



FLIGHT LINES

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

Merry Christmas - Happy Holidays

PREZ SEZ

By Dave Brown

Greetings fellow members, the December meeting was quite productive. We voted on the Contest and Event Schedule and the amendments to the club By-Laws, both of which passed with little, or no, opposing votes. The first event for the 2011 schedule is just around the corner, so if you haven't already begun to prepare for the Annual New Years' Day Fly-In, now is the time!

Forty-two club members have paid their dues for the 2011 flying season. It's important that everyone pay their membership dues as soon as they can to avoid a last minute rush on the Membership Chairman and Treasurer.

Winter is a perfect time for reading so, please, log on to the club's web site and read those club flying rules. Who knows, there might be one or two you didn't even know about. We have so many it should keep you occupied for quite a while (HA, HA!).

Our thoughts and prayers are with you Lester. I hope the card we sent made you feel a little better, thanks Walt.

Christmas Day will soon be upon us, I hope that everyone has a great holiday, is able to spend time with family and friends and, if the weather cooperates, even make a trip to the field and do some flying. If you do, FLY SAFELY! FLY RESPONSIBLY!

MEETING MINUTES: December 8, 2010

By Walt Wilson

The meeting was called to order by President, Dave Brown, at 7:01 P.M.

Members signed in: Twenty-three members and a guest, braved wind chills in the teens to attend.

Membership Report: Membership Chairman Pete Stephans, reported that we have 40 members, plus two who submitted their renewals at the meeting, for a total of 42 renewed or joined for 2011, to date. We peaked at 172 members for 2010.

Secretary's Report: Walt Wilson, Secretary. Minutes were accepted as published in last month's Flight Lines.

Treasurer's Report: Les Richman, Treasurer, was in the hospital with congestive heart failure. He is being treated

and is expected to fully recover. Les is also scheduled to have eye surgery on December 14. Walt Wilson conveyed a brief report of club financial status from Les. The Treasurer's Report was approved as presented.

Field Report: Paul Geders, Field Committee Chairman. See the Safety Report for the only field news to be discussed.

Safety Report: Duane Youngman, Safety Chairman. Gunshots were heard and three bullet holes have appeared in a sign at our field. All members are reminded that hunting, exhibition, or discharge of firearms are strictly prohibited on our property. Deer hunting season has come and gone since the last meeting and may have been responsible for the gunshots heard. Lee Volmert, a former police officer, recommended that signs be erected on our property announcing the rules. A motion was made and passed to erect three signs saying "No Hunting, Exhibition, or Discharging of Firearms on Club Property" at the entrance, on the frequency board, and in the pavilion.

Activities Report: Paul Geders, Contest/Event Chairman

New Years' Day Fly-In: Members and guests are urged to attend our Annual New Years' Day Fly-In, regardless of weather conditions. The past two years have seen strong winds and temperatures in the teens, but some days have been so nice that at least one flyer wore shorts. One or more members have flown at every one in recent memory. It's a mad scramble, at 9:00 A.M., to be the first in the air for the new year.

Replace Four-Star 40's? There was a discussion about changing from a Sig Four-Star 40 to another airplane for spec racing because of uncertain availability of the kits or ARF's. Paul Geders has checked with Sig and production will resume as soon as a satisfactory replacement manufacturer is under contract. No action will be taken at this time. **Free Food** will no longer be provided for contest participants. Concessions will continue to be available.

OLD BUSINESS:

By-Law Changes: A vote was taken and passed to ratify the changes to our By-Laws that were presented in the November Flight Lines. See page 4.

(Continued on the next page)

FLIGHT LINES

(Continued from the previous page)

Contest and Event Schedule: The schedule for 2011 was voted upon and approved as presented. Since we will be meeting on the second Thursday of each month, at least for the foreseeable future, the question of whether the Member Appreciation Dinner meeting would be on Wednesday, September 7, or Thursday, September 8, came up. The final date will be decided later, but it will probably be on Thursday. There were suggestions for at least one event with no entry fee or prizes. The feeling is real racers will usually race for the pure fun of it and "bragging rights".



PAUL GEDERS PHOTO (RIGHT)



Walt Wilson discussed his experiences learning to fly the Blade 120 SR he won in the raffle at the October Helicopter Fun-Fly. It comes with a dual-rate, 2.4 GHz radio including AA batteries, four-channel controls, a gyro, Lipo battery, and multi-rate charger.



