# THE WINDSOCK

PUBLICATION OF THE TRI-LAKES R/C FLYING CLUB EDITOR - DON JOHNSON - 49 Nottingham Rd, KIMBERLING CITY, MO 65686 (417) 779-5340 e-mail dmj@tri-lakes.net CLUB WEB SITE http://www.bransonrc.org

#### VOLUME 8 ISSUE 7

# JULY MEETING

JULY 10, 7:30 PM ROCKY TOP FIELD. In case of bad weather meet at the Branson Community Center

# Program

Fly before the meeting. Bring your new planes and projects in progress for show and tell.

#### TRI-LAKES R/C FLYING CLUB

PRESIDENT JOHN WOODS 338-8419

VICE-PRESIDENT RAY DIXSON 870 426-4310

SECRETARY HOWARD SHIRE 779-5069

TREASURER ERV ROHDE 538-2439

SAFETY OFFICER ERV ROHDE 538-2439

FIELD MARSHALL HOWARD SHIRE 779-5069

INSTRUCTORS MIKE ANDERSON 272-3155 RAY DIXSON 870 426-4310 ROSCOE FUDGE 336-5841 DON LIVERMORE 823-8899 ERV ROHDE 538-2439 CHRIS RUST 546-6681 JIM STUART 546-6255 JOHN WOODS 338-8419 THE PRESIDENT'S CORNER

Returned from California last week and had a great time with friends and family. Traveled 5,100 miles through the Badlands, Mount Rushmore, Yellowstone into Bend, Oregon. From there down along Highway One to Southern CA for five days. Stopped to see friends in Arizona and Oklahoma on the way back.

Sure nice to be back but have been busy catching up with all the stuff that needs to be done. Looking forward to getting out to the field and back into a more normal routine.

Thanks again to Ray for taking care of the meetings while I was gone – I appreciate it very much. Next meeting I'll be there and hope every one can make it out to the field to fly before the meeting.

Happy Landings.....JOHN

### SAFETY MESSAGE

I've noticed some fliers are flying west of the Shed, that's a NO-NO. All it takes is one call from that closest neighbor to our landlord and we may be looking for another field. FLY EAST OF THE SHED ONLY. Erv.

## **Basic Positions for Aerobatics**

The drawings shown to the right are the basic stick positions on your (Mode II) transmitter for basic aerobatics for beginners.

These basic stick positions as shown are guidelines only and are not intended to be the final word.

Aerobatics require patience and constant practice to get consistent results. Your airplane should be in near-perfect trim and the CG and lateral balance should also be as close to near-perfect as you can get.

You need not be afraid to try these maneuvers, just make certain that you do it in a *safe* manner, at a *safe* altitude, and announce your intentions to other pilots.

It is extremely important to practice aerobatics at a safe altitude and not over the runway or pit area. Remember—safety first.

> from The Yankee Flyer Millis Model Aircraft Club Ted Zaborski, editor Natick MA



National Newsletter May 2001 **JULY 2001** 

Natick MA L

# TRI-LAKES FLYING CLUB MEETING MINUTES JUNE 12, 2001

Vice President Ray Dixson opened the meeting at 7:08 P.M. at Rocky Top flying field. All officers were present with the exception of President Woods. There were 16 members present including the officers. The May minutes were amended to show that Sid Beckham had won the 50/50 raffle at the last meeting and not Brian Jones. The minutes were then accepted as written in the June newsletter.

Treasurer Erv Rohde reported a balance of \$1467.65. Virgil Moon won the 50/50 raffle; he received half of the \$16.00 collected. Three other prizes were donated by TPA hobby shop; Curt Krause, Ray Wommack, and Bill Rose won them.

Walter Hadley of Blue Eye is a new member of the club.

#### Committee Reports: None

#### Announcements and Old Business:

Don Johnson reported on the small aircraft show (S.M.A.L.L.) that he attended. He encouraged the members to attend next year's event.

Our next fun fly is Saturday the 16<sup>th</sup> of June. The events will be similar to the last fun fly but there will be a new twist on each event. The fun fly will start at 10:00 A.M. with a meeting of all pilots who plan to enter. Instructions will be given for the events at that time. Hot dogs will be available if we can get a volunteer to cook them.

#### New Business:

Erv Rohde stated that the batteries for the walkietalkies were missing and requested permission to purchase new ones. The motion was made and passed for Erv to purchase new batteries. It was requested that if you use the walkie-talkies that you remove at least one of the batteries so they won't run down.

**Program:** No one had a project to show.

Howard Shire

## THE EDITORS NOTE PAD

Yep, did it again! Made another mistake. Last month's Newsletter said the meeting was going to be at the Branson Community Center but it wasn't. Have a Newsletter template and forgot to change the meeting block. Have it changed now so it won't happen again. Sorry if it inconvenienced anyone.

