

NEWSLETTER OF THE CHARLES RIVER RADIO CONTROLLERS, INC



CRRC FLIGHT-LOG

<http://www.charlesriverrc.org/>

AMA CHARTER 339

MARCH 2004

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General Meeting

Wednesday,

March 17th

7:30 pm

Verizon Labs

Sylvan Road, Waltham

Exit 27b off I95/128

Key Note



**Show
US**

**YOUR WINTER
PROJECTS**

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(1) Mega 16/15/3



(1) R148DF Rx

WON
a
COOL TOOL
for
Show-n-Tell

President's Message



Welcome to Spring time!! It's time to cycle batteries, clean the dust off the old planes and finish the new winter projects. We have a busy year planned and thankfully, we have volunteers to run almost all events. This job is not so hard after all. There has been some discussion about a few topics of which we will

cover at the next meeting. One is the proposed use of Paypal. Shall we use it or rely on cash or checks? Also there has been some talk about a two day hand launch contest. Some were explaining that the contest needs to be two days in order to have an ESL Sanction. Do we want to do that?

The next upcoming event is field cleanup at Medfield tentatively scheduled for the first Saturday in April, weather permitting. There shouldn't be much work but, it's a good excuse to fly and have some coffee and doughnuts. Our sister club, Millis Model aircraft club, will also be on hand to join us in the cleanup of the jointly leased field. By the way, I will have a trainer and buddy box system available at the cleanup so, even if you have never flown, bring a pair of work gloves and do some flying!

- Ken Antonellis

February 2004 Board of Directors Meeting

The entertainment for the March general meeting will be winter projects.

The March raffle will include a dandy combination cordless drill/radio, an 8-channel receiver, and a MegaMotor.

One BOD member noted that the 495th club is hosting a Static Scale show on April 7 in Tewksbury. Viewing begins after 5:00.

The March BOD will be held at the Natick Library.

Keys will be changed at Medfield on March 30, 2004. To exchange your key, send your old one with a SASE to:

Ken Antonellis
14 Winslow Road
Natick, MA 01760

If you do not have a current key, there is a one time fee of \$5.00

Recorded by Dave Walter

MEMBERSHIP STATISTICS

Here are the updated CRRC membership figures. We are still waiting for 58 of last year's members to renew.

Year	Renewals	New Members	Peak Totals
1999			135
2000	112	62	174
2001	124	50	174
2002	138	58	196
2003	156	40	196
2004	131	11	142

TREE CLIMBERS

Tony Morais

A1 Tree Services- Framingham, MA
508-626-0088 800-657-7788

Kenny Greeno

Office Phone: 617-661-8591
Cell Phone: 617-201-5300

Brian Pikarski

Burlington, MA
617-797-2136

Paul Harrington

(508) 376-2573 [Medfield Area]



Who's plate is this?



CRRC BUILDING AND FLIGHT INSTRUCTORS

This is our list of qualified and willing instructors. Power planes are flown only at the Bill Martin Flying Field in Medfield. Sailplanes and Electrics can be flown at the Davis Farm Field on Rte. 117 in Sudbury. For directions to the fields go to <http://www.charlesriverrc.org>. If you have any questions about the construction of your airplane, or want to have an experienced pilot preflight check your airplane before heading to the flying field, then call any of the building instructors.

BUILDING

Ruane Crummett

Wayland 508-655-2234

Fritz Bien

Concord 978-369-1720

Joel Foner

Natick 508-653-3560

John Weigel

Natick 508-653-3560

Pete Young

Watertown 617 923-4184

Derrick Veliz

Acton 978-266-1739

ELECTRICS

Bruce Schneider

Hudson 978-562-9900

Fritz Bien

Concord 978-369-1720

Dave Walter

Hudson 978-562-5400

Derick Veliz

Acton 978-266-1739

Pete Young

Watertown 617 923-4184

Lincoln Ross

Waltham 781-891-0332

HELICOPTERS:

- None Available at present-

POWER

Chief Instructor

Ruane Crummett

Wayland 508-655-2234

Bob Scott

Norwell 781-982-0268

Pete Young

Watertown 617 923-4184

Jon Leehey

Wayland 508 358 5721

Dave Walter

Hudson 508-562-5400

Fritz Bien

Concord 978-369-1720

Neil Kaufman

Sudbury 508-443-9647



SOARING

Dick Williamson

Sudbury 978 443-8549

Dave Walter

Hudson 978-562-5400

Bruce Schneider

Hudson 978-562-9900

Fritz Bien

Concord 978-369-1720

John Nilsson

Clinton 508-368-7136

Pete Young

Watertown 617 923-4184

Lincoln Ross

Waltham 781-891-0332

.....< CRRC LIBRARY >.....

