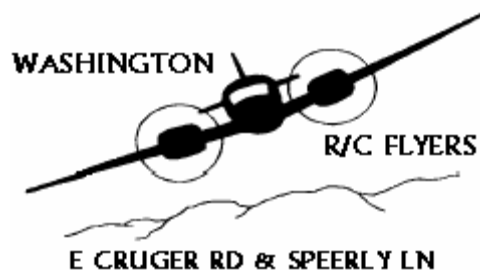


# Washington R/C Flyers Newsletter



December 2005

[www.washingtonrcflyers.com](http://www.washingtonrcflyers.com)

## Next Meeting



Our next meeting will be at the Navy Marine Club  
1310 E Sieberling

Ave in Peoria Heights at  
7:00 pm on Tuesday, December  
13, 2005

## Mow Schedule



No mowing until next spring. The seed that was sown in the fall has sprouted and it looks like the bare spots will be mostly filled in next spring.

## Safety Tip of the Month

Make any necessary repairs on your airplanes before you store them for the winter. At minimum disconnect the battery lead from the receiver. The dreaded 'Black Wire Disease' can make your battery lead brittle and engine vibration can break it when you are flying the airplane next season. See more details on this problem here: <http://www.rcbatteryclinic.com/>

## 2006 Officers

The November membership meeting had a very good attendance and the election was held for the 2006 Officers. All of the 2005 Officers were re-elected for the 2006 term.

## From the Presidents Hangar

December is a time for reflection or retrospect. You have accomplished a great deal during the year 2005 and I have kept a list of "things to do" and updated it as the year progressed. I would guess that it has been the busiest year in the Club's history. I would encourage you to reflect on each item in the following list and imagine the amount of man hours that went into each item.

Vern  
(See list on last page of Newsletter)

## Central School Delta Dart Program

Bryan Miller is pursuing a Delta Dart program for Central School. Originally, Arts and Crafts Day was being considered but it was decided that this would severely limit the exposure with all the other things going on during that

President	Vern Mall
Vice President	Wally Walwer
Sec./Treasurer	Jim Martin
Newsletter Editor	Steve Grob
Safety & Rules Committee	Bryan Miller
Maint. & Grounds Committee	John Bremenkamp
Events Committee	Jim Allen Paul Wann
Social & Education Committee	Kayton Heavrin
Site Committee	Paul Cobb

particular event. Our President would like the Club to get involved with a school. Bryan is going to look into organizing a field trip for the students to come to the field. If you would like to get involved, please contact Bryan.

## Winter Meeting Place

The December membership meeting will be the last meeting at the Navy Marine Club. In 2006, starting with the February 7 meeting, winter meetings will be held at Katy's in Washington. It's on old 24 just a few blocks east of the square.

## Banquet

The January 10 meeting will be our traditional banquet. It will be held at Bernardi's in Washington and we will order from the menu. Watch for more details at the December meeting and in the January Newsletter.

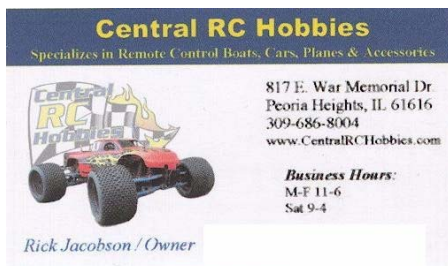
## Website Update

Check out the home page of the WRCF Website. There is a new side bar on the right hand side titled "RC Reviews and Articles". Watch this side bar for great product reviews, how-to's and tips and tricks.

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

## Roster Information

This is a reminder that information on the Club Roster is confidential. Please help us keep it that way. We want to protect our members and do everything we can to keep this information from being posted on the internet for obvious reasons. This is one of the reasons why the Roster is in the password protected Members Only section of the website. Please do not use the Club email distribution list for anything but Club business. If you have something to sell, please ask Bryan to post it on the "For Sale" page of the website. Under no circumstances should any member use the Club email distribution list to forward "chain emails".



**Central RC Hobbies**  
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817 E. War Memorial Dr.  
Peoria Heights, IL 61616  
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[www.CentralRCHobbies.com](http://www.CentralRCHobbies.com)

**Business Hours:**  
M-F 11-6  
Sat 9-4

Rick Jacobson / Owner

## Amazing Videos

These are awesome aerobatics videos of full size airplanes. The things these pilots make the airplanes do are unbelievable.

