Charles River Radio Controllers

Flight Log

April 2026

Image Credit: Adam Smith

April Meeting

Wednesday, April 15th, 7:30 pm

In Person at

Goodnow Library, Sudbury

President's Message

Spring is finally starting to show up! After what felt like a long winter, it's great to see the days getting longer and the temperatures (slowly) climbing (let's just ignore the snow earlier this week). Flying weather is on its way.

Thanks to everyone who came out to the March meeting. Phil Rossoni's walkalong glider session was a lot of fun — it's always cool to see how much you can do with just a sheet of foam. If you missed it, keep an eye out for a return visit down the road.

Our next meeting will be Wednesday, April 15th at 7:30 p.m. at the Goodnow Library in Sudbury. Bring a current project for show & tell! Looking ahead, there's quite a bit on the calendar. We are looking to have our annual Davis Field clean-up on April 18th. After the clean-up, we are also thinking of doing some buddy box equipment check-outs and maybe some training. On May 24th, we'll be holding the Flea Market & Fun Fly at School Street Field (more details to come). And the ALES Contest is scheduled for June 13th. As always, help with any of these events is always appreciated — if you'd like to get involved, please reach out to a member of the Board.

Hope to see everyone on the 15th!

Thanks,

Joe

Club Meeting - Wednesday April 15

Our April meeting is scheduled to be ***in-person at Goodnow Library at 7:30 p.m.*** Bring something to fly, something to show & tell, or just come for some friendly company.

Club meetings are open to the public. We welcome visitors and guests to learn about model aviation and CRRC!

Membership Renewals

Many of you have still not renewed, so please fill out the form at the end of this newsletter and get it to Adam Smith, or email it to membership@charlesriverrc.org.

Club Expenses

You might be aware that our club membership is down from our highs, but field costs continue to be our primary expense. We have reserves, but dues alone are not sufficient to cover expenses. The club always accepts donations, which you can send in with your membership dues, bring to a club meeting, or send with PayPal to membership@charlesriverrc.org.

Davis Field Clean Up

Saturday, April 18

Join us for our annual spring cleanup at Davis Field. This is a great opportunity to spruce up the field before the flying season kicks into full gear. We'll start in the morning and plan to check out our buddy box equipment afterwards. Volunteers are encouraged to bring gloves and any yard tools that might be useful.

Following the cleanup, we'll also conduct equipment checks and some practice training sessions for those interested.

Flea Market & Fun Fly

Sunday, May 24

Bring your surplus gear to sell or trade, and enjoy a day of fun flying at **School Street Field**. Whether you're looking for that hard-to-find part or just want to fly and socialize, this is a highlight of the season.

More details to come in the next newsletter and at the May meeting.

March Meeting

The highlight of the meeting was Phil Rossoni's talk and demonstration of walk-along gliders (see the cover image). If you missed it, that's too bad, but you can always buy his book and build some on your own.

There was some club business conducted. The minutes are below, but the club approved funding to pay for our usage of the School Street fields.

18 Mar 2026 / 7:30 PM

ATTENDEES

In-person meeting at Goodnow Library. Quorum met.

AGENDA

Business commenced at 7:50 p.m.

Last Meeting Follow-up

- None.

Business / Discussion

- No Treasurer report
- Safety - No problems reported
- Membership
  - Roughly the same as last year. 65 cards printed, about a dozen or so free members.
- Field report
  - School St in good shape, not as wet as last year.
  - Davis a little wet but not ponding.
- Old Business
  - Discussed having more events like a learn-to-fly day. Sudbury P&R might be interested. Could plan a week before our scheduled meeting to encourage interested persons to visit. Possible demo as Sudbury summer camp.
- New Business
  - Acton P&R has a new director. Schedule set and will be published. Expect fee to be $1900 with likely new (higher) fees next year.
  - Vote to approve "Not to Exceed $2000.00" to pay fee. Voted seconded and passed unanimously.
- Davis field
  - Sudbury P&R is planning to "fix" the field. Maybe parking lot and solar panels, possible fenced-in dog park. There will be a vote in May to start the process. Suggest the club stay engaged and participate in the town meetings.

