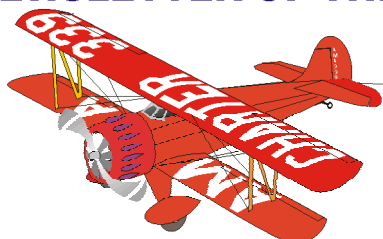


NEWSLETTER OF THE CHARLES RIVER RADIO CONTROLLERS, INC



CRRC FLIGHT-LOG

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

AMA CHARTER 339

May 2002

VOLUME 39 NUMBER 5

2002 CRRC OFFICERS

PRESIDENT

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508 358-5721

jon.leehey@alum.mit.edu

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978-266-1739

dveliz@omr-architects.com

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978 443-8549

williamson@ll.mit.edu

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617-923-0725

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978 443-8209

minerc@aol.com

NEWSLETTER EDITOR

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978 369-1720

fritz@spectral.com

Ex-Officio and RAFFLE

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781 235-7344

tbauer@wellesley.edu

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Joel Foner

508 653-3560

jfoner@fonerassoc.com

GENERAL MEETING

Wednesday May 15th 7:30 PM

VERIZON LABORATORIES

SEE MAP ON COVER

Guest Speaker

Tom Peghiny

Tom is an ex-member of CRRC from the time when he was in high school. Through model airplanes, he got hooked up with hang-gliders, and was a champ at doing that, too. From there, he is now president of a full sized aircraft company!



To many old members, we remember Tom for the VERY low inverted passes he used to make with his Andrews Trainer-Master.

MAY RAFFLE

1st Prize

Model Aircraft Company *Feather



Merchant Old Timer Kit

72" Wing Span, 657 Sq In 42oz Weight

0.19 Gas or 05 Geared Electric

2nd Prize

Choice of:

Gallon of 10% Premium Nitro fuel,

Sterling/Estes Extra 300 24" Rubber FF kit

Dumas T-34 Mentor Rubber FF kit 171/2"*

3rd Prize

Choice of a Cool Tool (Including, but not limited to):

11" Easy Sander Bar, Razor Plane, Balsa Stripper, Allen Ball-Driver set, 4" Bench Vise, Hemostat, Covering Iron

Thermometer, 100 #11 Knife Blades, X-Acto Needle Files*, or a Peck Polymers

ROG FF-Kit

One prize awarded from each category.

Show and Tell prize will be selection from Cool Tools.

* We thank RC Buyers Warehouse in Nashua, NH 603-595-2494 for their generous contribution on these prizes. Please think of them for your next hobby purchase.

Tom Bauer Raffle Chairman

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TREASURER'S REPORT

Report Date	4/30/02
Starting Balance	3/28/02
Checking (after #1244)	\$2,283.89
Savings	4,538.10
Cash	25.00
Total Starting	\$6,846.99
Income	
Dues	\$205.00
Raffle	114.00
Key Deposits	90.00
Total Income	\$409.00
Expenses	
Jack Buckley – Scale Fun Fly #1245	600.00
Ruane Crummett – RES Sanction #1246	30.57
Fritz Bien -- Newsletter, winch credit #1247	63.30
Tom Bauer – Raffle Prizes, Awards #1248	218.81
Goodnow Library – BOD meetings #1249	75.00
Bank Fee (April)	9.00
Total Expenses	\$996.68
Ending Balances	
Checking (after #1249)	\$1,696.21
Savings	4,538.10
Cash	25.00
Total Ending 4/30/02	\$6,259.31

Signed: *Miner Crary*

MAY DIRECTORS MEETING

The next directors meeting will be, Tuesday, May 21st, at 7:30 PM. Place will be announced at the club meeting.

PRESIDENT'S COLUMN

Jon Leehey

Well, the flying season is in full swing. Wednesday Instructor's night at Medfield has started, thanks to Daylight Savings Time and sunsets past 7:30. We have been blessed with some beautiful weather and mostly dry conditions. It has been a bit windy, but who can really complain. In the peak of summer, we will be wishing for a bit of that breeze to cool it off and keep the bugs down.

It appears that the announcement of the death of the Millis flying field was premature. While there has been some increase in Millis flyers at Medfield, the Millis field is still barely accessible and still being used. Mostly likely by summer it will be completely closed. With the impending increase in flyers at Medfield, I would like to remind everybody of the frequency pin rules. We have gotten sloppy over the last few years. All flyers MUST use frequency pins and pins must have your Name, Frequency Number and AMA number. This information written with a Sharpie on a simple piece of balsa CA'd to a closepin will suffice. I for one have notice an increase in usage of my heretofore private frequencies 54 and 57.

