



**WESTERN
OREGON
CONTROL
LINE
FLYERS**

THE WOLF CALL

MARCH 2009

ACADEMY OF MODEL AERONAUTICS
CHARTER CLUB #3464

Ye Olde Editor: Mike Hazel

Upcoming Area Events:

WOLF Fun Fly, March 14

**McMinnville Aircraft Modelers Swap Meet
March 14**

T.E.A.M. Fun Fly, April 5

**Jim Walker Memorial Spring Tune-up
April 17, 18, 19**

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 2009 CLUB OFFICERS:

President:	Bruce Hunt	503-361-7491
Vice-Prez:	Craig Bartlett	scraigbart@yahoo.com
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Editor:	Mike Hazel	503-859-2905

For the latest and most complete information regarding control line flying activities in the Northwest, go to this website: flyinglines.org

Miscellaneous Ramblings from Ye Olde Editor

An almost Spring greetings to all of you! The weather is starting to turn a bit better, and events are going onto the schedule. Here is what's on tap in the upcoming few weeks:

Right here in good'ol Salem is the WOLF installment of the Oregon fun fly series. That happens on March 14th. There was a pretty good turnout down in Eugene last month for the February fun fly. Bruce Hunt and Mike Hazel made the trek to the Eugene airport site and put up several flights and scooped up their share of the raffle door prizes. Anyhoo, we will do much the same here. Again the details are just show up and fly anything, every flight gets a raffle ticket, and there will be prizes at the end of the flying session. How easy is that? The grass area appears to be clear of rental trucks and other stuff, so we should have two circles available at all times now.

Also happening on March 14th (bad timing!) is a swap meet by the M.A.M. RC club over in Mac City. If you want to swap instead of fly, the contact for details is: Larry Miller, phone 503-472-4987, or e-mail: lmiller@onlinemac.com

Around the corner of the month we go back to Mac! That is the April 5th installment of the Oregon Fun Fly series hosted by The Evergreen AeroModelers.

Flyers for the first two large contest events are included in this issue. Those would be the Jim Walker Memorial Spring Tune-up in Portland, and the NW Control-Line Regionals in Eugene. Check the flyers for more details.

NOTICE!!!!

"DOOZ -R- DOO!"

There are still several WOLF members that have not sent in their dues for 2009! It's time for us to renew our A.M.A. charter and we need you to re-up to stay on the roster. If your address label was marked by colored highlighter, then you still owe dues. Please take care of this ASAP, thanks!

The following piece was gleaned off of George Aldrich's website a few years ago. It's a good read.

Back in 1983 there was quite a controversy in Radio Control Modeler magazine about the tests that were necessary to measure the "lubricity" of various oils that might be useful in model engines. Castor oil was used as the benchmark, but it was obvious no one knew why this was so. They apparently got a lot of info on various industry tests of lubricants, but these were really designed for other purposes. This was my answer. I will remind you that I was a lubrications engineer and not a chemist, but I drew my chemical info from Bob Durr, the most experienced lubricant scientist in the labs of Conoco. Bob worked with my group on many product development projects and I can tell you that he is one smart hombre! Small changes were made in the test, but surprisingly very little has really changed since this was originally written. Here goes with the answer:

"I thought I would answer your plea for more information on castor oil and its "film strength", which can be a very misleading term. I have never really seen a satisfactory way to measure the film strength of an oil like castor oil. We routinely use tests like the Falex test, the Timken test or the Shell 4-Ball test, but these are primarily designed to measure the effect of chemical extreme pressure agents such as are used in gear oils. These "EP" agents have no function in an IC engine, particularly the two-stroke model engine types.

You really have to go back to the basics of lubrication to get a better handle on what happens in a model engine. For any fluid to act as a lubricant, it must first be "polar" enough to wet the moving surfaces. Next, it must have a high resistance to surface boiling and vaporizations at the temperatures encountered. Ideally the fluid should have "oiliness", which is difficult to measure but generally requires a rather large molecular structure. Even water can be a good lubricant under the right conditions.

