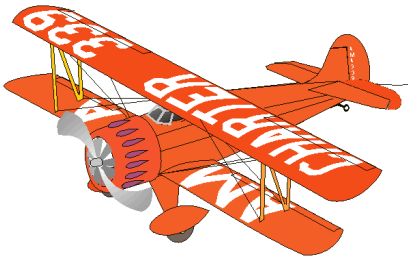
NEWSLETTER OF THE CHARLES RIVER RADIO CONTROLLERS, INC



CRRC FLIGHT-LOG

http://www.charlesriverrc.org/

AMA CHARTER 339 NOVEMBER 2003 VOLUME 40 NUMBER 11

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GENERAL MEETING

Wednesday
November 19th
7:30 PM

"Combat 101"

By Mark Rudner

An introduction to control line combat with an emphasis on the history, development, current equipment, and strategies of F2D (international style) combat.

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NOVEMBER RAFFLE

1st Prize *

Defiant 2M EPP sailplane kit. A fast build and perfect for winter flying.

2nd Prize *

Combo - Great Planes Slot Machine + Hobbico Top Fueler MkIII.

Take one or both.

3rd Prize *

Selection of Cool Tools.

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

--Jon Leehey
Raffle Chairman

ARF Plane Inspections, Some Thoughts (Part II)

Control Linkages:

- Remember that most ARFs are supplied with metric threaded hardware that's incompatible with American SAE 2-56 threads. So be careful not to mix clevises and other threaded items.
- On the primary control surfaces, I replace any threaded linkage retainers (E-Z Just or equivalent) with Z-bends or some other more robust arrangement. It would be disastrous if a linkage retainer screw loosening led to loss of elevator control, for example!
- I install short sections of fuel tubing over all clevises to insure they don't open in-flight, or anytime.
- Particular attention is paid to the nose steering wheel linkage to make sure there's no binding. I usually file a "flat" into the nosewheel wire to help retain the connectors and spacers there. LocTite® here is essential as this linkage really takes a beating.
- I've found that for ARF trainers, a Z-bend on the nose steering wire isn't necessary and makes the linkage hard to remove or adjust. A 90 deg bend on music wire, with a fairly long leg, is sufficient and readily removed when needed.

Radio equipment:

- I usually find that the servos' rubber grommets and brass inserts aren't installed properly or else, not at all. As long as I have to remove the servos to fix the grommets, I add a drop or two of c/a to the servo mounts' wooden threads to harden them.
- On-off switch: as the markings are very hard to read and not intuitively positioned (why aren't more switches aligned vertically, like household light switches?), I add a short piece of colored trim tape to mark when the switch is in the "on" position.
- I make sure the receiver is securely wrapped in foam rubber, and that the battery restrained by Velcro ® or some other equivalent means.
- All control functions and servos are checked for proper neutrals and response to controls. Be sure to do this with the transmitter trims neutralized. <It's very easy to get the throttle response backwards but with servo reversing, easy to fix – who remembers the "bad old days" when servo reversing hadn't yet been made a standard feature? >
- I tie together the battery connector so it can't possibly come apart in flight. A spare strand of servo wire is sufficient to do this and is easily removed if necessary.
- Make sure all servo arms are properly retained with a servo screw.
- String out the antenna and make sure it won't get cut where it exits the fuselage.

Miscellaneous items:

- It's handy and convenient to mark the empty CG position with sections of trim tape. This makes it easy to check the CG on the field.
- I insist on name and address labels be added to the wing and fuselage interior.
- In addition to all the items above, it's important to keep observant for any other details that may ultimately end up being important.

Whew – the list ended up being longer to write out than I expected. Despite the seeming length and complexity, I can usually do all the above items in about an hour and a half in my workshop. I've mentioned a few "surprises" that I've found and let me assure you that there's plenty more I haven't mentioned. The list of checked items for gliders and electric aircraft is slightly different and perhaps, a subject of a follow-up article. The moral of this story is there's no substitute for a detailed pre-flight inspection performed in a workshop environment and not at the field!