<http://www.eagletraining.net/video/airshow.wmv>

Take the time to download these and watch them. They are virus-

free. The in-cockpit footage will take your breath away.

[http://www.users.uswest.net/~choice220721678/Aerial\\_Movie.htm](http://www.users.uswest.net/~choice220721678/Aerial_Movie.htm)

## Quote

Industrialist Henry J. Kaiser said, "When your work speaks for itself, don't interrupt".



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JIM BYER 1901c 2nd. st. PEKIN. IL. 61554

## FROM HORN to HORN

Our radio's servos move the airplanes control surfaces in accordance with our desires. In almost every case, though, there is some linkage between the servo and the control surface; specifically, between the servo's output arm and the surfaces control horn. We usually call this linkage the control rod. There are several types of rods used for this purpose, each with its own good and not-so-good features. Exactly what type connection you use will depend on what the designer calls for, what you are comfortable installing, or maybe what you happen to have on hand at the time. We'll go through the general types and explain them.

**Dowel/Wood Rod:** Wooden dowels and balsa square rods are still common on smaller planes and gliders, where there is not much force involved, lightness is critical, and where little sideways forces are expected from aircraft

maneuvering. Wire rods are used at the ends, held in place by thread and glue.

**Nyrods:** These are sold at hobby shops in several grades of stiffness and work beautifully; they're easy to install, the end fittings just screw in, and they will handle curvatures nicely. If curves are made smoothly, there is very little friction. But nyrods do have disadvantages - they must be supported every few inches along their length, they expand and contract with temperature changes, and can have a tiny bit of slop as the nyrod squiggles around in its tube. Great for sport planes, not used much for competition or larger planes.

**Wire:** Unsupported wire is often used for short links, such as the links between aileron horns and their servo. Also used at the ends of other types of rods to provide for connections to servo and control horns.

**Supported Wire:** A special method, using music wire for its strength, and nyrods as the support and for bearings, is sometimes used where positive control is needed along with the nyrods ability to bend. The wire is encased in an outer nyrod shell, using short lengths of inner nyrod as support and bearing surface. This system will tolerate slight smooth bending, but does not have the expansion problems that a pure nyrod would. It does require the same periodic supports along its length that nyrods do.

(continued on next page)

# Horn to Horn

## Continued

**Housed Cable:** Cable, running in a plastic housing, is commonly used for throttle control or other uses where loads are light and there will be bends to go around. A throttle cable can go through some amazing contortions and still have little friction. The main disadvantage - cable can stand very little compressive load. If cable is used for nose gear steering, you may have good positive steering when the cable pulls, and mushy, unreliable turns when the cable is pushing. End fittings for clevises must be soldered on.

**Pull-Pull Cable:** Under the right circumstances and with the right hardware, pull-pull is a neat way to go. Most commonly used for rudder and sometimes for elevator control, pull cables are light, strong, and positive. Used heavily throughout the years on full size aircraft, from flying fleas to B-17s. For model use, cables require a ball bearing servo, and special fittings for adjustment. They also must run reasonably straight.

**Arrowshafts:** The modern version of wood dowels, these are used where strength and precision are paramount, and can be either aluminum or carbon fiber tubing. They require a straight, unobstructed run, and special end fittings must be made or bought to attach wire for clevis attachment. Arrowshaft control rods are often used for pattern and larger planes; they are strong, light, do not expand and contract much if at all, and are very precise in operation.

# Washington R/C Fliers Inc.

## Things to do

11-13-04

updated 5-10-05 & 7-08-05 & 8-06-05 & 8-25-05

updated 9-28-05 & 11-09-05

### Topic

### Date

### Comments

Zoning

**Approved**  
12-07-04

Tazwell County / Bob Heuermann & TJ Klise

Lease Agreement

**Approved**  
3-21-05

City of Washington / Bob Heuermann & Vern Mall  
Met with Bob Morris on 2-10-05  
Tenitiave approval date 3-21-05 council meeting

Club Name Change voted on by members  
Requires majority vote of members at meeting.

**Approved**  
12-14-04

John Bremerkamp December Club meeting  
**Delegated to Bryan Miller "Washington R/C Flyers Inc"**

Business plan approval  
Requires majority vote of members at meeting.

**Approved**  
12-14-04

Paul Cobb December Club meeting

Site Development Authorization 12-14-04  
Requires majority vote of members at meeting.

