



**WESTERN  
OREGON  
CONTROL  
LINE  
FLYERS**

# **THE WOLF CALL**

**January/February 2015**

ACADEMY OF MODEL AERONAUTICS  
CHARTER CLUB #3464

Ye Olde Editor: Mike Hazel

## **Upcoming Local Events:**

**Jan 31st WOLF annual meeting**

**Feb 7 Roseburg Fun Fly**

*The "WOLF CALL" is the newsletter for the Western Oregon Control Line Flyers. "WOLF" members fly at the Bill Riegel Model Airpark facility at the Salem Airport.*

*WOLF membership is not required to utilize the facility, but fliers should be A.M.A. members. If you are not a WOLF club member, please consider joining us to help support control line model aviation activity in our area!*

## **WOLF 2014 CLUB OFFICERS:**

President: Craig Bartlett

Vice-President: Dean Singleton

Secretary-Treasurer: Mike Hazel

Safety Officer: John Thompson

Newsletter: Mike Hazel

*For the latest Northwest Control Line news go to:*

*[flyinglines.org](http://flyinglines.org)*



## ***Miscellaneous Ramblings from Ye Olde Editor***

Greetings All! As usual our winter western Oregon weather has not been real conducive for lots of flying activity, but I know a couple of you have been at the field between showers lately.

Coming right up is our Annual General Meeting on January 31st. There is a flyer for this in this issue. Would sure like to see everybody make it. We will have a short business meeting, followed by some visiting, show and tell, and plenty of door prizes. Dave Denison has volunteered to give a presentation regarding setup and flying of electric planes. This should be fun and informative. Oh, yeah and also lunch! We will have about the same thing as last year, a spread of deli sandwiches and all the trimmings along with soda, coffee and tea. The nominal charge takes care of both the food and room charge. The Flight Deck took real good care of us last time.

## **Dues Are Due!**

Ok, it's that time of year again! Please pay up soon. Members who have paid up so far are: Will Naemura, Don McClave, Robin Mason, Mike Hazel, John Thompson & Fred Underwood. The rest of youse guys need to pony up! Do it at the meeting if you wish.

This issue includes our 2015 NW CL Calendar with all the known relevant modeling activities. If something has been missed, please contact the editor! Items will be added thru the year as they are confirmed.

## ***Thought of the month.....***

Why do you press harder on the buttons of a remote control when you know the batteries are dead?

*The following is from a PAMPA article, and posted on Stunt Hanger forum January 07, 2010, by Randy Smith*

## *The Golden Age of Stunt*

I've known we are living it; however, while at the VSC 18, this thought was solidified. The Golden Age of Stunt is Today. At no time in history did we have more planes, motors, props and all the stuff we use. It is amazing the amount of choice that is available to every stunt flyer.

From Laser cut Old Time and Classic kits to modern AAC motors to the light , super strong Carbon Fiber items that seem to grow out of the woodwork everyday. The planes were absolutely stunning and comparing motor runs to 30 years ago, well suffice to say "no comparison".

I have been asked many times lately to explain how to setup an engine for a good "stunt run". All too often I see motors running backwards from the ideal. Four stroking up hill and breaking into a 2 stroke downhill, going blubbery rich on insides, screaming lean on outsides, etc, etc.

I would like to talk about the basics for setting up your engine to get a better machine. Someone once said a good stunt ship is 40% design, 60% motor. The performance of some of the airplanes at VSC proved this is true.

In a nutshell:

Remember the needle is for setting the fuel mixture, not for setting the plane speed. The prop pitch is for setting the speed of the airplane. The prop diameter is for loading the engine properly and getting maximum thrust from the motor. Nitro is for controlling how much or how little break you have, this is to say how strong the motor will come on in the maneuvers. The other 2 items that work with this are compression and venturi size. This is not all there is to getting perfect engine runs.

