2456 Quince St., Eugene, OR 97404

JohnT4051@aol.com

Editor: John Thompson/Publisher: Mike Hazel

The best days may be yet to come!

Don't give up on CL flying just because the leaves are beginning to change color.

Some of the best flying days are those in the fall and winter when the sun goes behind some clouds and the wind dies down. We have the tremendous advantage of living in a part of the country where we can fly all year-round.

try new things. It's a time when version in this ground-level photo. (Bob Huber photo) heavy-duty competitors can relax a little, bring out the sport planes and just fly for the joy of it.

It's a good time to work with beginners, when the wind doesn't kite their trainers and we have some time to concentrate on helping them fly instead of worrying about getting ready for next weekend's meet.

Heck, if it starts to rain, we can just adjourn to the nearest restaurant and tell lies about last season, plan our contest trips for the coming year, cook up goofy new airplane projects, argue about rules, trade building and engine secrets, and just enjoy the company of fellow modelers.

Keeping active in flying during the winter helps us keep up our enthusiasm for the hobby and sport and makes sure that, when the nice weather and the contests come next year, we're not out of practice or fallen away to other interests.

There's nothing like flying to make us want to get in the shop and build, and nothing like building to make us want to go flying.

Winter's also a good time to be recruiting new

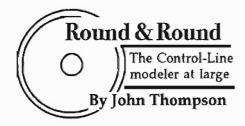


Contest activity drops off, so This fabulous 4-stroke-powered Bearcat semiscale stunter has been it's a good time to test, practice and Pat Johnston's expert stunt entry in 2003. Looks like the full-scale

fliers to join the fun for next year, and what better way to recruit than to be out flying and capturing the interest of passers-by? No doubt about it some good flying days are yet to come!

In this issue	
• Round & Round	2
Regionals planning	3
Where the Action Is	3
• Flying Flea Market	4
On the Contest Trail	5
 World Championship Trials 	11
Northwest Standings	14
Palmer Cup Standings	15
Northwest Records	16
Back to Basics	17
• MPH — Speed news	18
Combat Cornucopia	18
• Shop Tips	19

Flying Lines



Modeling thought for the month:

"Achievement is largely the product of steadily raising one's levels of aspiration and expectation."

Jack Nicklaus

The splatter effect

Building and flying model airplanes takes a special kind of person. That's why we tend to cherish friendships we make on the flying field.

There's one universal rule of model aviation that is both part of its allure and one of the things that keeps the population of modelers limited to those "special people": If you fly, you crash.

Unfortunately, the rule applies more ruthlessly to beginners than to old-timers.

Everyone who wants to become a model airplane flier must ultimately face the dragon that blows fire on every model that takes to the air. It morphs into various forms — gravity, wind, sun, hard ground, inexperienced trimming, dizziness, disorientation (which way is up when you're flying upside-down?). It grabs at airplanes and smashes them to the ground.

There's another perverse rule of nature, as applied to novice modelers: The prettier the airplane, the more likely it is to crash.

So the novice comes out and watches the oldtimers fly their graceful stunt patterns, zoom their combat planes around wildly, etc., and heads off to the shop to build that first masterpiece. He's back at the field a week or two later, and so is the dragon.

Splatter. The dragon wins. Maybe not on the first flight, but eventually. The plane is fragments. Hours gone, money spent, frustration, anger. Here is where the roads diverge — the "special person" that is a model aviator takes the fork that leads back to the workshop, back to the field, and ultimately, after a road that may take years to travel, to successful flying, seldom visited again by that nasty old dragon. The guy who takes the other fork is never seen again. We mourn his loss, but some people are just not cut out for the battle against the frustrations of model

building, flying and crashing.

Nonetheless, some people take the fork away from modeling who might have been successful if they had tried just a little more — or had some help in doing so.

Efforts are being made to bridge the gap between modeler and "potential" modeler. To direct more people along the fork to success. The almost-ready-to fly planes now on the market can help. They're our counterpart to the RC park fliers, a way to get the casual guy hooked so that he'll have some flying success and eventually become a serious builder and flier, leaving the ARFs behind and becoming one of us, so to speak.

And people are always coming up with ideas for planes that will teach people to fly with a greater degree of success than they might have left to their own devices.

Whenever a potential flier asks me what to build for a first plane, I tell them to build something strong, simple and ugly. "Don't paint it!" I emphasize. "It's a trainer. You're going to crash it repeatedly. If you spend weeks building a beautiful plane on the field, you'll never fly it!"

This has been nagging me lately — what to use as a trainer? I've finally put on paper a trainer idea that has been in my head for years, and given the plans to one of our local fliers to build and test. If it works as planned, it will be fairly easy to build and will withstand horrendous abuse. It will be ugly and it won't stunt. But it should fly well enough that a beginner can have some immediate success.

Coincidentally, Joe Just hit on a great idea for a trainer. It gave him a chance to use up some foam cores that are no good for Ukeys and other good airplanes because they're too heavy. But perfect for a bulletproof trainer.

And here is the latest issue of the Skywriter revealing that the club is working on a trainer design as well.

I plan to feature all of these airplanes in a future FL article. There's no reason why the article needs to be limited to these two planes. If you have a favorite trainer, or your own design, or any tales of success in teaching people to fly, send 'em in to FL.

Anything we can do to work together to help more new people be successful will help make our hobby more enjoyable for all of us.

John Thompson can be contacted by mail c/o Flying Lines, or by e-mail at JohnT4051@aol.com. Web site: http://members.aol.com/JohnT4051 /NorthwestCL.html.

Flying Lines

Issue #194

September-October 2003

Page 2

Regionals planning under way (already!)

Yes, the Northwest Regionals are a year-round affair for the people lifting and toting behind the scenes. The Northwest Regionals Management Association intends to have a 2004 Regionals planning meeting in November, most likely at FL headquarters in Eugene, date to be set.

If you'd like to be a part of this planning effort (and add your muscle to the job of putting on the west's biggest contest) contact FL and we'll make sure that you're on the list to be invited to the November meeting.

We've got a number of things to talk about that you might want to have a say in:

- What will be the events for next year? At this point, it looks as if the schedule will be about the same, but there are questions: Should we drop the low-attended events (Northwest Goodyear, Slow Rat, for example?) Should we add fast combat, or P-40 stunt, or Nostalgia Carrier?)
- Concessions: We have to have food on site, but it has been difficult to get a professional caterer to commit to the weekend. We'll be working on this project and welcome some help.
- Human resources: Too much work is being done by too few people. We need to appoint chairpersons to oversee a number of functions now being handled by the overworked management committee. Among the jobs we need to fill for 2004 are field setup and teardown boss, concessions coordinator, banquet coordinator, registration chairperson, scoreboard and champions tabulator, trophy/prize chairperson, security chief, field

marshal, grass mowing boss, and probably others.

- Workers. Everyone who participates usually helps out in some way. We need work crews to accomplish the tasks assigned to all of the chairpersons in the categories listed above.
- Event directors, judges and officials. It takes a huge number of people to make the contest go smoothly. Don't assume that everyone who did all the work last year will be available this year. If you can volunteer, directors and judges are needed in aerobatics, combat, racing, speed, scale and carrier. Some of last year's people will be there, but they can't do it alone.

Again, contact *Flying Lines* to get your name on the list as a worker or to be invited to the planning meeting.

Where the action ist

Coming events in Northwest Control-Line model aviation

Oct. 11-12

Fall Follies, Bill Riegel Field, Salem, Ore. Saturday: Northwest Sport Race, Northwest Super Sport Race, Clown Race, P-40 Stunt, Classic Stunt. Sunday: 4 PAMPA aerobatics classes and barbecue. Contact John Thompson, (541) 689-5553, JohnT4051@aol.com.

Clip this out and give it to a new CL flying friend!

Flying Lines subscription form

Name	Phone	E-mail
Street address		
City	State	ZIP
Cond the above information alone with \$14 \\$15 I	TC funda in Canada) A	- Floring Lines 24E6 Onlines St

Send the above information along with \$14 (\$15 U.S. funds in Canada) to Flying Lines, 2456 Quince St., Eugene, OR 97404.

The Flying Flea Market

Classified advertisements — FREE for FL subscribers

CONTROL-LINE SUPPLIES: Just arrived: Top Flite Flite Streak ARF: Durable balsa/ply construction covered with MonoKote — a classic is reborn. Regular price is \$89.99. Special for Flying Lines readers, \$69.99. Also: Top Flite Nobler ARF: Wood covered with MonoKote, painted fiberglass cowl, leadout already installed!! Regular price is \$139.99. Special for Flying Lines readers, \$119.99. Remember — We ship UPS daily. Eugene Toy & Hobby, (541) 344-2117, www.eugenetoyandhobby.com.

COMBAT SHUTOFF: H&R MKIII Combat Fuel Shutoff now available. Sliding bellcrank design. CNC milled 7075 anodized and hard coated aluminum. Brass bushing and line buttons. 3" for Fast and 80MPH, all new 2" for F2D and 1/2A. \$25 plus \$5 S&H. Contact Jeffrey Rein at jeffrey.a.rein@boeing.com, or (425) 823-6053.