The club keeps a library of videos and books. They are made available at club meetings. If you cannot come to the meeting, and would like to borrow a video or book, call Ken Antonellis at (508) 653-4513.

Videos:

1996 World Masters Aerobatic

Championships

AMA - The Pioneers (25 min)

Byron - New Generation of Modeling

Products (17 min)

Byron - R/C Wars

Combat Models - Fighter town

Demo (8 min)

Coming of Jets & History of the DC3

Dynamic Soaring

Elmira '97

Endless Lift

Hot Stuff Video (60 min)

Local Flying (Medfield)

Military Aircraft

Monokote 1 & 2

Old Buzzard Goes Flying

R/C Helicopters

R/C Info and Tips

R/C Ornithopter Research Project R/

C Soaring from the Ground Up

R/C Video Magazine, Vol. 1-13

Scale Aircraft Documentation

The Light Stuff (Daedalus Project)

Wring It Out, Vol. 2

Books:

1993 Don Edberg Complete Source Book

AMA - Sound and Model Aeronautics

Aviation Heritage Magazine - B2

Flying Wing

Completely Cars - Harry Higley

Trainers (R/C Magazine)

TREASURER'S REPORT

Report Date 2/27/04

Starting Balance 1/30/04	
Checking	\$5,327.61
Savings	\$5,626.69
Cash	\$25.00
Total Starting	\$10,979.30
Income	
Raffle:	\$103.00
Interest: Savings	\$2.59
Total Income	\$105.59
Expenses	
Scott Anderson -raffle prizes #1347	\$99.99
Derick Veliz -raffle prizes #1348	\$78.37
Town of Sudbury -event expenses #1349	\$500.00
Jeff Newcum -Feb newsletter & postage #1350	\$127.30
Monthly Bank Fees	\$11.00
	\$816.66
Ending Balances	
Checking	\$4,613.95
Savings	\$5,629.28
Cash	\$25.00
Total Ending 2/27/04	\$10,268.23

- Scott Anderson



Secretary's Report: February 2004 General Meeting

Club President Ken Antonellis opened the meeting at 7:45 PM. Secretary's Report and Treasurer's Report were approved as printed in the January newsletter.

Field Reports

Davis Field, Sudbury

Davis Field is clear, and the ground is still frozen.

Bill Martin Field, Medfield

The road to the Bill Martin field is currently drivable. The lock to this field will be changed soon. Keys will be available at the March General Meeting. If you have the old key you can exchange it for the new one. If you don't currently have a key, it costs \$5.

Old Business

Dick Williamson reported that 124 members are currently signed up for 2004. The membership fee goes up \$5 on March 1.

Dick plans to send \$500 to the Town of Sudbury to reserve Davis Field for two weekends during the summer, one for the RES/HLG contest, and one for the SoarIn.

New Business

Ruane Crummett volunteered to attend the next two BOD meetings.

The Collings Foundation Fun Fly date has moved to June 19-20 (Father's Day). We are still looking for a volunteer CD.

The spring field cleanup at Medfield is scheduled for the first weekend in April, weather permitting.

There were no new solo pilots this month.



Dick Williamson pointed out a new online E-zine called Sport Aviator, offered by the AMA. This web site is dedicated to helping new model pilots succeed. You can find it at www.masportaviator.com.



Visitors to the monthly meeting included the following:

- Allen Joffe – A past club member who decided to re-activate himself. Welcome back!
- Jim Sbrogna - From the Central Mass club, and also one of the guest speakers.
- Federico Frigerio – A current member, but attending the meeting for the first time.

Raffle

- 1st Prize – Ruane Crummett – A partially built Sig Kadet LT-40 with engine and receiver
- 2nd Prize – Lee Arnold – Miter box

Show-N-Tell

John Leehey – A classic Astro Hog, beautifully built and nicely equipped with a Saito 91 4-stroke.

