



# ROTATE

*The Official Monthly Publication of St. Louis Radio Control Flying Association*

## JAN/FEB 2017

### SLRCFA WELCOMES 2017

**Happy  
New Year!**

Many SLRCFA members arrived at the club field on the morning of January 1<sup>st</sup>. Most brought aircraft to fly and entered the raffle to have a chance to have the first flight of the year at SLRCFA. In past years, most members would jump from their car grab a quick flight and leave. However, 2017 started off different, the winds were calm and the temperature was unseasonably warm and allowed for multiple flights.

The raffle for the first flight was held and Jim Henke's name was drawn. He had the honor of the first of the year flight for many past years. He stated that it was time for someone else to have the first flight and insisted that another name should be drawn. Jim flew his 85 inch electric Carbon Z Cub. He completed his first takeoff and landing and then invited everybody to join him and fly.

Check out the video of his first flight at this link  
<https://www.facebook.com/slrcfa/videos/1254423724637856/>

You can also check out a few pictures at our website. <http://slrcfa.com/page-18171>

### SLRCFA's Youth Outreach to **CAP CADETS**



SLRCFA's Youth Outreach Program was developed last year as part of our club's new Mission and Goals to bring new people into the hobby and our club. George Biderman volunteered to spearhead this effort and to recruit other club members to assist when opportunities were developed.

In January, George, Kerry Eisenbach, and Geoff Biderman responded to a local Civil Air Cadets Education Officer's request to show his cadets how to fly R/C Airplanes and to talk about what R/C flying means to experienced flyers. Additionally, the Cadets wanted to hear firsthand about our local club and our resources available to them.



The cadets hold their meetings at the Rockwood Summit High School in Fenton (just off I-44) and its huge, basketball court sized atrium offered a perfect place to fly some of the same foamies that Kerry, Geoff and George fly in the gym in Eureka on Friday evenings.



Kerry and Geoff brought an amazing variety of models to generate interest in our hobby ranging from 35" foamies, to some crowd pleasers like Kerry's Superman and Flintstone flyers, and even Geoff's big 50cc gas model airplane. George brought an Apprentice and urged the cadets to come to our field on Saturdays this spring for some free flying lessons. The Education Officer said he'd for sure bring the cadets. Later that evening we received the following email:



Mr. Biderman,  
Thank you so much for the R/C flight display tonight! The Cadets were very impressed with it. Several of the Cadets are now VERY interested in joining you all for some R/C flights. I very much appreciate the time and effort you all showed the Cadets tonight. The variety of planes was impressive. I have attached a few photos from tonight. Again, thank you!

Respectfully,  
2d Lt Benjamin Weaver  
Assistant Director of Aerospace Education,  
Missouri Wing, CAP  
Aerospace Education Officer, River City  
Composite Squadron, CAP



## Indoor Flying

Has the weather been keeping you from flying? There is a solution close to home. Many SLRCFA members have been flying Friday nights 6-9pm indoors at the Central Baptist Church in Eureka, MO. All are welcome to fly for \$5 a night, but must be a current AMA member (SLRCFA membership not required). It's a great way to brush up on your flying skills, not weather dependent, and Fun!!

Contact: Ron Lawson 636-677-1247 for details

## SLRCFA Visitors

Have you been out at the field and had a visitor ask you about the Club? Sure we all have had this happen. SLRCFA now has a New Flyer holder located under the pavilion near the Electrical Panel. This container is filled with upcoming event flyers and club brochures, flyers, and Business Cards. Please utilize this to give our guests information about our club.



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# facebook



SLRCFA has an ACTIVE facebook page managed by Jonathon Hendrickson, Marshall Henley, and Geoff Biderman. Happenings at SLRCFA's page are constantly being updated with up to the minute news and even LIVE streaming video. Don't miss out on what is happening at the field. Be sure to check out our [facebook page](#) and "like" it if you are a facebook user.

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## Pilot Communication

Pilot Communications (callouts) are verbal announcements that are required to be used between you and other pilots anytime you or your aircraft enters the runway operations area (grass or paved runways and taxiways beyond the white lines). All Communications must be acknowledged by all pilots before proceeding with your intentions. Fly next to the last pilot in the air in the PILOT STATION BOX to improve communication, loading from the inside of the box towards the outside.