Many things work in conjunction with

each other to achieving this goal, and most everything I am going to mention affects the others to some degree or another. Please do not think of the following as an oversimplification, it is not. It would take a volume of text to try to explain all the relationships that one item has to another, this is just to try to add a little clarity, and to give you a place to start.

The 8 basics to helping yourself to a better engine setup are:

1. Engine: Pay careful attention to matching the engine to the airframe. Don't overpower or under power your plane. Make sure your power plant is an acceptable weight for the ship it is in and matches well with it

2. Correct Fuel: Fuel is one of the most important things in tuning an engine. You must make sure that you have the correct oil type and percentage for the engine your using. For example Fox 35s, OS 35s, older McCoy's and such need high oil content fuels 24 to 29% are common percentages. Modern ABC and AAC engines will use much lower oil, 18 to 22 % percentages are the norm here. Nitro percentage is also key to getting the best from your power plant, There are so many ways to run stunt engines it is impossible to print anything but guide lines. I have written many times about fuel. You can get a copy of my Care and Feeding of a Stunt Engine from the PAMPA archives

Typical stunt engines will use 5% nitro in cold weather going to 10 or even 15% in hot months. You can get in trouble using, say 15% in January, this setup would need 25% or more to be the equivalent in August. So unless you really have this working it is best to setup your engine for lower nitro in cold months and higher nitro in hot months. This will help keep the run constant thru out the year. Also it will help control power in your motor.

3. Correct Props: Props are also critical for achieving good engine runs; a prop needs to "load" the motor correctly without over or under loading the motor. It also needs to be the correct size and pitch to pull the airplane. This is an over simplification, but

generally the diameter will be what you use to "load" the engine and the pitch will be what you pick to set the plane speed

Some of the things you will run into when over propping an engine are; hard to set the needle on the ground; the engine will unload a lot and go rich in the air; the engine will run hot, or not cycle very rapidly. When under propping generally you will notice the engine will also not cycle correctly. They at times will just 4 stroke thru everything, sometimes going into a 2 cycle at weird times.

A properly loaded engine will use a prop that if running a 4-2 break, will come onto a 2 stroke a 10 O'clock and back to a 4 at 2 O'clock. There are variations on this; You can have a strong motor just beep 2 stroke at the tops of maneuvers, but you shouldn't have one that 4 strokes uphill and switches to a 2 stroke on the downhill parts of maneuvers. You can setup the run with a very strong 4 cycle that doesn't break anywhere, but will still cycle and increase/decrease power in maneuvers somewhat, don't try to get so deep into a 4 cycle that the engine goes even richer when starting a maneuver, or slows ans speed in weird places, generally this setup should still be in a high power setting that is close to the 2 cycle beep without going into a 2cycle.

4. Needle setting: Don't try to use the needle to set the speed of the airplane; the needle is for setting the fuel-air ratio that goes into the engine. Typical settings are so the motor will be in a very fast 4 stroke when in level flight. If you set the needle too rich it will delay the engine switching and make the engine come on late in the maneuvers. If you set it too lean, you can sometimes run the risk of too much 2 stroke and going sagging lean in the tops of maneuvers, killing your drive and over heating the engine. Once you get this set, you will have a little leeway in tweeking the needle in or out for conditions.

5. Airspeed: Most all planes like to fly at the airspeed they work best in, even exact or what is supposed to be the exact same design , will a lot of times want to fly at

different lap times. Example: I have flown many SV-11s, at the same weight that fly at different speeds. Try to find the optimum speed for the plane your flying. This will depend a lot on the weight of the plane and also the power of the engines

6. Compression: Setting the correct compression for you motor isn't a simple thing and will vary with nitro and prop size. Try to set the compression so when your engine hits into a 2 stroke it doesn't come on too hard or too soft. This will work in conjunction with nitro and venturie size. Generally you will use higher compression for low nitro and lower the compression when using higher nitro fuels.