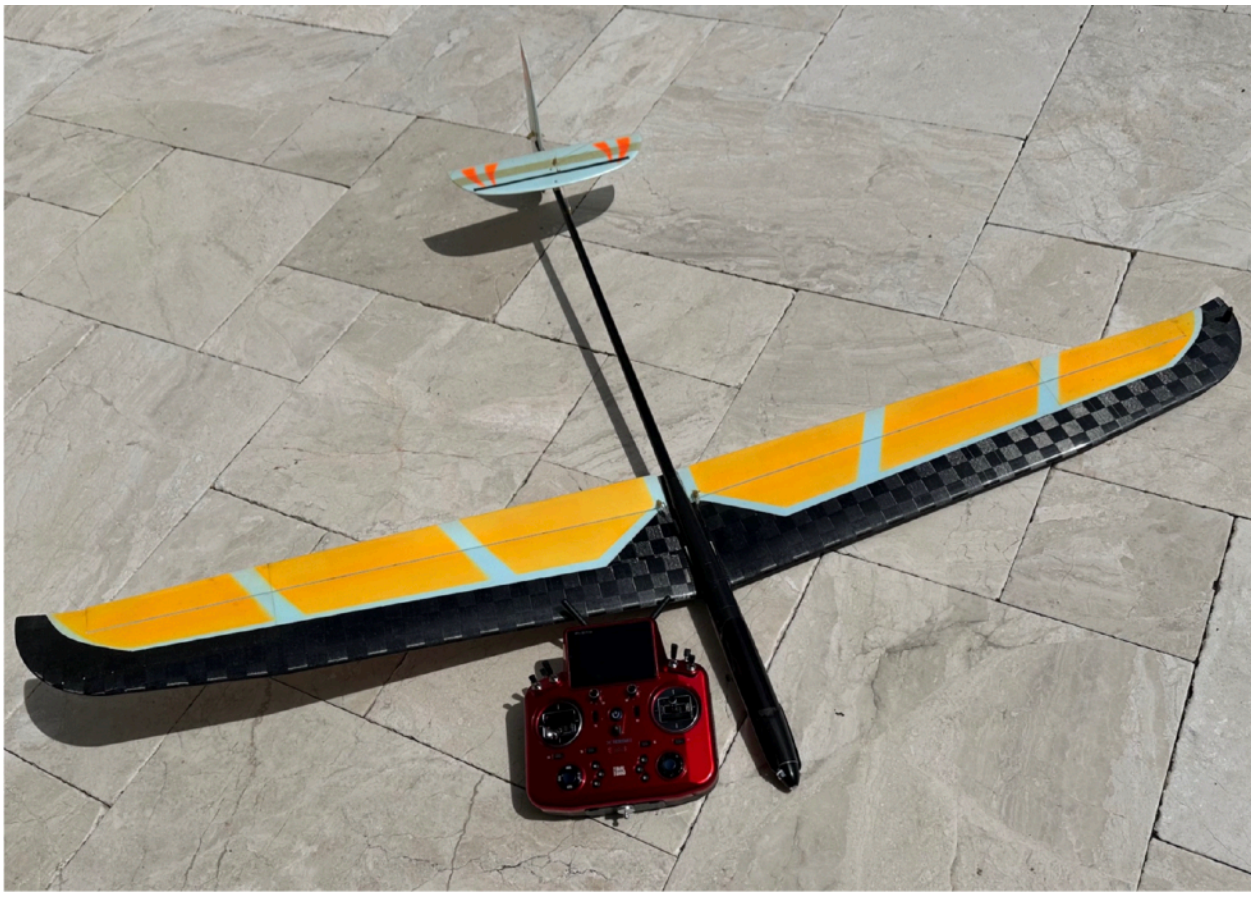
Special guest Phil Rossini and Walk-a-Long gliders.

End of Business 8:20 p.m.

