

Flight Lines



Inside... coverage of June's events

Midwest **AUTO-GYRO** Fun-Fly and Summer Helicopter Fun-Fly

Photo by Gary Pyles

Monthly periodical of the Spirits of St. Louis R/C Flying Club, Inc.
AMA Charter No. 396, our 48th Year, a Gold Level Leader Club



Stuff

by: Gary Pyles

Can you really talk about anything that occurs in late May and early June in St. Louis without discussing the weather? Personally, I don't think it is possible.

Last year our Spring weather produced a tornado that wreaked havoc on the St. Louis Airport. This year the severe weather was much closer to the field and many members and their families were affected by the storm of May 31, 2013.

According to the report I heard an F-3 tornado touched down in St. Charles County and stayed on the ground for 22 miles ending up somewhere around Earth City. It probably got as close as 1 1/2 to 2 miles from the field and the only damage we received was three run-up tables were flipped over, broke some legs and lost their wheels from the high winds.

The area along Pitman Hill Dr., Towers Rd., and Caulks Hill Rd. were devastated with downed trees, power outages and property damage. Meanwhile we took preparations for what seemed to be the inevitable flood that would cover our field.

A call to action on the morning of June 1st rallied a great group of members to help move all of the run-up tables, picnic tables, chairs and other items to higher ground. Special thanks to Mike Bien and Jeff Becker for the use of their trucks during the evacuation and recovery of our club's assets.

The water behind the levee rose 36"+ from noon on Sat. June 1st to noon Sunday. At its peak my best guess was the water was about 1 1/2 feet below the top of the levee. Far too close for comfort. I think we were very lucky in avoiding significant storm damage and flooding this year.

Despite the awful weather the Auto-Gyro event still happened, somewhat. Read about it later in the newsletter.

See you at the field.

Gary

In Memoriam Betty Westhoff

Betty Westhoff, wife of Spirits founding member Merrill "Westy" Westhoff passed away recently. As we loose another of our club's family our thoughts and prayers go out to Westy and his family.

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Cover photo taken at the Auto-Gyro Fun-Fly

Pages 9 through 17 are available in the PDF & Interactive versions only.



MEETING MINUTES

Meeting Minutes: June 12, 2013

By Dale Buchanan, Secretary

Meeting was called to order at 7:00 PM by President, Gary Pyles.

Attendance:

17 members were present.



Announcements:

Gary Graul will no longer be doing field maintenance. He has had a stroke and is going through some therapy. If you are interested in taking over the field maintenance please contact one of the board members.

Westy Westhoffs wife, Betty, has passed away. Westy is one of the five people that started the club charter. The club is sorry to hear about his loss.

Bob Wilson has passed away. The company that Bob worked for, JetCorp, took up a collection for Bob and they will be donating a park bench with a plaque to the Spirits club in Bobs memory.

There was no flooding at the field. The water level hit 33.8ft and the Corps of Engineers said we had about 2.1ft before topping the levy, if it holds.

New Members in Attendance:

Two new members were present. A motion was made to accept the new members.

Mark Niebrzydowski

Kevin Schulte

Secretary's Report:

Dale Buchanan, Secretary

Anyone that does not have an AMA Gold Leader pin can contact me, Dale Buchanan. I will also be giving them out at our events or whenever I'm at the field during the week.

A motion was made to accept the Minutes as published in last month's newsletter.

Treasurer's Report:

Bill Lindewirth, Treasure

Bill reports that the club is short of the projected level of income because we are about twenty members short of last year's membership. He also mentioned that the field rent is due in June.

A motion was made to accept the Treasury report as presented and the members accepted.

Field Report:

Gary Graul, Field Chairman

Gary was not present because of his health.

Gary Pyles mentioned that the blue and white posts along the parking lot could use a new coat of paint. He will get a work party together to take care of this issue.

Bill Lindewirth should have the field roller done in a couple of weeks.

The blades on the fans need to be installed. The blades are in the barn and the screws are laying on top the ring around the fan motor.

