

Flight Lines

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

"Celebrating 50+ Years - Established in 1965"

July, 2017

FROM THE PRESIDENT:

July was HOT but it didn't seem to keep people away from the field. Most folks seemed to bring plenty of water, bug spray, and sunscreen and it was on with business as usual. We've had a couple of really fun Warbird nights with dead calm wind. Fire up those warbirds and come on out! Dave Brown and I haven't missed a single one and we have been having a blast defending Spirit's field from the enemy! The Info-AG event was a success with about 50-60 attendees present to see flight demos and discuss various topics. Several of us were on hand to represent the club. Simple events like this have become a nice source of income for the club and \$250 was deposited in the coffers as a thank you for use of the field.

Membership is holding steady at 135. Ralph Doyle say's, "Remember, you can join now and for a nominal fee of \$20 bucks, you're good for 2017 and 2018"!

If your interested in high energy pattern aerobatic flying or just an amazingly fast sport plane, check out my article on the Extreme Flight Pantera. Vrooom! You can also take a trip down memory lane with Babe Raab and his "Hanger Queens" which were built in a simpler era when men were made of iron and planes were made of balsa! I doubt people will be writing articles about foam planes in 30 years!

Next month, I will continue my article on Refinishing that Foamie with part two of the three part series. I didn't get to it this month since my Flightline 1600mm Spitfire Mark IX came in. I spent my painting energy putting

NEXT MEETING:

Join us 7:00 on Tuesday, August 8th, 2017 back at Bridgeton Trails Library.
3455 McKelvey Rd., Bridgeton, MO
63044.

Tentative Agenda:

- Meeting Minutes Review
- Secretary's Report
- Treasurers Report
- Field Committee Report
- Membership Chair Update
- Flight Safety Moment
- 2017 Event Discussions
- Technical Presentations

invasion stripes on it. I'll do an article on that bad boy next month too if I get a chance to maiden her.

National Model Aviation day is on August 12th. Swing by the field for some flying and a cookout to celebrate. Yours truly will man the grill and I'm thinking pork steaks will be on the menu.

Remember, introduce someone new to flying today!



Happy Flying!
Ralph Grant (2017 Spirits President)

JULY 15TH RACE EVENT:

By Steve Cross (Event CD)

Five pilots registered for the races on this day, however, one of the pilots became ill upon arriving at the field and was unable to race.

The remaining pilots then voted to cancel the races for the day due to the limited number of pilots and the heat. The field was then opened for general flying.

Our next race will be on September 16th. Lets see if we can get some electric warbirds out there to run around the pylons! Ralph Grant will be donating the Spitfire for that race so come on out!

This Flightline 1200mm Spitfire pictured below (About a dozen flights) will be donated for use in a drawing for volunteers



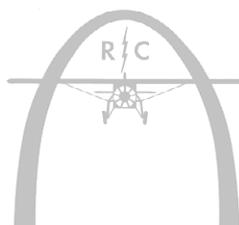
and new warbird race pilots!

SAFETY COMMITTEE REMINDER:

By Steve Cross, Safety Chairman

Several safety issues have recently been observed. Please make sure the following guidelines are followed:

1. Your Spirits membership card is required to be placed on the frequency board any time you are flying.
2. The field is closed and no flying is allowed anytime someone is on the field to perform maintenance or other activities including, but not limited to, grass cutting, putting up or taking down the racing pylons and repairing or replacing the windsock. Flying may continue if a pilot announces they are going onto the field to retrieve their aircraft, but please fly in an area away from the person retrieving their aircraft until they announce they are off the field.
3. When there are pilots at the Flightline and you are taxiing out to the runway from behind the pilots, please announce to the other pilots that you are approaching on the left or right and in which direction you intend to take off. Also, please stand at one of the designated pilot stations....do not stand behind a pilot already at one of the pilot stations.



MONTHLY MEETING MINUTES:

By Greg Bowles, Secretary

(Note: This was the first meeting held at the remodeled St. Louis County Library/ Bridgeton Trails Branch.)

President, Ralph Grant called the meeting to order at 7:03pm.