Use the following Pilot Communications, and make sure you get confirmation from 100% of all other pilots in the air before proceeding, unless you need to land for safety sake:

- **"Coming out"** as you prepare to place your aircraft on the runway or taxiing to the runway.
- **"Taking Off"** aircraft is on the runway and ready for takeoff roll.
- **"Setting up to land"** as you begin your downwind leg gives others time to clear the area for you.
- **"Landing"** as you are on final approach.
- **"On the runway"** if your aircraft stops dead on the runway.
- **"Off on the far side"** or **"In the grass"** if your aircraft veers off on the side away from the pilots' stations
- **"Crossing the runway"** Anytime you have to cross the runway (in either direction).
- **"Runway clear"** after you have retrieved your errant aircraft, or if it has been taxied off the runway on the pit side.
- **"Dead stick"** when your engine dies while in the air. Other pilots will pass this announcement down the line as it is a signal for everyone to immediately clear the runway.
- **"Touch and go"** or **"Slow fly-by"** (note that high speed low passes and acrobatics over the runway when other pilots are at stations are forbidden-these may only be performed out past the runway over the grass).
- **"Low Pass"** is a high or low speed pass a low altitude over the border between the asphalt and grass runways.
- **"Aircraft down"** followed by the general area. An aircraft has crashed.
- **"Don't have it"** A loss of control. The pilot will announce that he has a problem as soon as possible, other observers may be able to get a fix on the plane if it goes down. If you do get a fix, such as a certain tree, etc., do not move. Call for another person to stand beside you and show them the point you fixed on. Even turning around and back can lose the fix.

Runway Protocol/Priorities allow multiple aircraft operating in close airspace to land and/or maneuver on or over the runway in an orderly

and safe manor. This list below is in order of priority.

1. Declared “**dead stick**” landing has priority over all other flight activities. The runway must be cleared for him. If more than one happens at the same time, generally, the first declared has the right-of -way, or he may yield to a lower other aircraft at his discretion.
2. Declared “**equipment problem**” and needing to land ASAP.
3. Declared normal “**landing**”
4. Declared “**touch and go**”
5. Declared “**takeoff**”
6. Declared “**slow fly-by**” or “**Low Pass**”

High speed low-passes over the paved runway are never allowed and must be performed past the far edge of the paved runway.



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## SLRCFA's Documents

Over the last several years, SLRCFA's governing documents have been edited many times. This has left the documents with several holes and discontinuity. The 2017 SLRCFA Board of Directors and its sub committees (Teams) will be tackling an overhaul of these documents throughout the year.

The goal is to streamline all the governing documents while accommodating for the future. First up are the Field Rules and Operating Procedures. These documents will be overhauled before the flying season kicks off. The updated Field Rules and AMA rules will be prominently posted at the field sometime in April.

The SLRCFA Board of Directors has formed a Constitution team to overhaul our clubs constitution. The team is made up of both board members and club members. We are still looking for a few more volunteers for this team due to the size and complexity of this job. If you would like to join this team please contact Jonathon Hendrickson [slrcfa.rotate@gmail.com](mailto:slrcfa.rotate@gmail.com)

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## Trailer Solutions

George Biderman's driveway slopes away from his garage, so he needed a way to help him move his new plane trailer in & out of the garage. A local welding shop made a bracket that an ATV winch could side in & out of it. George then mounted that bracket on the floor at the front of his garage. His Warn ATV winch has a wireless remote control button that lets George ease the trailer out of the garage while gravity does all the work. A strategically placed big wheel chock pivots the trailer 90 degrees to line it up with his car. Reversing this procedure pulls the trailer effortlessly back into the garage.





## SLRCFA Board Meeting Minutes

SLRCFA's Board meeting Minutes are located in the members only section of our website. To access the minutes, log in then go to the members only tab and then select the Board Minutes.

While you are there checking out the minutes, take a minute to explore our website and all it has to offer.



