

FLYING LINES

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October, 1984 NEWS OF NORTHWEST CONTROL LINE MODEL AVIATION Number 57

WASHINGTON STATE CHAMPS -- ANOTHER SMASH HIT FOR RAIDERS By Dan Cronyn, Contest Director

The 1984 version of the Raider Roundup/Washington State Control Line Championships was the largest ever. With the very evident fact that control-line is again growing, the Seattle Skyraiders' premier contest attracted 48 contestants. The weather was even cooperative this year with only slight winds and very little rain.

At the end of the two-day event, contestants eagerly awaited the trophy presentation. There they found a few surprises in store for them. A young lady named Linda Birch had bested most of the competitors to end up in third place in Half-A combat. Well done, Linda, and welcome to competition. We all hope to see more of your flying.

In Northwest Sport Race, Richie Salter ended up in second place. Congratulations to you, Richie. In stunt, the 1984 national champion, Paul Walker, was bested by Randy Schultz. Randy has really become a force to be reckoned with. Good job, Randy.

Meanwhile, in sport scale, Dave Mullens and his Ryan put in a near perfect flight. I have never seen Dave smile from ear to ear, but I was treated to this sight as I watched him walk away from the circle. A very heartfelt congratulations to you, Dave.

The final award of the day was the presentation of the Sportsman Award. This is given to the person who competes in the most events and places highest in each event. For another year it goes south again. Dave Green of Astoria, Ore., has won it for the third time. Congratulations, Dave. A few more times and we will just have you bring the plaque back with you so you can sign it. Why haul that big trophy when you don't have to?

Finally, I would like to thank all of the people who helped me in the running of this contest. Without your help I could never have done it. Jim Parsons, Dave and Carolyn Mullens (my strong right arm), Jo Cronyn (for her patience), Dave and Alice Gardner, Pete Bergstrom, Alan Resinger, Dick and Pat Salter, Glenn Salter, Dick McConnell, Bob Parker, Bob Emmett, Tom Knoppi, Dick Peterson and Randy Schultz. Thank you all very much.

Now, on to the contest results:

(EDITOR'S NOTE: Contestants also enjoyed the presentation of membership in the Society of Aircraft Demolishers to Pete Bergstrom for his re-kitting of three precision aerobatics airplanes in three months, and the "crasher" award to Bob Parker for his stunt plane mishap.)

EXPERT PRECISION AEROBATICS (8 entries)

1. Randy Schultz, Seattle, Wash. -- 511.5. Infatuation, Ted Fancher/Randy Schultz design, 60" span, 49 oz., balsa/graphite construction, Monokote/Formula U finish. OS Max .45, Henry Nelson/Vic Garner rework, Rev-Up 11x6EW wood prop, Hobby Shack RC long plug, Red Max 10% nitro fuel, muffler pressure, Supertigre needle valve, Schultz 6-oz. uniflow tank, .013"x64.5' braided lines, Schultz handle.
2. Paul Walker, Kent, Wash. -- 511.5.
3. Don McClave, Portland, Ore. -- 509.
4. Don Schultz, Renton, Wash. -- 486.

ADVANCED PRECISION AEROBATICS (6 entries)

1. Mark Freeman, Seattle, Wash. -- 460.5. Miss Dara, original design, 55" span, 54 oz., Monokote/dope finish. Supertigre .46, Zinger 11x6 wood prop, Fox L-RC plug, Red Max 10% nitro fuel, muffler pressure, Sullivan 6-oz. uniflow tank, .013"x63' braided lines.
2. Mark Walker, home town unavailable -- 436.5.
3. Dave Mullens, Seattle, Wash. -- 420.5.
4. Dave Gardner, Renton, Wash. -- 413.

INTERMEDIATE PRECISION AEROBATICS (2 entries)

1. John Hall, Puyallup, Wash. -- 377.5. Modified Sig Twister, 52" span, 48 oz., balsa, Monokote/Aero Gloss, modified airfoil and fuselage. OS .40FSR-S, Zinger 12x6 wood prop, Fox RC plug, Red Max 10% nitro fuel, Enya needle valve in OS spray bar, Fox 4-oz. uniflow outboard tank, .015"x60' braided lines, E-Z Just handle.
2. Bob Danielson, Bothell, Wash. -- 254.5

RAIDER ROUNDUP, continued

BEGINNER PRECISION AEROBATICS (2 entries)

1. Glenn Salter, Seattle, Wash. -- 199.5. Nobler, Sheldon's 12.5% nitro fuel, 10x6 Master Airscrew prop.
2. Pat Waters, Sumner, Wash. -- 190.

JUNIOR PRECISION AEROBATICS (4 entries)

1. Jason Howell, Tacoma, Wash. -- (score unavailable). Midwest Magician, 44" span, balsa, Monokote. Fox .35, 10x6 wood prop, Fox RC plug, Sheldon's 15% nitro fuel, suction tank, .018"x60' braided lines. Pit crew Bruce and Jamie Howell.
2. Richie Salter, Seattle, Wash.
3. Shawn Mullens, Seattle, Wash.
4. Lance Cronyn (unable to fly due to theft of airplane).

OPEN BALLOON BURST (12 entries)

1. Joe Just, Sunnyside, Wash. -- Selohssa, original design, foam/balsa/ply. shelf paper. Fox .29, J&J Sales 10x7 glass prop, Magnum 5% nitro fuel, Fox 3-oz tank, .015"x60' lines, E-Z Just handle.
2. Dick McConnell, Seattle, Wash.
3. Dave Mullens.
4. Dave Green, Astoria, Ore.

JUNIOR BALLOON BURST (3 entries)

1. Richie Salter, Seattle, Wash. -- Airplane data unavailable.
2. Shawn Mullens.
3. Jason Howell.

HALF-A COMBAT (3 entries)

1. Glenn Salter -- Fantail, Chet Hales design. Cox TeeDee .049, 5x3 prop, Cox plug, Sheldon's 40% nitro fuel, bladder pressure, Aldrich handle.
2. Dick Salter, Seattle, Wash.
3. Linda Birch, Everett, Wash.
4. Gary Byerley, Spanaway, Wash.

SLOW COMBAT (4 entries)

1. Pat Waters, Sumner, Wash. -- Airplane data unavailable.
2. Gary Byerley.
3. Dick Salter.
4. Dick McConnell.

AMA COMBAT (3 entries)

1. Norm McFadden, Lynwood, Wash. -- Creamsicle, original design, 48" span, 17.5 oz., balsa/foam, Solarfilm. Fox .36 Combat Special, McFadden rework, Top Flite 3.5x6.5 wood prop, K&B plug, McFadden 45% nitro fuel, bladder tank, pressure regulator.
2. Gary Byerley.
3. Bob Stettler, Spanaway, Wash.
4. Glenn Salter.

AMA COMBAT MATCHES:

ROUND 1: Norm McFadden d. John Thompson (kill). Bob Stettler d. Glenn Salter (air time). Gary Byerley d. Myles Lawrence (kill).

ROUND 2: McFadden d. Dick Salter (cut). G. Salter d. Lawrence (kill). Stettler d. Thompson (kill). Byerley d. D. Salter (airtime).

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RAIDER ROUNDUP, continued

ROUND 3: Byerley d. McFadden (airtime). Stettler d. G. Salter (air time).

ROUND 4: McFadden d. Stettler (cut).

ROUND 5: Byerley d. Stettler (cut).

ROUND 6: McFadden d. Byerley (cut).

FINAL: McFadden d. Byerley (kill).

AMA COMBAT EVENT DIRECTOR DICK McCONNELL'S NOTES: Despite the low turnout of entries, AMA combat featured hot and furious action. Event Director Dick McConnell wishes to thank Bill Varner (who did most of the work) and the professionalism and cooperation of combat fliers themselves.