Mowing will be on Thursdays at 2:00. There will be no Flying when mowers are at the field.

Safety Report:

Russ Watts, Safety Chairman

Russ reports that there are no safety issues.

Membership Report:

Ralph Doyle, Membership Chairman

Ralph was not present. There are currently 149 members. When renewing or joining send a copy of your 2013 AMA card. NOT a copy of the temporary card.

Events Report:

Vic Bunze, Event Chairman

The auto gyro event had a few die hard pilots show up from California, Tennessee, Nebraska, and Louisiana. Unfortunately our field was about to flood and roads were being closed. The club would like to thank those who showed up even though the event didn't turn out as nice as it could have been because of the weather. There will also be pictures of the auto gyros on our website.

Vic says the Phantom Flyers is having a Blue Bulls Carrier fun fly on July 13th and a Sportsman pattern contest on July 27th.

continued on page 7

MIDWEST AUTO-GYRO FUN-FLY

by Gary Pyles

This year the Spirits were approached by a group of Auto-Gyro pilots looking for a central location to hold an event where pilots from this little-known sector of our hobby could come together and present their unique segment of radio control aviation. After consultation with the BOD and membership we agreed to host the event on June 1st and 2nd.

Some of you may ask why this needed to be a two-day event. Well, we had auto-gyro pilots make the trip from Tennessee, Nebraska, Louisiana, and California and it seemed like it was only right to make it a two day event. Things were looking good, the field was in excellent shape and then, as things usually do, something changed.

That change was our unpredictable weather. The week before the event we were inundated with rain to point of the ground being completely satu-



rated. In this condition any new rain simple runs down to the lowest point, our low-lying areas and fields.



On the Thursday before June 1st it looked like we might make it through the weekend and get the event off without a hitch. Unfortunately, Friday May 31st, had a different plan. The rains were relentless and then the tornado that tore through St. Charles County destroying hundreds of trees and causing untold property damage.

Several attendees were planning on making it in Friday night to start flying Saturday morning. Well, the weather did not cooperate and everyone inbound to the field hit multiple weather delays and that was only the start.

As the sun came up on June 1st and I made my way to the field by way of Pittman Hill Dr. the destruction caused by the storm along the way. Utility trucks trying to restore power and move branches were everywhere. People trying to cover their exposed roofs and missing house sections were hard

at work.

Joe Cole, auto-gyro pilot and really the mastermind of this event, was the first of the out of town guys headed for our event to show up around 9 AM. Throughout the morning Joe and I talked to the other pilots trying to get to the field. Intermittent road closures along Pitman, Towers, and Caulks Hill had our visitors detouring through sub-divisions and

obscure routes to the field. As all of this was happening we had a work party moving everything from the field to higher ground in preparation for a possible flood if the levee was breached.

I felt bad because we literally took the run-up tables away from our guests as they were trying to setup. Despite the weather, flood prep., and ensuing drama. There were still some



great auto-Gyro flights from some impressive machines.

Check out the Gallery on the Website to see some pictures of these machines in action. Joe also wrote a nice article that is in this newsletter's online version. I have a small Auto-Gyro of my own and after talking to Joe maybe I will get it setup correctly and have the courage to maiden it this summer.

Thanks to everyone that was there that day to help prepare for the flood and also enjoy these unique aircraft.



more pictures on page 12

June 22nd, 2013

by Tom Foster

What a great day it was. On Saturday the 22nd we ran our fourth annual Spring Helicopter Fun Fly and ended up with 38 pilots. Not too shabby for a local event. The rules were simple, everyone had to fly, eat, fly and win all while having fun, and no one failed!

As always all of our guests were treated like royalty by our great Spirits volunteers. I personally thank each and every one of you. The food was absolutely excellent and Sharon's cookies rocked as usual. Our sponsors both past and present never cease to amaze me with their extreme generosity.

I am truly taken back when I see what they do for us as a club and encourage each and every one of you to consider these sponsors when looking for new products for your projects. They truly care about us, our club and our hobby! Hearty thanks goes out to (in no particular order!) Scorpion, HeliDirect, Hobbico, Castle Creations, Futaba, ReadyHeli, and Boca Bearings.

