

FLYING LINES

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FLASH! TURKEYS SWARM OVER NORTHWEST; FLY MODEL AIRPLANES

Beware of the advancing turkeys! Yes, they arrive on Nov. 17 to a flying field near YOU!

Who are these turkeys?

They are control-line model airplane fliers looking for a place to attack with a full day of craziness in the air.

The invasion is code named the FLYING LINES ANNUAL BENEFIT POSTAL TURKEY TOURNAMENT.

This is an event for all CL fliers, no matter whether you're a snooty Nats Champ or a slum-dwelling beginner, or somebody who's never entered a competition before. It takes only one airplane and an afternoon of your time.

Oh, and \$10.

Well, there's no such thing as free lunch -- or a cheap newsletter. The \$10 goes to help support the Northwest's CL communications network Flying Lines.

What do the fliers get out of it? Well, besides an a day of flying fun, the top four placers in the region will receive gift certificates for 20-pound turkeys at a supermarket near them. These winners will be able to show their spouses that model airplane flying isn't just a turkey hobby -- it also could be a turkey dinner!

Now to the specifics:

WHEN: 10 a.m., Sunday, Nov. 17.

WHERE: Contest fields in fourth Northwest CL hotbeds. They are: Carkeek Park, Seattle, Wash.; Richmond flying site, Richmond, B.C.; Delta Park, Portland, Ore.; and Mahlon Sweet Airport, Eugene, Ore.

WHAT HAPPENS: All contestants fly four fun-fly events with a single airplane under the direction of a FL representative at each site. Scores will be mailed to FL, tabulated, and the region-wide winners will receive their prize certificates by mail.

AIRPLANES: Any sport/stunt type airplane is legal. It will be up to the individual event directors to make the determination, but the event is not intended to include participation by high-competition aircraft such as Rat Racers and fast Combat planes. We recommend wing/fuselage/tail type airplanes, and we hope the usual Northwest sporting spirit will determine what fliers bring out. This is a contest designed for the sport flier as well as the competitor.

Aircraft shall have no throttles or shutoffs, or throttles or shutoffs must be disabled. Planes must be able to rise off ground, and they must be on lines of appropriate strength for their size.

TURKEY TOURNAMENT RULES

* TWO-MINUTE TIME TARGET: Plane is timed from the moment of release to initial touchdown. Each second over or under the 120-second goal is deducted from the 120 possible points. No timepieces or signals from the pit crew are allowed.

* SPEED: Fourteen laps from a standing start. Shutoffs may be used in this event after completion of timed portion of the flight.

* HIGH-LOW: Plane is timed for a half-mile at high speed. Entrant is then allowed five minutes to refuel and be timed for a half mile at low speed. Only the fuel, plug or prop may be changed. Difference between high and low speed in miles per hour is the score. In low-speed portion, takeoff must be accomplished within one lap of launch and the plane must not touch down during the timed flight. If it does touch ground, low-speed timing will start over.

* SPOT LANDING: A desired landing spot will be marked on the edge of the circle, which entrant will attempt to hit upon landing. Officials will mark the landing spot and measure the distance from the target.

Distance in inches from the target on your best flight will be the score, lowest score being best. Scoring will be based on the initial touchdown point and landing must be accomplished within one lap of engine stoppage.

The traditional point system will be used: 10 points for first place, 9 for second, etc., in each event. Most overall points wins.

For information about activities at individual contest locations, contact the following people: In Seattle, Dave Mullens, 15559 Palatine Ave. N., Seattle, WA 98133, (206) 365-5436. In Richmond, Alan Resinger, 11283 82A Ave., N. Delta, B.C., Canada V4C 2E5, (604) 594-0931. In Portland, Roy Beers, (206) 254-8049. In Eugene, John Thompson, 1505 Ash Ave., Cottage Grove, Ore. 97424 (503) 942-7324.

FALL FALLIES FALLS ON FLAWLESS FUNSHINY FLYING FIELD

EUGENE, Ore. -- Yes, it was a day to go out and fly and enjoy one of the last days of autumn sunshine. The Eugene Prop Spinners Fall Follies, Oct. 13 at Mahlon Sweet Airport, was a relaxed day of Stunt and MACA Combat flown in perhaps the most ideal conditions possible.

With T-shirt weather and almost no wind, Stunt fliers had a chance to practice their art without the pressure of a big field of contestants and adverse conditions.

Across the field, Combat fliers were experimenting with the new FoxDoo event, using Fox .35 stunt engines on Voo Doo airplanes. The event was judged a rousing success.

Combat with the universal setup was a perfect demonstration of the excitement of good, close competition. Nearly all the matches had excellent long periods of good Combat and most of the airplanes survived to fly another day. The Fox/VooDoo combination proved to be a good solid flier, fast enough to be tight on the lines and good for close-quarters Combat without the blinding speed and reflex-action of the faster classes. "I could think!" exclaimed one experienced fast combat flier.

Don McClave of Portland, Ore. won the expert Precision Aerobatics class with an excellent 560.5 score. At the same time, Don managed to get around the field and help out other fliers with tips and support.

Ray Mathis of Bremerton, Wash., won the intermediate/advanced class

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with a 407.5 score. Mel Marcum collected his first first-place hardware in the beginner class.

Old Pro Gene Pape came out on top in a double-elimination Combat contest in which each contestant used only a single airplane! Two planes were allowed, but nobody used a spare. The final match was a good bout until it ended in the day's only mid-air collision, Pape winning with cuts and air-time over John Thompson.

The Fox stunt engines started and ran well on just about any old fuel or prop. All contestants used bladders and a variety of different needle valve setups, all of which seemed to work fine. This could well be a good beginner class Combat, possibly an improvement on the Northwest Sport Combat concept. Time will tell if there is interest among other fliers.

Thanks for organizing the contest go to Eugene Prop Spinners Mel Marcum and Gerald Schamp. Stunt fliers willingly provided judges to assist head judge Tom Kopriva. Mike Hazel officiated the Combat with the help of Mike Kopriva and Walter Sweet. All winners took home handsome trophies provided by the Prop Spinners and Stunt elevator/flap horns donated by Don McClave.

Here are the complete results:

EXPERT PRECISION AEROBATICS (2 entries)

1. Don McClave, Portland, Ore. -- 560.5. Esprit, McClave design, 59.25" span, 56 oz., balsa/plywood/carbon fiber construction, Monokote/Formula U finish. Supertigre .60, Zinger 12x6 wood prop, K&B idle bar long plug, FHS custom blend 10% nitro fuel, .178" venturi, muffler pressure, Robbert uniflow tank, .018x70 braided lines, McClave handle.

