



# FLIGHT LINES

*The Monthly Newsmagazine of the Spirits of St. Louis R/C Flying Club*

# HAPPY NEW YEAR!

## **Spirits of St. Louis RC Flying Club**

*Monthly Meeting Minutes for January 8<sup>th</sup>, 2019 by Paul Geders, Secretary*

**President Ralph Grant:** Meeting called to order at 7:00 p.m. by the President.

### **Attendance:**

22 members were in attendance.

### **New Member(s):**

No new members.

### **Secretary's Report:**

*Paul Geders, Secretary*

A motion was made, seconded and voted to accept the December meeting minutes as published on the Spirits website under 2018 December Flightlines Newsletter link.

### **Treasurer's Report:**

*Ralph Grant, Treasurer*

- 1) For December, income was \$4500.00. Expenses were \$105.72. A motion was made, seconded and vote taken to accept the Treasurer's Report.
- 2) Motion to remove Gary Pyles name from bank account was unanimously approved.
- 3) Ralph Grant will work on an "emphasis on assets" with the VP (Greg) to determine what assets we have and which ones require budgeted maintenance.
- 4) Ralph Grant and Steve Cross will be having lunch with the Ostmann's.

### **Field Committee Chairman's Report:**

*Dave Brown, Field Committee Chairman*

- 1) Dave Brown rolled the field to compact the mole tunnels.
- 2) Ralph Grant indicated that additional gravel for the road and parking lot will be applied in the spring at no cost to the club.

### **Safety Committee Chairman's**

*Sid Kinzel, Safety Chairman*

- 1) No incidents or accidents at the field.

### **Membership Chairman's Report:**

*Ralph Doyle, Membership Chairman*

- 1) Current 2019 membership is 72 including 3 new members.
- 2) 65 members were eligible for the drawing for free membership in 2019. The winner was Jim Elkins...Congratulations Jim!

- 3) **Click below for access to our [Membership Application \(s\)](#)**

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## Upcoming Spirits Events:

- 1) **Dave Brown's Indoor Fly-in; January 26<sup>th</sup>, 2019, 8:00 a.m. to 12:00. No Entry Fees.**



[Click to Enlarge](#)

- 2) **Local Aviation Museum Tour:** Greg Bowles is working on a tour of the Historic Aircraft Restoration Museum at Dauster Flying Field, also known as Creve Coeur Airport.

## Upcoming Local Events:

- 1) **SLRCFA Friday Night Indoor Flying; November 3<sup>rd</sup> thru March 29<sup>th</sup>; 6-9:00pm;** Central Baptist Church, 601 N. Central Ave., Eureka, 6:00-9:00 p.m.; \$5.
- 2) **Old Business:**
  1. Bob Gizzie suggested method to increase our membership by looking into having an area set aside in the southwest side of the pavilion for RC cars. This will be one of the subjects of discussion with the Ostmann's by Ralph and Steve Cross.
  2. Trailer has been legally transferred to Bill Lindewirth on MO Form 5049.
  3. Ralph Grant, Greg Bowles, Babe Raab (Safe Deposit Box Key Holder), and Bill Lindewirth are signatories on new account access cards at Reliance Bank.
  4. Monthly Meeting Topics continue...

**January - Vapor Pylon Racing** By a drawing O'Neil Galbraith and Michael Grau took home the Vapors donated by Ralph Grant.



Wyatt Grant flying his Mini-Vapor with the battery hanging down...didn't stop him!



Vapor cruising...

**February** - It's cold outside and the only flying we get in is online. Send your favorite aviation related website links to [Ralph Grant](#). We will have a projector and computer at next meeting to view them as a group!

**March - Training Program Brainstorming** Let's talk about what would make a great training program.

**April - Turbines** Steve Collins has been flying turbine powered jets and he will bring in a jet and talk about getting started

**May - Smoke on!** Ralph Grant is putting smoke on his latest Extreme Flight plane with a DA 30CC gas engine. Here is what he has learned.

**June - Construction techniques** for FMS style foam airplanes/warbirds.

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**July – Foam board Airplanes** There are several members that build Flite-Test type foam airplanes.

**August – National Model Aviation Day!** Membership appreciation! Fun Fly!

**September – FPV** Bring in your FPV flyer and share with the club the ins and outs of First Person View. **Nomination of Officers**

**October – Tether Cars** Several members (Paul and Walt) have been racing Tether cars. They will bring a couple and show the club what they have been up to. **Nominations Published.**

**November – New Officers in Office**

**December – Christmas/Holiday gift ideas**

**Couple of additional suggestions were made:**

1. Discuss how to program/setup different type radios. Such as; V-tail, crowing, flap to elevator, elevons, etc.

## New Business:

- 1) No new business.

