

FLYING LINES

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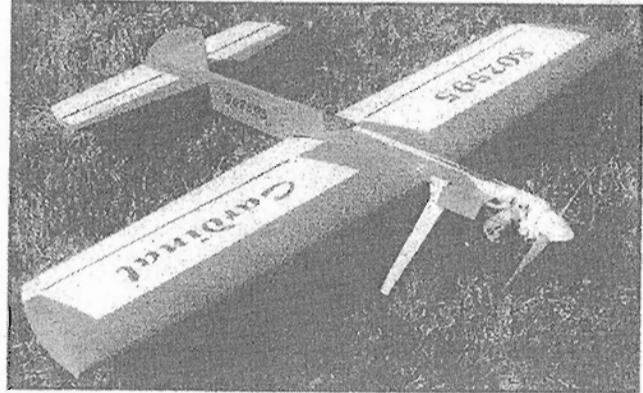
Greetings, all! An attempt was made to get this issue out before the end of the year, so hopefully it made it into your hands will the calendar still says 2005. I know you guys in Canada will be reading this in 2006, sorry 'bout that! Anyway, a happy new year to everybody!

In the last issue there was a plea for more input on two proposals relating to NW racing events. Two things have happened... number one there has been very little input, and number two, the proposals have been withdrawn. So, the proposals are now moot as there will be no vote. Thanks to those who did take the time and effort to respond.

Speaking of responding, we have had a good amount of workshop tips and miscellaneous articles submitted. Don't have room for everything in this small issue, so look for more next time. Meanwhile, keep those articles coming!

This issue has the first draft of the year 2006 Northwest CL activity schedule. As always, clubs and contest directors are encouraged to get their information to FL headquarters soon as possible for inclusion. If details are tentative, we will update as things get firmed up. We can also distribute your event flyers, so long as adequate lead time is observed. Contact the editor for details there.

Speaking of the CL schedule, it is now confirmed that the NW Regionals will return to Eugene. The contest has now come full circle! All of the sites we have used have made for some great contests, with each one of these locations having their up and downsides. I am looking forward to this one! See articles in this issue for more information.



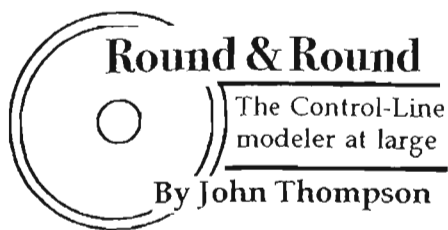
Greg Hart's nice profile Cardinal. The profile Cardinal is very popular for P.40 Stunt, in homebuilt, ARF and ARC configurations.

Hey, don't get disconnected! If your name follows, then this is the last issue of your subscription. It's time to re-up!

Rex Abbott, Ken Bugar, G K Campbell, Bruce Hunt, Ronald Ingham, Kenny Johansen, Bob Parker, Scott Riese, Homer Smith, Thomas Wilk, Doug Wood.

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Modeling thought for the month:

"A gem is not polished without rubbing, nor a man perfected without trials."

— Chinese proverb

Regionals coming home!

I can still remember my first trip to the Northwest Regional Control-Line Championships.

The trip from Astoria, Ore., that May of 1977 wasn't just a contest trip, it was a pilgrimage. We weren't just going to a contest, we were going to *The Regionals*.

I remember as we turned off Interstate 5 onto Eugene's Belt Line Road, following the signs to the Eugene Airport. My heart rate increased a bit as the anticipation sent adrenaline through my veins. Just a little ways to go to the airport, *The Regionals*.

Pulling up to the site, seeing all the circles staked out in colorful flags, the flying going on on five circles at once, dozens of airplanes of all types scattered around on the ground.

I can still remember the planes! Phil Granderson's colorful Ringmaster sport racer. Marty Phillips' V-tail stunter. Combat planes covered in flowered shelf paper. Orin Humphries' twin-engine scale bomber. There was speed flier Sam Snyder's Rolls Royce to add an element of class to the meet. Oba St. Clair's incredibly sophisticated control-line simulator!

My first actual competition was piloting my green Ringmaster in Northwest Sport Race. Fellow CLAMS member, then a teenager, Jim Cameron, won NWSR in the senior division.