2. Mark Freeman, Vancouver, Wash. -- 511.5.

SPORTSMAN (I/A) PRECISION AEROBATICS (4 entries)

1. Ray Mathis, Bremerton, Wash. -- 407.5. Rayletto, Mathis design, 59" span, 56 oz., foam/balsa, Monokote/Aero Gloss. Design uses Stiletto wing and McClave moments. O.S. .40, Rev-Up 11x6 wood prop, Tower Hobbies idle bar plug, Sound 10% nitro fuel, Supertigre needle valve, muffler pressure, .015x65 braided lines, Sullivan handle.
2. George Micky, Seattle, Wash. -- 393.
3. John Thompson, Cottage Grove, Ore. -- 327.
4. Gerald Schamp, Albany, Ore. -- 393.

BEGINNER PRECISION AEROBATICS (3 entries)

1. Mel Marcum, Eugene, Ore. -- Top Flite Nobler, George Aldrich version, 50" span, 45 oz., balsa, silkspan/Aero Gloss. O.S. .35, Zinger 10x6 wood prop, Fox 2-volt plug, K&B 100 5% nitro fuel, muffler pressure, .015x70 braided lines, Aldrich handle.
2. Jason Huntress, Seattle, Wash. -- 162.
3. Dave Royer, Portland, Ore. -- 123.5.

MACA COMBAT (4 entries)

1. Gene Pape, Eugene, Ore. -- Goldberg VooDoo, 36" span, 18.5 oz., balsa, FasCal. Fox .35 stunt, Tornado 9x7 nylon prop, Glo Devil standard plug, Sheldon's 15% nitro fuel, bladder pressure, Magnum handle.
2. John Thompson.
3. Bill Varner, Astoria, Ore.
4. Ray Mathis.

MASTERS, STUNTACULAR, OCCUR SIMULTANEOUSLY IN KENT

By Dave Mullens

KENT, Wash. -- Sept. 28 and 29 saw the Masters of Precision Aerobatics contest assemble at the Boeing Space Center. Five entrants showed up to fly three qualification rounds on Saturday with one qualification round on Sunday and a finals round of three flights on Sunday with the top five qualifying fliers competing.

The finals round became a moot point, considering there were five entries. It was obvious that Paul Walker and Pete Bergstrom benefitted from flying in the wind in Detroit at the World Championship team trials, because they were less affected by the somewhat gusty and shifting wind to be found on Saturday.

Here are the results of the Masters contest:

PRECISION AEROBATICS (5 entries)

(Scores are final score, followed by final round scores, followed by qualifying totals.)

1. Paul Walker, Kent, Wash. -- 2,068.32, 507.83/515.5/492.5, 1,049.99.
2. Pete Bergstrom, Ft. Lewis, Wash. -- 1,892, 470.66/465/454.33, 957.33.
3. Randy Schultz, Seattle, Wash. -- 1,866.31, 425/471.66/466.66, 927.99.
4. Bob Emmett, Renton, Wash. -- 919.82, no final round scores, 830.32.
5. Joe Dill, Kent, Wash. -- 784.15, no final round scores, 784.15.

Bob Emmett attempted a flight in the final round and retired due to mechanical problems. Bob and Joe Dill each retired an airplane on Saturday. Joe was plagued with mechanical and fuel problems on Saturday.

The 28th and 29th also saw the second attempt to fly Stuntacular '85. The original Stuntacular was blown out in Vancouver, B.C. in June. Alan Resinger re-scheduled to run the contest concurrent with the Masters. Due to business obligations, Alan was not able to make it down for the contest.

Regrettably, the contest drew only four advanced fliers and one beginner. The format was two rounds on Saturday and two rounds on Sunday, with the best flight of each day combined for the final score. The winds on Saturday took their toll on the other guys' circle also. Jim Parsons judged solo for both days. Ray Mathis scored his personal best score on Sunday.

Here are the results:

BEGINNER PRECISION AEROBATICS (1 entry)

1. Jason Huntress, Seattle, Wash. -- 260.

ADVANCED PRECISION AEROBATICS (4 entries)

(Scores are final score, followed by round scores.)

1. Ray Mathis, Bremerton, Wash. -- 901, 373/435/466/pass.
2. Dave Mullens, Seattle, Wash. -- 888, 429/427/459/451.
3. George Mickey, Seattle, Wash. -- 877, 409/442/311/435.
4. Dan Cronyn, Seattle, Wash. -- 661, 293/368/239/no score.

Jason Huntress, in his first contest ever, attempted every maneuver, taxing Jim Parsons' imagination to the limit. Jason also was the victim of the wind on his second flight on Saturday. Dan Cronyn also retired a plane on Saturday and another on Sunday. George Mickey has established himself as a bona-fide threat in the advanced class. Ray Mathis brought out a new plane that actually flew.

HOT SPORT RACING CONTINUES IN B.C.

By Chris Sackett

RICHMOND, B.C. -- Here is yet another contest report featuring Northwest Sport Race and our 33 1/3 event. The date was Sept. 29 at Richmond, B.C. There was beautiful weather, bright sunshine, temperature 68 degrees, light breeze.

We had seven entries in sport racing with two preliminary heats.

In heat 1A featuring Henry Hajdik, Mel Lyne and Art Lander, Hajdik turned a sparkling 4:03! No error, Hajdik just did everything right, a one-flip start and a 10-second pit stop accounted for the real good time. Hank's best in practice has been a 3:57 by the way. Mel Lyne returned a 6:56 with engine problems and Art Lander did not finish.

Heat 1B had Roy West at 6:08, Paul Dranfield at 5:06 and Frank Boden

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DNF.

A few guys passed on heat 2A so it was up to Mel Lyne who improved to a 5:57. Art Lander got in a time of 5:26 and Roy West turned a nice 4:52.

The feature had Hajdik, West, Dranfield and Lander. It seems every time we report on these races, Hajdik, clearly the fastest guy in sight, has problems in the final. This day was no exception as Hank starved on takeoff and had to go over and restart, then broke a prop on takeoff and had more starvation problems ending up with a poor 11:13 run.

Paul Dranfield won sport race for the first time with a clean 9:04, followed by Art Lander with a new Ringmaster sport racer at 10:51. Hank was third and Roy West limped in at 13:00 with some poor pitting.

Our final sport race of the season will take place Nov. 10 at Richmond. We also will crown the season champ for the event for the Creative Hobbycraft trophy. (Editor's note: We hope the VGMC will send us a complete 1985 schedule so these contests can be announced in the contest calendar.)

Here are the complete results from Sept. 29:

NORTHWEST SPORT RACE (7 entries)

NAME	HEAT 1	HEAT 2	FEATURE
Paul Dranfield	5:06	Pass	9:04
Art Lander	DNF	5:26	10:51
Henry Hajdik	4:03	Pass	11:13
Roy West	6:08	4:52	13:00
Mel Lyne	6:56	5:57	
Frank Boden	DNF	Pass	

33 1/3

1. Roy West -- 78 points.
2. Vic Chometsky -- 75.
3. Dave Bredefield -- 74.

NWSR RULES INTERPRETATION QUESTIONS RAISED

Sharp-eyed readers have raised a couple of interpretation questions in regard to the 1986 Northwest Sport Race rules which go into effect in December. Text of the rules was published in FL Issue No. 66 and is available by mail from FL.