VIDEOS FOR SALE: Videos of the 2003 Vintage Stunt Championship and 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

DBAT HELP OFFERED: I can provide assistance and advice on Diesel Combat engines, planes and equipment. Mel Lyne, (604) 898-5581 e-mail: mlyne@sea-to-sky.net.

FOR SALE: K&B 45 Sportster RC, LNIB only \$50.00 shipped. Mike Hazel 1073 Windemere Drive N.W., Salem, OR 97304, (503) 364-8593, ZZCLspeed@aol.com

SPEED INTEREST GROUP: Join the North American Speed Society. USA and Canada dues are \$25 annually, membership includes "Speed Times" newsletter. Write to: NASS, P.O. Box 371, Fenton, MI 48430.

WANTED: New Magnum .65 GP plain bearing engine. contact Rick Wallace, (360) 683-9860, or preferably by e-mail, toolman50@prodigy.net.

FOR SALE: Cyclon Top 3 engine, \$130. (New price is \$165.) This one has about 3 minutes of running time. E-mail Tom Strom at TStrom@aol.com.

WANTED: K&B 4.9 engines and parts. Craig Bartlett, (541) 745-2025.

FREE: Old model magazines, in lots of five. Free plus cost of shipping, unless I deliver them to you at a contest, then free. Contact John Thompson, JohnT4051@aol.com

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.

AEROBATICS INTEREST GROUP: Right now — as in TODAY — is the very best time to join PAMPA! Your \$25.00 will see a full year's worth of the world's best CL-specific magazine (at 100-plus pages we no longer call it a newsletter!) dropped in your mailbox. Send check or money order to: Shareen Fancher, 158 Flying Cloud Isle, Foster City, CA 94404.

COMBAT INTEREST GROUP: Miniature Aircraft Combat Association offers national newsletter with technical articles, organizes national events, keeps national combat standings, and much more. Send \$15 dues to MACA, c/o Gene Berry, 4610 89th St., Lubbock, TX 79424.

NAVY CARRIER INTEREST GROUP: Navy Carrier Society offers newsletter with technical articles, organizes national events, keeps national standings and more. Contact NCS, c/o Bill Bischoff, 2609 Harris, Garland, TX 75041. Online: President Bill Calkins at clflyer@tbcnet.com.

RACING INTEREST GROUP: National Control Line Racing Association offers newsletter with technical articles, organizes national events, keeps national standings and more. To Join, send dues of \$10 U.S. (\$12 international) to NCLRA, c/o Mike MacCarthy, 4704 Hillsboro Ct., Santa Rosa, CA 95405. Online: http://www.NCLRA.org.

WEBMASTER WANTED: Flying Lines seeks the help of a Webmaster-type person to develop a professional quality Northwest Cl news Web site. If you would be interested in donating your skills to this project, contact Flying Lines for details.

YOUR AD HERE: Remember, classified ads are <u>free</u> to *Flying Lines* subscribers. Send yours in today for publication in the next edition.

ON THE CONTEST TRAIL

RESULTS OF NORTHWEST CONTROL-LINE COMPETITION

Tailhook 2003

Tacoma, Wash., Aug. 23

By Mike Potter

The annual carrier contest was held at Clover Park Technical College, sponsored by the Northwest Skyraiders.

Surny skies, but gusty winds that changed directions made .15 class a real challenge.

Jim Schneider came up from California to give us a run for our money but had some bad luck in Class I, crashing his MO-1.

A good time was had by all and we look forward to next year — Tailhook 2004.

Here are the results (Northwest standings points in parentheses):

338 7

363.69

PROFILE NAVY CARRIER (4 entries) 1. Jim Schneider, Livermore, Calif.

11 Jilli Germieraer, Ervermiere, Cumi	000.7
MO-1, Nelson .36R	
2. Mike Potter, Auburn, Wash. (3)	319.6
MO-1, Nelson .36R	
3. Shawn Parker, Seattle, Wash. (2)	299.9
MO-1, Wiley .36R	
4. John Hall, Sumner, Wash. (1)	203.43

4. John Hall, Sumner, Wash. (1) 203. Seahawk, K&B 5.8R

NOSTALGIA CARRIER (1975 scoring)(4 entries)

		Melton	Guardia	n, Supe	erTigre	.35
2.	Rich	Salter,	Seattle,	Wash.	(3)	353.53
		Super N	Aoho, Mo	Coy .35	5	
3.		Hall (2)		,		317.95

Midwest Skyraider, K&B .35

4. Dave Shrum, Roseburg, Ore. (1) 290.03 GS Bearcat, Fox .36 Schneurle

.15 NAVY CARRIER (5 entries)

1. Dick Salter, Seattle, Wash. (4)

1. Jim Schneider	245.3
Conley SP, MVVS .15	
2. Shawn Parker (4)	126

Skyshark, Cox .15
3. Mike Potter (3) 114.3

MO-1, Cox .15

4. Rich McConnell, Seattle, Wash. (2) 57.3
Original design, Fuji .15

5. Dave Shrum attempt

Flying Lines

Issue #194

Skyraider, Fox .15

CLASS I NAVY CARRIER (2 entries)

1. Jim Schneider 241.9
Nelson .40R
2. Dave Shrum (1) 192.6
Mauler, Fox .40

CLASS II NAVY CARRIER (1 entry)

1. Jim Schneider 411.8 MO-1, Webra .61

SPORTSMAN CARRIER (1 entry)

1. Mike Hazel, Salem, Ore. (1) 196.8 Cro-Magnon Air Force, Fox .36



Milissa Huber of Stanwood, Wash., has been a contender at every combat contest in 2003, and in Portland at the Jim Walker Memorial she broke through and came out as 80mph combat champion. She's shown here with other top finishers, Dave Baxter (second place, center), and uncle Tony Huber (third). (Bob Huber photo)

Jim Walker Memorial

Portland, Ore., Aug. 30-31

■ A big thank-you

By Gary Harris

On Labor Day weekend the Northwest Fireballs hosted a two-day contest in Portland at East Delta Park featuring Stunt, Racing and Combat.

September-October 2003

Page 5



Stunt flight line at Delta Park in Portland, for the Jim Walker Memorial. (Bruce Hunt photo)

Twenty-four contestants came to the park to play. Many of those flew in more than one event.

We had Bar-B-Q both days.

Kris Hunt surprised her husband, Bruce, with cake and ice cream to celebrate his birthday.

Trophies were awarded to third place. Four nice control-line kits were given out to lucky competitors whose names were drawn.

Thanks to: Scott Riese, John Anderson, Ted Gritzmacher and Ted's friend for mowing grass and preparing the flying field.

CL kits: Tammie's Hobbies, John Brodak, Leo Mehl and the Northwest Fireballs.

Event Directors: PA, John Anderson; Classic and Old-Time Stunt, Dave Baxter; Clown Race, Leo Mehl; 1/2A Combat, Mark Hansen; 80mph Combat, Gary Harris.

Stunt pull scale, Jack Pitcher.

Stunt judges and assistants: Scott Riese, Leo Mehl, Jerry Eichten, John Waldorf, Bill Veselik and Dave Royer

80 mph Combat: Judging, James Cox, Dave Baxter, Mark Hansen, Jim Green and John Thompson. Streamers, Mark Hansen and Gary Harris.

Bar-B-Q: John Waldorf. Cooks, Mel Lyne and Jay Woods.

And thanks to all others who helped.

Here are the results (Northwest standings points in parentheses):

FLYING CLOWN RACE (4 entries)

- 1. Nitroholics Racing Team, Oregon (4) 225
- 2. Allen Hoffmann, Greenville, Calif. 184
- 3. Milissa Huber, Stanwood, Wash. (2) 133

4. Dave Shrum, Roseburg, Ore. (1)	137 heat
OLD-TIME STUNT (2 entries)	
1. Scott Riese, Portland, Ore. (2)	269
2. Dave Baxter, St. Helens, Ore. (1)	220.5
CLASSIC STUNT (5 entries)	
1. Bruce Hunt, Salem, Ore. (5)	519
2. Randy Powell, Port Orchard, Wash. (4)	496
3. John Thompson, Eugene, Ore. (3)	446.5
4. Dave Royer, Portland, Ore. (2)	441.5
5. Mike Foley, Walla Walla, Wash.	363.5
INTERMEDIATE/ADVANCED AERO	<u>. (5 entrie</u>

1. Rich McConnell, Seattle, Wash. (5)	457
2. John Thompson (4)	456
3. Dave Gardner, Renton, Wash. (3)	426.5
4. Leo Mehl, Portland, Ore. (2)	42 5
5. Mike Foley	317

EXPERT PRECISION AEROBATICS (5 entries) Chair Cov. Dalta D.C. (7.5)

1. Chris Cox, Della, B.C. (7.5)	364.3
2. Pat Johnston, Meridian, Idaho (6)	544.5
3. Jerry Eichten, Dundee, Ore. (4.5)	525.5
4. Bruce Hunt (3)	519.5
5. Keith Varley, Vancouver, B.C.	485.5

1/2-A COMBAT (1 entry, canceled)

80 MPH COMBAT (10 entries)

- 1. Milissa Huber (10)
- 2. Dave Baxter (9)
- 3. Tony Huber, Renton, Wash. (8)
- 4. Mark Hansen, Portland, Ore. (2.5) Jay Woods, Portland, Ore. (2.5) Bob Smith, Roy, Wash. (2.5)
- 7. John Thompson
 - Mel Lyne, Squamish, B.C.
- Rich McConnell
 - Jim Green, Bellevue, Wash.