How to convert a DLG to motorized F5K glider

RC auctions are always a great time, with loads of planes at bargain prices.
By David Spielman

In November 2019, on Thanksgiving weekend, CRRC had what would turn out to be the last in-person auction. RC pilots would drive a long way to get there because the club was well known for sailplanes and a good turnout. One pilot even drove all the way from Vermont to Massachusetts in the snow with a car full of DLGs (Discuss Launch Gliders) and larger sailplanes. That day, I won a bid for one of over half a dozen Predator DLGs. Mine was almost built, brand new, and never flown. It was set up for discuss launch with a ready-to-fly weight of 9.3 ounces. This was the deal of the day.

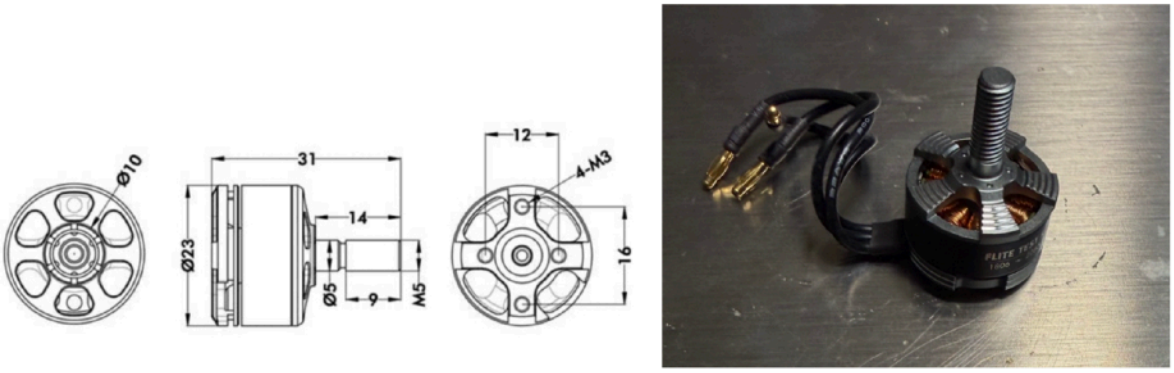


The Predator DLG came with the requisite parts. It included four Dymond D47 analogue servos, a pull-pull string, ballast weights, and everything needed to finish the model. Construction for the 60” wing was a D-box design with a vacuum-bagged carbon and fiberglass mix over a foam core. The fuselage was carbon fiber and fiberglass. It took me some time to do research and find instructions for this 2012 model and to finish the build. The weight was pretty good at 9.3 ounces, but not up to today’s super-lightweight standards. For about $100, it was great. The plane was flown a few times just by hand tossing to check controls and balance… and then the COVID-19 lockdown happened. A few years passed, batteries got old, my wife and I moved to sunny Florida, and my new club’s field that I fly at now is full of power planes, jets, and EDFs, so not at all DLG-friendly.

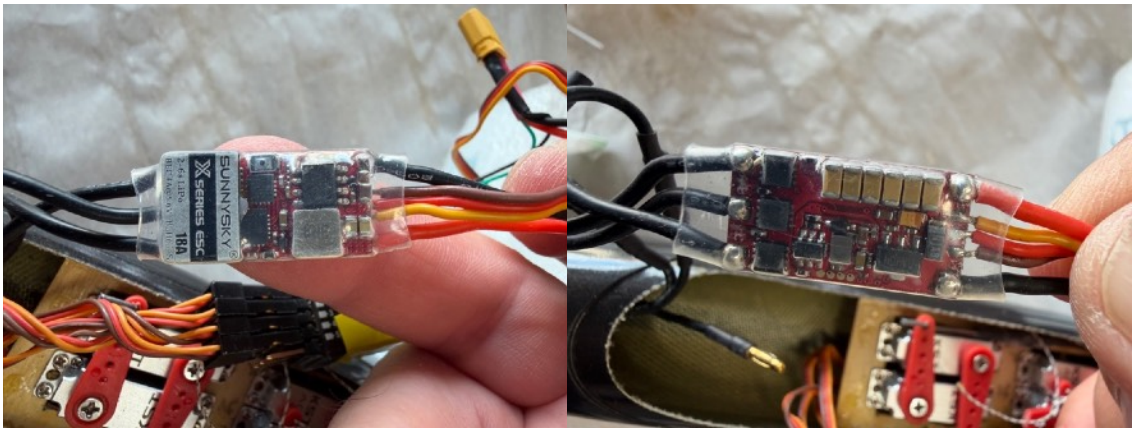
I decided that a plane can only look pretty in your garage for only so long, and that time came to an end. This plane needed a motor or a new owner, so a motor it was. I listened to all of the CRRC Zoom meetings and members showing off the latest greatest 1M DLG features. One source was www.flightcomp.com, a US sailplane shop. Another vendor I’ve used as a resource was www.hyperflight.com, who carries many high-quality sailplane parts. The closure of the import duty loophole made Hyperflight much more expensive. These vendors led me to www.Armsoar.com, another US company, which makes some super lightweight powertrains (motor/esc sets).