--Pete Young

TREASURERS REPORT

Report Date 10/31/03

Starting Balance 9/30/03	
Checking (after #1322)	4,016.78
Savings	5,612.95
Cash	25.00
Total Starting	9,654.73
Income	
Scale Fly Reimbursement	600.00
October Raffle	128.00
Dues	310.00
Interest on Savings (October)	3.58
Total Income	1,041.58
Expenses	
Teamworks – Nov. Indoor Flying # 1323	150.00
Mike Cormier – Sept. Newsletter #1324	35.97
Ruane Crummett – Raffle for Auction #1325	134.80
Natick VFW – Auction rental #1326	100.00
John Leehey -- Raffle Prizes, etc. #1327	311.84
Commonwealth of MA – Annual Filing #1328	15.00
Monthly Bank Fees (October)	11.00
Total Expenses	758.61
Ending Balances	
Checking (after #1328)	4,296.17
Savings	5,616.53
Cash	25.00
Total Ending 10/31/03	9,937.70

(Only $62.30 away from $10,000!)

Signature: ***Miner Crary***

On the lighter side

After every flight, pilots fill out a form called a gripe sheet. These sheets convey to the mechanics problems encountered with the aircraft during the flight that need repair or correction. The mechanics correct the problems, and then respond in writing on the lower half of the form what remedial action was taken. The pilots review the gripe sheets before the next flight.

Never let it be said that ground crews and engineers lack a sense of humor.

P=Problem logged by the pilot
S=Solution/action taken by the mechanics

P: Left inside main tire almost needs replacement.
S: Almost replaced left inside tire.

P: Test flight OK, except auto-land very rough.
S: Auto-land not installed on this aircraft.

P: Something loose in cockpit.
S: Something tightened in cockpit.

P: Dead bugs on windshield.
S: Live bugs on backorder.

P: Autopilot in altitude-hold mode produces a 200 feet per minute descent.
S: Cannot reproduce problem on ground.

P: Evidence of leak on right main landing gear.
S: Evidence removed.

P: DME volume unbelievably loud.
S: DME volume set to more believable level.

P: Friction locks cause throttle to stick.
S: That's what they're there for.

P: IFF inoperative.
S: IFF always inoperative in OFF mode.

From Hear Ye!
Valley Forge Signal Seekers
Marilyn Ayres, editor
Glen Mills PA

Thought for the day:

Never be afraid to try something new !remember, amateurs built the Ark; professionals built the Titanic.

BLURB

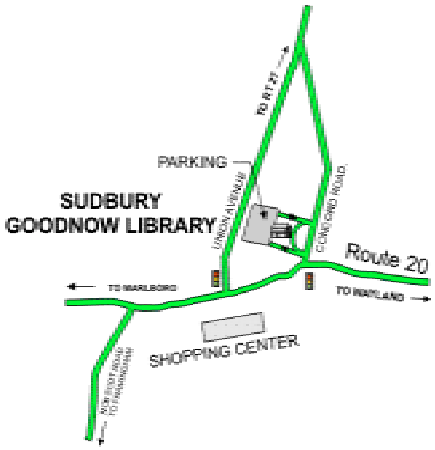
Are you a new CRRC member? Want to get all the latest club updates? Find out when people are going slope soaring at the Cape? Or just want to join the daily RC chatter? Then subscribe to the CRRC Email list! Direct your web browser to:

http://www.charlesriverrc.org/crrc_emaillist.htm or just send an email to walter@toplayer.com requestingthat you be added to the list. See you online!

--Dave Walter

NOVEMBER DIRECTOR'S MEETING

The next directors meeting will be, Tuesday, November 25th 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
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]

Selected hints and Tips from the National Newsletter.

Storage for small items. If you can find a kitchen spice rack at the flea market, get one to put your CyA and epoxy glue bottles in. The kind made for small bottles works very well. Empty bottles can be used to store small hardware items.

Bending balsa A spray bottle of water on your workbench comes in handy for bending balsa sheets. If you spray a little water on the wood before you use filler, it will stick much better and will go on smoother.

Repairing dings and dents. Have you ever had a dent in a balsa leading edge? Try fixing it with water! Get a small diabetic syringe and put water in it. Inject a little water into the balsa around the dent in the leading edge. Heat the area with your covering iron. When the water starts boiling, it will build pressure and push the balsa out to its original shape.