It was the kickoff of a fascinating "career" in model aviation competition that for me has led to racing, combat, stunt, even a little speed and carrier over the years.

All because of that fabulous experience I had on the first pilgrimage to Eugene.

There was a Regionals before Eugene, held in Seattle at Sand Point Naval Air Station, now Magnuson Park. When I was a teenager growing up in Port Angeles, Wash., some of my buddies went to that contest and came back with lots of

tall tales and some wild new technology (a Voodoo with a Fox .36X was pretty impressive the first time a guy brought one home!).

But like many Northwest fliers, my first Regionals memories are of the Eugene regionals, which started in 1971, a couple of years after the Sand Point show ended.

The original Eugene contest venue was a dedicated CL flying site provided by the city of Eugene at the municipal airport across from the passenger terminal. When I moved to Eugene in the fall of 1977, it became my home flying site.

The Regionals was held there through 1987, when the flying site was swallowed up in a terminal remodeling project. You can still see where it is by finding the small beacon tower that stood at its northeast corner, but the site is now covered with rental cars.

The airport revamping included construction of an overflow parking lot across the main road from the terminal complex. CL "insiders" in the design staff saw to it that the overflow parking lot also was designed to accommodate model flying. It's perfectly laid out for seven CL circles, four on grass and three on asphalt, with space left over for parking and other support facilities.

The Regionals moved there in 1988, and continued on that site until 1995. That's when the airport management got queasy about reserving the parking lot for the contest — they wanted to keep it clear for parking if needed on the holiday weekend. The contest moved to Roseburg, and later to Albany. The era of the Eugene Regionals, it seemed, had ended.

Years have gone by, the airport has not needed the lot for parking on that particular weekend — and parking near the terminal has been expanded. The airport administration's outlook on the reservation of the parking lot as mellowed — and the go-ahead has been given for return of the Regionals to Eugene.

My local club, the Eugene Prop Spinners, have flown on this perfect model flying field, almost every weekend. I can't be there without envisioning the Regionals. What's now just a vast expanse of asphalt and grass is, in mind's eye, an ideal layout of circles for stunt, racing, combat, carrier and speed. It's all there waiting for the contest. Finally, it's going to happen.

The Northwest's contest showcase, you might say, is coming home!

John Thompson can be reached in care of Flying Lines or at JohnT4051@aol.com.

Where the action is!

Coming events in Northwest Control-Line model aviation

FEBRUARY 3 - 5

NORTHWEST MODEL EXPO, Site: fairgrounds in Puyallup, Wash. www.nwhobbyexpo.com

MAY 13

NW SKYRAIDERS FUN FLY, Site: River View Park, Kent, Washington. Sponsor: Northwest Skyraiders. Contact: Chris Gomez: gomez5801@comcast.net

MAY 26 - 28

NORTHWEST CONTROL LINE REGIONALS
Site: Eugene Airport, Eugene, Oregon. Sponsor: Northwest Regionals Management Association. Contact: John Thompson JohnT4051@aol.com

JUNE 17 & 18

JIM PARSONS MEMORIAL STUNTATHON
Site: Pierce County Airport (Thun Field), Puyallup, Washington. Sponsor: NW Skyraiders
Contact: Steve Helmick: sbasser@yahoo.com

JULY 8

WOLF LUCKY HAND FUN FLY Site: Bill Riegel Model Airpark, Salem, Oregon. Contact: Mike Hazel (tentative)

JULY 15

NW SKYRAIDERS SUMMER SWAP MEET
Contact: Mike Potter skyshark58@comcast.net

JULY 29 & 30

WESTERN CANADA STUNT CHAMPIONSHIPS. Site: Rice Mill Road, Richmond, BC
Sponsor: Vancouver Gas Model Club. Contact: Chris Cox

AUGUST ???

