

# Flying Lines

2456 Quince St., Eugene, OR 97404 JohnT4051@aol.com Editor: John Thompson/Publisher: Mike Hazel

## CL fliers burning up the summer sky

It's great to be alive and flying control-line model airplanes in 2001.

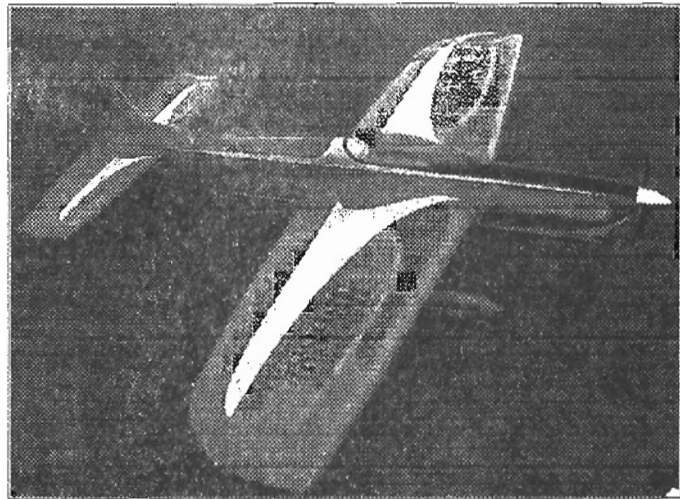
Our Northwest model aviation paradise, the Regionals, took place in heavenly weather on a great contest site. It was a six-ring circus of the best in CL flying, and the best possible sendoff for the Roseburg site. We now look to the future and hopes for more of the same in coming years. See Page 2 for more on that!

We're heavy into the summer contest season. The Stuntathon was humming along as this cover report was being written in early June, the Bladder Grabber was coming up, and lots of other activity large and small. See "Where the Action Is" for details on some new activities just added to the schedule.

And the news isn't just on the contest trail. In the Puget Sound, the club has changed its name to the Northwest Skyraiders, in hopes of building a better relationship with local governments around the region as they search for long-term flying sites. In Portland, the Fireballs have their show team sanctioned and have a full schedule of activity for this season. See reports in this issue on both topics.

The next issue of *Flying Lines* most likely will be a combined July-August issue, due in your mailboxes about Aug. 1, as we recover from a massive household painting project here at *FL* headquarters and gather up reports from the summer contests. *FL's* growing stable of regular contributors is pouring material in not only for your summer reading pleasure but for your technical support over the winter when flying activity is dampened a bit. (Deadline July 1, staffers!)

We hope you're enjoying your flying and your reading of your Northwest CL communications

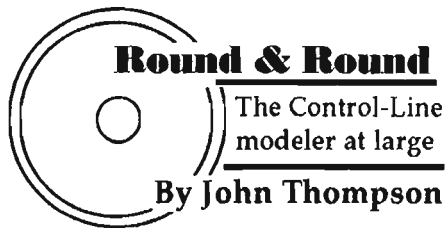


Former Northwesterner Phil Granderson returned to the Regionals in 2001 after a long absence. His gorgeous Diva captured the coveted Concours d'Elegance trophy awarded by the aerobatics pilots. Heman Lee photo

network, *Flying Lines*. Remember, the pages are open to everyone, and we always welcome your feedback on what you like best and want to see more of. *FL* is a team effort, and everyone on the mailing list is part of the team!

### In this issue ...

- |                             |    |
|-----------------------------|----|
| • Round & Round             | 2  |
| • Where the Action Is       | 3  |
| • Flying Flea Market        | 4  |
| • Contest results           | 5  |
| • Standings                 | 11 |
| • NW and Regionals records  | 12 |
| • Show Team News            | 14 |
| • Just for the Fun of it    | 15 |
| • Combat Cornucopia         | 15 |
| • The Cognitive Modeler     | 16 |
| • Northwest Carrier News    | 17 |
| • Northwest Skyraiders News | 19 |
| • The Real Thing            | 20 |



Modeling thought for the month:

*"Nothing is impossible for the man who doesn't have to do it himself."*

— Weiler's Law

## We can't wait until next year ...

The hum of the last stunt flight has barely wafted away on the gentle Roseburg breeze, and already planning is under way for the 2002 Regionals.

Usually, as soon as the last of the equipment is stowed away, the paperwork completed, results posted and published, the Regionals staff breathes a sigh of relief and forgets about the contest until December, when the work starts up again.

But this is no usual year, and preparation for Regionals planning was already under way while the flying was still going on in Roseburg.

That's because the Roseburg site and field work crew, which has served us well, is now retired. If there is to be a 2002 Regionals, there will have to be an entirely new site and much of the staff will have to be replaced.

Most competitors see the Regionals as three days of competition and sideshows. What competitors see is the tip of a very large iceberg. Now, most of what's under the waterline has to be regenerated.

The outgoing Northwest Regionals Management Committee has arranged for storage of the Regionals equipment for three months, to give time for us to determine whether the contest can continue. A successor NWRMC is being organized, and it will include, hopefully, members from the Eugene Prop Spinners, Umpqua Valley Modelers, Seattle Skyraiders, Central Oregon fliers, Western Oregon Control-Line Fliers, Portland Fireballs, and any other group or individual willing to work.

Some of those involved in planning and execution of the past Regionals are still willing to do what they have done. But those stepping aside leave a major gap to be filled.

To get an idea of what confronts us to resume the Regionals, even as a fairly streamlined event, here is what needs to be accounted for in the near future:

- Finding and arranging for use of a new site that can accommodate at least four asphalt circles and at least two grass circles for at least five days, including at least a day of setup and tear-down. In order to maintain the same geographical advantage, the site should be somewhere in Oregon near the Interstate-5 corridor.

- A committed work crew for setup and tear-down. This includes at least one and possibly more days in advance of the contest and the Sunday night and possibly Monday afterward. This is hard, labor-intensive work that is essential to the contest.

- A new registration crew, willing to prepare contestant packets in advance, staff the table for three days, calculate Grand Championship scores, and handle all the at-site paperwork.

- A staff to handle duplicating, folding, stamping and mailing about 1,000 pieces of correspondence before the contest in the form of flyers, prize solicitations, etc.

- A staff to design and arrange for trophies and prizes.

- Key personnel, some of whom remain and some of whom will have to be recruited: Community liaison, contest director, six event directors, registration chairman, field setup director.

There have been various individuals associated with the Regionals and thought of as "Mr. Regionals," the guy who did it all. But, in fact, the Regionals has always been larger than one individual, and no single individual can carry it on. So, we can't dump this all into the lap of one person and expect a 2002 Regionals to happen. If you want a Regionals next year, *you* have to pitch in.

The successor NWRMC is being organized by the current CD, Craig Bartlett. Contact Craig to volunteer to be a part of this effort. He can be reached at [scraigbart@yahoo.com](mailto:scraigbart@yahoo.com), or at (541) 745-2025.

And remember, there's a deadline. If there isn't a clear direction by the end of this summer, the chances of a 2002 Regionals diminish considerably. Now is the time to get involved.

*Send comments, questions and topics for discussion to John Thompson, 2456 Quince St., Eugene, OR 97404. E-mail [JohnT4051@aol.com](mailto:JohnT4051@aol.com). World Wide Web: <http://members.aol.com/JohnT4051/NorthwestCL.html>.*

---

# Where the action is!

Coming events in Northwest Control-Line model aviation

---

## June 23-24

**Bladder Grabber** triple-elimination fast combat tournament, Harvey Field, Snohomish, Wash. Info: Jeff Rein, 14326 102nd Ave. N.E., Bothell, WA 98011.

## June 24

**Racing contest** for .15 Sport, Northwest Sport and Clown Race, Richmond, B.C. Info: Mike Conner at (604) 465-7277, e-mail conrat@intergate.bc.ca.

## June 30 (New Date!)

**Nostalgia Diesel Combat**, Surrey Ultralite Field, 988 176th St., Surrey, B.C. First driveway 250 yards north of 8th Avenue on the east side; look for the red hangars. Info: Mel Lyne at mlyne@alpha.sea-to-sky.net. Date changed from July 7.

## July 7

**Lucky Hand Fun Fly**, Bill Riegel Field, Salem, Ore. Bring any kind of plane. Fly any kind of flying you want. Make five flights, get a poker hand, maybe win a prize! Info: CD Mike Hazel, (503) 364-8593, e-mail ZZCLSpeed@aol.com.

## July 21-22

**Central Oregon Lawn Darts Stunt Contest** Field of Dreams, Redmond, Ore. Info: Nils Norling, (541) 546-9132, e-mail hogrider@palmain.com.

## July 28-29

**PAC Classic**, Richmond, B.C. Saturday: Northwest Sport Race, Clown Race and Carrier. Sunday: Old-Time Stunt, Precision Aerobatics.

## August 11-12

**Can-Am Speed Championship**, Upper Coquitlam River Park, B.C. Info: Marty Higgs, (604) 729-5286.

## August 12

**Tailhook 2001**, Clover Park Technical College, 4500 Steilacoom Blvd, Lakewood, Wash. All carrier events will be flown, plus a Golden Age Biplane event for carrier biplanes from the 1920s and '30s. Info: Mike Potter at Skyshark58@cs.com.

## August 25-26

**Fifth Annual WOLF Summer Meet**, Bill Riegel Field, Salem, Ore. Racing, combat and precision

aerobatics events to be announced. Info: CD Mike Hazel, (503) 364-8593, e-mail ZZCLSpeed@aol.com.

