



CRRC Flight-Log

October 2014

<http://www.charlesriverrc.org>

AMA Charter 339

Next General Meeting

Wednesday October 15, 2014 7:30PM at Goodnow Library

The Speaker, Bill from Hobbyland in Stow, will talk about trends in the modeling industry

Please review the AMA Documents on pages 16, 17 and 18



CRRC General Meeting Minutes for September 17, 2014

Business Meeting: Dave Spielman opened the business meeting at 7:30 PM at Goodnow library in Sudbury, MA.

Meeting minutes and treasurer's report from last month's meeting were approved.
Current membership stands at 106 persons.

Field Reports:

Davis field is in excellent condition.
Medfield is also in excellent condition. There are some weeds along the entrance road that could be trimmed.

Old Business:

The current status of the Davis field development plans is a proposal to construct of four little league –sized fields (organized back to back with all four home plates at the center of the array). The plan would cost roughly \$3.6 million, which may help keep the forces of development at bay.

The rudder elevator spoiler (RES) glider contest was held on August 30 with 15 pilots participating. A dog walker was hit by a glider prior to the contest (fortunately no injury). Safety must always be the top priority for all CRCC events. Several suggestions were made on how to improve safety at events:

1. Be more formal in the registration and pre event process. Don't allow flying prior to the pilots meeting so that local filed rules are understood. Make sure the winches and launch area is set up and cleared of persons prior to allowing any flights.
2. At fields where non-flyers may be using the field, designate someone to manage spectators, dog walkers, and others to keep them from high risk areas.

Brian Rickman could use some assistance in running the Sudbury High School RC club.

New Business:

CRRC elections will occur in November. Ray Harlan is looking to step down as membership secretary; anyone who wants to replace Ray will be held in high esteem by the club.

Upcoming Events and Schedule:

CRRC auction will be held on November 30, 2014 (11:00 AM – 4:00 PM) at the Natick VFW hall.

New Members and Guests:

Nick Foscolos is a new member and was given a set of pilot wings.

Raffle Winners



Dave Spielman: Flite Test quadcopter kit



Al Marshall: Hobby King Orange receiver



Wayne MacKeil: Flite Test Mustang kit



Dick Roy: Bottle of CA glue



Speaker

Frank Krzciuk of the Millis RC club discussed methods of converting a 72 MHz receiver to 2.4 GHz by installing a 2.4 GHz module onto the old transmitter.



Show and Tell



Nick Foscolos discussed a Real Flight simulator that he is using to learn to fly. He was able to fly his new model successfully on his first flight due to the skills he was able to develop on the simulator.



Al Marshall showed his new Frsky Taranis transmitter. This transmitter uses Open TX open source software and is highly capable and configurable. It includes a voice system to relay information to the pilot, a telemetry system. The system can use Frsky receivers or can be configured to other radio systems by installing a plug-in transmitter module.



Wayne MacKeil showed a partially finished Canadair CL415 waterbomber/seaplane that he is assembling. The plane will have 0.70 engines, 11x7 props and weigh approximately 10 pounds.



Bert Cohen had a Fast and Furious combat plane that was coming out tail heavy. It was suggested that a fix for the tail heaviness would be to glue a foam plug onto the existing firewall to extend the nose and motor location forward.



Fritz Bien had a small rubber powered Kawasaki Ki-61 "Tony" that he scratch built.



Brian Rickman brought the model that will be built by his "Learn to Fly Radio Controlled Airplanes" class.



Dave Spielman showed some parts of his Allegro-Lite glider that suffered a mishap at the RES contest. Due to misreading the plans, he had constructed the horizontal stabilizer in two glued-together halves instead a single piece. The weakness at the center of the stabilizer resulted in it breaking in half on a hard winch launch. The plane was not seriously damaged and he has the new stronger tail installed.



John Eppling showed his recently completed quadcopter with FPV system. It's made of Flite Test structural components arranged in the "dead cat" or spider configuration. The "dead cat" has the forward arms of the quadcopter spread a bit wider than the rear arms, allowing a clear view from the camera without any props in the frame.



