Newsletter of the Charles River Radio Controllers, Inc.

CRRC Flight-Log

http://www.charlesriverrc.org

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GENERAL MEETING

Wednesday
January 19th
7:30 PM

The Club Meeting will be held at the **Goodnow Library in Sudbury.** Bring a friend or just come alone. See directions on the last page.

SPEAKER
Sky Andrew

Our new vice president will bring us up to date on his personal and modelling past and his thoughts as we move forward into the new year.

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RAFFLE

First Prize

Model Aero
Mini Polaris Seaplane
Foam 21.75"





Second Prize

SURPRISE!

President's Letter



I hope everyone is having a great start to 2011! It sure started with some amazing flying weather for the Frozen Finger Fun Fly. The winds were very calm, and the temperature was in the upper 50's. According to weather.com, it hit 57°. I can not remember the last time that I walked around with just a T-shirt on New Year's Day. Unfortunately, it will probably be a while before we see weather like that again.

Winter Projects

If you didn't attend last month's meeting, you may have missed it, but we will be giving away prizes in several categories for our annual Winter Projects night. One of the categories will be the best before/after. It could be the best repair, or the best build, but we want to see the before and after. It could be a repair or a fresh new build. If you didn't get to bring your project(s) out last month, you can still do it over the next few months, but don't wait too long to start on the project.

Also, I want to remind everyone that we will be moving our Winter Projects night from March to April, since we do not have access to Goodnow library meeting room during March. This gives you a whole extra month.

Guest Speakers

We have some exciting guest speakers lined up for the next several months. This month, Sky Andrew, our new Vice President will start 2011 with a presentation of his experience on being a Black Hawk Crew Chief in Iraq and Afghanistan. You can read Sky's bio later in this newsletter.

For February, we will have speakers from the New England Aerobatics Club (full scale, not RC). We'll have more information in February's newsletter.

Flying at Public Parks

I received an email last month from Eliot, a Sudbury resident. He is a member of the AMA but does not belong to a club. He was flying at a high school baseball and practice fields along Route 30 (I'm not sure which high school). After he had finished, a person started flying an electric plane over a soccer field that had some kids playing. Eliot said that he suggested to the person that the flying should be done over the other field and not over people. The person reportedly got defensive and said that he was a member of CRRC club and flies over people at Davis all the time without a problem.

Since I wasn't there, I don't know the circumstances, and what was said by whom. But I would like to urge everyone to be extra careful when flying in public parks or school grounds, especially with higher powered electrics. Please don't fly over people, especially over small children. Everything gets magnified when children are involved. Also, if anyone makes a request, please try not to get into any arguments. (I admit that I once got into an argument at Davis Field with someone who took umbrage at the fact that I warned him that I would "need to land in a few minutes." I regret the way I handled that situation.) Some people are oblivious of possible dangers, but also some people may over react to any possible danger no matter how remote. In either case, you will not likely change their minds. So please use your discretion.

I would also like to remind everyone flying at Davis to keep safety in mind. I realize that since we don't have set pilot's stations or a runway, it can seem haphazard at times. I don't think any of us, especially the glider pilots, would like to have restrictions on where pilots can fly from. If there really is a lot of flying over people's heads, maybe we should have a discussion to improve safety. (I wouldn't consider a glider flying many hundreds of feet overhead in the middle of the field to be much of a safety issue, but flying an electric 50 feet over someone's head is a safety issue.) What we shouldn't do is to use what may happen at Davis to justify flying over peoples heads in a public park or school grounds.

Board of Directors Meeting

Due to the holidays and people being unavailable, December's BOD meeting was not held.

So, unless we get more unseasonable weather, stay warm in your work shops and get busy on those winter projects!

– John Eppling
CRRC President

Sky Andrew Introduction

My name is Sky Andrew. I was born 4 JUL 1982 in Framingham MA and have recently returned to the area. In September I was discharged from active duty and returned from Ft. Campbell, KY after 6 years of Army service. I served as a Black Hawk Crew Chief with the 160th Aviation Regiment and saw action in Iraq and Afghanistan. About three years ago I purchased an ESTES EDF from Wal-Mart on my birthday. After floating it around the backyard for a few days I was hooked and progressed to a PZ Super-cub. Over the last couple years I have graduated into bigger and more complex equipment up to the 40-50 size Glow ARF category. Until this fall I was not a member of an RC club and I am enthused to enjoy the camaraderie and opportunity to further my involvement in the hobby. I am excited to participate and learn as much as I can from the more seasoned veterans in our club and FLY! For this upcoming year my goals include increasing membership through active engagement of younger flyers, developing a Night Flyer League, and expanding our involvement with FPV (First Person Video) flight. I look forward to serving The Charles River Radio Controllers and welcome any advice or suggestions you may have. See you on the downwind.

