



FLIGHT LINES

The Monthly Newsmagazine of The Spirits of St. Louis R/C Flying Club, Inc.

Tailgate Swap-Meet May 22, Trainer Race June 19, Heli Fun-Fly June 26

PREZ SEZ:

By Don Fitch

Hi guys and girls:

I'm building an ARF. Well, building is an exaggeration, assembly is more like it. The problem is, I don't like it. Actually, I don't know how you feel about it, but I don't particularly care for ARF's. When you (meaning I) build, I prefer scratch designing and building. Haven't done much of that lately, but it's more fun than an ARF. When building an ARF, you almost gotta do it their way. When scratch building, I get to do it my way (boy, we could make a song for Sinatra out of that, oops, too late). Talking about scratch building, have you seen the new table in the pavilion? Tom Foster built that and he did a GREAT job. That was a scratch built. I, perhaps I should say we, really appreciate the great job he did on it. He designed and built it all by his lonely. Thanks Tom, from all of us.

MEETING MINUTES: May 12, 2010

By Carolyn Schlueter

Meeting was called to order at 7:00 P.M. by President Don Fitch.

Two new members were present:

Daniel Long,	636 685-6126
Troy Fernandez	636 294-9876

The members present voted unanimously to accept both gentlemen into our club and a round of welcoming applause followed.

Secretary's Report: *Walt Wilson, Secretary, was unable to attend because of illness.* Minutes were accepted as published in last month's Flight Lines.

Treasurer's Report: *Les Richman, Treasurer.* The Treasurer's Report was accepted as presented.

Field Report: *Paul Geders, Field Chairman, was unable to attend due to recent surgery.* President Don Fitch thanked and complimented Tom Foster for building such a beautiful table for the field. Everyone gave him a round of applause for his efforts. Tom said "thank you" and that he was glad to be able to give something back to the club.

Safety Report: *Safety Chairman, Duane Youngman.* No issues were presented.

Membership Report: *Pete Stephans, Membership Chairman,* was not present. With the addition of the new applicants noted above, we have 162 members.

Activities Report:

April 24, Four-Star 40 and Warbirds Races: Races were cancelled due to rain and wind. Ralph Doyle suggested that, since there is an open date on June 5, a Four-Star 40/Warbirds Race take place. The membership voted okay and Ralph will check with Paul Geders.

Editor's Note: If such a race is to be put on, a different CD will have to step forward. Paul will not be up to it this soon after surgery!

May 15, Tailgate Swap Meet: Chris Nenzel reported on the forthcoming Swap-Meet and thanked those members who came forward to volunteer to help make it a success.

Volunteers get in for free, but everyone else pays \$5.00 per car. They plan to begin the Meet at 9:00 A.M. and wind up by 3:00 P.M. or sooner. If it rains, the rain date will be the following Saturday, May 22. Chris also has a poster in the window and handouts for the event at Schaefer's and at Mark Twain Hobby and said it would be helpful to have the intersections (Greens Bottom Road and Amrein Road) posted on the website. Walt Wilson arranged to have the Swap-Meet flyer posted in the April and May issues of RC Report Online at no cost to the club.

Editor's Note: The Swap Meet was rained out and will be on May 22!

Tuesday Evening Cox Warbird Races: Chris Nenzel received unanimous permission to use the club's e-mail list to announce the Tuesday night events.

Boy Scout Flying Night, June 23: *Event Director, Les Richman* reminded us the Boy Scout Troop would like to return to the Spirits' Flying Field on Tuesday night, June 22, for orientation and flying lessons. Vote carried unanimously in favor of again hosting this community service event for the Boy Scouts.

OLD BUSINESS

Training Radio: Tom Foster has put the trainer radio he received from the AMA in the new table at the field.

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NEW BUSINESS

Paul Geders Recovering From Surgery. We all wish Paul Geders a good recovery from his recent surgery and look forward to seeing him out at the field soon.

Meeting Activity: Two members brought planes to discuss. See the pictures for details.



