



Charter #963



WWW.LCRC.ORG

VOLUME 33 NUMBER 6

JUNE 2006

NEWS LETTER

This Years Model Mania To Be Held On Sunday, August 20th.

It's Looking To Be The Best Ever !

With the leadership of Bob Brassel as contest director, great things are being planned for this years Model Mania. Information for Model Mania can be found at <http://www.brcdesign.com/lcrc>. An event flyer can be downloaded and printed from the website at

<http://www.brcdesign.com/lcrc/mm2006print.html>. Please print off a few copies and distribute them to your friends and family. They can also be posted at your local Convenient store or other local establishments. All pilots planning on participating in the event are asked to complete a registration form which can be found on the website at


<http://www.brcdesign.com/lcrc/mm2006reg.doc>. You will note on the form that it is clearly stated that flight line operations for practice or trim flights will end at 11:30 am on the day of the show, and that all pilots must be on hand with aircraft ready to fly by 12:00 noon. A pilot and club member briefing will be held promptly at 12:30 am, and the show will proceed promptly at 1:00 pm. More information can also be found on our website at <http://www.lcrc.org>.

LCRC Financial Report as of 06/04/06:

| | | |
|---|--------------|-------------------|
| Beginning Balance | | \$8,527.27 |
| Less Expenses: | | |
| #1320 05/07/06 Bill Ritchie FM Gas | \$13.52 | |
| #1321 05/07/06 Stan Lewandowski | 49.52 | |
| #1322 06/01/06 Miller & Co. PP | <u>84.47</u> | |
| Less Total Expenses: | | \$147.51 |
| Plus Total Receipts: 273654 05/07/06 Membership | | <u>\$590.00</u> |
| Gross Balanced | | \$8,969.76 |
| Less Reserves: Field Rent, Porta Pottie, Field Mowing | | <u>\$4,547.00</u> |
| Net Operating Funds | | \$4,422.76 |

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The June Fun fly was postponed due to bad weather so don't forget to attend the fun fly after the meeting on Sunday July 2nd. There will be prizes for all contestants. Event coordinator is Bill Ritchie.

NEXT MEETING—SUNDAY, JULY 2nd, AT CRAWFORD FIELD 1:30 P.M.

JUNE MEETING MINUTES:

- ◇ The meeting was called to order by President John Fischer at 1:38 p.m. on June 4th, 2006
- ◇ Bill Ritchie read the minutes from the last meeting. Bob Brassel motioned to accept, Steve Petranyi seconded, minutes accepted.
- ◇ Club Treasurer Tony Oravec read the financial report—motion to accept by Ben Sultzer—passed.
- ◇ Membership: We have new member—Ruben Diaz— Welcome Ruben !
- ◇ Field Maintenance: Field looks great! - Thank You Pete Spencer and John Amoczky.
- ◇ Safety report not available. Everything seems to be going ok.

OLD BUSINESS

- ◇ Model Mania: Bob Brassel will C.D. the event. Bob suggested a new plan for the event layout: We will move the flight line approx. 25 feet forward. All membership canopies will be set up along the railroad ties so that the spectators can view the show in front of them. We will rope off our pit area behind the flight line leaving ample room for our guests. Troop 73 volunteered to provide food for our event and the Civil Air Patrol will handle the parking requirements. Sign up sheets for Model Mania participants can be found on our web site. The deadline for registration is August 10th.
- ◇ Flag pole placement was discussed and a motion was made by Bob Brassel to install it at the North end of the field along the flight line with the wind sock. Motion passed.
- ◇ John Fischer thanked all members who showed up at Burr Oak Metroparks for the flight demonstration and those who put on a great show for Troop 73 the afternoon of June 3rd.