NORTHWEST SUMMER CL SPEED MEET
Site: Bill Riegel Model Airpark, Salem, Oregon
Contact: Mike Hazel (tentative)

AUGUST 19

NW SKYRAIDERS FUN FLY. Site: River View Park, Kent, Washington. Sponsor: Northwest Skyraiders. Contact: Chris Gomez: gomez5801@comcast.net

AUGUST 20

TAILHOOK. Site: Clover Park Technical College, Lakewood, Washington. Details tentative. Contact: Mike Potter skyshark58@comcast.net

SEPTEMBER 2 & 3

THE STEVENSON MEMORIAL CONTEST.
Site: Sand Point NAS, Seattle, Washington (formerly known as the Raider Roundup) Sponsor: Northwest Skyraiders. Contact: Steve Helmick sbasser@yahoo.com

This is the first draft of the 2006 season. The NW Skyraiders have already announced their events for the year. Thanks for the early notice, guys!

As always, Flying Lines will list your group's events. Even if dates and details are tentative, please forward these ASAP for inclusion in the next issue. Updates will be made as needed.

Shop Tip:

Set up a small box on your bench to throw parts (hardware) into during the course of a flying season. In my case, this box will include bolts, washers, nuts, filters, elevator pieces, shutoffs, modeling pins, short pieces of rod etc.

At the end of the season, inspect and put back with similar materials. You will be amazed at how well this will keep your bench from junking up.

..... Buzz Wilson

Regionals returns to Eugene

The Northwest Control-Line Regionals will be held at the Eugene Airport in Eugene, Ore., on Memorial Day weekend of 2006, May 26-27-28.

The Regionals is returning to its longtime home field after 10 years on the road.

Old-timers will remember a Northwest Regionals held at Sand Point in Seattle in the 1960s, but the modern regionals started in Eugene in 1971 and continued there until 1995.

Over the years, there were two different flying sites at the Eugene Airport. In 2006, the contest returns to the site where the Regionals was held from 1988 through 1995.

The site, which has remained the everyday flying site of the local club, the Eugene Prop Spinners, is one of the finest control-line venues in the world.

Its "real" use is as an overflow parking lot for the airport terminal. However, the parking lot was designed with control-line model aviation in mind, because when it was built it was intended to replace a designated flying site elsewhere at the airport that was plowed up during an airport upgrade project.

As a result, the parking lot accommodates three asphalt circles and four grass circles, plus plenty of area for parking and support facilities such as registration trailer, hobby shop truck, food concession, etc.

Circles are permanently marked on smooth asphalt, with lines for racing, stunt and speed. There's a permanent pylon base in the speed circle. The grass circles have concrete center pads. For the first time in 10 years, we will fly the Regionals on the site with *no aircraft tie-downs to duct-tape over!*

One of the great advantages of the Eugene site is that all seven circles are adjacent to one another. No quarter-mile walk (or drive) between the different circles as at the Albany site. You can stand in one place and see everything that is going on at once.

The flying field is on flat land away from buildings or trees, so there is a minimum of turbulence on the site. Winds tend to be light in the morning and pick up somewhat in the afternoons, and they're often slightly shift in direction.

If there is a drawback to the site, it is that there are no permanent onsite facilities. Rest

rooms will be portables brought in for the contest. Registration will be a trailer, the swap meet will be in a tent, and concessions will be some sort of portable arrangement yet to be announced.

However, there is plenty of space for tent and motor home camping. There is a full-service restaurant at the airport terminal just across the road from the flying site. Motels are about a 15-minute drive from the contest venue. Downtown Eugene, with many opportunities for fine dining and entertainment, is about 20 minutes from the field. Two major shopping malls are a short drive from the field as well.

The contest itself will be almost the same as in past years. There will be some juggling of the schedule.

The stunt event list will be the same as in the past, with the addition of an expert class in P-40. Stunt will include P-40 (sportsman and expert), Old-Time, Classic and four PAMPA classes.

Combat will include high-performance 1/2-A, Vintage Diesel and 80 mph. There will be no fast combat in 2006 but it may return in the future.

Racing will include all the traditional Regionals events with the exception of Northwest Goodyear, which has been dropped due to lack of participation. The racing events will be Mouse I, Mouse II, AMA Goodyear, .15 Rat, Quickie Rat, Northwest Flying Clown, Northwest Sport and Northwest Super Sport.

Carrier will be the same as in the past, with Profile, Class I, Class II, .15 and Nostalgia (Profile and Class I-II).

Speed classes will be all the usual: 1/2-A, 1/2-A Proto, A, B, D, FAI, Jet, Formula 40, .21 Sport, .21 Proto and NW Sport Jet.

