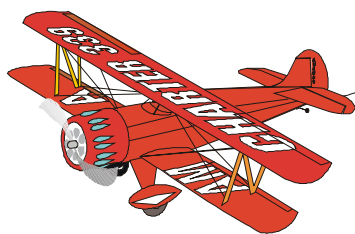


NEWSLETTER OF THE CHARLES RIVER RADIO CONTROLLERS, INC



CRRRC FLIGHT-LOG

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

AMA Charter 339

March 2001

Volume 38 Number 3

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NEXT CLUB MEETING:

Winter Projects Night

Show us what you have been working on
this winter!

VERIZON Labs

March 21, 2001

7:30 PM

(See map on last page)

Raffle Prizes:

Zagi-400 electric (8 cell)
Monokote Sealing Iron
Gallon of Fuel

NEXT BOARD OF DIRECTORS MEETING:

The next directors meeting will be at
the Sudbury Library Tuesday, March
27th at 7:30 PM. These meetings are
traditionally held the Tuesday following
the general meeting. All members and
guests are invited to attend.

PRESIDENT'S COLUMN:

Tom Bauer

Well despite all the snow the Vernal
Equinox is just a couple of weeks away.
With spring being a windy time of year
there has been much discussion about
slope soaring down at the Cape or in
Rhode Island if there is a south wind.
Keep an eye on the weather reports and
on the CRRRC Yahoo e-group for last
minute information on upcoming trips. If
the weather permits plan on a trip every
Saturday over the next few weeks. For
you low time pilots, a Spirit or similar
polyhedral sailplane makes a good
starter slope plane in 5 to 15MPH winds.
It is also a good way to get LOTS of
stick time. On my first slope trip I easily
doubled the total time I had been in the
air.

This month's meeting is winter proj-
ect night. With all the inclement weather
this year I am expecting to see some
good projects under way or just com-
pleted. For any new comers out there,
bring in whatever you have. If you have
a model just completed, but not yet
flown, this is a good time to have some-

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one look it over for you before going to the field. Don't forget to check the direction of control surface throws for that first flight. Even though you did it in the shop (What time of night was it?) check it before taking to the air.

Key Changes: The lock at Medfield is scheduled for change on the 1st of March. Bring in your old key to swap for a new one so you can get into the field. Kenny Antonellis is once again taking care of this task for us. Thank you Kenny. You can also pick up a new key by bringing your CRRC membership card and your old key to Alex's RC Shop. If you don't have an old key to exchange there is a \$5 deposit.

Renew your Membership: you need AMA and CRRC memberships to fly at CRRC fields. Look at your newsletter this month, if there is an asterisk by your name you have not renewed. If you can make the March meeting Dick Williamson has both AMA and CRRC renewal forms so you can be squared away all in one stop. The last count showed there were about 104 renewals with 10 new members, but there were still 77 that hadn't renewed.

Hope to see you all at this month's meeting. Thanks to Alex's RC Shop for distributing Medfield keys and his contributions made on raffle prizes. Please think of him when you go to shop.

Tom Bauer

TREASURER'S REPORT:

Report Date 1/31/01

Starting Balance

Checking (after #1161)	\$814.53
Savings	\$4,420.92
Cash	\$25.00
Total Starting	\$5,260.45

Income

Dues	\$1,240.00
Raffle	\$71.00
Holiday Party	\$116.72
Interest	\$ 22.33
Total Income	\$1,450.05

Expenses

Dues Refunds	
#1163, 1164, 1169	\$15.00
Davis Permit	
#1167 Dick Williamson	\$360.00
Newsletter	
#1166 Jan Kinsky	\$125.83
Raffle Prizes	
#1165 Pete Young	\$86.53
#1168 Pete Young	\$121.00
Recognition Awards	
#1162 Dick Williamson	\$86.10
Bank Fee	\$9.00
Total Expenses	\$803.46

Ending Balances

Checking (after #1168)	\$1,438.79
Savings	\$4,443.25
Cash	\$25.00
Total Ending	\$5,907.04

Signature *Miner Cray*

FEBRUARY MEETING:

Laurie Hurwitz, Chris Larsen

Vice President **Jose Bruzual** opened the meeting at 7:40. The secretary's and treasurer's reports were presented and accepted as usual.