Hawk Attacks Quadcopter



Presidents letter October 2014

If you are wondering what's happening next in CRRC, read on. We have Bill Howard from Hobby Land in Stow speaking at our October general meeting. He'll fill us in on what it's like to run a hobby shop, and he may also show some new products. Bill's hobby shop is just 7 minutes from Davis Field in Sudbury. This is your chance to let Bill know what people want to buy locally. In addition to this treat, we have an open raffle where you have a chance to win one of several prizes. I'm not sure what prizes John has in store for us this meeting, but I'm sure they're good. The October meeting is on the 15th, just a few days away. Guests are welcome.

The Natick VFW hall has been reserved for our annual CRRC Auction on November 30th at 1:00 pm. This is your chance to buy and sell new and used RC items. We will auction everything RC. I recommend looking through your stock of treasures and consider turning your old boxed kits, radios, planes and things into cash. Starting now, gives you a chance to clean off the dust and make those treasures shine. CRRC collects a 10% fee for items that sell, up to \$10 per item. There's no charge for buyback. We also have a great raffle prize with tickets and food available for purchase. I'll see you there!

Your Board of Directors will be planning events for 2015 in the next few months. They will include the FFFF (frozen finger fun fly), field clean ups, a float fly or two, ALES soaring contest, Soar-In thermal duration contest, RES soaring contest, combat fun fly and auction. Your voice counts, so please let us know what you'd like the club to do. We're going to use several venues to help introduce you to all of our clubs resources.

If you've attended meetings or read the newsletter, you know that CRRC is promoting Radio Control Flying in the Sudbury and local communities. A LSHS high school flying club is in its first stages of startup. CRRC is funding the purchase of planes and equipment to start the club and CRRC members are there to support building and flying. If you're interested in helping out, contact Brian Rickman, Bruce Schneider or myself.

We also have a presence in the adult community. Brian Rickman is instructing a Sudbury Adult Education class in RC airplane building and flying. Each of the 10 students will build a foam trainer during three classes and spend an additional three learning to fly. The main building class takes place at the high school with makeup classes at Hobby Land. Training takes place at Davis Field. If you're interested in helping to train new pilots, please contact Brian. Look for Brian and the class at Davis Field on Saturday morning starting mid October.

I attended the Sudbury Park and Recreation meeting on September 29th where about 30 to 40 residents had plenty of questions for the commission. Residents who live alongside the field expressed concerns of intrusive parking, noise, water runoff and lost access to the field for their current use. The preservation of dog walking, airplane flying, kite flying and general recreation were the concern of many of these residents.

cont'd

A field plan was presented, the culmination of community and commission input from many Park and Rec meetings. The plan has 4 small back-to-back 90-foot baseball diamonds in the far left corner of the field with a concession stand in the center of the group. It's a bit like a 4 leaf clover. Included were 2 multipurpose fields with space surrounding and in between. Parking was increased to 160 cars. At a total cost of about \$3.6 Million a town meeting will be required to approve the plan. The new fields would accommodate our use, but with a modified footprint (shorter winch line, flatter field, wider area, but obstructions in the far corner) and a strict schedule during spring and fall.

One of the next steps is for the Park and Recreation commission to request funding from the town at a Sudbury town meeting. Other agendas interested in the same \$\$ include school improvements, purchase of open land and improvements to town property and equipment. The park and rec commission recommends this plan as the best use of Davis Field. There will be more discussion in park and

rec meetings before the vote at a special town meeting. It's not over and not a done deal, just a recommendation from the commission.

There are residents opposed to the development of Davis Field. Some efforts are underway to organize people who feel there are better options than developing this unique resource – the only open general-purpose field of its kind in Sudbury. A web site has been set up at SaveDavisField.org with more information, where residents can join the effort.

Sudbury Park and Recreation listens. Just recently, a resident who regularly walks his dog on Davis Field saw that wheelchair access to the field was barely possible. Within two days after bringing this up to Nancy McShea, both access gates were widened. What a difference. A motorized wheelchair now fits through both entrances. Thank you Park and Rec.

**Fly Safely,
David Spielman**

Safety Corner September 2014

Bow hunting season begins on the 15th and lasts until mid-January. Weekdays through Saturday, the hunters may be out in the woods. Please respect their right to hunt by avoiding the woods behind the farmers fields Monday through Saturday. Wear appropriate clothing when you're out there looking for your lost planes. Don't forget your insect repellent, ticks are still active and may carry Lyme disease.