80mph combat at the Iim Walker Memorial

By Mel Lyne

Gary Harris with help from a bunch of people put together a nice relaxed-paced contest at Delta Park, with even a "help the other guy out of line tangles" speech at the pilots meeting. There were 10 entries.

Milissa and Tony Huber were entered with Bob Huber pitting. Dave Baxter drew "Killer Milissa" Huber in round one and was fortunate that Milissa had technical problems, with Dave getting the win. This got Milissa fired up and she proceeded to chew her way through the rest of the field in her following matches.

John Thompson flew hard using Mejzliks but was short on kills. He got whacked a couple of times, once when the O.S. was set too lean and not pulling well. There was a fair wind most of the day so fliers had to be careful with upwind tactics. Rich McConnell and Jim Green each took 2 losses to go out early. Mel Lyne managed a win in a long match with Tony Huber, but then got massacred by "Killer Milissa." "Curse you Red Baron! Baroness?" Robert Smith and newcomer Jay Woods were flying well, scoring some wins. Robert put Mel out and Jay dispatched a couple. This was Jay's first contest and he flew well, but like a bunch of others got blindsided by "Killer Milissa." "Curse you Red Baron!" Jay will be ready for her next time. "No more Mr. nice guy!" It seems many of us have been muttering that for a couple of seasons now. Doesn't seem to help though. Maybe Mike Willcox has some advice on a more potent mantra, like "Watch yer ass kiddo, she'll kick yer butt!!" Mark Hansen also had a good run with some wins.

The semifinal was Milissa vs her uncle Tony. No family loyalty here! They went at it and busted both models with Milissa getting the win into the final.

Dave Baxter had been alternating between quietly flying his matches and working as a time-keeper with Gary. He had got his "protégé" Jay Woods up to speed with planes and equipment for the contest, and now he found himself in the final against "Killer Milissa.. He knew he was in tough.

At the start horn Dave's motor fired up instantly and Dave (one of us older geezers with metal hips and the like) knew he had to get to the handle fast. But Milissa outran him and got a 2-1/2 second airtime lead. The combat was cautious and then more aggressive. A couple of close calls and then an innocent-looking midair. Dave's real solid foam Allenplane flew on, but Milissa's more fragile Yuvenko Wakkerman model had extensive damage. CD Gary Harris ruled it unflyable and the match ended with Milissa the winner by 2 1/2 seconds. Next time Dave says he'll have faster running shoes and an oxygen bottle to get him to the handle quicker!

So Milissa won all the marbles, and some of us are still licking our wounds. MAN, SHE IS ONE TOUGH MATCH!!

There was a nice BBQ hot dog lunch served,

and some great flying. Thanks to all who helped out.

Oregon CL Speed Championships

Salem, Ore., Sept. 6-7

By Mike Hazel

Northwest speedsters gathered at Bill Riegel Model Airpark in Salem to make lots of noise and go fast during the first weekend of September.

Weather was fairly cooperative thru the weekend. It was a bit windy on Saturday but most of these planes cut right through that. Rain was predicted on Sunday, but it held off until just after the awards presentation.

There were nine entrants, including Les Akre all the way from Alberta. Three or four Northwest speedsters were missing from the action, but Will Naemura did make a brief cameo appearance.

Craig Bartlett turned a new Northwest class D record, after mooching flying wire, handle, and a stock out of the bag prop from the ZZ!Prop store.

The results: (Northwest standings points in parentheses):

1/2 A SPEED (1 entry)

1. Ken Kortness, Spokane, Wash. (1)	87.42
1/2 A PROFILE PROTO (1 entry)	

1. Chuck Schuette, Vancouver, Wash. (1) 95.70 .21 SPORT SPEED (6 entries)

1. Loren Howard, Vancouver, Wash. (6) 153.06
2. Les Akre, Edmonton, Alberta	151.77
3. Chuck Schuette (4)	143.02
4. Ken Kortness, (3)	137.77
5. Ron Salo, Surrey, B.C.	131.14
6. Ted Gritzmacher, Battle Ground, Wash	. 130.85
A SPEED (1 entry)	
1. Ron Salo (1)	160.36
F2A SPEED (2 entries)	
1. Jim Booker, Arlington, Wash. (2)	178.10
2. Les Akre	164.48
B SPEED (1 entry)	

1. Ken Kortness (1) FORMULA 40 (2 entries)

 1. Ken Kortness (2)
 156.66

 2. Ted Gritzmacher (1)
 126.00

Flying Lines

Issue #194

September-October 2003

Page 7

146.04

2. Ted Gritzmacher (1)	126.00
D SPEED (2 entries)	
1. Craig Bartlett (2)	*171.20
2. Ken Kortness (1)	164.09
AMA JET SPEED (3 entries)	
1. Loren Howard (3)	168.71
2. Ron Salo (2)	151.20
3. Ken Kortness (1)	attempt
NW SPORT IET SPEED (2 entries)	
1. Mike Hazel, Salem, Ore. (2)	151.83
2. Loren Howard (1)	148.82

Raider Roundup

Tacoma, Wash., Sept. 13-14

By Steve Helmick

Many thanks to the Judges, Paul Walker, Gary Letsinger, Bobs Parker and Emmett. Vern Bryant "ran" scores both days, Pit Boss was Dave Gardner Saturday and Gary Letsinger Sunday. Chris Gomez helped with tabulating, cooked "McRib Sammiches" (from the local Indian word for "heap big greasy & spicy meat-like thing on a bun"), D. Dirt provided home grown, ripe and Yummmy tomatoes and pickled Walla Walla Onions. Vern B. brought coffee for all takers, free, along with the McRib "inserts". Bimbo's Bakery (really) donated many boxes of Entmann's Donuts, Chris and D.Lady Cox brought more donuts. Many of the wives (and ex-wives) passed out hugs that were greatly appreciated.

Outstanding stuff: Rich McConnell no doubt would have been Grand Champ, if only we did such fluff. From memory, he came in seventh in OTS, third in Classic, and first in P.40, all with an old Super Clown with a K&B .28 Sportsman fed with a surgical tubing bladder, no regulator. Some rude jokes were made about the appearance of this hanging under the 'Clown. Justifiably. Rich flew his "very original" full fuselage stunter in Advanced, and came in second with a pair of 439's.

Keith Varley had completed his last round flight in Expert, when a hawk came flying by and got very aggressive with Keith's airplane, as Keith waited for the engine to quit. No harm was done, but we were all watching closely and nervously, expecting the hawk to be hit by a wire or the model at any second. All breathed a big sigh of relief as the hawk finally moved onward. We knew Keith had lost his new, beautiful and very light Stalker .61 powered Saturn in July, and



Joan Cox shows off hubby Chris's Saturn at the Raider Roundup in Tacoma. (Steve Helmick photo)

didn't want to see him suffer another loss.

Jim Johnson reports that he has completed his "coffee table book" on model airplane collectibles. Look for it in the next few months!

Pat Johnston's QED 500 with Saito .40 has a venturi conversion that is very cute and sensible.

We had great weather, a bit of wind, but not much worse than the Nats. Some of the regulars were missing, but I'm sure their ears were burning, because we were all wondering why the heck they weren't present.

On the carrier circle, Jason Parker, 12, flew in his first contest and scored 156.2 in the new nostal-gia carrier event, which uses 1979 rules and gives a bonus to pre-1979 airplane designs and non-Schnuerle engines.