Little Plane, Big Sky

Sky Andrew
CRRC Vice-President

Treasurer's Reports

December Report Date 01/03/11

Starting Balance 12/01/10	
Checking	$6,565.22
Cash Box	$25.00
PayPal Acct	$362.69
CD Accounts	$6,841.30
Total Starting	**$13,794.21**
Income - CDs	
Interest Dec.	$3.81
Income - Checking	
Raffle	$44.00
Membership	$270.00
Total Income	**$314.00**
Expenses - Checking	
Comm. of Mass AR 180 Annual Report #1853	$15.00
Sky Andrew Membership refund #1854	$45.00
Stamps Membership Sec. #1855	$8.80
Raffle #1856	$94.98
Website Fee, HostGator.com	$119.40
Total Expenses	**$283.18**
Ending Balances	
Checking	$6,596.04
Cash Box	$25.00
PayPal Acct	$362.69
CD Accounts	$6,845.11
Grand Total Ending 12/31/10	**$13,828.84**

– Richard Roy
Treasurer

General Meeting Minutes for December 15, 2010.

Business Meeting

Field Reports

Davis Field is in good condition. The pink footed goose has been hanging out in the back corn field. It's been followed by a group of birders armed with cameras and binoculars. A few fliers were there last Saturday and reported great flying weather.

Membership Report

Ray Harland reported that the membership now stands at 41 people including the free members.

Board of Director's Meeting

The BoD meeting will be held Tuesday, December 21st. There were no volunteers from the members at large. John will solicit volunteers privately during the meeting. The venue for the meeting will be Skype. Dick Williamson reported that it is an easy hookup with a cell phone head piece to his lap top computer.

Old Business

None

New Business

Sudbury field planning: Dick Williamson reports that the Town of Sudbury is taking a serious look at developing the old gravel pit on route 117 into baseball fields. Renovation of Davis Field for baseball is unlikely because funding for that renovation would have to come from property taxes rather than the CPA community development fund. Town by-laws limit the CPA fund only to be used for development of new recreation areas, not upgrade existing areas. This is good news for people desiring open fields for recreation.

Rue Crummett spotted a large developable field in Westborough near Lake Chauncey. The field is an estimated 1000 acres, roughly three times the size of the old Drop Zone flying field. This is state owned property with good access. Rue was looking for a volunteer to approach the state to begin inquiring about the field's availability for a flying site. This may be a good multi-club venture.

Ray Harlan has applied for a permit for the club float fun fly at the Wayland town pond. Nancy McSchaye is the Wayland and Sudbury Department of Recreation lead to which the application goes for approval. Ray will notify Rue when the permit is approved so that he can submit paperwork for the AMA sanction.

New Wings

None reported

Guests

None noted

Raffle

Raffle prizes were 1st prize – An L39 Albatross receiver ready, ducted fan jet. This awesome plane was purchased form Hobby Lobby and only needs a radio and 1800 mAh 3s battery. This is a very pretty foam jet. 2nd prize is a laminated field guide. Tony liked this one so much he bought 2, one for himself and one for the club. He's hoping to win first prize.

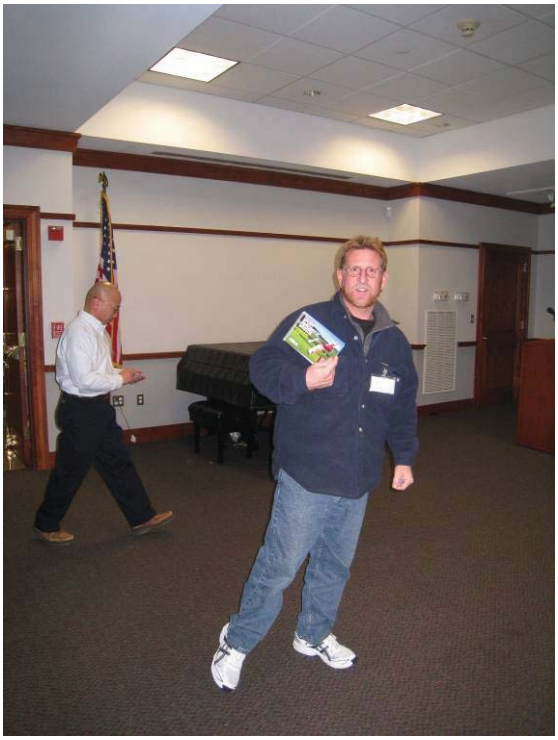
The big events tonight were the raffle and the show and tell. We had nearly 100% participation in the raffle tonight. Dick Williamson graciously conceded his ticket to ensure an impartial ticket pick.