For you engineers out there who rely on dimensional drawings for everything, this isn’t it! It’s more of a buy and measure. I was lucky and found the right parts on the first try. My criteria included fit, weight, price, and shipping. Staying stateside had a big benefit. To make sure I didn’t blow it and order the wrong parts, I ordered the motor mount, spinner, and prop and measured them before the motor selection. I selected the CCM products mount and spinner. Super light and made to work with the T-motor F30. Surely, I could find a T-motor to fit this. HA!! Forget about it. The measurements from the mount helped me find an alternative. Believe it or not, the Flight Test Radial 1806-2280 was the right fit. I found the dimensional drawings at an Australian website. Length, mounting pattern,

motor shaft, and appearance matched the T-Motor. It was a perfect match with the exception of two of the mounting holes would need mods.



Flight Test's Australian distributor had drawings



A great little speed controller that fits this plane perfectly is from Sunny Sky. The X18A esc is a BLHeli_S protocol, tiny, 18-amp controller. You need a full brake setting even with an elastic hold down on the prop. Without the brake on, the prop pinwheels and slows the plane during gliding. The ESC brake needs to be programmed using the BLHeli suite because the transmitter throttle stick position programming doesn't work with this ESC. Programming is a story in last quarter's club newsletter.

We've got the power train, motor mount, motor, spinner, and folding prop. Time to modify and fit the new parts. First, I elongated the two holes in the mount so I could use four flat-head mounting screws. A bit of adjustment with a tiny flat file, and I was done. I did a little at a time to avoid removing

too much metal. I checked the fit of the motor and shaved away bumps that interfered. A #11 X-Acto blade worked well for this.

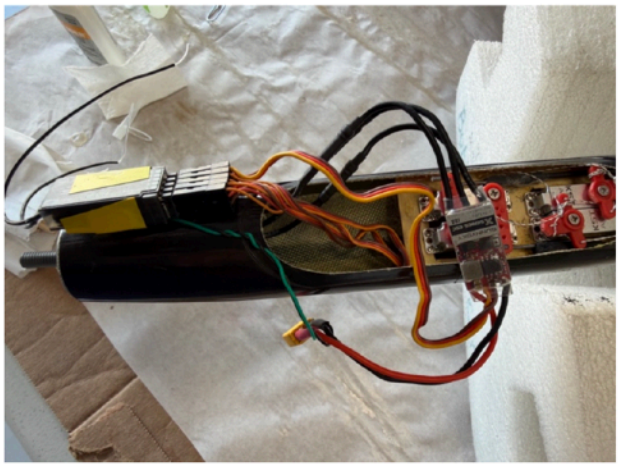
Point of no return: I needed to cut the nose off the fuselage so that the motor mount can be pushed in, to rest on the motor mount flange. It's barely a flange, just a little ridge. The fuselage isn't round, but I made it round just by pushing in the motor mount. I also needed to aim the motor down by about 2 degrees. Marking the fuselage with a pencil and using blue tape to mask helped me measure the motor offset. Using a Dremel tool abrasive disk, I cut the nose off, but left extra length so I could come back with a good bench sander to get the diameter and angle just right. I did fit checks to test the assembly several times until it was perfect. Well, nothing is ever perfect, so almost perfect.