Bob Fiely brought a Great Planes Super Sportstar 90/120 that he built for Don Fitch. The kit is from the mid-1980's, has a 125 Saito engine, Monocote, Spectrum Radio and weighs around 9 pounds. Discussion followed and Don announced that he casts his own weights to balance the CG and gave a brief demo on the blackboard after the meeting was over to those who were interested.

Meeting adjourned at 7:35 p.m., but, as usual, everyone attending enjoyed seeing the planes brought in this evening for Show & Tell. They were up and out of their seats getting first hand looks at both of the planes and good camaraderie prevailed well past the 7:35 p.m. adjournment, which made for a very pleasant evening for all in attendance.

R/C Helicopter Q & A

By Pete Stephans

With our first annual Helicopter Fun-Fly scheduled for June 26 I thought it might be a good time to list some typical questions that I get at the field concerning R/C Helicopters.

Q. R/C Helicopters interest me. How do I get started?

A. Start small. The least expensive and easiest to fly are the coaxial electric helis. Unless you just want something to fly around your great room, and don't think there is any possibility that you may ever want to really get into helis down the road, I don't recommend one of these. They are so stable that they don't require any skill and do not handle at all like



Les Richman brought a quarter-scale replica of the Charles Lindbergh Monocoupe D-145. He said Jim Rawlings helped him and, between them, they put at least 800 man hours into the completion of this beautiful replica. The original Lindbergh D-145 is hanging at Lambert St. Louis International Airport. Mark Bien remarked that it was quite coincidental that Les chose to bring this replica for Show & Tell, tonight, as today (May 12) was the actual day that Lindbergh departed (In his Ryan Spirit of St. Louis) from St. Louis to Curtis Field in New York, where he started his voyage across the ocean blue.



Les Richman (left) and Jim Rawlings discuss the features of the Monocoupe D-145. It has a Super Tigre 3000, self-starter, on-board ignition, smoke, flaps, and lights.

single rotor machines. I recommend one of the small fixed pitch, single rotor helis that have recently become available. The E-flight mSR would be a good choice. It is not quite as easy to fly as a coaxial machine but still very stable and

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handles much more like larger R/C Helicopters. If you get to be good at flying one of these around your living room, and decide that you really want to get into helicopters, you are ready for the next step.

Q. What should I buy if I am ready to move up from an E-flight mSR, or similar helicopter, or just want to start out with a larger, collective pitch helicopter that can be flown outdoors?

A. This depends on your interest level and hobby budget. I really like the E-flight Blade 400. Several of the new heli pilots in our club are flying Blade 400's. This is a collective pitch heli that can be setup to handle very stable for beginners and, once you are ready, it can be changed to make aerobatic flight possible. The Blade 400 is inexpensive to buy and inexpensive to repair if (when) needed. Another advantage is that replacement parts are readily available. Mark Twain Hobby does not carry a full inventory of replacement parts for all helicopters, but does usually have anything you may need for the Blade 400. It's nice to be able to quickly replace a broken part so you can get back in the air and not have to wait for a mail order part.

A second choice would be a T-Rex 450. This is a more capable, more expensive, heli. I have one of these and love it but repair costs for a 450 are definitely higher than a Blade 400.

Q. What about nitro powered helicopters?

A. Nitro-powered machines have advantages. I flew nitro helis for years and was reluctant to try electric because I thought they did not have the power that nitro machines have and have short flight times. Improvements in electric technology have closed the gap in power and flight times are getting longer. Electric flight is clean and easy. Also, helicopter glow engine tuning can sometimes be a challenge. Many R/C Helicopter pilots still love their nitro machines but I like the simplicity of electric. I have decided to focus on electric and have stopped flying my nitro machines.

Q. I hear that helicopters are very difficult to fly and are much more likely to crash than R/C airplanes.

A. Helicopters do present more of a challenge. I haven't crashed an R/C airplane in at least 10 years. I wish I could say the same about R/C Helicopters.