The winning ticket was held by lucky John Eppling. Way to go John. John picked the Albatross even after a lot of coaxing by the audience to take the book.



The second winning ticket was held by Rue Crummet. Rue commented that this is the first raffle prize that he has won since he was club president in 1994. It looks like Rue's luck may be changing.

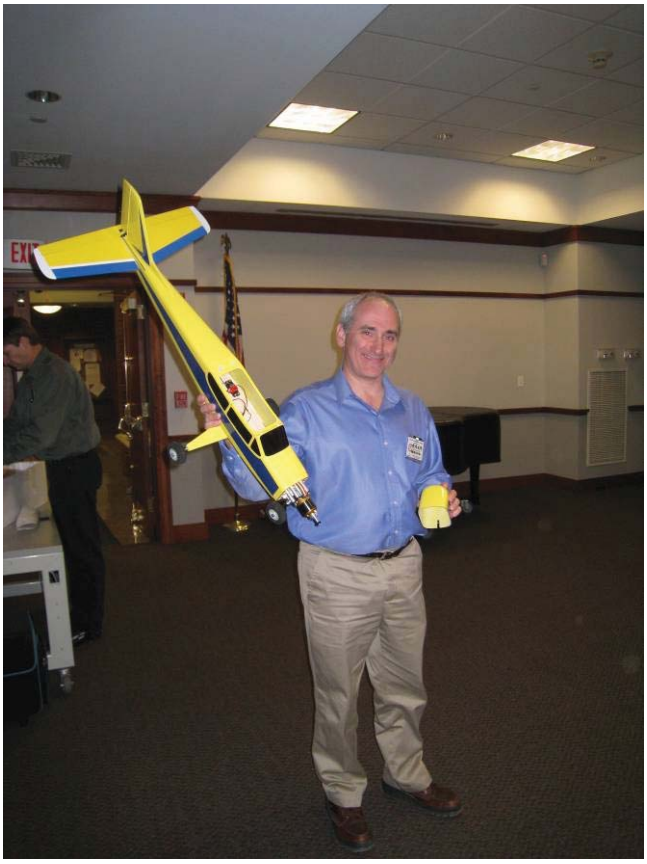




Show and Tell

David Spielman showed off his Bonnie 20 purchased at the November auction. This high wing trainer was carried by Hobby Lobby several years ago and was written up in the AMA web site. It's powered by an AXI 2820/10 and a 10X7E prop. Rue and Ken commented that the AXI will provide plenty of power. It is also a great float-plane.







Sky Andrew has moved back from Florida and is rebuilding his shop. Sky brought in two simple tail hangers for plane storage. The first hanger supports a 50 size Zero by the tail. His second hanger will hold four aircraft. It's made from 2X4 lumber and 1/2 inch copper pipe with PVC hose to cushion the pipe. Sky plans to hang low wing planes nose in on it. The secret to getting the PVC hose over the copper pipe is to apply WD40 to the pipe for lubrication.

Dick Williamson brought in a Denny Maze EZ Bubble Dancer kit. Denny and Mark Drela came up with a way to make the build of the Bubble Dancer go faster. The original Bubble dancer is built with vertical grain balsa with top and bottom carbon fiber caps. The new method uses a carbon fiber tube with top and bottom carbon fiber caps. Both methods wrap the spar with Kevlar Tow. This EZ Bubble Dancer kit is very complete with pod, boom, carbon fiber pivoting stabilizer, a complete set of carbon fiber components and well machined balsa parts.





Dan Murphy brought in his Oly IIS fuselage with a little damage. The plane was launched with the power off. After a brief free flight it landed in the street with only a little tail damage. Dan needed some help with the approach to do the repair. Two suggestions: 1) Fit all the pieces together and dribble in a little CA. 2) Cut out the plywood side and replace it with new wood. Then apply some light fiberglass.





Dick Roy brought in a Mountain Models EVA (Extremely Versatile Airframe) biplane. He selected this plane because he wanted something different. The drawback of flying a biplane is, when you crash, there are twice as many wings to fix.





The EVA biplane is built with CA, carpenters glue and epoxy. Carpenters glue does a nicer job than the CA. CA soaks into the wood making it brittle. Carpenters glue cleans up well and is much lighter because most of the weight is water that evaporates. This project was more fun to build than an ARF. Dick will cover it with Ultracoat Lite. Power will be an E-flight 450 brushless motor, providing about 130 to 150 watts.

John Eppling showed off his new Turnigy transmitter glove to keep his hands warm during those cold days on the field. It will be used with a transmitter tray and a heat pack to keep things nice and warm.