David Spielman



CONTACT

92 Great Rd (Rt. 117)

Stow, MA 01775

info@hobbylandstow.com

978-637-2275



HOURS:

Tuesday - Thursday: 10AM-6PM

Friday: 10AM-8PM

Saturday: 10AM-6PM

Sunday: 1PM-6PM

Closed Mondays

October Raffle Prizes

Flitetest Simple Storch



Build instructions can be viewed here

<https://www.youtube.com/watch?v=i0S4epTCmss>

<https://www.youtube.com/watch?v=4dpgSbks9OI&list=PL6luSFWz4kttstQluULH2Yc1UW4drIn2g>

Spektrum DSM2 compatible receiver:
Orange RX 610



Electrifly Rimfire 300 brushless motor
<http://www.electrifly.com/motors/gpmg4505.html>



Float Fly



The Raffle Prizes





No taxiways/runways







The Gang of Four gathered on Sunday and displayed their Carbon Z Cubs
From left to right Chris Hubbard, Mark Tsombakos, John Eppling, Ned Watts

4th Annual Plum Island Fun Fly

Plum Island Airport 24 Plum Island Turnpike Newbury MA

October 18 & 19, 2014

Scale or not, bring what you have!
Glow, gas, electric and turbines welcome.
Helicopters welcome, but must fly the pattern.
No hovering please.

\$10 for any one day
\$15 for Saturday and Sunday
9:00 am – 4:00 pm

2100 Ft Paved Runway
Food on site. Campers welcome.
No hook-ups

Contest Director: Michael Turocy

☎ 978.514.2591 / Email: onrunway34@comcast.net.

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Officers

President

David Spielman

president@charlesriverrc.org

Vice President

Brian Rickman

vicepresident@charlesriverrc.org

Membership Secretary

Ray Harlan

membership@charlesriverrc.org

Recording Secretary

Dan Sullivan

secretary@charlesriverrc.org

Newsletter Editor

Robert Sisson

newsletter@charlesriverrc.org

Treasurer

Dave Marshall

treasurer@charlesriverrc.org

Webmaster

Bert Cohen

webmaster@charlesriverrc.org

Chief Instructor

Dick Williamson

chiefinstructor@charlesriverrc.org

Raffle Chairman

John Epping

xofficio@charlesriverrc.org

Building and Flight Instructors

To start your your instruction please call the Chief Instructor, Dick Williamson. You will be match with one of the Instructors. All Instructors are qualified AMA pilots and willing to give assistance to fellow club members.

Types of instruction - B = Building, G = Glider, E = Electric, F = Fuel, H = Helicopter

Dick Williamson - B, G, E

978-618-5475 - Sudbury

Fritz Bien - B,G, E

978-369-1720 - Concord

Tom Bauer - B,G, E

781-235-7344 - Wellesley

Brian Rickman - B, E

774-249-2494 - Marlborough

Derick Veliz - B, E

978-337-7867 - Acton

John Weigel - B

508-655-2138 - Natick

Richard Gammon - B, G, E, F

508-835-2049 - West Boylston

Ken Antonellis - G, E, F

508-653-8369 - Natick

Bruce Schneider - G, E

978-460-0305 - Hudson

Lincoln Ross - G, E

978-800-0608 - Maynard

Dave Walter - G

978-562-5400 - Hudson

Jon Leehey - F

508-358-5721 - Wayland

Tony Davids - H

978-568-9598 - Stow

Calendar

October 15, 2014

General Meeting at Goodnow

November 19, 2014

General Meeting at Goodnow

November 30, 2014

CRRC Auction
at VFW Hall Natick

December 17, 2014

General Meeting at Goodnow

January 1, 2015

Frozen Finger Fun Fly

January 21, 2015

General Meeting at Goodnow

February 18, 2015

General Meeting at Goodnow

March 18, 2015

General Meeting at Goodnow

April 22, 2015

General Meeting at Goodnow

May 20, 2015

General Meeting at Goodnow

June 20, 2015

General Meeting at Davis

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. Effective March 25 the key for the 2014 season is key #27. Ken may have keys at the meeting. A \$5 deposit is required the first time you receive a key.