Attendance:

14 members were in attendance.

New Member(s) in Attendance:

Mike Dunker has been checking out our club and is interested in learning to fly.

Dan Zvorak is also interest in re-learning to fly. He was a past member of the Phantom Flyers and wants to get back into the hobby. Welcome to the Spirits!

Secretary's Report:

Greg Bowles, Secretary

A motion was made, seconded and voted to accept the June meeting minutes as published in the 2017 June "Flight Lines".

Treasurer's Report:

Bill Lindewirth, Treasurer (Not Present)

Field Committee Chairman's Report:

Paul Geders, Field Committee Chairman

1. We have installed "NO TAXI" stencils in the pit areas and a "START TAXI" stencil at the concrete culvert.
2. The training Helipad was covered with limestone screenings and we are awaiting delivery of the 8 oz. fabric - Non Woven Geotextile Underlayment.
3. The field is always closed for mowing from 1:00 to 5:00 pm each Thursday (Weather permitting). There is no flying while the field is being mowed!
4. The board voted not to change our Port-a-Potty out for a handicapped accessible one.
5. The broken Bradford Pear tree/bush has been trimmed to allow one sapling to grow back. Thanks to Bill L. & Ralph D.
6. New recommendation #1: To extend the life of the newly purchased "Lawn Chairs are to be Stacked Under the Pavilion when Not in Use".

7. New recommendation #2: "Please Do Not Sit on the Plastic Flight Tables". Someone sat on one and now it is swayback.
8. When you are the last person to leave the field, please close and lock the gate. And if the gate is closed, PLEASE don't drive around it. Members are still leaving the gate open!
9. If you are using the charging tables, please remember to close the electrical box covers before leaving.
10. Non-members are still flying at the field. Please place your membership card on the Frequency Board when you are flying. If you suspect someone is not a member, politely ask to see their card and remind them they have to be a member to fly at our field.

Safety Committee Chairman's Report:

Steve Cross, Safety Committee Chairman (Not Present)

"Have Fun. Be Safe."

1. Per the FAA, your registered number is no longer required to be placed on your aircraft (at this time). The AMA still requires you to place your name, contact information and AMA number inside or outside of your aircraft.
2. Ralph Grant mentioned, that he also places a note inside or outside his electric powered aircraft, stating that it contains a Li-Po battery which can be a fire hazard. This might be a good policy to follow if you have one get away.
3. With summer temperatures and humidity rising, be sure to drink plenty of water. Please Read the flyer on the bulletin board listing the warning signs of Heat Stroke and Heat Exhaustion. If you have an aircraft go down off the field, 1) inform someone you are going to off the field, 2) take a long marker pole and 3) take a "walkie-talkie" with you.
4. We are still having incidences where are members are not familiar with our revised safety rules. If you are a new or existing member, please review the revised Safety Rules posted on our website and at the field. Safety is your responsibility!
5. Non-members are still flying at the field. Please place your membership card on the Frequency Board when you are flying. If you suspect someone is not a member, politely ask to see their card and remind them they have to be a member to fly at our field.
6. If you are new and are seeking instruction, contact

Ralph Grant at ralph@thegrantz.com. Please provide information on your aircraft, times & dates available, transmitter type, experience and contact information.

Membership Chairman's Report:

Ralph Doyle, Membership Chairman

Our membership is presently at 134 members. If you are a new member, and join the club in August, the cost is \$170 for the remainder of 2017 and 2018.

Contest/Event Committee Chairman's Report (Position Open).

Upcoming Spirits Events:

- 2017 Wednesday Night Warbirds schedule (formerly Tuesday Night):

August 9th Pylon Racers
August 23rd "Dawn Patrol"
September 6th "British Invasion"

- 2017 AMA National Model Aviation Day/Fun Fly, Saturday, August 12th. 9:00am -2:00pm. Quad racing, Soaring Challenge, etc.
- 2017 Annual Heli Fun-Fly Extravaganza, Saturday August 26th, 9:00-Dusk.
- 2017 Membership Appreciation Dinner & Nomination of 2018 Club Officers; Tuesday, September 12th, 5:00-9:00pm.
- 2017 Four-Star 40, Unlimited Electric Warbirds & High Wing Trainer Racers event schedule:
Saturday, September 16th, 9:00am-2:00pm; Open (CD). Cut Judges and Counters needed. Ralph Grant is donating 1200mm Flight Line Spitfire as a 1st place prize for the Unlimited Warbirds.
The \$5 entry fee for the event was eliminated by a vote of the attending members.