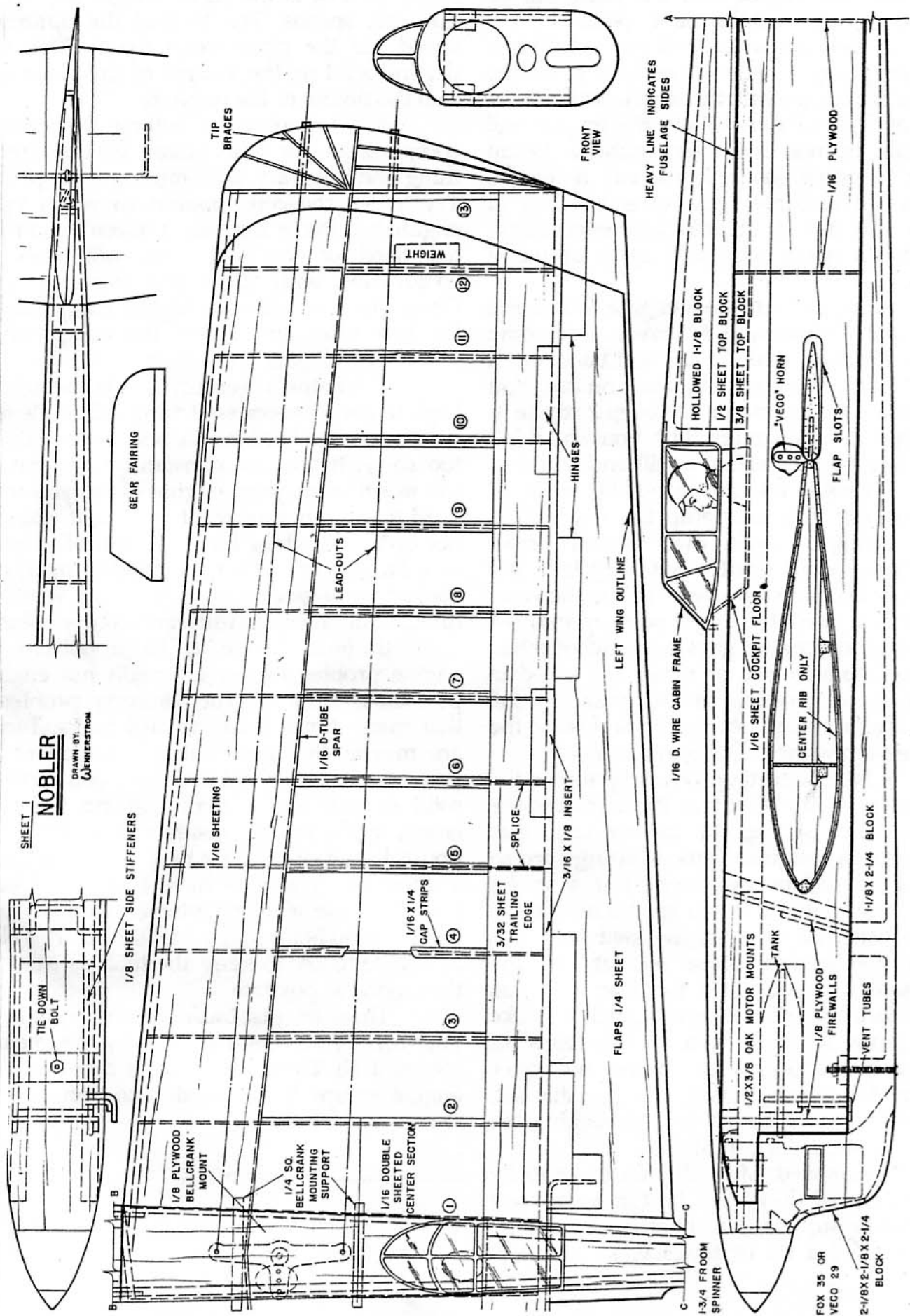
7. Venturi : Venturi size is one of the keys to get a proper switching 4-2, while not coming on too hard or too soft or too late or too early. If you are constantly accelerating too much when your engine cycles you may need to go down on venturi size. If you are not cycling much or have too soft of a break or a late break , you may need to open the venturi up a size or two. This will work in direct relationship to nitro and compression.