Here are the results (Northwest standings points in parentheses):

PROFILE SCALE (2 entries)

1. James Cox, Delta, B.C. (2)	132
2. Rich McConnell, Seattle, Wash. (1)	121
NAVY CARRIER CLASS I/II (2 entries	3)
1. Peter Tribe, Kent, England	338.8
2. Mike Potter, Auburn, Wash. (1)	300.4
PROFILE NAVY CARRIER (4 entries)	

Flying Lines

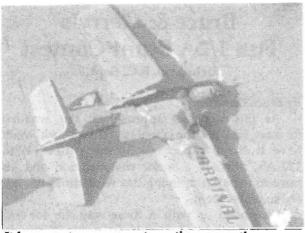
Issue #194

September-October 2003

1. Mike Potter (4)

Page 8

303.8



It happens to everyone at one time or another — a beautiful plane bites the dust. Mike Haverly's Cardinal suffered that fate at the Raider Roundup. (Steve Helmick photo)

3. Bob Parker, Renton, Wash. (2)	206.1
4. John Hall, Sumner, Wash. (1)	177.8
5. Shawn Parker, Seattle, Wash.	attempt
.15 NAVY CARRIER (3 entries)	•
1. Mike Potter (3)	222.4
2. Shawn Parker (2)	221.8
3. James Cox (1)	202.8
NOSTALGIA CARRIER (3 entries)	
1. Mike Potter (3)	362.9
2. Shawn Parker (2)	344
3. Jason Parker (1) *	156.2
OLD-TIME STUNT (8 entries)	
1. Don McClave, Portland, Ore. (8)	288.75
2. Dan Rutherford, Bothell, Wash. (7)	285/283.5
3. Keith Varley, Vancouver, B.C. (6)	285/276
4. Bob Emmett, Sequim, Wash. (5)	280
5. Rich McConnell	248.5
6. Dave Pellerin, Kirkland, Wash.	228.5
7. Mike Haverly, Auburn, Wash.	238
8. Emil Kovac, Issaquah, Wash.	200
CLASSIC STUNT (7 entries)	
1. Don McClave (7)	538.5
2. Dan Rutherford (6)	506
3. Rich McConnell (5)	490
4. Bob Smiley, Kingston, Wash. (4)	466
5. Dave Pellerin	459
6. Jim Johnson, Olympia, Wash.	409.5
7. Mike Haverly	398.5
P-40 STUNT (5 entries)	
1. Rich McConnell (5)	483.5
2. Bob Smiley (4)	459
3. Dan Rutherford (3)	447
4. Mike Haverly (2)	437.5
5. Dave Pellerin	362

BEGINNER	PRECISION	AEROBATICS	(1 entry)
----------	------------------	-------------------	-----------

1. Chris Gomez, Auburn,	Wash. (1)	190
ADVANCED PRECISIO	N AEROB	ATICS (6 ent

449.5
439
419.5
404
349
269.5

EXPERT PRECISION AEROBATICS (8 entries

EXPERT PRECISION AEROBATICS 18	entries
1. Chris Cox, Delta, B.C.(12)	539.5
2. Pat Johnston, Meridian, Idaho (10.5)	526.5
3. Bruce Hunt, Salem, Ore. (9)	521.5
4. Dan Rutherford (7.5)	514.5
5. Jerry Eichten, Dundee, Ore.	508.5
6. Keith Varley	499
7. Randy Powell, Port Orchard, Wash.	497
8. John Leidle, Kirkland, Wash.	492

Fun Fly and BBQ Sedro Woolley, Wash, Sept. 6

By Mel Lyne

This one was different. When Ole Johansen's clan (about 20 in three generations) host a Fun Fly BBQ, they do it right! It was worth the trip just for the BBQ and the country scenery and setting. An out-of-this-world pastoral setting in Skagit farm country, a bang-up salmon (done in an incredible brown sugar-garlic-butter sauce by Mark, son-in-law), burger and hotdog BBQ with gourmet beans, potato salad, melons, the works, in a shady glade by the Samish River. Tables set for about 35, and we ate 'til it hurt, and then resumed flying.

Kenny Johansen had mowed the pasture for two circles and set up sun shades and cold drink coolers. It was almost a shame to break the country stillness with 80 mph combat matches. Kenny and dad Ole put up numerous flights on Flite Streaks, Busters, P-40s, a diesel powered Missourian (a .35-size combat plane from 1958) and Warlords. Ole's shop has a 3/4 built Smoothie with a PAW .29 diesel for power. Eight-year-old Austin Johansen showed us how to fly trainers and loop. Then the beginners lined up. Angel had a go followed by Lara (Travis Lyne's fiancee) and John Morrow's gal Bernie. They were great! Bernie never gets dizzy due to ballet training. Gotta get this tip into the AMA controlline tips section.

The cheering gallery (about 15 or so) cheered after every flight. Even the one point landings! After the midafternoon feed the chant was for combat. First Bob Carver did some "Showboat" flying doing square maneuvers with a diesel Orcrist. Then he took on John Morrow flying a Warlord in a very entertaining bout. No dorks, lots of action, and the crowd loved it, having never seen combat before. Flying-interested people had seen the Fun Fly sign on the road and came in to watch the fun and help out launching etc. Next the 80s were fired up. Travis Lyne took on dad Mel in a real barn-burner. Dead even at one cut apiece at the end. Real hard work chasing these "kids" all over the sky! Then it was Kenny and Mel with more great action. Then Bob Carver took on Mel in three long matches with endless following. Bob is still one of the best and you have to pull out all the stops to get close to his streamer. (Bob says he will be flying D/Bat at the Sept. 27 Arlington meet.) We had a fleet of old 80 mph ships, all with working shutoffs, to dispose of. But after umpteen matches we had only munched up one plane. These old dogs just won't die!

Mel and Bob retired to the shade for a rest and drinks and the sport fliers took over. Kenny has an interesting 1960s Enya 35 that really hauls a P-40 well on 65-foot lines. And that Missourian of Ole's has a very strong laminated red cedar curved leading edge making it "bounceable" without damage. Amazing how small the .35 Fast combat models were back in 1958.

A few more training flights were put in but then the wind started to gust late in day, heralding the dark storm clouds approaching, and Gerry, who used to fly CL, got out some enormous 2-line kites to entertain us. As we packed up at 7:15 p.m., the first rain (long overdue) started to fall to end a really enjoyable day.

Thanks again to all the Johansen clan for hosting a great fun fly and BBQ. Mary Ellen, Jan, Ole, Kenny, Mark, all the adults, in-laws, kids and friends. I sure hope we can do it again sometime. To all the fliers who missed it, this really is the one to bring the whole family to. Kids galore playing on giant rope swings, fishing crayfish out of the creek, tons of fun and relaxation for everyone. As Bernie, a real city girl, said, "This is really, really nice."

Next D/Bat is at Arlington, WA on Saturday, Sept. 27. See you all there.

Bruce & Gerry's Fun 1/2A Stunt Contest

Richmond, B.C., Sept. 7

By Bruce Duncan

As this weekend approached, the weather forecast was not the greatest, but as luck would have it the weather was almost perfect. With 1/2-A's, wind is a major consideration and just prior to the start of flying the wind dropped right off, so off we went.

We ended up with a three-way tie for first place so a tiebreaker was in order. Some nut suggested a glow plug spitting contest as the tiebreaker, that's how the competition was decided. There were 7 entries in this event, the top three below.

- 1. (Best spitter), Chris (who tells everyone how he hates 1/2-A's) Cox
 - 2. (Just about as good) Marty Higgs
 - 3. (Not even close) Ron Belcourt

The second event was the Bruce & Gerry (Winnipeg) version of balloon bursting, no tie here. This event had nine entries.

- 1. (Ol' stunter) Keith Varley
- 2. (Racer man) Marty Higgs
- 3. (Havin' fun) Dave McCheyne

Everyone had FUN, which is what this contest is all about, it's not designed to be serious. Next year there will be a slight change, bring your own model(s) to fly, there will be no loaners as we have done in the past. This year every flight in balloon bursting was flown on one (now ventilated) model and the 1/2-A stunt wasn't much better. It takes about two nights to throw a simple stunter together. Do it now for next year.

Thanks to all who attended.

Clayburn Ukie Fun-Fly

Clayburn, B.C., Aug. 16

From B.C. Aces newsletter

A good group of Ukie guys got together at the historic little town of Clayburn, just north of Abbotsford, for an old-time fun fly.

This was almost like a throwback to the Fifties when guys would show up and fly at the local park. Clayburn Park, right across from the town's general store and cafe, made for a perfect setting and a host of guys flew all kinds of gear.

On hand were Partner (Chris Sackett), Wonder Boy, Hube Start, Henry Hajdik, Larry Bell, Mel Lyne, Martin Brown, Jack Oster and Paul Dranfield among others.

Models included Ringmasters, Mustangs, Chiefs, PT-19s, among original creations and

combat ships.

Partner put on a monoline stunt flying clinic for the troops, which was a real hit. A lot of people did not think it was possible to do that with monoline.

The gang was treated to a neato barbecue at the Bells' house just across the road at day's end.

This may become an annual affair, and we can only encourage more of you to come on out and fly at this lovely little field in the heart of the Fraser Valley.

Northwest well-represented on U.S. world championship team

As a hotbed of control-line flying and competition, the Northwest region frequently provides some of the members of the United States team in the aeromodeling world championships.

The world championships are held every two years, each time in a different country. The 2004 world championships will be held in the United States, at the National Aeromodeling Center in Muncie, Ind., headquarters of the Academy of Model Aeronautics. As an added bonus, the world championships will be held in the week previous to the control-line national championships, to be held at the same site. It's a great modeling twoweek vacation for modelers: You can attend and watch the world championships, or work as a volunteer there if you're not a contestant, and the follow it up by flying in the Nats the following week.