New Wings

Nick Foscolos

Flying Sites

Go to the [CRRC Website](#) and select the Flying Sites tab to see the various sites. The site page will give current weather and site information.

RC Boats



LloydKeyes(Wayland)
508-358-9197 or
508-341-0110

Paul Harrington (Medfield)
508-376-2573

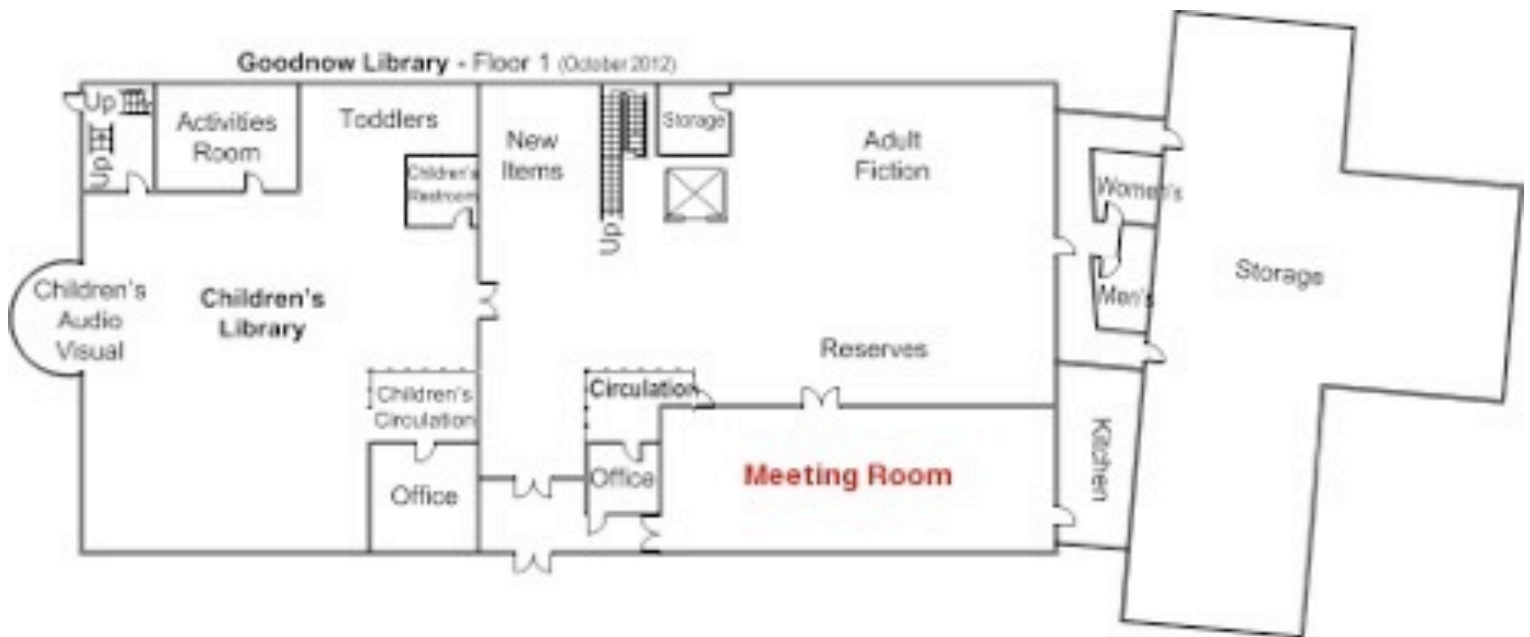
Monkey Men (Marlboro)
508-481-8461

Scott (Sudbury)
508-203-3845

Tony Morais
A1 Tree Services
(Framingham)
508-626-0088 or
800-657-7788

Stephen Canessa
The Tree Guy
978-460-1000

Hartney Greymont (Medfield)
Sean Comer
781-444-1227
thescomer@gmail.com



October Club Meeting Guests are Welcome

Wednesday October 15, 2014
7:30PM at the Goodnow Library
21 Concord Rd, Sudbury, MA 01776



AMA Document #550

Radio Controlled Model Aircraft Operation Utilizing “First Person View” Systems

GENERAL:

FPV flying of radio control model aircraft by AMA members is allowed only for noncommercial purposes as a hobby/recreational and/or competition activity and must be conducted in accordance with AMA’s current National Model Aircraft Safety Code and any additional rules specific to a flying site/location.