Scale will include AMA Precision, AMA Sport and Profile.

The flyer, to be distributed in early 2006, will include all the details of the schedule, directions to the site, etc.

Questions about the 2006 Regionals can be directed to John Thompson at john4051@aol.com.

Or, you can join in the discussion of Regionals planning via the Regionals planning Web site, <http://groups.yahoo.com/group/NWCLregionals>.

The Northwest Regionals Management Association invites you to attend the 35th annual Northwest Regionals. It will be a dandy!

THE FLYING FLEA MARKET

Free ads for the Flying Lines Subscriber

CONTROL-LINE SUPPLIES: Remember — We ship UPS daily. Eugene Toy & Hobby, (541) 344-2117, www.eugenetoyandhobby.com.

RACING MADE EASY: Get the Nitroholics introduction to racing packet, and you'll be on your way to success in NW racing competition. Packet includes general racing tips, articles on how to set up a NW Sport and Super Sport racer, and NW racing rules. Send \$2 to *Flying Lines*, and get the packet via mail.

VIDEOS FOR SALE: Two hour videos of the Vintage Stunt Championship 14, 15, and 16. The VSC 16 video is available on DVD, and all three are available in VHS. Also the 2003 Northwest Regionals Precision Aerobatics competition are available for \$15 plus \$3.85 shipping, each. Videos are 2-hour summaries of the highlight flights, with stills and captions. Available from Bruce Hunt. Call (503) 361-7491 or e-mail at bhunt@swbell.net

FASCAL: Back by popular demand. The ultimate combat plane covering, good over open frame or foam. Available in full 27"x150' rolls. Contact me for price and availability info. John Thompson, JohnT4051@aol.com.

FOR SALE: Old magazine plans on CD's. Thomas Wilk, 301 W. Redwing Street, Duluth, MN 55803 e-mail: Tawilk36@cpinternet.com

FOR SALE: O.K. 60 ignition with Champion plug and coil. \$100.00 Rex Abbott 360-681-5067, e-mail: rex1945@juno.com

The USM (Universal Stunt Machine) So ya wanna fly CL Stunt, huh? For a painless beginning, using equipment which can take you from first flights to Expert PA, contact me at dlr111845@yahoo.com. Ask for Universal Stunt Machine package. It's free, but only available by E-mail.

FOR SALE: The Northwest Skyraiders have the following engines for sale, add \$6.50 for shipping.

Mike Potter, skyshark58@comcast.net

(3) Merco 49s (used)	\$40.00ea
Testors 29 CL NIB	\$40.00
Testors 35 RC NIB	\$40.00
Wasp .049 (H) VG	\$50.00
Atwood .049 VG	\$30.00
McCoy 35 T-bolt CL VG	\$35.00
Fox .09 CL VG	\$40.00
Enya 35 CL Used Good	\$30.00
OS 60 RC Used Good	\$40.00
OS 30 RC Crashed, bad carb, looks OK	\$15.00

WANTED : Cylinder head for an old ST 51 or 56 Plain Bearing engine. This Head will have the fore and aft mounting holes right on the Shaft centerline - not straddling the Centerline like all of the later Tigres. No broken Fins please. I'd even take a whole , beat-up engine - as long as it had a decent Head.

Please contact Nils Norling at 541-546-9132 or email hogrider@crestviewcable.com

Again, my new contact information:

Mike Hazel

Po Box 126, Mehama, Oregon 97384

phone: 503-859-2905

e-mail: zzclspeed@aol.com

the REAL DIRT

by Dan Rutherford

Setup Information for ARF and ARC Models

Not meant to be a how-to article, but how's about we institute a new feature for [Flying Lines](#), one intended to spread the word on known, proven setups for the ARF and ARC models out there?

There is no better way to promote CL Stunt than providing to those just making a beginning a proven setup, thus maximizing practice/contest efforts, reducing fiddling to an absolute minimum.

I'll start it off with the ARF *Flite Streak*, measurements from the one I like the best (*Dirtmobile II*), but during the Fall Follies I noticed several ARF Top Flite *Tutor IIs* being put to very good use and so this design already has a database worthy of publication.