By the time you read this, we should have a few loads of tailings neatly spread on the Medfield access road. If all goes well, we picked a Saturday morning that was non-optimal flying weather. The purpose of the stone is to maintain a solid base for access when the river floods. We did this about 5 years ago and it was time to do it again. No one has ever gotten stuck on the access road and we intend to make sure that a few inches (or up to a foot for you with 4-wheel drives) of Charles River water does not come between an RC flyer and his otherwise dry and flyable field.

In addition to the already exciting summer calendar, there are a couple of

new events I would like to mention. We will be holding our first annual evening cookout on Saturday, July 13th at Davis field. This is the evening between the two days of the RES contest. The cookout is intended to primarily be a social event but I suspect that there might be a few Zagis buzzing about. Anybody have a multi-engine electric night-flyer?

Derick, our VP, is also looking into holding one of our summer general meetings at the Collings Foundation in Stow. For those of you who do not remember the meeting held there a few years back, Bob Collings gave us a private tour of his vintage airplane and automobile collection that was simply unbelievable. The Board of Directors hopes to be able to announce shortly that the June or August meeting will be held there.

Stay tuned...

TREE CLIMBERS

Tony Morais

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

Brian Pikarski

Burlington, MA
617-797-2136
recently rejoined CRRRC, building a glider, might find him at Davis soon.

Kenny Greeno

Office Phone: 617-661-8591
Cell Phone: 617-839-1814

Paul Harrington

(508) 376-2573 [Medfield Area]

APRIL MEETING NOTES

Jan Kansky for Laurie Hurwitz

President Emeritus/Raffle Chairman **Tom Bauer** opened the meeting at 7:55 in Jon Leehey's temporary absence.

Show and Tell:

Derick Veliz showed his P-51 Mustang.

This is a Kyosho foam ARF powered by a MEC geared electric Turbo 10 plus motor with at 6:1 ratio and a 12x8 prop at 30-40 amps on 10 cells on NiMhs for 6-10 minute flights. Derick has flown four times. The flying weight is 50 Oz at 40,000 rpm. Several pictures of it flying are included in this newsletter.

Bob Scott brought in a magnificent P-40 Warhawk pedal plane that he built for his daughter Elizabeth and son Robert. It is an all wood cedar, plywood and pine contraption that a child can sit in and pedal around. The extra large fuselage and short stubby wings look great! The flight stick is connected to a basic pull-pull surface that allows the tail wheel to steer. The 10 inch pneumatic tires looked great. It should be able to cover tall grass with no problem. The wing loading is reported to be "very high".

Steve Young brought in the "Air Surfer" that he bought at Walgreen's. This forehead slope soarer is a super light free flight slope soarer that you can position above your forehead as you walk along and keep it up in the air.

Tomer Jackman

Tomer's first refrigerator vacuum pump died so Tomer went to Wal-Mart and got a tiny car tire inflator pump that he connected in reverse to a car motor diaphragm. This allows him to control the vacuum at 18 inches of mercury. All up cost is 9.99. Tomer has been using this pump to bag his latest project. Tomer recycled the

pump box as a housing for his hot-wire power supply that he built.

Brian Pikarski

Brian started a Lazy Bee project 7 years ago and when he had a mishap with the plane and recently started scratch building a new plane trimmed out in red white and blue colors.

Rick Walba

Rick brought one of his DJ Aerotech Roadkill P-38 Lightning. This airplane has slaved aileron and rudder, steerable nose wheel, elevator and throttle control. This plane can be flown outdoors in calm conditions. The P-38 took about 20 hours to assemble over a period of a year and a half. All up weight is 4 oz with battery pack. The wing loading is about 5 oz per sq foot. This all laser cut kit looks like fun. Rick also brought a 700 mAH Lithium pack that weighs the same as a 7 cell 170mAh pack. The current draw from the plane is 2 Amps and the Lithium pack holds up fine. Rick used HS-50 servos for control actuation.

