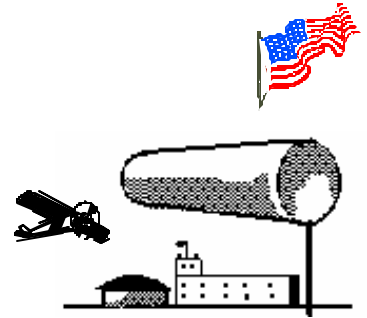


THE WINDSOCK

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 9 ISSUE 5

MAY 2002

MAY MEETING

MAY 14, 7:30 PM

Meet at Rocky Top Flying Field. In case of severe weather meet at the Branson Community Center

Program

Fly before and possibly after the meeting. Bring your new projects for Show and Tell.

THE PRESIDENT'S CORNER

Thanks to the many people who showed up at the workday on April 6th! We did quite a bit of work to make the field look good for the fun fly, and for our enjoyment during this flying season.

Sorry I missed the fun fly. I hope everyone had a good time and we didn't lose any planes.

See you all at the field, if this wind ever dies down.

Howard

TRI-LAKES R/C FLYING CLUB

PRESIDENT

HOWARD SHIRE 779-5069

VICE-PRESIDENT

RAY DIXSON 870 426-4310

SECRETARY & EDITOR

DON JOHNSON 779-5340

TREASURER

ERV ROHDE 538-2439

SAFETY OFFICER

DAVID RICE 335-8709

FIELD MARSHALL

INSTRUCTORS

MIKE ANDERSON 272-3155

RAY DIXSON 870 426-4310

ROSCOE FUDGE 336-5841

DON LIVERMORE 823-8899

ERV ROHDE 538-2439

JIM STUART 546-6255

JOHN WOODS 338-8419

APRIL FUN FLY

The day looked promising with an overcast sky, mild temperatures and low to moderate wind. At noon Chef Gary Metzger started things off with sizzling hot BBQ'ed hot dogs.

At 1 PM the first event was the Taxi Event. Veteran RC car guy, Ray Dixon, had the best time at 47 seconds but a 10 second penalty for hitting a gate put him in Second Place behind John Woods and his racy Speedy Bee with a time of 54 seconds. In Third Place was Contest Director Joe Major with a time of 61 seconds.

Next up was the Timed Flight with Loops—take off and do as many loops as possible in 60 seconds and land in exactly 30 seconds. Five points for each loop and 1 point off for each second off 90 seconds on touchdown. Ray Dixon got back to his winning ways with 16 loops and only a 6 second penalty for 74 points. Joe Major was second with 14 loops and a 5 second penalty. Mike Anderson was third with 13 loops and only a 2 second penalty. He just beat out Curt Krause with 14 loops but had an 8 second penalty. First

MEETING MINUTES

TRI-LAKES R/C FLYING CLUB

April 9, 2002

President Howard Shire opened the meeting at 7:03 p.m. at the Branson Community Center. All officers were present and there were 22 members present. The minutes from the March meeting were approved as written in the April Newsletter.

Treasurer Erv Rohde reported a balance of \$2,146.78. The 50/50 raffle was won by Don Johnson and he received 1/2 of \$18.00.

There were no guests at the meeting.

Committee Reports: none

Announcements and Old Business:

President Howard Shire reminded the members of the Club Fun Fly on April 13th. Since Walt Hadley was unable to act as Fun Fly Chairman, Joe Major volunteered to assume that responsibility.

Howard reported that the Club had a very successful Work Day April 6th and thanked everyone that participated. Brian Jones made and put up a nice new Club sign, several sections of safety fencing were replaced, ruts in the field were filled in and any trash in the area was picked up.

Howard handed out a New Year's Fun Fly certificate to Tom Mckenzie that he earned in New Zealand.

New Business

Erv had an offer to buy the Club boat and wanted to know if we wanted to sell it, and if so, what price. Since the Club never used the boat and does very little float flying it was decided to sell the boat, trolling motor and battery. Erv was authorized to offer the boat, motor and battery for \$100 and negotiate any price he can get for them.

Del D'Alessandro has made a new wind sock for the Club, to be used when the one currently being used wears out.

There was a question about putting diazinon on the field to get rid of the grubs (and armadillos). Howard said he and Brian Jones would do that on a day that was not too windy.

Program

Bob Miller demonstrated a trammel, which is a couple of brass or aluminum tubes that can be locked at any length and is used to determine that two or more distances are equal. Like the distance from wing tip to tail. He also showed an incidence meter he had made out of some Robart parts and a digital level element that reads to 0.1 degrees. He feels this is more accurate than the Robart laser incidence meter. The level element comes from a \$100 level! **** Joe Major showed his Balsa USA North Star amphibian. He said it flies well but is a little too hot for him. He may accept any reasonable offer. **** Roscoe Fudge showed his new Ultra Stick 60 in clear yellow with red and blue trim. **** Brian Jones showed his Balsa USA Force one in bare balsa bones. He also had a dual motor pod and transmitter unit for a blimp.