I fit the motor in the mount and marked the mount and fuselage so that the wires came out where they would work best. After the fit check several times to feed my inner OCD, I removed the motor and glued the mount in place with some good sticky filled epoxy. I used West Systems G-flex filled epoxy. It needs to be thick to limit running all over the mount and fuselage. Don't use 5-minute epoxy. Epoxy filler and a high-temp epoxy are a good idea because motors will heat the glue joint. I had G-Flex so that's what I used.

Now that the mount is permanently in place with no drips that I couldn't remove with the scrape of a #11 blade, I went ahead and installed the motor. It's a tight fit to get the screws in from the inside of the fuselage so patience was needed, also tweezers and magnetizer for my screwdriver.

A $5 magnetizer/demagnetizer is a great addition to your toolbox.

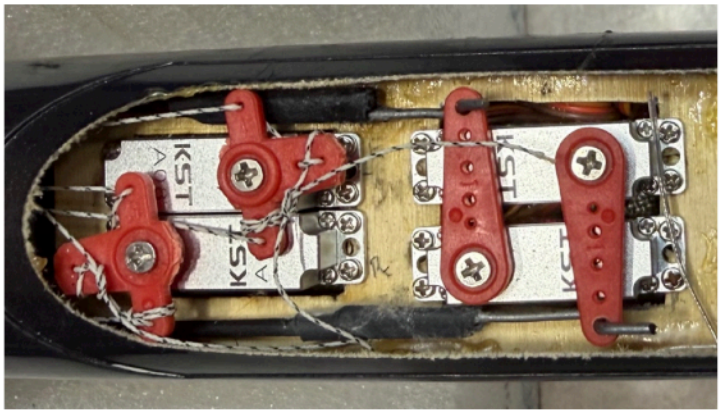
Note: if you are passionate about weight, then this is a good time to cut wires short. I checked to make sure the XT30 connector fit through the motor mount and it did. By soldering the motor leads directly to the ESC I eliminated connectors and inches of wire. In my build, I had not cut the wires short yet, and the battery fits, the plane balances and still flies great.



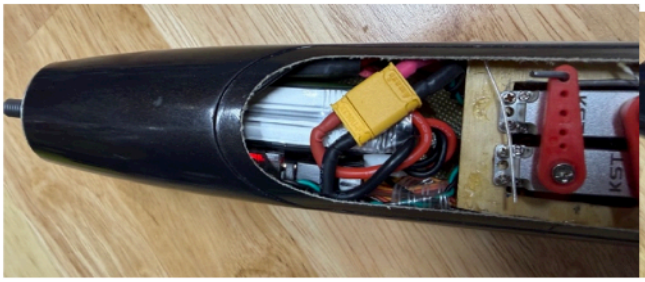
Let's remove excess wire and connectors. 3 inches of motor leads, 3 connector sets and servo wire yield almost a quarter ounce of weight savings.

The receiver and transmitter: I'm using an FRSky X18se transmitter with a TW Pro module so I can use a TW GR6 receiver. The receiver is tiny and very capable. I'm also using an F5K model template published by Mike Shellium. It's a complex, but easy enough to use. Calibration is time-consuming though.

The go-to servo for DLGs when this plane was new was the Dymond D47. That comes with a little warning: Be careful with the plastic gears and don't move the control surfaces manually. I found out why and was down to three servos and maybe two if you count that I stripped the top screw on servo number three. The new go-to servo is the KST A08. It's digital and metal gear and stronger than the Dymond. The plywood servo platform needed a little modification, and the four new shiny servos fit great. I still shouldn't move the servo arms, but there is a little more forgiveness for clumsy handling.



The new digital servos fit great and offer tighter control than the original. The new spinner and prop are 8.1 grams.