You have to master two types of flight, hovering and forward flight. Since every helicopter flight starts and ends with hovering, that's the first thing you learn. Learning to hover was a lot of fun for me. I mastered hovering without any mishaps and was thinking that this R/C Heli flying was not as hard as I had heard.

I was feeling confident and pushed my 30 size nitro machine into forward flight and immediately had my hands full. The big challenge in controlling a helicopter in forward flight is that it is very easy to get disorientated. A helicopter does not give you the visual cues an airplane gives you and if you let the heli get too far away bad things can

happen very fast. I crashed my Hirobo Shuttle within 30 seconds of commencing my first attempt at forward flight. I took the pieces home, repaired it and proceeded much more cautiously.

Q. Is Flying R/C Helicopters more expensive than R/C airplanes?

A. It can be but you can keep the costs lower if you buy the right equipment the first time and are patient in your learning process.

Q. I taught myself to fly R/C airplanes. If I buy a quality R/C Heli can I teach myself how to fly R/C Helicopters?

A. No. Over 50% of helicopters bought by an inexperienced pilot crash on their first attempt. You need help. The biggest challenge is in setting the heli up correctly. A collective pitch helicopter can be set up to be very tame for training, or the same helicopter can be setup to be much more maneuverable for experienced pilots. Setting a helicopter up is accomplished mechanically by adjusting the links and servos correctly and through programming your transmitter. Contact one of the helicopter instructors on the instructor page on the Spirits web site for help.

Q. Ok, flying R/C Helicopters is more of a challenge, are more expensive, crash more often and are more complicated to setup. Is it worth all of this hassle?

A. Absolutely!! Ask anyone you see flying a helicopter if it is worth it. Developing the skill to be able to confidently launch one of these machines, fly it around and land is very satisfying and rewarding.

A word of caution. Try R/C Helicopters at your own risk because if you try it you may get addicted as I did and be compelled to spend every spare moment working on and flying these fascinating machines.

Exerpts from an E-Mail From Paul Geders to Our Mowing Contractor:

“This memo is to provide guidance to you, document our conversation, and will be used to inform our club members as well. You asked who decided on the 10 day mowing schedule? The members voted to go to a 10 day mowing schedule to save money. During the FAST growing season, you may have to cut more frequently, like every seven days to keep it under control. If, later in the season when it gets hotter, you can cut on a 10 day or longer schedule...we will work with you on that. You can cut in the mornings, and if you are not done by 9:00 A.M., just keep cutting until you are done. You can also cut later in the day, if no one is there when you arrive. That way, they have to wait for you to finish if they show up after you have started. Please keep Pete Stephans informed 12 to 24 hours in advance, as to when you will be mowing, so we can e-mail the majority of our members and let them know the field is being mowed. We have a Kubota tractor/mower and, once in a while, one of our members will cut or trim around the runway to keep

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it shorter so airplanes that run off of the runway will not get damaged in the longer grass.

You asked about cutting on Saturday mornings. I stated that it would not be a good idea to cut on Saturday's because we usually have a contest or event that day. Sunday mornings are also available for you to cut. Every Tuesday evening is Electric Night where our members get out there around 5:00 p.m. and start flying. So, Tuesday night after 5:00 is not available."

So that everyone knows...Lawns & More (Alex's company) carries liability insurance just like our previous contracted mowers.

"MOST IMPORTANTLY...IF SOMEONE ASKS YOU TO STOP MOWING SO THEY CAN FLY, YOU ARE TO TELL THEM TO CALL ME, AND I WILL TAKE IT FROM THERE. ALSO, HAVE THEM READ THE SIGN AS IT EXPLAINS OUR POSITION ON LIABILITY, AND MAYBE THEY WON'T CALL ME.

WHEN YOU PUT THAT "FIELD CLOSED" SIGN UP ON THE FREQUENCY BOARD THE FIELD IS CLOSED UNTIL YOU ARE FINISHED MOWING, AND YOU REMOVE IT."