## September 1

**Bruce & Gerry's 2nd Annual 1/2A Stunt Contest**, Richmond, B.C. Info: Bruce Duncan, (604) 513-9450, a.b.duncan@home.com

## September 8-9

**Scappoose Barnstormer Tee Dee 5 Rounder Combat Challenge, BBQ, Social, Camp-over and McCoy/Fox/Tee Dee Combat Swap Meet**, at Barnstormer B&B, near Scappoose Airport, Scappoose, Ore. Tee Dee clinic at 9 a.m. Saturday, Tee Dee-only 1/2-A Combat, noon Saturday until 2 p.m. Sunday. Saturday night BBQ, social and collecto-swap meet. Info: Mel Lyne at mlyne@alpha.sea-to-sky.net, or Gary Harris, (503) 324-3450.

## September 15-16

**Raider Roundup** for racing, stunt, combat and carrier, in the Seattle area. Details TBA. Info: DGardner55@aol.com

## September 22

**Nostalgia Diesel Combat**, Surrey Ultralite Field, 988 176th St., Surrey, B.C. First driveway 250 yards north of 8th Avenue on the east side; look for the red hangars. Info: Mel Lyne at mlyne@alpha.sea-to-sky.net.

## September 29-30

**Oregon CL Speed Champs**, Bill Riegel Field, Salem, Ore. Info: CD Mike Hazel, (503) 364-8593, e-mail ZZCLSpeed@aol.com.

## October 6

**Really Racing**, Bill Riegel Field, Salem, Ore. Class I and II Mouse Race, Northwest Sport Race, Northwest Super Sport Race, Clown Race (sportsman/expert), AMA Goodyear, .21 Rat Race, Quickie Rat. Info: CD John Thompson, (541) 689-5553, e-mail JohnT4051@aol.com. **Note date and events list changes!**

## October 7

**Fall Follies**, Bill Riegel Field, Salem, Ore. Precision Aerobatics in four PAMPA classes. Info: CD John Thompson, (541) 689-5553, e-mail JohnT4051@aol.com. **Note date change!**

---

# The Flying Flea Market

Classified advertisements — FREE for FL subscribers

---

**FOR SALE:** 2 Ea. Nelson 15 ABC FIRE, Exc., just back from Henry Nelson (new bearings, etc.) Used for FF and combat, U.S. \$135 or both for \$260; 1 Ea. Nelson 15 ABC FIRE longstack, C/W spinner, exc., low time used for GY, U.S. \$130; 1 Ea. NIB Irvine .15 MK 2 GY/FF Version, P/L chromed & fitted by Dye, fitted Nelson head, large venturi & pressure backplate, U.S. \$150; 1 Ea. NIB Irvine .15 MK 2 or speed, C/W spinner, P/L chromed and fitted by Dye, 4.9mm pipe stinger, U.S. \$185; also many excellent Irvine .15 parts for sale: heads, shims, spinners, P/L, venturis. Write for details & prices. 1 Ea original version Cyclon .15S FAI piped speed engine, Mint cond. in orig. handmade wood box W/ plexiglass top, C/W factory pan, prop, spinner, shutoff, tank & spare parts, also C/W Doc package for collectors, U.S. \$200; 1 ea. NIB Russian Cyclon .40 ABC pylon (RIRE) C/W, gorgeous 2-1/4-inch spinner, minipipe, head wrench, U.S. \$275. Paul Gibeault, 54-5380 Smith Drive, Richmond, B.C. Canada V6V 2K8, phone (604) 526 3386.

**FOR SALE:** All props and plugs 25% off; Eugene Toy & Hobby, 32 E. 11th Ave., Eugene, OR 97401. (541) 344-2117, [www.eugenetoyandhobby.com](http://www.eugenetoyandhobby.com).

**WANTED:** K&B 4.9 engines and parts. Also early version of Veco Tom Tom kit. Craig Bartlett, (541) 745-2025.

**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.

**FOR SALE:** Vintage original model airplane plans circa: 30's to 70's. Rubber-FF-UC-RC-CO2-Jetex. Send #10 SASE for list to: Jerry Campbell, 2355 SE 43rd, Portland, OR 97215-3713, phone 503-233-2194.

**WANTED:** I am looking for AMA rulebooks for the following years: 1959-1963, 1966, 1968-1969, 1973, 1976-1977. Mike Hazel, 1073 Windemere Drive N.W., Salem, OR 97304.

**J & J SALES** now has three sizes of "UKEY-SPORT" CL ARFs in its new line. A new 300-sq.-in. suitable for .15 size engines. The very popular 420-sq.-in. for up to .35 engines (over 300 of this popular plane sold in past two years!) A new 500+-sq.-in. for up to .40 engines. This version has nearly full-length doublers. Give us a call at (509) 337-6489 or e-mail: [ukeyman@altavista.net](mailto:ukeyman@altavista.net). Price: \$50 for the .15 size, \$60 for the .35 size, \$70 for the .40 size. All planes shipped POSTAGE-FREE.

**NEEDED:** Seattle area fliers are training several enthusiastic new combat fliers, and they need used fast combat engines to help get them started. If you have usable Fox Combat Special MK II, IV, VI or VII engines, or Stels combat engines you'll part with, contact Tom Strom at [TStrom@aol.com](mailto:TStrom@aol.com), phone (206) 246-4258.

**FOR SALE:** One lap counter, new in box. \$15 postpaid. Mike Hazel, 1073 Windemere Drive N.W., Salem, OR 97304.

**WANTED:** Fox .35X and .36X parts. Also Supertigre .35 parts. Chuck Matheny, (360) 659-0155.

**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 [clflier@tbcnet.com](mailto:clflier@tbcnet.com).

**RACING INTEREST GROUP:** National Control Line Racing Association offers newsletter with technical articles, organizes national events, keeps national standings and more. Contact NCLRA, c/o Dave McDonald, P.O. Box 384, Daleville, IN 47334. Online: <http://members.aol.com/DMcD143>

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

---

# ON THE CONTEST TRAIL

## Results of Northwest Control-Line Competition

---

### B.C. Carrier and Old-Time Stunt contest

May 6, Richmond, B.C., Canada

By Chris Cox

The VGMC held their first Old Time stunt contest of the season on May 6. We had six entries in a hard-fought battle. Emil Kovac headed up from Seattle for the day and put a real scare into Moittle and myself, but I was victorious in beating him back to capture first place.

Results were as follows (Northwest standings points in parentheses):

#### OLD-TIME STUNT

1. Chris Cox, "Moittle" (6) 303.25
2. Emil Kovac, "Humongus" (5) 289.0
3. Keith Varley, "Humongus" (4) 252.25
4. Jasha Wondratschek, "Ringmaster" (3) 248.75

Judges: Joan Cox and Ron Belcourt

By Mike Potter

Held on the same day was a Carrier contest hosted by the Pacific Aeromodellers.

There were only three of us that showed up to fly that day and it was more of a tune-up for the Regionals than a contest. The weather was good as well as the company.

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

#### PROFILE CARRIER

1. Mike Potter (3) 245.2
2. Mike Conner (2) 212.4
3. James Cox N/S

#### .15 CARRIER

1. James Cox (3) 212.13
2. Mike Conner (2) 68.75
3. Mike Potter N/S

---

Spread the word about your favorite newsletter!

Attractive *Flying Lines* toolbox stickers — commemorating more than 21 years of covering the Northwest's modeling news, can be obtained for \$2 a sheet from your *FL* editor.

### Six rounds Nostalgia Diesel Combat

May 12, Surrey, B.C., Canada

By Mel Lyne

Yes folks, it's not a typo, we really did go six rounds plus two semis and a final in perfect weather on a dry but soft field. Flying standard was cranked up a few notches from the damp April contest, and many super matches were flown with a full five minutes of following combat. Pat Willcox attended for the first time and was very impressed. He adapted quickly to the diesels and flew very well, making it to the finals.

Turnout was a tad light at seven flyers (it was Mother's Day weekend), but everyone was pumped and really got into it. Buzz Wilson was up from Seattle, this time determined to beat up on Mel. Preston Briggs also came up from Seattle, very kindly bringing Pat Willcox who had only flown in hours before. Remy Dawson, Paul Dranfield, Rick Meadows, and Diesel Mel made up the Canadians.

The contest was very smoothly run by Keith Varley, Troy Lyne & Amy and Martin Winn. Two matches were held up as we cleared the runway for takeoff and landing of a really neat Red Baron biplane Ultralite replica. (He didn't have a streamer!)

Right away in Round 1 the first match was really close and intense with Rick and Buzz, ending in a midair wiping out Rick's Piranha. From then on, the matches were fast and furious with lots of really good combat. Most matches were full out pursuit right until the five-minute horn. In one match, the final horn went, the flyers leveled out, then they started up again, figuring it was too much fun to stop. Several matches ended with the flyers cracking up in laughter, it had been so close and so much fun. It was a contest where everyone helped everyone, pitting, equipment loaning etc., just as a really fun contest should be. There were only a few bad engine runs, and not a lot of dorks. Preston had one "dorky" match where Pat ran nu-

merous time around the circle to shovel him out, whack the engine, and chuck him in the air again. So next round Pat and Mel each took one side of the circle to pit him. Of course Preston then flew his Orcrist brilliantly and never did dork. There were many very close matches.

Pat and Remy early on had a close match with Remy's Warlord just taking it over Pat's Ironmonger. Paul and Preston duked it out in a close one, Paul getting it three cuts to two. Rick managed to get four matches out of his second Piranha before he rekitted it in a midair. So in round 6 he used a brand-spanking new shiny black Piranha against Remy's "charmed life" six-match Warlord. It was a very intense match with numerous really close calls until the midair. Remy managed to get up, but Rick's left wing was gone, and even Pat's F2D-type repair putting the right wing inboard didn't get Rick much more air time. Paul flew very impressively (says it was the new sunglasses), losing only once in six matches, and getting the most cuts (15) of any flyer. Remy also got five victories.