Field Reports:

Davis Field Parking lot had been plowed, but was very icy. **Medfield** Field difficult to access due to snow.

Old Business:

The video library will now be available at meetings. Fritz volunteered to come to the monthly board meetings.

New Business:

85 club members had renewed. The dates for several events for this year were reviewed. The auction will be held on Sunday November 4, at the VFW hall. Pete Young asked for volunteers for the Woodsom Farm fun fly. No Davis field soccer schedule was available yet. Dick Williamson was working with the Millis club to get Medfield insured for the state. Medfield keys would become available on March first. 85 club members had renewed.

Special Events:

Instructor of the year award went to **Bob Scott**. The Bob Fish Award for a person not on the board of directors who made a large contribution to the club went to **Larry Copeland** and **Don Black**.

Raffle Prizes:

Eddie Ellis won first prize in the raffle, a Dremel tool. **John Plump** received a heat gun, and **Fritz Bien** won the gallon of fuel.

Speakers:

Dick Williamson taught techniques of working with EPP foam and fiberglass. **Joel Foner** demonstrated foam cutting. **Bob Scott** demonstrated covering with Monokote. **Fritz Bien** soldered up a storm. **Pete Young** showed the techniques of vacuum bagging.

MEDFIELD KEYS:

Sometime at the end of February, or early March the lock on the gate at the Medfield flying field will be changed. When this happens, you will be able to secure your new key either by: 1) Bringing your old key to the next meeting for exchange. 2) Stopping by Alex's R/C hobby shop for exchange (don't

forget your membership card.) or 3) Sending a SASE with your old key to Ken Antonellis, 14 Winslow Road, Natick, MA 01760. If you do not have a key to exchange, there is a \$5.00 fee.

CRRC BUILDING AND FLIGHT INSTRUCTORS:

Below is our list of qualified and willing instructors. Power planes are flown at the Bill Martin Flying Field in Medfield. Sailplanes and Electrics can be flown at the Davis Farm Field on Rte 177 in Sudbury and at Callahan State Park in Framingham. See our web-site <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 any of the building instructors.

POWER

Jon Leehey (Chief)	Wayland	508-358-5721
Bob Scott	Roslindale	617-323-6600
Pete Young	Belmont	617-484-0648
Ruane Crummett	Wayland	508-655-2234
Larry Copeland	E. Walpole	508-668-0448
Fritz Bien	Concord	508-369-1720
Neil Kaufman	Sudbury	978-443-9647

SOARING

Dick Williamson	Sudbury	978-443-8549
Ken Antonellis	Natick	508-653-4513
Fritz Bien	Concord	978-369-1720
Dave Walter	Hudson	978-562-5400
Tom Bauer	Wellesley	781-235-7344
Bruce Schneider	Hudson	978-562-9900
John Nilsson	Clinton	508-368-7136
Pete Young	Belmont	617-484-0640
Joel Foner	Natick	508-653-3560
Lincoln Ross	Waltham	781-891-0332

BUILDING

Pete Young	Belmont	617-484-0640
John Weigel	Natick	508-655-2138
Fritz Bien	Concord	978-369-1720
Dick Williamson	Sudbury	978-443-8549
Tom Bauer	Wellesley	781-235-7344
Joel Foner	Natick	508-653-3560

ELECTRICS

Tom Bauer	Wellesley	781-235-7344
Fritz Bien	Concord	978-369-1720
Dick Williamson	Sudbury	978-443-8549
Bruce Schneider	Hudson	978-562-9900
Dave Walter	Hudson	978-562-5400
Pete Young	Belmont	617-484-0640
Lincoln Ross	Waltham	781-891-0332

HELICOPTERS

Joel Foner	Natick	508-653-3560
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MEMBERSHIP RENEWAL:

Don't forget to renew your CRRC membership! Please use the form enclosed in this newsletter, or talk to Dick Williamson at the next club meeting. Renew before March 1st for \$5 off!

SEEN AT THE FIELD:

DAVIS FIELD

Fritz writes:

On March 3, the wind was calm, light snow was falling, so I told Bruce I'd stay home to build. Right after he gave the Expedition keys to his wife the sun came out. I stopped by the field with my Zagi, Electric Hawk and Lite Stik. Miner Crary was also there with his new Electric sailplane as well as a Lite Stik, and his Zagi. Sunday we had just Bruce and myself flying while Charlie Clerkin came by to watch and chat.

