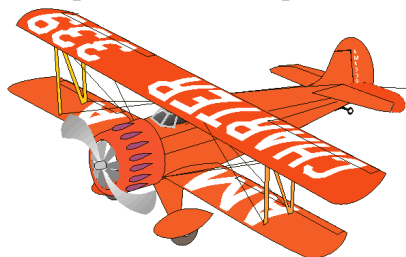


NEWSLETTER OF THE CHARLES RIVER RADIO CONTROLLERS, INC



CRRRC FLIGHT-LOG

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

AMA CHARTER 339

JULY 2003

VOLUME 40 NUMBER 7

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GENERAL MEETING

Wednesday

July 16th

7: 30 PM

PAPER AIRPLANE CONTEST!

Great Awards!
Intense
Competition!

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JULY RAFFLE

1st Prize *

A Hitec Micro 555 Flight Pack with 3 HS81 micro servos, 270 mAh battery and micro switch harness.!



2nd Prize *

MicroSizer - Complete miniature R/C car system



3rd Prize *

Selection of Cool Tools
(Sorry! No Gallon 'o Fuel)

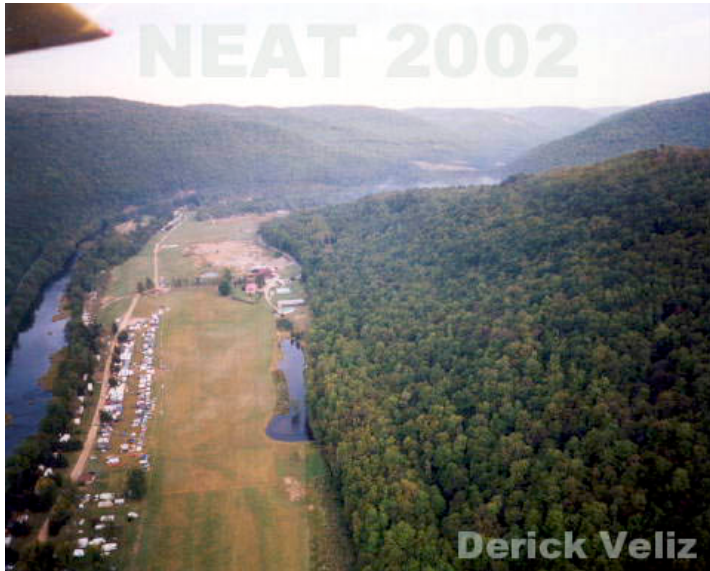
*Show and Tell prize will be A Selection of Cool Tools!

--Jon Leehey
Raffle Chairman

PRESIDENT'S Message

NEAT 2003

Northeast Electric Aircraft Technology Fair
Sept. 12, 13, 14 2003



The NEAT Fair is the largest and finest electric model aircraft gathering in North America, and probably the world.



The Peaceful Valley Campground is along the east branch of the Delaware River near the northwest corner of the Catskill Mountains, 2.5 hours northwest of NYC. It is only a little more than an hour from Scranton, PA, and Binghamton, NY.

Electric model enthusiasts from all over North America attend the three day Fair. They bring with them hundreds of different types of models; scale, sport, micro, giant scale, jets, helicopters, slow flyers, park flyers you name it... it will be there, all powered by electric motors!! Vendors and manufacturers will also be on hand to talk about new products/ideas and sell you their products/wares.



The field will be open all day Friday, Saturday, and Sunday for AMA members to fly their models. The field will be shut down from 12 noon to 1pm, each day, for demo flights, by some of the most talented electric modelers in attendance.

For more information go to:

<http://www.neatfair.org/index.html>

Pictures By Derick Veliz

Reprint of selected items from the "NeatFair" F.A.Q.

<http://www.neatfair.org/faqs.html>

By Tom Hunt.

CRRC

"Paper Airplane Contest Details"

Events:

- 1) **Duration** - 2 sec bonus for hand catch, to be decided at the meeting after we see if it makes it more interesting.
- 2) **Distance**- Launched from front of room. If more than one person hits the far wall, highest impact wins.

Each plane MUST be one of the four on this web page:

<http://www.josephpalmer.com/planes/Aiplane.shtml>

They cover the range of "floater" to "dart". Standard 8.5 x 11 paper only. One added paper clip allowed.

One official attempt per event. Winner of each event gets to pick one item from the Cool Toolbox.

Low-cost, post-cure oven for composites

By DAVID FEE

If you've ever worked with epoxy resins, then you know that waiting for the epoxy to cure is the most time-consuming part of the process. You also may know that heating the cured part to a specified temperature for a given time interval (known as post-cure) will ensure the best physical properties of the final product. This simple and inexpensive project will help in both of these areas.