## Technical Presentation(s):

1. Last month a member asked about the tuning/adjusting of nitro and gasoline engines. See “How to adjust a ‘2-needle’ RC Carburetor”, and “How to Adjust a Gasoline RC Engine Carburetor” at the end of this newsletter.
2. Darrell Youngman showed his Hot Shot 4WD off-road car. Cost \$200.00.

**Photos were captured by Greg Bowles.**



The box it came in...in case you want one.

3. Wyatt Grant showed and discussed his school science fair project that used a Flite-Test Tiny Trainer HLG. He tried 3 different wings that had thin, medium and thick airfoils with same weight and planform. He wanted to know which wing would fly the farthest...the thin wing ended up winning by 3”!



4. Paul Geders displayed and discussed his Avios C-130 Hercules. It weighs 5.3 lbs., uses four 18 Amp ESC's, a 2200 mAh 14.8 V battery!, wingspan of 63” and has 14 servos. Cost was \$328.82 from HobbyKing.



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Gear up and lit up!

5. New member Jeff Tanner presented a T-28 Trojan that was setup to be completely autonomous. Free mission planning software to control it was installed on his Microsoft Surface tablet. It will be able to fly by inputting waypoints, etc. It will also be able to return to take-off point without any transmitter control inputs. Truly autonomous!



Jeff and his autonomous T-28 Trojan



Look at all those wires!

**Meeting adjourned:** 8:33 p.m.

### New Year's Day Frozen Thumbs Fly In:

by Greg Bowles. Thanks to all that participated in the 2019 Frozen Thumbs Fly-In (January 1st). 25 - 30 pilots were in attendance, and quite a few

spectators braved the cold and wind. "SPECIAL" thanks goes to Dave ("Workaholic") Brown for wrapping the pavilion as a wind break and providing the most appreciated heating. Even though a call for help went out to the members to help in the setup, it was completed by Dave, as usual, before we all showed up at 8:00 a.m. Another thanks to Dave Brown and Curt McIntyre for providing the delicious Chili, Coffee, Curt's killer Hot Chocolate, Paul's Donuts, PG's Cheese & Meat Platter and cold beverages were also provided. (Mark Livesay we missed you and hope you get better.)

Dave Brown was the first in the air at 9:00 a.m., and unfortunately Ralph Grant was the first to crash. Hopefully, all had a good time and enjoyed their first flights for the New Year! Photos by Greg Bowles



The early birds...



We even had some Christmas decorations...

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Babe Raab has an “oops” moment, while Rich Taylor, Dave Brown Ralph Grant and Jeff Becker were the first to bore holes in the overcast sky.



The line-up prior to take-off!



Ralph and Steve performing an autopsy! Diagnosis indicated that a clevis on the pull-pull cable driven rudder came open, driving the rudder full right.



Proud Dad sharing the day!

**Been Thinking:** Looking back on articles written by Walt Wilson, our former Secretary and Newsletter Editor I couldn't help but want to reprint the following from August 2003 Flight Lines. Walt's article below appeared in other club newsletters all around the world.

### **The Last Word**

*By Walt Wilson*

In most clubs, virtually all the work necessary to keep the organization going is done by a small percentage of the membership. The Spirits are no different. Whether it's being the Field Chairman, grass cutting, being the Activities Chairman, a Contest Director, a Board of Directors member, maintaining a club web site, being President, Treasurer, Secretary, or Newsletter Editor, we are ALL volunteers. The pay scale is the same, zip. Most members who have never been involved in any of these jobs have no appreciation of the effort that goes in to doing them. Many club members have no idea who does what for the club. Some seem to think it all happens automatically and, since they've paid their dues, they're entitled to a free ride in all other respects. The people who recognize and assume the responsibilities do so for a variety of reasons. Most want to do something to feel like they're doing their share to support the club. Some have unique skills that enable them to make special contributions. As long as the volunteers do their jobs, the people who recognize what they're doing appreciate and,

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occasionally, thank them. Whatever the reason, eventually the workers will feel it's time to move on and let someone else carry the ball for a while. Maybe they're burned out, tired, have developed physical problems, or have family or business responsibilities that precludes donating the time necessary to do a club job. Maybe they feel that they've done enough. Eventually, all will quit doing whatever they do. If you don't think that being a club officer takes its toll on time and patience, think about how many past Presidents are still active members of the club. Of those who are, how many are willing to be

President, or hold any office, again? Appreciate the people who spend their time making your club work. Pat them on the back occasionally. Don't resent them when they quit doing it. Ask yourself if you would have done that job?