The Meeting was adjourned at 7:58 PM.

TRI-LAKES FINANCIAL STATEMENT

		APR	Y T D
BALANCE	04/01/2002	\$ 2,146.78	\$ 1,989.43
INCOME-DUES -----		\$ 40.00	\$ 875.04
INCOME-SHIRTS&CAPS		\$ -	\$ 5.00
INCOME-FOOD -----		\$ 52.21	\$ 75.71
INCOME-50/50 -----		\$ 9.00	\$ 42.50
INCOME-MISC -----		\$ -	\$ -
EXPENSE-FIELD -----		\$ 6.50	\$ 604.50
EXPENSE-NEWSLETTER		\$ -	\$ 57.36
EXPENSE-SHIRTS&CAPS		\$ -	\$ -
EXPENSE-FOOD -----		\$ 50.96	\$ 80.29
EXPENSE-AMA -----		\$ -	\$ 55.00
EXPENSE-MISC -----		\$ -	\$ -
BALANCE	05/01/2002	\$ 2,190.53	\$ 2,190.53

through seventh place all had at least 12 loops.

The last event was a Climb and Glide with a Spot Landing. Take off and climb for 30 seconds. One point for every second the plane is in the air and until it stops and minus one point for each foot away from the target the plane stops. Jim Halbert was the dark horse in this event, flying in his first fun fly with a 480 powered electric glider of his own design. Jim stayed up 260 seconds and had the winning score of 209 after his 51 foot penalty. This did not even include his 20 bonus points for his novice status. Second place went to Roscoe Fudge with air time of 242 seconds and a 42 foot penalty. Not to say Roscoe was lucky with his Super Stick 60, but as he got to altitude a flock of vultures circled over the field in a big thermal and Roscoe took a ride with them for several minutes. Don Johnson was third with an air time of 180 seconds and a 26 foot penalty.

The Overall Winner was Ray Dixson with a total of 200 points. It sure seems that bigger is better. Second Overall went to Contest Director and Score Keeper Joe Major with 130 points. And Third Overall went to John Woods and his Speedy Bee with 120 points. Roscoe Fudge and Jim Halbert tied for Fourth Overall with 100 points each.

Many thanks to Chef Gary Metzger, Mike Anderson for providing the food and drink and CD Joe Major for running the events and to all the members that helped during the events.

WEATHER STATION CONTRIBUTORS

The following people have contributed \$35 toward the Clubs proposed weather station.

Richard Berthold, Ray Dixson, Jim Halbert, Don Johnson, Reeder Jones, Bob Reynolds, Bob Miller, Virgil Moon, Howard Shire and John Woods.

The project will get under way as soon as all those that pledged to support the weather station have done so

THE EDITORS NOTE PAD

Had a good Fun Fly. The weather was good in spite of a bad forecast. The lunch BBQ was excellent and we broke even with a couple of bucks extra for a change. Using blocks instead of pylons for the taxi event seemed to work well but the same people seem to be at the top. Was hoping one of the electric Lil' Luscombs would compete. Think they would have done well in the loop event, and also would have done well in the gliding event if they could have caught the thermal that Roscoe found. Maybe I can borrow one of Gary's for the next fun fly. Looks like most of us need to practice dead stick landings to a target as this caused most of the mishaps during the fun fly. The problem seems to be trying to stretch the glide too much before setting up to land on the target.

Been trying to think of a motor plane combination that would be competitive in most of the fun fly events that we have but haven't come up with one yet. What handles well on the ground, climbs fast, glides well, is very maneuverable and stable and is not effected much by the wind? Maybe a modified Lazy Bee with a hot brushless motor?

Don't have many trophies left for our fun fly awards. Not sure we would want to go to the expense of buying trophies for these quarterly events. May have to substitute certificates.

Time to land for this month.

NEW MEMBER

We had a new member join the Club prior to the April meeting, bringing the current Club membership to 48.

He is Jim King. Jim lives in Omaha, AR.

Welcome to the Club Jim, we are happy to have you join us.

The Basics of Float Flying

by David Summers

Flying off of water brings a new dimension to our sport. There is a mistaken belief that it is a lot harder to be a good seaplane pilot. Actually, once you get the hang of it, flying off water is usually easier.

There are two basic types of airplanes that fly off water: floatplanes (usually converted wheeled aircraft) and flying boats that have a boat-like hull. From a beginner's point of view, the flying boat is easier to handle but it is usually easier to convert an existing wheeled plane. Floatplanes are discussed below. (Tech. Ed. note: This is the author's view, not necessarily the view of others who fly off the water.)