- March 1<sup>st</sup>, 7:30pm SLRCFA Board Meeting @ Saint Louis County Library Eureka Hills Branch 156 Eureka Towne CTR, Eureka Mo 63025
- April 5<sup>th</sup>, 7:30pm SLRCFA Board Meeting @ Saint Louis County Library Eureka Hills Branch 156 Eureka Towne CTR, Eureka Mo 63025
- May 3<sup>rd</sup>, 7:30pm SLRCFA Board Meeting @ Saint Louis County Library Eureka Hills Branch 156 Eureka Towne CTR, Eureka Mo 63025
- May 20<sup>th</sup> Midwest Air Wing, Warbirds and Classics
- June 3<sup>rd</sup>-4<sup>th</sup>, SLRCFA's Giant Scale & Jet Fly In
- June 7<sup>th</sup>, 7:30pm SLRCFA Board Meeting @ Saint Louis County Library Eureka Hills Branch 156 Eureka Towne CTR, Eureka Mo 63025
- June 24<sup>th</sup> Midwest Air Wing All Electric fly-in
- July 15<sup>th</sup> Midwest Air Wing Big Bird Fly-in
- September 30-October 1<sup>st</sup>, SLRCFA SuperFly
- October 7<sup>th</sup> (8<sup>th</sup> rain date) SLRCFA, Warbirds and Civilian Scale
- October (TBD) SLRCFA, Toys For Tots/Chili Fly



## GENERAL INFORMATION

### 2016 Board of Directors

Jonathon Hendrickson, President, Newsletter Editor	815.222.5790
Marshall Henley, Vice President, Webmaster	314.378.8663
Shane Eisenbach, Secretary	314.226.4231
Dennis Chivetta, Treasurer	636.391.8071
Jim Beerman, Director	636.390.4461
Geoff Biderman, Director	314.221.5985
George Biderman, Director	314.821.8554
John K. DeLuca, Director	636.394.1581
Barry Klussman, Director	636.390.3744
Allen Main, Director	636.913.0837
Mark Stellern, Director	636.458.4874
Mike Stellern, Director	636.458.0006

### Club Information

The newsletter, *Rotate* is a monthly publication of the St. Louis Radio Control Flying Association. Monthly General meetings are held on the 3rd Thursday of the month at 7:30 p.m. at the club field in warm weather. The Club's private field is located at 788 Augustine Road, Eureka, Missouri. Guest/members are welcome to attend the Board meeting the 1st Wednesday or Thursday of the month. See "Upcoming Events" in *Rotate* for Dates, Times, and Location.

### Flying Instructors List

Jonathon Hendrickson	815.222.5790
Dennis Chivetta	636.391.8071
Mark Stellern	636.458.4874
Mike Stellern	636.458.0006

### 2017 Membership Dues

<b>Full Membership</b>	<b>\$195</b>
<b>Prime Membership</b> (Equivalent to FULL membership. Includes additional benefits published on SLRCFA.com)	<b>\$250</b>
<b>Junior Membership</b> (23 years old and under. No voting rights)	<b>\$25</b>
<b>Spouse Membership</b> (Legal spouse of current FULL or PRIME member.)	<b>\$25</b>
<b>Dual Membership</b> (Open to all members of ANY other RC flying club excluding Buder park flying permits. Must not have been a SLRCFA FULL member within the last 2 years. No voting rights. Must present current membership credentials for their primary club before being accepted into SLRCFA.)	<b>\$125</b>
<b>Associate Membership</b> (Primary residence of member is greater than 75 miles from SLRCFA field (road miles). No Voting Rights.)	<b>\$95</b>

SLRCFA membership is capped at 100 members

No More than 20 Dual or Associate members will be accepted into our club without board approval

Join or Renew Online @ [www.slrcfa.com](http://www.slrcfa.com) or by Mail. Make checks payable to SLRCFA. Mail to Dennis Chivetta, Treasurer St. Louis RC Flying association, 187 Brightfield Drive, Ballwin, Missouri 63011. Any questions call 636.391.8071.

