sizes. I find that a selection of 1-inch, 2-inch, and 3-inch pieces, varying in length from one to six inches are quite helpful, and these can be obtained at a metal supply shop. If you have a metal fabricator near you, you might try asking him to sell you some scraps of angle about these sizes. Since these lengths are considered trash to these fellows, you may get lucky and get them for free. Even if you don’t, the cost should be minimal, and as useful as these are, I would have purchased new stock and cut it up into pieces to obtain these tools.

What good are they, you ask? Well, here are a few of the things I use them for and I’m sure you can come up with more once you start using them. First off, this is a great way to align the table on

disk/belt sanders, drill presses, band saws, etc. You can use them to hold items to be glued or drilled exactly perpendicular to the work surface, such as drilling into the edge of sheeting, or holding ribs at 90 degrees to the table while your adhesive dries.
—from Mark Kallio, Balsa Chips, Milford Connecticut

Installing Control Horns
Your airplane is done and covered and now we have to put holes into that perfect job you've done. That's not bad because the horn and base will cover them. But, now we have to take a small, fine-head Phillips screwdriver and struggle getting those little self-tapping screws to bite on the back. It will happen, the driver slips off and a third hole is in your covering. Here is the tip and kind of input we can all use. Simply take a piece of cardboard, or plywood if you wish to make it permanent, trace the outline of your horn, trim it out, place over the horn and you have eliminated that possible third hole!
—from John Neilson, the Sun Valley Fliers, Phoenix, Arizona

GLAD Press 'N Seal plastic wrap makes a great masking medium for spray painting. It is sticky on one side and will stick to itself, or the item you want to paint. It is much easier to work with than paper because it clings to the surface without lifting the paint off when removed.
—From Flightline, Casper Airmodelers Association, Casper, Wyoming

RC blimps -simple radio control fun!

RC **blimps** are a very affordable way of enjoying some quiet, clean and simple radio control flying fun.
Ideally suited to indoor flying, the body of a blimp is made of nylon or a similar plastic and is very tough.

All rc blimps must be filled with **helium** gas which these days is very easy to purchase from party, balloon or flower stores. Helium is an inert gas, much less dense than air, and gives the blimp the buoyancy to stay airborne.
RC blimps are very simple to control - they typically have 2 or 3 micro electric motors beneath the body which rotate in various planes to control direction, height and speed.
By rotating the motors to change the thrust angle, a blimp can be brought to a standstill, rotated 360 degrees and made to reverse.
One example of a good rc blimp is the **Airship1 / Area 51 combo blimp**, a fully maneuverable model using the better 'tri-turbofan' system.
Or for something *really* impressive, the **Party Blimp** will certainly surprise the birthday boy or girl at the party! The Party Blimp is fully customizable with the colored special marker pens that are supplied with it. Pre-programmed music and strobe lighting effects can be controlled from the transmitter, to play from the blimp's gondola, while the tri-turbofan system gives complete control and maneuverability.

For more RC blimp fun...

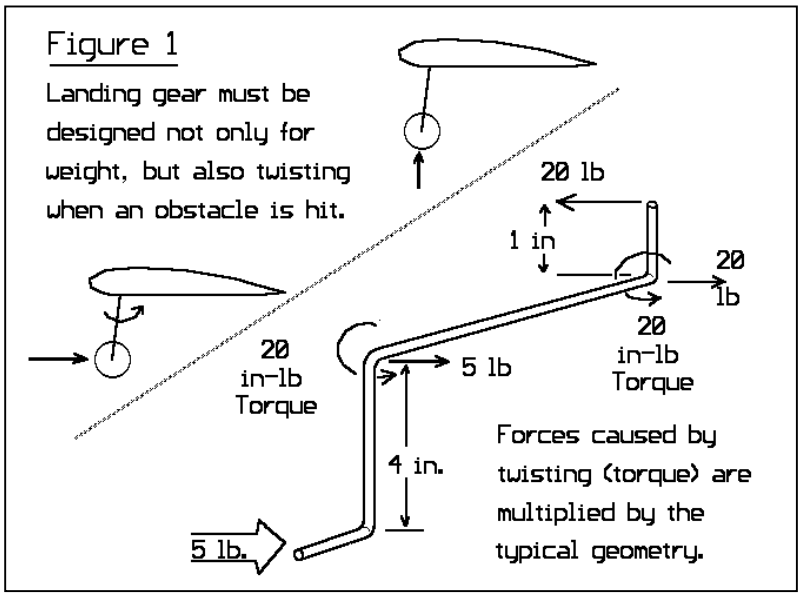
An increasing and fun use of rc blimps is for **aerial photography**.
Their maneuverability, slow flying speeds and inherent

stability make them perfect platforms for the smaller digital cameras and wireless spy cameras - spying on the neighbor has never been so much fun! *(not that I'm suggesting anything here...)*
And thanks to the electronic revolution of recent years, there is a good variety of suitable cameras available - many can be found at stores selling electric rc helicopters, another popular modern-day micro video camera platform!