8. Fuel Tanks: A large portion of engine problems I see are really not engine problems. They are fuel delivery problems that many times relate to fuel tanks, Tanks are maybe the most critical component of your power train. Make sure you have a solid mount, and a tank with no leaks or cracks in the tubing, inside or out. When in doubt I suggest trying a new tank, if there is a difference, you may have bad tank. Don't forget to use a good filter and make sure there are no holes in the fuel tubing. It is also advisable to try to keep the tank as close to the engine as possible

These are just basic suggestion to help you tune your engine, and by no means covers it all. There are literally thousands of engine setups that would take volumes to cover.

..... Randy Smith

**"Nobler" from 1960 American Aircraft Modeler annual issue**



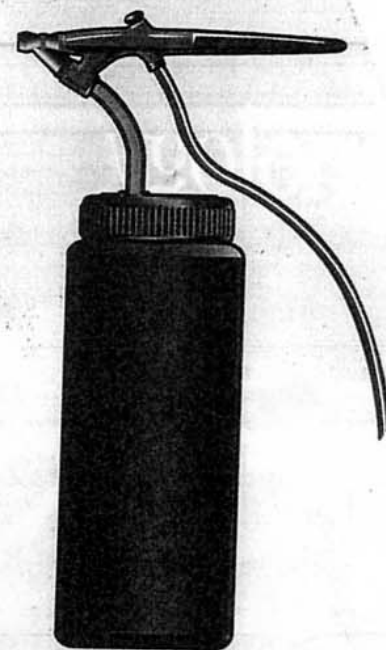
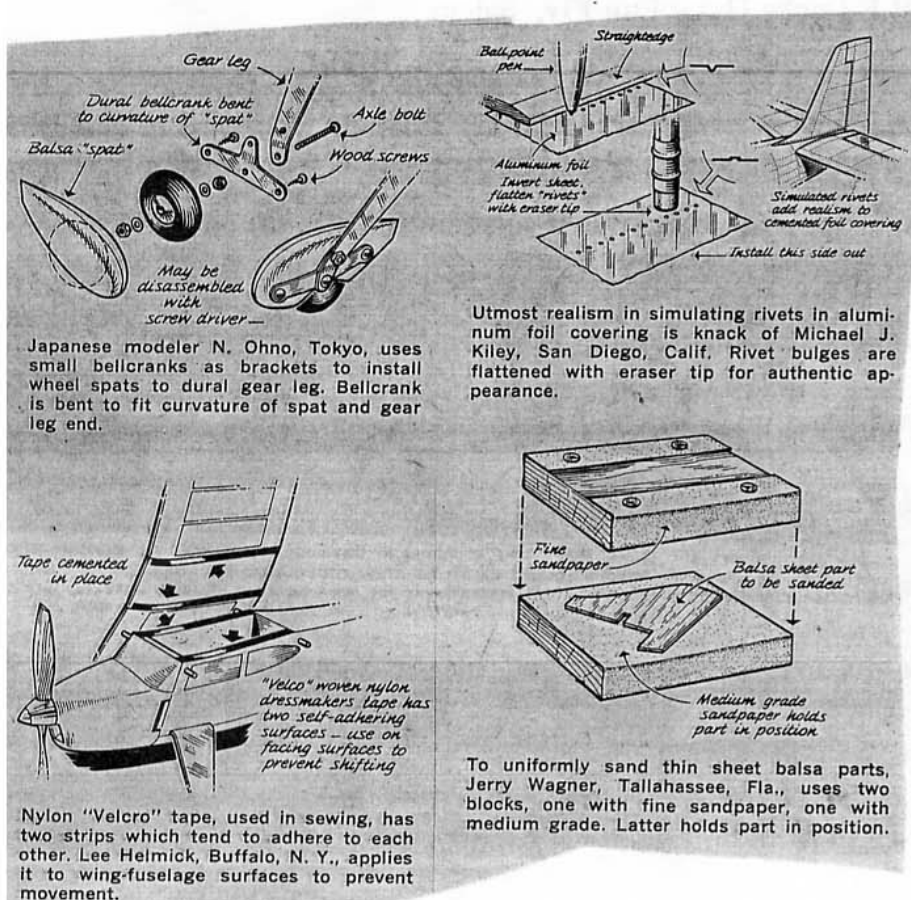
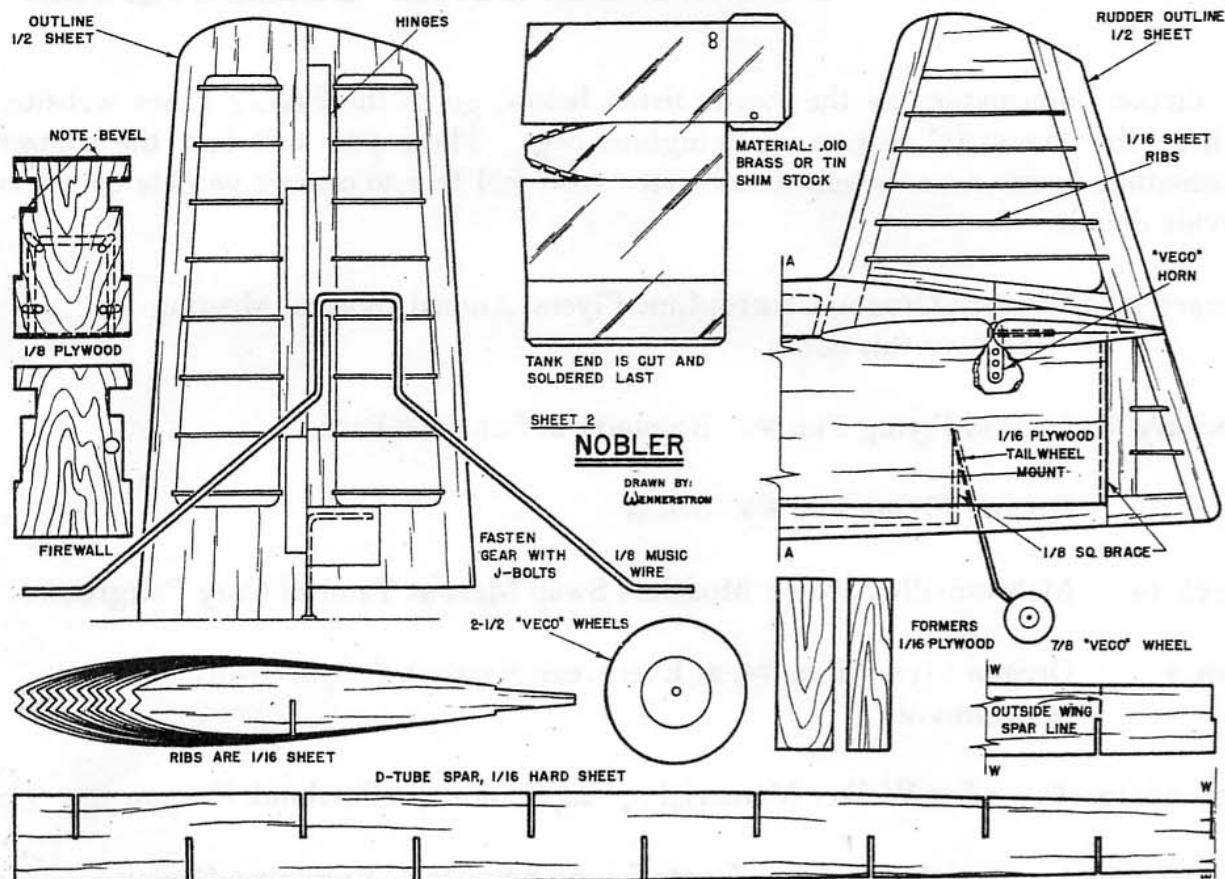
# **NORTHWEST CONTROL LINE CALENDAR**

For further information on the events listed below, go to the Flying Lines website, "Where the Action Is" section. ( [flyinglines.org](http://flyinglines.org)) There you will find the contact information, sponsor, and event details, etc. Also feel free to contact ye olde editor to provide details.