WALT WILSON PHOTOS

Paul Geders discussed his new Blitz RC P-38 RTF. It's made of foam, has a 55" wingspan, and retracts with working gear doors. It has twin brushless motors, 30 Amp ESC's, ten servos, and is powered by a 2200 MAh Lipo Battery.



Paul says it flies like a trainer with 10-7 three-bladed props. He bought the plane, complete except for transmitter and receiver, for \$231.00 including shipping.

It's more challenging to fly than a typical coaxial heli, but not overly difficult. Walt has flown it in a garage and outside in mild winds. Except for one servo that only works when it's in the mood, it's a very stable little bird. All-up cost is \$179.95 and it's also available in a less expensive bind-and-fly package for those who have Spektrum or JR DSM2 transmitters.

This approach may induce some novices to get into the sport, who may otherwise feel they are just donating their entry fees to the experienced racers. Other events may be added as the year goes on, such as the annual Boy Scout introduction to R/C flying and a possible day of introductory flying for visitors.

The question of rescheduling events if rained-out, or otherwise cancelled due to bad weather, came up. Rain dates will be addressed on an individual basis and may, or may not, occur.

(Continued on the next page)

FLIGHT LINES

(Continued from the previous page)

NEW BUSINESS

Lee Volmert suggested that the treasury be audited. It hasn't been audited for several years and it's just good business to do so occasionally. To hold costs down, it was suggested that we try to find a club member who is a CPA. It was suggested that Steve Cross may be qualified to do it since he is Chief Financial Officer for the company that employs him. President Dave Brown is to follow up on the suggestion.

Meeting Activity: Paul Geders and Walt Wilson brought aircraft to show and discuss. See the pictures for details.

Meeting was adjourned at 8:23 P.M. The next meeting will be on **Thursday, January 13.**

Winterizing Engines?

by Paul Geders

Recently, I have had several members ask me; "How do you winterize your engines"? My response usually catches them off-guard when I state; "I don't, they are always winterized". If you read any of the magazine engine column guru's, such as Clarence Lee, Joe Wagner, Brian Winch, etc., they all tell us to put after-run oil in the engine.

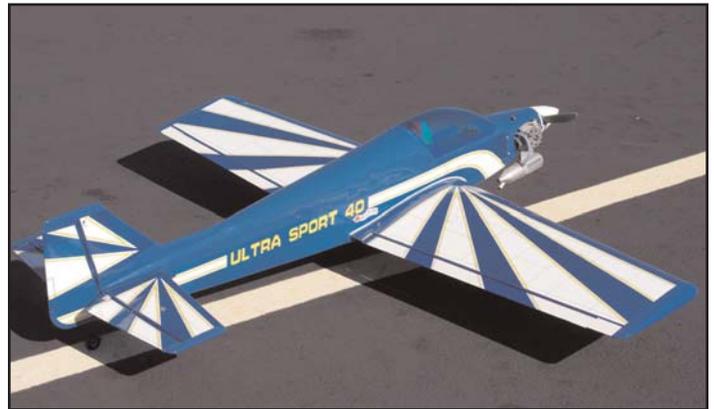
Many of you have seen me "taking care of my engines" before leaving the field. Always empty the fuel tank, then start the engine and choke it to get every last drop of residual fuel left in the tank and the engine itself. When the engine will no longer start it is presumed to be dry. Now all you do is put some Automatic Transmission Fluid (ATF), my favorite after-run oil, in the intake. I use a Marvel Mystery Penetrating oil can (which is an ATF like oil with a solvent in it to make it penetrate) with the small removable red cap (like a 3-in-1 oil can). With the carburetor in the "idle" position, fill up the carburetor and then turn the engine over by hand to pull the ATF into the engine. Do this three times and you have just preserved your engine from rust (on the steel parts) and corrosion.

Remember, raw model airplane fuel is hygroscopic (meaning it draws moisture right out of the air) and it starts immediately. Another by-product of combustion is nitric acid (from the nitro methane) which attacks most metals if left alone. When you run the engine dry you still have a chance of corrosion from the residual nitric acid. Once you add the ATF you are providing a good oil barrier to all the parts of the interior of the engine.