Contestants in the world championships are selected on the off years by trials held in each country. Each country sends teams of three fliers in each of the events: combat, racing, aerobatics and speed; plus, the reigning world champion is automatically invited to the following championships. They compete for individual and team titles in each category. U.S. trials for the four events have been held this summer and fall.

As usual, Northwest fliers made the teams. Here are the U.S. teams to the 2004 world

championships in Muncie:

AEROBATICS

Paul Walker, Kent, Wash. Bill Werwage Ted Fancher

Bob Hunt (alternate)

COMBAT

Mark Rudner David Owen Ron Colombo Mike Willcox (reigning champion) Andy Minor (alternate) Holden Hill (junior)

RACING

Leonard and Aaron Ascher Todd Ryan, Pasco, Wash., and Tim Gillott Stoo Willoughby and Bob Oge Jim Holland and Dave Wallick (alternate)

SPEED

Trials were being held as this article was being prepared.

Flying Lines has asked people who attended the team trials to write reports for us. Following are commentary by Don McClave on the stunt trials, then comments by Jeff Rein and Ken Burdick on the combat trials. Todd Ryan has promised a report on the racing trials, to come later, and Will Naemura will be providing commentary on the speed trials.

U.S. Aerobatics Team Trials

By Don McClave

I spent the recent Labor Day weekend at the AMA national flying site in Muncie, Ind., for the United States Team Trials to determine which three pilots would represent the United States in the F2B (control-line precision aerobatics) event at next year's World Championships. As on many previous occasions, my purpose in going was to support Paul Walker in his efforts to make the team.

After absence, the World long Championships will return to the United States at the Muncie site, July 5-12, 2004. As a result, the level of competition was unusually intense, with two-dozen top-notch fliers vying for the chance to try and recapture the team championship for the United States on our home turf. In my opinion, at least one third of the field flew at a level that September-October 2003 Page 11

Flying Lines

Issue #194

would have placed them on most previous teams; the flying was that good!

In preparation for the World Championships, AMA had added new control line circles, so there was plenty of opportunity for everyone to practice as much as desired throughout the weekend. Event Director Warren Thiart, Head Judge Gary McClellan and Chief Tabulator Shareen Fancher did their usual magnificent job of ensuring that everything ran like clockwork throughout the weekend, and they were supported by a cast of experienced and dedicated judges. In short, the stage was set for a great contest.

Longtime competitor and many-time champ, Bill Werwage got off to a great start on Saturday and flew with a consistency and accuracy that he hasn't displayed for years. Flying his proven P-47 "Razorback", powered by a PA .61, Bill stayed on top all weekend and showed why he just missed winning what would have been his third world championship in Sweden last year. Bill first became a stunt legend when he won the Senior Division at the 1959 Los Alamitos Nats, and then bested my boyhood stunt hero, Open winner Bob Palmer, in the Walker Cup fly-off that ensued. To say that he hasn't lost his touch over the past four decades would be an understatement, to say the least!

Virtually neck-in-neck with Bill all weekend was Paul Walker, with an improved Mk. II version of his 2002 NATS-winning Mustang, powered by a Saito .72 4-cycle. Paul has spent nearly three years working with 4-cycle engines, which have many attributes that may well make them the engines of choice for CL aerobatics in the future. He continues to make excellent progress in optimizing the airplane-engine-prop-fuel combination to reach new levels of performance. Since I see a lot of Paul's flights each year, I can report that his flying is getting better and better all the time. He's well ahead of where he was a year ago, when he won an unprecedented ninth national championship, and there's still almost a year to go before the World Championships!

While Bill and Paul were clearly at the front of the pack, not far behind were Ted Fancher, Bob Hunt, Bill Rich and 2003 NATS champ, David Fitzgerald. It was a dogfight all weekend, and wasn't settled until Ted Fancher put up a magnificent, and unbeatable, flight with his ancient Final Edition to edge out Bob Hunt for the third and final team spot; yet another seasoned

veteran digging deep when it counted most. Ted has won two of his four national championships with this plane, and finished second two or three times, but he promises a new ship for 2004. Watch out, everyone!

Bob Hunt is the team alternate, and the story of how he got there is a remarkable one of ability and perseverance. Bob showed up with a brand new plane, an updated version of his .40-sized "small" Genesis from 1980, powered by a Ro-Jett .40, an engine with which Bob had no experience. He struggled, and struggled, and struggled! Then things started to come together and Bob finished a strong fourth, flying a setup that many would have imagined couldn't possibly be competitive. Bob is a former World and NATS champion, and proved once again – as if there were any doubt – that he's a truly remarkable talent!

The 2004 team is both experienced and motivated. Both Bill and Paul have won at the world championships before, and Ted has been near the top in his two previous appearances. Bill and Ted are approaching the end of long and highly successful competitive careers, but are flying superbly and no doubt motivated by the thought that this might be their last chance to grab the brass ring. Paul has won far more U.S. national championships than anyone in history, but has often fallen just short in world competition. His one win came in Sweden in 1992, but his 4-cycle setup is intentionally tailored to the style of flying favored by most international judges. He'll be very, very competitive!

Predictions? My guess is two of our flyers in the top five, the third somewhere in the top 10, which should enable us to regain the team championship. This is going to be the best-prepared United States team in some time, and I honestly think it's going to be our year. By the way, you can get a preview of next year's World Championships by planning now to attend the Northwest Regionals in Albany, Oregon next Memorial Day weekend. Ted and Paul will lock horns with David Fitzgerald and other top fliers in the annual battle for bragging rights in the Pacific Northwest.

Make your airplane stick out

Get some nifty Flying Lines stickers to decorate your plane or flight box.

Send a \$2 donation to cover the cost, and we'll send you a bunch.

Combat team trials

By Ken Burdick

Someone asked if we flew in the rain at the trials. Yes ... "kickin an gouging in the mud and the blood and the beer" (lyrics from "A Boy Named Sue.")

The weather was nearly as big a story to me as the incredible flying and equipment. I can say I'm from Seattle but have never seen rain before.

Saturday we flew in the downpour the wind was high abut no one complained. We fought, lived and died with what was there — people fell, slid and face-planted at times but it did not effect the high caliber of play. Not one whimper was heard — in fact it made the resolve even greater for some — like playing football in the mud.

You can only get so wet then it just doesn't matter anymore.

Jeff, Steve and I bought rain gear and big rubber boots — we looked like Kenny from South Park.

About 3/4 through round, 3 Pat announced that a BIG storm was an hour away — finish the round if you're in it and run like hell if you're not.

We were of course ALL stuck in the mud — I wish you all could have seen it — cars trucks all trying to get traction. The AMA has these little green John Deere 4-wheel mules and they pulled many out of the muck. The road was a good 100 yards away though and the run to it is another story in itself. Steve Brisbay made the most spectacular exit — backwards at 35 mph hitting the "swamp" with George Cleveland running for his life, mud went up in a fountain and Steve barely making it to the road.

The weather was a bitch but bonded us and branded us too.

Sunday, as the next storm came closer and it was getting darker — (both storm and evening were on the way) a stream on cars and minivans were exiting the complex. The combat guys were still raging together and we wanted to finish this monster — no one even though about leaving until it got too dark to see well enough. Now I know what the animals in the drive through preserves feel like: "Oh, look — it's COMBAT FLYERS!"

There were tailgate parties at motels because power was out — no place to go so they made their own fun.

That is just a warm up for what happened — by the time Monday afternoon came and S/L

started AMA decided to evacuate the place again — once again the combat guy's stayed and watched the stream of cars go by — George C looked at the clouds and lightning that was hitting nearby — said, "It's goin' around us" so we all stayed and drank sodas)

A couple of hours later we got the OK to continue.

Riley Wooten was there with us and the Mears — that was as much fun as the storm.

Combat Trials, part 2 By Jeff Rein

Well you have heard about the weather, and Steve's 35mph exit from the field in reverse, but when he hit that lake, it was a sight to behold.

He did have the window rolled up though. My first match was with Darrin Albert. The wind was blowing 25mph plus, and the performance of my PC6 and his Zorro were outstanding. We flew to a cut a piece then wound up in a couple of consecutives. The first thing I learned is that I will NEVER use American lines in F2D competition again. After a couple of loops, Darrin's Russian razor wire cut through my lines like a sharp knife through 1/4" rope. My plane turned upwind at about 50' and dragging a full set of lines plus the added drag of the 25mph winds, my shutoff stopped the motor about the time it left the circle 180 degrees from where I was cut away. At 2.4 seconds per lap, I calculate that the motor stopped in about 1.2-1.5 seconds. The plane floated down about 15' from the judges canopy and didn't even break the prop. In fact I used that plane the rest of the contest. George got the streamer and I got back up, but soon ran out of fuel with a pinhole in the bag. I whipped it into the pits, and promptly received a 40 point penalty for stepping out of the circle. One loss. My next match my pit crew could not get either one of my motors going before the two minute time limit. Two losses. My next match was against Dick Stubblefield. Trying to be careful and take my time, I was behind Stubby, he wiggled to stall his plane, then fed me the whole streamer, a kill, not good. I hid for about 1-1/2 minutes, then he got me to the knot. I hid some more until 10 seconds to go then he knocked me out of the sky, and lost on ground time. Three losses. Steve and Ken flew well with two and three wins respectively. The best part of the trials was watching the finest combat that I have ever seen on Sunday. I may have to go back next year just to watch. What a treat.