### **Next Spirits' Meeting:**

***Tuesday, February 12<sup>th</sup>, 7-9pm***

***Dorsett Village Church***

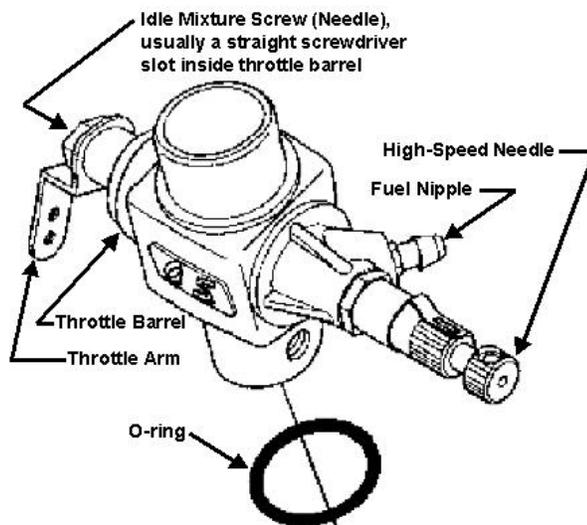
***2240 Bennington Place***

***Maryland Heights, Missouri 63034***

See website <http://spiritsofstl.com> for directions

## **How to adjust a "2 needle" RC Carburetor!**

*by Paul F. Geders*



Above is a typical "2 needle" RC carburetor without a "throttle stop screw".

Typically, carburetors come from the factory close to being pre-set.

If you have torn down your carburetor for a thorough cleaning, examination, or you just want it to run right, here's a good starting point. With the throttle barrel in the full open position close the high-speed needle until it stops. Don't gorilla it. Then, back it out three turns. Now, with the throttle barrel almost closed do the same thing with the idle mixture screw. This is your baseline.

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Also, some carburetors have a throttle stop screw. Typically, we set these so that the air hole in the carburetor barrel completely closes off against the stop screw. This is so we can shut the engine off at full low throttle trim.

When adjusting some idle mixture screws the carburetor barrel wants to rotate and get pushed inward which makes it a little difficult to get a good setting. All you have to do is lock the throttles arm so it can't rotate or go in while you are adjusting the idle mixture screw.

Ten steps for adjusting just about any 2-needle carburetor.

1. Start the engine and go to full power.
2. Set the high-speed needle to maximum power and back off about a  $\frac{1}{4}$  to  $\frac{1}{2}$  a turn.
3. Go back to as low an idle as you can achieve.
4. Be careful and turn the idle mixture screw in until the engine stops. While the engine is off back the idle screw out  $\frac{1}{2}$  to  $\frac{3}{4}$  turn.
5. Restart the engine at idle.
6. The engine should be idling pretty well.
7. Reset the high-speed needle to maximum RPM using a tachometer and back off 200-300 RPM.
8. Return to idle, and let the engine idle for about 15 seconds.
9. Quickly move the throttle to full power and listen to the transition from idle to full power. If it instantly goes to full power you're done.
10. If it hesitates or sags just a little...it is too lean still, back out just  $\frac{1}{4}$  turn. Repeat step 9.

When you are all done, at about  $\frac{1}{2}$  throttle trim setting on transmitter you should be getting a great idle, a good fast idle at high throttle trim, and be able to shut the engine off at full low idle trim.

That's all there is to it!

The above is also on our web-site under Collection of Interesting Things along with a lot of other information...[Click here.](#)

## **How to Adjust a Gasoline RC Engine Carburetor**

*by Paul F. Geders*

Most gasoline powered RC engines come with either a Walbro brand carburetor or a clone of one. These carburetors are very easy to set up. The key is the starting position of the High and Low mixture needles. The High and Low speed needles are usually marked with an H or L next to the adjusting needle. Start by closing both needles by turning clockwise. Do not overtighten. Open the Low speed needle 1 and  $\frac{1}{4}$  turns. Open the High speed needle 1 and  $\frac{1}{2}$  turns. This is the factory recommended initial settings.

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Now start the engine...it should be running pretty good. Remember that "L" low speed needle adjustments will affect high speed operation. Using a tachometer go to full throttle and reduce the wide open RPM by 100 RPM by richening the high speed needle CCW. Always wait about 10 seconds after a needle setting change as the carburetor needs to stabilize as it makes internal changes.

The engine will run its best if both the low and high speed needles are lean which you can hear as you turn them in by an increase in RPM. If the engine sags you are too lean. These engines do not perform well if set on the too rich side. An ideal setup is that you should be able to rapidly advance your throttle stick from idle to WOT and back down without hesitation or a flameout!