Zb Hubacek from Esprit Models www.espritmodel.com brought some of the planes he is importing. The first plane called the Lambda. Each part is CNC cut and the plane comes completely covered and looked great with transparent red covering. The next aircraft was a Diablotin 50 inch, 600 sq inch plane that weighs 22 oz empty weight. It's powered by a hacker b50 with 10 cells. This plane comes in several sizes. The third plane was a Diabolik 3D red and blue Ultracote covered plane with a full flying tail with ball bearings on the tail. The fourth plane was the Demon. This is a follow on to the Hobby Lobby Speedy. This electric was faster than a Quickie 500 powered by a 46Fx when powered by a Hacker B50 brushless motor. A fiberglass fuselage with a built up wing looks great in the air. This airplane can also be powered by a speed 400 power package for 10 minute flights on 1800 mAH packs. Zb also brought a Hacker B50 that can spin a 18x10 at 17000 rpm with 140 Oz of thrust on

14 cells of 3000 NiMhs. Zb also brought one of those electric motors where the housing holds the magnets and the coils are in the center of the motor. This configuration allows for higher torque. This motor is capable of running a 12x8 on 10 cells at 9000 rpm direct drive at 30 Amps. It can power a 43 oz airplane straight up and fly for ten minutes.

Helmut Lelke brought the third incarnation of his actively stabilized flying wing airplane. This one is lighter than the second incarnation. This plane has a 9oz per square foot wing loading so it should allow for better thermal flying. He flew it Saturday at the cape for the first time. It also has an electrostatic auto-pilot on top of the active stabilization. The aircraft has an MH32 airfoil. The rudder is also configured as a split rudder to add drag on landing.

Jon Leehey graced us with his presence at 8:15 and held the business portion of the meeting.

Secretary's and Treasurer's report were accepted as printed.

Field reports were presented by active flyers.

The issue of adding gravel to the Medfield road was raised. The Board of Directors had already approved to spend \$600 on adding gravel to the road. The general membership approved the expenditure. The Millis club will bring in a roller to flatten the road.

Membership is at 140 members, including 14 new members. 48 renewals are pending.

Ruane Crummett volunteered to attend the BOD meetings for the next two months.

Wednesday April 24th will be the official start of flight training at Medfield. Members wishing to volunteer as instructors would be greatly appreciated.

Al Dean gave a great talk about the Ford Tri-motor.

CRRRC BUILDING AND FLIGHT INSTRUCTORS:

Derrick Veliz

Acton

978-266-1739

Below 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 as well as Callahan State Park in Framingham.

See <http://www.charlesriverrrc.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 any of the building instructors.

INSTRUCTOR	TOWN	TELEPHONE
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POWER

Ruane Crummett (Chief)	Wayland	508-655-2234
Bob Scott	Roslindale	617 323 6600
Pete Young	Belmont	617-484-0648
Larry Copeland	E. Walpole	508-668-0448
Ken Antonellis	Natick	508-653-4513
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
Peter Young	Belmont	617 484 0640
Lincoln Ross	Waltham	781-891-0332

ELECTRICS

Bruce Schneider	Hudson	978-562-9900
Fritz Bien	Concord	978-369-1720
Dave Walter	Hudson	978-562-5400
Derrick Veliz	Acton	978-266-1739
Peter Young	Belmont	617 484 0640
Lincoln Ross	Waltham	781-891-0332

HELICOPTERS

Joel Foner	Natick	508-653-3560
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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
Peter Young	Belmont	617 484 0640

CRRRC 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 @ (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)

BOB FISH MEMORIAL AWARD

Each year CRRC presents the Bob Fish Memorial award to a person who, while not being an officer, does most for the club.

This award is in memory of Bob Fish, a founding member of CRRC, who ran a hobby shop out of his basement so that we modelers could get those hard-to find things needed when R/C was at its infancy. He served coffee, showed movies of flying, and essentially opened his home to nurture the club and RC in New England.

Even though Bob never went to any of the meetings, he sponsored events, helped run contests, and acted as a focal point for CRRC.

This year the award went to **Bruce Schneider**, who also never goes to meetings, so the only way to get the plaque to him was to corner him at the field. Bruce has worked tirelessly the

last several years promoting Indoors flying and getting us the nice Lincoln-Sudbury High School site.



Bruce Schneider shows off Bob Fish Memorial Award presented at the field by Ex-President Tom Bauer.

CALENDAR OF EVENTS

The calendar of events for the year was determined in the January Board of Director's meeting. If you have a favorite event you want included on the 2002 Calendar, please come to the Board Meeting and bring it up. For a up-to-date list of area events check http://www.charlesriverrc.org/calendar_events.htm.