Some unofficial awards:

FIRST FLYAWAY: In the first match, Norm McFadden's plane demonstrated tight maneuvers over the RC pylon race's pit area.

SECOND FLYAWAY: Gary Byerley's plane made a determined effort to reach the I-5 freeway.

FIRST OUT-OF-CONTROL: Goes to Bob Stettler and John Thompson, who stepped aside as Stettler's plane slammed into the center of the pilot's circle.

FIRST SPORTSMANSHIP: To Myles Lawrence, who accepted the judges' call against him with calm aplomb and dignity. A very class act.

NORTHWEST SPORT RACE (7 entries)

1. Steve Cole, Portland, Ore. -- 9:33. Airplane data unavailable.
2. Richie Salter -- 11:15.
3. Dave Green -- 134 laps.
4. Glenn Salter -- 127 laps.

NORTHWEST SUPER SPORT RACE (6 entries)

1. Dave Green -- 8:23. Minotaur, original design, 34" span, 27 oz., balsa/spruce/bass, K&B clear epoxy finish. K&B .35, Green rework, Dark Ages Racing Equipment 8.75x7.5 epoxy-glass prop, Thunderbolt long plug, Sheldon's 15% nitro fuel, needle valve turned .010 down, fastfill, shutoff, hot glove, DARE 2.75-oz. uniflow tank, Fox handle modified to 2" leadout spacing. Pilot Bill Varner, pit crew Dave Green (Dark Ages Racing Team).
2. Greg Beers, Vancouver, Wash. -- 8:25.
3. Glenn Salter -- 9:36.
4. Dick McConnell -- 4:42 heat.

OPEN CLASS I MOUSE RACE (5 entries)

1. Dave Green -- Times unavailable. Dragonfly (Joe Just design), 15" span, 5.5 oz., balsa/spruce/ply, K&B Super Pox. Cox .049, Green rework, J&J Sales 5x4.5 epoxy-glass prop, Cox head, Sheldon's 50% nitro fuel, fastfill, hot glove, spring starter, .008"x42" single strand lines, Dick Salter handle. Pilot Bill Varner, pit crew Dave Green.
2. Dave McFadden, Lynnwood, Wash.
3. John Thompson, Cottage Grove, Ore.
4. Glenn Salter.

JUNIOR CLASS I MOUSE RACE (1 entry)

1. Richie Salter -- Time unavailable. Cat's Paw, plywood/basswood. Cox Black Widow .049, J&J Sales 5x4 glass prop, GloBee plug, Custom Blend 20% nitro fuel, spring starter. Pilot Richie Salter, pit crew Dick Salter.

CLASS II MOUSE RACE (6 entries)

1. Dave Green -- Times unavailable. Midwest Super Mouse, 12" span, 6.5 oz., balsa/spruce/bass, clear epoxy, modified for V-tail. Cox .049, Green rework, J&J Sales 5x4.5 epoxy-glass prop, Cox high-compression head, Sheldon's 50% nitro fuel, fastfill, shutoff, hot glove, crankcase pressure, spring starter, DARE 1.5-oz. uniflow tank. Pilot Bill Varner, pit crew Dave Green (Dark Ages Racing Team).
2. Jason Howell.
3. Glenn Salter.

PROFILE NAVY CARRIER (8 entries)

1. Dave Green -- 215.9. Sterling P-51, 36" span, 36 oz., balsa, paper/dope. Supertigre .35, DARE 9x7 epoxy-glass prop, K&B idle-bar long plug, Sheldon's 25% nitro fuel, throttle, DARE uniflow 2.5-oz. outboard uniflow tank, J-Roberts handle.
2. Greg Beers -- 204.5.
3. Bill Skelton, Warrenton, Ore. -- 204.3.
4. Bob Parker, Renton, Wash. -- 123.6

CLASS I NAVY CARRIER (2 entries)

1. Rick Wallace, Sequim, Wash. -- Scores unavailable. Kingfisher, 34" span, 2.8 lbs., balsa/ply, Formula U. OS .40, Top Flite 9x8 wood prop, Fox plug, Cool Power 40% nitro fuel, Sullivan 4-oz. tank, G&S handle. Pit crew Dawn Wallace, Hope Wallace.
2. Bob Danielson.

RAIDER ROUNDUP, continued

CLASS II NAVY CARRIER (2 entries)

1. Roy Beers, Vancouver, Wash. -- Scores unavailable. Airplane data unavailable.
2. Shawn Parker, Renton, Wash.

RECORD RATIO SPEED (4 entries)

1. Chris Sackett, Burnaby, B.C. -- 188.6 mph. Ironsides Too, Jerry Thomas design, 30.5 oz., aluminum/magnesium/titanium, polished finish. Dyna-Jet, Sackett-Thomas rework, 3" extended Thomas intake, Sackett 60% nitro/40% propylene oxide fuel, Thomas 9-oz suction tank, Stanzel Speedmaster monoline handle. Pilot Chris Sackett, pit crew Jerry Thomas, Bob Einhaus, Mike Hazel.
2. Jerry Thomas, Puyallup, Wash. -- Jet, 186.41 mph.
3. Mike Hazel, Salem, Ore. -- Airplane type unavailable, 144.06 mph.
4. Greg Beers -- Airplane type unavailable, no flight.

D-JET SPEED (4 entries)

1. Jerry Thomas -- Jet, 192.64 mph.
2. Chris Sackett -- Jet, 191.41 mph.
3. Mike Hazel -- Jet, 154.18 mph.
4. Ken Burdick, Kirkland, Wash. -- D, no flight.

FORMULA 40 SPEED (3 entries)

1. Greg Beers -- 139.16 mph. Airplane data unavailable.
2. Ken Burdick -- 131.91 mph.
3. Dan Burdick, Seattle, Wash. -- 131.91 mph.

SPORT SCALE (4 entries)

1. Dave Mullens -- 180.5. Airplane data unavailable.
2. Bob Danielson -- 90.5.
3. Dick Salter -- 87.5
4. Mike Bogan, home town unavailable -- 3 attempts.

SORTA SCALE (4 entries)

1. Randy Schultz -- 128.5. Midwest ME 109, 48" span, 42 oz., balsa/plywood, silk/Aero Gloss dope. OS Max .35, Zinger 10x6W wood prop, Hobby Shack RC-long plug, Sheldon's 5% nitro fuel, muffler pressure, Pylon 4-oz. clunk tank, .015"x60' braided lines, Schultz handle.
2. Dick Salter -- 107.
3. Dave Green -- 107.
4. Bob Danielson -- 100.

OLD-TIME STUNT (7 entries)

1. Bob Emmett, Renton, Wash. -- 258. P.K. Guillow Barnstormer, 47" span, 30 oz., Aero Gloss finish. Fox .35, Rev-Up 10x6W wood prop, Thunderbolt RC plug, Red Max 10% nitro fuel, Emmett 3-oz. uniflow suction tank, .015"x58' braided lines, Aldrich handle.
2. Dick Salter -- 233.
3. Bob Danielson -- 222.25.
4. John Hall -- 184.75.

WHO'S THE GEORGE IN OUR CIRCLE?

The FL monthly "George Award" is being suspended for one month while we ask our readers to help out.

There are so many deserving of recognition in this regular feature that we're having trouble deciding, so we're going to turn the question over to the readers.

Send us your nomination for a "George" recipient. The "George" is the guy who steps forward to go to work when everyone else says, "Let George do it."

Just send us his name and a paragraph about what he's done for control-line model aviation.

DEADLINES -- A NECESSARY EVIL

Though FL has been the most regularly published wide-circulation control-line newsletter in the nation for half a decade, there are occasional irregularities in its publication schedule caused by the interference of the staff's personal lives.

