

# Raleigh Aero MasterS Newsletter



February, 2012

Hello everyone.

**Club Meeting:** Our next club meeting is Sunday, February 5 at 8:30AM at Golden Corral by Wakefield going towards Wake Forest out of US 1 / Capital Blvd. This meeting will be during breakfast and will be to continue planning for the 2012 club activities. We had our January breakfast meeting at Golden Corral and the present membership agreed that during the next two winter months of February and March, we will have the meetings as breakfast meetings to stay out of the cold at the field. We will not have a 3:00PM meeting at the field on these Sundays. So let's just get together and share our hobby and friendship. I am looking forward to see everyone there.

**2012 RAMS Club Membership Cards:** For those members that have completed the new members or renewal application process and paid the 2012 dues, we have the membership cards available at the field on Sunday's afternoon. For sure we will have them available at the club meetings. Come and join us and get your membership card. The back of the card has the password to get into the members only section of our website. Also remember that all members must have their AMA up to date to fly.

**Work Days / Mowing:** As soon as we need to start maintenance at the RAMS field, I will send RAMS Update e-mails to the members to volunteer time and come to help. We will start again our, now famous, after mowing debriefings which proved to be so much fun and enjoyable.

**Recycling At RAMS:** On the January meeting, our fellow member, John Geier, proposed that the club starts recycling trash. Sam Goldfarb offered to bring a trash bin that will be used for recycling at the field. John and Rich have volunteered to take care of the recycling. They asked that the members at the field do crush and compact plastic bottles and cans before throwing them in the recycling bin.

**Intro Pilot Program:** At RAMS we are more than happy to help new pilots get going into the RC Flying hobby / sport. Any of our members can be of help. We all have areas of expertise in this hobby. Some members are good at radio programming, others regarding repairs, tips for better flying, good airplanes for specific types of flying and many specialize on everything bizarre than can be done with and to an airplane. Most of our members are more than willing to help new pilots. Some of our members will buddy cord with you to help with your introduction to flying model airplanes. So take advantage of their time and expertise. We do require all new pilots to have registered with the AMA.

**Safety:** For 2012 we have two Safety Officers at the field. Greg Koepke and Bruce Crozier. Some quick reminders.

\*Any motor or engine test must be done on the pilot side of the fence. Not in the shelter area where a stray propeller can seriously hurt someone.

\*Call the runway when taking off or landing or if retrieving an airplane.

\*Avoid flying an airplane on a slow pass too close to the pilot stands. Too many close encounters have been happening at the field and we may run out of luck.

\*Follow the flight pattern: Once again, some members like to always land or take off in the same direction despite the direction of the wind. Sometimes this will have one member flying the opposite direction from the other pilots. If you must land or take off contrary to everyone else pattern, call the runway and state from which direction you are coming in or taking off. Once in the air, go with the flow!! (Follow the pattern). Many of our airplanes are great models and expensive ones. Let's reduce the chance of crashing our airplanes or even worse hit someone else airplane in a mid-air or while landing collision.

\*FLIP FLOPPERS: To the 3D gang: Keep entertaining us. You are doing a great job but keep the flip flopping on the far side of the runway avoiding the flight pattern or right on top of the runway. Let's avoid a "Close Encounter of the Fourth Kind" between a flip flopper and an airplane flying the pattern.

**"Evenings With Gary" Workshops:** Come and join us to build, learn stuff, improve skills and just plain having a good time sharing with friends. We will meet on selected Tuesdays or Thursdays at 7:30PM. Gary Elliott is our Master Builder and he organizes these gatherings. I will keep everyone aware of when we are getting together and try to join us. We will give a try to these workshops during the winter months and depending on member participation, we will decide on future workshops. Our first workshop is scheduled for January 31. Depending on member's interest and participation we will plan other workshops.



**Geeee!! JT, You are cutting the darn thing the wrong way. Look, this is the way is done!**

**ANOTHER DELAY for the Unmanned Aircraft Rules: It is just like dealing with the government. Ohh! Wait!! We are dealing with the government.**