DATE	EVENT	WHERE	CONTACT	EMAIL
May 15 2002	General Meeting	Verizon Lab	Jon Leehey	jon.leehey@alum.mit.edu
May 21, 2002	Board Meeting	TBD	Jon Leehey	jon.leehey@alum.mit.edu
Jun 1 2002	CRRC Family Fun-Fly	Bill Martin Field (Medfield)	Tracy Clark	tclark@magnemotion.com
June 25,26	LISF	Syosset NY	Gordon Stratton	gstrat3784@aol.com
July 13, 14 2002	CRRC 2002 RES soaring contest	Davis Farm Field (Sudbury)	Miner Crary Ruane Crummett	minerc@aol.com
Aug 10-11 2002	CRRC 2002 Open Class soaring contest	Davis Farm Field (Sudbury)	Dave Walter Anker Berg-Sonne	anker@ultranet.com
Oct 19 2002	CRRC Electric Fun-Fly	Bill Martin Field (Medfield)	Tom Bauer	tbauer@wellesley.edu
Nov 17 2002	CRRC RC Auction	probably Natick VFW (Natick)		
Jan 1 2003	CRRC Frozen Finger Fun Fly	Bill Martin Field (Medfield)		fritz@spectral.com

HEARD AND SEEN AT THE FIELD

If you weren't at the Field Day at Medfield, you missed a great day of flying.

Derick Veliz:

P-51 Mustang. From MEC
It's an ARF made by Kyosho, I think it's discontinued? too bad.

Wingspan: 40 in.

Fuselage: 31 in.

Weight 50 oz.

Thrust approx.

Motor (05)-can Turbo 10 plus;
50,000 RPM

Battery 10 cells 3000

Gearbox Super Box 6:1

Prop. 12 x 8

Servos 2 Hitec HS-81

Receiver Super-Slim Hitec

ESC

Flight duration 5 minutes at full
power, 9 min. cruising around

Building the model is straight forward and fast! Glue the molded pieces together with 5 min. epoxy; install servos,

receiver and motor control.
Attach the motor mount with screws and install the motor.
ALL MOVING CONTROL SURFACES ARE PRE-HINGED AND AILERON TORQUE RODS ARE IN PLACE.

64 oz.

So far I have 6 flights and everything is ok, waiting to hit the skies again!



Nice flyby of Derick's Mustang at Medfield



Derick holding his Mustang on field-cleanup day at Medfield.



Bill Martin Flying Field Medfield is viewed from Space. You can almost make out Jon Leehey practicing landings while Ken Tsang's 1/4 scale Extra is on the left of the runway. :)



We couldn't tell who this person was or what he was doing. *Tom Bauer Picture*

FIRST THERMAL FLIGHT

Christopher J. Sequeira '05

...as reported to Pete Young

Well it's late at night as I'm writing this, so I'll keep it short, but... to use a phrase you introduced to me in your last letter; I "specked out" the Blue fly. It happened just once, but I was amazed enough that I was satisfied for the whole rest of the day :)

Well... almost. Anyway, in the little online journal I write in and show to my friends, I had been talking about flying a whole lot since Spring Break, so today's experience finally prompted me to break the flying stuff off into a separate journal, <http://silentwings.blogspot.com>. I don't profess to be a good writer, but you and your friends might get a kick out of the two entries that are there so far (hopefully the website is working when you try to access it). Hopefully you enjoy all the details of today's flight; lemme know what you think :)

Actually, I'm a bit disappointed that you say this would possibly be one of the best weather days. That means other days will be worse than this, but in a way, that's not totally bad. I'm thinking I'm actually learning to soar the hard way, by flying a plane not even designed for such activity. In Gelb today I saw that there was new foam, and I entertained the idea of cutting out a wing based on Drela's airfoils. I won't touch anything unless you wish, and even then I'd have to think about shape, area, reinforcements, etc., but it's just a thought. I'm glad flying went well for you; take care.

SYSTEM LOSSES IN ELECTRIC POWERTRAIN

Scott Anderson

As I'm installing the new Astro motor in my plane, I wondered about losses due to a fuse and a toggle switch. Out of curiosity, I measured the resistance of some of the electrical components that came with my Aspire EP kit. The kit comes with a car style fuse, a toggle switch and a leaf switch that's triggered by a servo arm (the cheap version of a speed controller).

To my surprise, the resistances didn't measure as high as I thought they would. I then calculated voltage drop (based on 7 cells - 8.4v) and power loss (based on 25 amps motor draw - close to what I should see with the Astro motor in my set-up). I'm using a speed controller, so the leaf switch measurement was purely for curiosity sake.

Attached are my findings. I thought you guys might be interested...

Has anyone else done this? I wonder how it compares...