The same principle applies to four-stroke cycle engines except they are a little more difficult to induce the ATF. My method has been to put the ATF in the intake or exhaust/muffler/pressure chamber and turn the engine over a couple of times. This gets the upper portion of the cylinder/s and valves coated with ATF. The lower end of most four-stroke cycle engines have a vent and that is the place to put in the ATF to protect the lower end (crankshaft, bearings, connecting rod bearing, and cam/cam gears). Some of the new O.S. engines have removed the vent and basically

have sealed the crankcase. As Clarence Lee suggested, he would drill and tap the back plate and put in a vent fitting with some fuel line on it and a screw in the end of the fuel line during normal operation and remove the screw to put in the after-run oil in the lower end.

Have been doing this to my engines for more than 30 years after learning that not doing it ruins engines. Most of you have seen me fly my Das Little Stik with the tuned pipe ducted fan O.S. 25. That engine and airframe are right at 30 years old and I replaced the piston and sleeve about 3 years ago...but it still has the original ball bearings in it. Using after run oil in that engine is a great testament to its viability. Again, if you don't use an after run oil the corrosion process will start almost immediately. Trust me, it is worth doing! I have many engines (i.e. Fox .35's, K&B .35 Green Head, YS .45, Nelson's, O.S.'s etc.) stored in zip-lock type plastic bags where the engine was treated with ATF many years ago and they still are like new!



FOR SALE:

Great Planes Ultra Sport 40, 55 inch wingspan, OS Max 46FX engine, four (4) Hitec HS425BB servos, original instruction manual. Excellent condition, ready to fly, just



add your receiver. \$195 Complete.

Hanger 9 Advance 40, 60 inch wingspan, OS Max 46FX engine, four (4) Airtronics 94102 servos, original instruction manual. Excellent condition, ready to fly, just add your receiver. \$195 Complete

Contact Steve Cross svcross@att.net, or call at 636.458.3287 (home), 314.698.6657 (cell)