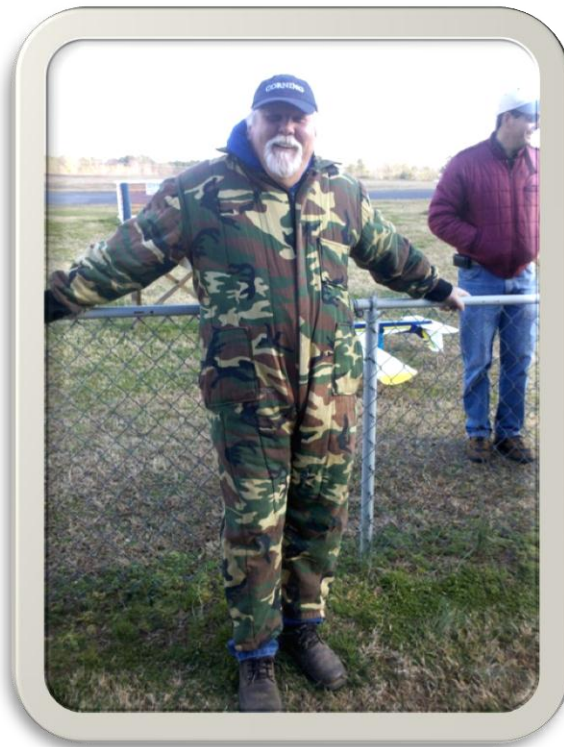
### **NOTICE OF PROPOSED RULE MAKING Slips to 'Spring 2012'**

In a recent meeting with representatives of the FAA's Unmanned Aircraft Program Office, it was learned that publication of the Notice of Proposed Rulemaking (NPRM) for the small Unmanned Aircraft Systems (sUAS) rule has again been delayed by several months. Going into the 2011/2012 holiday season we believed that the proposed rule would be released sometime in January or February. However, citing "unanticipated issues requiring further analysis," the rule failed to clear the Office of the Secretary of Transportation (OST) before year's end.

The rules have been sent to the Office of Management and Budget (OMB) where OMB will evaluate the regulation for potential adverse impact on small businesses and small government entities. OMB's review could take as much as ninety days which would put publication of the NPRM in May 2012. Nevertheless, there is some optimism that OMB's review will not take the full ninety days and the current best guess on the release date for the NPRM places it in 'Spring 2012.'

**Restrictions by the FAA:** Some information has been recently provided by FAA representatives to our AMA representatives and it seems that there is more likelihood that there will be rules for our model airplanes that we will not like as we have been grouped together with commercial unmanned aircrafts. We may be more likely facing restrictions on where we can fly and limitations on performance like speed and altitude. Limitations on weight of our models. Even park-flyers may be asked to only fly in designated areas and only be of certain size and weight. The AMA stated to the FAA that some of these restrictions we already self-impose in our hobby to keep it safe. The AMA also questioned how all these rules are going to be enforced if they come into law? Who is going to enforce them? I personally have this image of a Youngsville police officer coming to give me a warning because I am flying my YAK 54 to fast. Say WHAT!!!!!! Anyways, we need to be alert and help the AMA with letters to congress and writing giving our comments about the proposed rules. So be ready for when the AMA gives us advise on what to do as modelers. Once the rules come for public discussion one of the main AMA goals is to have the FAA still allow us to self-regulate the hobby and still address their concerns. So, let's watch closely what BIG BROTHER wants us to do and not do and how it wants to regulate our hobby.

**Caption this picture:** A few weeks ago I asked the RAMS members to submit a caption for this picture. Let's see what we got.



\*Camofly Pilot, JT -- Greg Koepke

\*Captain of the "Fallen Airplane Retrieval Team" also known as F.A.R.T. Captain - Dr. Joey

\*You should have seen the figure on the side shot picture. -- Dr. Joey

\*A deer hunter came to complain about the noise. -- John Geier

\*Is he wearing Depends under that suit? - Anonymous

## **Crosswind Landings:**

OK! It is windy at the field. So, I can't fly?? There is a crosswind. So I can't fly?? You may have heard me before, saying that if you do not fly when there is wind, you are missing on some great flying. Granted, I would not fly my nice, expensive aerobatic model in 20 mph winds but I would fly in the usual 5 to 15 mph winds that we often have. I prefer to fly a more simple and less expensive airplane in very windy conditions just because there is a higher risk of crashing the airplane in take-off and landings. But I have to say that wind adds an element of difficulty that can make flying more fun. Is it a matter of skill? Yes! The more skilled you are on flying with wind the better chances you have of not crashing. If you are a beginner, of course, wind presents more of a challenge to you. Then again, the skills of flying in the wind are acquired by FLYING IN THE WIND. It is practice, practice, practice. The best part is that if you learn to fly when is windy, you will have more flying days. So consider at some point to practice flying when windy and do it with an airplane you are not in love with. Bring with you plenty of CA, tape and epoxy and you will be fine.