Flying an rc blimp outdoors is possible but only on *completely* wind-free days - even the slightest of breezes will be enough to render your blimp pretty much uncontrollable.
Also if you do choose to fly your blimp outdoors then it should be tethered with a fine cord to limit the altitude performance should you lose control for any reason - any free-roaming helium filled balloon will just keep going up, up and away...!
Generally speaking, rc blimps are fairly cheap to buy and the cost of filling the body with helium is negligible. For the small cost they can provide a great deal of fun around the home *(especially when a camera is attached - again, not suggesting anything...)* and certainly don't require any knowledge of radio control flying to operate them.

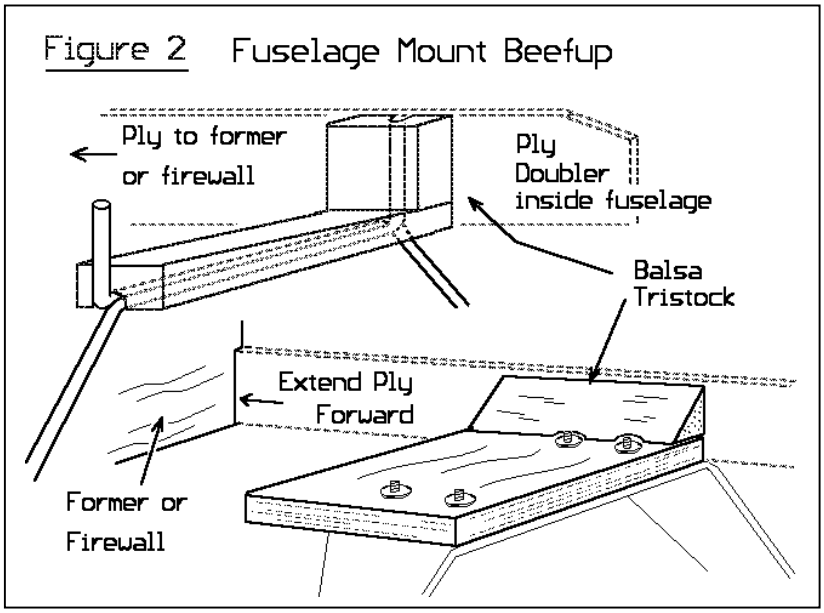
LANDING GEAR ENGINEERING

by Clay Ramskill



The plane hit the runway hard, bounced and hit again. A second bounce put it over the tall grass near the runway, and the plane mushed into it. Not any damage -- except the main landing gear had torn out in the grass! This scenario is quite common. Our planes' landing gear will often take unbelievable impacts on the runway, yet collapse in a heartbeat when in the grass (or weeds). Why?

It's a matter of design, sometimes awfully poor design. The poorer designs assume the major loads on the gear will all be vertical, from the weight of the plane. And with easily turning wheels on a smooth runway, that's pretty much true. But -- in the REAL WORLD, we hit things (rocks, uneven ground, high grass, gophers, etc.), putting heavy rearward loads at the wheel. Since the gear hangs down several inches from its mounting, a rearward shock at the wheel also adds a considerable TWISTING force on the gear mount. In figure 1, a typical wire gear set up is shown, wing mounted. This torsion-wire system is designed such that shock is eased by the torsion link -- but very heavy forces are still involved. Hitting high grass or the lip of a runway, a force of 5 pounds at the wheel is not unreasonable; over the 4 inches of strut, that puts 20 inch-pounds torque on the wire. At the anchor block end,



with only one inch of mount arm to spread the load, we see 20 pounds force on the ends of the block! It is here that the block fails, or its attachment to the wing fails.

Aluminum or fiberglass gear bolted to a block or plate on the bottom of a fuselage have a similar force arrangement, resulting in heavy upward force at the rear of the block, downward force at the front. It is that downward part of the twist that many designs fail to cope with.

What we need to do is spread out the load from these twisting forces - on a typical fuselage gear arrangement, the gear is mounted on a block or plate glued between the fuselage sides, usually with some kind of doublers or tristock on top to keep the block from being forced upwards from landing shocks. Unfortunately, there is often little provision to keep the front end of the block from being ripped out downwards. This is best done by using ply doublers, extending forward several inches, preferably to a bulkhead or the firewall. Figure 2 illustrates.

The same type of considerations applies to a wing-mounted set-up. In this case, use a ply rib, or a ply rib doubler, so that the forces are well spread out along the rib, preferably tying in with the leading edge and spars. Also, placing some heavy balsa on either side of the anchor block (aileron stock works very well for this) will help keep the block itself from breaking under heavy shock loads. Figure 3 applies.

So, for the next kit you build; take a careful look at the plans. If you see shortcomings with the main landing gear, add a bit of extra beef, to save you some grief!