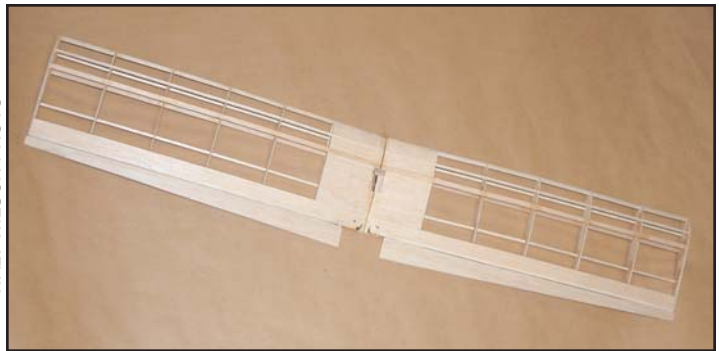
Wanted: I need an 11- 6 EW Revup (wood) prop. Don Fitch, 636-441-0373, e-mail at: dfit4@charter.net

The Last Word

By Walt Wilson

A question I was asked about scaling down a wing, was "How do you know what size spars to use". The answer is to scale down the size of the spars, too. The original Four-Star 40 has 1/4" spruce spars. Electric power is easier on structure than a reciprocating engine, so hard balsa should be fine for the spars. Scaling the spars to 60%, rounded off, is 5/32". Balsa isn't commercially available in that size, so use 3/16" strips for the main spars. The Four-Stars have five spars, so all but the main spars, top and bottom, could go down to 1/8". These are the sizes I used on my Mini Four-Star and they worked out fine. The ribs are 1/16" thick balsa. One thirty-second balsa would work, but is very fragile and allows no margin for error in alignment. Use the reduced outline to determine airfoil and spar placement. I used the rib spacing from the full-size Four-Star 40 and reduced the number of ribs. Make a template out of 1/8" plywood for cutting ribs. Trace onto balsa and cut all ribs out a bit oversize. I recommend you make two rib templates, drill holes and use 3/16" or 1/4" dowels to hold the templates and balsa together, then sand all ribs to shape and cut notches for spars at the same time. All W-2 ribs should be identical at this point. The W-1 ribs are 1/8" thinner to allow for the center sheeting. Rib shapes should be on your

reduced plans. Cut a joiner from 3/16" plywood (or same thickness as the main spars) and cut 1/16" balsa to width for the trailing edge sheeting. Make a scaled-down leading edge out of medium balsa. Cut a trailing edge to size and sand to a slight taper to match the trailing edge sheeting. Assemble the wing panels, using CA, following the same procedure as described in the Four-Star 40 instructions. Be sure to make left and right wing panels and cant the center W-1 ribs to allow for dihedral. Add 1/16" shear webs on each side of the main spars in the area to be sheeted on each panel. They make a box to contain the wing joiner. Cut out the area between the main spars in the center ribs to accommodate the wing joiner. Check the fit and try pushing the wing halves together, with the joiner in place, before gluing. Sand and trim as necessary to make it fit. Place wood blocks under the tips for dihedral and join the wing halves



WALT WILSON PHOTO

with 30-minute epoxy, being sure the wing tips are in perfect alignment with each other. Determine where the wing-mounting screws will be and be sure to have solid balsa in that area. Add balsa blocks if necessary. Add 1/16" sheeting to the center of the wing where shown on the plans. Make ailerons from 3/16" balsa sheet.