Type—Just about anything can be made to fly off of water on floats. Cubs are the single most popular choice, followed by the Beaver and Norseman. Basically, a flat bottom or semi-symmetrical airfoil type is best for beginners. All things being equal, it is desirable to choose an airplane with a slow stall speed. As a first effort, you might want to use your trainer, although you will probably want to increase its horsepower.

Floats—There are three ways to acquire floats. You can buy prebuilt plastic floats, you can buy kits to create built-up floats (hollow) out of balsa and Lite Ply®, or you can make your own with a foam core covered with balsa sheet and finished with either film covering or fiberglass, epoxy-finishing resin and paint.

Engines—Both two-cycle and four-strokes work well. The two-cycle is lighter and may be more practical for smaller models and is less prone to damage when it eats water. The four-stroke has the low-end torque that is useful for float flying. In both cases, you will need about 20% more power than the equivalent wheeled equipment. In general, go one size bigger so your 40-powered trainer will need a 46 to get off the water.

Propeller—As a general rule, never use wooden propellers, as they will shred when hitting water. Advanced fliers paint wooden propellers with epoxy-finishing resin to make them more durable. A solid plastic propeller, such as the APC brand, works well. Dropping the pitch one size will give you much better liftoff capability.

Propeller Tip Clearance—Make sure the propeller clears the top of the floats by one inch or more. If you have a clearance problem, you could change to a three-bladed propeller. Usually, a 10-inch in diameter, three-bladed propeller can replace an 11-inch, two-bladed propeller.

Splash Rails—To minimize spray hitting the propellers, splash rails can be installed on the tip of the floats, from the nose back to the propeller line. The rails need only be on the inside edges. A one- to three-inch wide strip of clear plastic sheeting embedded roughly parallel to the water, following the curve of the float and fixed into the float body with epoxy seems to work well.

Waterproofing—Most glow engine aircraft are pretty waterproof, but there are some special considerations. You should paint exposed balsa in the fuselage cavity with varnish. You need to wrap your receiver in plastic to prevent damage. Caution: Do not wrap your Nicad battery pack in any impervious material. Any watertight wrapping will cause the battery to overheat when you charge it. The battery pack, wrapped in normal latex foam vibration absorber, will be waterproof enough. Where the wing mates with the fuselage, you must take some steps to keep water out. Along the line of the wing saddle you can glue a thin rubber-ribbed weather stripping commonly found in hardware stores. Alternatively, you might lay down a bead of silicone sealant on the saddle and drop the wing (covered with plastic wrap) onto the saddle, let the bead dry and remove when the sealant has cured. A third method is to simply put the wing on, sealing the gap with a bead of Vaseline®. (Tech. Ed. note: some float fliers prefer to leave the receiver unpackaged and suspended mid-cabin since the package holds water in the receiver if it does get dunked and you have to leave a hole for the connections and antenna which lets water in.)

Rudders—In anything less than the lightest breeze, it is impossible to control the taxiing of a floatplane on water. You need rudders, and two are always better than one. The rudders should be rigged for maximum deflection left and right, as steering at low speeds requires extra bite. Rudders should swing upward out of the water so they do not have any steering effect of drag when you approach takeoff speed. Also, when you taxi back to the beach you want them to fold back to prevent strain on your steering setup. The water rudders have to work in harmony with the air rudder.

The Step—The step is that notch in the bottom of the float. You will notice that the bottom of the hull slopes upwards at about three to five degrees behind the step. This allows you to rotate the aircraft for takeoff and landing without the back of the float digging into the water. As the aircraft increases speed to takeoff, the float rides up onto the step and a huge amount of suction is eliminated. Nothing is more important than getting the step in the right place. In general terms, the step should be under the center of gravity or about a half inch to the rear of the center of gravity.

Balance—Your wheeled aircraft will become tail heavy when floats are added. Add balancing lead to the nose of the floats for two reasons. First, they are the farthest out and provide the greatest leverage for the least amount of lead. Second, when you take your floats off and go back to wheeled flying, you won't have to rebalance the airplane.

Attachment gear—You have to decide whether you are going to retain the existing wheeled landing gear and adapt it to the floats or whether you are going to take off the wheeled gear and create a totally new mount. If you keep the existing landing gear, you will have to insert some hard points in the rear bottom of the fuselage at a point about half the chord width behind the trailing edge. These hard points will anchor a rear landing gear support that might be a bit lighter but similar to the front gear. If you are going to strip off the landing gear, then you will need hard points front and rear and solid support geometry to support the floats that does not twist or bend.

Float Nose Protrusion—The nose of the floats needs to protrude beyond the propeller anywhere from one-half to one-third the diameter of the propeller. Thus, if you are swinging an 11-inch propeller, the nose should jut out about four inches. This ensures that there is enough flotation up front so that when you apply throttle you don't get into RC submarine operations.