This article is intended to provide contest directors with a guide for interpretation, should these questions come up. If necessary, the rules could be clarified in the 1987 cycle.

QUESTION 1 involves the legality of V-tail kit airplanes such as the M&P Bonanza. ANSWER is that a bona-fide kit with an alternate tail structure such as the V-tail is LEGAL. Purpose of the rule is to prevent use of exotic competition-oriented designs that leave out the canopy and fin. The Bonanza is a semi-scale plane following the full-scale tail design.

QUESTION 2 involves the length of fuselage. It was pointed out that the same Bonanza has only a 23.5" length from thrust washer to front of elevator, instead of the required 24". ANSWER is that the plane probably can be made legal by moving the engine forward a half-inch. In the case of an existing airplane that follows kit plans, a contest director would have the right to waive the 24" requirement as long as the intent of the rule is not violated. New airplanes should follow the 24" rule.

The new NWSR kit dimensions were taken from AMA Slow Rat and NW Super Sport Race rules after Northwest fliers voted to move toward minimum dimensions in setting standards for NWSR kits. Comments are welcome here at rules central.

DRIZZLE CIRCUIT EIGHTH SEASON TO BEGIN

PORTLAND, Ore. -- The eighth running of the Northwest Sport Race Drizzle Circuit will span the months of December through April at Portland's Delta Park.

Coordinated by the Northwest Aeroliners, the DC will follow the same format as the past several years.

Contests will be on the second Sunday of each month, each sponsored by a different Northwest control-line organization.

Each will feature Northwest Sport Race and Northwest Super Sport Race as main events, with points scored leading to the season-ending championship trophies. Each contest also will feature a secondary event for spice and variety.

The concept of the Drizzle Circuit is to give CL fliers a chance to keep active over the winter and get in lots of flying. All races are run in a round-robin format, with each NWSR and NWSS contestant guaranteed two heats of racing.

Schedule information is in the contest calendar. Secondary events at all but the December contest are tentative at this writing but will be confirmed by the time the season starts.

The DC opener also is the effective date of the revised Northwest Sport Race Rules, which were published in Issue No. 66.

The Drizzle Circuit is an excellent opportunity for fliers to gain experience in racing and competition in general in a pleasant, friendly environment. And for experienced racers, there's always plenty of keen competition. The central location in Portland makes the circuit contests accessible to most western Northwest fliers as a one-day activity.

In 1984-85, the weather was dry and comfortable most of the time, but the winter flier in the Northwest is always well-advised to have good quality rain gear and warm clothing. It helps make those long flying days more fun if the rain happens to fall.

We're looking forward to the DC -- hope we see you there.

COCKPIT CHATTER
Notes from the editor

Frankly, folks, I'm a little steamed as I write this.

I've tried to go along with this brotherly love routine: "Don't come down so hard on the RC fliers. We're all in the same hobby and we need each other."

Well, frankly, I'm losing my patience with the RC big shots.

Today FL received word in the mail that Controline Sales, Tom Dixon's Stunt supply operation, is quitting business because Great Planes, the RC company that recently bought out World Engines, refuses to distribute OS and Supertigre engines through Controline Sales. Those engines were a major part of his business.

Why? Because GP won't deal with any non-walk-in hobby dealer except Tower Hobbies. Never mind that most walk-in hobby dealers (with a few notable exceptions) are going along with the program and refusing to stock such products.

Those of you who have been around me when I've been in one of my less

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kind moods have heard me say on the flying field that I believe the difficulty with keeping CL healthy has been a deliberate, orchestrated attempt by the RC businesses to smother the low-profit CL products out of the market. The tactic, I've said, is to artificially retard demand by making products difficult to get, by steering newcomers away from them, and by refusing to update products to modern standards. Then, when the products don't sell, the big companies say, "There's no demand." News to us on the flying field, isn't it?

I submit that CL activity is strong and vibrant in areas where the fliers have gotten together through some club or network (i.e. in the Northwest) and refused to let the RC companies divide and isolate us. In areas where the CL people are operating in a vacuum _ being told by their hobby dealers that they are the only CL flier in the state _ the group support effect fulfills the prophecy.

What to do?

First of all, CL fliers should buck this trend whenever possible. Write these companies and complain about their tactics. Insist that your local hobby dealer acknowledge the existence of CL and CL activity when newcomers enter the shop. Insist that they stock and order the things you need. And make it clear to them how much money you're going to spend in shops that DO respond to CL needs.

Guys, I refuse to quit flying CL because some RC corporate goon thinks I should. I've tried to see the RC side of the picture. But frankly, fliers, this kind of thing stinks!

NW COMPETITION STANDINGS

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

Standings in Precision Aerobatics, Northwest Sport Race and Combat were juggled during the past month as a result of contests in those categories.

Because it was held for the first time and is similar in concept with Northwest Sport Combat, the new MACA Combat event is combined into the NWSC standings.

Flying Lines keeps track of the performances of Northwest Control-Line model aviators in sanctioned AMA/MAAC Northwest competitive events. Information about the scoring system and printouts of complete standings are available from FL.

Top fliers in events in which standings have changed since publication of issue No. 66, computed as of Oct. 27, are:

NORTHWEST SPORT RACE (12 contests, 113 entries)

1. S&S Racing Team	Seattle, Wash.	60
2. Henry Hadjik	New Westminster, B.C.	44
3. Beers-Cole Team	Vancouver/Portland	38
4. Dave Green	Astoria, Ore.	30
5. Nitroholics Team	Salem/Cottage Grove	28
Paul Dranfield	Vancouver, B.C.	28

OVERALL RACING (30 contests, 198 entries)

1. Dave Green	Astoria, Ore.	82
2. S&S Racing Team	Seattle, Wash.	60
3. Beers-Cole Team	Vancouver/Portland	56
4. Nitroholics Team	Salem/Cottage Grove	50
5. John Hall	Puyallup, Wash.	44

NW SPORT/MACA COMBAT (3 contests, 17 entries)

1. John Thompson	Cottage Grove, Ore.	9
2. Gary Swisher	Milwaukie, Ore.	7
3. Paul Dranfield	Vancouver, B.C.	6
4. Glenn Salter	Seattle, Wash.	5
Lyn Murray	Maple Ridge, B.C.	5

OVERALL COMBAT (21 contests, 174 entries) @

1. Gary Byerley	Spanaway, Wash.	78
2. Norm McFadden	Lynnwood, Wash.	74
3. John Thompson	Cottage Grove, Ore.	41
4. Howard Rush	Kirkland, Wash.	37
5. Mel Lyne	Garibaldi Hghlnds, B.C.	33

PRECISION AEROBATICS (32 contests, 116 entries)

1. Dave Mullens	Seattle, Wash.	46.5
2. Ray Mathis	Bremerton, Wash.	34.5
3. Paul Walker	Kent, Wash.	33
4. Randy Schultz	Seattle, Wash.	27
Pete Bergstrom	Ft. Lewis, Wash.	27

NW COMPETITION RECORDS

RECORD PERFORMANCES ESTABLISHED BETWEEN NORTHWEST MODELERS IN SANCTIONED COMPETITION

Records continue to be adjusted as Northwest racers thumbtack new times to the board after the old marks were wiped out by the fuel rules change in June.