John also brought in a Citabria 69-inch wingspan airplane that he purchased after last year's auction. The old covering was removed and the wood sanded smooth in preparation for a new skin of Ultracoat. This project will be set up with a small gas engine and smoke tank or 1200 to 1800 watt brushless motor setup. The overall weight will be roughly 10 pounds complete. John plans to lighten the structure if the plane is powered by electric motor.





Tony Davids brought in a Hobby Lobby servo slower. He plans to use this to give scale like movement of the landing gear in several of his new jets. The SU34's landing gear snaps back when activated. The movement can be slowed to between .7 and 14.7 seconds. Tony's SR71 Blackbird also has servo-powered landing gear which will benefit from the servo slower. The servo slower costs $19.95.



Tony also brought in a long list of projects that he hopes to put a dent in over the winter. We'll get to see these at one of our spring meetings.

Evening Program

Extended Show and Tell

David Spielman
Recording Secretary of the Day

Frozen Finger Fun Fly



Photo courtesy of Dave Walter

The annual Frozen Finger Fun Fly was held on New Year's Day at Davis Field. The weather was the best in recent memory for the Frozen Finger event. The turnout was quite good, probably twenty to thirty people at least. Everybody seemed to have a good time. Some of the pilots were probably a little rusty, or over anxious as we had a few mishaps with tree encounters and at least one mid air collision. The warm weather also melted quite a bit of the snow making the use of skis optional.

Miner Crary had as much fun as anyone showing off his iPod controlled four blade hover craft. Who needs 2.4 GHz transmitters? Maybe we need to open up a spot on the frequency board for iPod apps. We had one father son beginner team getting help from John Eppling and Dick Williamson.

There were also several new BluCor Zagi like flying wings present. John Eppling, always looking for a smoother runway, laid out his eighty foot tarp runway. John seemed to have more success laying out the runway than landing on it.

All in all, if you weren't there, you missed a good time. There were no frozen fingers in sight. In fact, many pilots were shedding so much winter garb it was starting to look like an early spring CRRC event.