NEW BUSINESS

- ◇ John Fischer talked with our land owner about installing a club sign at the gate to the property. John suggested the sign read: "Home of Lorain County Radio Control—Private Property—Members and Guests Only". Motion was passed to install a new sign.
- ◇ John Schutic will put on the end of year Christmas Party. We are expecting even a larger turn out this year because of the great job John did last year.
- ◇ John Fischer noted that we need to fill his presidents position for the next two years. The treasures position also needs to be voted on. We also need someone to run the raffle—Any Volunteers ?
- ◇ Bob Brassel motioned to purchase fuel for the meeting raffle for the next 4 months. Motion passed.
- ◇ Fun fly was postponed due to high winds. Bill Ritchie will host July, August will be hosted by John Fischer, and September will be hosted by Bob Jackson.
- ◇ Eddie Sanders won this meetings fuel raffle.
- ◇ Amanda Davis motioned to adjourn the meeting at 3:07 p.m.—Motion passed.



Rudder-ly Amazing ! Part I

I have a personal observation that I have often contemplated, one that I would like you to think about with me (well, in a minute anyway).

As a small boy, I grew up around airplanes—civilian and military. To this day, when I hear a noise in the sky, I am still compelled to LOOK UP. I cannot even help myself, it's a natural reaction. So, model aviation was just the right outlet for that small boy while he clocked off right seat (and later left seat) time waiting for his 16th birthday. Free-Flight (rubber and gas) was a wondrous sight. Running after airplanes was great exercise for a boy of five, well not so great for a boy who was intellectually beyond his years! Within a year, chasing airplanes didn't really make much sense. Control line was GREAT, but eventually going around in circles (upright or upside down) just didn't hold the luster any-

more—at least once I saw that screaming banshee flying around WITHOUT wires. So after MANY lawn-mowing and snow shoveling jobs, I had the \$75.00 I needed for my 1st Radio Controlled airplane—well, \$75 before additional building materials, covering, etc. OKAY, what does ANY of this have to do with RUDDER or my question? I'm getting to that.

My entry into R/C was a single stick 2 channel radio and a 2 meter glider—the important thing here is the radio. It had TWO channels, elevator and RUDDER. That was it, nice and simple. It flew the glider beautifully—unfortunately, I DIDN'T. (editors note: crash). Next came 3 channels (single right stick and a slider for throttle) Oh how I LOVED my Kraft radio—that GOLDEN color on the square box with a gimble poking out of it.

I know, I know—what does ANY of this have to do with it? Well, funny you should

ask (by the way, I did tell you in the very first paragraph that we would get to contemplating together "...in a minute..." So, unless you read real S L O W, it's still less than a minute! Question: why do folks fly airplanes with 4 or more channel radios and NOT use RUDDER? Let's break this down further;

Early Radio Control flights manipulated RUDDER. Must have been deemed as a pretty important control surface to somebody. Since airplanes deal in 3 dimensions, elevator is a nice inclusion. Throttle, well that's a given. Next comes ailerons - cool, now we can bank the wings like a real airplane. Guess we won't be needing that damn rudder anymore. What happened?

For the sake of the Irish, or those folks up past their bedtime, let's get to the real meat and potatoes (yes, OES). Since I have a rudder, how do I use it? PRESS ON—

A BRIEF (OR NOT SO BRIEF) INTRODUCTION AND MISSION STATEMENT

I HAVE BEEN INVOLVED IN MODEL AND FULL-SCALE AVIATION MOST OF MY LIFE. IN OVER 35 YEARS OF MODEL AVIATION, I HAVE EXPERIENCED ALL FORMS OF FLYING - FREE-FLIGHT, CONTROL-LINE, TO R/C. SAILPLANES, PYLON, COMBAT, SCALE, PATTERN/IMAC, TO JUST PLAIN OLD SPORT FLYING. IN ALL THAT TIME AND THROUGH ALL THOSE ADVENTURES (BOTH COMPETITIVELY AND JUST FOR FUN) I KEEP COMING BACK TO ONE FORM OR ASPECT OF FLYING, A LOVE OF—"IN THE BOX".

THROUGH THESE ARTICLES I HOPE TO SHARE SOME OF THAT LOVE AND MAYBE, JUST MAYBE, SPARK THAT SAME INTEREST IN YOU.