As a result, contest organizers must provide flyers and information for the contest calendar well in advance of their events.

As a reminder, we are asking contest directors to remember that a TWO-MONTH lead time is normally necessary. Three months actually is much safer due to space and other considerations.

If you want to make sure your event is publicized in FL in advance, get us the information as soon as humanly possible. If it's less than two months in advance, you're taking chances.



RANDOM TIPS AND RIBS FROM THE FL WORKSHOP FLOOR

=====**MISSING PERSONS DEPT.:** Does anyone know a flier by the name of Trond Toft. Mr. Toft sent us a subscription form, listing his address at 122 Pearl St., but he didn't tell us what city. If somebody can put us in touch with him, we'll start sending him the newsletter.

=====**THANKS:** Joe Just of J&J Sales promises to send FL subscription forms out with his catalog mailing in January. Another example of the support we continue to get from the leaders in our hobby. By the way, thanks also to Doug Taffinder for distributing FL sub forms at the Carolina-Taffinder booth at the Reno Nats.

=====**BIG CHEESE:** Mike Hazel of Salem, Ore., has signed on as contest director for the 1985 Northwest Regional Control-line Championships in Eugene, Ore. It promises to be another biggie.

=====**HOW DO YOU SPELL RELIEF?:** In order to relieve pressure on the Speed circle during that busy Regionals Sunday, the hardtop circle will be open from noon to 5 p.m. FRIDAY for official flights in 1985. The only other schedule change now planned is to drop FAI Team Race, for which there were no entries in 1984. This is subject to change upon appeal from the diesel-dippers.

=====**WELCOME BACK, CHAMP:** Paul Walker, the 1984 National Precision Aerobatics champion, has moved back to Kent, Wash., ending his temporary Boeing Co. assignment in Alta Loma, Calif. He's at 25900 127th Ave. SE, 98031. By the way, we've got several excellent STUNT SCENE columns by Paul waiting in the wings. Stay tuned.

=====**TORNADOS:** The new Tornado reinforced propellers, aparently the work of the famed Al Kelly, are on the market. Ask for them at your hobby shop.

=====**NEW KIT ON THE BLOCK:** A new Slow Combat kit called Instant Replay is being marketed by L&R Products. It features replaceable foamwings, adjustable leadouts, replaceable elevator and an almost indestructible fuselage. Damages are \$17 per kit, \$6 for extra wings and \$2 for elevators. L&R Products, P.O. Box 236, Mendon, Illinois 62351.

=====**VIC'S NIX:** Vic Garner says the pistons and liners for Tune-Hill OS .36 engines are not yet ready. We apologize for printing that they were in Issue 56...we cribbed that info from another newsletter. Shame on us.

=====**BEAR'S BACK:** Bear Model Products has a new catalog with lots of

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FLYAWAYS, continued

nifty CL items. Bear Model Products, 2709 Turtlecreek Drive, Hazel Crest, Illinois, 60429. Note the new address.

====CONTRIBUTIONS TO GREATNESS: Bob Carver, the mentor of the Bladder Grabber, has donated money for Miniature Aircraft Combat Association Top-10 T-shirts. Thanks, Bob, for your continued help keeping Combat healthy.

====TIP TOP: Gary Byerley, almost unbeatable in Combat this year, is resting comfortably in the MACA Top 10. Gary was at No. 8 at last report, may be higher now.

====TRIAL RUN: A proposal is being prepared to host the 1985 United States control-line world championship team trials at the Boeing Space Center in Kent, Wash. This would include Speed, Combat, Racing and Aerobatics in the first combined trials in several years.

====POLITICS: Jim McNeill of Birmingham, Ala., asks us to remind AMA members that he is a candidate for re-election as AMA executive vice president. He asks for our votes. FL does not normally endorse political candidates, but we are pleased to pass along announcements from the candidates.

====TURKEY EXPRESS: Yes, the FL Benefit Turkey Tournament will happen! The mail-order concept has proved quite well accepted. Contests will be held in Seattle at Carkeek Park, in Eugene at Mahlon Sweet Airport, and probably in the Portland or Astoria areas. Others may be added, since there is still time for CDs to offer to run the contest in their areas. Watch the next issue for final details. Contest date is Nov. 11, at a flying site near you!

ISB SCALE MEET PARTIAL RESULTS

The Intermountain Scale Builders scale meet was held in Deer Park, Wash., Aug. 19. Organizers have not yet responded to FL's request for information. However, we do have competition information forms for some events, provided by competitor Orin Humphries. We hope to have complete results in a future issue. Any help in locating these results would be appreciated.

PROFILE SCALE

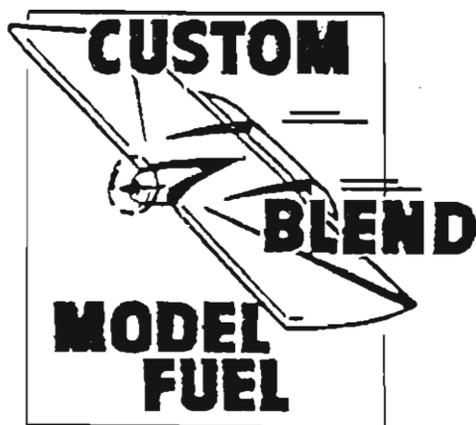
1. Orin Humphries, Spokane, Wash. -- B-25, Humphries plans, twin .049s.
2. Clarence Haught, Coeur d'Alene, Idaho -- Staggerwing, Haught design, K&B .35.

JUNIOR HALF-A PROFILE SCALE

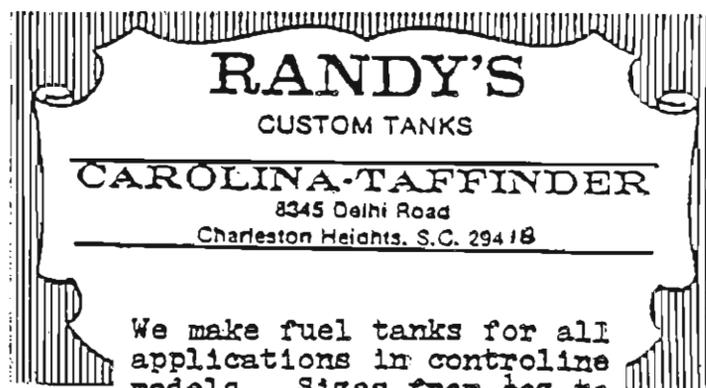
1. Rick Humphries, Spokane, Wash. -- B-25, O. Humphries design, twin Cox .049s.

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40TH VGMC INTERNATS IS A FIRST FOR MODERN NW CL

Though the Vancouver, B.C., Gas Model Club "Internats" contest has been held some 40 times, the Sept. 1-3 contest was the first to attract Northwest-wide attention in a number of years.

Results below were provided by Chris Sackett of Burnaby, B.C. This being new on the schedule, FL was asleep at the switch and failed to get information forms out to the organizers, so we don't have airplane data below.

Also, we do not have any information about the number of entries in each category. FL standings at this time will reflect the number of entries listed below. If there were more entries than these results reflect, would someone connected with the contest please send us complete results through fourth place, with the number of entries. That would allow the participants to get full credit in the Northwest standings.

Here are the results:

FORMULA 40 SPEED

1. Ken Burdick, Bothell, Wash. -- 139.48 mph.
2. Dan Burdick, Seattle, Wash. -- 122.9.
3. Alan Resinger, Delta, B.C. -- no time listed.

D-JET SPEED

1. Jerry Thomas, Tacoma, Wash. -- 197.51 mph (jet).
2. Chris Sackett, Burnaby, B.C. -- 195.57 mph (jet).
3. Ken Burdick, Seattle, Wash. -- 183.04 mph (D).