Upcoming Local Events:

SLRCFA Indoor Flying – Every Friday 6-9pm; Eureka Central Baptist Church, 601 North Central Avenue, Eureka, MO; \$5 & current AMA required.

Wright Flyers Innsbrook Float Fly – Saturday,

September 2nd; 9:00–12:00am; for directions see wrightflyersrc.com website, email information@wrightflyersrc.com or contact Bill Moran 314-952-8542

Technical Presentation:

Checkout www.warbirdpilots.com for scale pilots. No presentations at this time.

The meeting adjourned at 7:53pm.

Next Spirits' Meeting:

Tuesday, August 8th, 7:00-9:00pm
St. Louis County Library/ Bridgeton Trails Branch, 3455 McKelvey Road, Bridgeton, Missouri.

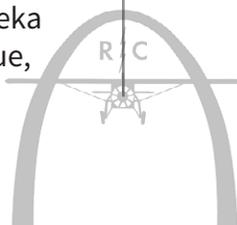
2017 Monthly Meeting Schedule:

- Tuesday, September 12th
- Tuesday, October 10th
- Tuesday, November 14th
- Tuesday, December 12th

ARTICLE & PHOTO SUBMISSIONS:

By Ralph Grant, President / Newsletter Editor

If you have an idea for an article or technical piece, please contact any of the officers and we will do our best to provide it. If you would like to submit an article, all you need to do is provide the text via email and a few pictures, we'll do the rest to make it "Pretty" for you. I know there is a ton of knowledge out there so please, share it with the club members. Don't forget to submit your photo's to the club as well! Just email them to ralph@thegrantz.com and I'll include them in the newsletter.



BABE'S

HANGER QUEENS

Text by Ralph Grant and Photography By Babe Raab

We all have 'em and they almost always stand the test of time because they occupy a special place in our hearts or remind us of another era of our lives. Often they are dedicated to special people or represent an important event.

Long time spirits Member Babe Raab has shared a couple of his self proclaimed "Hanger Queens" with us here.

THE COMET CLIPPER:

Babe thinks this old timer design made its debut around 1939. Babe constructed her around 1989 and it has never touched the sky. He bought the ribs so he didn't have to cut them out and scratch built the rest. The Spitfire like flying surfaces were what drew



him to build her. Its a simple flying design of Rudder and Elevator only. The name of the covering is a mystery but it was an iron-on material that resembles silk span. It was obviously good stuff because it has never wrinkled or sagged during its almost 30 year existence! Babe is hoping to turn her into an electric flyer someday and let her live among the clouds like she deserves!

THE FOKKER DVII:

This beauty was scratch built from plans and has never seen the sky, let alone the great war.



It was built to honor of the Waltersam brothers who helped Babe tremendously when he was a teenager and the cockpit is proudly adorned with their names. Babe says the pilot sports a cigar just like Rudy Waltersam always had. This



model is the RC version of a control line model that Rudy built. Rumor has it that George Cooper built one from the same plans but we don't know if it is still around or ever flew.

Thanks for sharing these planes with us Babe, I'm quite sure that the Waltersam brothers would be proud!