Buzz was waiting for a go at Mel, and it came in round four. A tough match with lots of evasive fakes. It was two cuts each, but Mel had a refueling stop, so Buzz at last had his win over Mel. Preston had some tough luck with a turned spray bar making his motor skip, losing power, costing him a match. Mel and Remy had a close match in round 5 until a wild "pancake-type" midair with both planes helicoptering into the turf. Remy was OK, but Mel's right wing on his Orcrist was badly mashed. Pat helped surgically amputate the "nylon bag of balsa" wing, and Mel got relaunched minus the right wing. An interesting chase ensued with Mel's "half-plane" staggering through turns and bouncing off the turf, with Pat relaunching as required. Remy was the winner. Paul managed to beat up on Mel in round 6, getting the win with Mel stuck on the ground with a cooked motor in his Turncoat.

Byes were not used in this contest to allow everybody to fly the same number of rounds. Instead, the odd man each round got a "delayed match," where he flew against the odd flyer in the next round as well as his drawn match. With an even number of rounds, the system works well. And nobody complained about getting too much combat. We do have a rule of three planes per competitor, and this time Rick used up three planes by the end of round 6. Gotta rebuild faster

or fly to give your models better longevity.

At the end of six rounds, Paul and Remy were on top with Pat and Mel rounding out the top four. The first semi had Remy against Pat in a very close match, one cut each and ground time after a minor midair. Pat got it by 10 seconds. The second semi had Paul against Mel (using a new Ironmonger) in a tough match. Both had ground time and one cut each. It was very close, and Mel got it by a few seconds.

So the final was Pat and Mel. Mel had reset his motor and it was really hauling, barely within the speed limit. Pat had a good run, but Pat's almost-new PAW was not turning as fast as Mel's. There were lots of passes and streamer hits, but only one cut, and it went to Mel for the victory.

The top four flyers were all very close, and each I think deserved to win it. Maybe we'll have to consider multiple first-place awards. Something to think about.

Rick Meadows, in light of his solid effort in destroying three Piranhas, was awarded the coveted "Best Crash" trophy. Everybody flew a lot of combat and some of us were even wondering when it would end. But we all had fun and will remember some of the crazier matches for quite a while.

At the lunch break and after the contest, beginners Ralph Simonds, daughter Sarah, 10, and Martin Winn were given training flights on stable diesel flying wings. For a while it looked like lawn darts!

Many thanks to Paul and his crew for grass cutting and field preparation, and thanks again to our judging crew. Thanks also to Volker Budziak and the Ultralite group for the great flying site.

See you all at the next D/Bat Five or Six Rounds June 30, same place.

Results (Northwest standings points in parentheses):

1. Mel Lyne (7)
2. Pat Willcox
3. Paul Dranfield (5)
4. Remy Dawson (4)
5. Rick Meadows
6. Buzz Wilson
7. Preston Briggs

---

**Share your knowledge!**

Write a technical article or regular column for *Flying Lines*. All contributions are welcome! Send us digital photos of your flying activity, too.

# Regionals says farewell to Roseburg in fine style

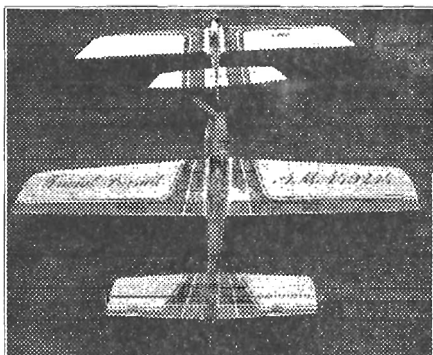
The 30th Annual Northwest Control-Line Regionals, the last planned for Roseburg Regional Airport, turned out to be one of the best ever.

A total of 96 individuals entered, with strong participation in every standard competition category, plus a few having fun on the float pond.

Weather was fabulous, warm and breezy but not too breezy on Friday and Saturday, and cooler and only slightly breezy on Sunday.

There was gorgeous aerobatic competition, tight, close, trouble-free racing, safe and entertaining combat, record-breaking carrier flying, some solid fast speed flying and beautiful scale ships.

The Regionals staff from the Umpqua Valley Modelers and Eugene Prop Spinners hosted the contest in their traditional competent fashion, and a good time was had by all. The behind-the-scenes workers who have always made the Regionals a great success will be missed by all as a new crew gets to work on succeeding years' contests.



Howard Rush photo

## 2001 Northwest Control Line Regionals Results

May 25-26-27, Roseburg, Ore.

Total entries: 96 individuals, 273 event entries \*

**First Grand Champion:** Todd Ryan  
**Second Grand Champion:** Nitroholics Racing Team  
**Third Grand Champion:** Bill Cave  
**Precision Aerobatics Concours 'd Elegance:** Phil Granderson, Diva

## Results

(Northwest Standings points in parenthesis)

### MOUSE RACE I SENIOR-OPEN (11 entries)

1. Vic Garner, Livemore, Calif., 4:55.98
2. Bill Cave, Burson, Calif., 5:41.18
3. James Holland, Livermore, Calif, DQ
4. McIntyre/MacCarthy, Calif., 2:54.16 heat

### MOUSE RACE II JUNIOR (2 entries)

1. Aaron Smith, Madras, Ore., 7:37.52 (2)
2. Amanda Smith, Madras, Ore., 9:34.95 (1)

### MOUSE RACE III (4 entries)

1. McIntyre/MacCarthy, 6:25.98 (Regionals record)
2. Vic Garner, 8:40.28
3. Bill Cave, 10:28.56

### 4. David Hallas, Largo, Fla., 7:21.49 heat

### EXPERT FLYING CLOWN RACE (8 entries)

1. Todd Ryan, Klamath Falls, Ore., 296 laps (8)
2. Nitroholics Racing Team, Oregon, 246 (7)
3. Mac Ryan, Pasco, Wash., 237 (6)

### 4. David Hallas, 130-lap heat heat

### SPORTSMAN FLYING CLOWN RACE (3 entries)

1. Vic Garner, 101-lap heat
2. Larry Hyder, Madras, Ore., 70- lap heat (2)
3. Ken Smith, Madras, Ore., 58-lap heat (1)

### NORTHWEST SPORT RACE I JUNIOR (0 entries)

### NORTHWEST SPORT RACE SR.-OP (16 entries)

1. Todd Ryan, 8:36.10 (16)
2. David Hallas, 9:30.24
3. Ron Howell, Federal Way, Wa., 9:38.5 (14)
4. McIntyre/MacCarthy, 9:45.61

### NORTHWEST SUPER SPORT RACE (9 entries)

1. S&S Racing Team, Seattle, Wash, 6:49.92 (9)
2. McIntyre/MacCarthy, 7:45.53
3. Todd Ryan, 8:18.48 (7)

(3:12.20 heat — Northwest record)

### 4. Nitroholics Team, 3:31.43 heat (6)

### NORTHWEST GOODYEAR (6 entries)

1. Vic Garner, 7:40.5 (Regionals record)
2. Bill Cave, 8:43.58
3. Bobby Arledge, Sedro Woolley, Wa., 71 laps (4)
4. James Holland, 4:26.4 heat

### QUICKIE RAT RACE (9 entries)

1. Bill Cave, 6:26.88 (Regionals record)
2. James Holland, 6:39.07
3. Todd Ryan, 68 laps (7)
4. David Hallas, 3:14.5 heat

### RAT RACE (4 entries)

1. Todd Ryan, 7:19.52 (4)
2. Nitroholics Racing Team, 8:05.48 (3)

3. James Holland, 3:13.02 heat
4. McIntyre/MacCarthy, 3:53.16 heat

#### **SLOW RAT RACE (3 entries)**

1. McIntyre/MacCarthy, 5:58
2. Bill Cave, 7:43.25
3. Todd Ryan, 57-lap heat (1)

#### **AMA GOODYEAR (8 entries)**

1. Todd Ryan, 6:54.49, (8) (NW record)
2. Bill Cave, 7:05.12
3. Nitroholics Racing Team, 7:05.15 (6)
4. McIntyre/MacCarthy, 7:16.17

#### **B-TEAM RACE (0 entries)**

#### **EXPERT PRECISION AEROBATICS (13 entries)**

1. Paul Walker, Kent, Wash., 564.5 (19.5)
2. Brett Buck, Sunnyvale, Calif., 550.5
3. Chris Cox, Delta, B.C., 546 (16.5)
4. Bruce Perry, Edmonton, Alberta, 534

#### **ADVANCED PRECISION AERO. (12 entries)**

1. John Miller, Magna, Utah, 483.5
2. Dave Royer, Portland, Ore., 482/473 (11)
3. Keith Varley, Vancouver, B.C., 471/482 (10)
4. Pete Peterson, West Valley City, Utah, 468

#### **INTERMEDIATE PRECISION AERO. (4 entries)**

1. Mark Micheli, Salinas, Calif., 483
2. Scott Urabe, Salinas, Calif., 482.5
3. Heman Lee, California, 466.5
4. Burt Brokaw, Utah, 447

#### **BEGINNER PRECISION AERO. (2 entries)**

1. Don Chandler, Red Bluff, Calif., 196.5
2. Montana Marlatt, Metolius, Ore, 124 (1)

#### **CLASSIC STUNT (12 entries)**

1. Paul Walker, 589 (12)
2. Don McClave, Portland, Ore., 539 (11)
3. Bruce Perry, 533
4. Phil Granderson, Oakland, Calif., 511.1