Commercial aileron torque rods are available, but I usually make my own. Use 1/16" music wire with appropriately

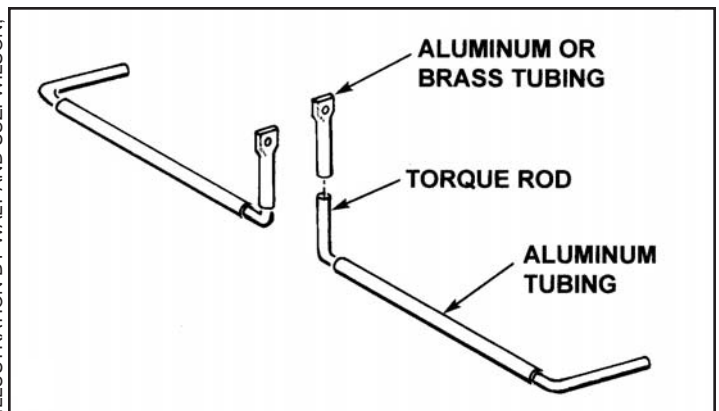


ILLUSTRATION BY WALT AND SUZI WILSON

sized aluminum tubing for bearings. Cut two pieces of aluminum tubing to about 3/4" length and mash about 1/4" of one end flat. Drill 1/16" holes in the centers of the flats to fit your pushrods or clevises.

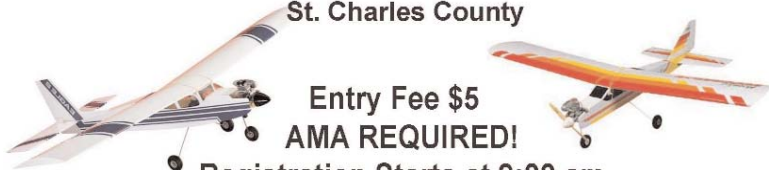
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The Spirits of St. Louis R/C Flying Club, Inc.



Presents High Wing Trainer Races Saturday June 19th, 2010 at Spirits' Field

on Amrein Road, 1/2 mile south of Greens Bottom Rd.
St. Charles County



Entry Fee \$5
AMA REQUIRED!

Registration Starts at 9:00 am
Racing Starts at 11:00 am
Four-Star 40 Racing Procedures Apply



For more information, contact
Steve Ramonczuk 314-298- 9284 or
e-mail at sramonczuk@yahoo.com



Les Richman photographed the original markings and had custom decals made for the Monocoupe. He also had a scale instrument panel built. It makes a beautiful, authentic model and has many working features.

CAROLYN SCHLUETER PHOTO

Spirits of St. Louis R/C Flying Club, Inc.

Four-Star 40* and WARBIRDS*

Pylon Races

Saturday, June 5, 2010



Spirits Field on Amrein Road, 1/2 mile south of Greens Bottom Road, St. Charles County

ENTRY FEE: **\$10 for Four-Star 40 and \$10 for WARBIRDS**

Registration starts at 9:00 a.m.

Racing starts at ~ 10:00 a.m.

*Class rules are available on our website:

<http://spiritsofstl.com/contest.htm>



For more information call: **Ralph Doyle at 314-878-7914**
or e-mail him at: keelhaul@sbcglobal.net



Spirits of St. Louis R/C Flying Club, Inc.

1ST ANNUAL HELICOPTER FUN FLY

Saturday June 26, 2010

Open Flying Starts at 9:00 a.m. till Dark
AMA Sanctioned - **AMA Card REQUIRED**

See <http://spiritsofstl.com> for Maps to
Flying Field, Flying Site pictures, etc.

Electric outlets along pit area
and in the pavilion

Concessions Available

Landing Fee \$10.00
with Lunch Provided

Pilots Raffle Prizes

Contacts:

Tom Foster 636-244-2655, litespeed600@hotmail.com
Kevin Cordell 636-329-1918, kevin.cordell@sbcglobal.net
Pete Stephans 636-926-3087 pete491@wans.net



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Use JB Weld to attach the mashed-tubing horns to the torque rods. Cut grooves in the trailing edges of the wing and epoxy the bearings in place. Ideally, the center of the torque rods will be on the hinge centerline. Don't get any epoxy on the torque rods! Drill the ailerons to match and cut grooves, as necessary, to clear the bearings.