FLIGHT LINES

Membership Renewals Due

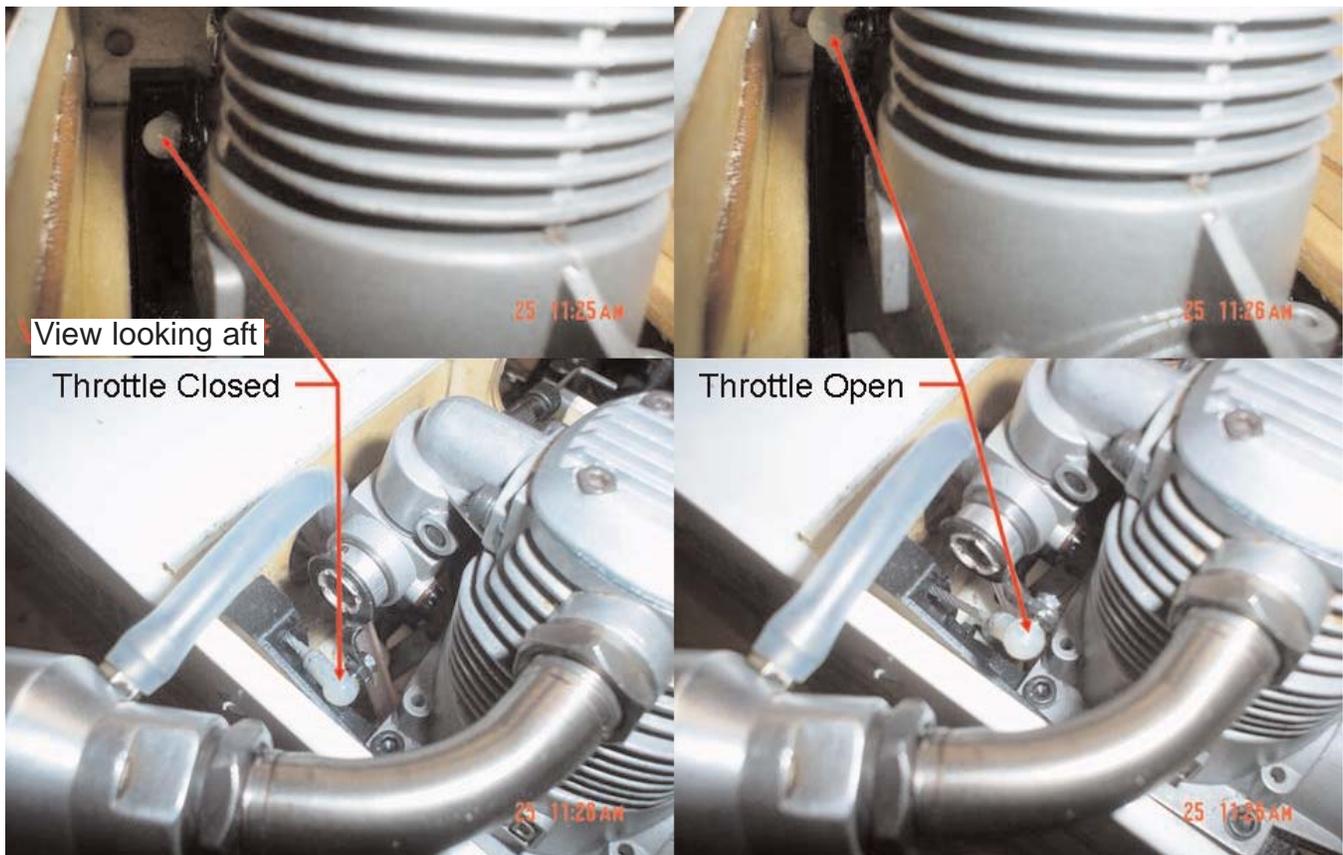
By Walt Wilson

Just a quick reminder that your 2010 Spirits' membership expires on December 31. Members who don't renew by the conclusion of the March meeting will be considered new and will be required to pay an initiation fee. A membership application is included in this newsletter. A copy of your 2011 AMA card must accompany your renewal. If you are one of the new members who signed up for 2011 using a 2010 AMA card, you must submit a copy of your 2011 AMA card to the Membership Chairman, Pete Stephans, to retain flying rights.

Throttle Linkage For Limited Space.

By Paul Geders

When a rear updraft carbureted engine is installed close to the firewall you can use a Du-Bro 3105 20" Throttle Case Assembly, a Nylon Ball Link fitting that has been shortened to 1/2 its threaded length, cross-drilled with a 1/16" drill, then JB Welded to the cable as the basis for this setup. The throttle arm is set to full open when parallel to the engine mounting lugs. Hole location in the firewall is determined when throttle arm is in the carburetor closed position with throttle arm straight down. This setup allows the cable to curve in an upward arc and work in a minimal space.



The following club Safety Rules have been voted upon and are now effective:

Rule 7. A maximum of six (6) aircraft will be permitted in the air at one time in the Primary Flying Area. (Numbers 1,2,3,4 on safety fence in pilot's box/stations are for pylon racing only).

Rule 34. Helicopter flying in the Primary Flying Area is permitted and Rule 23 applies. No takeoffs from the taxiways allowed except between the safety fence and edge of runway (as is currently done). A maximum of one (1) helicopter at a time will be permitted to perform directional flight in the Helicopter Flying Area. Helicopter directional flight in Helicopter Flying Area is restricted to helicopters with a 730mm/29inch rotor diameter, or smaller, and is restricted to an area bordered by the Helicopter Flight Safety Line and the Primary Flying Area Flight Safety Line (See Field Layout). Hover practice is permitted in the Helicopter Flying Area with any size helicopter, electric or fuel, within the boundaries of the Primary Flying Area and Hover Area Safety lines.

Rule 36. No hunting, exhibiting, or discharging of firearms, on club property.

Rule 37 has been deleted.

FLIGHT LINES



PHOTOS BY RALPH DOYLE

Airfield F-15 Fighter EDF RTF

By Ralph Doyle

I have been building and flying RC planes for more years than I care to admit. The growth of the "new" technology of electric propulsion and "foam" airplanes has truly been mind boggling. Recently, I decided to test the waters and buy an electric plane. Having made that decision, the next question was what to buy: might as well go all the way and get a jet. My main concern was that I knew nothing about electrics. So I approached the project with the idea of being a first timer (which I certainly was) and write a construction article to share the benefit of my experience.

Since this was the first time getting involved with this technology, I also went cheap. I purchased an Airfield F-15 Fighter RTF. I was amazed that I could buy a scale model jet, WITH a radio, motor, battery, and charger for \$140!!

The kit was well packaged and all the pieces appeared that

it was indeed a jet plane. The manual, consisting of one sheet of paper, showed that only 18 steps were needed to construct the model. The first six involved gluing the wings and tail feathers to the fuselage. The next four steps showed how to glue the missiles and wing fuel tanks. Three steps described the landing gear installation, while the balance of the steps showed where to insert the battery and connect the installed servos. Simple stuff. I probably could have figured it all out without the instruction manual.