Sometimes, especially in the winter months, the workshop air temperature can be low enough that epoxy cure times are greatly lengthened. In fact, some resin/hardener systems may not cure satisfactorily at all. For this reason, it is desirable to have a way to heat the part to a temperature around 75 to 80 degrees Fahrenheit. Some of us have used the kitchen oven from time to time, but temperature control can be difficult, not to mention the constraints on physical dimensions (kitchen ovens are not shaped like wings or fuselages). There also may be complaints from wives, domestic partners, or Mom. There must be a better answer.

Implementing a post-cure procedure will do several things for you. The fundamental benefit is that you will have a fully-cured part in several hours, instead of several days or even weeks. Caution must be exercised, of course, because a 250-degree post-cure will quickly turn your beautiful new glass and carbon over blue foam vacuum-bagged wing into a lumpy little potato chip. Don't ask how I learned that!

If the epoxy manufacturer's spec sheet suggests 220 degrees for two hours, but your foam or mold will distort at a lower temperature, then simply post-cure for a longer time at a safe temperature. Remember, any post-cure will be better than none, as the elevated temperature serves to drive the curing process to completion. Also, post-cure generally should be done after the initial cure. That is, the epoxy should be firm and not liquid. For the most part, overnight at 75 degrees is a sufficient initial cure for room-temperature epoxy systems.

So now that you're convinced (or even if you're not) that a post-cure oven would be helpful, how do we go about building one without investing a lot of time and money? You will be pleased to know that the solution is simple and inexpensive. Total cost is around \$20, and you may already have several of the required items in your home or garage.

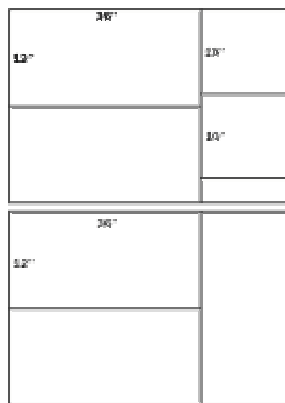
Materials needed:

- Two 2 x 4' sheets of 1-inch metalized Mylar-coated insulating Styrofoam
- A 4'2" conductor extension cord
- Two plastic lamp holders
- Two 40-watt light bulbs
- A wall-mount light dimmer
- A light dimmer switch plate cover
- A plastic wall receptacle box
- Duct tape (high temperature)

Construction:

Take your Styrofoam board measurements and figure out the dimensions for the oven you desire. I chose to make an oven large enough to hold an S400 Pylon wing or fuselage. This size was convenient since the finished oven is not overly bulky. You could experiment building a collapsible oven for convenient storage. If you make your own box, keep in mind that this system uses light bulbs as a heat source, so you want to leave plenty of room between the tallest part and the bulbs. One you have worked out your dimensions, you can get started.

Oven Components



From Hangar News
First Weed Wacker Aero Squadron
Don Westergren, editor
Lakeside CA

TREASURERS REPORT

Report Date 6/30/03

Starting Balance	
5/31/03	
Checking (after #1309)	3,339.58
Savings	5,598.12
Cash	25.00
Total Starting	8,962.70
Income	
Interest on Savings (June)	4.14
Total Income	4.14
Expenses	
Mike Cormier – June Newsletter #1310	39.67
Monthly Bank Fee (June)	11.00
Total Expenses	50.67
Ending Balances	
Checking (after #1309)	3,288.91
Savings	5,602.26
Cash	25.00
Total Ending 6/30/03	8,916.17

Signature: Miner Crary

JUNE GENERAL MEETING NOTES

Secretary's Report: May 2003 General Meeting

Derek Veliz – opened the business meeting at 7:45pm.

Secretary's report was approved as printed in newsletter.

Treasurer's report was approved as printed in newsletter.

Field Reports

Collings Fun Fly – The conditions were quite wet on Saturday, but Sunday's beautiful weather witnessed many pilots in the air. Wet power, e-power and glider pilots all flew together.

Medfield – Field is still wet.

Davis – Lots of pilots out last Sunday.

Old Business

Membership:

- 169 members so far in 2003
- 194 peak members in 2002.

New Business

Next BOD was – June 24. The location this month has changed to Derek's office in Acton.

Bob Scott – reported the statistics from Collings. A total of 29 pilots registered. Financially, club expenses totaled \$92.92, while

receipts totaled \$232.00, resulting in a net profit of \$139.00.