**Approved**  
12-14-04

Paul Cobb December Club meeting

Approval of access drive monies. 12-14-04  
Requires majority vote of members at meeting.

**Approved**

Paul Cobb and Wally Walwer  
Approved with Business Plan & Site Developement Authorizat

Club dinner

**Complete**  
1-15-05

Vern Mall at Wild Bills (Dinner)

Name Change on Corporate Papers, AMA,  
Checking,  
and all documents under the Secretary, Treasurer  
Control

**1-05**  
**Complete**  
**2-08-05**

Jim Martin (Jim and I have the Corp. form, cost \$5.00)

Secure bldg permits for sign, club house, vault toilet,  
Special use permit.

**Complete**  
**3-28-05**

Bob Heurmann and or Vern Mall

Name Change and Club Constitution update  
Requires 2/3 vote of total membership for  
approval

**Approved**  
**3-08-05**

Vern Mall & Club Officers  
See constitution (Proposal complete on my computer)

Name Change and Safety Rules update  
Requires majority vote of members at meeting.

**3-08-05**  
**Approved**  
**6-14-05**

Bryan Miller, Tom Clark & Vern Mall  
Delegated to Safety Committee Chairperson Bryan Miller

Add Pres& VP to check authorization  
Requires majority vote of membership at meeting

**Approved**  
**1-11-05**

Vern Mall & Jim Martin

Approval of Pres. & VP having \$100.00 of petty  
cash.  
Requires majority vote of membership at meeting  
Settlement of Club debt to Tom Imhoff

**Rejected**  
**1-11-05**  
**2-08-05**

Vern Mall (Replenished by receipts to Jim Martin)

Requires majority vote of membership at meeting

**Approved**

Vern Mall Cash Payment? Issue bonds in lieu of Payment?  
Paid up Membership dues?

Tom would not accept payment of any kind. Only friendship!

Approval of monies to prepare, fertilize & seed  
Requires majority vote of membership at meeting

**Approved**  
**12-14-04**

Approved with Business Plan & Site Developement Auth

Approval of monies to build club house & "vault toilet" Requires majority vote of membership at meeting	<b>Approved</b> 12-14-04	Approved with Business Plan & Site Development Authorization
Club Name Change on web address & web site	<b>Complete</b> 2-8-05	Bryan Miller & Steve Grob
Complete and mail form to AMA for Flying Site Assist.	<b>Complete</b>	1 original and 4 copies to Charlie Bauer mailed on 2-18-05 signed by Charlie Bauer & he forwarded to AMA on 2-28-05
Organize a static display at the Cherry Festival	<b>Cancelled</b>	John Bremenkamp
Organize a display on the square for "Moonlight Madness"	<b>Cancelled</b>	Vern Mall
Article in Washing Courier about Club	Summer 05 <b>Complete</b>	Vern Mall (Marie Grieser)
Request grant or discount from RP Lumber	<b>Complete</b> Spring 05	Vern Mall (letter written 2-28-05) 10 % Discount Granted 5-12-05
Till and plant grass	<b>Complete</b> March 05	John Bremenkamp
Build access drive	Spring 05 <b>Complete</b>	Wally Walwer
Build vault toilet	Spring 05 <b>Complete</b>	Vern Mall <b>8-5-05 Phoned for inspection Approved 8-19-05</b>
Build equipment shed	Spring 05 <b>Complete</b> 7-16-05	<b>Phoned for inspection 8-19-05 Approved 9-21-05</b>
Build club house	Summer 05	<b>Delayed till Spring of 06</b>
Paint and install signs	Spring 05 <b>Complete</b>	John Bremenkamp
Road Sign (Speerly Lane) provided by Dave Weaver	Summer 05 <b>Complete 7-22-05</b>	Vern Mall
Shelves & Organize Walter Mitty Hangar	August 05 <b>Partial Sept 05</b>	Vern Mall
Spray field for weed control	August 05 <b>Complete 7-25-05</b>	John Bremenkamp
Replant grass seed on field and perimeter	Sept 05 <b>Complete</b>	John Bremenkamp
Install Large sign at E Cruger & Speerly Lane	August 05 <b>Complete</b>	Sign reworked by Paul Cobb, John Bremenkamp & Vern Mall
Install US flag donated by Marv Prather	August 05 <b>Complete 7-25-05</b>	John Bremenkamp
Organize fall weiner roast & Joann Heuermann day	October 05 <b>Complete 10-15-05</b>	Wally Walwer & Vern Mall