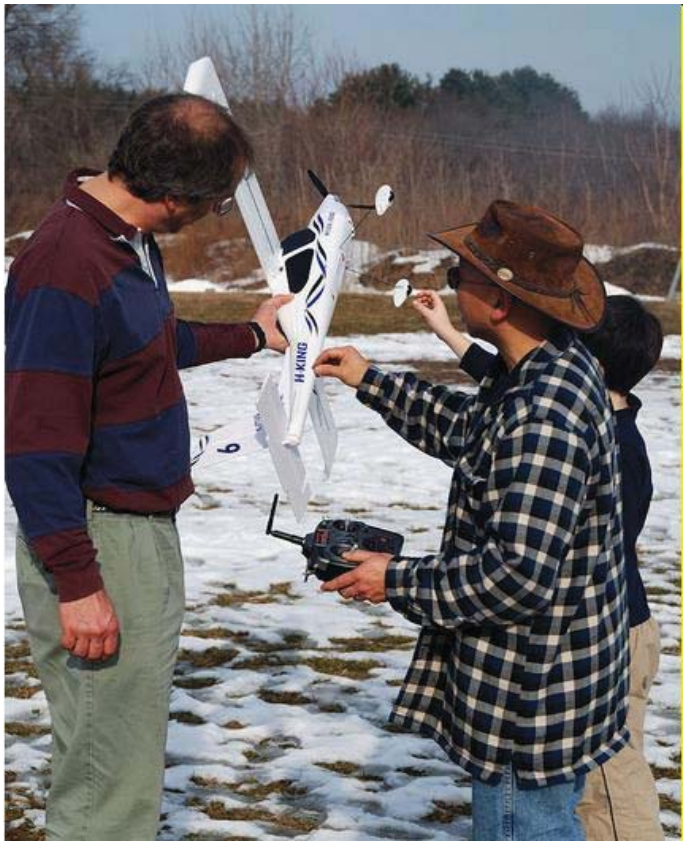




















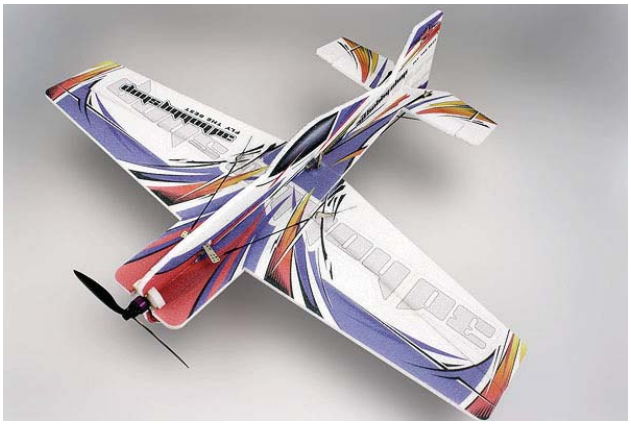


Photos courtesy of Dave Walter and Dick Roy

3D Hobby Shop's 33" Extra 330 SC

3D Hobby Shop has just released a 33" EPP foam model of the Extra 330 SC. They have balsa models of the 330 SC in several sizes ranging from 57" to 119". These are very popular 3D models, so when 3DHS announced that they would be producing several foam models, the anticipation was high. I got one of the 33" EPP Extras from the first batch. I maidened it on December 31st at Teamworks in Auburn, and then flew it at the Frozen Finger Fun Fly on January 1. It is great flying plane, and loads of fun. So far, almost everyone who has flown it is planning on getting one. I think we may see more of this plane at Davis, so I thought I would do a short report on this new airframe.

The model can be ordered from 3DHS for $56.95 (you get this price once you register). This includes all hardware necessary to build. You will need one tube of Welder glue (you can get this from Lowe's). You can get the power package from 3DHS when it comes back in stock (or other on-line vendors), or you can go with HobbyCity servos, esc, and motor for a very inexpensive setup.



Airframe

The 33" Extra was designed by Scott Stoops, who also designed many of the models that 3DHS carries. Last summer, 3DHS bought 3D EPP who produced a version of the ever popular EPP Yak 55. They no longer produce the Yak 55 (you can still find plans on-line if you want to make one for your self), but the Extra is the replacement for the Yak.

The Extra comes with all the foam pieces separate. You will use Welder glue for gluing all the pieces as well as creating the hinges. There are build videos on the 3DHS website in case you are not familiar with using Welder glue for hinges on foamies. The build videos cover every step from start to finish. Unfortunately, I didn't take any photos during my really, really, late night build session before last Friday's indoor session, but the build videos will take you step by step through the process.

Along with the foam, you get all hardware necessary to build the plane. This includes laser cut ply control horns and special servo arms. The aileron servo arms provided are biased (the arms are not 180° to each other) to eliminate the aileron differential that is produced when using a single aileron servo. The provided aileron servo arms are plenty long for any combination of servo and radio equipment that you may use. Just remember to max out the servo travel and use the hole that provides the necessary throw. I ended up cutting away at least ½" off the ends of each servo arm.

The hardware pack includes carbon fiber push rods and enough wire to make Z-bend ends for each push rod. Also included are carbon fiber rods that are used as stiffening struts for the fuse. A nice touch is that the digitally painted fuse sides have small circles where the ends of each piece of carbon fiber rods should go. No guess work or measuring the foam. You do have to measure the fiber rods to cut the necessary lengths of rods. I was skeptical of how well the Welder glue will hold the struts. I've been hand catching the Extra when I fly it, and several times, I have missed the foam and grabbed onto the fiber rods. So far, I haven't had a single strut come loose.

Power Components

The 3DHS recommended power package consists of:

- Hacker A10-9L brushless motor ($36.99 from Aero-Models)
- Hacker X7 ESC ($29.99 from Aero-Models)
- Hitec HS-45HB (3 servos for a total of $41.97 from Todd's Models)

The recommended batteries are 2S, 300-600 mah, lipos.

I went with the following components:

- Motrolfly DM2203-1600kv brushless motor ($24.95 from subsonicplanes.com)
- ZTW 12 Amp ESC ($17.99 from Mile High RC)
- HXT-900 aileron servo ($2.69 from Hobby City)
- HXT-500 servos for elevator and rudder ($3.49)
- Rhino 2S 360-460 mah and Rhino 3S 360 mah lipos ($4 to $6 each from Hobby City)

I also used the Hobby City clone of the 6-channel DSM2 receiver ($7.95). It works just like the Spektrum receivers, and I haven't had any trouble binding or with signal loss. It only weighs 4.4 grams, so it is great for small foamies.

The Motrolfly/ZTW combination is only a few grams less than the Hacker motor/esc combination, but the cost is a lot less. Not counting lipos and shipping, my 33" Extra cost me $118. If I go with a HobbyCity motor (Turnigy 2730-1500kv for $8.54) and HobbyKing SS 8-10A ESC ($6.15), then you can reduce the final cost even more. The Turnigy 2730 motor will be about 28grams vs the 18 grams for the Motrolfly/ZTW combo.

My Extra came out at 5.45 oz without the battery.

Airborne

I maidened the Extra at Teamworks in Auburn on December 31st. I used a 2S 460mah lipo. The Extra flies extremely smoothly, and it can be flown very slowly, which is great for flying indoors if you are not used to having walls. Yet, give it full throttle and full down elevator, and you will have the tail flipping end over end. The roll rate is incredible, but you can stop the roll instantly. Hovering the Extra will make you think that you are a pretty good 3D pilot. I even pulled off a couple of revolutions of torque roll. I've chickened out on torque rolls with my balsa models, but I'm not afraid of damaging the EPP foam. I lost orientation a few times and flew it into the floor, but I had no damage other than a bent prop. I did manage to fly it into a chair, and I got about a 1" tear on the wing. I put some Welder glue on the tear and had it back up in the air before anyone even realized that I had any damage. Today, I can't even see where the tear was.