Castor oil meets these rather simple requirements in an engine, with only one really severe drawback in that it is thermally unstable. This unusual instability is the thing that lets castor oil lubricate at temperatures well beyond those at which most synthetics will work. Castor oil is roughly 87% triglyceride ricinoleic acid, which is unique because there is a double bond in the 9th position and a hydroxyl in the 11th position. As the temperature goes up, it loses one molecule of water and becomes a "drying" oil. Castor oil has excellent storage stability at room temperatures, but it polymerizes rapidly as the temperature goes up. As it polymerizes, it forms ever-heavier "oils" that are rich in esters. These esters do not even begin to decompose until the temperature hits about 650 degrees F. Castor oil forms huge molecular structures at these elevated temperatures - in other words, as the temperature goes up, the castor oil exposed to these temperatures reponds by becoming an even better lubricant!

Unfortunately, the end byproduct of this process is what we refer to as "varnish". So, you can't have everything, but you can come close by running a mixture of castor oil with polyalkylene glycol like Union Carbide's UCON, or their MA 731. This mixture has some synergistic properties, or better properties than either product had alone. As an interesting sidelight, castor oil can be stabilized to a degree by the addition of Vitamin E (Tocopherol) in small quantities, but if you make it too stable it would no longer offer the unusual high temperature protection that it did before.

Castor oil is not normally soluble in ordinary petroleum oils, but if you polymerize it for several hours at 300 degrees C., the polymerized oil becomes soluble. Hydrogenation achieves somewhat the same effect.

Castor oil has other unique properties. It is highly polar and has a great affinity for metal surfaces. It has a flash point of only 445 degrees F., but its fire point is about 840 degrees F.! This is very unusually behavior if you consider that polyalkylene glycols flash at about 350 - 400 degrees F. and have a fire point of only about 550 degrees F., or slightly higher. Nearly all of the common synthetics that we use burn in the combustion chamber if you get off too lean. Castor oil does not, because it busily forming more and more complex polymers as the temperature goes up. Most synthetics boil on the cylinder walls at temperatures slightly above their flash point. The same activity can take place in the wrist pin area, depending on engine design.

Synthetics also have another interesting feature - they would like to return to the materials from which they were made, usually things like ethylene oxide, complex alcohols, or other less suitable lubricants. This happens very rapidly when a critical temperature is reached. We call this phenomena "unzipping" for obvious reasons. So you have a choice. Run the engine too lean and it gets too hot. The synthetic burns or simply vaporizes, but castor oil decomposes into a soft varnish and a series of ester groups that still have powerful lubricity. Good reason for a mix of the two lubricants!

In spite of all this, the synthetics are still excellent lubricants if you know their limitations and work within those limits. Used properly, engine life will be good with either product. Cooked on a lean run, castor oil will win every time. A mix of the two can give the best of both worlds. Most glo engines can get by with only a little castor oil in the oil mix, but diesels, with their higher cooling loads and heavier wrist pin pressures, thrive on more castor oil in the mix.

Like most things in this old life, lubricants are always a compromise of good and bad properties. We can and do get away with murder in our glo engines because they are "alcohol cooled" to a large degree. Diesels, though, can really stress the synthetics we use today and do better with a generous amount of castor oil in the lubricant mix. Synthetics yield a clean engine, while castor oil yields a dirty engine, but at least now you know why". --- Bert Striegler ---

The 38th annual...



Control-Line Northwest Regionals

Eugene, Oregon

May 22-23-24, 2009

Championship Control-Line flying competition

With 35 events, the Northwest Regionals provides the largest selection of CL competition events and awards available in a single contest in North America.