2017 EVENT CALENDAR

DATE:	TIME:	DESCRIPTION:	CD/ SPONSOR:
Aug 09	5:30 - Dusk	Wednesday Night Warbird Fly-In: Reno Racers	Ralph Grant
Aug 12	9:00 - 2:00	National Model Aviation Day: Fly-In / Fun-Fly	Committee
Aug 23	5:30 - Dusk	Wednesday Night Warbird Fly-In: WWI / Dawn Patrol	Ralph Grant
Aug 26	9:00 - Dusk	Annual Heli Fun-Fly Extravaganza (AMA Sanctioned) - Volunteers Needed	Jason Cummings / Steve Cross
Sept 06	5:30 - Dusk	Wednesday Night Warbird Fly-In: British Invasion	Ralph Grant
Sept 12	5:00 - Dusk	Meeting / Membership Appreciation Dinner	Officers and BOD
Sept 16	9:00 - 1:00	Four Star 40, Warbirds, and Trainer Pylon Races Volunteers Needed	Ralph Doyle

Calendar was approved at the March Meeting. If you have an event you would like to sponsor, just come to the monthly meeting and let us know!

STAN NEEDS OUR HELP:

By Ralph Grant via SLRCFA

Long time fellow Flyer Stanton "Stan" King broke his neck in an accident 33 years ago and is a quadriplegic. Stan obviously needs a wheelchair to aid in his mobility and a vehicle suitable to transport him to and from the flying field. Recently, the wheelchair lift on his Van failed and parts are no longer available. Stan is in need of a NEW wheelchair lift in order to get from A to B and the total cost is \$11,000. If you have the means and would like to donate to his cause, it would be greatly appreciated.

Personally, I haven't had the pleasure of meeting Stan, but you can be sure that I will do my part to help a fellow flyer.

If your so inclined, donations can be made at the link below:

[CLICK HERE TO HELP STAN](#)

I can also accept cash donations at the Model Aviation Day Fly-In on August 23rd, 2017 at Spirit's Field.



THE EXTREME FLIGHT-PANTERA

Text and Photography By Ralph Grant

INTRODUCTION:

If you are excited about "Gigantic Big Sky High Speed Aerobatics" then this bird is for you! Anyone who knows me is aware that I cannot get enough of Chris Hinson's Extreme Flight Birds and this one is no exception!

QUALITY, FEATURES, ETC:

Everything about this plane is 100% quality:

- Ample Use of Carbon Fiber
- Fantastic Oracover Job
- Awesome quality fiberglass cowling and matching wheel pants



SPECIFICATIONS:

Here are the details of the setup I configured.

Wingspan: 52" **Length:** 51.5"

Wing Area: About 300-400 in²

Weight: 4.7 lbs with Battery

Motor: X-Power T3520 (900KV) 6S monster.

ESC: Castle Talon 90 (My goto ESC now)

Batteries: Pulse 3700 mah 60C

Propeller: APC 9x9

Receiver/Radio: Futaba R7008SB / 18SZ

Telemetry: Futaba Current, GPS, Motor Temp.

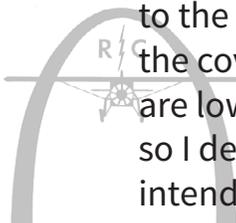
Servos: Hitec HS-70MG digital high torque

Flight Stabilizer: Bavarian Cortex Demon

Total Cost: ~\$600 w/out gyro and telemetry.

- Great Hardware
- Totally designed for speed!

The only negative I have with the kit is that they provide the EXACT number of fasteners which can be a problem with those fat sausage fingers that we all have during those late night building sessions. You drop a screw under the workbench on this bad boy and your going to the hobby shop. No extra's. Although the covering job is awesome, the graphics are lower tier if your used to Callie Graphics so I decided to leave my "Plane" Jane. Pun intended.



THE EXTREME FLIGHT PANTERA (CONTINUED)

BUILD TIPS:

This is my 5th Extreme Flight build and I've pretty much gotten to the point that they are a no-brainer. The one thing you notice about this plane is its ample use of Carbon Fiber reinforced plywood. The frame is super light and super strong. Extreme flight recommends that you use 18" extensions on your servos for the Rudder and Elevator but I would recommend going a little bit longer if you can. Also, one of the blind nuts for the landing gear was stripped which caused me to have to cut through the bottom of my awesome covering to repair it. Other than that, the build was pretty much a non-event.