OPERATIONS – REQUIREMENTS – LIMITATIONS:

1. a) FPV novice pilots undergoing training at low altitude must use a buddy-box system with an FPV spotter, or must go to a safer altitude if no buddy-box system is used.
2. b) All FPV flights require an AMA FPV pilot to have an AMA FPV spotter next to him/her maintaining VLOS with the FPV aircraft throughout its flight.
3. c) The FPV pilot must brief the FPV spotter on the FPV spotter’s duties, communications and hand-over control procedures before FPV flight.
4. d) The AMA FPV spotter must communicate with the FPV pilot to ensure the FPV aircraft remains within VLOS, warning the FPV pilot of approaching aircraft, and when avoidance techniques are necessary.
5. e) During an FPV flight, the FPV spotter must be prepared to acquire the transmitter/control from the FPV pilot and assume VLOS control of the model aircraft at any time safe operation of the flight is in question.
- f) If an FPV pilot experiences a safety issue that does not appear to be a brief glitch, they must abandon FPV mode and fly VLOS.
1. g) Before the initial FPV flight of an FPV model aircraft and/or after any changes or repairs to essential flight systems, the FPV model aircraft must have an R/C test flight by conventional VLOS.
2. h) FPV model aircraft must use frequencies approved by the FCC for both the RC system and the wireless video system. Pilots must meet applicable FCC licensing requirements if they choose to operate the RC flight control system or the wireless video system on Amateur Band frequencies.
- i) AMA FPV pilots must first be capable of flying their FPV model aircraft manually before utilizing FPV flight.

4. RANGE – ALTITUDE – WEIGHT – SPEED:

- a) One of the requirements in Federal Law (Public Law 112-95 Sec 336 (c) (2) February 14, 2012) for model aircraft to be excluded from FAA regulations is that model aircraft must be flown within VLOS of the operator.
- b) Model aircraft flown using FPV must remain at or below 400 feet AGL when within 3 miles of an airport as specified in the AMA Safety Code.
- c) Model aircraft flown FPV are limited to a weight (including fuel, batteries, and onboard FPV equipment) of 15lbs. and a speed of 70mph.

5. RECOMMENDATIONS & INFORMATION:

- a) AMA FPV novice pilots should consider using a cockpit view flight simulator to become accustomed to FPV flight.
- b) AMA FPV pilots should consider using a programmable autopilot (AMA Document #560) with a failsafe “return to launch” (RTL) feature that will maintain control of the aircraft in the event of signal loss.
- c) When purchasing FPV operational systems, always try to select quality equipment, verify its compatibility, install components for interference rejection, and determine that signal range is adequate for maximum VLOS range.

6. **PRIVACY PROTECTION SAFEGUARDS:** The use of imaging technology for aerial surveillance with radio control model aircraft having the capability of obtaining high-resolution photographs and/or video, or using any types of sensors, for the collection, retention, or dissemination of surveillance data information on individuals, homes, businesses, or property at locations where there is a reasonable expectation of privacy is strictly prohibited by the AMA unless written expressed permission is obtained from the individual property owners or managers.

AMA Document # 560

Radio Controlled Model Aircraft Operation Utilizing Failsafe, Stabilization and Autopilot Systems

GENERAL: All model aircraft flights utilizing stabilization and autopilot control systems must be conducted in accordance with AMA's current National Model Aircraft Safety Code and any additional rules specific to a flying site/location.

OPERATIONS – REQUIREMENTS – LIMITATIONS:

a) AMA members flying radio controlled model aircraft equipped with flight stabilization and autopilot systems must maintain VLOS with the aircraft at all times including programmed autopilot waypoint flight.

b) AMA Pilots must be able to instantaneously deactivate programmed flight of autopilot systems at any time during flight and resume manual control of the model aircraft.

c) AMA Pilots must perform an R/C Test Flight of a model aircraft before activating a newly installed autopilot or stabilization system and/or after any repairs or replacement of model aircraft essential flight systems.

d) Model aircraft exceeding 15lbs and/or 70mph may only use an autopilot for a programmed "return to launch" (RTL) flight and not for programmed waypoint flying of a predetermined course.