The Scoreboard

Northwest control-line competition standings.

Championship races begin shaping up

The end of the competition season is approaching, and the Northwest standings are beginning to take their final shape, with only a couple of contests not yet counted.

August and September was a busy time for meets, and nearly every category's top positions were juggled.

See the contest reports in this issue for details, which show how many points were scored by each flier in each event.

Contests counted to date: March 29, Arlington, Wash.; April 12, Arlington; May 23-25, Albany, Ore.; June 14-15, Tacoma, Wash.; June 21, Arlington, Wash.; July 12, Arlington; July 19-20, Arlington; July 26, Richmond, B.C.; July 27, Richmond, B.C.; Aug. 1-3, Snohomish, Wash.; Aug. 1-3, Coquitlam, B.C.; Aug. 23, Tacoma; Aug. 30-31, Portland, Ore.; Sept. 6-7, Salem, Ore.; Sept. 13-14, Tacoma.

Following are standings for updated events:

2003 STANDINGS

PRECISION AEROBATICS	
1. Paul Walker, Kent, Wash.	42
2. Keith Varley, Vancouver, B.C.	31
3. Chris Cox, Delta, B.C.	30
4. Pat Johnston, Meridian, Idaho	27
5. Dan Rutherford, Bothell, Wash.	19.5
Bruce Hunt, Salem, Ore.	19.5
CLASSIC STUNT	
1. Don McClave, Portland, Ore.	27
2. Bruce Hunt	11
Dan Rutherford	11
4. Randy Powell, Port Orchard, Wash.	8
5. Rich McConnell, Seattle, Wash.	8
OLD-TIME STUNT	
1. Dan Rutherford	30

Issue #194

Flying Lines

	P-40 STUNT		
	1. Bob Smiley, Kingston, Wash.		8
	2. Mike Haverly, Auburn, Wash.		5
	Rich McConnell		5
	4. Dan Rutherford		3
	5. Dave Pellerin, Kirkland, Wash.		2
	OVERALL STUNT		
	1. Dan Rutherford		63.5
	2. Keith Varley		55
	3. Paul Walker		42
	4. Chris Cox		36
	5. Don McClave		35
	6. Mike Conner		33
	7. Bruce Hunt		30.5
	8. Pat Johnston		27
U	9. Bob Smiley		25
,	10. Rich McConnell		20
	80 MPH COMBAT		
	1. Tony Huber, Renton, Wash.		18
	2. Mel Lyne, Squamish, B.C.		12
	3. Mike Rule, Black Diamond, Wash	h.	11
	4. Milissa Huber, Stanwood, Wash.		10
	5. Dave Baxter, St. Helens, Ore.		9
	Burt Brokaw, Pullman, Wash.		9
	OVERALL COMBAT		•
	1. Bob Smith		32
	2. Milissa Huber		27.5
	3. Mel Lyne		23
	4. Cayce Rule, Black Diamond, Was	sh.	19
	5. Tony Huber		18
	6. Paul Dranfield, Mission, B.C.		15.5
	7. John Thompson, Eugene, Ore.		14
	8. Mike Rule, Black Diamond, Wasl	h.	11
	9. Paul Vallins, Lynnwood, Wash.		10
	10. John Morrow, Bellevue, Wash.		9
	Burt Brokaw		9
	Dave Baxter		9
	PROFILE NAVY CARRIER		
	1. Mike Potter, Auburn, Wash.		16
	2. James Cox, Delta, B.C.		14
	3. Shawn Parker, Seattle, Wash.		10
	4. Mike Conner		3
	5. Dennis Matthews, B.C.		
	John Hall, Sumner, Wash.		2 2 2
	Bob Parker, Renton, Wash.		2
	.15 NAVY CARRIER		
	1. Shawn Parker		14
	2. Mike Potter		13
9	eptember-October 2003	Page 14	4
U	OPEGETION OCCUPIED ZOOD	I auc I	T.

24

17

10

2. Keith Varley

3. Mike Conner, Pitt Meadows, B.C.

4. Bob Emmett, Sequim, Wash.
5. Roy DeCamara, Vancouver, Wash.

3. James Cox		9	James Cox	3
4. Mike Conner		3	3. Rich McConnell	1
5. Frank Boden, Revelstoke	RC.	2	TOP JUNIOR-SENIOR CONTESTANTS	^
Rich McConnell	., b.c.	2	1. Milissa Huber	32.5
CLASS I NAVY CARRIER		_	2. Cayce Rule, Black Diamond, Wash.	20
1. Shawn Parker		4		2
		4 3	3. Maria Huber, Stanwood, Wash.	1
2. Mike Potter	\- <u>-</u> -	1	4. Jason Parker, Seattle, Wash.	1
3. Dave Shrum, Roseburg, C	Jie.	1	Philips Lives because treate of standings in a	11 4374
OVERALL CARRIER		0.0	Flying Lines keeps track of standings in a rulebook and Northwest official events, in all No	
1. Mike Potter		36	sanctioned contests.	HHIWESL
2. Shawn Parker		30	Your FL editors do their best to keep up	with the
3. James Cox		24	results, but contest directors can help keep the st	andings
3. Mike Conner		6	up to date by making sure to send the result immediately after the contest. If you spot errors, p	
4. John Hall		4	us know.	
Dick Salter, Seattle, Wa	ash.	4	Results must include the placing in each	n event
6. Frank Boden		3	through fourth place and the report also must number of contestants in the event, in order for t	
Dennis Matthews, B.C.		3	standings to be counted accurately.	ne ponic
Rich Salter, Seattle, Wa	ash.		Also, please include in your report the home	etown of
9. Dave Shrum		2	the contestants, and note which contestants are	juniors.
Bob Parker		2	Only Northwest residents are counted in the st (AMA Dist. XI and British Columbia). The score	
Rich McConnell		2	contestant also should be listed for general r	eporting
FLYING CLOWN RACE			purposes and for checking against the Northwest	records.
1. Mac Ryan, Pasco, Wash.		10	If you flew in a contest that doesn't appe	
2. Todd Ryan, Pasco, Wash		4.5	counted, contact the contest director or Flying Lin Special notes: Precision aerobatics exper	
S&S Racing Team, Seat		4.5	scores are multiplied by a factor of 1.5. W	
4. Nitroholics Racing Team		4	individual is allowed more than one entry in	a single
5. Mike Conner	,0	2	event, only the highest-placing score shall be Events run by nonstandard rules will be counted	counted.
Larry Bell, Clayburn, B.	C.	2	the overall standings for the category.	Colly III
Milissa Huber		2	Send contest results, corrections and	
OVERALL RACING		_	correspondence regarding Northwest Con Standings to John Thompson, 2456 Quince St., Eug	npetition
1. Todd Ryan		27.5	97404, e-mail JohnT4051@aol.com. For a printed	copy of
2. S&S Racing Team		22.5	complete standings for any event, or for a copy of t	he rules
3. Mel Lyne		18	for any Northwest event, send a self-addressed, envelope.	stamped
4. Nitroholics Racing Team		11	enociope.	
5. Mac Ryan	•	10	Palmer Cun final standin	αe
6. Henry Hajdik, New Wes	tmineter BC	7	Palmer Cup final standin	
7. Jim Booker, Arlington, V		6	Here are the final standings for the	
8. Milissa Huber, Stanwoo		5	Palmer Cup perpetual trophy for th	e top
9. Marty Higgs, B.C.	a, wasii.	3	performance in Classic Stunt in three s	elected
Dave Shrum		3	Northwest contests:	
SPEED (All classes combine	(he	9	1. Don McClave 25	
		21	2. Dan Rutherford 13	
1. Loren Howard, Vancouv		21 19	3. Gordon Delaney 10	
2. Ken Kortness, Spokane,			4. Ted Fancher 7	
3. Mike Hazel, Salem, Ore	•	14 12.5	Bruce Hunt 7	
4. Ron Salo, Surrey, B.C.	ven Mach		6. Rich McConnell 5	
5. Chuck Schuette, Vancou		9	7. Phil Granderson 3	
6. Jim Booker, Arlington, V	vasn.	6	Randy Powell 3	
7. S&S Racing Team	0	4	Bob Smiley 3	
8. Craig Bartlett, Corvallis		2	10. John Thompson 1	
9. Ted Gritzmacher, Battle		1	Dave Pellerin 1	
SCALE (All classes combin	<u>ear</u>		Scoring based NW Regionals, Stuntathon and	Raider
1. Mike Potter		3	Roundup. 1st=10; 2nd=7; 3rd=5; 4th= 3; 5th= 1	
Flying Lines	Issue #194		September-October 2003 Page	15



Northwest Competition Records

Best performances established between Northwest CL modelers in sanctioned competition

Two more Northwest records were knocked down in this season's competition, one in speed and one in racing. Todd Ryan of Pasco, Wash., teaming with Tim Gillott of California, turned a heat of 3:28.49 in FAI Team Race at the U.S. world championship team trials in July. He bested his own record (set with Bob Whitney in 2003) of

In speed, Craig Bartlett turned 171.2 mph at the Oregon CL Speed Championships in Salem on Sept. 7. He erased Ken Kortness's 170.31 speed, set at the Albany Regionals in 2002.