Tom Bauer – A U2 foamy slope glider from RC Sailplanes in Australia. Two channels and 29 ounces, Tom covered it to match the Dryden Research plane.

Andrew Johnsen – A Picojet electric flying wing. All foam with brushless motor.

David Spielman – A Defiant 2 meter thermal foamie from Northeast Sailplanes.



Entertainment

Jim Sbrogna and Mitch Buckley introduced their Carden Aircraft 40% Extra 330S. This stunning scale model had club members drooling like fools. Mitch showed us photos of the plane wedged into his dining room during the construction phase. Jim and Mitch have flown the model several times already. Mitch plans to fly it in competition this summer. He explained the basic maneuvers known as 3D. Here are a few interesting facts:

- Constructed mainly of foam, balsa, and lite-ply. Mitch calls it his flying beer cooler.
- Eleven servos, 2 on each flying surface, with MatchBoxes used to balance the servos.
- Two receivers for redundancy and load sharing.
- Built in digital voltmeters for the two receivers.
- Separate battery packs for receivers, ignition, and smoke system.
- Weight is 40+ lbs.
- Engine is the Desert Aircraft DA-150 twin. 150cc, 8 lbs, 16.5 HP providing a 3-to-1 power to weight ratio.
- 3 bladed carbon fiber prop and spinner.



Recorded by Dave Walter

draganFLY

Predator

Removable Canopy

Removable Canopy for easy access to flight guidance and camera system (no tools required).

Precision FM Radio

System with digital V-tail mixing and DSP receiver.

Easy Transport

Both wings and all three tail surfaces are removable.

V-Tail

25% less drag than conventional design.

Streamlined Fuselage

Fuselage streamlined to minimize drag.

Eyecam

2.4 GHz wireless color video camera - Watch video in Realtime from the ground!!

Digital Camera

2 Megapixel still digital camera.

Long and Sleek

Long, sleek plug-in wing for extreme flight duration with heavy payload.

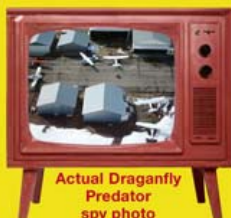
Rails for easy hand launching.

High Performance Motor

DC 70 watt electric motor with efficient, durable pusher propeller powered by NiCD battery (Lithium - Polymer available for extreme duration flights)

Self-aligning Ventral Fin

Provides the extreme stability necessary in an aerial camera platform.



Actual Draganfly Predator spy photo

High Quality Almost Ready to Fly

Hand built balsa construction, durable polyester Oracover covering, and hand painted camouflage scheme

Draganfly Innovation's scaled-down Predator looks just like the Predator B you have seen on CNN. And, like its full-size cousin, the scale Predator is flown by a radio system from the ground while it transmits real-time color video and takes high quality still photos. The scale Predator can even be equipped with a GPS flight control unit for long distance, pre-programmed reconnaissance missions (20 miles effective range). Designed with a low-drag fuselage and V-tail, the Predator is configured to extract the maximum power available from the flight battery.

Professional hand-and-jig balsa construction minimizes weight, high quality Oracover polyester covering adds considerable strength and offers impressive durability, and a hand-painted camouflage paint scheme completes the scale realism. Electric 'plug and play' power is fool-proof, and transportation is made simple by modular plug-in wings and tail fins. The radio and propulsion systems are pre-installed and each Predator is balanced and hand-tuned by our factory professionals. Even a battery and DC peak charger are included, making the Predator a Plug-In-and-Fly system.

The Predator's radio system is based around a high-quality professional grade transmitter equipped with rechargeable batteries and adjustable control sensitivity to fine-tune the Predator's flight characteristics to your personal preferences. The airborne radio package includes a revolutionary microprocessor DSP based receiver capable of rejecting radio interference for high-reliability operation in noisy RF environments. Also included are our own Draganfly brand 9 gram servos for powerful and precise control. Over 1 mile of control range can be achieved using this combination of state-of-the-art

components. The scale Predator is very easy to fly, but it wasn't designed as a first R/C airplane. If you already are an R/C pilot you will have no problem flying the Predator.

Below: Each kit has a hand painted camouflage scheme



The Predator's long wingspan, self-aligning ventral fin, positive balance, and light wing loading make for a very gentle and steady aerial platform.