Dick Salter of Seattle, Wash. gets credit for the Northwest Super Sport Race heat time of 3:37, turned at the Washington State CL Championships in September. (This time was not available for the October issue, when it normally would have been listed).

Rich Salter, teaming with son Rich as the S&S Racing Team, also knocked down the Northwest Sport Race heat record at 4:18, stealing away Henry Hajdik's 4:22. Not to be outdone, Henry came back in a B.C. Sport Race Sept. 29 to record a 4:03, an unprecedented NWSR time.

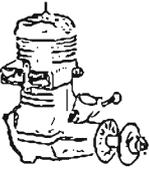
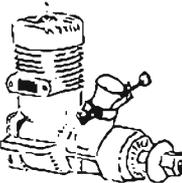
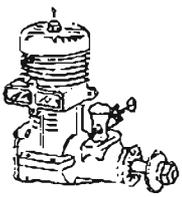
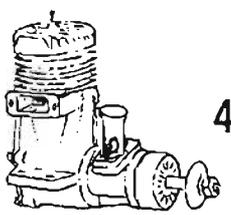
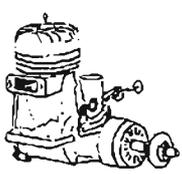
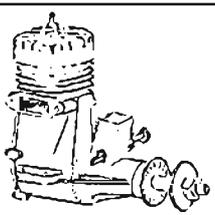
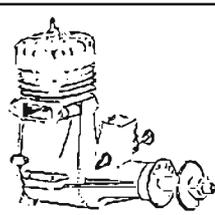
Flying Lines keeps track of the best performances of Northwest control-line fliers in AMA-sanctioned contests (or MAAC-sanctioned contests using AMA rules), and in Northwest regional events. Here are the complete records as of Sept. 28:

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: ---	140-lap: ---
SLOW RAT 70-lap: 3:56 (Dave Green)	140-lap: 8:03 (Dave Green)
RAT RACE 70-lap: ---	140-lap: ---
TEAM RACE 100-lap: 3:51 (Knoppi-McCollum)	200-lap: 7:49 (Knoppi-McCollum)
NW SPORT RACE 70-lap: 4:03 (Henry Hajdik)	140-lap: 8:57 (S&S Team)
NW SUPER SPORT 70-lap: 3:37 (Dick Salter)	140-lap: 7:45 (Dave Green)
HALF-A SPEED: 88.2 mph (Paul Wallace)	FAI SPEED: 152.98 mph (Scott Newkirk)
HALF-A PROTO: 83.63 (Paul Wallace)	FORMULA 21: 79.54 (Rich Salter)
A SPEED: 181.56 (Chris Sackett)	FORMULA 40: 152.28 (Scott Newkirk)
B SPEED: 184.57 (Chris Sackett)	JET SPEED: 194.73 (Chris Sackett)
D SPEED: 170.71* (Mike Hazel)	PROFILE NAVY CARRIER: 232.5 (Bob Parker)
	CLASS I NAVY CARRIER: 311.1 (Rick Wallace)
	CLASS II NAVY CARRIER: 323.7 (Loren Howard)

* Speed of 170.55 has been recorded by Loren Howard.

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WHERE THE ACTION IS

UPCOMING ORGANIZED EVENTS

NORTHWEST EVENTS

Listed below are the Northwest control-line model aviation events known to Flying Lines. If you or your organization is sponsoring an upcoming event, contact FL Now. TWO MONTHS ADVANCE NOTICE IS ABSOLUTE MINIMUM for guarantee of publication. 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.

- Nov. 17 ... EVERYWHERE - Flying Lines Annual Benefit Postal Turkey Tournament. Four events with one airplane, \$10 entry fee to benefit Flying Lines. Events: Two-minute time target, proto speed, high-low, spot landing. Airplanes must be of sport-stunt variety (no rat racers, fast combat planes, etc.). Sites: Carkeek Park, Seattle, Wash. Richmond flying site, Richmond, B.C. Delta Park, Portland, Ore. Mahlon Sweet Airport, Eugene, Ore. 20-pound turkeys to top four places. Official flying starts at 10 a.m. at all sites. For information, contact FL.
- Dec. 8 ... PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest No. 1. Northwest Sport Race, Northwest Super Sport Race, Class I Mouse Race. NWSR and NWSS points scored for season trophies. Site: Delta Park. For information, contact FL.
- Jan. 12 ... PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest No. 2. Northwest Sport Race, Northwest Super Sport Race and a secondary event to be announced. NWSR and NWSS points scored for season trophies. Site: Delta Park. For information, contact FL.
- Feb. 9 ... PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest No. 3. Northwest Sport Race, Northwest Super Sport Race and a secondary event to be announced. NWSR and NWSS points scored for season trophies. Site: Delta Park. For information, contact FL.
- March 9 ... PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest No. 4. Northwest Sport Race, Northwest Super Sport Race and a secondary event to be announced. NWSR and NWSS points scored for season trophies. Site: Delta Park. For information, contact FL.
- April 13 ... PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest No. 5. Northwest Sport Race, Northwest Super Sport Race and a secondary event to be announced. NWSR and NWSS points scored for season trophies. Site: Delta Park. For information, contact FL.
- May 23-25 ... EUGENE, Ore. -- Northwest Regional Control Line Championships. RACING: Rat, Slow Rat, Goodyear, Mouse I, Mouse II, Northwest Sport, Northwest Super Sport. COMBAT: AMA, FAI, Slow, Half-A. PRECISION AEROBATICS: 4 PAMPA classes. OLD-TIME STUNT. SCALE: Precision, Profile. SPEED: Half-A, A, B, D, FAI, Formula 40, Jet. NAVY CARRIER: I, II, Profile. BALLOON BUST. JUNIOR EVENTS: NWSR, Balloon Bust, Mouse I. Displays. On-field hobby shop. Food concession. Within walking distance: Airline connections, rental cars, restaurant, rest rooms, gift shop. Largest CL contest on the West Coast. Trophies and merchandise through third place in all