I have assembled three ARF *Flite Streaks*. All have been used in competition by myself and friends, frequently with impressive results. A nicely turned-out ARF *Flite Streak* can easily take one through Advanced PA, all the while competing quite effectively in Classic Stunt, along with either Sportsman or Expert P.40.

The model: Lots of option here, all of which have been dealt with in [Stunt News](#), [Flying Lines](#) and the SSW Internet site. Despite what you may have heard, an absolutely stock model--less only the tank which is too small--is pretty good, most especially considering the \$55.00 price. There are numerous tweaks--some minor, some substantial--few of which may be of interest in the beginning, or can be incorporated as need be. (Read: If there is a good chance the model will be crashed in learning to fly inverted, why invest time in spiffing it up to last hundreds of flights over a couple years?)

Weight: ARF *Flite Streaks* come in at about 27 ounces. *Dirtmobile II* has been modded in various ways, flies at 900 grams/ 31.75 ounces. I see no advantage to the lighter models, although mine may be close to the upper limit.

Warps: Shrink 'em out! You want the model to fly flat to the lines in both upright and inverted flight.

Rudder: No offset.

Thrust: Just enough engine offset is used to ensure there is no left thrust.

Tip weight: On a stock model, this is close enough for early test flights. *Be prepared to experiment.* Model being cited had all the bird-shot tip weight removed from upper side of right wing tip, now packs about 4 grams. However, there is a small--but hidden and so not known as to specifics--amount of tip weight in the *left* wing tip.

Balance point: This is strongly suggested to be 1 5/8" back from wing leading edge. Experimentation may be in order, but do so in small increments and only after you develop a good feel for the model.

Power plant: All things taken into consideration it is pretty clear to me the O.S. 25LA-S (the CL-specific model, noted by the "S") is the best choice for a wide range of flyers. It is a weak sister to the older--and out of production--O.S. 20FP, but the 20 needs to be choked back slightly for the *Flite Streak*. The 25LA-S--complete with stock muffler, internal cone in muffler left in place--has more than adequate power, nice power delivery, is easy to start, needles in a linear fashion, runs smoothly, is amazingly quiet, *does not require modification of any sort.* (The O.S. 25FP is not regarded as a viable engine for this application.)

For a full-on effort--one well outside the limits of this setup sheet--the 20FP is Killer, although for the hassle in finding one and getting it set up, one might want to put it off for something like a SIG *Skyray 35*.

Prop: Use an APC 9-4 with either the 25LA or 20FP.

Tank: Use a Hayes 3-ounce tank. Stock plumbing *with* muffler pressure. Noting the *Flite Streak* has a short nose, mounting the Hayes tank on the *inboard* side of fuselage is a good option. Attach so tank is not only secure, it can be adjusted in 1/64" increments (I use scraps of ply). Mount tank such that rear is kicked to outside of the circle by about 1/8 inch.

Fuel: Use a good 10%-nitro blend, my preference being SIG "Champion" fuel. A home-brew

mix of 10% nitromethane, 10% castor, 10% Klotz synthetic, balance methanol is fine.

Glow plug: Ya need something hot, and the Thunderbolt RC long is the defacto standard in the NW, available from Hobby People via mail-order. The O.S. #8 plug is excellent, may be easier to obtain.

Controls: Stock bellcrank with output from innermost hole. The 'crank is not reversed; output arm is to outboard panel, as per stock kit. Elevator travel is 40 degrees up, 40 degrees down. Total leadout travel is 2 3/4 inches, achieved by relieving the built-in stops. Input at control horn is 5/8-inch from centerline of elevator. Spacing of leadouts at handle is 4 inches.

(Another way to get a similar control "feel" is to use center output hole on bellcrank, a longer-than-stock control horn at the elevator, same 40-degree deflection. I personally prefer setup outlined in previous paragraph.)

Lines: Use .015-inch cable, 60 feet from centerline of model to centerline of handle. Model being described has stock and thus fixed leadout position, so is not suitable for use with .012-inch lines of any reasonable length. If using .012s in conjunction with adjustable leadouts, set leadout position such that midpoint of the two leadouts is .90-inch back from balance point. (With balance at 1.6 inches from leading edge, midpoint of the two leadouts will be 2.5 inches back from wing leading edge.)