Now, my other point is, if it is windy and there is crosswind, the key is, landings and take off will require RUDDER. Practice rudder flying, making turns with rudder (not ailerons) when is not as windy so you get used to it. Then apply that feel and knowledge of rudder flying to more windy and crosswind conditions.

Remember that rudder input will also require aileron input. Usually the aileron input is opposite to the turn you are making with the rudder. This is where we can get confused and wing tip stall / roll the airplane because we input aileron in the same direction as rudder. The rudder is causing the airplane to change direction but the airplane is going to want to roll. You input gently opposite aileron to keep the airplane stable on the horizontal level and counter the roll the rudder is causing as the airplane turns. It is a little bit confusing, but it is a matter of practice. I have been practicing for more than a year to input more rudder commands as I have seen JT extensively doing smooth flying and landings mostly based on rudder input. I am getting better but it has been difficult because I often have to think what to do with the ailerons. And if you think, then there is a good chance you are going to input the wrong command. Is becoming more instinct flying now but I still have a way to go.

So, what do you do in a crosswind landing with a model airplane. You have a few options. Let's say the wind is blowing from the northwest. You approach the runway from the south end. You can line up with the runway but toward the west side, like if you want to land on the grass area in front of the pilot stands. Your goal is to have the northwest wind carry your airplane to the east so by the time the airplane gets to the runway, you have drifted and lined up with the middle of the runway for touchdown. Takes practice but it works well. You also may approach the runway in an angle coming from the southeast. This, lines up your airplane directly into the wind. Keep losing altitude and by the time you are just about getting to the runway make a slight right bank turn to line up with the runway just right before touchdown. The third way is with effective rudder control. Again, with a northwest crosswind, approach the runway from the south. You need to get the nose of the airplane to start facing the northwest even though you are flying north. Input left rudder. The airplane will want to roll to the left so your left wing will drop. Counter with right aileron enough to stabilize the airplane and get your wings level. This maneuver will create some drag that will make the airplane want to lose altitude. Great! That is what you want. Just input enough elevator to smooth your descent. Remember that as soon as you touch down on the runway, you will need to let go rudder flying input and then go for rudder taxiing input. When you do this transition do not forget to release aileron input or your right wing will hit the runway. And that's it!! Yeah, like it is that easy! It is fun to practice. Do it little at a time. Practice rudder in flight, two mistakes high. Learn how your rudder input makes your airplane behave. The reaction to rudder will vary from a cub to and Extra 260 or Yak 54. So you need to learn how your airplane behaves. The best part is that it will make you more able to

fly in stronger wind and crosswinds. And don't forget to manage your throttle. In windy conditions you do not really glide the airplane to the runway. You must fly it and get use to bring that nose down under power. So, of course, there are limits to how much wind your particular plane can properly handle in terms of weight, power and design so be wise and careful. Then again, practice flying with some wind and crosswinds and as your skills improve you will have another level of challenge and fun. And don't forget throttle management to maintain enough power so the wind do not overcome your airplane.

Now take a look at how these guys do it:

[http://www.youtube.com/watch?v=mMvLuUJFHYk&feature=player\\_detailpage](http://www.youtube.com/watch?v=mMvLuUJFHYk&feature=player_detailpage)

### **Gyros on Airplanes:**

This link below is courtesy of Rich – Very good link. It explains the use of a simple gyro in the rudder, elevator and aileron functions each. Has text and video explanations and demonstrations. Larry Harris brought to the field the concept of using the helicopter gyros on small foamies and they fly remarkably stable and even in windier conditions.

<http://www.mycoolrc.com/gyro/indexnew.html>



**Here is Rich and his new T-28 Trojan from Parkzone with two gyros installed.**

## What is New at the Field:



**Toledo Special from Hangar 9.** The Toledo is a similar shaped airplane to the old time Rascal by Sig Manufacturing. The Toledo can be powered with an electric motor (Power 46) or in this model, powered by an 82 Saito Four Stroke. At the field we have both versions. The electric version is flown by Larry McMillen. I have flown Larry's and it is quite nice on the handling and power this airplane has. It is highly aerobatic as well as very predictable. The four stroke version is flown by our new member, Patrick O'Connell. With the four stroke Saito, it has a great sound and it seems to fly with different characteristics from its electric cousin. It seems like all its movements become more fluid and smooth. It has a wingspan of 69.5 inches and the ARF model is about \$275.00. A very nice airplane to consider for all around performance. I personally would be inclined to say that I prefer this particular model with a four stroke over electric.