Events coming up the weekend of June 21/22:

- Millis is having a competition Fun-Fly at Medfield on Saturday the 21st.
- The New England Scale Championship/Scale Masters Qualifier is Saturday/Sunday in Garner, MA.
- The Air & Space Day event is being held starting 10am Saturday in Tewksbury. CRRRC members can setup between 7:30 and 10am.
- Crow Island is hosting a Heli Fun-Fly.

Raffle

Roadkill Park Flyer – Fritz Bien

Hobbico Dual Field Charger – Tony Davids

Gallon of Fuel (Finally!) – Jon Leehey

Show and Tell – razor blades – Jeff Newcum

New Pilots

Tony Davids

Dilip Kokater

Guests

John Plug – is built a glider.

Ken Vincent – has been flying park flyers.

Bob Cox – is a new Member.

Derick closed the business meeting at 8:105pm.

Show And Tell

Dennis Ganz – GWS Tiger Moth on floats from foamfloats.com

Tom Bauer – Mini Streak powered by a speed 400

Jeff Newcum – Ellipsoid

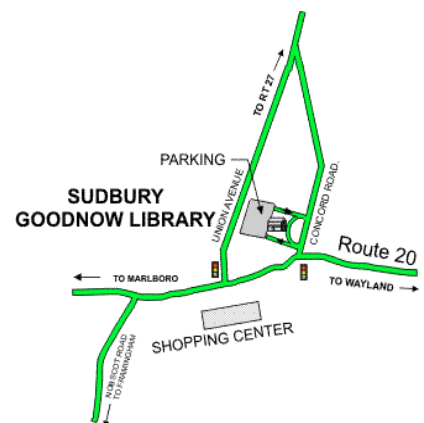
Speaker

Simulator Night – Tomer Jackman, Jeremy Harkin, and others demonstrated computer flight simulators including CRRCSim and RealFlight G2.

--Jeremy Harkin

JULY DIRECTOR'S MEETING

The next directors meeting will be, Tuesday, July 22nd at 7:30 PM, at the Sudbury Goodnow Library.



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. 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 any of the building instructors.

INSTRUCTOR TOWN TELEPHONE

POWER:

Chief Instructor:

Ruane Crummett

(Wayland 508-655-2234)

Bob Scott	Norwell	781-982-0268
Pete Young	Watertown	617 923-4184
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
Pete Young	Watertown	617 923-4184
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
Pete Young	Watertown	617 923-4184
Lincoln Ross	Waltham	781-891-0332

HELICOPTERS:

– None Available at present –

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

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)

TREE CLIMBERS

Tony Morais

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

Brian Pikarski

Burlington, MA
617-797-2136

Kenny Greeno

Office Phone: 617-661-8591

Cell Phone: 617-201-5300

Paul Harrington

(508) 376-2573 [Medfield Area]

JUNE 2003 L.I.S.F. REPORT

***"I have to say,
These trips are never
boring!"***

By Anker Berg-Sonne

Friday Bruce, Jan, Dave and I drove down together. Fritz drove by himself, because he always stays at Gordon Stratton's. And Jose drove by himself because none of us wanted to drive by upstate New York.

On the way I got a call from Jose, who was looking for a field to trim his new fuse and old wings on. He was going to join us later at the hotel; the Red Roof Inn, which we are checking out as a possible replacement for the Roadway, which is being renovated. Miner also drove down by himself because he was going to stay at his folks.

When Jose arrived, he had managed to crash and seriously damage his plane; his only plane. I said "no problem, you can fly my backup"! So after dinner we got going; adapting my plane to his transmitter. This involved going to the FMA site to check switch settings, replacing the receiver, and swapping pins on all of the connectors. Finally we got everything working, the last step was to adjust the trims by mounting the wing.

I retrieved the wing from my van and I unpacked the tips while Bruce unpacked the center panel. He was somewhat puzzled by how familiar the center panel looked, and I was puzzled by the fact that it was held together by duct tape. Lo and behold, after the Lancaster contest Bruce had taken my center panel and left his in my van,! He had left mine back in his house, (of

course.) All the connectors were different, so there was no way to mount Bruce's center panel on the rest of my plane. On to plan "B" in which Bruce lent his backup Escape to Jose. At 12:30 in the morning Jose was finished setting it up.

Next morning we ate at a "new" diner. Just like at the Roadway Inn, the charm had the work of the old one. Four of the five of us tried the Freedom Toast, (which this diner was able to cook completely through) ... so far so good! Fritz ate in lone majesty at the old one.

Next stop, the supermarket. Which was closed! We didn't drive close enough to see the sign that said that they had just moved down the block, so that day we had hamburgers and hot dogs served at the field.