Of course, the full-size Predator was designed as an aerial platform for video and still cameras, and this functionality is shared by the scale Predator. The Eyecam 2.4GHz wireless color video camera transmits its birds-eye-view video in real-time to the pilot, where it can be viewed and recorded. If high-quality images from above are desired, Draganfly offers a 2 megapixel digital still camera that is remotely activated by the R/C transmitter.

With personal use in mind, Draganfly offers the base Predator as an aerial platform. Simply add our Eyecam wireless video system or digital still

camera and you will be ready for those aerial surveillance missions. Draganfly also offers a high performance Lithium-Polymer battery system that triples flight endurance and improves performance. Finally, if autonomous flight or long-distance (up to 15 mile range) video is required, Draganfly's Predator is up to the task. If you require these extreme capabilities, please contact us with your specific requirements

What autopilot system do you use?

We use the Micropilot 2028 (micropilot.com) for autonomous flight. This autopilot is the smallest in the world (weighs only 28grams!), and comes with ground control software for a laptop computer. Each Predator purchased with the 2028 will include a brushless motor system and 4200mAh Lithium-Polymer battery. Please call for availability (generally 6-8 weeks).

Kit Contents

High quality 4 channel FM transmitter with NiCad battery, Adjustable Travel Volume, and V-Tail mixing on 72MHz, Berg Digital Signal Processing 4-channel micro-receiver with micro-antenna (installed) Built, covered, and painted airframe Two DF-09 9gram servos (installed) Pusher prop 20amp Electronic Speed Controller (installed) Speed 400 70watt Electric motor (installed) Charger for transmitter and airplane batteries Printed manual with photos and instructions for building and flying

7-cell 1000mah NiCD battery, or 2-cell 4200mah Lithium-Polymer battery if you purchase the Predator with Eyecam Bundle It's a Complete Plug-in and Fly R/C Aerial video platform!

Wingspan: 73.5"

Length: 35 inches

Takeoff weight: 25-39 oz Max

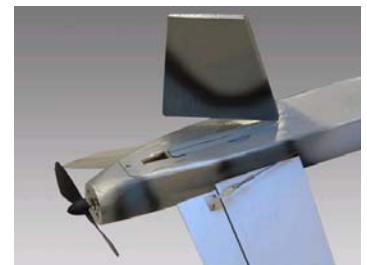
Airspeed: 50mph

Max altitude: 8000 Ft

Propulsion: 70 watt electric motor

Max endurance: 1.5 hours with Lithium-Polymer battery.

Right: Self-aligning Vertical Fin



Below: The Predator with all the options



Below: The digital camera is mounted inside and looks sideways. The video camera looks forward.



**Pictures and text are used with permission from Draganfly Innovations
www.rctoys.com**



Glider fun fly Day

RIGHT: Rick Walba's HLG in overhead flight



For fun we made several landings during the day playing for coins marking the closest landing to the spot. I don't remember who was the closest, but I do remember landing on the coins and showering them about the field. I don't think anyone got the coins in the end because we couldn't find them.

Fritz launched several minutes ahead of me with his Aegea-Mantis, Jim Tyrie was up in the same lift with his AVA, and I followed with my MH32-Mantis loaded with the Picolario. Fritz was in lift, don't need a vario to decide where to go, chase Fritz, and I did. We both played around with the lift for about 15 minutes or so. Fritz cut out to check out the other end of the field and I hung around listening to the vario and coring on the small pockets of lift (golden rule, never leave lift)



LEFT: Jim Tyrie's Escape against the overcast sky.

Last fall our club, the SNHRCC held a glider fun fly day. We had a pretty fair turnout with a variety of gliders, electrics and hand launch.

This was the first time I really had the chance to sort out the value of the Picolario Talk. This little unit provides a vario function to provide feedback on the climb rate. Beyond this function it also provides a real-time altitude feedback and onboard battery voltage reporting. What's unique about this is that it speaks to you in English for the altitude and voltage through a FRS radio. Nice little unit, pricing runs about the same as an 8 ch radio.



ABOVE: L to R Jim Tyrie, Bob Dionne and Grandfather Ralph focused on lift.

Photos by John Hayes



ABOVE: A good mix of sailplanes for the day, there were Mantis, Majestics, Laser, Sovereign's, Escape, AVA and HLG.