You can compete in these great championship events:

- AEROBATICS — 4 PAMPA classes, Old-Time Stunt, Classic stunt and two classes of Profile Stunt!
- COMBAT — 1/2-A (high-performance), 80-mph and Vintage Diesel!
- NAVY CARRIER — Profile, Class I, Class II, .15 and Nostalgia (Profile and Class I-II)!
- RACING — Mouse I, NW Sport, NW Super Sport, NW Clown. Trophies for best junior-senior entry in NWSR, Mouse I and Clown!
- SCALE — AMA Precision, AMA Sport Scale and Profile Scale!
- SPEED — 1/2-A, 1/2-A Proto, A, B, D, FAI, Jet, Formula 40, .21 sport, .21 Proto, NW Sport Jet, F2D Proto!

Enjoy the Regionals at Eugene Airport!

Smooth paved surface ... Ample parking ... Camping and RV space ... Rest rooms
Food concessions ... Restaurant at airport terminal ... Motels a short drive away
TROPHIES ... MERCHANDISE PRIZES ... EVENT CHAMPIONSHIP TROPHIES

Follow the signs to Eugene Airport: Take the Belt Line Road West exit from Interstate 5 (Exit 195). Take Belt Line to the Highway 99 North exit. Go north on Highway 99, turn left on Airport Road. Stay on Airport Road all the way to the flying site, on the right side of the road across from the airport terminal.

For your convenience: Advance registration!

Sign up early and purchase your T-shirts and sweatshirts in advance.

Discount for all early entry and shirt sales! Write for entry package:
John Thompson, 2456 Quince St., Eugene, OR 97404; JohnT4051@aol.com

Regionals host hotel: Quality Inn, near the Interstate 5/Belt Line Road interchange. Call (541) 726-9266 and mention the Northwest Control Line Regionals to get a special room rate.

FOR INFORMATION, CONTACT:

Contest Director John Thompson, 2456 Quince St., Eugene, OR 97404
E-mail johnt4051@aol.com, phone (541) 689-5553 (no calls before 10 a.m.)

The Northwest Regionals are brought to you in part by
Eugene Toy & Hobby, (541) 344-2117, www.eugenetoyandhobby.com
For more information and late updates, visit flyinglines.org

The Northwest Control-Line Regionals

Eugene Airport, Eugene, Oregon

FRIDAY

Speed (all classes) 10:30-6
Carrier (all classes) Noon-5
Old-Time Stunt Noon

SATURDAY

80mph combat 8:30 a.m.
Mouse Race I 9 a.m.
Classic Stunt
Appearance judging 9 a.m.
Profile Stunt 9 a.m.
Carrier (all classes) 9-5
Speed (all classes) 9-6
Classic Stunt flying 10 a.m.
NW Sport Race 10 a.m.
Beg.-Int. Aerobatics 1 p.m.
NW Super Sport Race Noon
Flying Clown Race 2 p.m.
HP 1/2-A Combat * 3 p.m.
Adv.-Exp. Aerobatics
Appearance Judging 3 p.m.
Scale static judging 4 p.m.

SUNDAY

Advanced-Expert
Precision Aerobatics 8:30 a.m.
Carrier (all classes) 9-4
1/2-A Combat finals
(if necessary) 8:30 a.m.
Vintage Diesel Combat 9 a.m.
(or after 1/2-A finals)
Scale flying 9 a.m.
Contest ends 4:30 p.m.
Awards ceremony 5 p.m.

* 1/2-A Combat may be finished on Sunday if necessary

SCHEDULE NOTES

- **Absolutely no engine running before 8 a.m. any day.**
- Schedule may be adjusted due to number of entries, weather conditions, etc.
- Site will be open for camping and limited flying starting at noon Thursday, May 21. No flying or camping on Wednesday.
- Registration Friday 10 a.m.-2 p.m., Saturday 8 a.m.-noon, Sunday 8 a.m.-10 a.m.