This plane had several steps outlined in the manual that were basically "Imperatives" that cannot be bypassed. The liberal use of **BOLD** and **DO NOT OMIT THIS STEP** or **THIS IS VERY IMPORTANT!** made you extra diligent on items like the following:

1. Sealing the gaps on all surfaces with Blendederm tape.
2. Installing the baffling in the cowl to force air through the motor.
3. Putting cooling holes in the bottom of the cowl.

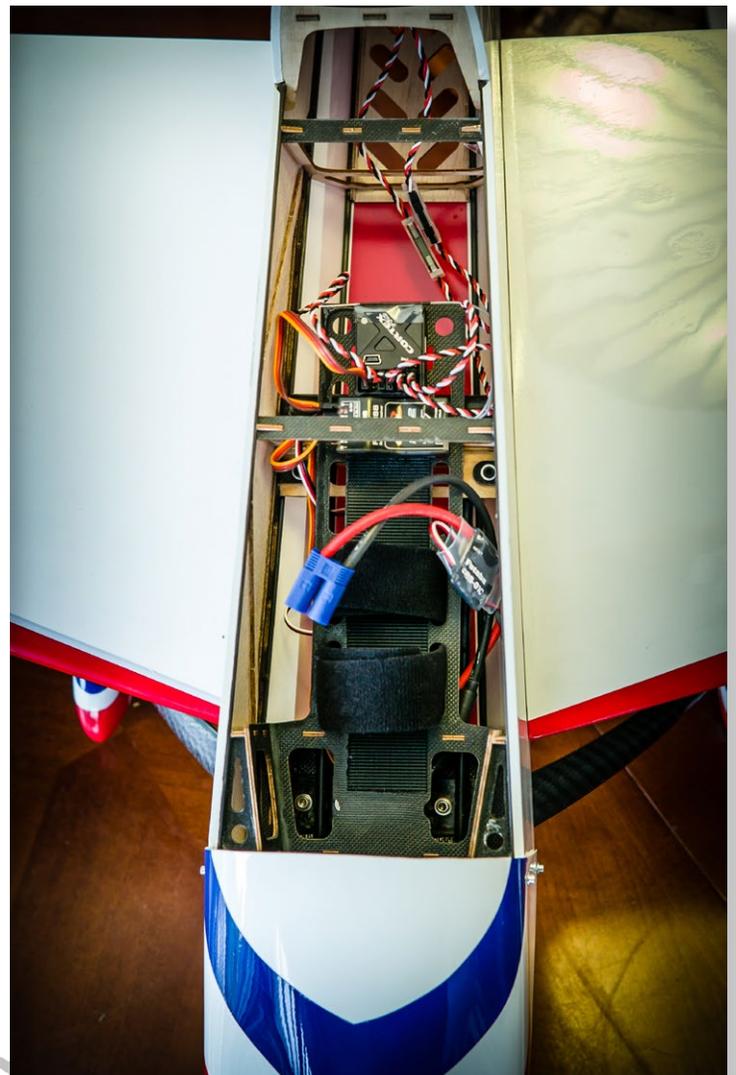
POWER SYSTEM:

The power system in this bird is insanely oversized for the plane. Obviously, when your goal is 130mph+ you need the horsepower to get there. The X-Power T3520 (900KV) motor running on 6S is going to twirl that propeller at almost 22,000 rpm's. The APC 9x9 propeller screams at you and pulls 104 amps static on the ground at full throttle. On the climbs and going through the paces in the air she pulled about 88 amps. Lets face it, 2200 watts pulling a 4.7lb plane is INSANE power. This plane will

go straight up at 100 mph all day! One note, the manual has recommended settings for the Castle ESC so I programmed it from my PC per their recommendations. Also, that 20,000 rpm was weighing heavily on my mind so I made sure to balance the propeller with extra love and attention.