You should already have a hole in the former at the front of the wing for a mounting dowel. Use either one 1/4" dowel or two 3/16" dowels at the leading edge of the wing. Chuck the dowel(s) in your drill and sand one end to a hemisphere. Fit the wing assembly to the fuselage and make sure where the dowel should go. Drill the leading edge of the wing and put the dowel in place, with the rounded end out. Fit it to the fuselage former and make adjustments, as necessary, so it fits properly. Epoxy the dowel(s) into the wing. Put the wing in place, while it's curing, to assure proper alignment. Locate and cut out for the aileron servo. The front mounting lug should be immediately behind the main spar shear - webbing. Cut out the center ribs and bury the servo as deep in the wing as possible to avoid conflict with other compo-

nents in the fuselage. Make 1/8" plywood mounting plates for the servo. Make 1/16" plywood tip plates for the wingtips and install.

Cover the wing and ailerons with Ultracote, or your covering of choice, before installing the ailerons. I use wick-type hinges and have never had a problem with them. A Great Planes Slot Machine is great for cutting slots for hinges. Using thick CA on the torque rods and thin CA on the hinges, install the ailerons. Align the wing so the tips are an equal distance from the center of the fuselage tail. Locate the wing mounting plates in the fuselage and mark their location on the wing assembly. Make a 1/16" plywood support plate to go on the wing bottom, under the heads of the wing mounting screws. Cut out the covering under the plate and CA in place. Check the alignment again, and drill the wing mounting screw holes. I use 4-40 screws on the Mini Four-Star. Drill as necessary and install blind nuts in the fuselage.

Next month, we'll build the tail surfaces.

Gotta Go Build!

COX Micro

Warbirds Race



Second Tuesday of
each Month...

weather depending

Register at 6:00

Racing at 7:00

This is a fun race
for bragging rights!

Contact: Chris Nenzel
636-634-8888

You can order them here:

[http://www.gravityhobby.com/home.php?
cat=263](http://www.gravityhobby.com/home.php?cat=263)



Spirits of St. Louis R/C Flying Club, Inc. 2010 Event Schedule

Date	Contest/Event	CD/ED	Notes
Saturday, May 22	Tailgate Swap Meet	Chris Nenzel	Rained out May 15
Saturday, June 5	Four-Star 40/Warbirds	Ralph Doyle	
Tuesday, June 8	Cox Warbird Races	Chris Nenzel	
Saturday, June 19	High-Wing Trainer Race	Steve Ramonczuk	
Tuesday, June 22	Boy Scout Intro Night	Les Richman	
Saturday, June 26	Helicopter Fun-Fly	Tom Foster	
Tuesday, July 13, 20, or 27*	Tuesday Night E-Warbirds Race	Chris Nenzel & Paul Geders	* Single date TBD later
Saturday, July 17	Four-Star 40/Warbirds	Steve Cross	
Tuesday, Aug 10, 17, or 24*	Tuesday Night E-Warbirds Race	Chris Nenzel & Paul Geders	* Single date TBD later
Saturday, Aug. 21	High-Wing Trainer Race	Curt Milster	
Tuesday, Sept. 7	Cox Warbird Races	Chris Nenzel	
Wed., Sept. 8	Meeting at Field	B of D	Member Appreciation Dinner
Saturday, Sept. 25	Open House	Committee	
Saturday, Oct. 9	Four-Star 40/Warbirds	Ron Hesskamp	

The Spirits of St. Louis R/C Flying Club, Inc
Invites you to a

TAILGATE SWAP MEET

Saturday, May 22

Spirits Flying Field, St. Charles, County, Missouri

See our web site at: [http:// spiritsofstl.com](http://spiritsofstl.com) for directions to the field.

9:00 A.M. till ?

\$5.00 per car (Swapping, or Flying)

Concessions Will Be Available

All Proceeds Go To The

Make-A-Wish Foundation of Missouri

For more Info: Call: Chris Nenzel: 636-634-8888

Field will be Open for Flying

AMA Membership Required For Flying



FLIGHT LINES

Walt Wilson
3000 Persimmon Drive
St. Charles, MO 63301-0131

www.spiritsofstl.com

**Meeting is on
Wednesday,
June 9
at 7:00 P.M.**