Bob Miller made a couple of replacement frequency pins. In one way this is good and appreciate Bob doing it but on the other hand it is now possible to have two frequency pins at the field with the same number. If you have one of the pins that was replaced (one was 49 and the other was 30? or 40?) give it to one of the Club officers to be disposed of. Our frequency pin system is simple and very effective in preventing one member shooting down another member but the pins must stay at the field for this system to work. And duplicate pins floating around will sooner or later be a problem. Also channel 24 and 54 pins are missing but we know who they are. Would be great if you would bring them back. Also when you take a frequency pin from the rack you are supposed to replace it with a pin with your name on it.

Hope many of our members are getting ready for the float fly at Springfield Lake on August 18th and 19th. It's a fun event with only one (optional) event and the rest of the time is free flying. Dust off your float planes or just plan on attending as a spectator. Practice is August 4th.

The Clubs next Fun Fly would normally be on August 18th, the Saturday after our meeting. Since this conflicts with the Black Sheep's float fly it is suggested that we have our Fun Fly the next weekend, August 25th. It has also been suggested that we hold the Fun Fly in the afternoon rather than the morning to avoid sun in our eyes. Maybe have a BBQ before the Fun Fly. Probably should discuss this at the July meeting.

Basic Positions for Aerobatics and The Ol' Model Doctor were scanned form the National Newsletter. If you have trouble reading them on the web, print them out as they should print legible.

Time to land for this month. See you at the field.

# The Ol' Model Doctor

by Will Sievert and Tom Minger

#### Model Doctor #60

The Model Doctor occasionally puts his brain in neutral by simply stealing ideas from others. The following was inspired by the PCC newsletter.

When you car corners poorly, you start looking at suspension or tire/wheel adjustments. When your airplane turns poorly, you may need to look at control adjustments.

Many aircraft designs require a setup called "aileron differential," to help the airplane turn better. The basic idea here is that the aileron moving in the up direction travels farther than the opposite side aileron moving in the down direction. For example, the Goldberg Cub specifies <sup>3</sup>/<sub>8</sub>-inch upward deflection and only <sup>1</sup>/<sub>4</sub>-inch downward deflection.

The effect of the Goldberg Cub specification is that the downward moving aileron adds lift to one side of the airplane (along with a small amount of drag), causing the airplane to roll toward the side with less lift, but it will also yaw away from the roll direction because of the drag induced by the aileron deflection.

On the other side of the wing, the upward-moving aileron reduces lift on that side for added roll effect, and also creates drag.

The notion of having increased upward movement is to create more drag on that side of the airplane to offset the drag on the downward deflecting side, which creates an overall effect of the airplane yawing into the direction of the roll. This helps the airplane turn into the direction of the roll.

This combination of roll and yaw will result in very smooth turns, once you get the amount of differential figured out. Of course, the differential can be applied in the other direction, depending on the result you are trying to achieve. You may want to use differential to eliminate any yaw when rolling the airplane.

Unless you use a servo for each aileron, along with a computer radio to achieve differential electronically, you will have to build in aileron differential mechanically.

There are at least two ways to get the job done. The first method is to offset the pushrod attachments to the servo output arm or wheel. Typically, you mount the servo in the airplane and attach the pushrods to the servo output wheel such that the pushrods are at the midpoint of the wheel. That is to say, if you drew a line from the attachment point of one of the pushrods over to the other pushrod, that line would pass directly over the output wheel attachment screw.

That arrangement will result in exactly equal pushrod movement in both directions; i.e. the same amount of up and down.

To get differential, move both pushrod attachment points equally around the wheel toward one another such that a line drawn between the two attachment points would fall either above or below the wheel attachment screw.

The direction and amount you offset the pushrod attachment points depend on the effect you are trying to get and the configuration of your airplane. Keep in mind the example with the Cub when thinking about whether or not you want more up than down aileron.

The second method to achieve differential is by offsetting the control horn or torque rod attached to the aileron itself.

If you looked straight onto the end of the aileron with the horn or torque rod attached, and that control horn or torque rod is exactly perpendicular to the aileron cross section, then equal fore and aft movements of the pushrod attached to the control horn will cause equal up and down movement of the aileron.

However, if you were to cant the control horn either forward or aft as opposed to a perpendicular installation, then equal fore and aft movement of the attached pushrod will not result in equal up and down movement of the aileron.

Again, the direction and amount of the cant are dependent on the effect you are trying to achieve.

Try messing around with this effect. You may turn a dog into a pretty good flier. By the way, this identical approach works with elevator set up.

Ever had an airplane that requires more down than up elevator to respond the same, whether upright or inverted? Differential elevator will fix this such that your transmitter sticks won't know there is a difference.