e) STABILIZATION & AUTOPILOT SYSTEMS MAY BE USED FOR/TO:

- Stabilization/automatically stabilize aircraft to level flight when control sticks are centered.
 - Recovery/activate TRX switch to recover an out of control aircraft to level flight.
 - Heading/activate TRX switch to hold a model aircraft's heading for precision flight path.
 - Altitude/activate TRX switch to maintain fixed aircraft altitude while allowing directional control.
 - Return GPS/activate TRX switch to return aircraft via GPS to launch point.
 - Return FSS/failsafe activated from radio signal loss to return aircraft via GPS to launch point.
 - Fixed circle/activate TRX switch to circle aircraft at point of activation at fixed altitude.
 - Waypoint/activate TRX switch to initiate an autopilot programmed flight path via waypoints.
 - Fencing/autopilot programmed to display site unique boundaries on video monitor/goggles.
- PAGE 2 OF 3 (Revision 01/14/2013)

4. RANGE – ALTITUDE – WEIGHT – SPEED:

a) One of the requirements in Federal Law (Public Law 112-95 Sec 336 (c) (2) February 14, 2012) for model aircraft to be excluded from FAA regulations is that model aircraft be flown within VLOS of the operator.

b) Model aircraft must be flown at or below 400 feet AGL when within 3 miles of an airport as stated in the AMA Safety Code.

c) Model aircraft utilizing an autopilot for waypoint flying are limited to a maximum weight (including fuel, batteries, and onboard autopilot systems) of 15lbs and a speed of 70mph.

RECOMMENDATIONS & INFORMATION:

a) If your radio system lacks failsafe capability, consider using programmable digital servos or auxiliary failsafe modules. In the event of a radio signal failure these components will activate desired safe servo settings or an autopilot for return to base/launch (RTL).

b) When using an autopilot system the "return to launch" (RTL) feature should be programmed to return the aircraft to a safe location and safely terminate the flight should manual control of the aircraft be lost. When using RTL, pay particular attention to the manufacturer's throttle recommendations to prevent stalling.

c) The use of stabilization systems is recommended when flying FPV to improve flight stability and video quality.

Cont'd next page

AMA Document # 560

Radio Controlled Model Aircraft Operation Utilizing Failsafe, Stabilization and Autopilot Systems

d) Pilots usually choose to incorporate stabilization and autopilot systems for model aircraft flying to enhance flight performance, correct bad tendencies of the model aircraft, maintain stability in windy weather, establish precision heading holds for takeoffs/landings, flight training for novice pilots, create a steady flight platform for cameras, and generally just to make an airplane easier and safer to fly.

e) When purchasing stabilization and autopilot systems, always try to select quality equipment from reputable dealers, ensure for compatibility with other onboard systems, and install components according to manufacturers' instructions.

6. PRIVACY PROTECTION SAFEGUARDS:

The use of imaging technology for aerial surveillance with radio control model aircraft having the capability of obtaining high-resolution photographs and/or video, or using any types of sensors, for the collection, retention, or dissemination of surveillance data or information on individuals, homes, businesses, or property at locations where there is a reasonable expectation of privacy is strictly prohibited by the AMA unless written expressed permission is obtained from the individual property owners or managers.

The definition of terms may be seen in the AMA documents at:

<http://www.modelaircraft.org/files/550.pdf>

<http://www.modelaircraft.org/files/560.pdf>



2015 MEMBERSHIP APPLICATION

Name
Street
Town State Zip
Telephone
E-mail

IMPORTANT: You must be an AMA member in order to receive your CRRC membership card. By submitting this membership application you agree to comply with the AMA safety code including documents 550 and 560

AMA No.

Birth Date (AMA req'd)

To receive membership card and field pass, bring this application to a club meeting, or mail to the membership secretary (address below).

Ray Harlan

Membership Secretary CRRC

15 Happy Hollow Road Wayland, MA 01778

508-358-4013

Email: membership@charlesriverrc.org

Please make check payable to: **Charles River RC**

You can pay by check or use PayPal.

(PayPal to membership@charlesriverrc.org)

SAVE \$5 - EARLY BIRD DUES RATES ARE LISTED

	MEMBERSHIP CATAGORY	On or before Mar 1, 2015	After Mar 1, 2015
☐	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 chose 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.