This year we added an Auto contest that was truly entertaining. The idea was to land as close as possible to a marked area on the runway. Most creative auto goes out to Sam Sutter for his

amazing inverted flipping auto's. The very amusing event finished with Steve O'Connor taking the Crown with Jim Schuster in second and Pete Stephens rounding out third place.

We had a Goblin 500 helicopter kit for the grand raffle prize thanks to Team HeliDirect's Steve O'Connor and HeliDirect. The big winner was Arron Garcia. Congratulations Arron! The second prize, won by Ralph Doyle (Gene Jones accepting it for him at the event) was a Futaba 7-channel transmitter donated by Kevin Cordell and our friends at Hobbico.

Even with a little rain in the afternoon it didn't stop the flying but it did cool the air and made for a very pleasant afternoon. Thanks to all that participated and I can't wait to see what the Fall helicopter event brings.



PRESENTATIONS
TECHNICAL

Gene Jones brought in a Hobby King De-Havilland that is one of 500 produced. It has an 1100mm wingspan, 70mm fan and retracts. The ARF was \$129.95 from the USA warehouse.



Gene's Vampire

Vic Bunze brought in his Rush 750 Helicopter that he won at last year's heli fun fly. It flies on two 6 cell 5000mah batteries. It has an Align 750MX motor. He says the best place to get Heli information is on Heli-freak or RunRyder.



Vic's Rush 750

Dennis Skeeters brought in a couple of small additions to his collection of more than 500 RC engines. Very Impressive!



Dennis' Engines

Bob Bennett displayed a Twinstar that he converted to a Quad engine nitro powered airplane. He made the wing 80" long with 4 OS25LA motors spinning 9x5 props

with 4oz tanks for each engine. He thinks he will rename it a QuadraStar. This is an impressive build.

Check out more photos from all the presentations on the website gallery, "At The Meeting" and look for June.

The \$20.00 gift card from Mark Twain Hobby was won by Bob Bennett. Great job Bob!



Bob's QuadraStar



Thanks

Club members continue to be generous with their time, expertise and equipment. The latest donation to the club is from Stan Goldfader.



photos by Gary Pyles

ALL GEARED UP!

by Ralph Doyle

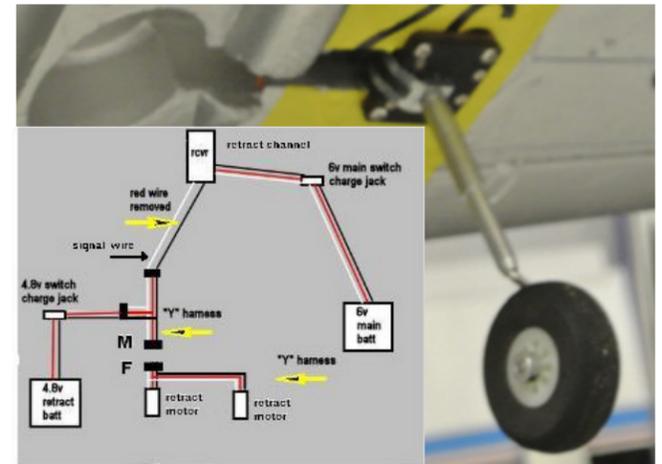
Do you own an ARF or any plane that has fixed landing gear and have ever wondered what it would be like to add retractable gear to it? So you grab a catalog and look in the ads and discover that the cost could be in the hundreds of dollars for pneumatic types depending on size and type, or mechanicals that are available in varying sizes at a reasonable cost. If you go the mechanical route, you have to consider the difficulty in installation since the wing (as with any ARF) has already been completed, and in some cases permanently attached to the fuselage. Then you probably will need to dicker with the adjustments in the push-rod length so that the retracts will cycle properly.