All together, not counting epoxy-drying time, it took about 10 minutes to glue the plane together. I did change the order of construction slightly by installing the landing gear before gluing on the vertical stabs so I could set the model on the gear. I also decided not to glue on the wing tanks and missiles until after the first flight. Be very, very careful not to lose the Allen nut that holds the main gear in place. The nut was not installed in the collar. I was lucky and found it in the bottom of the box.

The CG was checked per the recommendation on the plans. I had to add one ounce of nose weight to get the correct balance point with the supplied battery. Due to the difference in weight between a 1300ma and a 2200ma battery, I later found that I could remove the weights with the larger battery.

You can see by the shortness of this article that there is next to nothing to putting this foam plane together. My real concern is the li-po battery and the loving care it seems to take to charge them. Not to mention the cost of having additional batteries and a decent charger that also seems to be a requirement for this niche of the hobby. I also want to mention that one might give some consideration to saving about \$60 by not buying the radio that is included in this kit, as it is an option, and use the money to buy that second battery or two. If you already own a 2.4G system, I think it is better to purchase a receiver for about \$10 and bind it to your current radio. The receiver that came with the kit would not bind to my Futaba FASST system.

(Continued on the next page)



The Airfield F-15 Fighter RTF comes with everything needed to fly, including batteries and a charger. Instructions leave something to be desired, but assembly is quick and intuitive for an experienced modeler.



COME JOIN US FOR OUR ANNUAL
New Years' Day Fly-In

At Spirits' Field!

Saturday, January 1st, 2011

10:00 A.M. - 2:00 P.M.

Regardless of Weather!

FREE Landing Fee

Bring Your Favorite Hot Drink, or Snack

For more information contact: Dave Brown, 636-936-1453,

E-mail at: jetmech6772@sbcglobal.net,

or visit our website at: <http://www.spiritsofstl.com>

Open to all AMA Members

(Continued from the previous page)

As I mentioned above, I finished building Saturday in about a half hour but had to wait until Monday to fly. I had no idea if the battery was charged, or not, although it was on its charger for several hours using a 12 volt wet cell battery. I centered all the control surfaces, guessed at the amount of throw needed as there were no recommendations on the plans (better to have too much than not enough), pointed the nose down the runway toward the trees, and hit full throttle. I was worried about nose gear over-control and if the plane actually had enough power to take off. It stayed on the runway centerline and, with the elevator stick about half way back, the plane lifted off. I banked right, gained some altitude, and started trimming. The elevator needed full up trim and about half full right trim. I had just enough time to accomplish this when the motor quit!! I was advised that this is normal and is built into the battery/radio system because the receiver uses the same battery as the motor and we certainly don't want to completely discharge the battery and lose radio control. It was a pleasant surprise to see that this F-15 glides rather nicely and I was able to make a smooth landing on the runway while noticing no bad characteristics during the glide down. I made the trim changes while the battery was recharging, (about two hours) flew again hands off straight and level.

You can't ask for more. Well, ... actually you can. Since I had some success, I then bit the bullet and purchased two more 2200 mAh batteries, a higher rated charger, a battery

level tester, a DC power supply, and a package of XT 60 connectors for an additional cost of about \$90 including shipping. Total cost: \$240 to get in the air with a new plane more than just once a day with a construction time of about a half an hour. As a postscript, be advised to measure the internal dimensions of the model and check to see that new battery you order will fit inside the plane. I had to cut some of the foam away to fit these. There was a small bonus as I was able to remove the lead weights due to the extra weight of the larger batteries.

The Last Word

By Walt Wilson

A tip for those still running glow fueled engines on their aircraft. Cleanup becomes a snap if you treat your aircraft to a coat of RAIN X, a product sold in auto stores to apply to your windshield to aid in clearing rain. The product apparently leaves a thin layer to prevent the water from 'wetting' the surface. Cleanup of the plane is as simple as a wipe down with a dry paper towel. Re-application every couple of flying sessions seems to suffice.

I've been flying the Blade 120SR helicopter I won at the Heli Fun-Fly in October. This was my first experience flying other than dual-rotor craft and it was a learning experience! It actually flies very well in still air and is reasonably stable in a mild breeze. I'm still learning, though, with a long way to go. *Merry Christmas and Happy New Year!*

Gotta go build!