Using above setup will result in a nicely trimmed model with minimal effort, probably no more than two flying sessions. From that point on it is simply a matter of practicing the pattern, possibly fiddling with small tweaks: Balance point, tip weight, launch rpm, leadout spacing at the handle, and so on.

Okay, who will be next with a setup article for one of the more popular ARC/ARF models? That *Tutor II* looks rather intriguing, already has an interesting contest record to its credit. The SIG *Primary Force* ARF should be available by now, is another design which will prove both popular and effective.

For more detailed information on the ARF *Flite Streak*, the O.S. 20FP, quite a lot of information on a next-step model, the SIG *Skyray 35*, contact me at dlr111845@yahoo.com, asking for Universal Stunt Machine package.

"My Update" by Mike Hazel

You have all read and heard something about this newsletter's editor moving his household. Since I have been MIA for much of 2005 and haven't had the chance to catch up with many of you, I thought it might be about time for an update. I will attempt to do this in a linear fashion, which usually means to begin at the beginning.

My wife Laura and I have talked off and on over the years about moving from the city to the country. Being in a country setting is just part of the recipe, another portion of it involving "the dream house". And of course the control liner's dream, a private flying circle. We are not yet in the dream house, and there is not a flying circle yet, but that is getting ahead of the story.

Sometime in the early spring we decided to start looking around our general area to window-shop for property. We started doing this quite casually, just wanting to see what one's dollar would buy in different areas outside of Salem, and we were in no particular hurry as there wasn't a timeline involved.

Then one of our neighbors, who was in the process of putting his home on the market, said he would be quite interested in buying ours. The idea of having a ready buyer was really nice, and put us into a mode of needing to hurry up and get our home and house in order to make a change. So now we are taking care of business regarding our existing home while checking out leads on property. All the while we are wondering how the timing and the variables will play out, such as where would we live if we sell our house soon, and buy bare property. (rent apartment, live in tent, cave, storage shed???)

In late April, an opportunity to acquire a "piece of dirt" comes up that looks good. The property was in one of the general areas that we decided would be acceptable. The "lay of the land", and the price was good for the amount of acreage. But the icing on the cake was that there was a dwelling included for essentially no cost. In fact the realtor's advertising said you could "live in the trailer while you build your dream house".

The existing dwelling is in fact an old double-wide, with added on structure. Another bit of "icing" is that there is also a small barn structure with shop area.

We needed to move quickly to put in our offer to buy this place before we lost out. This was on the first weekend in May. That particular weekend I had plans to attend a Stunt and Carrier contest down in California with Dave Shrum. So unfortunately I had to scrub the contest plans just the day before we planned to leave. Sorry Dave!

Next comes the usual hurry up and wait process for the closing on the property, and then we finally take possession in June. Hooray! But now the plot thickens.....it turns out that the earlier mentioned neighbor cannot qualify to buy our home. So this means we must get our home ready to put onto the open market. Plenty of little cosmetic fixups to do here, along with the already in progress getting ready to move organizing going on.

Our Salem home goes onto the market in July, and now while we are waiting for a buyer the work continues on getting ready to move. We had lived in this house for over twenty years, so plenty of accumulation to sort and box. And of course when you are a modeler it's a lot worse!

Simultaneously we are getting the house on the country property for living in. The place was in need of some maintenance, plus it needed lots of cleaning up inside. (this is a gross understatement, more details upon request!) This was a true case of burning the candle at both ends, plus showing up for work on the regular job. At this point of course, the possibility of getting away for an enjoyable weekend at the Stuntathon was hopeless.

Virtually the only flying activity I did during the entire summer was a one day diesel combat meet, and my local speed contest in August. No test sessions, no practice flying, not even dropping by the local flying field to see "what's going on".

After what seemed like an endless parade of real estate agents and their clients looking at our home, we finally get an offer after a few weeks. Then there was a somewhat lengthy period of counter-offer/offers that took place. After this process was finished, and our Salem house went to closing, then it was time for the final move out to the country. This took place in several steps in October, and was accomplished

with help from relatives, lots of pickup trips, and finally a big moving truck with professional grunts taking care of the heavy stuff--bulky furniture and big shop tools, etc. The official changeover was October 25.