At the field, the long line of cars made it obvious that the turnout was really good. (40 registered contestants). The contest format was man-on-man, where three or four contestants launch at the same time and compete against each other. The best time makes 1000 points, and all others are given prorated scores. All rounds were 10 minutes. The landing was in-or-out of 6-foot diameter circles for 30 points.

The weather was as forecast, a pleasant 80 degrees with light breezes out of the north. Lift was light all day. Everything went smoothly until the fourth or fifth round, when Jose launched. The plane veered left, then right, then straight down and into the ground with a sickening crunch! Everybody went silent and didn't do anything as Jose and Fritz went out to survey the damage. Pretty much destroyed... Poor Jose had just bought a 1000 \$ plane that was never going to fly again! It's hard

to think of something appropriate to say or do when something like this happens. Up to this point, Jose had been in first place in Sportsman. Anyway, life has to go on, and flying continued. We ended up flying 6 rounds.

At the end of the contest Miner ended up in 4th place in Sportsman, and Bruce in 6th in spite of his trauma. Jose didn't fly after the crash and ended up in the bottom of the pack. The expert performance was nothing to write home about. Dave took 8th, Jan 10th, me 13th, and Fritz 14th. We are really good at bunching up in the middle of the pack. John Hauff is a tough CD, and only allowed one pop-off for the entire contest (and it had to be in the first round.) After that it was "fly it"!

Tom Kiesling managed to pop off at 100 feet in altitude! Aggressive as he is, he went off over the trees in search of lift. He soon ran out of altitude, and settled gently into the top of the tallest tree in the woods.

In the evening I went into the city to deliver wedding presents to my daughter and son-in-law. The rest of the Red Roof gang ate at a Mexican restaurant that Miner had recommended. As Bruce says so eloquently: ***"I didn't know it was possible to make bland Mexican food where all the dishes look the same, but these guys had the talent!"*** To top it off they had an unbelievably noisy Mariachi band.

Next morning, off to the new diner. Fritz didn't join us, and I forgot to ask why. There was a supermarket right across from the diner, so we stocked up on food and drink there. Nice place, but we miss the old one...especially the guy behind the deli counter, who has always remembered us from year to year.

At the field, we were set up at the opposite end because the winds were going to be from the south. Again, a good turnout and exactly the same format. This day Jose and Jan shared Jan's plane, which they have done before. It survived the experience with no mishaps. The format was the same as Saturday. Lift was stronger and the breeze picked up in the afternoon. At noon a warm front passed through, and the humidity and temperature increased markedly. The lift also became spotty until the front had fully passed through. Bruce had an awesome day, and made all his times and most of his landings. His raw score ended up being 65 (off-max), 5 better than my ending score. He took first in sportsman, of course. Joe ended up in 5th and Miner in 9th.

The experts repeated the previous days performance, even though our absolute scores were very good. Fritz made 8th with 64 (off-max), Jan 9th with 354 (off-max), I tenth with 70 (off-max) and Dave 11th with 72 (off-max). At least we didn't let anybody else into the middle! Jan's score shows an interesting fact; that your raw score doesn't line up with your normalized score when flying man-on-man. John Hauff had an awesome 1 (off-max) for the day, and won the contest after a fly-off against Josh Glaab, who had 5 off max.

Sunday was plagued by line breaks and John Hauff was clearly getting really stressed. At one point Bruce broke the line and John was so upset he was reluctant to grant Bruce a re-launch. After much pleading from Bruce and myself he finally relented, but he put Bruce on his warning list. Ironically, Bill Haymaker launched just after Bruce. As Bill was going up the line John kept saying to Bruce "see that is a good launch". On the zoom Bill dove too sharply, got off the pedal and managed to wrap his plane up in the winch line. John didn't comment on that! There was some exciting flying. In the third

round I went downwind when my competition, (Steve Lucke and Jerry Zeigenfuse), went upwind. I searched and searched and couldn't find anything and after 5 minutes I was so low that I couldn't circle over the 10-foot brush surrounding the field. Then I found a bump, and after a lot of hard work and yells of encouragement (and criticism) of my flying from the audience, I was able to get into decent air and make my time.

The Drela wing is really awesome and the plane can work tiny thermals in spite of its size. Steve Lucke was running out of altitude as well and came over and joined me, also yelling so as to encourage me. After landing, I was totally exhausted. Bruce and I must have been quite a sight. We both use a lot of body language when the flying is hard.

I have never seen scores bunched as tightly as the expert scores Sunday. The first 6 pilots were within 99% of the winners. 14 were within 95%.

The return trip was uneventful for a good beach day on Long Island. We made it back to Bruce's before 7PM.