New on the market, as far as I am concerned, are electric retracts. I first saw them on the RTF foam planes that are becoming so popular. There are three popular sizes as far as I can tell. The miniature type that may come installed in the small park flyer foam planes, and two other sizes that support maximum weights up to 5.5 or 10.5 pounds respectively. There may be larger size retracts but then you are getting into quarter scale size planes and the cost starts to rise. Currently, the cost of the inexpensive electric retracts run about \$7.50 each for both weight sizes but you can get fancier ones that have built-in shock absorbers and/or the rotating type in the \$80 to \$120 range.

What do you also need to hook these rascals up to your receiver? I'll list what it took me to install a set of electric retracts in my .90 size airplane. For smaller planes the only cable(s) you may not need are the servo (motor) extension cables that would attach to the retract motors:

- 2 - servo (motor) extension cables (6" or 12" depending on length of wing)
- 2 - "Y" harnesses
- 1 - on/off switch (type with charging cable)
- 1 - extension cable (from receiver to wing, modified with plus side voltage wire removed)
- 1 - flight pack battery of your choice not to exceed 6 volts

Note on the diagram that you have to remove the positive voltage lead that comes from the receiver and goes to the retract wiring. If you don't remove this wire you are, in effect, wiring the two batteries in parallel and you don't want to do that. I included a schematic diagram of



the way I hooked up the retracts in my plane. I hope this schematic helps you with your installation. The schematic does not show the motor extension cables, as they may not be needed. As usual, any modifications are your own responsibility.

SAFETY CORNER

We have not seen it yet, but you know it is coming. That's right, St. Louis Summer. High Temps and even higher humidity. Don't over do it.

Take plenty of fluids with you to the field, wear a hat and sunglasses. Take advantage of the shade and fans in the pavilion. Remember, Never fly alone, and always bring a friend and don't fly when the field is being mowed!

Meeting Minutes: June 12, 2013

continued from page 3

Flight Training:

Stan Goldfader and Paul Geders have donated a trainer plane to the flight training program. The club thanks Stan and Paul for their donations.

New Business:

Name The Plane contest had five people that correctly identified all four aircraft for the month of June. Bob Gizzie, Vic Bunze, Paul Geders, Ralph Doyle and Dale Buchanan were the five people that correctly identified the aircraft. Vic Bunze was drawn as the winner. The prize was a \$20.00 gift card from Mark Twain Hobby and a set of Allen wrenches.

Meeting was adjourned at 8:20.

The next meeting will be Wednesday, July 10, 2013 at the Bridgeton Trails Library at 7:00, meeting room 1.

Events Coming in July 2013

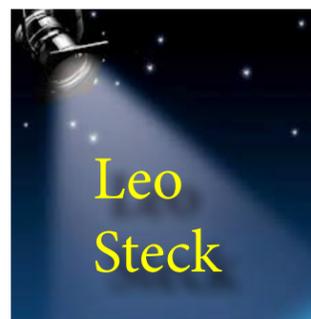
Four-Star-40 / WARBIRDS

RACING

July 20th, 10:30 till 2 PM

CONTACT STEVE CROSS FOR MORE DETAILS OR TO VOLUNTEER.
SVCROSS@ATT.NET

Member Spotlight



Leo Steck

Leo Steck who has been a dealer for NovaRossi Engines, Klass Kote Paint, Balsa USA, Morgan Fuel, and B&D Retracts has added another supplier of note to the companies he represents.

Leo is now a direct dealer for SIG Mfg. Co. entire product line. Including the new Four-Star-54/64, Kadet series, and all of your favorites. As always, Leo offers special discounts for Spirits' members.

So give him a call and place your order for one the great SIG planes or Nova Rossi Engines.

His web page is located at: www.klasskotemo.com Check out his website and take a look at the gallery. There are some impressive aircraft displayed that use the products he represents. Leo can be reached by email at leosteck@AOL.com or by phone at (636) 828-4343. As many of you know that have dealt with Leo in the past, he will take care of club members.

Leo also told me that he will be donating a Balsa USA Stick 40 plus kit and a NovaRossi engine as raffle prizes fro the annual Open House in September. From all of us the Spir-its... Thanks Leo and see you at the field.