SETTING UP THE PANTERA:

I set this bird up with 3 different rates on the throws. The idea is that at low speed you are on high rate and at high speed you are on the lowest rate. Even at high rate, there is no surface that has a greater throw than



25degrees and the expo ranges between 25-40 on the Futaba. It looks very odd to see such tiny throws and pretty small surfaces when you

THE EXTREME FLIGHT PANTERA (CONTINUED)

usually are setting up 3D and aerobatic planes at 90 degrees! I've come to respect the boys at Extreme Flight and pretty much do exactly what they recommend as far as throws and CG go. I setup the Bavarian Demon Cortex Gyro in Normal mode and started the gain at a setting of 20 and programmed it so I could adjust it on the fly. I also took the liberty of programming a switch on the 18SZ to have it say the speed of the aircraft and the amount of total current left in the battery repeatedly until I turned it off. I also set a vibration alarm at 400' on the GPS although I rarely fly my birds much over 150'.

FLYING THE ROCKET SHIP:

I got to the field and it was pretty busy since the weather was 80 and overcast. I dropped a battery in her, did a quick range check, and



taxied to the runway. I slowly added power and it tracked straight down the center of the runway and lifted off nice and scale with ZERO rudder input thanks to the Demon. I know it sounds cliché but I didn't put a single click of trim in her, mostly thanks to the Demon. The Pantera is completely capable if any pattern ship maneuver you want to throw at her, and I did just that, only at the speed of a bullet and at half throttle! After about a minute of getting to know her, I felt as comfortable as if I'd been flying her for years so I decided to see how fast I could taunt her to go. I went out as

far as I dared and set her up for a long flat pass across show center. I flipped the telemetry switch to "on" during the turn and gradually pushed the throttle forward. The 18SZ began reporting, "75mph, 89mph, 105mph, 122mph, 126mph" and I ran out of field so I pulled straight up. The 18SZ continued, "102mph, 102mph, 106mph!" This plane climbed straight up while doing aileron rolls and continued to accelerate at greater than 100mph! My vibration alarm went off at 400' and I blew right past it! I gently pulled the power back and rolled her over on her back and then gradually pushed the throttle forward and rolled upright, diving toward me. "97mph, 108mph, 128mph, 133mph, 139mph", so I cut the throttle and started pulling back on the elevator. The sound of the air rushing over the planes surfaces when it screamed by was awesome! At the 4 minute mark, I lined her up for landing and she greased in straight down the runway with a gentle touchdown. When I got her on the ground, I was amazed to see that some of the Oracover trim was dangling from the left wing like a streamer! I checked the data on the radio after returning to the pits to see how high I had climbed in a blink of an eye and the GPS said that she went to 670' (Shhhh, Don't tell Geders).

CONCLUSION / SUMMARY:

This is without a doubt the most awesome big sky aerobatic sport plane and the fastest and best flying pattern machine that I have ever flown! The price was a little steep but it was totally worth it. I can't wait to iron the trim back on the cover and take her out for another adrenalin rush at the field. If you want a crazy fast sport plane, get yourself a Pantera and join me! Stay tuned, there is a new Extreme Flight FW-190 Butcher Bird in the basement that I need to put together next! If time allows, maybe I'll do a review on it next month!

Spirits of St. Louis RC Flying Club

WEDNESDAY NIGHT WARBIRDS

JULY 12 - "JUGS" (P-47) & "TIGERS" (P-40)
JULY 26 - MULTI-ENGINE
AUGUST 9 - PYLON RACERS
AUGUST 23 - "DAWN PATROL"
SEPTEMBER 6 - "BRITISH INVASION"

1600 HRS. (4:00 pm) to DUSK

Free to Spirits Members,

\$5.00 landing fee for everyone else with a valid AMA Membership.

Don't have a warbird? Put Stars and Bars on your trainer and come fly! Static aircraft welcome.

**73 Amrein Road
St. Charles, MO
63303**

Find us using Google Maps,
MapQuest or your GPS
using the address above.

Hwy 94 & Pitmann Hill & Mid Rivers (10 Minutes)
South on Pitmann Hill Rd, it crosses the Katy Trail
and turns into Greens Bottom Rd
Turn right on Amrein Rd.
About 1 mile down on your right

Hwy 94 & Jungs Station (10 Minutes)
South on Jungs Station, it crosses the Katy Trail
and turns into Greens Bottom Rd
After Chalks Hill intersection, turn left on Amrein Rd.
About 1 mile down on your right