--Anker

Davis Field Schedule

CRRC has two contests on the weekends of July 19-20

- (RES and HLG contests)
- (August 9-10 (ESL Soar-In)).

CRRC's permit for Davis Field gives us the exclusive use of the field on those weekends.

There will be a lacrosse camp at Davis Field starting Sunday, July 27 and ending Friday, August 1. The same lacrosse camp was at Davis Field last summer and I

recall that it was primarily a daytime event. The field was open in the evenings. Also on the first Sunday, the lacrosse folks were setting up, but the field was open for flying until mid afternoon. Hopefully, a similar schedule will hold this year.

Starting August 1, Pop Warner Football has the field reserved. Until September 7, we can expect Davis Field to be in use for practices on weekday evenings. It is not yet clear if there will be weekend practices. Football games begin after Labor Day. Home games will be played at Davis Field starting at 7:15 am and ending around 4 pm on the following Sundays:

- September 7
- September 28
- October 5
- October 26

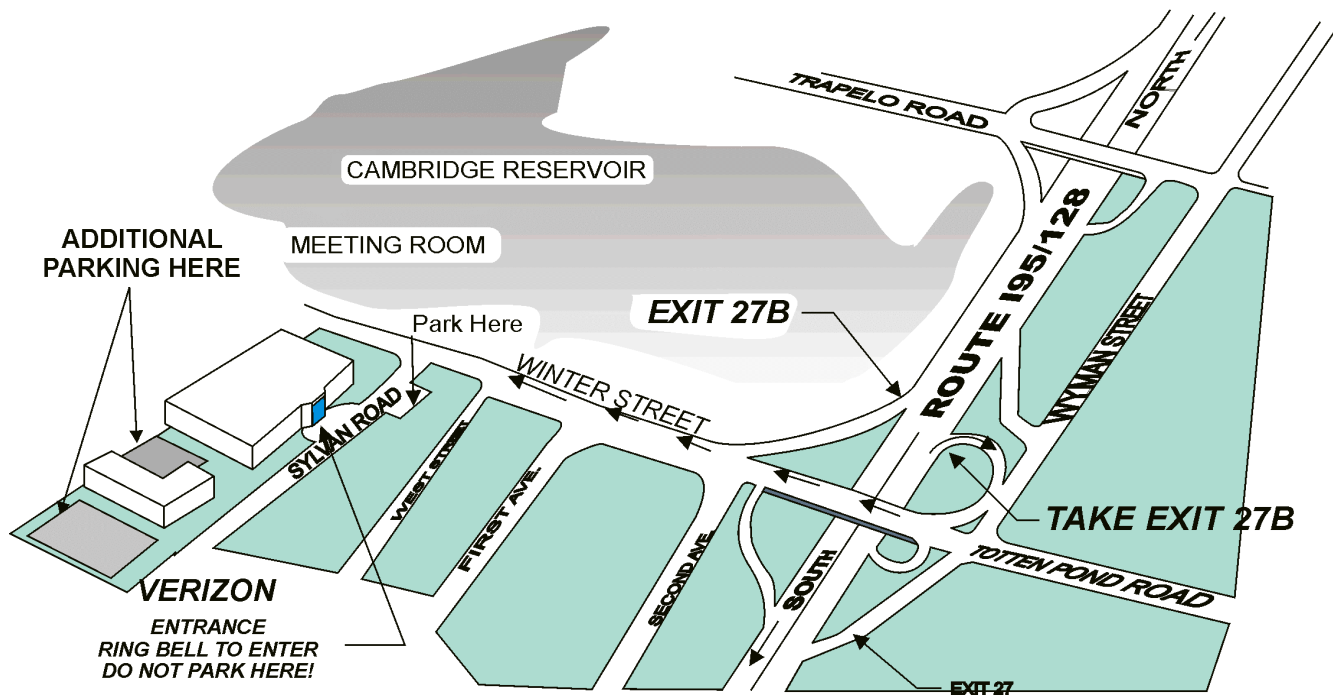
There may be playoff games after October 26. As we did last year, we will request that the Pop Warner folks move the goal posts off the field for those weekends when there are no home games. Pop Warner information can be viewed at:

<http://www.sudburypopwarner.com/>

The construction of the new Lincoln-Sudbury Regional High School seems to be on a schedule that will allow the school to be occupied in the fall of 2004. Along with that, there will be a demolition of the old school and the creation of new athletic fields. My guess is that the fields will not be ready until the spring of 2005. That means that sports programs will use Davis Field rather intensively until then. Hopefully by the fall of 2005, CRRC will have to worry only about fall soccer at Davis Field.

--Dick Williamson

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



Michael Cormier / Editor
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