Flaps—If ever there was a time to put flaps on a plane, it is for flying off water. Flaps make takeoffs and landings so much easier that it is hard not to sing their praises loudly enough.

Flying Technique—When flying off water you must be very aware of the wind. It affects taxiing as well as takeoff and landing. Left alone, an airplane on water will always weathervane into the wind, which you can use to your advantage. To line up for a takeoff, taxi out and then drop to a very low idle. The wind will line you up automatically! Taxiing can be a little like sailing; you must judge your turns according to the strength and direction of the wind.

Flat bottom, high-wing machines are notorious for flipping over if you let the wind get under the wing when turning down wind. You must learn to use aileron to lean into the wind. With the engine off, the wind can be used to "sail" the airplane back to shore. Always take off and land into the wind. On water, the floats cause a lot of drag and the extra weight makes it tricky to take-off in a crosswind. It can be done, but the tendency is for the airplane to lift off and cartwheel into the water on the downwind side.

Takeoff—When taking off, taxi to position using the rudder. When lined up, apply full up-elevator and apply full throttle. As soon as you see the airplane up on the step and an increase in speed, relax the elevator to neutral. As you approach full speed, try not to use rudder at all. If you have to, use it sparingly. Too much rudder and the float tip on the inside of the turn will dig in and you will flip before you know what happened. Close to full throttle, gently apply up-elevator until the floats leave the water. Then level out to gain airspeed before completing the climb out.

Landing—Landing a floatplane is easier than a wheeled airplane—the runway is very long and very flat. Just line up and ease back on the throttle to set up a hallow, sinking approach that is a bit faster than the land version. The extra weight of the floats will make it stall earlier and the increased drag will cause the airplane to slow down much more quickly. When over the threshold, ease back on throttle and hold it off about three inches above the water. It will land itself. Taxi back using aileron and elevator to balance a strong wind.

Crashing—Your craft will usually be floating upside down on its wing, with the engine submerged. A small amount of water often leaks into the upper wing saddle cavity. NEVER, NEVER, NEVER turn the craft right side up. The water will drop down inside and dampen all that is still dry. Turn off the receiver and get the airplane back to land upside down, take off the wing and let all the water drain out.

The engine will have ingested water. The piston will now be in hydraulic lock. If you try to turn the shaft, you will probably snap the connecting rod. Simply take out the glow plug and let the water drain out. Squirt a bit of fuel into the cylinder and flood the case through the carburetor. With the glow plug still removed, turn over the crank by hand and make sure the muffler drains as well.

Setting the airplane right side up, you can then give the crank a whirl with your electric starters making sure to keep your eyes out of any spray coming from the glow plug hole. While all this is going on, you can hook your glow plug up to its electrical driver to dry it out. Put in the glow plug and start the engine as soon as possible. The heat from combustion will purge all the water and the lubricant in the fuel will coat the bearings. The worst thing to do is let the water rust the bearings.

If your receiver got wet, do not mess with it. Take off the wrappings and lay it out in the sun to dry. If it got really damp, your day may be over. Never fear though, once dried out, it will be just fine. However, if you were flying off salt water, the news is probably very bad. The saline solution will damage the electronics very quickly.

An illustrated version of this article can be found at <http://members.attcanada.ca/~ironsidz/floats.htm>.

from *The Pilot Log*
Niagara County RC Mac

SAFETY COMES FIRST by Safety Officer David Rice.

We can only enjoy our hobby if we do it safely. As a reminder, below is a review of a few of the Club's Safety Rules and Regulations.

4. All models must be identified with the owner's name and address or their AMA number on or in the aircraft.

5. Alcoholic beverages are not allowed at the flying field nor may they be consumed prior to participation in any model operation.

A complete list of the Club Safety Rules and Regulations are on the Club Web Site at bransonrc.org or can be obtained from the Club Secretary.

David

COMING EVENTS

May 31-June 2 S.M.A.L.L. Fun Fly. Restricted to engines of .26 cu in or less. Burns Park, North Little Rock, AR (formerly held at Maumelle,AR). See April Model Aviation schedule for more info.

June 15, Fun Fly, sponsor -Tri-Lakes R/C Flying Club, Site—Rocky Top Field. Pilots meeting at 1 PM, hot dogs and sodas available around noon.

August 3rd Sat Practice Float Fly. Springfield Lake. Sponsor Springfield Black Sheep RC Flying Club.

August 17 & 18 Float Fly. Springfield Lake. Sponsor Springfield Black Sheep RC Flying Club. See latest issue of Model Aviation for more details.

August 24 Sat (Preliminary date) Tri-Lakes August Fun Fly. Rocky Top Field. Pilots meeting at 1PM

TRI-LAKES R/C FLYING CLUB

Don Johnson - Editor
49 Nottingham Road
Kimberling City, MO 65686