RECORD RATIO SPEED

1. Chuck Schuette, Vancouver, Wash. -- 160.57 (FAI).
2. Jerry Thomas -- 200.37 mph (Jet).
3. Paul Gibeault, Calgary, Alta. -- 147.15 mph (FAI).

NORTHWEST SPORT RACE

1. Henry Hadjik, New Westminster, B.C. -- 18:43.
2. Mel Lyne, Squamish, B.C. -- 20:50.
3. Robert Scotland, Vancouver, B.C. -- 110 laps.

.15 COMBAT

1. Greg Davis, Burnaby, B.C.
2. Greg Wornell, Vancouver, B.C.
3. Mel Lyne.

JUNIOR HALF-A PROFILE SCALE

1. Mike Slessor, Whonnock, B.C. -- 137 points.
2. Colyn Matthews, Surrey, B.C. -- 115.75.
3. Rich Humphries, Spokane, Wash. -- 93.25 mph.

OPEN HALF-A PROFILE SCALE

1. Orin Humphries, Spokane, Wash. -- 100.25.

PROFILE SCALE

1. Art Lander, Richmond, B.C. -- 134.5.
2. Orin Humphries -- 123.75

SPORT SCALE

1. Orin Humphries -- 560.75.
2. Dennis Matthews, Surrey, B.C. -- 417.5
3. Art Lander.

EXPERT PRECISION AEROBATICS

1. Randy Schultz, Seattle, Wash. -- 487.
2. Al Resinger, Delta, B.C. -- 483.

ADVANCED PRECISION AEROBATICS

1. Ray Mathis, Bremerton, Wash. -- 425.

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INTERNATS, continued

2. Mel Lyne -- 351.
3. Dennis McLellan, Surrey, B.C. -- 325.5.

BEGINNER-INTERMEDIATE PRECISION AEROBATICS

1. Orin Humphries, -- 145.
2. Trans Lyne, Squamish, B.C. -- 92.
3. Jim Low, Richmond, B.C. -- 83.

PROFILE NAVY CARRIER

1. Orin Humphries -- 225.88.
2. Bob Newman, Langley, B.C. -- 209.67.
3. Bob Parker, Renton, Wash. -- 169.51.

CLASS I-II NAVY CARRIER

1. Orin Humphries -- 318.55.
2. Bob Parker -- 315.25.
3. Rick Wallace, Sequim, Wash. -- 225.

BALLOON BUST

1. Ron Underhill, Richmond, B.C. -- 4 balloons.
2. Randy Schultz -- 4 balloons.
3. Art Lander -- 2 balloons.

C O C K P I T C H A T T E R

(Notes from the editor)

A CLASS ACT...

Dan Cronyn must go down as the Contest Directors' Rookie of the Year for a splendid job of organizing and running the Raider Roundup/Washington State Control-line Championships. With such a fine organization behind him, the contest is definitely a class act and a pleasure for all to attend.

There were some sad moments, though, that were not the fault of modelers.

The evening before the contest was to begin, Glenn Salter's van was burglarized. Glenn lost a flight box, tools and other items. It didn't help to have the wind and assorted other mishaps bash up all Glenn's racing planes on Saturday!

Then, as if to add insult to injury, Dan Cronyn's van was burglarized Saturday night!! Dan's flight box and tools, all the Skyraiders' stopwatches and lap counters and -- worst of all -- young Lance Cronyn's stunt plane were stolen. Fliers pitched in the equipment needed to run the contest, but there was no consoling the flier who lost his plane.

It can be a cruel world.

On the brighter side, the sportsmanship of modelers at the Roundup and other Northwest contests in the past year has been exemplary. These are people out to have a good time, win or lose.

NO WEAK LINKS, PLEASE...

Flying Lines was intended to be a communications NETWORK, involving the participation of all Northwest fliers. This is how we keep ourselves in touch with the modeling world around us. Everyone must pitch in.

As control-line activity continues to grow, it is essential that all the pockets of activity report in. The scene is too vast now for the editor and publisher to attend every single event in the five-state, one-province region, so in some cases we rely on written reports.

If you know of organized activity not being reported here, take it upon yourselves to educate the officials. Get these activities into the calendar and get the results to us. If you find an area where CL activity is springing up (it's happening all over), get out and sell a few subscriptions. FL subscription forms will be cheerfully mailed to anyone who requests them.

Remember, FL keeps track of standings and records for all Northwest sanctioned contests, but we cannot keep an accurate record if we don't have the results. Results MUST come to us for each event through FOURTH place, with the number of entries listed as well.

AVON CALLING...

It's time to get out and sell again, gang. FL's financially up against the wall again. Get us some subs, some ads, some raffle tickets. It will be touch and go until next summer unless we get a transfusion quick. There's a ton of material to get into the newsletter, so let's make sure we have one.

WHO SHOULD RULE?

Control-Line Contest Board member Bill Lee has filed a silly rules proposal intended to show that people making proposals should have competence in the event they are dealing with. There is some merit to that thinking.

However, there may be another side. Sure, some proposals are idiotic and should be -- and are -- rejected by the contest boards. Still, it might be unwise to allow only heavy participants to make the rules. Sometimes

COCKPIT, continued

those of us deeply involved in our own events can't step back far enough to see the whole picture.

I sort of like hearing new ideas and proposals. Maybe I'll reject them...but hearing them makes me think.

What do YOU think?

YES, THERE WILL BE A DRIZZLE CIRCUIT!

Because a coordinator has stepped forward, there will indeed be a seventh running of the Northwest Sport Race Drizzle Circuit.

Steve Lindstedt of Portland, Ore., assisted by several of the Portland-area Northwest Aeroliners, will coordinate the circuit. The usual gang of contest directors will play supporting roles.

The circuit will follow the format of the past several years. Contests will be held on the second Sunday of each month, December through April. Main events will be Northwest Sport Race and Northwest Super Sport Race. A secondary event will be held at each contest.

Contests are tentatively scheduled to take place at Delta Park in Portland.

Points will accumulate for NWSR and NWSS, with the usual big trophies being presented at the end of the year. Dave Green of Astoria, Ore., is holding the two big perpetual trophies captive, and the whole Northwest is chasing him.

As usual, fliers will be encouraged to register and apply for a DC racing number for each of their airplanes. Registration can be via FL, since we have last year's records.

For information about the circuit, contact: Steve Lindstedt, 8725 N. Newman, Portland, OR 97203, (503) 285-1463.

More details will follow, but the tentative schedule is as follows:

DATE	EVENTS	CONTEST DIRECTOR
Dec. 9, 1984	NWSR, NWSS, Class I Mouse Race	Rich Schaper
Jan. 13, 1985	NWSR, NWSS, Rat Race	Dick Salter
Feb. 10, 1985	NWSR, NWSS, Half-A Combat	Dave Green
March. 10, 1985	NWSR, NWSS, Northwest Sport Combat	John Thompson
April 14, 1985	NWSR, NWSS, Slow Rat Race	Mike Hazel

The DC is great fun and great experience in competition for everyone novice through old pro. Be there!

ALL RULES PROPOSALS ARE IN, DEBATE BEGINS

A number of additional rules change proposals were filed with the Academy of Model Aeronautics after the report in the August issue of Flying Lines. The list below is the complete list of proposals filed by the Sept. 1 deadline. The rules now go to a period of discussion via correspondence and eventually to a vote. All changes approved would affect the 1986-87 rule book.

The Control-Line Contest Board representative for District XI is John Thompson. Comments on any and all rules change proposals are invited. Mail them to Thompson in care of Flying Lines.