#### **OLD-TIME STUNT (12 entries)**

1. Jim Aron, Richmond, Calif., 289.5
2. Pete Peterson, 281
3. Chris Cox, 280 (10)
4. Keith Varley, 275 (9)

#### **80-MPH COMBAT (13 entries)**

1. Mel Lyne, Garibaldi Highlands, B.C. (13)
2. Chuck Matheny, Arlington, Wash., (12)
3. Charlie Matheny, Arlington, Wash., (11)
4. Jeff Rein, Bothell, Wash. (10)

#### **AMA COMBAT (9 entries)**

1. Howard Rush, Bellevue, Wash. (9)
2. Mel Lyne (8)
3. Chuck Madeiros, Los Gatos, Calif.

#### **1/2-A COMBAT (9 entries)**

1. Jeff Rein (9)
2. Mel Lyne (8)
3. Bob Smith, Roy, Wash. (7)

#### **SLOW COMBAT (3 entries)**

1. Jeff Rein (3)
2. Mel Lyne (2)
3. Bill Pettersen, Everett, Wash. (1)

#### **CLASS I NAVY CARRIER (5 entries)**

1. Jim Schneider, Livermore, Calif., 372.2
2. Don Chandler, 231.2
3. Three other entries posted no score

#### **CLASS II NAVY CARRIER (5 entries)**

1. Jim Schneider, 365.8
2. Mike Potter, Auburn, Wash., 291.7 (4)
3. Don Chandler, 290
4. Team Mark & Ted, Portland, Ore., 210.3 (2)

#### **PROFILE NAVY CARRIER (11 entries)**

1. Eric Conley, Clovis, Calif., 342 (Regionals record)
2. Jim Schneider, 317.7
3. Todd Ryan, 269.5 (9)
4. Mike Potter, 225 (8)

#### **.15 NAVY CARRIER (9 entries)**

1. Eric Conley, 263.4 (Regionals record)
2. Todd Ryan, 244.7 (8) (NW record)
3. James Cox, Delta, B.C. 210.2 (7)
4. Mike Potter, 205.6 (6)

#### **.21 SPORT SPEED (6 entries)**

1. Loren Howard, Vancouver, Wa., 153.52 mph (6)  
(Regionals record)
2. John Newton, Rowland Heights, Calif., 151.84
3. Greg Settle, Aurora, Colo., 147
4. Jim Booker, Washington, 134.68 (3)

#### **1/2-A SPEED (4 entries)**

1. Jerry Rocha, Napa, Calif., 137.4 mph  
(Regionals record)
2. Nitroholics Racing Team, 90.22 (3)
3. Two other entries did not score

#### **A SPEED (4 entries)**

1. Luke Roy, Fairfield, Calif. 183.04 mph  
(Regionals record)
2. Ron Salo, Surrey, B.C., 173.84 (3)
3. Jerry Rocha, 164.17

One other entry did not score

#### **B SPEED (3 entries)**

1. Ken Kortness, Spokane, Wash., 157.14 mph (3)
  2. Nitroholics Racing Team, 108.08 (2)
- One other entry did not score





Nick Stratis shows off his precision scale entry at the Regionals. Heman Lee photo

#### D SPEED (4 entries)

1. Craig Bartlett, Corvallis, Ore., 168 mph (4)
2. Ron Salo, 164.47 (3)
3. Ken Kortness, 163.44 (2)
4. Loren Howard, attempt (1)

#### JET SPEED (5 five entries)

1. Jerry Thomas, 170.23 (5)
4. Nitroholics Racing Team, 153.13 (4)

Three other entrants did not score

#### 1/2-A PROTO SPEED (7 entries)

1. Jerry Rocha, 108.39 mph
2. Chuck Schuette, Vancouver, Wash., 102.52 (6)
3. R.J. Spahr, Bailey, Colo., 96.17
4. Laura Beers, Cascade, Mont., 44.33 (4)

#### FORMULA 40 SPEED (8 entries)

1. Glen Dye, Draper, Utah, 153.52
2. Marty Schoenheiter, Salt Lk Cty, Utah, 153.20
3. Ken Kortness, 153.07 (6)
4. Les Akre, Edmonton, Alberta, 121.49

#### .21 PROTO SPEED (3 entries)

1. Karl Caldwell, Sparks, Nev., 129.26

#### FAI SPEED (4 entries)

1. Chris Sackett, Burnaby, B.C., 173.68 mph (4)
2. Jim Rhoades, Salt Lake City, Utah, 169.47
3. Jim Booker, 168.58 (2)
4. R.J. Spahr, 166.94

#### NORTHWEST SPORT JET SPEED (9 entries)

1. Nitroholics Racing Team, 149.82 mph (9)
2. Dick Salter, Seattle, Wash., 149.44 (8)
3. Jerry Rocha, 146.69
4. Bruce Duncan, Langley, B.C., 134.27 (6)

#### PRECISION SCALE (4 entries)

1. Grant Hiestand, Glendale, Calif., 663.5 points
2. Stephen Davis, Pasadena, Calif., 464.5
3. Nick Stratis, Federal Way, Wash., 442 (2)

One other entrant did not score

#### SPORT SCALE (3 entries)

1. Fred Cronenwett, Tarzana, Calif., 160 points
2. Don Chandler, 98.5
3. Chris Gomez, Auburn, Wash., 89

#### PROFILE SCALE (4 entries)

1. Fred Cronenwett, 181.5 points
2. Don Chandler, 163.5
3. Mike Potter, 130 (2)

One other entrant did not score

#### OPEN SEAPLANE (2 entries)

1. Mike Conner, Pitt Meadows, B.C., 155
2. Fred Cronenwett, 150

#### SCHNEIDER CUP (1 entry)

1. Grant Hiestand, 235

\* Event entries: Racing, 83; Speed, 57; Stunt, 55; Combat, 34; Carrier, 30; Scale, 11; Seaplane 3

## Combat at the Regionals — the gory details

By Mel Lyne

Three days of combat, about a gazillion matches, good weather, manageable winds, and a pretty decent turnout of flyers. Events were capably run by Mark Hansen, Rich Salter and helpers, with Jeff Rein as event director. And there wasn't a single flyaway.

### Slow Combat

Friday noon kicked it off with Slow Combat. Bill Pettersen from Everett Wash., Jeff Rein, Bothell, Wash., and Mel Lyne, Canada, had some interesting matches with lots of following. Jeff managed to out-sneaky Mel in the final, with "first contest Bill" flying two pretty good matches.

### 1/2A Combat

Half-A had nine entries, Jim Green, Mel Lyne,

Jeff Rein, Bob Smith, Chuck Medeiros, Bob and Tony Huber, Dave Baxter and Bill Pettersen.

In Round 1, Jeff, with his Hypersonic Cyclon Sword of Death, lost a "technical" to Tony, and in Round 2 Mel messed up, did a loop to separate, and forfeited to Dave. Lotsa "Screamin' Meanie" matches were flown with the guys sluggin' it out with Tee Dees, AME/Norvels, VAs and Jeff's Cyclon.

Oddly, there were very few kills. Bob Smith flew well using a Tee Dee and staying away from the dirt, with wins over Bill and Jim in the first two rounds. Chuck had a fast AME, but buried it against Bob Huber. The final three alive were Bob, Jeff and Mel. Jeff beat Bob in a "screamer," then had a very fast and tight match with Mel where neither seemed on top. But the big horsepower of the Cyclon closed the gap on Mel's Tee Dee, and Jeff had the kill for First place. Bob and Mel flew off for second and third. Bob had Mel all lined up for the kill, when a "Lesser Yellow-Bellied Sapsucker" (female, about 2 years old, with a grasshopper in its mouth) flew right through the edge of the circle. The turbulence created by it's wingbeats caused Bob's plane to buffet slightly and as a result he missed Mel's knot by 3/4 of an inch! Panting with relief, Mel redoubled his efforts and got the kill on Bob. Okay, so like, eh, towing only a knot Mel had a speed advantage. Thus ended 1/2A, well flown, with no real wind problems.

### **80 mph Combat**

Thirteen fliers were rarin' to get some kills in 80 mph. Jim Green, Bill Pettersen, Mel Lyne, Dave Baxter, Bob Smith, Chuck and Charlie Matheny, Tony and Bob Huber, Burt Brokaw from Ogden, Utah, Jeff Rein, Phil Granderson and Chuck Medeiros from California were the combatants. In the early going, Dave lost a close one by 14 seconds to Burt. Gotta get a pit crew that can run faster! Bob killed Tony and Jeff and Phil had a close match going, ending in a midair with lotsa Stels plane bits fluttering down.

During this match, Phil had his glasses knocked off. They stopped combat, leveled out, and Jeff managed to pick up Phil's glasses and get them back on him. Best Sportsman award undoubtedly should go to Jeff Rein. Bob Smith got one cut on Chuck Medeiros before the midair, and took the win. Burt and Jim had an interesting "ground-punching" contest in their match. Dave took on Charlie and ended it with a kill. By

Round 3, only two flyers were out. The Bob and Bob match had Bob Smith with airtime plus a cut when just before the 5 minutes Bob Huber re-launched and nailed a solid mid air, getting the kill in a desperate move. Mel flew Burt in a barn-burner of close following with the wind gusting. A midair ended it with Mel's old favorite model going out in glorious style. getting the kill as it disintegrated in a shower of foam bits.