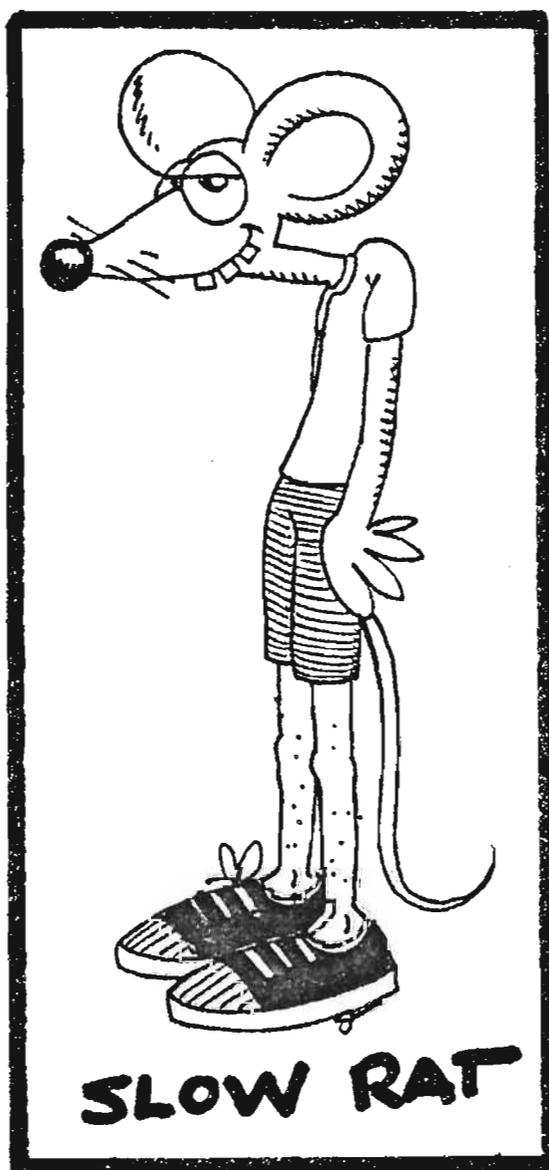
events. Site: Mahlon Sweet Airport. SPEED FLIERS NOTE: Speed circle opens for official flights at noon Friday. For information, contact Flying Lines.

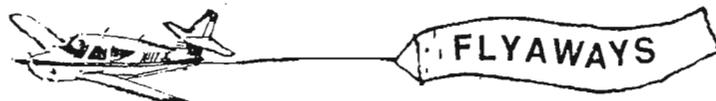
July 20-26 ... VANCOUVER, B.C. -- Canadian National Model Airplane Championships. Details to follow.

OUTSIDE THE NORTHWEST

The following activities are listed as a service to FL readers living outside the Northwest. Contact person or contest directors are listed for details. This space is available for listing of any CL contest. Listings must include all scheduled CL events, and be accompanied by a contact person's phone number.

- Dec. 28-29 ... JACKSONVILLE, Fla. -- Rat, Slow Rat, Mouse I, Goodyear and Florida Slow Rat Racing, Profile, I and II Carrier, Novice Precision Aerobatics, Precision Aerobatics, Old-Time Stunt, AMA, Slow, Fox .35 and Half-A Combat, Record Ratio Speed. J. Mead, (904) 388-7454.
- Jan. 18-19 ... BUCKEYE, Ariz. -- Rat, Slow Rat, Mouse II Goodyear, Formula Unlimited and ACLA Slow Rat Racing, Profile Carrier, AMA, Slow and Half-A Combat, Sport Scale, Precision Aerobatics. A. Lidberg, (602) 838-4743.





RANDOM TIPS AND RIBS FROM THE FL WORKSHOP FLOOR

[====GLOBAL IMPACT: Having conquered the United States (1984 Nats Champ), the Northwest's Paul Walker is on his way to the world championships. Paul was selected as a member of the U.S.A. Precision Aerobatics team at the September team trials. Other team members are Jim Casale and Bill Werwage, with Bob Gieseke as alternate. Paul is from Kent, Wash. Pete Bergstrom of Ft. Lewis, Wash., finished 11th in the trials. Congratulations, Paul!

[====FAST COMPANY: How would you like to fly your Speed plane at 200+ miles per hour and come in SIXTH? That was the case, as the top six finishers in the U.S. Nats in D Speed turned 200+ mph. Glenn Lee of Batavia, Ill., got the measly fifth-place trophy for going 201.26 mph, while Frank Garzon of Central Islip, NY was first at 209.95. It was all humdrum, however, to Nick Sher of Langhorn, Pa., who cruised to an all-class record of 213.45 mph in B Speed. Now, that's an X-tra fast X-29!

[====TIMBUKTU: That's where we sometimes feel we live when we hear and read some of the odd pronouncements about the Northwest from other regions. First there is the major model magazine columnist to speculated that Speed flying was dead in the West...when all the contests have been experiencing the best activity in years. (This columnist apparently also fails to notice SPEED TIMES, the North American Speed Society, publication, which gives evidence of a boom in speed activity. NASS now has 250 members and notes the most Speed flying activity in 10 years). But, we really had to laugh when it came to us recently that an eastern Stunt luminary alleged that there were only 23 CL fliers in the Northwest. Holy, cow! That guy ought to have to keep track of the Northwest competition standings! Our count shows that there were 94 CL competitors placing (not flying, just placing) in 1984 Northwest contests.

[====SPORT SPEED: Speaking of Speed, Glenn Lee proposes a 3.5-cc speed class with fairly standardized equipment, intended to be easy and low-key for beginners and experts. He proposes 10%-nitro fuel, mini-pipe or open-faced exhaust, either one or two wires, and A Speed lines. Anyone interested?

[====STRAY CATS: Paul Rogers may have left the Northwest, but he is making his mark elsewhere in the Combat world. We see his name prominently displayed in the results of Midwest combat contests, up there with the likes of Marvin Denny. Keep up the good work, Paul...and come back home!

[====WORLD BEATERS: The U.S.A. World Championship Combat Team is Chuck Rudner of California, John Stubblefield (Dick's son) of Texas, and George Cleveland of Louisiana.

[====BIG IDEAS: Doc Passen, a vocal force in national Combat issues the past few years, has taken over editorship of the MACA NEWSLETTER. He has lots of good ideas for improving that long-running publication. Should make for interesting reading. To join the Miniature Aircraft Combat Association, send \$9 to Chris Gay, 2018 Wessel Ct., St. Charles, IL 60174. Doc replaces Bob Nicks, who did a fine job for the past couple of years.

[====NOTABLE QUOTES: PRO-STUNT NEWS, in a report on the big Sig stunt contest in Iowa, says the following was heard from a spectator: "I like CL flying better than RC. The planes are close and I can see what they are doing." The PSN reporter adds: "When some guy asked his wife how they were flying those airplanes in a circle and he couldn't see any radios, she answered, 'They are flying them with wires. They are people-controlled.'"

[====TOUGH STUFF: A fine array of carbon fiber products is offered by a company called Aerospace Composite Products, 28 Crosswood Road, Farmington, CT 06032. When you write for a price list, tell them FL sent you.

[====NOSTALGIA: Collectors' old publications, such as the 1939 Comet catalog, are available from Norman Jacky, 20842 Catamaran, Huntington Beach, CA 92646. Inquire for list and tell them FL sent you. He has a lot of other collectible items as well.

[====OH DEAR: We hate to see good CL businesses disappear but it looks like Bob Rogers of L&R Products is cleaning house. Write him at Box 236, Mendon, IL, 62351 for an extensive list of available items at bargain prices. Quite a few old collectible engines on his list.