Sunday March 11. The weatherman predicted strong winds in the afternoon, so I went out in the morning. Don Black and Charlie were already there, but just chatting. We had several flights with the Zagis. The snow had a nice crust over it so we could walk out to the field on top, only occasionally breaking through. By the time we quit (11:00) we were breaking through the crust on almost every step, making it too much work to fly. The wind was really picking up when I flew the Lite Stik. The parking lot was quite muddy with puddles, but still frozen enough to R.O.G. from.

MEDFIELD

No reports. The snow must be pretty deep if it can keep you guys out of there.

CAPE COD

Remember in last month's president's column Tom was optimistically looking forward to a great trip out to the Cape. Well, here's what he had to say after the fact:

Well for those of you who chose not to go to the Cape, GOOD decision. I discovered the definition of TOO much wind. I estimated 40-45-MPH, but at lunch in town and one of the locals said they had a 57MPH gust in Orleans. I launched my 1-26 foamie at the cliff at Wellfleet, throwing DOWN as hard as I could. By the time it was on the ground it was almost in the trees and both elevator and rudder cables broke due to the tail down attitude on landing.

On the eve of the March Nor'easter-Sheldon wrote:

Anyone up for a slope trip tomorrow down the Cape? I heard the wind forecast is directly from the east with steady winds 40-60 mph gusting to 80....the snow could make it more fun. And if that gets boring we could go surfing on these 10-15 ft. waves they predicted. Let's see, for a 30 oz. plane you would need how much ballast with this wind? 10 lbs?

So Sheldon, how were the conditions?

All joking aside, get those slope trash airplanes ready for the annual Spring CRRC Cape Cod slope soaring trips!

UPCOMING EVENTS:

Mar 25: Salem Barnstormers Auction

Mar 27: CRRC Board Meeting

Apr 7: Indoor Flying at MIT

Apr 27: Indoor Flying at LSHS

May 5-6: East Coast HLG Classic

May 5: Down East Soaring Contest

May 6: CRRC Trainer Fun Fly/Race

See the website for more details!

CRRC ON THE WEB

OK, Guys you haven't been sending me enough newsletter contributions so you are going to pay the price. I spent some time web searching to dig up model airplane dirt on you guys to fill up the space. If you had sent me articles you wouldn't be subjected to this exposure. :-)

CRRC club member Chris Baker's Thunder Tiger Decathlon was featured on the the Thunder Tiger product page. He writes:

"I decided to mount the engine sideways with a Pitts muffler for a more scale look. A little work with the Dremel to make some air vents, and voila! It's a sweet looking ARF! "

This is what the plane looks like built stock:



Here are a few pictures of Chris's airplane:



Nice Work Chris! Chris also has a great web page devoted to his model airplane activities.

The page, located at the following url: <http://people.ne.mediaone.net/chris-tianzx/index.html> has a lot of great content regarding the Piccolo micro electric helicopter:



His web page features a Piccolo Pilot locator feature as well as a Chat function! A great resource for the hugely popular micro electric heli crowd. Chris has expanded to larger helicopters as well. Here is a picture of his Nexus helicopter:



Joel Foner's name appears in many places on the web. Here's a quote from the radiocarbonart web page:

"After watching all of Lift Ticket (present from you-know-who) I gotta find a DS slope in New England... That video is just beyond belief. If you don't come away from it panting and drooling you're in the wrong hobby! The "Got Foam?"; bit is just too funny also- the kids just want to see that section over and over again..." -Joel Foner

I agree Joel, it's a great video. I got a copy for my birthday and it inspired me to try an inverted hand catch with my Zagi 400. I won't repeat the results of that experiment here. :-)

Joel's name also appears on the International Radio Control Helicopter Association web site:, www.ircha.com. They have a pilot proficiency program which sets goals for pilots learning helicopters. The requirements for the first level are as follows:

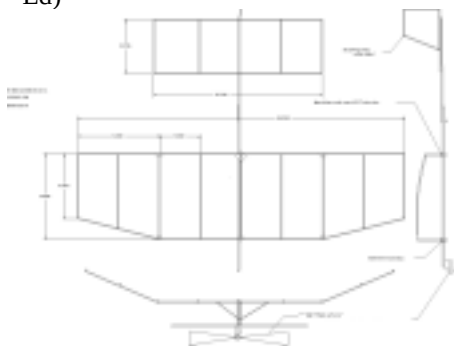
- 1.Take-off
- 2.Stationary Hover
- 3.Hovering Laterally
- 4.Multiple-level Hover
5. 3/4 Rear View Hovering
- 6.Full Lateral View Hovering
- 7.Diagonal Hovering
- 8.Circle Hovering, Tail-in Circle

Constant Heading Circle

The highest level is Level 7, with

three people having reached that level of skill. (Gary Wright, Curtis Youngblood, and Todd Bennett) Tasks for Level 7 include such "3D" maneuvers as the pirouetting loop, roll, tumble, outside loop, and autorotation. I'd like an explanation of the pirouetting autorotation please Joel.

Fritz Bien's name is synonymous with model airplane excellence and achievement. So naturally there are many interesting web pages with his name on them. Fritz apparently came up with a free-flight model airplane design that was used at the Science Olympiad. This simple rubber powered plane is shown here (obviously not to scale, but I dare someone to try to build it this small. -Ed)



Fritz's attention to detail is why he has the longest running record of the weights of different types of covering materials for model airplanes. As far as I can tell, Fritz's covering weight database started taking shape in 1971. He lists 1971 vintage Red monokote at 7.1 gm/sq ft. The same measurement in 1996 puts Red Monokote at 5.8 gm/sq ft. Did you remember to remove the backing in 1971? Just joking Fritz, I know you wouldn't miss a detail like that. Anyway, you can find this database of covering weight measurements at: <http://www.fatlion.com/sailplanes/weights.html>

Carl Blaurock has a couple of nice articles on the Ezone web site, www.ezonemag.com. One article describes the Speed 400 Powered Airplane called the MeagerWatt. The second article describes a simple peak detection charger that can be build for charging transmitter and receiver packs.



Pictures of Paul Breed's solar powered plane can be found at <http://www.rasdoc.com/splinter/> Any news on your plans to set a new record? Paul flew this aircraft under battery power last year and it performed admirably.

Mark Drela's name appears everywhere, so I figure I'd just pick one excerpt that we can all understand. Mark writes:

"The accuracy of a standard implicit conservative Euler equation solver is greatly improved by incorporation of an entropy-conservation equation, used in lieu of the streamwise momentum equation in all regions of the flow except at shock waves. A slight modification is also required at stagnation points.."

Everyone still following this? :-)
Not me! If it all results in more fun at the field, bring it on.

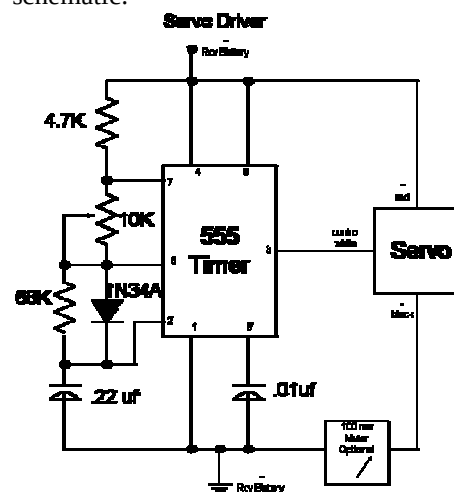
Abbott Lahti has made immense contributions to the field of micro rc model airplanes. The miniature radio receivers that he is able to built are just

amazingly small. Here is a photo of the RP-27 featured in the RC micro flight newsletter. Yes, that is a stamp next to Abbott's receiver!!!!



These receivers are available from Cloud9 RC at the following url: <http://www.rcmicroflight.com/cloud9rc/>

John Nilsson's servo driver design is mentioned in many places. Here is the schematic:



Lincoln Ross has many free-flight related contributions on the web. I found several pictures of his aircraft. Here is his Herr Cessna 180.



Lincoln writes:

"This is a picture of my Cessna 180, built from the Herr kit. 17-1/2", 18 grams, fairly stock for a local laser cut contest. I did move the peg and use one of those adjustable nose blocks. Also, I ended up adding some more dihedral. Got it to fly left as I was flying indoors. Might have flown right with original dihedral, I think, but marginally. With stock prop and an attempt to keep weight to the front I ended up adding a lump of clay on the back. In the picture you can see the results of trying to trim to circle in a small room: no struts or landing gear fairings, and replacement tissue. The model is airbrushed white with Golden airbrush media, then the trim is color tissue. So far I have 41 seconds indoors, but more may be possible.