SPIRITS OF ST. LOUIS R/C FLYING CLUB, INC.
MEMBERSHIP APPLICATION
 FOR YEAR _____



(PLEASE FILL IN YEAR ABOVE)

PLEASE PRINT CLEARLY!

Name: _____

Address: _____

City: _____

State: _____ Zip: _____ Phone: _____

AMA No. _____

Your e-mail address: _____

Additional Family Members:

Name: AMA #	Name: AMA #	Name: AMA #

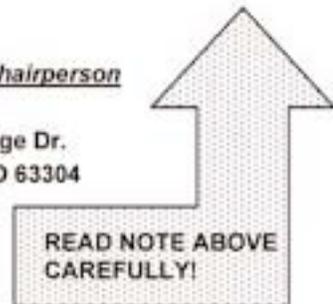
NOTE: ANY MEMBER WHO ALLOWS THEIR MEMBERSHIP TO LAPSE BEYOND THE END OF THE MARCH MEETING OF ANY YEAR SHALL BE CONSIDERED A NEW MEMBER WHEN RENEWING THEIR MEMBERSHIP. SOURCE: ARTICLE 7 SECTIONS 1 THRU 4, CLUB BYLAWS. DUES ARE PAYABLE NO LATER THAN THE JANUARY CLUB MEETING.

To become a new member or renew your membership, please do the following:

1. Fill in the above information, even if this is a renewal.
2. Photocopy this application with valid AMA license of each flying member in the spaces below.
3. Make out a check payable to SPIRITS OF ST. LOUIS R/C FLYING CLUB, INC. **(NO CASH PLEASE)**
4. Send completed application and check to the membership chairperson: →→→→→

Membership Chairperson

Pete Stephans
 420 Mason Ridge Dr.
 St. Charles, MO 63304
 636-926-3087



If you apply at a club meeting, be sure to have all three of the above items. Meetings are held on the second Wednesday of each month, 7:00 p.m., at the Bridgeton Trails County Library Branch, 3455 McKelvey Rd.

Note: New Members shall be introduced in person OR, by their sponsor, to the club before joining. This allows new members to join the club, even though their schedule doesn't allow them to attend club meetings. New members who join in August or September will pay \$10.00 each for August and/or September, and will also pay next year's dues and initiation fee at the same time. New members who join on/after October 1st pay only the annual membership amount and the initiation fee, but get the next year and the end of the current year included. Junior members pay no initiation fee and \$2.50 each for August and/or September!

MEMBERSHIP AGREEMENT:

I agree to abide by the SAFETY RULES and CONSTITUTION & BY-LAWS of the SPIRITS OF ST. LOUIS R/C FLYING CLUB, INC.

 Signature Date: _____ Family Member Signature Date: _____

Membership rejected if not signed and dated, or AMA card NOT VALID FOR YEAR APPLIED FOR!

Spirits Web-site Address is: <http://spiritsofstl.com>

Place AMA card here when photocopying

Place AMA card here when photocopying

AMA "Introductory Membership" Program NOT VALID for membership to our club!

FLIGHT LINES

2011 SPIRITS CONTEST AND EVENTS SCHEDULE

Date	Contest/Event	Contest/Event Director	Notes
Jan 1	Annual New Years' Day Fly-In	All	10:00 A.M. to 2:00 P.M.
Spring	Tailgate SWAP Meet at Field	All	Date TBD
April 23	Four-Star 40/Warbirds	Paul Geders	Field Open to General Flying until 10:00 or 10:30 A.M.
May 22	Scale Fly-In	Curt Milster	This is a Sunday Event and Field is also Open to General Flying
June 25	Helicopter Fun Fly	Tom Foster/Kevin Cordell	
July 16	Four-Star 40/Warbirds	Ron Hesskamp	Field Open to General Flying until 10:00 or 10:30 A.M.
Aug 7	Electric Fly-In	CD TBD	This is a Sunday Event and will be Open to General Flying after 2:00 P.M.
Sept. 7 or 8	Meeting at Field	B of D	Member Appreciation Dinner
September 24	Open House	Committee	
October 1	Helicopter Fun Fly	Tom Foster/Kevin Cordell	
October 8	Four-Star 40/Warbirds	Steve Cross	Field Open to General Flying until 10:00 or 10:30 A.M.



FLIGHT LINES

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

www.spiritsofstl.com

**Meeting is on
Thursday,
January 13,
at 7:00 P.M.**