RULES INFORMATION

- AMA events are per **2009-2010 rule book**, except as noted below. **Know the rules!**
- Northwest Rules will be used for these events: *NW Sport Race, NW Super Sport Race, Flying Clown Race, .15 Carrier, Nostalgia Carrier, 80-mph combat, Vintage Diesel Combat, Profile Stunt, Northwest Sport Jet Speed and F2D Proto Speed.*
- **Rules can be downloaded at flyinglines.org or write John Thompson, 2456 Quince St., Eugene, OR 97405, JohnT4051@aol.com. Not knowing the rules is no excuse — get a copy now!**
- **PRECISION AEROBATICS:** ARF planes allowed, zero appearance points. ARC appearance up to 10 points maximum
- **COMBAT** — 80mph and 1/2-A double-elimination; Diesel five rounds if time permits. *1/2-A combat will be flown on 42-foot lines, starters OK.* **FLYAWAY SHUTOFFS required in 80mph: Failure of a shutoff results in disqualification from the event.** Be sure that yours works!
- **SCALE** — **Make sure your airplane has been flight tested** and is ready for competition, per AMA rules.
- Precision Aerobatics Model Pilots Association rules will be used for *Old-Time Stunt* and *Classic Stunt*.
- **Safety thongs required in all events.**
- Contestants may at some times be required to assist in timing or judging.

OTHER INFORMATION

- AMA or MAAC membership required for all participants. AMA membership available at registration.
- Only participants and officials allowed in flying areas. All others must stay outside roped-off or restricted areas.
- **Absolutely no alcoholic beverages on flying field during meet hours.**
- Awards — Trophies through second or third place and merchandise through third place in each event. Event champion trophies for each category!
- **Product vendors contact Contest Director for permission and site info.**
- Primitive camping allowed on site (no hookups). Commercial camping/RV locations nearby.
- Attendees must stay inside the fenced flying site and public areas. Entry to the adjacent airport land is restricted.

FOR MORE INFORMATION, CONTACT:

Contest Director John Thompson, 2456 Quince St., Eugene, OR 97404
e-mail john4051@aol.com, phone (541) 689-5553 (after 10 a.m.) or see flyinglines.org

The Northwest Control-Line Regionals are sponsored and produced by the Northwest Regionals Management Association in association with flyinglines.org and Northwest control-line clubs.

The Northwest Fireballs
Present
The
Jim Walker Memorial
Spring Tune Up!
At East Delta Park In Portland Oregon
April 17th, 18th, 19th, 2009

Friday:

Record Ratio Speed: All speed classes to begin at 9:00am and be flown all day, or until everyone is all tired out. Also, on Friday, the Grassy areas adjacent to the field will be open for practice flying of all types. There will no practice flying, other than speed, during speed on the paved circle.

Saturday:

1/2A Combat: High performance 1/2A combat to begin at 10:00am, flow double elimination minimum more rounds if time permits. AMA "Kill" rules in effect.

N.W. Profile Stunt: To be flown over the paved circle, beginning at 9:00am, and ending at Noon.

PAMPA Classic Stunt: To be flown over the paved circle beginning at 1:00pm, and ending whenever it gets done.

Old Time Stunt: Flown over the grass to the East of the paved circle. Starting at 10:00am and ending whenever it gets done.

Sunday:

Northwest 80mph Combat: To begin at 10am and be flown double elimination minimum w/"Kill" Rules, more rounds as time permits.

Record Ratio Carrier: All AMA and Northwest Classes to begin at 9:00am and ending at 3:00pm.

Skill Class Precision Aerobatics: To begin at 9:00am and be flown all day or until everyone has competed.

General Information:

Contest Director: Mark Hansen (503)995-1158, FastCombat@comcast.net, call if you have any questions. As this is an AMA sanctioned event, AMA membership is required of all entrants, and is available at the time of the event.

Entry Fee is \$20 for the first event and \$5 for each additional event with a maximum of \$30.



**WESTERN
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WOLF
Po Box 126
Mehama, Oregon 97384

WOLF MEMBERSHIP APPLICATION - 2009 (NEW OR RENEWAL)

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

<u>NAME(S)</u>	<u>D.O.B.</u>	<u>A.M.A. NUMBER</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

INTERESTS: SPORT FLYING AEROBATICS RACING SPEED
 COMBAT CARRIER SCALE OTHER: _____

MAILING ADDRESS: _____

PHONE NUMBER(S): _____

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