[====WE'RE WORTH IT: AMA renewal notices should be arriving about now. Re-up right away and avoid the hassle of having to pony up the dues at your first 1986 contest. It also assures you won't miss any issues of MODEL AVIATION.

[====GO FOR IT, JOE: Congratulations to Joe Just, who has dived off the deep end and gone into CL supply full-time. Thanks for your involvement, Joe.

[====RICHES: Here's another picture in the mail of "Ridiculous" Rich Porter standing in front of a classroom full of enchanted kids, explaining model airplanes (that's a Max .10 in his hand), two-cycle engines, and how they work. He may fly a plane called "Ridiculous," but when he's around we're all rich.

[====ONE MORE NOTE: And, along with the picture, here's a bundle of thank-you notes this class of kids sent to Prof. Porter. Says one: "When I get older, I want to be a scientist like you are." Can't do much better than that!

[====MAKE A DATE: Note on your calendars that there are NEW DATES for the 1986 Canadian Nats in Vancouver, B.C. It's now July 20-26, not Aug. 3-9 as previously announced. This late word from Alan Resinger. By the way, be warned. There's a world's fair in Vancouver next year. Better get your room reservations NOW! Alan is checking on camping possibilities. Watch this space for details.

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.

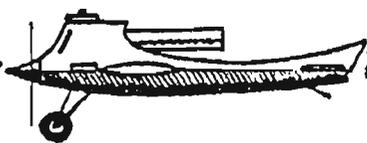
FL is your link to the rest of the Northwest's control-line modelers. Help keep it alive by spreading the word. Wear your FL T-shirt and tell your buddies what it stands for. FL shirts available at \$8 -- name your size and color.

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CLASSICS -- Control-line plans, models, motors and accessories. Send SASE to LoRe Enterprises, 11122 Welby Way, N. Hollywood, CA 91606.

FOR SALE -- Fox .36 plain bearing engine, has seen limited use in Northwest Super Sport Race. \$15. Contact John Thompson, c/o FL.

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STUNT SCENE

by paul walker

TRIM FLOW CHART

In the past, I thought there were definite, specific ways to fix certain types of trim problems. Being a little slow at learning, I now realize that there are many ways to fix the same problem. Some work better, some work faster, but there can be more than one way to fix a problem. The first flow chart I presented several years ago was a little complicated, so I have streamlined it a little. The basic assumption that you have a straight, unwarped airplane to start off with still applies.

Trimming an airplane is both objective and subjective. The objective portion I call "basic" trim. This must be correct before an airplane has a chance of becoming a good flying plane. This portion has yes-no answers to all the questions, and they are generally easy to answer this way. The remainder of trimming is subjective, hence two people could trim the exact same airplane two different ways, depending on how they want the airplane to fly. It's time to start, so have fun!

From the start, the first thing that has to be done is to get the wings to fly "level" both upright and inverted. The term "level" means that the wing is in the same attitude both ways. If the outboard wing flies low upright, it must fly the same amount low inverted also. The outboard wing-low situation will be corrected later by adjusting wing tip weight. If the wing is not flying "level" it is corrected by "tweaking" the flaps or adding a tab near the wing tip. Most flapped stunters have a metal flap horn that connects the two flaps so that when twisted hard enough they will take a set. If the outboard wing is flying high upright and low inverted, "tweak" the flaps so that the inboard flap becomes lower relative to the outboard flap than when you started tweaking. For the beginning pilot, this might require the help of someone outside the circle to check to see if the wings are "level."

During this phase of getting the wings to fly level, you will get a feel as to whether the plane is nose-heavy or tail-heavy. Add or subtract nose weight to make the plane manageable now. The pitch balance will be tuned in to a finer degree later on.

If the wings are "level" and it is manageable, the wing tip weight can be adjusted. To check this, put the plane in a wing-over and at about 3/4 of the way through it (about 45-degree elevation) turn a corner. The first one should be soft and if after doing a few you are convinced that the plane is not doing funny things (like rolling in towards you), make these "test" corners as hard as the plane will do. What should be seen in this corner is the wing remaining parallel to the lines at all times. If it is not, it is time to adjust. If the outboard wing drops relative to the inboard wing, there is too much wing tip weight. Try removing some, and re-test. Continue this until the second condition exists. This is when the inboard wing drops relative to the outboard wing. This can be most exciting as the plane can come chasing after you if this problem is too severe. To solve this, add wingtip weight. Keep adding or subtracting weight until the wing remains parallel to the lines.

The next step is to adjust the leadouts. If the line tension is not adequate throughout the pattern, adjust the leadouts. Generally, if a plane comes loose during the maneuvers but is tight in level flight, the leadouts are too far back. Try moving them forward some. Try adjusting the leadouts and feel the effect they create. Each time you adjust the leadouts, check for "hinging" again.

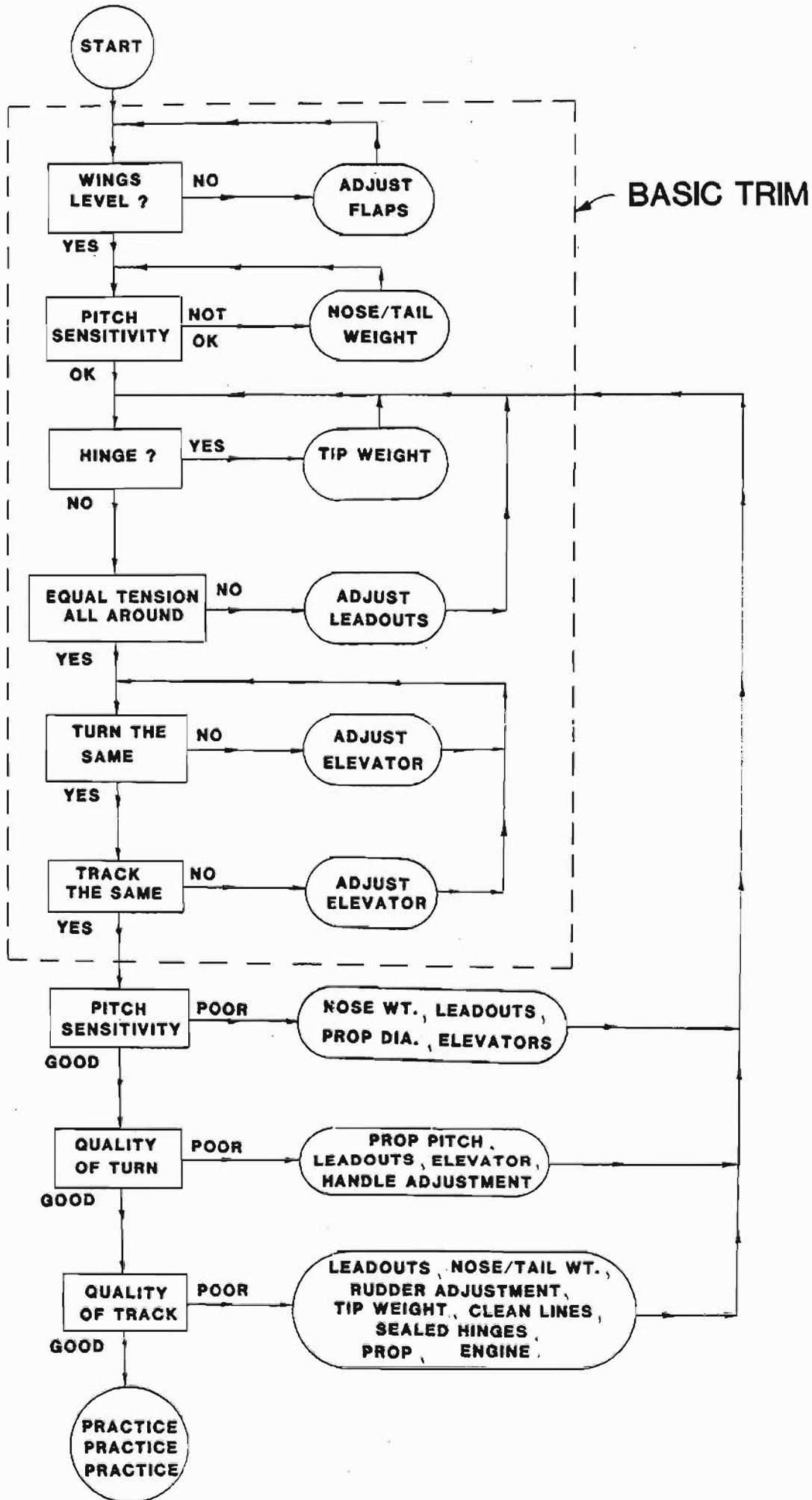
If you have the tip weight adjusted as previously described and can't get reasonable tension throughout all the maneuvers, you might try adding some tip weight. This will generally help line tension in most maneuvers. You might realize here, though, that if you do this you might get hinging in a hard corner. This is something you might have to concede in order to get it to work better at other places. But don't put so much tip weight in that it hinges in normal pattern corners. Adjust leadouts and tip weight until you are satisfied that this is as good as you can get it at this point in time.