Now after two months, here's what's going on..... still continuing to get things in the household organized. This after the good weather having gone away, which was mostly spent outside taking care of needs on the property, issues of overgrown vegetation and copious quantities of debris left behind by the previous owner. Much more can be said about that, but you don't need to hear the aggravating details.

So what's ahead? Well, we will start construction on a new home in a couple of years, and the old one will be demolished. Meanwhile, I have a barn structure to upgrade for use as a temporary model shop, and to store farm implements and misc. equipment and supplies. Earlier on I had mentioned a flying circle, but this will not exist until some further improvements are made, such as a couple of trees being removed and pushing a bit of dirt around. This will definitely be a work in progress.

While all of this will most likely reduce my available modeling time (you think?), I will still get out for much of the 2006 flying season. In 2005 I attended just four events, the fewest for me in decades. I don't plan for a repeat of that!

Oh, so just where is Mehama (pronounced Muh-Hay-Ma) you might be asking? The answer is twenty miles East of Salem in an area known as the Santiam Canyon. My spread is just sixty seconds off of the main highway, and is actually a pretty quick commute into work and the "big city".

My wife and I have been trying to think of a suitable name for our place. "Zoot's Paradise" has already been nixed. A couple of others that have come to mind are: Backache Acres, and Blackberry Fields Forever. These also not being quite 100% suitable, maybe for now it will just be "A Work in Progress".

OK, it's time to get off of this keyboard. Now where did I put that chainsaw.....?

WORKSHOP TUNE-UP, by Rich McConnell

Now that the Winter building season is upon us and thoughts turn to butchering balsa wood; let's get the workshop ready.

First hang up or otherwise return tools to their designated spaces. Next a good cleaning and dusting is probably in order.

Before diving into your next project, let's go over each tool one by one and make sure your tools are ready. Saws---table saw, jig saw, band saw, sabre saw, coping saw, crosscut saw, rip saw, hack saw, jeweler's saw and razor saw: are they rust free? any broken blades? or more common, are they dull and need to be replaced? A sharp saw cuts way faster and is much safer besides.

Exacto blades and modeling knives---same thing, though some people like to sharpen them on the ole Arkansas whet stone. Modeling pins, t-squares, drafting tools, hardware containers, odds and ends, rulers, weight scales, masking tape, other tapes, tape measures, wood planes and razor planes, balsa stripper, wood rasps, bench vices, clamps and spring clamps, razor blades, paint brushes and spray guns---all of these things require some degree of inspection and maintenance or replacement to perform at their best.

While you're at it, don't forget your electric drill, drill press, lathe, mototool and other power tools. For which you have how many (possibly hundreds) of drill bits and other rotary tools to stick in them. Remember, sharp tools will not only cut faster, saving you time and frustration but are actually safer to the user.

Almost done, right? What about

your collection of several dozen files? They get dull too. Glues; CYAs, epoxies, aliphatic resins, fiberglass resins, contact cement, Ambroid, Sigmant and other adhesives---are they fresh and ready to use? What about your glue guns? When you checked your paint brushes and spray guns, did you remember to inspect your clear dope, dope thinner, sanding sealer, etc?

You also remembered to charge up the batteries on your hand held tools, right? Scissors, heat gun and Moneycote iron are ready to use?

Fire extinguisher and shop vac need your attention too. Empty the waste basket or trash can. Shop rags clean and free of residue? Fresh batteries in the smoke alarm?

What about sanding tools---power sanders, bench sander, belt sander, sanding disks, also grinding disks, grinding wheels, T-bar sander, commercial and homemade sanding blocks and trifolds. I like to have stacks of precut or prefolded sandpaper ready as replacements for sanding blocks etc. so that a sanding project sees minimal interruption for replacement sandpaper.

Soldering iron, soldering gun, propane torch and other torches, welding gear etc., are next on the list.

Your shop may have other tools or other requirements that I failed to mention, but you have the general idea. Don't forget your custom made tools either, every modeler has lots of them. Fresh waxed paper on the building board?

By now your shop is neat, clean, organized with all the tools in their proper places---you can finally see the work surface again---let the balsa chips fly!

Happy building!

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FLYING LINES is published nine times per year. Subscription rate is \$14 for USA, and \$15 for Canada (U.S. funds). Expiration is noted on the mailing label --- issue number listed after name. Make your check or money order payable to *FLYING LINES*.

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