Stir sticks. Use popsicle sticks. The next time you are in the craft shop, pick up some popsicle sticks. They come in boxes of 100, 500, and 1,000 and they're cheap. You will use them for all kids of things, including servo rails, reinforcing splices, skids, fuel tank stops, mixing epoxy, and any other place you use screws.

From Airmailer
Benton County Radio Control ClubJim Trump, editor
Corvallis OR

Cooling your engine. If your engine is running hotter than you would like, how can you cool it down? Most people make the mistake of thinking more is better when it comes to the air inlet at the front of the cowl. This is a common error and while it seems logical, the reverse is actually true. To properly cool your engine, you need more outlet, not more inlet. You want at least 2:1—preferably 3:1—air out to air in ratio. Otherwise, it makes a dam and the air cannot come into the cowl because it has nowhere to go out of the cowl. If your engine is not cooling properly, try blocking off the other air inlet or opening the belly of the cowl further.

Stud threads. You know those threaded metal studs you get with you Ny-Rods? If you use a small electrical wire nut screwed into one end of the stud, you'll find it much easier to screw the other end into the inner pushrod of the Ny-Rod. It saves the stud threads too.

From the newsletter of the Duluth/Superior R/C Club
Joan Johnson, editor
Knife River MN

Need a bench? Need an extra workbench, yet don't have the space for a permanent one? How about an ironing board? It has a padded top (if you choose), is adjustable for height, and you can even sit down while covering or doing close-up work. Best of all, you can fold it up and put it away.

From The Tail Spinner
via the newsletter of the Duluth/Superior R/C Club
Joan Johnson, editor
Knife River MN

Wing/tail alignment. Get an old telescope antenna (the same type as found on transmitters). Use it as an adjustable-length measuring rod to compare critical measurements on airplanes during construction. This can help you compare the distance from one wingtip to the stabilizer and to make sure this distance is equal on both sides of the airplane. This ensures that the stabilizer is parallel to the wing.

From The Fly Paper
South Bend Radio Control Club
Jack Allinger, editor
South Bend IN

Tinker-toy balancing jig. This jig for determining the balance point of a new model is made of Tinker-toy parts. And if you have young children who have the toy, it won't cost you a cent (see graphic at right).

Blind nut safety. Blind nuts have been known to fall out inside the structure. Recess, then glue a 1/16-inch plywood plate over the top to capture the nut. Sketch shows wing strut attachment.

From Prop Spinner Chatter
Eugene Prop Spinners
Mel Marcum, editor
Eugene OR

MEMERSHIP STATISTICS.

Here are the updated CRRC membership figures. The table summarizes the membership status, and compares recent years.

Year	Renewals	New Members	Peak Totals
1999			135
2000	112	62	174
2001	124	50	174
2002	138	58	196
2003	**156**	**39***	**195**

*The 39 new members include 33 genuinely new members and 6 members who rejoined after a lapse of a year or more.

I will send out an updated membership list around the first of each month.

--Dick Williamson

THE CHARLES RIVER RADIO CONTROLLERS, INC

AMA Charter 339

Annual Hobby Auction

Drinks

SUNDAY, NOVEMBER 16, 2003

Hot Dogs

VFW Hall, Natick, MA

Set up and Viewing Noon to 1:00 PM
Auction 1:00PM to 3:30PM

Directions: From Rt. 9 and Mass Pike, exit at Speen Street towards Natick. Turn Left on Route 135. VFW Hall is on the left about 400 yards along Rt. 135.

All Modeling items auctioned

Come buy and sell:

Engines Radios Models Kits Tools

$1.00 Entrance fee includes raffle ticket for a new 4 channel radio system.

(additional raffle tickets $1.00 or 3/$2.00)

CRRC receives 10% of proceeds from all sales.($10 max)

Cash only PLEASE! No private sales.
Seller may refuse sale at no cost

THE CHARLES RIVER RADIO CONTROLLERS, INC

2004 MEMBERSHIP APPLICATION

AMA Charter 339

THIS FORM EXPIRES ON MARCH 1ST 2004!