Here we have a really nice looking **Yak 54 profile** airplane running on a 2 cycle glow engine, OS AX 55. In the background we can see its bigger cousin Yak 54 100CC gasser from PILOT. The big Yak belongs to James Taylor (JT) and the profile Yak 54 is a recent addition to Patrick O'Connell's fleet. This profile Yak looks like a great 3D model. Can do quite nice and aggressive 3D flying for what we have been able to see. I had a chance to see the airframe up close and seems to be sturdy and well constructed. Very nice airplane Patrick.



**Greg Koepke is merging his liking for all sorts of kites with his radio control hobby by flying this RC Kite.**

This power kite is flown with what is called a vector power system. Once the kite is assembled, an A shaped frame is inserted that contains a 450 size electric motor with a 10-8 propeller running on a 3 cell LiPo. The frame also accommodates two servos that steer the motor in all axis since this moving of the motor orientation, is what steers the kite as there are no moving flying surfaces. There are different versions of these kites but this design is the one that can fly best with wind. Greg is getting very good at it and is doing cool aerobatic moves.



Here we have an ongoing project. This **foamie F-22 jet** was built by Joe Schodt. He painted the model. JT is installing the electronics. He is using a 480 size electric motor to be run on a 3 cell LiPo. Each rudder, elevator and aileron has its own servo. With a programmable computer radio like the JR 11X JT has you can program all sorts of mixes to enhance the performance of this model. JT is also adding lights for night flying. I will follow the test flights and report further. If it flies as good as the F-18 Joe built prior to this one, it should fly great!!



**EFlite Scimitar:** The Scimitar is a wing design by 3D Champion, Quique Somenzini. It has wingspan of 42.6 inches. Can be powered with a 25 to 46 electric motor. It comes in a plug and play or a bind and fly version already fitted with a Power 32 electric motor. This wing has two cool features. It has landing gear and can be fitted with retracts like in this particular model. The other feature is vector on the yaw (rudder) axis. Uses a 4 cell 3200 milliamp Lipo that must be 30C rated or more to provide the amount of electricity the motor quickly demands. This wing is for a solid intermediate to advance pilot. The first few flights are not easy and you must get used to a few bad behaviors it has. Once you get the hang of it, it is pretty cool. You must fly this wing with a computer radio as it requires a lot of expo and some mixes. On take off you must deactivate the vector on the motor as it makes the airplane too sensitive. Once in the air, flip your mix switch and get the vector going. It has dual rudder that together with the motor vector can flat spin this wing in a dime. On take off you also must not give full throttle as the torque will make this wing flip over or go all over the runway (believe me, I know). As you accelerate you must give right aileron to counter the torque. I did this manually and I can get it under good control but I programmed a mix where when I throttle up, the ailerons slightly move automatically to compensate the torque that wants to flip the wing left. I am still deciding if I actually like this mix or I like to input the aileron compensation manually. This wing is said to be a speed demon. It is not. It goes fast but its main "thing" is aerobatics. I think that the Parkzone Stryker F27-Q is actually faster. And is not even close to the wing our fellow club member Steve flies. The last point is landing. As any wing (similar to jets) you must maintain speed to maintain control. Even though it slows down nicely, it still needs to go fast so when you touch down it really wants to jump in the air again. I will experiment by separating each rudder on its own channel instead of the "Y" connection. This way I can flip the rudders to the outside (opposite to each other) to create quick drag and decelerate the wing faster once is rolling on the runway. Let's see how that works. Cost is about \$400.00 so is not a foamie you want to crash anytime soon. It does have all electronic components installed as well as motor. The servos are all digital and metal gear. The addition of retracts will cost you \$120.00. If you get one, let me know and I will give you some tips on a few things that need to be fixed as everyone that installs retracts are finding that the nose retract binds and does not go in the airplane fully.



**John Geier's Yellow Slow Stick:** What do you think? Will it fly longer with this battery?? I put together this Slow Stich for John. I have not put together one of this GWS kits in for a few years now. This kit has now a few improvements that surprised me favorably. As you know, the wing is one piece that achieves its dihedral by using two shaped tubes in the leading edge and trailing edge of the center portion of the wing. In previous versions it was a pain to get the dihedral to stay. Now it has a clear plastic piece that is placed in the top of the wing center and has a wedge that gives the right shape for the dihedral. Another nice improvement is that the same color coating we see on the top of the wing is also applied to the bottom. The previous versions had a white wing bottom of bare foam. I don't know if there is a difference between this yellow version and the usual red ones that I see more frequently. We maiden this Slow stick on a windy day and it flew like a charm. Plenty of power on a 450 size motor with 3 cell LiPo. Nevertheless, it excels in low winds. Nice one John!.