Additional details about all proposals are published in MODEL AVIATION magazine's Competition News section.

GENERAL RULES PROPOSALS

NUMBER	SYNOPSIS
GEN-86-1	Creates "Elementary Modelers" competition class
GEN-86-2	Eliminates "Senior" class except for dues
GEN-86-3	Defines supercharching restriction
GEN-86-4	Creates Combat records
GEN-86-5	Establishes electric motor classes
GEN-86-6	Prevents CD from refusing protests

CONTROL-LINE RULES PROPOSALS

CL-86-1	Requires mufflers on all CL competition models
CL-86-2	Exempts Combat models from mufflers
CL-86-3	Do not end Combat match for collisions, tangles, flyaways
CL-86-4	Eliminate Combat 65-foot safety circle
CL-86-5	Change Precision Aerobatics level flight to high circling
CL-86-6	50% displacement for 4-stroke Precision Aerobatics engines
CL-86-7	Specifies Combat count-down
CL-86-8	Separate monoline and 2-line Speed classes
CL-86-9	.40 engines for Combat
CL-86-10	Jury system for Combat
CL-86-11	Prohibit changing Combat handle
CL-86-12	Outlaw tuned pipes/megaphones
CL-86-13	More ways to lose Precision Aerobatics pattern points

RULES, continued

- CL-86-14 Class system for Precision Aerobatics, pattern changes
CL-86-15 Increase Mouse Race pull tests
CL-86-16 Allow .008" stranded lines in Mouse Race
CL-86-17 Eliminate Profile Carrier scale bonus points
CL-86-18 10% margin of Profile Carrier scale
CL-86-19 Provisions for moving Carrier deck when wind shifts
CL-86-20 Pilots'-view Precision Aerobatics maneuver drawings
CL-86-21 Clarify start and end of Precision Aerobatics vertical eight
CL-86-22 Eliminate Precision Aerobatics pattern-start hand signal
CL-86-23 Specify Precision Aerobatics timing to begin with hand signal
CL-86-24 Lose Aerobatics starting points if electric starter used
CL-86-25 Grass Precision Aerobatics terrain specifications
CL-86-26 More grass Precision Aerobatics terrain specifications
CL-86-27 Use modified FAI procedural rules for Precision Aerobatics
CL-86-28 Use FAI scoring for Precision Aerobatics
CL-86-29 Sport .40 engines for Slow Rat Race
CL-86-30 .010" single-strand Mouse Race lines
CL-86-31 10% nitro fuel for all Navy Carrier events
CL-86-32 Allow mufflers in Navy Carrier
CL-86-33 Exempt Navy Carrier from muffler requirement
CL-86-34 Weigh Navy Carrier planes without fuel
CL-86-35 Mufflers must be fully inside or outside of Carrier planes
CL-86-36 Allow fishing line for control lines
(Proposer Bill Lee says this is a frivolous proposal intended to demonstrate need to require proposers to have competency in the event discussed.)
CL-86-37 10% nitro for all Racing
CL-86-38 .21 Slow Rat, external controls, .018" stranded lines
CL-86-39 Exempt Racing from muffler requirement
CL-86-40 Require mufflers for all CL models

OTHER CL-RELATED RULES PROPOSALS
IND-86-16 Creates CL electric scale, indoor and outdoor

NW COMPETITION RECORDS

RECORD PERFORMANCES ESTABLISHED BETWEEN NORTHWEST MODELERS IN SANCTIONED COMPETITION

Three Northwest control-line competition records fell at the Vancouver Gas Model Club Internats over Labor Day weekend, two in speed and one in carrier. Another speed record was set at a record trials in Richmond, B.C., Aug. 19.

At the VGMC meet, Orin Humphries of Spokane, Wash., entered the escalating Navy Carrier record race with a 225.88 score in Profile. That erased Dave Green's record of 218.5. Welcome back to competition, Orin!

Meanwhile, Jerry Thomas of Puyallup, Wash. was joining the 200-club with a speed of 200.37 mph in Jet Speed, erasing Chris Sackett's mark of 194.73 mph. Chuck Schuette of Vancouver, Wash. went 160.57 mph in FAI Speed to erase Scott Newkirk's record of 158.98.

At the Richmond record trials, Sackett turned 164.77 mph in A Speed. That was a new Canadian record as well as a Northwest mark. The previous Northwest mark was Sackett's own 149.82 mph.

Flying Lines keeps track of the best performances of Northwest control-line fliers in AMA-sanctioned contests (or MAAC-sanctioned contests using AMA rules), and in Northwest regional events. Here are the complete records as of Sept. 22:

MOUSE RACE I 50-lap: 2:35 (Knoppi-McCollum)	100-lap: 5:08 (Knoppi-McCollum)
MOUSE RACE II 75-lap: 3:54 (John Thompson)	200-lap: 9:21 (Bill Varner)
GOODYEAR 70-lap: 3:28 (Dave Green)	140-lap: 7:42 (John Thompson)
SLOW RAT 70-lap: ---	140-lap: 9:33 (Dick Peterson)
RAT RACE 70-lap: 2:29 (Mike Hazel)	140-lap: 4:53 (Mike Hazel)
TEAM RACE 100-lap: 3:51 (Knoppi-McCollum)	200-lap: 7:49 (Knoppi-McCollum)
NW SPORT RACE 70-lap: 4:14 (Dick Salter)	140-lap: 8:27 (Dick Salter)
NW SUPER SPORT 70-lap: 3:23* (Dave Green)	140-lap: 6:52 (Dave Green)
HALF-A SPEED: 83.2 mph (Paul Wallace)	FAI SPEED: 160.57 mph (Chuck Schuette)
HALF-A PROTO: 83.63 (Paul Wallace)	FORMULA 21: 79.54 (Rich Salter)
A SPEED: 164.77 (Chris Sackett)	FORMULA 40: 152.28 (Scott Newkirk)
B SPEED: 184.57 (Chris Sackett)	JET SPEED: 200.37 (Jerry Thomas)
D SPEED: 170.71 (Mike Hazel)	PROFILE NAVY CARRIER: 225.88 (Orin Humphries)
	CLASS I NAVY CARRIER: 311.1 (Rick Wallace)
	CLASS II NAVY CARRIER: 323.7 (Loren Howard)

* Established by Green Sept. 10, 1983, tied by Dick Peterson March 11, 1984.

NW COMPETITION STANDINGS

FLYING LINES' COMPILATION OF EVENT PLACINGS BY NORTHWEST MODELERS COMPETING IN NORTHWEST REGION CONTESTS

The Washington State Control Line Championships and the Vancouver Gas Model Club Internats juggled standings in many Northwest competition events since the last issue of FL. Here are the top fives in all events in which standings have changed. FL standings chart the rankings of Northwest fliers in Northwest contests. Information on the point system is available from FL. The standings below are as of Sept. 22.