# SLRCFA MEMBERS SUPPORT THOSE WHO SUPPORT YOU

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# CombatONE: Back in Action

The CombatONE guys were back at it in late January. With upcoming good weather in February, expect some shoot-em-outs at the SLRCFA field.

## What is it?

In early 2016, the SLRCFA board wanted to create a fun activity that was on the low end of the cost spectrum. Many SLRCFA pilots are blessed to fly expensive planes, but we wanted something that would be fun for anyone who can fly elevator and ailerons, and on a budget.

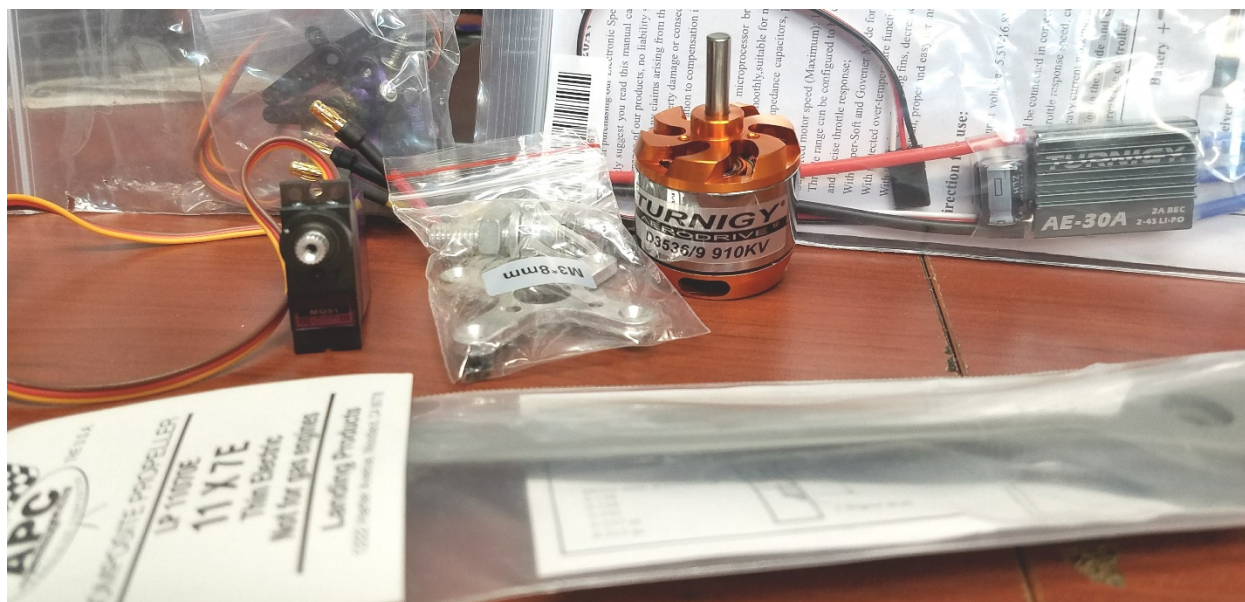
The *CombatONE* design was born! After investigating dollar store foam board (DSFB) designs on Flitetest.com, we created a two-DSFB-sheet design that uses only hot glue and packing tape to build, and some scrap plywood for the firewall and control horns.

The size is right, too... a CombatONE can be powered by any electric motor configuration that flies an 11x7 APC-style electric propeller. This means reasonable cost for servos, motors and ESCs. In fact, some guys are simply using their wrecked Parkzone T-28 innards to build Combat one, making it almost a free plane. Most guys are using the following or equivalent to handle their CombatONE:

- TowerPro MG91 servos (2) from ValueHobby.com
- 2,200-3,200 mAh 30C – 65C 3S Battery
- Turnigy D3536/9 Motor – available from HobbyKing.com
- Turnigy AE-30A 2-4S ESC w/2A BEC – from HobbyKing.com
- APC 11x7 electric prop