RIGHT: Jim Tyrie's AVA by Kennedy Composites. The design is based on Mark Drela's Bubble Dancer.

At the other end of the field Fritz was playing in some good stuff, and where I was began to get a bit more spotty, I cut loose and headed for Fritz, don't need the Picolario for lift finding, just find Fritz! I toyed around in Fritz's air for a few minutes while he bailed out for a landing. I continued to go up and play around reaching an altitude of 1200 ft, at that point I said that's enough and decided to head home for a landing. Coming back I ran into a bit of lift, Ok how much can I get from this? Played around a bit, 1300ft, time to come home, hit lift, 1400 ft., more lift, I maxed out at 1501 ft. Just then I heard the battery report 4.2 volts. Time to get serious about landing since the NiCd's were getting dangerously low.

The Picolario gave me excellent altitude reports and the voltage feedback unquestionably saved my glider and paid for itself in this one flight, but if you want to find the thermals just follow Fritz ;-)

- John Hayes



ABOVE: Bob Rondo launching his Majestic after an at altitude battery failure in his laser.



THE CHARLES RIVER RADIO CONTROLLERS, INC

AMA Charter 339

2004 MEMBERSHIP APPLICATION

Name _____
AMA No. _____
Street _____ Birth Date (AMA req'd) _____
Town _____ State _____ Zip _____ Tel. _____
E-mail _____
Channel Number(s) _____

I PREFER TO RECEIVE MY NEWSLETTER

☐  **ELECTRONICALLY**

☐  **Via the US Mail**

To receive membership card and field pass, bring this application to a club meeting, or mail with a copy of your Year 2004 AMA LICENSE, appropriate dues, and a **SELF ADDRESSED STAMPED ENVELOPE** to:

Dick Williamson /Secretary CRRC
P.O. Box 398
Lincoln, MA 01773
Telephone 978 443-8549
E-mail: williamson@ll.mit.edu

☐ I DO NOT want my address to appear in the club phone book

OPEN Member	\$35.00
JUNIOR member, (under 19 before 7-1)	\$20.00
SENIOR member, (if age 60 before 7-1)	\$25.00
full time STUDENT	\$20.00
Family member additional to OPEN membership	\$20.00

I'M INTERESTED IN THE FOLLOWING:

- | | | |
|--|--------------------------------------|--------------------------------------|
| ☐ TRAINERS/SPORT PLANES | ☐ ELECTRICS | ☐ PATTERN |
| ☐ GLIDERS | ☐ HELICOPTERS | ☐ RACING |
| ☐ INDOOR/PARK FLYERS | ☐ SCALE | ☐ GIANT SCALE |
| ☐ OTHER (specify) _____ | | |

February CRRC Meeting Pictures



Tom Bauer's U2 from down under



Ruane Crummett won the raffle prize, a partially built Sig Kadet LT-40 with engine and receiver