Congratulations to both record-setting fliers!

1/2 A Speed	132.56	Chuck Schuette	9-21-02	Salem, Ore.
A Speed	187.23	Paul Gibeault	12-2-01	El Monte, Calif.
B Speed	161.37	Ken Kortness	5-25-02	Albany, Ore.
D Speed	171.20	Craig Bartlett	9-7-03	Salem, Ore.
Jet Špeed	168.62	Loren Howard	5/23/03	Albany, Ore.
Formula 40 Speed	1 <i>5</i> 9. <i>5</i> 8	Ken Kortness	5-25-02	Albany, Ore.
21 Sport Speed	153.78	Loren Howard	9-18-99	Salem, Ore.
FAI Speed	183.52	Will Naemura	9-19-99	El Monte, Calif.
1/2 A Profile Proto	106.78	Chuck Schuette	6-20-99	Tacoma, Wash.
21 Proto Speed	133.03	Chris Sackett	5-25-97	Roseburg, Ore.
NW Sport Jet Speed	153.78	Mike Hazel	8-3-03	Coquitlam, B.C.
Mouse Race I - 50-lap	2:14.35	Todd Ryan	7-13-01	Muncie, Ind.
Mouse Race I - 100-lap	4:22	Paul Gibeault	7-15-99	Muncie, Ind.
Mouse Race II - 70-lap	3:01.02	S&S Racing Team	5-24-02	Albany, Ore.
Mouse Race II - 140-lap	6:31.41	S&S Racing Team	5-24-02	Albany, Ore.
AMA Scale Race-70-lap	2:53	Todd Ryan	7-00	Muncie, Ind.
AMA Scale Race - 140-lap	5.51	Todd Ryan	5-25-03	Albany, Ore.
NW Goodyear - 70-lap	3:42.22	Todd Ryan	5-24-02	Roseburg, Ore.
NW Goodyear - 140-lap	8:01	Julie Rice	5-27-95	Eugene, Ore.
Slow Rat Race - 70-lap	2:41	Todd Ryan	7-00	Muncie, Ind.
Slow Rat Race - 140-lap	5:49	Todd Ryan	7-16-98	Muncie, Ind.
AMA Rat Race - 70-lap	2:24.21	Todd Ryan	5-25-02	Albany, Ore.
AMA Rat Race - 140-lap	<i>5</i> :38	Todd Ryan	5-24-98	Roseburg, Ore.
FAI Team Race 100-lap	3:28.49	Ryan/Ğillott	7/12/03	Muncie, Ind.
FAI Team Race - 200-lap	7:40	Knoppi/McCollum	6-84	Shanghai, China
NW Sport Race - 70-lap	4:00	Bruce Duncan	5-12-87	Richmond, B.C.
NW Sport Race -140-lap	8:22	Todd Ryan	7-24-99	Richmond, B.C.
NW Super Sport - 70-lap	3:12	Todd Ryan	5-27-01	Roseburg, Ore.
NW Super Sport - 140-lap	6:38	Todd Ryan	5-28-00	Roseburg, Ore.
Quickie Rat - 70-lap	3:05	Todd Ryan	5-26-01	Roseburg, Ore.
Quickie Rat - 140-lap	68 laps	Todd Ryan	5-26-01	Roseburg, Ore.
Flying Clown Race, Laps:	319	Todd Ryan	8-4-00	Coquitlam, B.C.
Class I Carrier	370	Todd Ryan	8-6-00	Richmond, B.C.
Class II Carrier	330.25	Orin Humphries	9-19-87	Kent, Wash.
Profile Carrier	330.17	Mike Potter	5-23-03	Albany, Ore.
.15 Carrier	244.7	Todd Ryan	5-26-01	Roseburg, Ore.
AMA Endurance	39:56	Mark Hansen	7-12-98	Salem, Ore.

Records as of 9/22/03

Updated records in boldface

Flying Lines

Issue #194

September-October 2003

Back to basics — and beyond

By Dave Shrum

I just finished painting my newest stunt airplane — a Jack Sheeks Spitfire in full camouflage — brown, green, and blue on the bottom.

The basic airframe has been reduced from the full size by 20% so that a .19-size engine would be just right. It is 45" wing span — 395 sq.in. The plane weighs 18 oz. bare bones. Finished and before covering it weighed 29-1/2 oz. The finished covering and paint was 3 oz.!!!!!

OK, now how did I come out with covering and paint so light? Back To Basics.

It has been 25 years since I have done a silkspan and dope covering, I loved it!! Yes, it was 11 coats of Aerogloss clear (3/4 qt.) and sanding sealer. I had 4 quarts of Aerogloss to use up on something.

The process was four coats on the bare wood — until shiny. Sand to get the fuzzies out and put the silkspan on with 25/75 thinner/dope painted thru the silkspan and rubbed down with finger. Four or five coats of clear on the silkspan until shiny — Sand out and then two coats of sanding sealer — sand out with 400 grit.

Spray final coat of clear — WOW, I haven't seen this smooth of a base for a LONG time. NOW, the beyond part! Grab your favorite 1" camel hair brush and your colored paint — Would you believe; ENAMEL, DERUSTO!!! I mean that, enamel. You say that enamel is heavy. Is 1 oz. on a 395 sq. in. airplane heavy???!!! I think not. I have always wanted to try this and I was even surprised.

The secret to painting enamel is the viscosity and how you put it on.

First, the viscosity: Put some paint in a small jar and add thinner, very, very, slowly. I use a jar large enough to get the 1" brush into and at least 1-1/2" depth of fluid. Made a stick 3/8x1/8" and dip into the fluid 1" — pull it out and count.!! When you get to a 7 or 8 count, a drop will come off the end. I started with a 6 count and it was not covering very well —I could see the brush marks and couldn't smooth them out. 7 or 8 count was just right and will not sag.

Now — do you know how to paint with a brush? Clean the surface with a tack cloth and

then clean it with a "prepsol" or paint thinner on a piece of T-shirt rag. It has to been CLEAN. Dip your brush into the paint about 1/2 way and patpat on the sides of container — don't scrapescrape!! Now put the brush on the surface and go one way until the load runs out. Go back to the start point and go the other way. You should have paint on the surface about 1" X 7". When you load up your brush again DO NOT put it into the fresh paint—go to a spot about 3-1/2 inches to the right or left of the paint on the surface and make the same pattern — stroke right, stroke left. Do large enough area and then cross-stroke to smooth all of it together. You will end up with a painted airplane that will not show any brush marks and is very glossy!!

I hang my airplane over an oil-filled electric heater and it cures the enamel in about four hours. Yes it is fuel proof (I have painted my 1/2-A stunt planes with enamel also. I have to thank Frank Macy for showing me how beautiful a brush-enamel airplane could be!!!

OH, your favorite color of ename! Go to your paint store and pick out the color from the display rack. They can mix almost to the exact shade that you want. The green of the Spitfire started out as "Hunter green" and was too bright. He knocked it down by putting in blue (not black) to bring it to the right shade.

I have Ted Gritzmacher to thank for putting me on to the MIN WAX rattle cans of Polyurethane clear coat. It is fuelproof and the spray pattern is to die for — wonderful spray pattern. One coat of the semigloss Min Wax knocked the shine out of the "spit" and gave it a nice "military" look. Have some fun this winter with ENAMEL!

Pon't be left behind!

Your life just wouldn't be the same without your *Flying Lines* arriving regularly to remind you about how much fun it is to fly model airplanes, right! Time to re-up for these subscribers:

Scott Crichton, Ted Gritzmacher, Ronald Ingham, Mel Marcum, Michael Potter, Scott Riese, Dan Rutherford, Homer Smith.



Speed news and notes by Mike "ZZ" Hazel

Refried speed — Jet style!

As most of you speedsters know, the North American Speed Society (NASS) added a sport jet event to the National schedule this year.

In doing so, a set of rules had to be created. The NASS rules borrowed many aspects of the Northwest rules, but did not incorporate our allowance of externally cut-up heads. This is unfortunate, as it eliminates a lot of engines which still meet the intent of the stock engine rule.

Also included was what many feel to be a very overkill wire size of .022. The .022 size is utilized mainly because of allowing heavy planes, and the unrealistic notion of them going record speeds.

Most of you probably also noted that a recent "Speed Times" newsletter "dissed" our Northwest Regionals speed results by not reporting the Sport Jet results, and then going on to make us out to be bad guys because we are running a supposedly unsafe wire size.