Round 4, and six flyers left alive. Bob Huber vs. Chuck Matheny was a good clean duel with Chuck getting the kill. Jeff vs. Mel was a really honkin' close match. Mel missed Jeff's string twice on easy gimmes. Then a crunching midair. It was a tie, so a re-fly was next. Jeff went after Mel's knot, but hooked his lines on the plastic streamer and spun in, destroying the Stels plane, giving Mel the win. One more win and Mel was in First spot. Chuck and Charlie Matheny flew off for second and third. A bit of a tough technical match. At the end Chuck had it on air time for 2nd spot.

### **Fast Combat**

Nine in Fast. Bob Smith, Chuck and Charlie Matheny, Mel Lyne, Phil Granderson, Howard Rush, Jeff Rein, Jim Green and Chuck Medeiros.

Round 1 had Bob over Charlie in a forfeit, Mel over Jim in another forfeit (both loops on takeoff) and Howard killed Phil. Jeff Rein had a Nelson come apart in flight. Lots of it'sy pieces. Bob lost on a technical to Chuck Matheny. Phil Killed Chuck Medeiros in a very fast match. Mel and Phil had a honker going when Phil got suckered and stuffed it! Too much stunt flying maybe? Howard flew both Chucks in a row, won both on airtime, and had a good chuckle?? (Hold the groans!) So it was Howard with two lives and Mel with one for the final. The first match, Howard was right on Mel when he stuffed it. The second match ended in a midair collision with Howard getting the kill for the win.

At the prize-giving, Phil Granderson was asked how an awesome, tough, gnarly combat fighter like him could win the "concours" prettiest model award. Phil was taken aback, but quipped "I used to be a man, but now I'm a stunt flier." After the hoots died down, it was apparent that Phil should not have stopped attending the "Combat Addicts" meetings. And who says Combat fliers don't tell the biggest whoppers on the planet?

And a good time was had by all. Final results appear elsewhere in this issue.

# The Scoreboard

Northwest control-line  
competition standings.

## Sorting out begins ...

The Regionals plus a couple of other spring contests got the Northwest standings watch under way big time. Nearly every event now has standings being juggled as competitors engage in the year's points race.

Note: Fourth-place results were not received from 1/2-A and Fast Combat at the Regionals. If received, future standings will be corrected.

Contests counted to date: March 10, Richmond, B.C.; April 7, Surrey, B.C.; April 8, Salem, Ore.; April 21-22, Portland, Ore.; May 6, Richmond, B.C.; May 12, Surrey, B.C.; May 25-27, Roseburg, Ore.

Following are standings for updated events:

### 2001 STANDINGS

#### VINTAGE DIESEL COMBAT

- |  |    |
|--|----|
| 1. Mel Lyne, Garibaldi Highlands, B.C. | 16 |
| 2. Remy Dawson, Vancouver, B.C.        | 11 |
| 3. Jeff Riechel, Snohomish, Wash.      | 8  |
| 4. Buzz Wilson, Edmonds, Wash.         | 6  |
| 5. Paul Dranfield, Mission, B.C.       | 5  |

#### 80mph COMBAT

- |                                    |    |
|------------------------------------|----|
| 1. Mel Lyne                        | 23 |
| 2. Jeff Rein, Bothell, Wash.       | 19 |
| 3. Chuck Matheny, Arlington, Wash. | 12 |
| 4. Tom Strom, Seattle, Wash.       | 11 |
| Charlie Matheny, Arlington, Wash.  | 11 |

#### AMA COMBAT

- |                                 |   |
|---------------------------------|---|
| 1. Howard Rush, Bellevue, Wash. | 9 |
| 2. Mel Lyne                     | 8 |

#### 1/2-A COMBAT

- |                          |   |
|--------------------------|---|
| 1. Jeff Rein             | 9 |
| 2. Mel Lyne              | 9 |
| 3. Bob Smith, Roy, Wash. | 7 |

#### SLOW COMBAT

- |              |   |
|--------------|---|
| 1. Jeff Rein | 3 |
|--------------|---|

- |             |   |
|-------------|---|
| 2. Mel Lyne | 2 |
|-------------|---|

#### OVERALL COMBAT

- |                                |    |
|--------------------------------|----|
| 1. Mel Lyne                    | 57 |
| 2. Jeff Rein                   | 31 |
| 3. Chuck Matheny               | 12 |
| 4. Tom Strom                   | 11 |
| Charlie Matheny                | 11 |
| Remy Dawson                    | 11 |
| 7. Howard Rush                 | 9  |
| 8. Dick Salter, Seattle, Wash. | 8  |
| Jeff Riechel                   | 8  |
| 10. Bob Smith                  | 7  |

#### CLASS II NAVY CARRIER

- |                                    |   |
|------------------------------------|---|
| 1. Mike Potter, Auburn, Wash.      | 4 |
| 2. Team Mark & Ted, Portland, Ore. | 2 |

#### PROFILE NAVY CARRIER

- |                                    |    |
|------------------------------------|----|
| 1. Mike Potter, Auburn, Wash.      | 18 |
| 2. Todd Ryan, Klamath Falls, Ore.  | 9  |
| 3. Mike Conner, Pitt Meadows, B.C. | 7  |
| 4. Shawn Parker, Seattle, Wash.    | 4  |
| 5. James Cox, Delta, B.C.          | 3  |

#### .15 NAVY CARRIER

- |                                |    |
|--------------------------------|----|
| 1. James Cox                   | 15 |
| 2. Mike Potter                 | 10 |
| 3. Todd Ryan                   | 8  |
| 4. Mike Conner                 | 5  |
| 5. Mark Hansen, Portland, Ore. | 2  |

#### OVERALL CARRIER

- |                    |    |
|--------------------|----|
| 1. Mike Potter     | 33 |
| 2. James Cox       | 19 |
| 3. Todd Ryan       | 17 |
| 4. Mike Conner     | 12 |
| 5. Shawn Parker    | 5  |
| 6. Ted Gritzmacher | 3  |
| 7. Mark Hansen     | 2  |
| Team Mark & Ted    | 2  |

#### FLYING CLOWN RACE

- |                                    |   |
|------------------------------------|---|
| 1. Nitroholics Racing Team, Oregon | 9 |
| 2. Todd Ryan                       | 8 |
| 3. Mac Ryan, Pasco, Wash.          | 6 |
| 4. S&S Racing Team, Seattle, Wash. | 3 |
| 5. Larry Hyder, Madras, Ore.       | 2 |

#### CLASS I MOUSE RACE

- |                                  |   |
|----------------------------------|---|
| 1. S&S Racing Team               | 2 |
| Aaron Smith, Madras, Ore. (Jr.)  | 2 |
| 3. Nitroholics Racing Team       | 1 |
| Amanda Smith, Madras, Ore. (Jr.) | 1 |

#### NORTHWEST SPORT RACE

- |                                |    |
|--------------------------------|----|
| 1. Todd Ryan                   | 16 |
| Ron Howell, Federal Way, Wash. | 16 |
| 3. S&S Racing Team             | 3  |

4. Nitroholics Racing Team	1
<b><u>NORTHWEST SUPER SPORT RACE</u></b>	
1. S&S Racing Team	9
2. Todd Ryan	7
3. Nitroholics Racing Team	6
<b><u>NORTHWEST GOODYEAR</u></b>	
1. Bobby Arledge, Sedro Woolley, Wash.	4
<b><u>QUICKIE RAT RACE</u></b>	
1. Todd Ryan	7
<b><u>RAT RACE</u></b>	
1. Todd Ryan	4
2. Nitroholics Racing Team	3
<b><u>SLOW RAT RACE</u></b>	
1. Todd Ryan	4
<b><u>AMA GOODYEAR</u></b>	
1. Todd Ryan	8
2. Nitroholics Racing Team	6
<b><u>OVERALL RACING</u></b>	
1. Todd Ryan	51
2. Nitroholics Racing Team	27
3. Ron Howell	17
S&S Racing Team	17
5. Mac Ryan	6
6. Bobby Arledge	4
7. Larry Hyder	2
Aaron Smith	2
9. Ken Smith, Madras, Ore.	1
Amanda Smith	1
<b><u>SCALE (All classes combined)</u></b>	
1. Nick Stratis, Auburn, Wash.	2
Mike Potter	2
<b><u>SPEED (All classes combined)</u></b>	
1. Nitroholics Racing Team	18
2. Ken Kortness, Spokane, Wash.	11
3. Dick Salter, Seattle, Wash.	8
4. Loren Howard, Vancouver, Wash.	7
5. Bruce Duncan, Langley, B.C.	6
Chuck Schuette, Vancouver, Wash.	6
Ron Salo, Surrey, B.C.	6
8. Jim Booker, Washington	5
Jerry Thomas, Edgewood, Wash.	5
10. Laura Beers, Cascade, Mont	4
Craig Bartlett, Corvallis, Ore.	4
Chris Sackett, Burnaby, B.C.	4
<b><u>OLD-TIME STUNT</u></b>	
1. Chris Cox, Delta, B.C.	22
2. Keith Varley, Vancouver, B.C.	16
3. Emil Kovac, Issaquah, Wash.	9
4. Scott Riese, Portland, Ore.	5
5. Jasha Wondratschek, B.C.	3

### **CLASSIC STUNT**

1. Don McClave, Portland, Ore.	15
2. Paul Walker, Kent, Wash.	12
3. Nils Norling, Metolius, Ore.	3
4. Scott Riese	2
5. Roy DeCamara, Vancouver, Wash.	1

### **PRECISION AEROBATICS**

1. Chris Cox	21
2. Paul Walker	19.5
3. Dave Royer, Portland, Ore.	16
4. Keith Varley	10
5. Don McClave	9

### **OVERALL STUNT**

1. Chris Cox	43
2. Paul Walker	31.5
3. Keith Varley	26
4. Don McClave	24
5. Dave Royer	16
6. Nils Norling, Metolius, Ore.	11
7. Emil Kovac	9
8. Jack Pitcher, Gresham, Ore.	7.5
9. Scott Riese	7
Mike Conner	7

### **TOP JUNIORS**

1. Aaron Smith	2
Montana Marlatt, Metolius, Ore.	2
3. Amanda Smith	1
Ken Smith	1

*Flying Lines* keeps track of standings in all AMA rulebook and Northwest official events, in all Northwest sanctioned contests.