I brought the Extra to the Frozen Finger Fun Fly on New Year's day. It was a perfect day to fly a 6.5 oz foamy. I ran a variety of 2S and 3S packs.



The Motrofly motor with 2S is flyable with a GWS 8x4 prop; however, in the last half of a 5 to 6 minute flight, pull out from a hover is very anemic. With a 3S lipo, there is plenty of power, at the cost of extra weight. Full throttle with a fresh pack will pull about 9 to 10 amps (the Motrolfly motor is rated at 7 amps max), but you shouldn't need to be going WOT with 3S. Actually, Ken from Subsonic Planes suggested using a GWS 9x4 prop on 2S. I'll be trying this combo as soon as I can get a hold of a 9x4 prop. I've used the Turnigy motor before on my old

EPP Yak55. It is a solid performer and works well on 2S lipos. It should work well on the 33" Extra, although it may not be quite as floaty with the extra weight, but I think most people will prefer the extra power. The weight difference between the Motrolfly/3S combo and the Turnigy/2S combo is not very much, but the Trunigy/2S combo is more cost effective.

Conclusion

The 33" Extra 330 SC from 3D Hobby Shop is a very floaty and smooth flying plane that is also capable of some very wild maneuvers (not by me, but everyone who flew it at the indoor session was looking good). With the recommended Hacker setup on 2S, the Extra should be a great indoor plane. For outdoor use with light winds, a slightly heavier setup with 3S should work really well. Using HobbyCity components, you can get one of these up in the air for less than $100.

Made out of EPP, it is durable and easy to repair. If you want to improve your 3D skills trying new maneuvers that you wouldn't dare with expensive balsa planes (or even with the more fragile depron foamies), this is the plane for you. If you just want something relaxing to fly on a calm summer evening, this plane is for you also.

Links:

3D Hobby shop (www.3dhobbyshop.com)
Subsonic Planes (www.subsonicplanes.com)
Aero-Models (www.aero-model.com)
Mile High RC (www.milehighrc.com)
Hobby City (www.hobbyking.com)

– John Eppling
CRRC President

TeamWorks Indoor Fly-In

I have been attending the indoor fly-in at Teamworks in Auburn this winter and last. The flying time is Fridays from 10:00 AM to 2:00 PM. The time is probably not too convenient since most people are working at that time.

The event is organized and publicized by the Quinapoxet Model Flying Club. This time slot is lightly used, so the owner/manager allows the use of the facility to any flyer for ten dollars a head, non-fliers free, no minimum, and the more the merrier

The facilities are excellent. There are generally about ten participants or less, so it isn't often crowded.



The picture shows the size of the facility, and shows about two thirds of the available flying space.

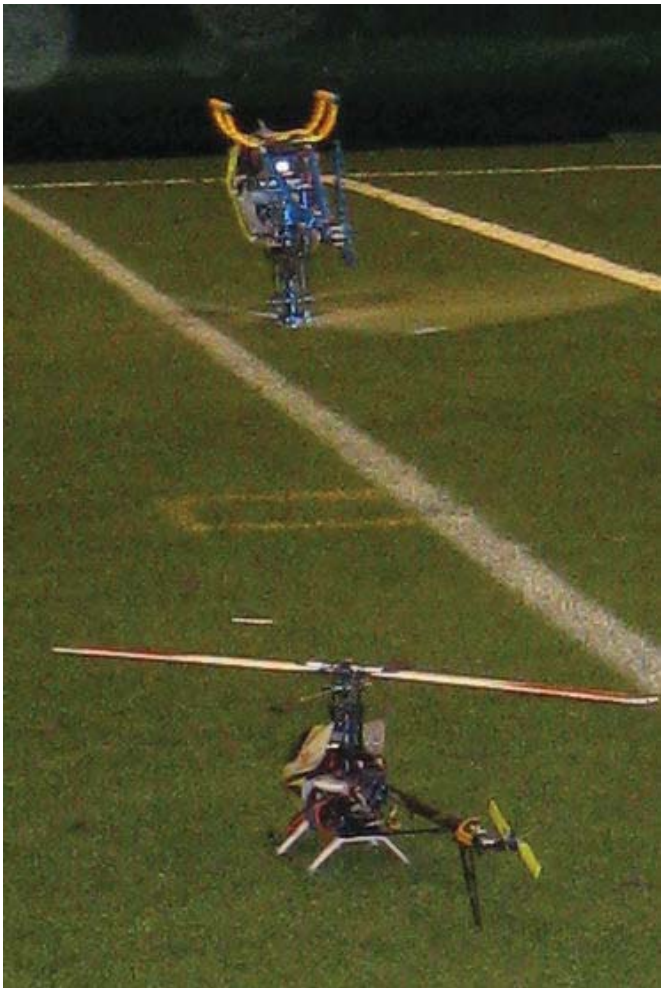
There are generally at most, a T-Rex 450 or two, a number of small E-Flite Blade mSRs, CX2s and mCXs, a large variety of Depron and EPP foam fixed wing indoor flyers and a variety of Hobby-Zone RTFs. Some members have their own unusual scratch built aircraft such as foamy VTOs and hover crafts. Extremely light indoor planes of the type flown by Ray Harland also make an appearance. The fixed wing airplane count generally greatly exceeds the helicopters so there is never a conflict.