- January 31 Western Oregon Control Line Flyers Annual General Meeting  
(see flyer this issue)
- February 7 Oregon Flying Fun #2, Roseburg at Sunshine Park
- March 7 Oregon Flying Fun #3, Salem
- March 14 McMinnville Aircraft Modelers Swap Meet at Yamhill Cnty Fairgrounds
- April 4 Oregon Flying Fun #4, at Evergreen Aviation & Space Museum,  
McMinnville
- April 17-18-19 Jim Walker Memorial Spring Tune-Up, Portland, Oregon
- May 22-23-24 44th Northwest Control-Line Regionals, Roseburg, Oregon
- June 6 WOLF Lucky Hand Fun Fly, Salem.
- June 13 & 14 NW Skyraiders Stunt-a-Thon, Auburn, Washington
- June 27 & 28 tentative: Salem Speed & Combat contest
- July 13 - 18 A.M.A. Control Line Nationals, Muncie, Indiana
- August 7-8-9 Bladder Grabber Combat contest, Snohomish, Wash.(tentative)
- August 15 & 16 Dick Scobee Memorial Contest, Auburn, Washington
- August 29 Zoot Ranch Fun Fly (Mike's place)
- September 12 & 13 R.F. Stevenson Memorial Raider Roundup, Auburn, Washington
- September 19 & 20 WOLF Speed Contest, Salem, Oregon (details tentative)
- October 3 & 4 Fall Follies, Salem, Oregon
- October 24 WOLF Fall Finale Fun Fly, Salem (tentative)



And here's the rest of it!



## WATER SUPPLY

If you use water-based paint in your airbrush, keep one of those sport bottles of water (the ones with the flip-up straws) at your workbench. Modify the straw to fit inside the bottle inlet, and you'll never have to get up for water again.

Ben Broderick



**WESTERN  
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**The Annual General Meeting  
of the Western Oregon Control Line Flyers  
Saturday, January 31, 2015**

11:00 am at the Flight Deck Restaurant at the Salem Airport  
We will be in the downstairs meeting room  
(take the outside steps down to the left of the entrance bridge)

Cold Deli Sandwich lunch with all the trimmings,  
plus soda, ice tea, & coffee.

Cost is fifteen bucks, pay at the meeting  
(we need an approximate head count by Jan 25th,  
please contact Mike for this)

**AGENDA:**

2015 Club officers  
Treasurers report  
2015 Club activities  
Field status report  
(some new news here)  
Door prizes!  
Other presentations  
Other monkey business as appropriate

Note: Guests are welcome!

Questions: call Mike Hazel 503-871-1057



WOLF  
Po Box 505  
Lyons, Oregon 97358

MEMBERSHIP CATEGORIES:	ADULT (A.M.A. "OPEN")	\$25 / YEAR
	YOUTH	\$5 / YEAR
	FAMILY (2 ADULTS & UNLIMITED YOUTH)	\$40 / YEAR

A.M.A. NUMBER

INTERESTS: \_\_\_\_\_ SPORT FLYING \_\_\_\_\_ AEROBATICS \_\_\_\_\_ RACING \_\_\_\_\_ SPEED  
COMBAT \_\_\_\_\_ CARRIER \_\_\_\_\_ SCALE OTHER: \_\_\_\_\_

E-MAIL NUMBER(S):

*I affirm to follow all A.M.A. and WOLF club rules and regulations as they may be adopted from time to time, pursuant to club and A.M.A. by-laws.*

applicant signature and date