Your *FL* editors do their best to keep up with the results, but contest directors can help keep the standings up to date by making sure to send the results to *FL* immediately after the contest. If you spot errors, please let us know.

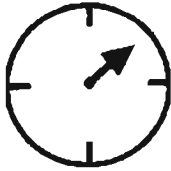
Results must include the placing in each event through fourth place and the report also must list the number of contestants in the event, in order for the point standings to be counted accurately.

Also, please include in your report the hometown of the contestants, and note which contestants are juniors. Only Northwest residents are counted in the standings (AMA Dist. XI and British Columbia). The score of each contestant also should be listed for general reporting purposes and for checking against the Northwest records.

Remember, only results that we receive can be counted, so send them in. If you flew in a contest that doesn't appear to be counted, contact the contest director or *FL* and let us know.

**Special notes:** Precision aerobatics expert fliers scores are multiplied by a factor of 1.5. When an individual is allowed more than one entry in a single event, only the highest-placing score shall be counted.

Send contest results, corrections and other correspondence regarding Northwest Competition Standings to John Thompson, 2456 Quince St., Eugene, OR 97404, e-mail [JohnT4051@aol.com](mailto:JohnT4051@aol.com). For a printed copy of complete standings for any event, or for a copy of the rules for any Northwest event, send a self-addressed, stamped envelope.



# Northwest Competition Records

Best performances established between Northwest CL modelers in sanctioned competition

Todd Ryan of Klamath Falls, Ore., knocked down five Northwest competition records at the Regionals in May, including a 15-year-old Northwest Super Sport Race heat record. Todd turned a 3:12.20, slipping under Dave Green's 1986 mark of 3:14. And Dave was there to see it!

1/2 A Speed	110.34	Mike Hazel	9-06-98	Tacoma, Wash.
A Speed	176.05	Will Naemura	7-14-99	Muncie, Ind.
B Speed	168.47	Ron Salo	6-14-97	Kent, Wash.
D Speed	171.85	Ron Salo	5-28-00	Roseburg, Ore.
Jet Speed	196.64	Jerry Thomas	8-08-93	Richmond, B.C.
Formula 40 Speed	154.71	Ken Kortness	9/23/00	Salem, 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	153.40	Loren Howard	9-18-99	Salem, Ore.
Mouse Race I - 50-lap	2:17	Stephen Cox	8-23-97	Salem, Ore.
Mouse Race I - 100-lap	4:22	Paul Gibeault	7-15-99	Muncie, Ind.
Mouse Race II - 75-lap	3:00	Todd Ryan	7-00	Muncie, Ind.
Mouse Race II - 200-lap	8:56	Todd Ryan	7-00	Muncie, Ind.
AMA Scale Race-70-lap	2:53	Todd Ryan	7-00	Muncie, Ind.
<b>AMA Scale Rc - 140-lap</b>	<b>6:54</b>	<b>Todd Ryan</b>	<b>5-27-01</b>	<b>Roseburg, Ore.</b>
NW Goodyear - 70-lap	4:00	Joe Rice	5-22-98	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	2:45	Todd Ryan	5-29-99	Roseburg, Ore.
AMA Rat Race - 140-lap	5:38	Todd Ryan	5-24-98	Roseburg, Ore.
FAI Team Race 100-lap	3:31	Ryan/Whitney	7-00	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.
<b>NW Super Spt- 70-lap</b>	<b>3:12</b>	<b>Todd Ryan</b>	<b>5-27-01</b>	<b>Roseburg, Ore.</b>
NW Super Spt - 140-lap	6:38	Todd Ryan	5-28-00	Roseburg, Ore.
<b>Quickie Rat - 70-lap</b>	<b>3:05</b>	<b>Todd Ryan</b>	<b>5-26-01</b>	<b>Roseburg, Ore.</b>
<b>Quickie Rat - 140-lap</b>	<b>68 laps</b>	<b>Todd Ryan</b>	<b>5-26-01</b>	<b>Roseburg, Ore.</b>
Flying Clown Race, Laps:	319	Todd Ryan	8-4-00	Coquiltam, 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	314.00	Todd Ryan	5-23-97	Roseburg, Ore.
<b>.15 Carrier</b>	<b>244.7</b>	<b>Todd Ryan</b>	<b>5-26-01</b>	<b>Roseburg, Ore.</b>
AMA Endurance	39:56	Mark Hansen	7-12-98	Salem, Ore.

Records as of 5/28/01  
New records in boldface

# NW REGIONALS COMPETITION RECORDS

BEST RECORDED PERFORMANCES AT THE EUGENE AND ROSEBURG, OREGON  
NORTHWEST REGIONAL CL CHAMPS BY ALL ENTRANTS.

1/2 A SPEED	137.4	JERRY ROCHA	2001
A SPEED	183.04	LUKE ROY	2001
B SPEED	179.75	FRANK HUNT	1994
D SPEED	191.01	MORRIS/MATHISON	1998
JET SPEED	187.62	BILL NUSZ	1995
FORMULA 40	159.22	JIM RHOADES	1998
21 SPORT SPEED	151.84	LOREN HOWARD	2001
FAI SPEED	177.54	CHRIS SACKETT	1999
1/2 A PROF. PROTO	112.46	JERRY ROCHA	1999
21 PROTO SPEED	133.03	CHRIS SACKETT	1997
SPORT JET SPEED	151.97	DICK SALTER	1998

(RACING RECORDS REFLECT ONLY FINALS)

MOUSE RACE I	4:34.59	PAUL GIBEAULT	1992
MOUSE RACE II	6:25.98	McINTYRE/MacCARTHY	2001
AMA GOODYEAR	5:47.01	LES AKRE	1999
NW GOODYEAR	7:40.05	VIC GARNER	2001
SLOW RAT RACE	5:38.67	BILL CAVE	2000
RAT RACE	5:37.88	TODD RYAN	1998
NW SPORT RACE	8:28	TODD RYAN	1999
NW SUPER SPORT	6:38	TODD RYAN	2000
NW FLYING CLOWN	305	TODD RYAN	2000
QUICKIE RAT RACE	6:26.88	BILL CAVE	2001
B TEAM RACE	4:35 ???	BOB WHITNEY	2000
CLASS I CARRIER	405.9	ERIC CONLEY	1997
CLASS II CARRIER	418.1	ERIC CONLEY	1997
PROFILE CARRIER	342	ERIC CONLEY	2001
.15 CARRIER	203.4	ERIC CONLEY	2001

## Show team chartered

By Jim Cameron

The Academy of Model Aeronautics has granted the Northwest Firecats a club charter. As of April 1, The Northwest Firecats is an "Official AMA Air Show Team." This is big news, because *never before has there been a Control line AMA Air Show Team in the Northwest.* This was the first step in qualifying for AMA sponsorship.

At the end of last year, Bill Darkow approached the Northwest Fireballs with the idea of starting an AMA show team. The club was already doing flight demonstrations at many functions. I volunteered to manage the team with the help of Bill Darkow (assistant manager) and Ted

Gritzmacher (treasurer). Most of the Northwest Fireballs signed up to be on the show team roster. We now have 20 members from around the Northwest. This is four times the number of participants required by the AMA.

We would like to thank the Northwest Fireballs and the Seattle Skyraiders for their support. Both clubs have made generous contributions to our efforts. Thank you again.

We will be doing shows at the Olympic Flight Museum, Rose Festival Airshow, and Pearson Air Museum, just to name a few. For a calendar of events you can contact me or Bill Darkow.

If you are not a show team member, but would like to participate in one or more of the events please contact me or Bill Darkow. AMA members can be listed as "guest pilots."

---

*Just for the* **FUN** *of it!*

By Bill Darkow

---

## That's Entertainment!

Continuing our use of control-line show team demo flying as a prime example of fun-flying, it's time to describe the type of flying that makes up such a show.

Keeping in mind the four E's — Entertainment, Education, Enlistment and Enjoyment — let's focus on Entertainment. Whatever act you decide to put up, it should be fun to watch, teach spectators something about CL flying, give them the idea that they'd like to try it and be fun for you.

The Firecats show usually opens with a banner tow. We have stock banners or can custom-build a banner for the occasion. It requires a strong, throttle-equipped .35 or .40 and a stable, dependable model. It looks deceptively easy, but was developed through the crash-and-burn method. If you'd like to tow a banner for your show, I can help you avoid climbing the steep part of the learning curve.

Banners have great spectator appeal and can please whatever host you may have, but air time should be limited to 2-3 minutes. You might want to tow a different banner later in the show or at the end.

Whatever opening act you perform, it should be a short attention-grabber.

Aerobatics is the meat of any CL show and should have a good, knowledgeable announcer on the public address system for maximum effect. Run through an Old-Time Stunt pattern to warm up the crowd, then treat them to the precision aerobatics pattern. Move right on to your next act and come back to aerobatics later if there's time and you have a new crowd.