> from Salinas Area Modelers Richard Woodcock, Editor PO Box 6351 Salinas CA 93912-6351

> > National Newsletter October 2000

# JUNE FUN FLY

The day looked good first thing in the morning, but by the time the Pilots meeting started the wind was getting a little gusty. Even so, ten brave aviators were ready to take to the skies.

The first event was to taxi through 7 gates and break 2 balloons with penalties for missing gates or not breaking the balloons. First out of the gates was Mike Anderson. He had a fast and perfect run of 40 seconds with no penalties. Mike took first as no one came close to matching his time. Second place was a tie. Howard Shire with 70 seconds including one gate penalty and Ray Dixson with 70 seconds including 2 gate penalties. Homer Zobel was fourth with 97 seconds, Brian Jones fifth with 107 and Don Johnson sixth with 127. Four pilots did not finish the course.

In the next event the pilot was to take off and fly under power for exactly 90 seconds, during which time he did a loop and a touch and go, then shut off the motor and land in exactly 30 seconds. Perfect score was 120 with penalties for missing the 90 or 30 second times, not doing a loop or touch and go or not landing on the field. Three pilots misjudged the wind and couldn't get back to the field during their dead stick landing. However Homer Zobel had a near perfect flight of 119 seconds, only 1 second penalty, and took first place. Ray Dixson was second with 104, Herman Hanebrink third with 95, Erv Rohde fourth with 94, Mike Anderson fifth with 92, and Ray Wommack sixth with a 91. Four pilots did not finish the event.

The last event was scheduled as a time and glide and spot landing event but due to the wind it was decided to eliminate the dead stick landing and just make it a spot landing event. Each pilot got two shots at landing on the target with the closest touch down counting. Brian Jones came in first with a distance of 2 feet—which would have been a good landing even without the wind. Second was Ray Wommack with a spot of just under 5 feet. Third was Mike Anderson at a little over 7 feet and Ray Dixson was fourth at a little under 11 feet. Fifth was Erv Rohde at 17 feet, sixth was Howard Shire at 19 feet, seventh was Homer Zobel at 27 feet and eighth, Don Johnson at 43 feet. Two Pilots did not finish the event.

Overall winners were:

1st Place Ray Dixson 190 points

2nd Place Mike Anderson 180 points

3rd Place Homer Zobel 150 points

4th place **Brian Jones** 130 points

5th Place **Ray Wommack** 100 points

The weather was good but windy, the competition was fierce and the sportsmanship and comradery was superb. Many thanks to all that helped put on the event and stepped in when help was needed, especially Howard Shire for having the field in great shape, Erv Rohde for his timing and measuring skills and my wife for writing down all the scores.

After the events it was time for lunch and chef Bob Miller had the BBQ going and the dogs were sizzling. The group was pretty hungry and a line formed, keeping Bob cooking as fast as he could. Instead of charging a buck and a half for a hotdog, soda, chips and condiments, a donation can was put out hoping it would subtly coax more money out of the membership and better cover the cost of the food and drinks. Don't know if that worked or not but we did O.K. Many thanks to Bob Miller for his culinary skills and to Mike Anderson for obtaining the food and drinks and getting them to the field.



Above is one of two pictures Steve Ingenthron emailed me. It shows a view of Rocky Top Field taken by a camera in his RC plane. Will try to get more details on what he used and how he did it.

Right is a picture of Bob Miller, our smiling chef, BBQ'ing dogs for lunch after our June Fun Fly. Good to chow down after a tough day of flying.

Below is a picture of Homer Zobel's F-14 Tomcat. Homer had it flying great but a couple of weeks later it was just a pile of shattered balsa. But Homer is undaunted and has ideas for two or three new planes.





	06/01/2001	JUN \$ 1,467.55		ΥTD	
BALANCE				\$	1,374.96
INCOME-DUES		\$	40.00	\$	1,190.36
INCOME-MISC		\$	18.00	\$	189.50
INCOME SHIRTS				\$	545.00
INCOME-BBQ		\$	26.00	\$	63.90
EXPENSE-FIELD		\$	56.87	\$	1,071.59
EXPENSE-NEWSLETTER		\$	6.80	\$	163.71
EXPENSE-SHIRTS				\$	556.62
EXPENSE-BBQ				\$	83.92
BALANCE	07/01/2001	\$ 1	,487.88	\$	1,487.88

## **COMING EVENTS**

July 28 Sat Joplin IMAA Jumbo Fly In. Sponsor Joplin RC Club. See June issue of Model Aviation for more details.

August 4th Sat Practice Float Fly. Springfield Lake. Sponsor Springfield Black Sheep RC Flying Club.

August 18 & 19 Float Fly. Springfield Lake. Sponsor Springfield Black Sheep RC Flying Club. See August issue of Model Aviation for more details.

August 25 Sat (Preliminary date) Tri-Lakes August Fun Fly. Rocky Top Field. Pilots meeting at 2PM

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