If you are a member and represent manufacturers of products related to our hobby. Send your info to the editor and we'll get you in the Spotlight!



Links

to stuff in this issue & other things

About the Spirits

[Click here](#) to see all of the elected officers, Board of Director positions, and the chairmen that administer the club's affairs.

Events

[Click Here](#) to go to the Spirits Events Page and see the list of events that are scheduled.

[Click Here](#) to visit the Local Events Page where we list events in the surrounding area. If you know of an event, send it and a flyer to the [Webmaster](#).

Membership

[Click Here](#) to view or download a Spirits, Membership Application for 2013.

Reminder: If you are reading this and have not renewed your Spirits or AMA membership you are no longer legal to fly at the field. There is **NO grace period**. If you renew your Spirits membership before the end of the March meeting there is no "In Arrears" penalty. *You must be a current member or guest to fly at Spirits.*

Support your local hobby shop!

If you don't, one day they won't be there when you need that critical part to go fly!



Safety always matters in our hobby. Please be careful this winter while building and refitting your aircraft. If you are new to electric aircraft, consult a member experienced with electric models to get some tips on preventing injuries from unwanted tor starts.

Safety is everyone's responsibility.

The following links discuss AMA and Spirits Safety:

- [AMA Safety Code](#)
- [Spirits Field Layout](#)
- [Spirits Bylaws](#)
- [Spirits Safety Rules](#)

[Click Here](#)

to go to the "Useful Links" page of our website. You will find dozens of links to manufacturers, Distributors, Hobby Shops, RC organizations, Local RC Clubs, Information for Newcomers, and info on Spirits' safety Program. Enjoy!



Lost & Found

Transmitter found at the Field. If it is yours contact Gary, gp@gtpfld.com

Spirits

Advertising Section

If you have something you wish to advertise for sale please in the next Online newsletter please send it to the [editor](#) with photos, and your contact information. These services are free for club members.



Chip Hyde Vision 3D 50cc gas airplane.

Ready to fly. \$1000.00 with receiver (Futaba) [\$900.00 without receiver.] 85" wingspan, 85" long.

Bruce Omans, Bmanfly@hotmail.com, 314-304-1350 cell

Only one gallon of break-in fuel run through brand new Desert

Aircraft 50cc gas engine. This plane was completely set up by club member Mart Trent.

Here is a recent review of this airplane:

These planes are great! When powered with a powerful 50cc engine like the DA50R, they have unlimited vertical around the 16.5 lb. mark. The MSC 22x8 props are perfect for these planes as are the NX 23x8 we tried.

They track well on the ground and lift off with a moderate roll-out. Clean! That's the best word to describe the flight characteristics. Like it's on rails. It definitely benefits from it's long tail moment and tracks well through it's maneuvers. With the rates on low it might as well be a pattern plane fully capable of inside and outside loops with no tendency to snap. 4 point rolls and slow rolls are pretty while snap rolls are crisp with little to no over rotation. The plane feels light, but solid and does well in the wind.

Flip to high rates and you got yourself a fun time! Like many of my favorite planes, this one will not snap with lots of elevator input making walls and elevators an absolute ball and very impressive. Harriers are very solid and with no wing rock to speak of. Hovering is a little more difficult as it seems to pull to the left as you goose the throttle. Some have reported adding a little more right thrust to combat this, but I prefer to just add a little rudder. You could even mix a little in with throttle input, but it's really not necessary.

The only area that it lacks in is flat spins as it's hard to get it entered into right and find the throws to keep it there. It often will do one revolution nice, then flop around with the nose down a little more, then do another nice turn. Still, when you nail it just right it'll flat spin nicely.

All in all a very nice aircraft. Built well, fairly light and beautiful lines. Whether you decide to do something custom or select the new covering scheme available stock, you're sure to have a plane that turns heads on the ground and in the air.