Combat: The greatest crowd-pleaser of them all, but — alas — a host's liability concerns usually dictate an impressive solo fast combat flight. However, it might be possible to put up a careful slow combat match with each flyer signaling his moves to the other as in pro wrestling. Other possibilities include World War I or World War II pre-programmed "combat."

Racing and Carrier, while fascinating to knowledgeable modelers, are difficult to present in a stage setting and in a manner that will hold an uninformed audience's attention. Perhaps you can find a way.

Now the weird stuff or what used to be called "novelty" flying in the old days.

Unusual and unorthodox models can shine here — biplanes, multi-engines, flying wings, autogyros, pushers, canards, etc. Your creative imagination is the only limit.

Stunts not in the rule book: Glider pick-up or tow-and-release, variations on balloon busting including towing a long, narrow balloon as a target for a chase plane, parachute drop or pilot ejection, smoke trail, etc. Again, whatever you can dream up and execute as long as it's safe and entertaining.

A CL demo flying show does not need to contain examples of all types of CL flying. You may have limited time and be forced to choose which acts to present. Keeping flights short is usually a good idea to match spectator's short attention spans. Throttle engines are handy or you can "short tank" the model.

Whatever you decide to do to entertain and inform the general public in an attempt to get some of them to try our recreation, be sure it's safe and have fun doing it.

Please share your ideas with me at the field. Hey! How about synchronized team stunt?

*Bill Darkow can be reached at romodler@aol.com.*

---

## Combat

## Cornucopia

**Combat  
news and  
views by  
Mel Lyne**

---

## Tee-Dee-only combat clash

The Scappoose Barnstormer Tee Dee 5 Rounder Combat Challenge, BBQ, Social, Camp-over, and McCoy/Fox/Tee Dee Combat Swap Meet, Sept. 8-9.

Folks, this is it! THE contest for those that want to "combat their brains out" with everyone getting five or more matches, depending on the number of entries. For a number of years "Laid Back" Dave Baxter has wanted to host and sponsor a Tee Dee event, and now it's happening! Rich Lopez in Southern California has been very suc-

cessfully hosting this type of event in past years.

Dave has an ideal location with camping and accommodation available, and the flying is right in Dave's back yard by the Scappoose airport about 30 minutes northwest of Portland. The top three flyers will each win a new Tee Dee.

There will be a Saturday night BBQ, social and combat swap meet. Bring your engines, kits, props, etc.

To make it easier for out-of-towners, Dave wants the contest to run from noon Saturday until 2:00pm Sunday. Saturday morning 9:00am to noon there will be a Tee Dee clinic where Mel will help guys get their Tee Dees up to speed. Current AMA 1/2A rules for "kill combat" will be used, but Tee Dees only, and rounds to give everyone lots of flying.

How often does someone come along with an offer of hosting a contest like this? This is a real "gift" to fliers who want to fly for the fun of it.

It is a fun contest with the top flyer also getting a "unique" trophy to proudly show to all his admiring friends. And some of you will be glad to hear that Mel will run the show, offer technical support, and not fly.

---

## THE COGNITIVE MODELER

Thinking about our hobby ... By Mark Hansen

---

## Unveiling the Uniflow

Continuing with my discussion of fuel tank design, I feel it is now necessary to bring to light the Uniflow tank. This type of fuel tank is probably the most widely used of all tank designs, and is by far the least understood and most mis-explained. I will now dispel all of the empirical myth and qualitative superstitions concerning these simple and effective fuel containment systems.

Throughout the following discussion the assumptions and any references will be based on the dimensions of a 4-oz. Veco wedge tank that has been modified to operate uniflow. Any mention of a conventionally vented tank will be the same Veco tank unmodified. Also, the tank will be assumed to be mounted on a profile airplane in the

standard manner, with the pickup on the centerline of the venturi; the velocity of the plane is 65 mph, flown on 60' lines. The depth of the fuel will be assumed to be measured from the airspace to the vent in question.

Let's first look at what makes a non-uniflow tank operate in an inconsistent fashion, hydraulic head pressure (head pressure). Hydraulic head pressure is defined as the density of the fluid in question  $\times$  the change in elevation. This is the relationship that governs water flowing downhill, and how pressure increases with depth in, for instance, a swimming pool. For simplicity's sake we will disregard the density of the fuel, since it is the same throughout the engine run.

In our tank, the distance to the fuel pickup is relative to whether the plane is flying or just sitting on the ground. In the former, the depth to the pickup is 2 inches, while the latter is only 1/2 inch. Henceforth the amount of head when in flight is four times that of when the plane is sitting on the ground.

It is common practice to adjust the needle setting while the plane is sitting on the ground and then wonder why the engine goes rich in the air and progressively leans through the flight. Well put simply the *hydraulic head* causes the good needle setting with only 1/2-inch of head to be completely wrong when there is 2 inches of hydraulic head pressure. One remedy to this problem is to point the outside wing straight at the ground and set the needle. This method will however cause the initial setting to be correct but the engine will melt down by midway through the flight. At the beginning of the flight there are 2 inches of head and nearly zero at the end.

Strictly speaking, the tank does not see the fuel as though the wing was pointed directly at the ground, but sees the fuel at an angle above horizontal and less than vertical. *The calculation is as follows:*

Centripetal Acceleration (that is correct there is no such thing as centrifugal force nor has there ever been any such thing) is defined as  $A_c = w^2 \times r$

where  $r$  is the radius of the circle that the tank is moving in (not simply the line length),  $w$  is defined as the angular velocity in radians per second. For our example, the angular velocity is 1.58rad/sec and the tank is in a radius of 60' 2".

Continued on Page 19



# NORTHWEST CARRIER NEWS

volume 1, issue 2

MIKE POTTER SKYSHARK58@CS.COM

JUNE, 2001

## ROSEBURG REGIONALS

The usual wind and showers stayed away this year for the most part. Friday was clear but windy and saw only one brave contestant fly. Mike Conner flew both his 15 class and profile class in mid afternoon, the rest of us elected to wait until Saturday and take our chances. It turned out to be a good choice. Saturday was some of the best weather I have seen in Roseburg.

Three contestants came up from California and three came down from Canada to compete. Eric Conley from Fresno, Ca. brought his ME109T powered by a Nelson 36 and his Conley Special 15 powered by a Conquest to take top scores in both classes. Jim Schneider from L.A. took first place in class 1 with a MO-1 powered by a Super tiger 40 and also class 2 honors with another MO-1 this one pulled swiftly by a Nelson 60. Mike Conner, James Cox and Henry Hajdik represented the boys North of the border, James taking third place in 15.

We put up a total of about 75 flights by the 10 contestants with their 25 models. A great time was had by all and I hope to see you all in Tacoma again on Aug 12th.

Results and scores thru third place are :

15  
First Eric Conley 263.4  
Second Todd Ryan 244.7  
Third James Cox 210.2

Profile  
First Eric Conley 342.06  
Second Jim Schneider 317.7  
Third Todd Ryan 294.46

Class I  
First Jim Schneider 372.22  
Second Don Chandler 231.26  
Third Mark Hanson 165.0

Class II  
First Jim Schnieder 365.8  
Second Mike Potter 291.75  
Third Don Chandler 290.0

## FOX SQUARE NECK CARB

If you are using a Fox 36 with a square intake you might take note of this. Perry (Varsane Products) Tel. 760-591-4228 546 So. Pacific St., Suite C-101, San Marcos, Ca 92069 VARSANE@RC-AERO.COM has a square neck to fit your Fox, about \$50.00+ shipping.

### COGNITIVE MODELER, continued from Page 16

Therefore the centripetal acceleration is equal to:  $150.20\text{ft}/\text{second}^2$ . Wow, that is almost five times the acceleration due to gravity ( $32.2\text{ft}/\text{sec}^2$ )! Now if we make a ratio of these two accelerations we have the tangent of the angle the fuel will be at in our tank.

$32.2\text{ft}/\text{sec}^2 / 150.20\text{ft}/\text{sec}^2 = .214$ , which is the tangent of the angle the fuel is at from vertical; to find the angle we will use the arc tangent function, and we find that the angle is  $\tan^{-1}.214 = 12^\circ$ . Subtracting this from 90 degrees yields the angle from horizontal which is  $78^\circ$ .

Now let's look at what happens when the tank is tipped straight up, as at the start of a wingover. We now have the angle that the fuel will be at inside the tank and can calculate the depth to the uniflow. Since the tank is 4 inches tall when the engine is pointed upward hydraulic head pressure at the pick-up increases to 4 inches plus about 3 inches to the venturi. However, because of the way we made our tank the uniflow is not at the same depth as the pick-up. If we want our engine run to be only affected by the attitude of the engine and not the change in depth to the uniflow vent, we will have to find where the depth of the fuel is at 2 inches. When the tank is full the depth is 2 inches all of the way along the tank, so we will assume the tank is half full, and that the depth we are looking for is one inch. *Using trig. we find that  $2 \times \tan 12^\circ$  gives a depth of .45" which when added to the half-full depth yields 1.45" at the pickup. When subtracted from the depth, this gives .55 at the top of the tank. Lo and behold, the point at which the depth is 1 inch is at the midpoint or 2 inches from either end.*

If the uniflow is moved to a point behind the midpoint it will make it more difficult to draw fuel and if it is placed ahead of the midpoint it will be easier for the engine to draw fuel.

I hope that I have been able to assist anyone who has endeavored to build their own tank by quantifying what goes on in a uniflow tank.