Name_____AMA No._____

Street_____Birth Date (AMA req'd)_____

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 2004 AMA LICENSE**, appropriate dues, and a **SELF ADDRESSED STAMPED ENVELOPE** to:

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

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

REMEMBER THE MARCH 1ST DEADLINE!	**Renewal before March 1st**
OPEN Member	**$30.00**
JUNIOR member, (under 19 before 7-1)	**$15.00**
SENIOR member, (if age 60 before 7-1)	**$20.00**
full time STUDENT	**$15.00**
Family member additional to OPEN membership	**$15.00**
There will be a $5.00 penalty for joining AFTER March 1st	

I'M INTERESTED IN THE FOLLOWING:

❑ **TRAINERS/SPORT PLANES** ❑ **ELECTRICS** ❑ **PATTERN**
❑ **GLIDERS** ❑ **HELICOPTERS** ❑ **RACING**
❑ **INDOOR/PARK FLYERS** ❑ **SCALE** ❑ **GIANT SCALE**

❑ **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 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>_____

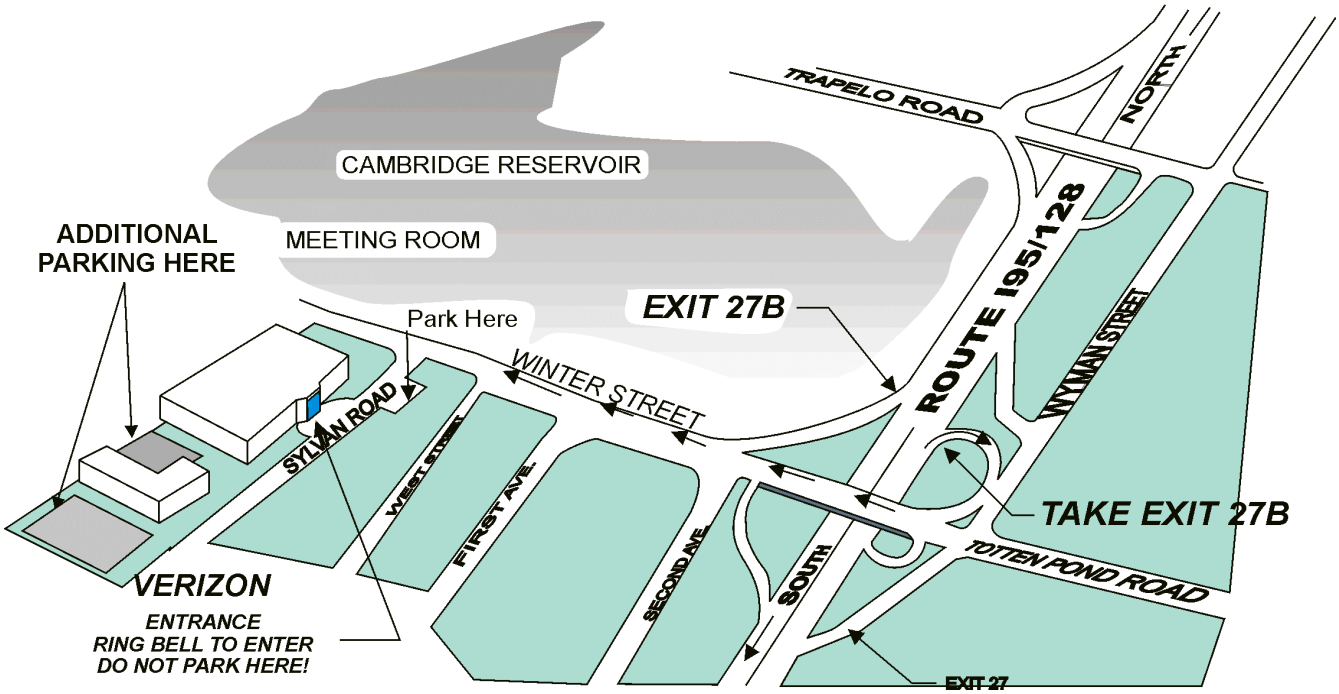
15>_____ 20>_____25>_____30> _____ 35> _____ 40> _____ 45> _____ 50>_____ 55>_____ 60>_____

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***



Michael Cormier / Editor

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