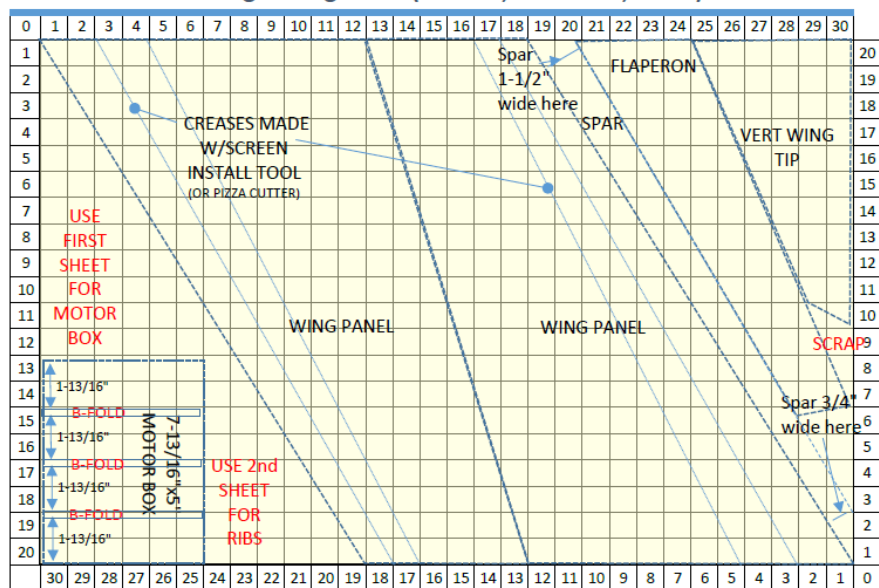
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## Build One

The plans are pretty straight-forward, cut from two sheets of DSFB. You can do it all with a yard-ruler and by measuring whole-inch measurements from each corner of the sheets. You can even cut two sheets at once to speed things up. A larger version of the following cut-sheet is included at the back of ROTATE this month.

### SLRCFA Combat Wing - Design v2.1 (Cut List, Materials, Tools)



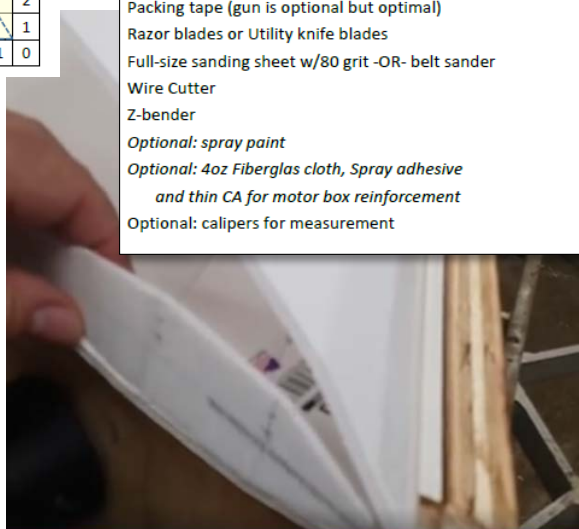
The fold-n-glue instructions will be published in the March ROTATE, but come-on down to the field any Saturday and we can show you how to build one. Takes about 2-3 hours from beginning to end.

#### Materials:

- (2) 20"x30" Ross Foam Bd (Walmart) or Dollar-Tree Fm Bd
- (1) 1/4" x 24" wooden dowel rods, min length (Walmart)
- (1) 1-1/2" x 1" piece of light ply
  - (cut into two pieces diagonally for control horns)
- (1) 2"x2" square piece of 1/4" plywood (Walmart)
- (2) 14g or larger MG servos and (no extensions needed)
- (2) straight thin wire pushrods
- (1) motor/ESC combo for 11x5.5 propellor
  - Sugg. motor: Turnigy 3536/9 or equivalent
  - Sugg. ESC: 30 - 40 amp
- Screws and mount for motor - #6 drywall screws for speed
- (1) battery providing 8-10 min of flight - 3S 2,200-2,650mAh
- (1) APC equivalent 12x7 electric propeller
- Velcro, sticky-back
- High-temp hot glue sticks
- Packing tape