EVEN IF YOU NEVER HAVE THE DESIRE TO FLY COMPETITIVELY, EVEN IF YOU JUST LIKE CHASING THE AIRPLANE AROUND AND BURNING HOLES IN THE SKY, MY INTENT IS TO SUPPLY THE CATALYST FOR BETTER, SAFER, AND MORE ENJOYABLE FLYING.

WE CAN COVER WHATEVER YOU WANT, ARESTI FIGURES/SEQUENCES, SETUPS, 3D, STRAIGHT AND LEVEL—YOU NAME IT AND WE CAN GO THERE TOGETHER. ALL YOU HAVE TO DO IS ASK.

IN THE MEANTIME, THIS ARTICLE WILL COVER A FORGOTTEN FUNDAMENTAL AND 'PET PEEVE' OF MINE.

You don't silly, you bank with the ailerons and pull back on the elevator—same thing right? - WRONG.

When you bank the wings of an airplane left the nose of the airplane skids to the right. There are many factors that contribute to this SKID (Asymmetrical lift, drag, adverse yaw, etc). Skidding an airplane is just as inefficient as skidding a car. Skid it nose high or slow enough and it will certainly stall—however, the stall is pretty much going to have an EXTRA little surprise for you because one wing is already producing less lift, has a different angle of attack, is not meeting the air perpendicular to the path of flight—well, let's just say one of these things is not like the other. Add a heavy, high wing loading airplane and we get to have some fun.

"But", you say, "I never use rudder". And you're right! WE CAN TELL. You are therefore somewhat limited and at the mercy of the wind far more so than a pilot who uses rudder in flight. You may also come across an airplane or two you simply cannot fly because they just won't fly right without rudder inputs—I know a certain vintage civilian plane out at the field that ABSOLUTELY requires some rudder knowledge. Now, I'm not saying that there is anything wrong with your rudderless flying around, I'm just giving you food for thought and asking why you paid for a channel you normally don't use. By the way, that guy in the paragraph above skidding his plane around at stall speeds—what control surface does he use when the airplane tip

stalls and spins in? He has to stop rotation first and that rotation is in the Yaw axis.

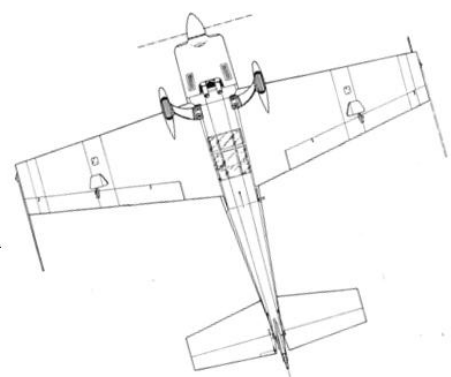
Coordinated turns and what I call continuous verses momentary control inputs. Flying is a matter of BALANCE. When lift, weight, thrust, and drag are in balance, the world is a beautiful place. Coordinated turns work to maintain this balance. We already know that aileron deflection is going to change the lift of one wing over another, produce drag, bank the wings, change the lift vector, and skid the nose of the airplane to the outside of the turn. You are already used to lift compensation because you are applying up elevator to maintain altitude in the turn. Applying a small amount of rudder in the direction of the turn is going to eliminate the skid and aide in the continuation of the turn. This brings me to continual verses momentary control inputs. If you want to bank an airplane 25 degrees, you apply aileron to establish the bank and then neutralize the aileron input—if you keep the same input, the plane would continue to roll (momentary input). The elevator input you apply throughout the turn is a continual input. That elevator input is also acting somewhat like rudder because it is PULLING the nose of the airplane into the turn. By applying a small amount of rudder input in the turn, you eliminate the ugly skid, the Yaw axis motion makes the outside wing fly faster (producing increased lift) and assist in the maintaining the bank angle and continuous turn radius of the turn. It also means less elevator is required.