"After I bought the kit I was in Elmira for the flying wing conference (workshop?) and the prototype buzzed the field and then landed where I could take pictures. The K model seems to have a window that is not in the kit."

He also has a photo of his Seversky S2 Racer.



Lincoln writes: "Here is a picture of my Seversky S2 Racer, modified from the Seversky Fighter kit from Golden Age Reproductions. Very fun kit, though you do have to cut out all the pieces. I

reinforced the nose as a result of my trimming sessions. It has a touch more dihedral than shown, and a bigger horizontal stab. The rudder is hinged for spiral stability, but that makes it hard to get a steady circle. Also, I lowered the canopy to match the racer. A nice out-door flyer, and my first really successful flying scale model. "

Derik Veliz has shown many of us the outstanding aerial photographs he has been able to take from his fleet of electric aircraft. In addition to this, Derik has expanded into video. There are several videos of Derik's planes at <http://www.squid-ink.com/hpn/rc-photos/video.htm> One shows the Pico Jet tearing up the sky at Davis field. The soccer goals are no match for the maneuverability of the Pico Jet.

Dick Williamson has written a great analysis of high-starts that can be found on our CRRC web page. There are many reference to this article around the web. Here is some key information from that article:

	HLG	2M	Stand	Open
I.D.	1/16"	1/8"	1/8"	1/8"
O.D.	3/16"	1/4"	3/8"	7/16"
Wall	1/16"	1/16"	1/8"	5/32"
Tension	4.2lbs	6.5lbs	17lbs	24lbs
Glider Wight	13oz	21oz	54oz	77oz
Rubber	15%	15%	15%	15%
Line	45%	45%	45%	45%

Percentages are percent of field length.

Peter Young, prolific author of model airplane reviews and columns also shows up everywhere on the internet. Many of Pete's reviews of sailplanes and power planes can be found on the CRRC web page. Some excerpts:

"This is when the mentally difficult but physically easy part begins. You've just spent almost \$500 for this perfectly molded wing. Now the instructions tell you to get out an exacto blade and a razor saw and start cutting holes in it. For a couple of hours, I kept finding something else to do. Finally, when I ran out of other things to do I was left with no choice but to begin cutting into the wing itself." From an article about the Genesis.

"After several consecutive weekends of rainy and windy weather, a Saturday morning dawned clear and sunny, a trifle chilly but pretty fair for a New England late fall day." Later he writes:

"After I had completed a dozen or so flights, a jogger came over who expressed an interest in this remote controlled model airplane. I launched the Minimax-700X, trimmed it for "hands off" stable flight, then turned the controls over to this totally "zero time" flier with just a few words of instructions. It may have been beginner's luck but the soaring conditions over the field just happened to go "excellent" during this flight, and a 3 1/2 minute flight resulted. We exchanged addresses and I believe I may have created a new R/C glider flier that morning. From an article about the Minimax. It seems there is no better way to guarantee rain and wind than to finish building a model airplane. Or maybe it's that you don't notice how rainy and windy it is until you have a plane ready to go. I don't know, maybe someone can research this and write an article for the next newsletter.



THE CHARLES RIVER RADIO CONTROLLERS, INC

AMA Charter 339

2001 MEMBERSHIP APPLICATION

Name _____ AMA No _____

Street _____ Birth Date (AMA reqmnt) _____

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

e-mail _____

To receive membership card and field pass, bring this application to a club meeting, or mail with a **copy of your current 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
email: williamson@ll.mit.edu

I WOULD LIKE TO PARTICIPATE IN:

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

	New Members	Renewals
OPEN Member	\$30.00	\$35.00
SENIOR member (if age 60 before July 1)	\$20.00	\$25.00
JUNIOR member (under 19 on July 1)	\$15.00	\$20.00
Full-time STUDENT	\$15.00	\$20.00
Family member addtl to OPEN membership	\$15.00	\$20.00
		Deduct \$5 if paid before Mar 1

I'M INTERESTED IN THE FOLLOWING:

- ☐ TRAINERS/SPORT PLANES ☐ ELECTRICS ☐ HELICOPTERS
☐ GLIDERS ☐ PATTERN ☐ RACING
☐ SCALE/SEMI-SCALE/QTR SCALE ☐ DUCTED FANS ☐ SEA/FLOAT-PLANES
☐ OTHER (specify) _____

FREQUENCY DATABASE

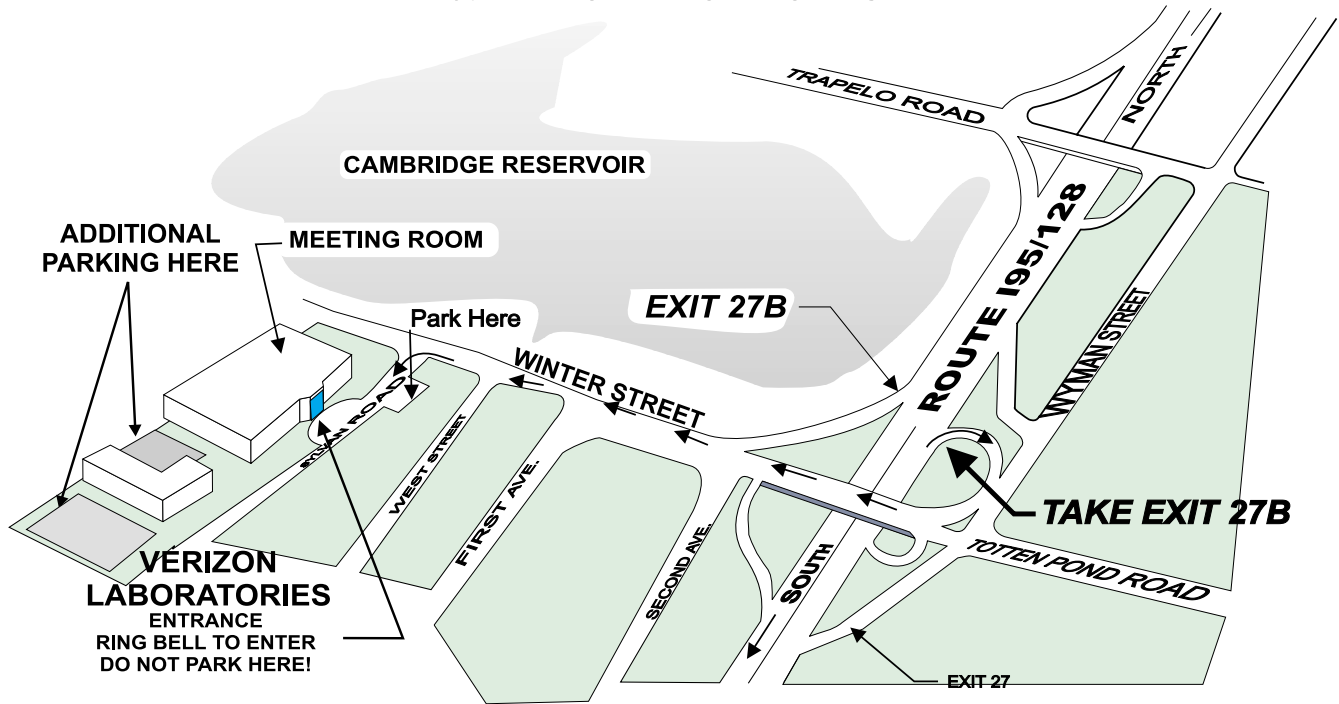
This database is made to help you select future radios that have the fewest conflicts with ones used by others at the flying field. Put the number of transmitters that you own for each frequency. **ADD D IF IT IS YOUR PRIMARY FREQUENCY AT Davis Farm, and M if it is your primary at Medfield.**

11 _____ 16 _____ * 21 X 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 X 25 _____ 30 _____ 35 _____ 40 _____ 45 _____ 50 _____ 55 _____ 60 _____

*These channels cannot be used at CRRC fields due to the close proximity to TV Channel 4. HAM LICENSE CHANNELS: license will be checked at the field!

01 _____ 02 _____ 03 _____ 04 _____ 05 _____ 06 _____ 07 _____ 08 _____ 09 _____ 10 _____
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 LABORATORIES



JAN KANSKY
159 ELSINORE ST #2
CONCORD, MA 01742