The next step is to get the plane to turn the same radius corner both inside and outside. At this point, the radius may still be large, but this will be taken care of later. If the plane turns inside better than outside, re-adjust the elevator such that it has more down relative to the flap. If you use a Kwik-Link type adjustment, this is accomplished by shortening the flap-to-elevator pushrod. If the plane turns faster outside, the adjustment is just the opposite. Note here that it is advisable

STUNT, continued

to use an E-Z Just handle up to this point so as to eliminate any effects of an out-of-adjustment handle. At this point we are adjusting the airplane, not the handle.

The last step in the "basic" adjustment is to get the plane to track the same both upright and inverted. If the plane tracks better upright than inverted, move the elevators up relative to the flaps (lengthen pushrod). If the plane tracks better inverted, move the elevators down relative to the flaps (shorten pushrod). Now the fun starts, as this may negate



what you have just done to get it to turn the same. If this is the case, make it track the same and adjust the turn now with an adjustable handle.

This completes the more objective part of trimming and now comes the more subjective part, which makes all planes fly different. This trimming can take a lot of flying to be happy with. This stage is very personal as everybody has different flying styles. So, when you think that your

plane is just right, your best buddy may not.

Adjusting the pitch sensitivity is the first of the subjective trimming areas. As these get harder to trim, they also get harder to describe! I will define pitch sensitivity as the rate in which a plane can turn a corner. A real sensitive is a plane that will move with a twitch of a finger. Start off with a nose-heavy situation. When the plane is very nose-heavy, it will be impossible to turn any kind of corner with it. You will also feel the load increase in one line relative to the other. In this condition, you will either have to add tail weight or preferably remove noseweight. Where you stop adding or subtracting weight is your personal decision. I am known for flying quite tailheavy as I find that this condition is the best compromise for calm and windy conditions. It also keeps the loads in each line nearly equal, which gives me a better feel of the plane. This is just my personal preference. Other people choose to fly nose-heavy relative to me. Do whatever works for you.

Now, there are other ways to adjust this sensitivity, assuming that it is close to start off with. Changing the diameter of the prop definitely influences sensitivity. Smaller diameter props will allow the plane to turn faster, larger diameters slower. Assuming that you have an adjustable elevator, making it move faster relative to the flaps will make the plane turn faster. The last thing that affects pitch sensitivity is the leadout position. Yes, the location of the leadouts does affect sensitivity. The more nose-heavy the plane, the less this effect will be noticed. To increase the sensitivity, move the leadouts forward. Now, after making any kind of these aforementioned changes to improve pitch sensitivity, follow the flow chart back and check the basic trim. As you are beginning to see, this can take a while to check all the variables.

The next trim area is the quality of turn. Just because the plane turns fast doesn't make it a good corner. The plane has to do a 90-degree corner and stop without any bounce or wiggle. Many people mistake an out-of-trim airplane for one that is too tailheavy. You would be surprised how tailheavy you can fly when the plane is in proper trim. Unfortunately, I have not found any quick and dirty methods to find this, just a lot of trial and error. To get this elusive perfect corner, many methods are available. Leadout position again is an important factor. Moving the leadouts as far forward as you can get away with helps. More prop pitch makes the plane accelerate out of the corner faster and thus has less tendency to bounce. Another adjustment to try is playing with your adjustable handle. Increasing or decreasing the line spacing can help. Adjusting the "overhang" also is worth trying. Yes, we are getting into details here, but this is what it takes.

The last trim item on the chart is tracking quality. Tracking is the inherent ability of the airplane to stay exactly in level flight. Just about every trimming item on your plane will affect tracking. Try adjusting your leadouts, balance point, tip weight and evaluate their effects (one at a time, or course). If you have an adjustable rudder, adjusting this definitely affects tracking. Different props have different effects on tracking. Sealing the control surface gaps has an influence. Flying with dirty lines does hurt tracking. And, finally, the horsepower output of your engine influences tracking.

Remember that each time you make an adjustment at this stage of the game, many of the fine points that you earlier trimmed can be quickly wiped out, so follow the arrows back up and take a flight or two to check out the differences and where they occur. If you are lucky, you might pick up some trends. If you get to the end of the yellow brick road and you figure the plane is in trim, practice, practice, practice.

--Paul Walker, 25900 127th Ave. SE, Kent, WA 98031.

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The most outstanding piece of equipment ever to be offered in the Flying Lines raffle is up for grabs in the Fall 1985 raffle.

This fantastic prize is the Paasche Model #62 spraygun, with Paasche #D500 compressor and pressure regulator, a \$160 retail value. This fine tool was donated by Don McClave of Portland, Ore., a long-time FL supporter.

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SPEED SCOOP

by mike hazel

As usual, it has been awhile since the last installment of this column. I don't think we were on any particular subject last time, so we'll just start from scratch.