	Measured Resistance (no load)	Calculated Drop @25 amps	Calculated Power Loss @25 amps
	(ohms)	(volts)	(watts)
Fuse & "Faston" connectors	0.005	0.125	3.13
.25" spade connectors (2) std car fuse			
Toggle switch MTS-1	0.005	0.125	3.13
Leaf switch brand unknown	0.004	0.100	2.50
TOTALS	0.014	0.35	8.75
			4.17% of input power

all resistance
measurements done with
Agilent 34401A meter w/
4-wire sense

June 1 FAMILY DAY

Come to the Family/Fun Fly Day at Martin Field in
Medfield. Start: 9:00AM

Contact Tracy Clark for details

tclark@magnemotion.com

781-275-6630

- BUDDY BOXES
- R/C CARS
- TRAINER PLANES
- CHUCK GLIDERS
- FOOD
- DRINK
- GAMES



COME ENJOY A FUN, LOW-PRESSURE CONTEST!

FIFTH ANNUAL CRRC RUDDER ELEVATOR SPOILERS ONLY SOARING CONTEST

When:

Saturday July 13th

Sunday July 14th

Separate contest each day

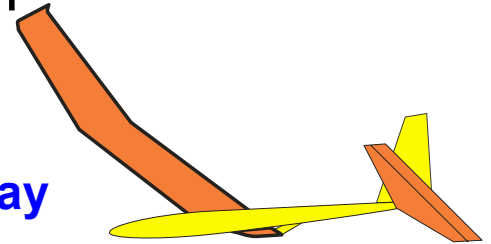
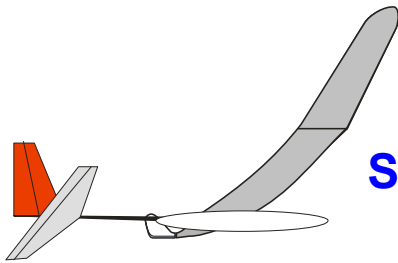
Where:

Davis Field, Rt. 117

Sudbury, MA

Classes:

Unlimited and 2 meter



Enter both classes: \$10.00/class

Launch Equipment: 12 volt Winches with retrievers

Registration at the Field: 8:00 -9:00am

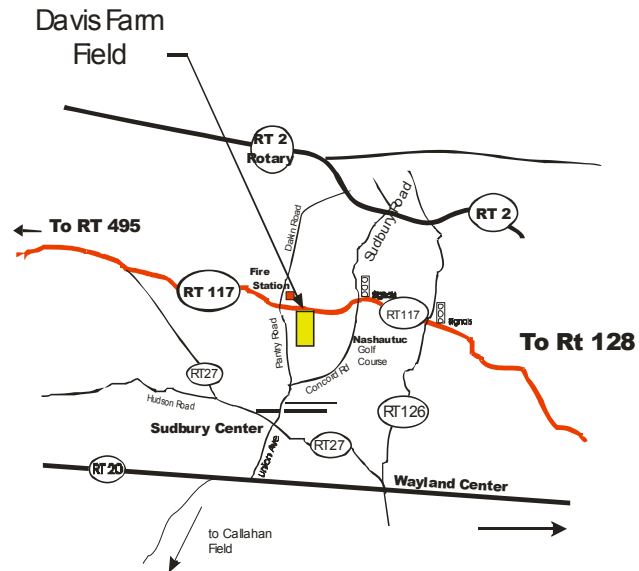
Pilot's meeting 9:03 AM

First Flight 9:18 AM

CONTEST DIRECTORS:

Miner Crary
14 Griffin Lane
Sudbury, MA 01776
978 443-8209
Minerc@aol.com

Ruane Crummett
33 Clubhouse Lane
Wayland MA 01778
508 655-2234
crrcplanes@aol.com



CRRC Flying Field Davis Farm

**COOK-OUT 5:00PM SATURDAY
AFTER THE CONTEST (\$5.00/person)**



THE CHARLES RIVER RADIO CONTROLLERS, INC

AMA Charter 339

2002 MEMBERSHIP APPLICATION

Name: _____ AMA No. _____

Street _____ Birth Date (AMA reqmnt) _____

Town _____ State _____ Zip _____ Tel. () _____ - _____

E-mail _____

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 2002 AMA LICENSE, appropriate dues, and a **SELF ADDRESSED STAMPED ENVELOPE** to:

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

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

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

☐ HELICOPTERS

☐ GLIDERS

☐ PATTERN

☐ RACING

☐ SCALE/SEMI-SCALE/QTR SCALE

☐ DUCTED FANS

☐ INDOOR/PARK FLYERS

☐ OTHER (specify) _____

FREQUENCY DATABASE

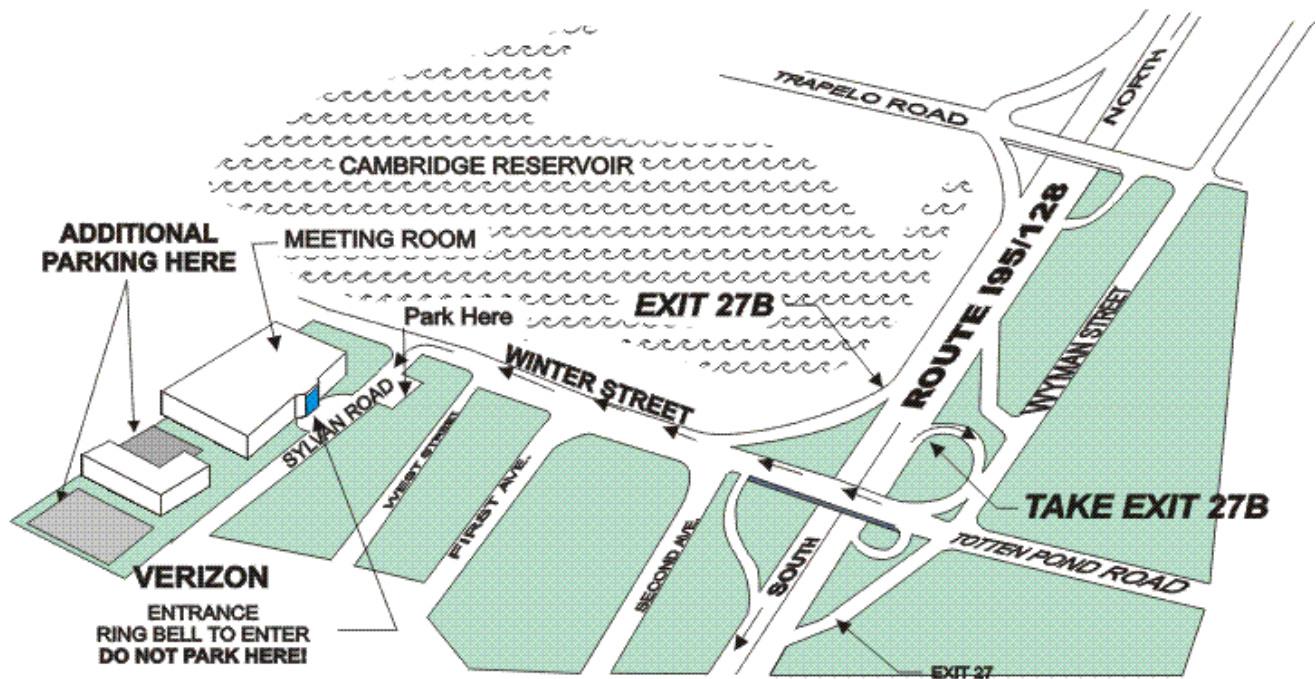
This database is made to help you select future radios that have the fewest conflicts with ones used by others at the flying field. Put the number of transmitters that you own for each frequency. **Add D if it is your primary frequency at Davis farm and M if it is your primary at Medfield.**

11 _____ 16 _____ 21 _____ 26 _____ 31 _____ 36 _____ 41 _____ 46 _____ 51 _____ 56 _____
 12 _____ 17 _____ 22 _____ 27 _____ 32 _____ 37 _____ 42 _____ 47 _____ 52 _____ 57 _____
 13 _____ 18 _____ 23 _____ 28 _____ 33 _____ 38 _____ 43 _____ 48 _____ 53 _____ 58 _____
 14 _____ 19 _____ 24 _____ 29 _____ 34 _____ 39 _____ 44 _____ 49 _____ 54 _____ 59 _____
 15 _____ 20 _____ 25 _____ 30 _____ 35 _____ 40 _____ 45 _____ 50 _____ 55 _____ 60 _____

HAM LICENSE CHANNELS: license may be checked at the field!

01 _____ 02 _____ 03 _____ 04 _____ 05 _____ 06 _____ 07 _____ 08 _____ 09 _____
 53.1 _____ 53.2 _____ 53.3 _____ 53.4 _____ 53.5 _____ 53.6 _____ 53.7 _____ 53.8 _____

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



Fritz Bien /Editor
41 Saw Mill Road
Concord, MA 01742-2221