You can see that the shorter motor leads still leave room for connecting the battery. With the battery in place, the motor compartment is good and snug so the battery won't shift.

The motor mount gives a perfect fit with little room to spare for the motor. It fits soooo well. Once installed, the finished motor assembly looks perfect.

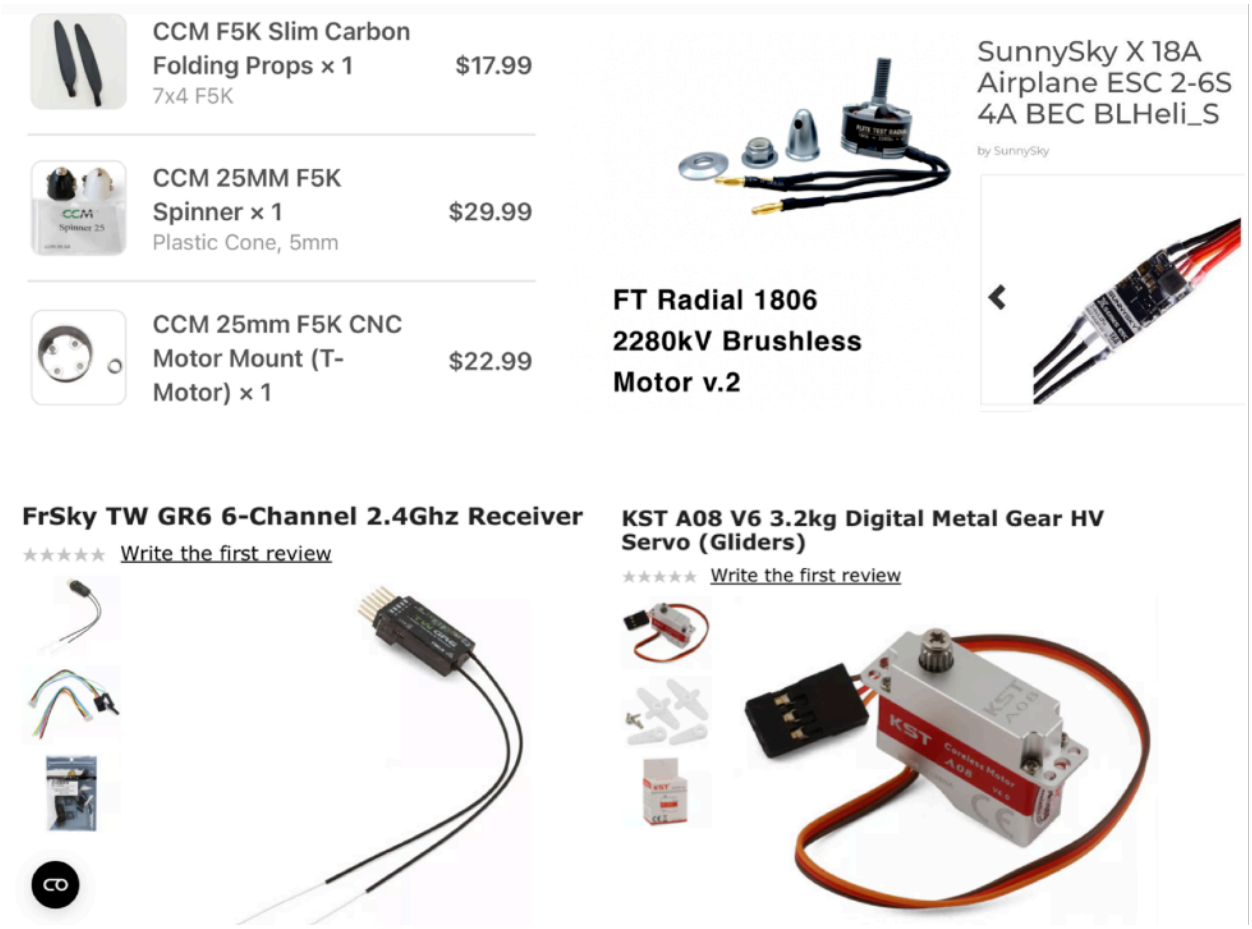
With the 7x4 prop open, the motor really has traction. A surgical mask elastic earband makes a great return spring for the prop. The white elastic is looped on the prop yoke to hold them against the fuselage.