NORTHWEST SPORT RACE (9 contests, 75 entries)

1. Dave Green	Astoria, Ore.	59
2. Rich Schaper	Kelso, Wash.	44
3. Gene Pape	Eugene, Ore.	19
4. Glenn Salter	Seattle, Wash.	17
5. Steve Cole	Portland, Ore.	16

NORTHWEST SUPER SPORT RACE (7 contests, 49 entries)

1. Dave Green	Astoria, Ore.	29
2. Rich Schaper	Kelso, Wash.	27
3. Glenn Salter	Seattle, Wash.	24
4. Nitroholics Team	Cottage Grove/Salem	19
5. Dick Peterson	Renton, Wash.	16

CLASS I MOUSE RACE (5 contests, 19 entries)

1. Dave Green	Astoria, Ore.	5
2. Dave McFadden	Lynnwood, Wash.	4
3. Rick Schaper	Kelso, Wash.	3
John Thompson	Cottage Grove, Ore.	3
5. FAST Team	Vancouver, Wash.	2
Glenn Salter	Seattle, Wash.	2
Rich Salter	Seattle, Wash.	2

CLASS II MOUSE RACE (2 contests, 11 entries)

1. Dave Green	Astoria, Ore.	8
2. Jason Howell	Tacoma, Wash.	5
3. Glenn Salter	Seattle, Wash.	4

OVERALL RACING (28 contests, 178 entries)

1. Dave Green	Astoria, Ore.	110
2. Rich Schaper	Kelso, Wash.	74
3. Glenn Salter	Seattle, Wash.	44
4. Nitroholics Team	Cottage Grove/Salem	33
5. FAST Team	Vancouver, Wash.	30

AMA COMBAT (5 contests, 75 entries)

1. Gary Byerley	Spanaway, Wash.	35
2. Kevin Krumman	Portland, Ore.	33
3. Bob Stettler	Tacoma, Wash.	20
4. Norm McFadden	Lynnwood, Wash.	16
5. Glenn Salter	Seattle, Wash.	12

SLOW COMBAT (2 contests, 14 entries)

1. Gary Byerley	Spanaway, Wash.	12
2. Dick McConnell	Seattle, Wash.	9
Pat Waters	Sumner, Wash.	4
Dick Salter	Seattle, Wash.	2

HALF-A COMBAT (6 contests, 54 entries)

1. Gary Byerley	Spanaway, Wash.	44
2. Glenn Salter	Seattle, Wash.	33
3. Ken Burdick	Kirkland, Wash.	12
4. John Thompson	Cottage Grove, Ore.	11
Lloyd Birch	Everett, Wash.	11

OVERALL COMBAT (16 contests, 156 entries)

1. Gary Byerley	Spanaway, Wash.	96
2. Glenn Salter	Seattle, Wash.	50
3. Kevin Krumman	Portland, Ore.	33
4. Bob Stettler	Spanaway, Wash.	27
5. Ken Burdick	Kirkland, Wash.	16
John Thompson	Cottage Grove, Ore.	16
Dick McConnell	Seattle, Wash.	16
Norm McFadden	Lynnwood, Wash.	16

PRECISION AEROBATICS (26 contests, 100 entries)

1. Don McClave	Portland, Ore.	33
2. Randy Schultz	Seattle, Wash.	31.5
3. Alan Resinger	Delta, B.C.	22.5
4. Marty Phillips	Kirkland, Wash.	18
5. Pete Bergstrom	Spanaway, Wash.	16.5

SPEED (13 contests, 59 entries)

1. Chris Sackett	Burnaby, B.C.	16	B, Jet
2. Jerry Thomas	Puyallup, Wash.	14	Jet
3. Loren Howard	Vancouver, Wash.	12	Formula 40, D
4. Chuck Schuette	Vancouver, Wash.	8	FAI
5. Ken Burdick	Kirkland, Wash.	7	Formula 40, D

OLD-TIME STUNT (4 contests, 21 entries)

1. Bob Emmett	Renton, Wash.	18
2. Bob Parker	Renton, Wash.	12
John Hall	Puyallup, Wash.	12
Bob Danielson	Bothell, Wash.	12
5. Dick Salter	Seattle, Wash.	6

CLASS I NAVY CARRIER * (3 contests, 13 entries)

1. Bob Danielson	Bothell, Wash.	12
2. Rick Wallace	Sequim, Wash.	10
3. Pat Johnston	Boise, Idaho	7
4. David Shrum	Glide, Ore.	5
5. Roy Beers	Vancouver, Wash.	1

PROFILE NAVY CARRIER (5 con ests, 36 entries)

1. Dave Green	Astoria, Ore.	21
2. Marty Phillips	Kirkland, Wash.	16
3. Bill Skelton	Warrenton, Ore.	13
4. Bob Parker	Renton, Wash.	11
5. Patrick Johnston	Boise, Idaho	10

OVERALL NAVY CARRIER * (13 contests, 67 entries)

1. Bob Parker	Renton, Wash.	22
2. Dave Green	Astoria, Ore.	21
3. Marty Phillips	Kirkland, Wash.	18
Bob Danielson	Bothell, Wash.	18
5. Patrick Johnston	Boise, Idaho	17

CLASS II NAVY CARRIER * (3 contests, 10 entries)

1. Roy Beers	Vancouver, Wash.	9
2. Bob Parker	Renton, Wash.	5
Wayne Spears	Portland, Ore.	5
4. Bob Danielson	Bothell, Wash.	3
5. Shawn Parker	Renton, Wash.	1

OVERALL SCALE (11 contests, 25 entries)

1. Bob Danielson	Bothell, Wash.	9
2. Randy Schultz	Seattle, Wash.	8
3. Orin Humphries	Spokane, Wash.	7
4. Art Lander	Richmond, B.C.	6
5. Patrick Johnson	Boise, Idaho	3
Dick Salter	Seattle, Wash.	3
Mike Glessor	Whonnock, B.C.	3

SPORT-PROFILE SCALE (10 contests, 21 entries)

1. Randy Schultz	Seattle, Wash.	12
2. Bob Danielson	Bothell, Wash.	9
3. Dick Salter	Seattle, Wash.	8
4. Orin Humphries	Spokane, Wash.	7
5. Art Lander	Richmond, B.C.	6

STANDINGS, continued

BALLOON BUST (6 contests, 34 entries)		
1 Joe Just	Sunnyside, Wash.	12
2 Dick Salter	Seattle, Wash.	11
Dick McConnell	Seattle, Wash.	11
4 John Hall	Puyallup, Wash.	10
Dave Mullens	Seattle, Wash.	10

* Results of Class I-II combined contests are included in Overall Carrier, not included in individual class standings. In the case of occasional odd events which are not flown often enough to warrant a separate standing (such as .15 combat at the UGMC meet), standings are included in the overall listing only.

WHERE THE ACTION IS ➡ ➡

← ← **UPCOMING ORGANIZED EVENTS**

Listed below are the control-line model aviation events currently known to Flying Lines. If you or your organization is sponsoring an upcoming event, contact FL NOW. All events listed here are sanctioned by AMA or MAAC (Canada) unless otherwise noted. There is no charge for listing here, and FL will distribute contest flyers free as well. All AMA-sanctioned events are open to all AMA members unless otherwise noted. Age class code: (J)=junior. (S)=senior. (O)=open. All events JSO unless otherwise noted.

- Oct. 7 ... EUGENE, OR -- COMBAT CASH CLASH for AMA Combat. At least double-elimination. \$15 entry fees split among first three places. Site: Mahlon Sweet Airport. Registration opens at 10 a.m., flying at 10:30. Contest Director: Gene Pape, 4528 Souza St., Eugene, OR 97402. For information contact John Thompson c/o FL. Sponsored by Beaver State Combat Team, Flying Lines and the Eugene Prop Spinners.
- Oct. 13-14 ... PORTLAND, Ore. -- STUNTATHON '84. Four classes of Precision Aerobatics, Old-Time Stunt. Site: Delta Park. Entry fees: \$5, \$2 under 16. Awards and merchandise through three places. Old-Time Stunt 1:30 p.m. Saturday. Precision Aerobatics starts 9 a.m. Sunday. Contest

- Director Dave Gardner, 17210 109th Place SE, Renton, WA. For information contact Don McClave, 7713 SE 28th Ave., Portland, OR 97202, (503) 771-8453 home, (503) 225-2175 work.
- Nov. 11 ... EVERYWHERE -- Flying Lines first annual POSTAL Benefit Turkey Tournament. Sites: Carkeek Park, Seattle, Wash., Mahlon Sweet Airport, Eugene, Ore., and at least one other site, probably in Portland area, to be announced. Four easy events with one airplane (2-minute time target, high-low, spot landing, speed). Entry fee \$10 (proceeds to Flying Lines). Prizes: 20-lb. turkey for first place, merchandise second through fourth. Contest Director John Thompson, 1505 Ash Ave., Cottage Grove, OR 97424 (503) 942-7324.
- Dec. 9 ... PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest No. 1. Northwest Sport Race, Northwest Super Sport Race, Class I Mouse Race. NWSR, NWSS points accumulate for championship trophies. Site: Delta Park. Contest Director: Rich Schaper, P.O. Box 608, Kelso, WA 98626. Sponsored by Northwest Aeroliners.
- Jan. 13 ... PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest No. 2. Northwest Sport

FLYING LINES

WHO'S WHO AT FLYING LINES

Flying Lines is produced monthly by a dedicated staff of volunteers interested in keeping lines of communication open between Northwest modelers. FL is totally independent of any organization, depending entirely upon support from subscribers, advertisers and donors.