To quote my buddy Tom Pierce's posts: "Mine is my all-time favorite plane, bar none. What a joy to fly. It's a sweetie. Can't think of any bad habits at all other than mine isn't the best at flat spins (everything else is unbelievable.) As a matter of fact, mine has pulled me out of tight spots that any other plane would not have been able to."



14SG 14-Channel 2.4GHz Computer Radio System

Everything you want...and more.

The 14SG makes 14-channel control more affordable – and easier to enjoy – than ever before. All the features that today's pilots want most are built-in, like innovative 2.4GHz FASST technology.

Since the 14SG is compatible with FASST and S-FHSS protocols, users can fly with virtually any Futaba 2.4GHz air receiver. Futaba telemetry sensors (sold separately) let the 14SG transmit and receive telemetry data, including real-time vibration alerts.

Flyless gyro support makes the 14SG perfect for heli pilots. Rubber hand grips and adjustable dual bearing gimbals provide superior in-flight "feel." Pilots can even download free online software updates using SD or SDHC cards.

We're just scratching the surface. For the full scoop on the 14SG, visit futaba-rc.com!

TELEMETRY	
RX-BATT.	7 1/2
RECEIVER	1 ALTITUDE
EXT-VOLT	1521FT
RECEIVER	SBS-01A
RECEIVER	48.3V 1 VARIO
RECEIVER	4MPH
RECEIVER	SBS-01A

Futaba
futaba-rc.com/118a

FASSTest FASST 2.4GHz S-FHSS

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Arron Garcia, Goblin Winner

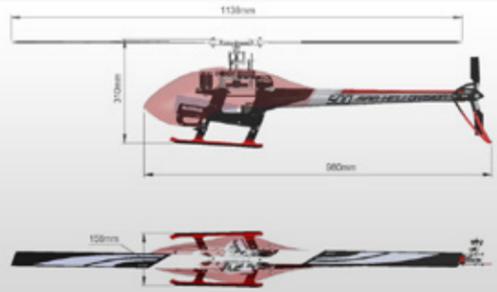


Gene Jones for Ralph Doyle

Spring Helicopter Fun-Flu



Thank You!