I don't believe that our wire size is unsafe on the present planes being flown, but it probably would be prudent to increase the safety margin.

After running the formulas in the rule book pertaining to flight load, here are some possible options:

- 1) Go to .020" x 70' wires and leave everything else the same.
- 2) Go to .020" x 60' wires and reduce maximum weight allowed.
- 3) Go to .018" x 70' wires and reduce maximum weight allowed.
- 4) Retain the .018" \times 60' wires, but change fuel formula to slow planes down.
 - 5) Just go to the NASS rules.
 - 6) Do nothing and run as an "outlaw" event.

I personally do not have a single preference, but do feel that the last two choices are the worst ones.

Let's hear from the active Sport Jet fliers: Loren Howard, Ron Salo, Marty Higgs, Dick Salter, Tom Strom, Ken Kortness, Jerry Rocha, Jim Rhoades. If I left anyone off that list, sorry. Feel free to jump in.

This discussion left out lots of specifics, including the pros and cons of each option, so we do have more to talk over. Please, let's hear from you guys, so we can all figure out how we want to do our event next year.

Combat news and views by Mel Lyne Cornucopia

Fox .36 Combat Motors, Keeping Them Alive (Part 4)

Now let's talk about well-used Mk VIs and what you can fix to keep them running. Basically, if your engine has enough compression left to fire, then it can be started and made to run on pressure reasonably well. In order to run on suction (as in Slow Combat) you require a reasonably good piston/cylinder fit in your engine. So we will just talk about motors to be run on pressure in Fast or 80 mph combat.

As I stated earlier, the worst feature of the Mk VI is the roll pin through the piston wall. Many of us have motors which have snapped this pin and ruined the piston and cylinder when the pieces exited. Some of these pistons and cylinders can be salvaged and made into usable

components.

Let's assume we want to make a reliable 80 mph motor out of a "beater" which has done the roll pin trick, snapped the rod, or worse, snapped the crank pin. Start by getting the case and crank assembly in shape. Clean all the components and check that the bearings are smooth

and not 'lumpy.'

The front bearing is a hybrid which seems to run forever. It should just need cleaning (WD-40 or lacquer thinners) and oiling (Rislone or ATF). The rear bearing, if original equipment, is the crimped cage type. If it is still silky smooth after cleaning and oiling, it can be left in place for 80 mph use. If it is at all lumpy or if you want to push the motor hard in Fast then it's best to change it to the "phenolic cage" variety of bearing. You need a #6902 phenolic cage bearing which costs around \$20.

The procedure for changing the rear bearing; Put the new bearing with the crank pushed into it, into the freezer. This reduces the outside diameter a few microns. Have the exposed ball side of the bearing against the

Flying Lines

Issue #194

September-October 2003

Page 18

crank throw. This makes it easier to inspect and clean the bearing later after a "mud-balling". Now look down into the case at the old rear bearing and notice how the rear bearing looks as it sits fully seated in the case. After you have installed the new bearing it should look the same, fully seated. After the new phenolic cage bearing and crank have chilled an hour, heat the case around the outside of the rear bearing with a hair dryer to get it as hot as possible. Then, using a work glove, hold the case firmly and whack the backplate face really hard down onto a wooden block on a solid surface. The rear bearing is supposed to pop out. If you are lucky it will pop out in two or three whacks. If it doesn't, apply more heat and try again. If after several tries it still hasn't moved, it's time to get the propane/butane torch. Heat it with this and it should pop out on the first whack. Try not to roast the case. Use the minimum heat required to do the job.

If you have a wrecked rear bearing you can take it apart to use the outer raceway as a bearing installation aid. If you take the chilled crank and bearing and put this extra outer raceway between the rear face of the bearing and the crank throw, then the force to install the bearing will go directly into the outer raceway of the new bearing. If you don't use this "dummy" outer raceway, then the installation force is transmitted from the inner raceway, through the balls and then into the outer raceway. This method can work fine as long as the case is well heated, the bearing is chilled, and a light spray of WD-40 is applied to the bearing only. Don't spray in the case as it could puddle or boil and leave a residue.

So take your chilled crank and bearing assembly and insert it into the rear of the crankshaft hole in the hot case. You can probably push the bearing into it's seat a little bit with your thumb in the glove. This gets it started. Now take the prop nut and washer, install a large old prop and wind in the nut to draw the bearing fully into its seat. Look down into the case to see that the bearing is fully seated. If you are not using the "dummy" outer raceway, then be careful you do not put too much force through the bearing. So be careful that you stop winding in the prop nut as soon the bearing is fully seated. This is where a new bearing can be damaged. It is safer to use a "dummy" outer raceway so that no high forces are put through the bearing.

Once the bearing is seated, remove the "dummy" raceway if used, and fully install the crankshaft. A drift tool in the crank and a few light taps with a hammer will seat the crank in the bearing. You can confirm that the bearing and crank are "home" in the case by looking at the step-down on the crank at the front of the front bearing. The crank step must be located very slightly in front of the bearing. If it isn't, then your crank will bind when you tighten the prop. If you have this problem then the rear bearing is not fully "home" in the case. If you got lubricant behind the bearing, then no amount of force will seat the bearing. It has to come out and be reinstalled. Check that the bearing seat in the case is very clean. This rear bearing fit in the case can wear out and end the life of the engine. The crankshaft fit in the rear bearing is a light press fit, whereas the rear bearing fit in the case is a medium press fit, or interference fit. Both these fits are important to the health of the motor. If either fit becomes loose, then motor performance suffers and can result in a crankshaft failure at high rpm. So always heat the case when removing or replacing a bearing. The Mk VI actually has a lot more case material around each bearing than the previous Mks, and as a result bearing replacement is a fairly safe procedure. The Mk III and IV are thinner in the case around the bearings and these cases wear out more easily with bearing changes. I have

several with loose rear bearing fits. Even with "Loctite" to hold the bearing, the motor is severely compromised. Crank failures right at the bearing usually happen eventually with a poor fitting rear bearing. At one time you could order "oversize" bearings to correct this problem. I don't believe these are now available. As Henry Nelson has stated, the rear bearing is the highest stressed component in these combat motors

Next we take a look at the piston/rod/cylinder assembly. For 80 mph a Fox rod with a bronze bushed big end and no bushing at the top is adequate. If you want to run hard in Fast, then you need a rod bushed at both ends. RPM and others are available. Check the piston for damage. You don't want any gouges, grooves or scoring higher than the wristpin hole. Below the hole damage is acceptable. If there is damage, smooth out any grooves with a fine file or emery cloth. But don't touch the piston

higher than the wrist pin. This part has to seal well.

Now look at the cylinder inside carefully. There should be no chrome missing in the port areas or elsewhere on the inside surface. If there is chrome missing, it is a "no-hoper" and can only be run successfully after a re-chrome. If it is gouged or grooved from the bottom up to the bottom edge of the exhaust port(caused by an exiting piece of roll pin), this is usable as long as the damage does not go above the ports. You need to smooth out this groove. So get a kitchen paring knied with a rounded tip and slowly work the groove to get the sharp chrome edges to smooth down into the groove. When you can feel there are no high spots, gently insert the piston and feel if the fit is smooth. If there is any interference, work the paring knife on the groove some more to smooth it down.

...to be continued in Part 5 Mel Lyne can be contacted in care of Flying Lines.



Superior sanding: Recently I picked up a set of sanding blocks at Eugene Toy & Hobby that made building airplanes easier in a big way.

These sanding blocks have a cutting surface made from tungsten carbide! They appear to be a lifetime product. "Use it. Brush it clean. Use it again!" says they label, and I believe they are correct. I've been using mine all summer and there's no sign of filling or wear.

The product is called the Sup-R Sander Tungsten Carbide Sanding Tool. You can get a set or add individual pieces. The set includes a typical plastic sanding handle. The cartridges are available in fine, medium or coarse.

They're expensive, but considering that they last forever, a pretty good deal!

John Thompson

Send your shop tips to Flying Lines.

Eugene, OR 97404

Flying Lines is produced by a staff of dedicated volunteers interested in keeping lines of communication open between Northwest region control-line model aviators. Flying Lines is independent of any organization, and is made possible by the fi-

nancial support of its subscribers.

The staff: Jim Cameron; Chris Cox; Fred Cronenwett; Dave Gardner; Paul Gibeault; Steve Helmick; Bob Huber, Joe Just; Mel Lyne; Don McClave; Nils Norling; Mike Potter; Dan Rutherford; Dave Shrum; John Thompson, editor; Mike Hazel, publisher —

and you!

Contributions for publication are welcomed. Any material submitted to the editor which is not for publication should be indicated as such. Duplication of contents is permissible, provided source is acknowledged. Contributions may be submitted by email or by mail to the address on the cover.

Flying Lines is published nine times a 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. Please make checks payable to Flying Lines.

Mail subscriptions and renewals to Flying Lines, in care of Mike Hazel, 1073 Windemere Drive N.W., Salem, OR 97304