**GyroCopter** by Larry Harris:



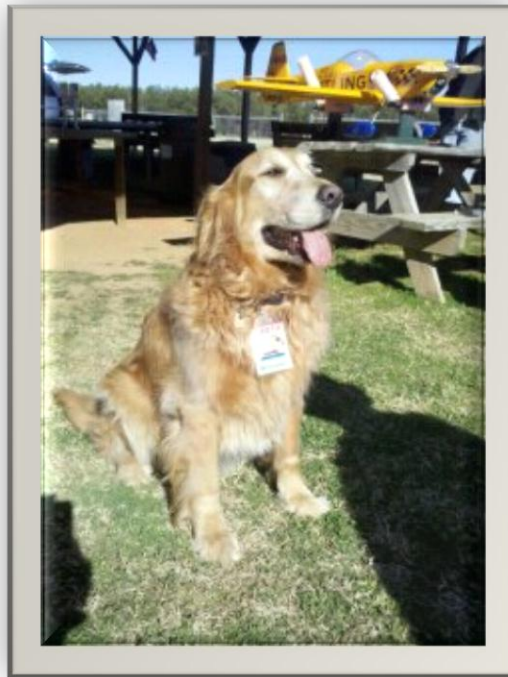
**CAP 231:** This beautiful 30CC size CAP belongs to our fellow club member, Ben Davis. Comes in ARF form manufactured by SIG. It was assembled by Gary Elliott. It was fitted with an Evolution 26cc gas engine.



**A nice Sunday afternoon of flying.** We had a couple of visitors from TriCounty RC Club. On the forefront is a Yak 54 from PILOT with a 50CC electric RIMFIRE Motor. The yellow Yak is a 50CC gasser from Extreme Flight.



Yes the dog is also a RAMS member. No, no guys!! I am talking about Winston the dog, not Gary the owner.



**Winston: Our own club expert on dogfighting.**

**RAMS Newsletter:** The January and February Newsletter have been sent to all members even if they have not renewed the membership for 2012. On March a new e-mail list for the newsletter will be for members that have completed renewal for 2012. The RAMS Update e-mail notifications will continue going to all of those that have been RAMS members during 2011 as well as to the 2012 members. So another good reason to renew your membership with the RAMS club is to continue receiving this "AWARD WINNING" Newsletter. Who Am I Kidding!!!!???. I just like to write the newsletter and want to keep you all as readers. So, RENEW!!!

**Wing / Aircraft Bags:**

J.T. received this from this vendor and we are passing it along to you guys.

My name is Roy Frey and we have opened an RC business called "AceWingCarrier"

We manufacture Wing Carriers for Planes, Gliders/Sailplanes, Helicopters and jets... and we do some custom design carriers also upon request.

It would be nice if you could link us to your website and we look forward to learning more about your club and look forward to meeting all of you in the near future.

If you would like to link us for your club

[WWW.AceWingCarrier.Com](http://WWW.AceWingCarrier.Com)

Happy Flying

Thank You

AceWingCarrier

Roy Frey

**Reminders:**

**Don't forget renewing your AMA registration for 2012 in order to keep flying at RAMS.**

**If you have not completed your RAMS 2012 membership renewal, we are looking forward to hear from you.** Download the application / renewal form from the website. Send it To Larry McMillen – treasurer.

**The 2012 Joe Nall:** May 12 to 19, 2012 This will be the 30<sup>th</sup> Anniversary of the Nall.

**Henderson RC Club:** July 14 &15, 2012. Henderson RC FLY IN

**E-WEEK “ The Electric Nall”** This is the second year for this activity. Sept 29 to October 1, 2012 at the Tripple Tree Aerodrome in Woodruf, S.C.

**BARKS SWAP MEET:** February 4, 2012

[http://www.dixienc.us/Barks/2009SwapShop/2009\\_Swap\\_idx.htm](http://www.dixienc.us/Barks/2009SwapShop/2009_Swap_idx.htm)

Take pictures and get some cool stories for the newsletter. Send them to me at [acumed96@aol.com](mailto:acumed96@aol.com).

**Well, I am done. Take care guys.  
I will see you at the field and have safe fun flying!!!**

**Dr. Joey**

*RAMS Secretary*