FL is your link to the rest of the Northwest's control-line modelers. Help keep it alive by spreading the word. Wear your FL T-shirt and tell your buddies what it stands for. FL shirts available at \$8 -- name your size and color. FL caps, \$5.

Prices for subscriptions: \$5 for 5 issues and \$9.50 for 10 issues. Canada and Mexico: \$5.50 for 5 issues and \$10 for 10 issues. Overseas, \$10 for 5 issues and \$18 for 10 issues, U.S. funds, please. Premium subscriptions, \$25, U.S., Canada and Mexico only.

Advertising rates: \$6 per half page, \$4 per quarter page, \$1 for five lines of classified advertising. Hobby Shop Directory, \$15 per year. Help FL and yourself by selling an ad!

Here is the FL staff:

Publisher.....Mike Hazel	Combat.....Gene Pape
Editor.....John Thompson	Engines....Help Wanted
Advertising...Steve Lindstedt	Racing.....Mike Hazel
Photo editor..Pete Bergstrom	Scale.....Orin Humphries
Aerobatics....Paul Walker	Speed.....Mike Hazel
Beginners.....Ken Burdick	Sport.....Larry Miles
Carrier.....Orin Humphries	

ACTION, continued

Race, Northwest Super Sport Race, Rat Race. NWSR, NWSS points accumulate for championship trophies. Site: Delta Park. Contest Director: Dick Salter, 7217 S. 133rd, Seattle, WA 98178. Sponsored by Seattle Skyraiders.

Feb. 10 ... PORTLAND, Ore. — Northwest Sport Race Drizzle Circuit Contest No. 3. Northwest Sport Race, Northwest Super Sport Race, Half-A Combat. NWSR, NWSS points accumulate for championship trophies. Site: Delta Park. Contest Director: Dave Green, 200 W. Franklin Ave., Astoria, OR 97103. Sponsored by North Coast Control-Line Aeromodelers' Society.

March 10 ... PORTLAND, Ore. — Northwest Sport Race

Drizzle Circuit Contest No. 4. Northwest Sport Race, Northwest Super Sport Race, Northwest Sport Combat. NWSR, NWSS points accumulate for championship trophies. Site: Delta Park. Contest Director: John Thompson, 1505 Ash Ave., Cottage Grove, OR 97424. Sponsored by Eugene Prop Spinners.

April 14 ... PORTLAND, Ore. — Northwest Sport Race Drizzle Circuit Contest No. 5. Northwest Sport Race, Northwest Super Sport Race, Slow Rat Race. Championship trophies awarded in NWSR, NWSS. Site: Delta Park. Contest Director: Mike Hazel, 1073 Windemere Dr. NW, Salem, OR 97304. Sponsored by Flying Lines.

STUNT SCENE

by paul walker

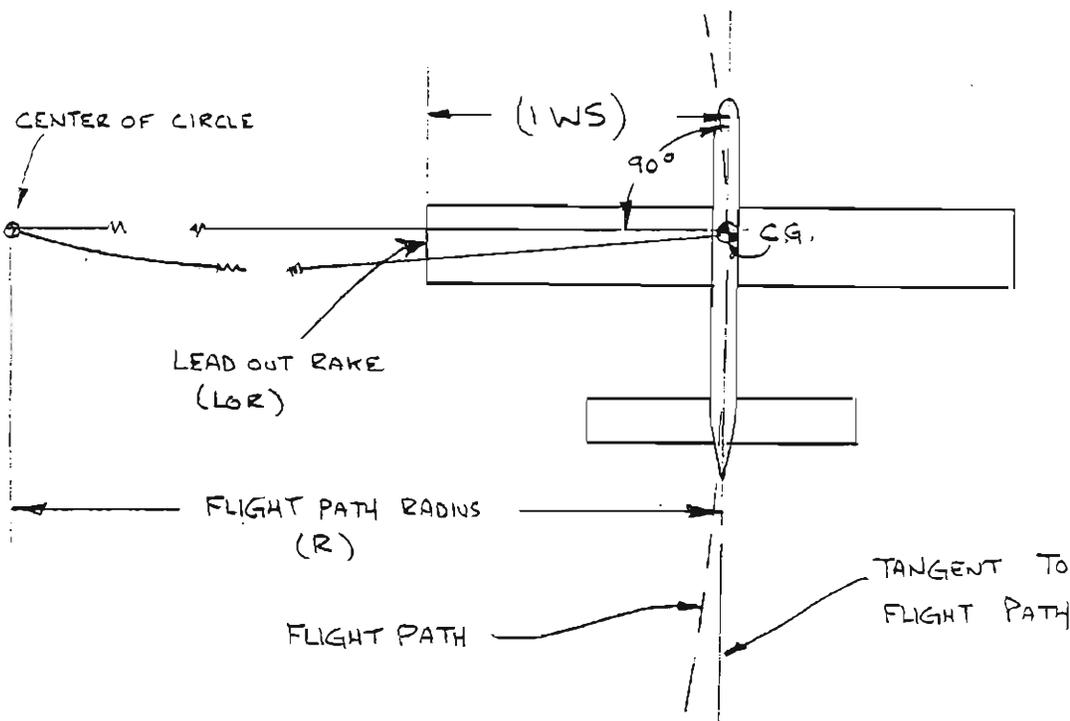
LEADOUT POSITION

Have you ever wondered where the optimum location for your adjustable leadouts is? Years ago, Bill Netzeband developed a method to calculate the leadout position relative to the pitch of the center of gravity.

What his method does is calculate the angle the lines sweep back due to their drag and the aircraft's centrifugal force, relative to a tangent line of the flight path. This angle can then be used to calculate the distance aft from the pitch center of gravity at the inboard wingtip.

The derivation of parts of this method are somewhat complex and this article will not get into that. The solution presented here is only valid in the speed range from 0 to 100 mph (that covers most stunt planes!) as I approximated a curve with a straight line for the line coefficient of drag so the solution could be presented in one equation. Below is a list of variables in the equation:

- * LOR = Leadout rake (inches aft of pitch center of gravity).
- * IWS = Inboard wing span (inches).
- * R = Flight path radius (ft., center of plane to handle).
- * d = Line diameter (inches).
- * W = Aircraft weight (ounces).
- * LT = Lap time (seconds, time for one lap).



To calculate leadout rake, just plug your variables into the following equation:

$$LOR = (IWS) \tan \left(\frac{(.73)(R^2)(d)}{W} \right) \left(1.34 - .2459 \left(\frac{(4.294)(R)(d)}{LT} \right) \right)$$

STUNT, continued

As an example, let's use my '83 Nats airplane's values. IWS = 31.5 oz. R = 69 feet. d = .018 in. W = 56 oz. LT = 5.2 sec/lap.

$$LOR = (31.5) \tan \left(\frac{(1.73)(69)^2(.018)}{56} \right) \left(1.34 - .2459 \left(\frac{(4.234)(69)(.018)}{5.2} \right) \right)$$

LOR = .67 inches.