The first time I went, John Glezellis was flying a variable pitch foamy hovering vertically, nose down about two inches off the floor



John's original design indoor foamy is featured in a past issue of Model Aviation

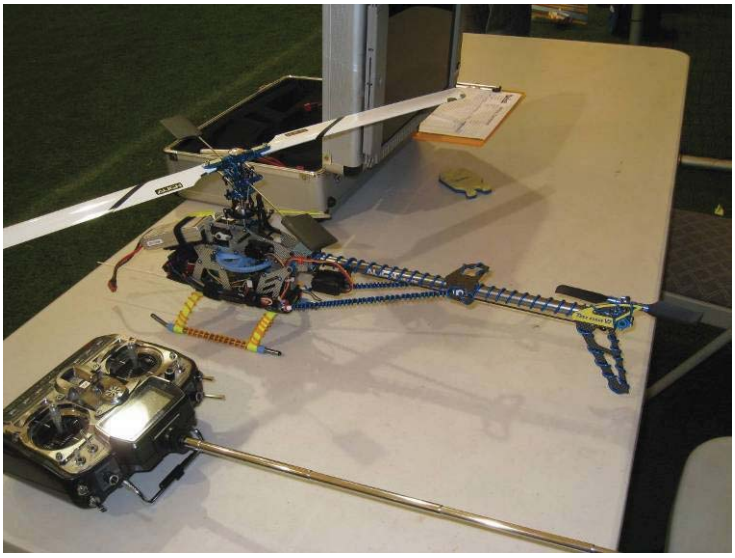
I also observed Raja Bortcosh fearlessly flying a T-Rex 450, looping, inverting, and tearing around at good speed a few feet off the floor in reverse etc.



Here is Raja hovering inverted over my helicopter. John got close enough to windmill the blades on my grounded T-Rex 450.



Here is Raja's helicopter sitting on my blades. The green lines on the canopy and spiral blue lines are additional lighting for night flying.



Here is Raja's helicopter close up. Note the extensive rope lighting used for night flying. Impressive when lit up. I haven't seen Raja or John since the first outing, so the atmosphere is a little calmer.



Here is a slow flyer previously manufactured by GWS, but apparently no longer available. It was a beautiful, slow scale like flyer.

Soon enough, a couple of other participants arrived. I spoke to one of them who assured me that he was sufficiently unskilled that I should feel comfortable enough to fly myself, so I brought in my planes and helicopters and proceeded to fly and had a great time.



Here I am showing off my skills.

The following are a variety of pictures taken since the first event.

















– Dick Roy
CRRC Newsletter Editor

CRRC BUILDING AND FLIGHT INSTRUCTORS

To start your flight instruction; please call our chief instructor:

Richard (Dick) Williamson
978-618-5475

Dick will match you with one club instructors. Our instructors are qualified and willing AMA pilots and fellow club members.

See http://www.charlesriverrc.org for directions to the flying fields. If you have any questions about the construction of your airplane, or want to have an experienced pilot pre-flight check your airplane before heading to the flying field, then call Brian or any of the building instructors.