*If you have any questions, please feel free to address them to me via e-mail at [FastCombat@aol.com](mailto:FastCombat@aol.com)*

**Say your piece!**

*Flying Lines' "Air Mail" column is open to you — share your ideas in a letter to the editor.*

## News from the Northwest Skyraiders

Editor: **Dave Gardner**, 15107 SE 145th Pl., Renton, WA 98059 — Phone: (425) 226-9667 — E-mail: [DGardner55@aol.com](mailto:DGardner55@aol.com)

### FLYING SITE REPORT

*Ron Canaan continues to chip away at every possibility for a site! Here's a recap of his latest activities!*

I just came back from meeting with King County Councilman, Les Thomas, at a town meeting in Auburn. They were there to discuss the transportation issues. That took about 1 hour and then the floor was open so I spoke up and made a pitch for a place to fly.

I was asked a lot of questions about the type of people would use it, costs, area needed etc. He assigned his aide, Jennifer Holms, to stay in touch with me and to help any way they could. I met with her after the meeting and she made an offer to look into a possible site at SeaTac. When King County gave SeaTac the deed to some land lately they made a stipulation that it be developed along the lines of Marymoor Park as a regional park. King County would pay half and SeaTac would pay the balance and would have control.

Now as Marymoor has a flying site this one would also, according to her. I told her I thought a Model Air Park would be a natural tie in with the theme that The City of SeaTac was building around the new park. As of now they are just starting to clear the area. No one has asked for any ground use other than a group that wants to walk dogs in an area when completed.

She is going to e-mail me tomorrow morning with the names of the use committee at the City of SeaTac. I will make contact with them as soon as possible and make the initial pitch. After that I will need that document with the rewording to make it our offer. We also need a group to go with me to show our planes and maybe a flight or two. At least that is what I am going to propose. Get back to as soon as you can as I will set up a meeting in the near future.

I next brought up the subject of our need for a daily site to use and also large enough for a contest and parking for 30 or more cars. He suggested that we use King County Fair grounds in Enumclaw.

They usually lease space but as we didn't have the money he would waive the cost before the King County Council for us. Sanicans would be provided. This would have to be approved by the fair director but he would smooth the way as much as he could. He didn't see any reason that a model park couldn't be built there but a study would have to be done and invited us to be involved. However he is only talking but at least he is on our side.

Take care there Dave, all this may lead nowhere but I am having a ball trying

—Ron

It looks as if we have several possibilities for sites at this time. We really have two issues, which might be combined as one; a regular flying site, and a contest site. They can be two different locations or, at best, all in one site. Clover Park still works for both. Marymoor Park probably has the opportunity for one circle.

City of Kent is still pending a full presentation, but could be a multi-circle site. Auburn has some opportunity, and so does Flaming Geyser State Park. Now King County is back in the picture with potentially better opportunity than at Marymoor Park.

I have a draft of a letter/proposal used by the Rocky Mountain Aeromodelers, in search of a site. It is an excellent document, and only needs editing to fit our area and needs. It even has a PowerPoint slide presentation to go with it. This was put together by Percy Attfield, a control-line transplant from South Africa, who moved to the Denver area to found a computer-oriented company.

Ladies and Gentlemen: We are getting the tools to get a permanent flying site, and the interest of some of the officials. It is just going to take some realistic presentation and working with local government officials to bring this whole thing together. It won't happen overnight, and it won't be handed to us. There is preparation involved, as well as meeting and presentation time, but it CAN BE DONE! Our group is now large enough to bring some numbers to the table, as well as present activities for both the kids and the seniors, as well as ourselves. We do have the advantage that our planes tend to stay under control, or at least close to the pilot!

---

## The Real Thing

Scale building and flying  
by Fred Cronenwett

---

### Book on CL scale and Electronics is ready!

I have finally finished my new book on CL scale and electronic controls. This book is volume #1 and I hope to continue this series with additional topics. One special note: This book does not show how to build a model airplane, but how to set the airplane for CL scale or sport flying with electronic controls, fly in competition and documentation. Everything from the flying lines to electronic controls are discussed. There are several new systems out on the market that are not included in this book. Bill Young has a new 3 channel handle that he just sent me as an example for testing so I can include this in the next volume. If there are any other systems that should be considered I would need to get photographs of the system and enough details to write a chapter. Bill was kind enough to let me borrow a 3-channel handle to do just this. Thanks again for your support and pass the word around.

This is the first known publication that also documents how to fly with electric powered CL scale models with proportional throttle control. Yes, you can fly an CL model with electric power and have full throttle control. Grant Hiestand wrote this chapter for the book.

I would like to thank the following people for their input: Bill Young, Grant Hiestand, Steve Davis, Lynn Boss, Merle Mohring, Bob Banka, Ken Long and my lovely wife Kimberly Kingman.

This book is dedicated to Luciano Nustrini who inspired me to build and fly model airplanes at the age of 12. Thanks so much.

*(What follows is a chapter from the book. — ed.)*

### Trimming the CL scale model

The CL scale model is a different beast than compared to a precision aerobatics model. The purpose of CL scale is to make a miniature duplicate of one particular plane. The relative flying speed of the model, how it flies and how it is flown makes a difference in your flight score. One would expect the Piper Cub to be slow and docile, while the P-51 to fly faster. This where trimming the model for CL scale is important.

When I test fly a new CL scale model, my goal is to determine what needs to be changed to make it fly correctly. We are not interested in sharp corners during maneuvers but a stable model that can takeoff easily and land correctly. The CG location and leadout guide are the first two things that will be adjusted after that maiden flight.

After the maiden flight, the CG is normally adjusted to account for landing gear or other features. The model should be able to fly level, and if the elevator position is changed it should not result in a 5-foot radius turn into a wing over. By precision aerobatic standards my CL scale models are slugs and can barely complete a lazy wing over. The reason for this is that the CG has been pushed forward resulting in a stable, docile model airplane. On my Piper Cub, I had to push the CG forward to make the landings smoother even through the level flight was acceptable due to the landing gear position.

The leadout guide position is critical only in that it affects the line tension. We typically do not fly CL scale models with aerobatic options so keeping line tension at the top of the circle and during overhead options is not considered. You want enough line tension during level flight and for perhaps a mild wing over. On the larger models, the adjustable guide is critical to keep the line tension to practical levels.

### **Takeoff**

Seems simple enough but on every competition flight you are judged on how well you take off and land. Here are some techniques we use. Trim your model accordingly and you will gain valuable flight points.

For the P-51, I would start the takeoff run with the engine at idle, put the elevator to neutral and slowly increase the throttle to full power. The tail should rise and then run along the ground on the main wheels until you reach a good flight speed so you do not stall the model. If the model is trimmed right it should lift off by itself, maybe with a small amount of up elevator applied. If you need to apply a lot of up elevator then the plane is too noseheavy.

Models with nose wheels require a different procedure. Apply full down elevator, slowly advance the throttle until full power is attained. Relax the full down elevator once you reach takeoff speed and, if trimmed correctly, the model should lift on its own. If you need to apply lots of up elevator to takeoff and it results in snapping motion off the ground then we have problems. The wing should have some angle of attack relative to the ground. Sometimes the nose wheel is too short and the wing is level or has negative incidence. The increasing ground speed forces the model to the ground, but if the wing has positive incidence the wing will want to lift off by itself with a suf-

ficient amount of airspeed.

### **Landing**

Once you establish a level cruise speed with the flaps down lock your hand and do not move the elevator. That's right we are going to land the model without moving the elevator. Throttle back slowly, lower the landing gear and continue to throttle back. At some point you will find a throttle setting that results in a gentle sink rate. If you throttle back too much it will fall out of the sky, and if you throttle up you would maintain level flight. So let's find that magical sink rate by adjusting the throttle and let the model settle in on the main wheels. Once the main wheels touch and are rolling then throttle back to idle and apply up elevator. The tail should drop and the tailwheel will start to roll.

Landing a model with a nose wheel requires a different setup. My A-20G havoc with a pair of OS-20FP's takes three laps to land properly. First after finding a cruise level laps I start to throttle back and apply more and more up elevator. I am setting up the model to fly nose high slightly above stall speed with the nose pointed upwards about 5 degrees. After the nose-high attitude is set up the throttle is pulled back some more until a sink rate is found for landing. During this last portion the elevator position is not changed. This will result in the main wheels hitting first and then allow the model to rotate to the nose gear. Once the mains are rolling on the ground, apply full down elevator to keep the nose wheel from bouncing and throttle back to idle. Some models with nose wheels like my A-20 Havoc can not land 3-point, otherwise it will bounce, and bounce and never settle down.

### **Flying Lines and Handles**

Every plane is slightly different and every one of my models has its own handle and lines. This set of lines is rarely used on another model. The reason is that you will establish a line length and handle adjustment that works with that model. I also never remove the handle from the lines so that the handle neutral adjustment is never affected.

I leave one line connector on the airplane, and the other line connector stays with the set of flying lines. That way when you connect the lines to the plane the next weekend you don't have to guess which lines goes where. You can also color-code your connectors if that works better for you.

**FLYING LINES**  
2456 Quince St.  
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 financial support of its subscribers.

The staff: Fred Cronenwett; Jim Cameron; Paul Gibeault; Mel Lyne; Chris Cox; Todd Ryan; Dave Gardner; Mike Potter; Nils Norling; Howard Rush; Alice Cotton-Royer; Dan Rutherford; Mark Hansen; Bill Darkow; John Thompson, editor; Mike Hazel, publisher.

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.

*FLYING LINES* is published nine times a year. Subscription rate is \$14 for USA and \$15 for Canada (U.S. funds). Subscription expiration is noted on the mailing label — issue number listed after name.

Rush to:

First Class Mail