"But that doesn't really do anything for me and I am already flying fine now". Sure, you are. And when you go to the field and find a crosswind, do you fly? By using rudder to establish coordinated turns you are opening yourself up to more aircraft, more weather conditions, more control over your flights,

etc. This is the first step to finding that you can establish a crab angle WITH RUDDER so you maintain a straight ground path in the direction YOU desire for flight—not the winds decision. You can learn how to SLIP in those hot little airplanes that don't seem to ever want to slow down on landing without falling out of the sky. You will instantaneously know which rudder to apply when that crosswind weathervanes the nose of your airplane in a direction YOU REALLY DON'T WANT IT TO GO. Knife Edge flight—NO PROBLEM. Inverted, absolutely. SLOW rolls—oh how pretty. Fly with confidence that if and when your plane gets into an attitude you either did not put it in or are not comfortable with—YOU can save it.

We will go over this and more in Part II. For now, I have a pop quiz;

Which way do you push the left stick to straighten the airplane in the picture below? The plane is on a vertical upline and you are looking at the bottom (belly). Hint: are you moving the nose or the tail?



Pylon Event Being Held

A pylon event is being hosted by the Toledo Weak Signals club at their field just north of Toledo. For reference, their field is about a 90 minute drive from the LCRC field. This is a weekend event being held July 29th and 30th and consists of two single-day racing events. So if you can only make it for one of the days, you do not miss out on anything. Event flyer may be found here : <http://www.matneymodels.com/WeakSignalsq500.pdf>
A map to the field may be found here: <http://www.matneymodels.com/WeakSignalsmap.pdf>

This is a Quickiee 500 (Q-500) race, using the 424 Sport Q-500 rules. It is intended as the 'entry level' class of pylon racing, and the rules are written as such to keep things inexpensive, and keep the equipment equal. And with that in mind, many experienced racers love this event as well !! And with that experience, some help and learning for new racers. All of us are happy to help out newcomers to our sport!

Q-500 aircraft are VERY easy to fly. They fly like any other sport plane, and actually handle and fly better than most! They are very smooth when set up properly. Skill level required for racing is not extraordinary. If you are comfortable flying any sort of advanced trainer or sport plane, and actually know how to fly in somewhat of a straight line, you will enjoy pylon racing, and everyone has the capability to be competitive !

At this event, we shall be flying on the standard pylon course - an elongated triangular shape. In this case, they are using the long" course, which is 2.5 miles for 10 laps, and is approx 650 feet long from the base of pylons 2 and 3 to the apex at pylon 1. Heats of 3 or 4 planes are flown, consisting of 10 laps each. Anyone wanting a bit better explanation of the procedures and what is involved can give me a call.

Requirements for this class of racing are:

A Q-500 aircraft, per the AMA rule book specs and dimensions (3.5 lbs min weight, 500 sq in wing, other dimensions required). In this class, no high dollar "tooled" composite aircraft are permitted - they must be wood/foam type construction. The ARF aircraft such as the Great Planes Viper and the Lanier Predator II are excellent choices for those just starting out. There are also a variety of laser cut wood/foam kits available for those wishing to build a plane. If you start off with one of the ARFs mentioned above, those kits meet all airframe rules, and even include wheels, and engine mount and other key components.

The engine is a .40 cu in standard issues sport engine, using the factory stock muffler. No tuned exhaust or tuned muffler. The engine and muffler must remain stock and unmodified. The engine of choice for this class is the Thunder Tiger .40 Pro. Inexpensive, reliable, and when broken in and set up properly it can provide for a quick airplane. I can assist with engine set up. Prop is an APC 9x6. Required by everyone. In fact, at most 424 races, the prop is issued to you when you register. Pilots and their callers are required to wear safety helmets while on the race course. Most of us use standard construction hardhats. Others like to use baseball batting helmets. If you have one, bring it. If not, usually we can round one up for you the day of the event. Sound interesting? Have questions? Want help selecting equipment? Maybe you want to try this, but are not sure you want to invest in a new plane ?? Give me (Bob Brassell) a call at 440-315-4633 and I can tell you more, and help get you started.

For a quick reference, take a look at the NEPRO web site. This is the racing organization up in North East, and their rules are what eventually became the current AMA 424 racing rules, so thus an excellent example.

<http://www.nepro.org>

OFFICER CONTACT NUMBERS

| | | | |
|-----------------------|---------------------|---|---------------------|
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