Name	Town	Phone	Building	Glider	Electric	Fuel	Helicopter
Dick Williamson	Sudbury	978 618-5475	Yes	Yes	Yes		
Fritz Bien	Concord	978 369-1720	Yes	Yes	Yes		
Tom Bauer	Wellesley	781 235-7344	Yes	Yes	Yes		
Brian Rickman	Marlborough	774 249-2494	Yes		Yes		
Derick Veliz	Acton	978 337-7867	Yes		Yes		
John Weigel	Natick	508 655-2138	Yes				
Richard Gammon	West Boylston	508 835-2049	Yes	Yes	Yes	Yes	
Ken Antonellis	Natick	508 653-8369		Yes	Yes	Yes	
Bruce Schneider	Hudson	978 460-0305		Yes	Yes		
Lincoln Ross	Maynard	978 800-0608		Yes	Yes		
John Nilsson	Clinton	978 368-7136		Yes			
Dave Walter	Hudson	978 562-5400		Yes			
Jon Leehey	Wayland	508 358-5721				Yes	
Tony Davids	Stow	978 568-9598					Yes

TREE CLIMBERS, KEYS, MEMBERSHIP & BOARD MEETING

TREE CLIMBERS

Lloyd Keyes: *[Wayland]*
508-358-9197 or 508-341-0110

Paul Harrington *[Medfield]*
508-376-2573

Monkey Man *[Marlboro]*
508-215-4290

Scott: *508-203-3845 [Sudbury]*

Tony Morais
A1 Tree Services [Framingham]
508-626-0088 or 800-657-7788

Editors Note: If you know of any tree climbers or tree services, please send contact information to the Newsletter Editor

Keys to the Bill Martin Field

To get a Key for Bill Martin Field in Medfield please email Ken Antonellis at kxa@verizon.net. Ken is the key-master. The key for the 2010 season is key #15. Ken will have exchange keys at the meeting. A $5 deposit is required the first time you receive a key. Keys are also available at Hobbytown in Ashland, MA (Valid CRRC membership required)

MEMBERSHIP

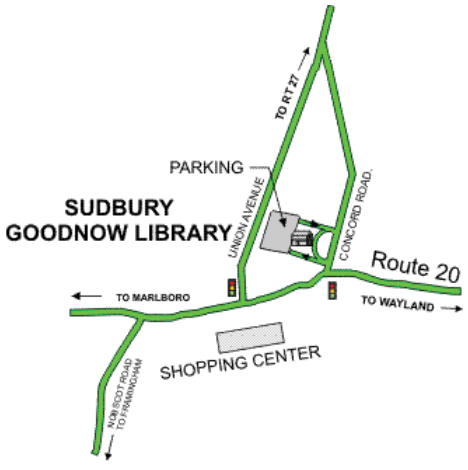
Here are the updated CRRC membership figures. The table summarizes the membership status from 2003 through current month, 2010.

Year	Renewals	New Members	Peak Totals
2005	144	20	164
2006	124	26	150
2007	132	32	164
2008	100	23	123
2009	90	28	118
2010	74	22	96
2011			

-Ray Harlan
Membership Secretary

DIRECTOR'S MEETING

The next directors meeting will be, Tuesday January 25th at 7:30 PM, at the Sudbury Goodnow Library. All club members are invited to attend. Please volunteer to attend at the next club meeting.



THE CHARLES RIVER RADIO CONTROLLERS, INC

2011 MEMBERSHIP APPLICATION

AMA Charter 339

Name_____AMA No._____

Street_____Birth Date (AMA req'd)_____

Town_____State___Zip _____Tel. ( )_____-_____

E-mail _____

IMPORTANT: You must be an AMA member in order to receive your CRRC membership card.

To receive membership card and field pass, bring this application to a club meeting or mail to the membership secretary (address below). You can pay by check or use PayPal.

(PayPal to membership@charlesriverrc.org)

Please make check payable to:

Charles River RC

Ray Harlan
Membership Secretary CRRC
15 Happy Hollow Road
Wayland, MA 01778
508-358-4013

E-mail: membership@charlesriverrc.org

SAVE $5 - EARLY BIRD DUES RATES ARE LISTED

	MEMBERSHIP CATAGORY	On or before Mar 1, 2011	After Mar 1, 2011
☐	OPEN Member	$40.00	$45.00
☐	JUNIOR member, (Under 19 before Jul. 1)	$10.00	$10.00
☐	SENIOR member, (If age 60 before Jul. 1)	$30.00	$35.00
☐	SENIOR member, (If age 75 before Jul. 1)	Free if AMA member	Free if AMA member
☐	Full time STUDENT	$20.00	$25.00
☐	Family member additional to OPEN membership	$20.00	$25.00

Please choose from the options below:

☐ DO NOT include my personal contact information in the club phone book

Help reduce operating costs by downloading the newsletter from the CRRC website.

☐ I DO NOT have access to a computer or the Internet - Please send me the Newsletter via US Mail.

NOTICE: THIS MONTH CRRC CLUB MEETING
Guests are welcome!

When: ***Wednesday January 19th, 2011 (3nd Wednesday)***
Note: Check for the meeting announcement in our monthly Newsletter.
Time: ***7:30 p.m.***
Where: ***Goodnow Library in Sudbury, MA***
21 Concord Road
Sudbury, MA 01776
Directions: ***0.1 miles on Concord Rd off RT 20 in Sudbury.***