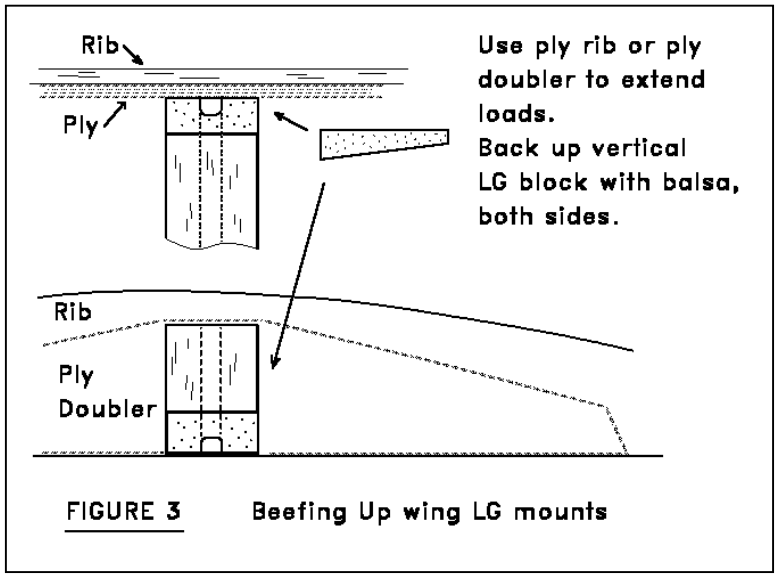


FIGURE 3 Beefing Up wing LG mounts

RC Skydiving

We will start right at the beginning. R/C skydiving is a lot like real skydiving. You need a jump plane, skydiver, and a few people. The only difference between the two is that all of our equipment is radio controlled. Flying a remote controlled skydiver requires two people: One to fly the plane, and one to fly the skydiver. R/C Skydiving is a growing sport. We are trying to get more and more people involved every year. We do have jump rallies just as helicopters have jamborees and airplanes have fly-ins. We usually see between 15 to 35 pilots at a jump rally.

Lets move onto **"How"** we skydive. First off, we have a trainer type aircraft rigged with a release box on the bottom of the plane. This aircraft should be at least a .60 size with plenty of power in order to skydive successfully with one of our standard-size skydivers. Also, you will need a plane with enough ground

clearance so there is enough room to mount the skydiver underneath the plane without him dragging the ground. Sometimes you can change the landing gear or add bigger tires to accommodate a skydiver. You need about 5 inches of ground clearance for the standard-size skydiver. The standard-size skydiver is usually what people choose to begin skydiving with before moving on to the giant scale or micro skydiver. This provides a skydiver big enough to see and work with along with something that is not going to require large equipment. However, if you are into electrics we by all means recommend getting the micro skydiver.

The next, and probably most important, thing to consider is ground preparation. Don't overlook this part; it is one of the most critical areas of ALL skydiving. First get the plane all ready and take it for a test flight to make sure everything is in working order. Then, right before you get ready to go up, pack up the skydiver's parachute making sure to follow the instructions included in the manual and also displayed on the website. Attach your skydiver to the bottom of the plane and you are ready to go. Take off and climb to a safe altitude. When both the pilot of the plane and the skydiver pilot are ready, drop the skydiver up wind (This is extremely important if the winds exceed 5-7 mph). Now the life of the skydiver is in your hands. During freefall you should not move any controls until you are ready to deploy the parachute. Once the chute is open (After the adrenaline rush), your fun-filled flight begins. Now all you have to do is fly around like the real thing. Now, do not get discouraged if you are not able to spot land him right in front of your feet, as this takes a lot of practice calculating exactly how the skydiver will fall according to certain weather conditions. Once you do get a few feet from the ground, flare gradually for a perfect, toe first, landing. Now you are ready to pack up your parachute and go again!

This is just a small introduction into the world of R/C Skydiving. We do feel obligated to mention that once you participate in the remote controlled skydiving experience you will be forever addicted. This can leave symptoms of taking off work early to go to the flying field and having more skydives than the whole Golden Knights team combined.

To get started you need to purchase a suitable jump plane, a skydiver, a drop box, and radio equipment to outfit all of these items. All of our skydivers accept various radio gear, so please check out the shopping cart area for the appropriate equipment for your skydiving purchase.

Classified Advertisements/ For Sale

FOR SALE- None this month

Seminole Radio Control Club
Tallahassee, FL

AMA Charter #216, 1969-2007

SRCC Officers
President – John Hall
Vice President – Brad Sharp
Secretary/ Newsletter Editor – Stephen Warmath
Treasurer - Sam Varn
Field Marshall – Chris Bailey
Field Safety Officer- Shannon Black

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
Mike Kinsey- Primary/ Advanced Fight Instructor	566-0144
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 1950

Club Meeting Location and Time –Meetings from April thru September are at the Field starting at 7:00.

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.

Newsletter 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 23rd of the month. Send your submissions to ssw@nettally.com or by phone, Steve Warmath at 509-0672.