We are done with the build. The all-up-ready-to-fly weight was 11.0 ounces. This is a 1.7-ounce increase over the original 9.3-ounce pure glider version. Let's just call the added weight "ballast" for windy days. Also, I did not have a scale by my side while building, and that makes a big difference.
So did the added weight hurt my ability to glide and have fun? Not a bit! I was in awe of how well it flew, so exciting. So much power, your shoulder will be thanking you. The plane could go vertical under power and glide around with awesome control.

Here's what you need to get to do the build the way I did.

Parts required:
Motor mount- CCM 25mm F5K
Spinner- M5 screw-on CCM 25mm F5K
Prop- 7x4 CCM F5K slim carbon
Motor- Flight Test Radial 1806-2280kv
ESC- Sunny Sky X18A BLHeli_S
Servos- KST A08 V6

Battery- LiPo 2S 550mah 95c with XT30 connector for 8-minute flights with at least four climb-outs
Receiver- FRSky TW GR6 six-channel receiver with altimeter



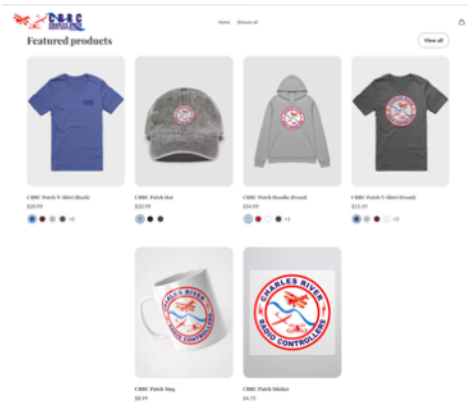
Other vendors:
Arm soar at www.armsoar.com has some great-looking powertrains, but they don't fit the hole pattern of the mount that's available. I would have used one of these power trains if it fit the mount.
Mike's Ethos Hangar https://rc-soar.com/ethos/support/ has a free download of his excellent F5K Ethos-based transmitter template.
What was the weight cost of adding a motor and changing servos?
9.2 grams increase for KST servos

8.1 grams for the spinner, prop, and elastic
20 grams for the motor
3 grams for the motor mount
-12 grams for changing to a lighter LiPo battery
=28.3 total grams or 1 oz increase

Volunteers Needed 2026

It's never too soon to start thinking about how you can support this club in one of the most important ways: volunteering. Without volunteers, we don't *have* a club. If you see someone helping out, say thank you, and if you see a way to help, please do! We will need help organizing an auction and all the events that need planning, and of course, club officer positions for next year.

Online Store!



Did you know that our webmaster has been quietly hard at work maintaining our website *and* bringing online the new Charles River RC online storefront? If you've seen Shawn and Roger at the field wearing CRRC "swag" and felt a twinge of envy, you can visit https://shop.charlesriverrc.org/ or click the link on our website.

Proceeds benefit the club, so stock up!

FAA Registration

Please remember to visit **https://faadronezone.faa.gov/#/** to check and renew your FAA registration ID. Also, beware some commercial entities who

are claiming to process registrations - often for increased prices. The FAA charges $5 for a three-year registration or extension.
Check your registration when you mark each new plane/drone, so you don't miss a renewal!

TRUST Test

The FAA has authorized several organizations, including the AMA, to administer the knowledge and safety test required by congressional action.

You are now required to show proof of passing the test (along with your FAA ID number) to law enforcement or FAA representatives upon request.

The test is free and can't be failed! Take it at:
https://trust.modelaircraft.org/

CRRC Membership Renewal

Support CRRC by renewing your annual membership! See the last page, or contact Adam Smith (membership@charlesriverrc.org). Ages 75 and over, and under 19, are free for CRRC membership (AMA membership required to fly at fields/events, and discounted for juniors). Sixty-and-over receive a $10 discount. Donations to the club are always welcome.