This is the location of the center of the two leadout cables.

If your plane has a straight flap hinge line, finding the leadout position is easy. Find the pitch center of gravity by balancing the plane on your fingers near the body. Then measure the distance from the hinge line to the center of gravity. From this number subtract the LOR number you calculated. Measure this distance from the hinge line at the wingtip and this is the center of your leadout position.

This method for calculating the leadout position has worked well for me over the years and should work equally well for you. Feel free to write with any questions.

--Paul Walker, 12900 127th Ave. SE, Kent, WA 98031.

TAKE A CHANCE AND WIN A SUPERTIGRE .60

There is still time to get in on the raffle with the best odds you're likely to encounter, the Flying Lines Raffle.

This time the prize is a Supertigre .60 Scale or Stunt engine, valued at about \$100 retail.

If you're lucky, you can have it for the price of a raffle ticket!

Tickets cost \$1 each, or three for \$2, or 10 for \$5. Fill in the form below and send it to Flying Lines. The raffle will last about three months, with the winner to be drawn by one of the Thompson Daughters Raffle Drawing Team.

Name _____ Telephone _____

Address _____

I enclose \$_____ for _____ tickets in the fall 1984 FL raffle.

HOBBY SHOP DIRECTORY

FIRGROVE MODEL SUPPLY -- Radio Control, control-line and gliders. 10611 136th St. East, Puyallup, WA 98373. (206) 845-7675. Open daily 12-8, Saturday 12-6, closed Sunday and Monday. Owned by R.B. "Bob" Pfeiffer.

HAVE YOUR FAVORITE SHOP LISTED HERE -- Ask your hobby supplier to buy a Directory listing. It's \$15 for a year, and he gets the newsletter, too!

THE FLYING FLEA MARKET

FOR SALE -- Two Dogfighter combat ships, complete, flown once each, and one Dogfighter kit, all for \$40. Supertigre G.35, bench run, in box, \$50. Two ST C.35, new in box, \$55 each. Royal tach, new, \$25. Two .008"x42" solid lines, made up, \$4 each. One .008"x50" solid lines new, \$4. Prices include postage. Money order, please. Tom Kopriva, 5240 Miramar, Eugene, OR 97405.

HELP WANTED -- Flying Lines seeks a volunteer to write a monthly engine column. Payment is free subscription for as long as you continue the work. Contact the editor.

A NEW BOOK FOR CONTROL-LINERS!

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STUNT ~ ~ THON '84

ALL - STUNT CONTEST

AMA SANCTION #146

OCTOBER 13-14, 1984

8:00AM 'TIL 5:00PM

DELTA PARK - PORTLAND, OREGON

PRECISION AEROBATICS MODEL PILOTS ASSOCIATION

PAMPA BEGINNER	0 TO 300 POINT AVERAGE
PAMPA INTERMEDIATE	301 TO 400 POINT AVERAGE
PAMPA ADVANCED	401 TO 500 POINT AVERAGE
PAMPA EXPERT	501 TO 650 POINT AVERAGE
OLD TIME STUNT	PRE-1952 PLANES AND PATTERN

AWARDS AND MERCHANDISE PRIZES FOR THREE PLACES IN EACH CATEGORY

ENTRY FEES: AGE 16 AND UP: \$5.00 AGE UNDER 16 YEARS: \$2.00

VOLUNTEERS ARE NEEDED FOR FLIGHT LINE CONTROL, JUDGING, PULL TESTING, CROWD CONTROL, CRASH & BURN FIRST AID, ETC. (AND SO FORTH)

SCHEDULE: SATURDAY: 1:30PM OLD TIME STUNT - BY THE SKYRAIDERS

SUNDAY: PAMPA - FIRST OFFICIAL FLIGHT IN THE AIR 9:00AM

ALL OF ROUND 1 WILL BE FLOWN BEFORE LUNCH BREAK.

LUNCH BREAK: 12 NOON TO 1:00PM (OR THEREABOUTS)

ALL OF ROUND 2 WILL BE FLOWN AFTER 1:00PM

NO HARD CIRCLE PRACTICE AFTER 8:45AM ON SUNDAY!!!!

THIS CONTEST SPONSORED BY THE SEATTLE SKYRAIDERS, AMA CHARTER #330

CONTEST DIRECTOR:

DAVE GARDNER

17210-109TH PLACE S.E.

RENTON, WASHINGTON 98055

(206) 226-9667 (HOME)

(206) 367-2500 (WORK)

CONTEST COORDINATOR:

DON McCLAVE

7719 S.E. 28TH AVE.

PORTLAND, OREGON 97202

(503) 771-8453 (HOME)

(503) 225-2175 (WORK)

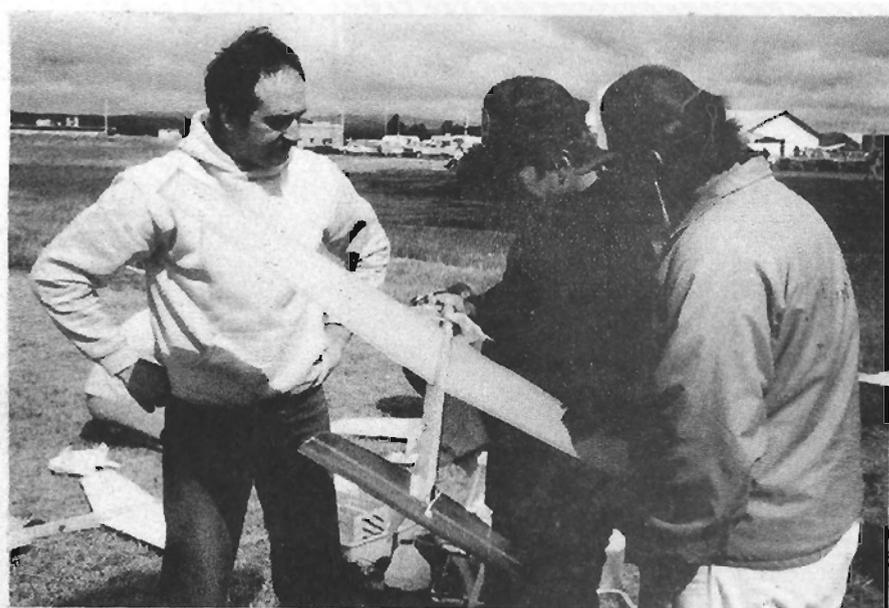
REMEMBER!! SATURDAY, OCTOBER 13TH IS THE OLD TIMER FUN DAY

COMPLETE WITH OLD TIME STUNT, OLD TIME PLANES AND OLD TIME PILOTS!!!

FOR O.T. FUN DAY INFO, CALL FRANK MACY AT (503) 653-7436



Northwest 1984 Regionals



Clockwise from top left: Al Resinger about to launch Art's Profile Carrier Model/ Peggy Parker, one of the indispensable wives and girlfriends of the NW modeling community. Action in the Goodyear racing circle. Sorry but I don't have the name/ Bob Parker and Jim Parsons, both stunt judges and just two of the many volunteers that helped to pull this years Regionals off in such an exemplary manner. (the picture was underexposed by the single, bright shiny object that fooled the camera. / The Regionals saw the return of Marty Phillips to Stunt competition. / Gary Byerly discussing Slow Combat technology with the California contingent. / Some of the constant tinkering that you will find in the speed pits at any contest. Photos by Pete Bergstrom.