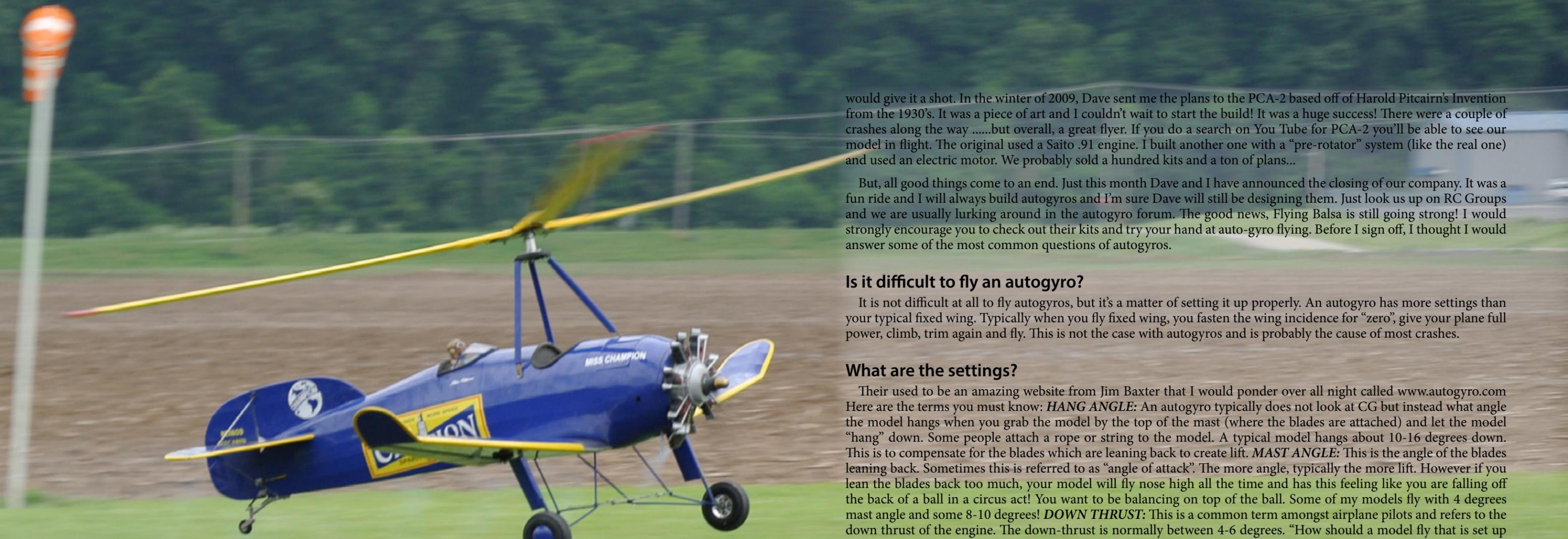
Key Features

- | | | | |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| | | | |
| • Unique concept as Goblin 700 and effective design | • Carbon fiber boom for maximum rigidity | • HPS (High Precision Head System) • 10mm high strength steel main shaft • 8mm high strength steel spindle shaft | • Large tail pulleys for increased authority • Dampened tail system for increased vibration tolerance |
| | | | |
| • Rigid, extremely rigid main rotor design • Unique design of the model defined by a | • Carbon fiber tail push rod hidden inside the boom for an aesthetically pleasing, unique design | • Nylon bolt break-away system to preserve the boom during a crash | • Landing gear mounting brackets don't require bolts to be installed. The brackets are a break point |



HELIDIRECT
 • HUGE SELECTION • FAST DELIVERY • GREAT SERVICE

Winner 2013 Spirits' Spring Autorotation Contest
 Steve O'Connor
 Team HeliDirect



What is that thing?! by Joe Cole

Those are the words I love to hear when people look at one of my autogyros. Seems like we have come to a point in our hobby where we can say, "Been there, done that!" Looking for something a little different? Autogyros definitely fit the bill! They look like some made up combination of helicopter and airplane that have their origins in full size aircraft, thanks to Juan de la Cierva in 1919.

About 9 years ago I was looking around for an autogyro kit, when I found a guy that had a C.4 from Arizona Autogyro. It was a beautiful kit that had an amazing instruction manual, great pictures and all the pieces. The problem was my inexperience with auto-gyros and no one around to help me set it up. Long story short, I re-kited it many times and was looking for a new hobby.

Then I came across Flying Balsa Inc., ran by two avid hobbyists, Mark and John. These guys put out the Avistar of Autogyros! Everything in the kit snapped together, was easy to build and a joy to fly. I bought a kit from them called the PT 1/2A and installed a Norvel .069 engine! After that first "hop", I was hooked!

One thing that Flying Balsa has done for the autogyro community is gotten more people into the hobby and letting them a experience the feeling that is unique to autogyro flight! But I wanted more, and that's when I came across Dave Surace. I met Dave through RC Groups (where most the autogyro guys hang) where Dave's love for autogyros shone through and was inspiring. He sold only plans and no kits, but was always developing new models. Dave designed the DAG 60 (DAG stands for Dave's Auto Gyro) and a gentleman Rich Harris and I took the opportunity to build the first two.

That is how our company, Whirlybird Aviation, started about 7 years ago. So whatever Dave and Rich designed, I was building....DAG R1, DAG R2, DAG 60, RPG, Profile Kellet, etc. I was really getting the hang of autogyros but we wanted to do more. So about 5 years ago, Dave and I were talking on the phone and mentioned that no one had a good auto-gyro scale model. Arizona Autogyro and Steve Tillson probably had the best scale auto-gyro models, but had gone out of business. So, we thought we

would give it a shot. In the winter of 2009, Dave sent me the plans to the PCA-2 based off of Harold Pitcairn's Invention from the 1930's. It was a piece of art and I couldn't wait to start the build! It was a huge success! There were a couple of crashes along the waybut overall, a great flyer. If you do a search on You Tube for PCA-2 you'll be able to see our model in flight. The original used a Saito .91 engine. I built another one with a "pre-rotator" system (like the real one) and used an electric motor. We probably sold a hundred kits and a ton of plans...