Make sure you have a current card to bring to in-person meetings and get a free raffle ticket!

Club Information

Officers - 2026

President
Joe Sicree
president at charlesriverrc.org

Vice President
Dan Sullivan
vicepresident at charlesriverrc.org

Treasurer
Dave Marshall
treasurer at charlesriverrc.org

Membership Secretary
Adam Smith
membership at charlesriverrc.org

Recording Secretary
Roger Silva
secretary at charlesriverrc.org

Webmaster
Shawn Silva
webmaster at charlesriverrc.org

Newsletter Editor
Mike Whidden
newsletter at charlesriverrc.org

Interim Chief Instructor
Scott Ritter
chiefinstructor at charlesriverrc.org

Safety Coordinator
Jimi Two Feathers
safety at charlesriverrc.org

Raffle Chairman
Scott Ritter
exofficio at charlesriverrc.org

Instruction

To inquire about instruction please contact Interim Chief Instructor, Scott Ritter.

Types of instruction
B = Building
G = Glider
E = Electric
F = Fuel
H = Helicopter
Q = Quadcopter/ Multirotor

John Weigel - B
Natick - 508-655-2138

Richard Gammon - B,G,E,F
West Boylston - 508-835-2049

Ken Antonellis - G,E,F
Natick - 508-653-8369

Lincoln Ross - G,E
Waltham - 781-891-0332

Dave Walter - G
Hudson - 978-562-5400

Jon Leehey - F
Wayland - 508-358-5721

Tony Davids - H
Stow - 978-568-9598

Scott Ritter - Q
Sudbury - 978-443-2373

General Info

Flying Sites

Go to charlesriverrc.org and select the Flying Sites tab to see the various sites. CRRC reserves time seasonally on Davis Field in Sudbury, and shares Bill Martin Field in Medfield with the MMAC.

Keys to Medfield / Bill Martin Field

To get a key for Bill Martin Field in Medfield please email key-master Ken Antonellis at kxa@verizon.net.

The key for 2023 will be updated in late April by MMAC. Keys may also be available at the monthly meeting. A $5 deposit is required the first time you receive a key.

Tree Climbers

Tom Hurney
508-272-7489

Sean Comer
781-444-1227
thescomer@gmail.com

Membership Application - 2026

Name					
Street					
Town		State		Zip	
Telephone		Email			
AMA No.		Birth Date			
I agree: [ ]	Club membership and activities are bound by the CRRC handbook, available at: http://charlesriverrc.org/newsite/Documents/CRRC%20Handbook%202020.pdf				

IMPORTANT: You must be an Academy of Model Aeronautics member to join CRRC.
AMA Jr membership is discounted! http://www.modelaircraft.org/membership/youth.aspx
By submitting this membership application, you agree to comply with the AMA safety code, including documents 550 and 560 found at: www.modelaircraft.org/documents.aspx

To receive a membership card, bring this application to a club meeting or mail it to the membership secretary:

Adam Smith
Membership Secretary CRRC
460 Main Street, Acton, MA 01720
membership@charlesriverrc.org

You may pay by check or use PayPal. Make **checks** payable to ***Charles River RC***, or send **PayPal** to the email above.

Member category	Before March 1, 2026	After March 1, 2026
OPEN Member	$60	$65
SENIOR member If age 60 before July 1st	$50	$55
SENIOR member If age 75 before July 1st	Free if AMA member *(Voluntary donation appreciated - e.g. $50)*	Free if AMA member (Voluntary donation appreciated - e.g. $50)
JUNIOR Member Under 19 before July 1st		
NON-FLYING member If age 75 before July 1st	*(Voluntary donation appreciated)*	(Voluntary donation appreciated)
Full time STUDENT	$40	$45
Family member additional to OPEN membership		
Additional / optional donation (supports field rental)	*Voluntary $10 / $25 / $50 / etc*	