#### Tools:

- 36" - 48" metal straight-edge ruler
- 2' level to apply pressure during creasing of wing skins
- Hi-temp hot glue gun
- Foam board scraps for hot glue spreading
- Packing tape (gun is optional but optimal)
- Razor blades or Utility knife blades
- Full-size sanding sheet w/80 grit -OR- belt sander
- Wire Cutter
- Z-bender
- Optional: spray paint
- Optional: 4oz Fiberglass cloth, Spray adhesive and thin CA for motor box reinforcement
- Optional: calipers for measurement



## Schemes

Now that we've been flying them, we've begun to decorate them a bit. Using different colors of DSFB, or just adding inkjet printed graphics shot with spray-ment, we've been able to create some unique schemes:



We've even been able to attempt a 3D version with rudders and a stabilizing 3D gyro... worked pretty good, but the knife edge could use some work!

## Durability

One of the best things about the plane, despite it's low cost, is that it can crash and crash and crash and still fly! We've put them in at full speed, cartwheeling and breaking off the motor box, and with some hot glue had them back in the air in 10 minutes.

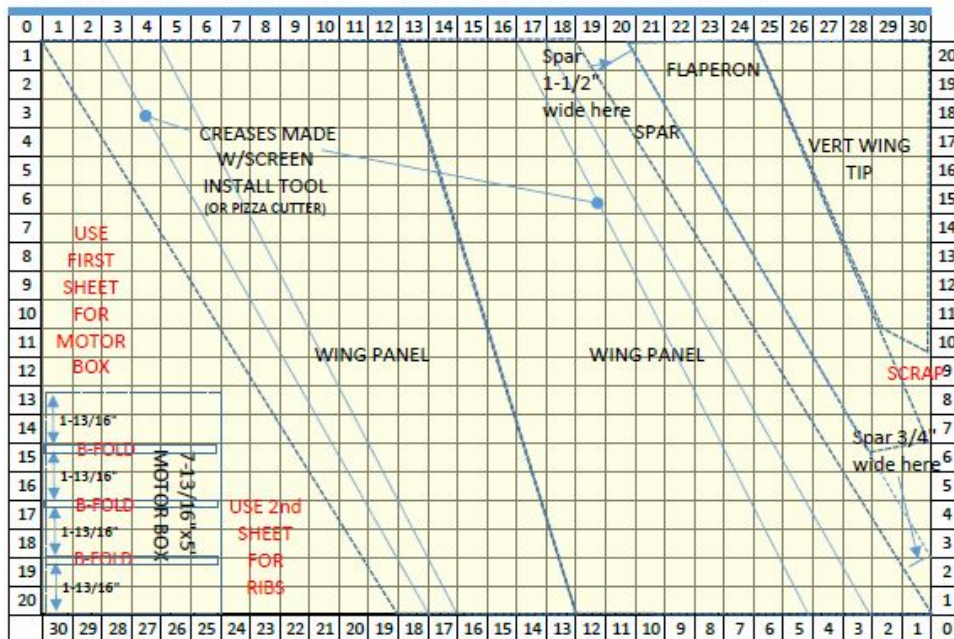


Next time you're at the field, ask about buying one pre-built and receiver-ready from the club. We'll have it for you by March!



You can build your very own  
CombatOneV2.1 from the plans listed  
on the next page!!

## SLRCFA Combat Wing - Design v2.1 (Cut List, Materials, Tools)



### Materials:

- (2) 20"x30" Ross Foam Bd (Walmart) or Dollar-Tree Fm Bd
- (1) 1/4" x 24" wooden dowel rods, min length (Walmart)
- (1) 1-1/2" x 1" piece of light ply  
(cut into two pieces diagonally for control horns)
- (1) 2"x2" square piece of 1/4" plywood (Walmart)
- (2) 14g or larger MG servos and (no extensions needed)
- (2) straight thin wire pushrods
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-Sugg. motor: Turnigy 3536/9 or equivalent  
-Sugg. ESC: 30 - 40 amp
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- Z-bender
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- Optional: 4oz Fiberglass cloth, Spray adhesive  
and thin CA for motor box reinforcement
- Optional: calipers for measurement

## SLRCFA Combat Wing - Design