But, all good things come to an end. Just this month Dave and I have announced the closing of our company. It was a fun ride and I will always build autogyros and I'm sure Dave will still be designing them. Just look us up on RC Groups and we are usually lurking around in the autogyro forum. The good news, Flying Balsa is still going strong! I would strongly encourage you to check out their kits and try your hand at auto-gyro flying. Before I sign off, I thought I would answer some of the most common questions of autogyros.

Is it difficult to fly an autogyro?

It is not difficult at all to fly autogyros, but it's a matter of setting it up properly. An autogyro has more settings than your typical fixed wing. Typically when you fly fixed wing, you fasten the wing incidence for "zero", give your plane full power, climb, trim again and fly. This is not the case with autogyros and is probably the cause of most crashes.

What are the settings?

Their used to be an amazing website from Jim Baxter that I would ponder over all night called www.autogyro.com Here are the terms you must know: **HANG ANGLE:** An autogyro typically does not look at CG but instead what angle the model hangs when you grab the model by the top of the mast (where the blades are attached) and let the model "hang" down. Some people attach a rope or string to the model. A typical model hangs about 10-16 degrees down. This is to compensate for the blades which are leaning back to create lift. **MAST ANGLE:** This is the angle of the blades leaning back. Sometimes this is referred to as "angle of attack". The more angle, typically the more lift. However if you lean the blades back too much, your model will fly nose high all the time and has this feeling like you are falling off the back of a ball in a circus act! You want to be balancing on top of the ball. Some of my models fly with 4 degrees mast angle and some 8-10 degrees! **DOWN THRUST:** This is a common term amongst airplane pilots and refers to the down thrust of the engine. The down-thrust is normally between 4-6 degrees. "How should a model fly that is set up correctly?" I explain to guys at the field to pretend they are flying an old timer. If you punch the throttle, it's going to climb out of control. You must learn to use your left stick more than your right. An autogyro loves throttle and rudder. Your throttle and rudder are going to control where your model goes and your elevator and aileron will help it along. When the model is set up correctly, you should be able to pull back the throttle and the model should be level and just auto-rotate down....for the most part. Every model is different, but that is the goal. If you want to fly high into the sky, you increase power. If you want to make a turn, then you use elevator with power.

How do I take off?!

In order for an autogyro to take off successfully, the blades have to be in full auto-rotation. In order to do that, their are different methods but this is what I typically do. I pick a day that has about 5-10 mph winds, I place the model directly into the wind, and then spin the blades with my finger as fast as possible. I SLOWLY taxi forward until I hear the blades "whistle" or blur. Slowly bring up the power (only about 1/2 stick) and let the model hop up....but NOT with elevator.....only with power. If it rolls left, you know you gave it power too soon and the model was not in auto-rotation. LET'S DO THE HOP! Maidens can be difficult with autogyros but if you want to keep them in one piece, it's good to do the hop. When you watch a new RC helicopter at the field, he does not just blast into the air and trim 100 feet above his head....he hovers, lands, and readjust. Same with autogyros! You want to taxi around, let the blades spin up, increase power and let the model float into the air only 5 feet and then decrease power and let it land before you get to far away. Then you trim accordingly. Smaller models (20 size and below) are easy to have someone give you a hand toss, but be warned! Never let the person toss your model until you hear the whistling blades!

I want to thank the Spirit of St. Louis RC flying field for letting us demonstrate and fly at their field. We probably picked the worse day of the year, however! Floods, tornadoes, rain and high wind - the important thing is everyone made it home safely. I pray for the people in the near by neighborhoods and hope no one was hurt. I would love to be invited next year and maybe join someone's event (helicopters, strange aircraft, strange pilots...whoever will take me)! All the best and keep your rotors turning!



the Spirits of St. Louis

R/C Flying Club, Inc.