John Leehey's classic Astro Hog



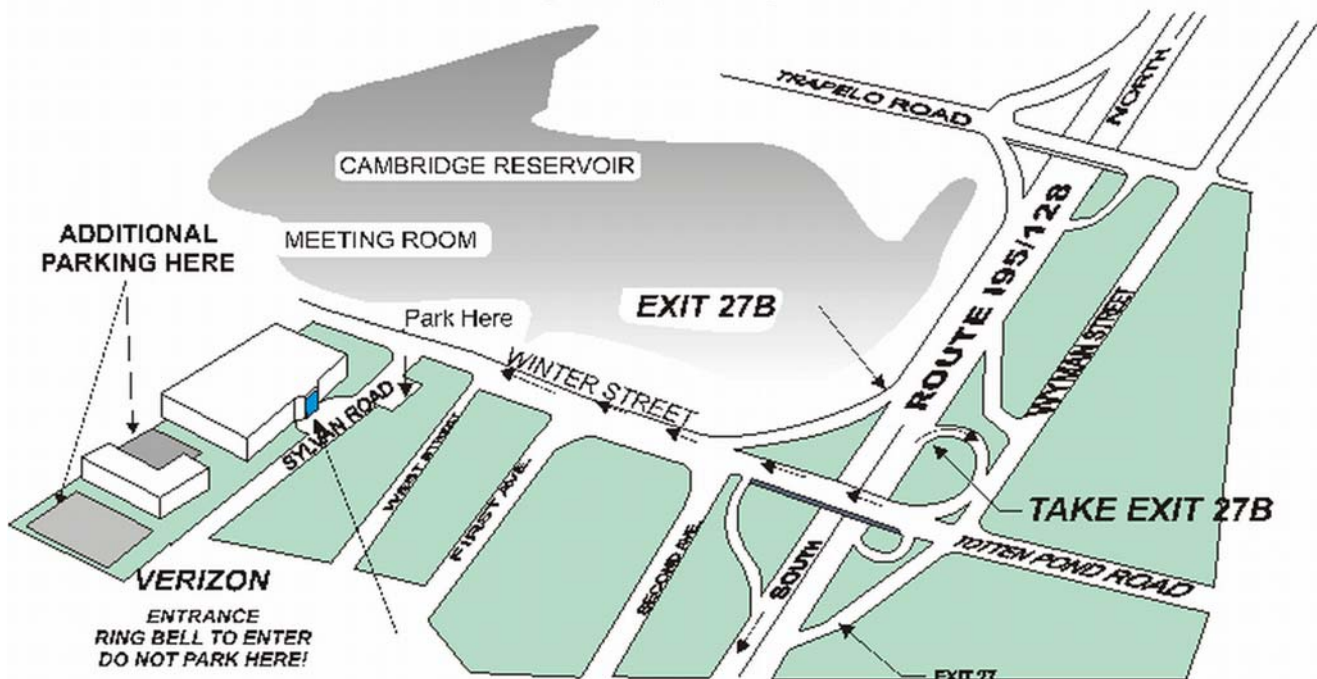
Jim Sbrogna's Carden Aircraft 40% Extra 330S



David Spielman's Defiant 2 meter from NSP

Photos by Derick Veliz and Les Gerhardt

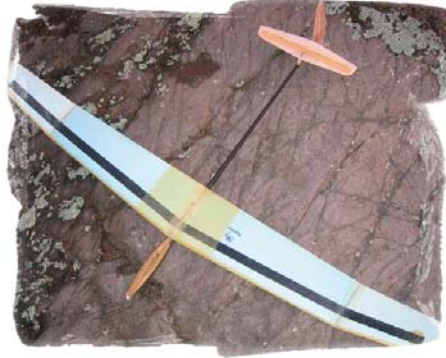
LOCATION OF MONTHLY MEETING
FOR THE CHARLES RIVER RADIO CONTROLLERS
at VERIZON LABS



I can't wait for spring! It's been a cold and windy winter. Thankfully we haven't had as much snow as previous years. I've been building a Magea (Mantis with the Aegea wing, coined by Frtiz) and a poly hl. The Magea is a very competitive 3m contest sailplane. I originally bought the fuse last year at the Lancaster ESL contest. The fuse is manufactured by Terry Luckenbach. It's a beautiful piece of composite sweetness. He uses carbon fiber, Kevlar, fiberglass, and epoxy to create it. The wing and v-tail was purchased from Phil Barnes. It's simply excellent. It's a 3 piece wing that uses Mark Drela's AG series airfoils. It's constructed by bagging foam cores with carbon, Kevlar, and epoxy. Fortunately, the majority of the work is already done and I'm left with a minimal amount of building.

Fritz Bien has assisted me the whole way and his insight has proven to be invaluable. I've taken the slow and steady approach to building on this project. The construction is straight forward and looks to be very durable. I've documented the progress on the

The Last Word



The completed poly HL airframe.



Here is the fuselage for the Magea with the HT series v-tail.

ESL forums, which can be located at: http://forums.flyesl.com/topic.asp?TOPIC_ID=3

Also, I'm assembling a poly hand launch that's based on Mark Drela's SuperGee. The boom and pod were purchased from Rick Walba. The wing was purchased from RandyG on Ezone (AG equipped) and the tail feathers were made (sanded and bagged with HT airfoils) by Tomer Jackman, Thanks Tomer! I recently started assembling the HL. Currently, I'm about 99% done and I will be flying it this weekend. I can't tell you how many times I've thought about launching it and I'm really psyched to see it fly.

I guess you could say that I really like Mark's designs and why shouldn't I? They're highly competitive, easily attainable, and love to stay in the air. What else could you want?

- Jeff Newcum



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newsletter@charlesriverrc.org