Quite awhile back, I received a letter from Steve "O'Bat" Helmick, regarding his views on the construction and operation of takeoff dollies. Steve is currently very active in free flight, but used to be a speed freak some years back. I don't agree necessarily with everything that Steve says, but some things work better for some than others. Here are some excerpts from Steve's letter:

Dear Mike, Gotta comment about your "speed scoop" column in the latest FL, Feb '85, regarding take-off dollies. First, a good, reliable take-off dolly need not have a "trip wire". In fact, after seeing a lot of "mousetrap" users in action, I decided that it wasn't a good way to go, and always used lift-offs, and with almost 100% reliability, too. I eventually developed an excellent design that a few guys even asked me to build copies for them. Although it looked complex and tough to build, it really wasn't bad.

Anyway, one point I wanted to make was to detail my unpatented, unpopular and unknown "Dolly Test". This is not a blood test given to every willing "chick" or "bird" a guy meets, but a very effective and practical test used on those take-off dollies to see if they'll work or dump the airplane. First, a bit of general lay-out rules of "thumb" that seemed to work real well for me in the old days. The front wheels should be at least in line with the propeller, or a few inches ahead. Big front wheels are nice.... 3" for A's and B's, and 3½ - 4" for D's. The track (distance between the front tires) should be about the same as the wingspan of an average model of the class.... I used 18" for A, 20" for B, and 24" for D. The rear tire should not be back much beyond the tail end of the model,....less on the longer designs like the "Pink Lady". There should be a cradel under the engine to prevent the model from simply rotating nose down, pivoting on the L.E., where the CG might be fairly close. Another yoke supports and centers the rear of the fuselage, about half way ahead of the stab L.E. to prevent the chance of the stab hooking on there. The wing posts should be around 4" high. Probably the hardest part is designing the dolly so that you can get your hand in under the wing to adjust the rear mounted needle valve.

But the "Dolly Test" is neat (best for last, etc.) Set the completed model, with engine, in the dolly, with a 6' - 10' line attached to the controls, with a loop on the "handle" end. With the thing sitting on asphalt, try dragging it toward you with the line, and watch to see if it slides sideways smoothly, or yaws in or out. If it yaws in, it will assuredly "come at ya" on launch, and you'll probably have a dandy shaft-run as a result. This can be adjusted by reworking the wheelbase to the rear of the CG, or by revising the rear tire...changing it, or grinding the tread off, etc. Don't screw around with electrical tape, or Trexler tires. Smooth treads work good, both ends, and while I used some "slicks" (square shouldered tires), I don't think they are a good idea, generally. Does the test work? Yes! It can save you some anxious moments, damaged engines and airplanes.

OK, thanks for the input, Steve. Again, I don't agree with all of Steve's ideas, but ya gotta do what works for you. I am personally a "mousetrap" man, but I do see merit in the lift-out type configurations. Sometimes, it is a must, for example with FAI planes, where they must get off during low power mode. Some of the guys running piped A & B jobs also prefer lift-out styles, as it is bad news if the engine comes on pipe with the plane still dragging a dolly. (check the Oct-Dec 1984 issue of Speed Times for details on the "stab-lock" dolly)

Here's a few more ramblings. For you jet fliers using the sidewinder design, consider doing some design testing for a dolly. One of the inherant natures of the sidewinder is a lean takeoff condition, which is very hard on valves. It would seem beneficial to have a dolly design that would allow the plane to accelerate much quicker and become airborne sooner, thus minimizing the lean fuel mixture time. The standard sidewinder dolly is a four wheel job, which really puts a lot of drag on the ground considering it is set to head out of the circle to keep it from coming in. (via the deflection rudder in the jet blast). I have built two sidewinder dollies, which were of the mousetrap winglock type, and this gives another small hesitation to getting up to full airspeed. Jerry Thomas has been using a sort of take-off dolly with his new design asymmetrical jet job. The plane could actually skid off if it didn't have the tendency to come in, so the dolly is used as a drag

device on the outside of the circle to prevent the evil tendency. It employs a single wheel, and locks onto the fuselage, and drops off via a trip wire. While this system is not exactly what would work on a sidewinder, it gives some fuel for thought.

Another concept for dolly design you may give some thought to, is to change around the mousetrap configuration. Years ago I observed one modeler who had a dolly with the wingclamps opening the opposite direction of a standard design. This makes a lot of sense, as sometimes the wingclamps hang up, or simply bump the plane as it drops the dolly. Operation of the mentioned dolly was extremely smooth, but it appeared to be needlessly constructed to complicated. This may be a project I may try to scratch out this winter.

Speaking of which, a reminder that the time to start getting ready for the 1986 speed season is NOW. It looks like we should have a great summer of speed flying next year. The Skyraiders are talking about moving their big one into July, which would spread the dates around nicely. Then the schedule may look like this: Eugene in May, Vancouver B.C. in June for the speed champs, Raider Roundup in July, Canadian Nats in August, and VGMC Internats in September! Go for it!

The hot event for NW speed (as if you didn't know) is Formula 40. The action was great at the Raider Roundup with three fliers bunched within 3 to 4 mph of each other. This is great competition. Next year we should see even more action. Wouldn't it be great to have 5 or 6 guys battling it out all over 150 mph. We're not far away now.

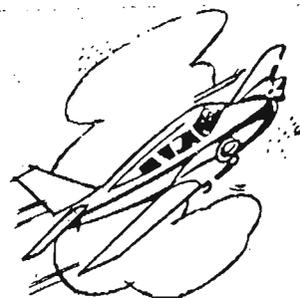
Make sure you don't go into hibernation over the winter. Maybe you can't fly, but make sure to build some planes and engines. Later.....

Mike Hazel, 1073 Windemere Drive NW, Salem, Oregon 97304



AIR MAIL

COMMENTS.....NEWS.....VIEWS
FROM THE FLYING LINES READER



DEAR FL:

Thank you very much for the certificate acknowledging the NWSR 4:13 heat time which was attained March 31, 1985, but first and foremost thanks for the great job you have done in promoting Control-Line flying in the Pacific Northwest, throughout both the USA and Canada via your Flying Lines newsletter! Your contribution of time and talent is very much appreciated by all Vancouver Gas Model Club members, and we encourage you to keep up the excellent work. You may be sure that most VGMCers in good standing are also Flying Lines subscribers!

My wife, Isabel, and my daughter, Michelle and I, together with all the VGMC members who attended your recent Pacific Northwest Regionals competition at Mahlon Sweet Municipal Airport in Eugene would like to thank one and all for the hospitality extended to us during our stay. It was an excellent contest and combined with good friends and nice weather together with keen competition, what more could anyone ask for? We shall look forward to this event in 1986 and we trust that as many of your readers as possible will be attending our VGMC Internationals control-line competition Aug. 31 and Sept. 1, 1985.

The writer has enclosed a photo copy of the Flying Lines NWSR rules poll together with stated observations as follows:

A. LEGAL AIRPLANE DESIGNS:

1. Introduce a wing-area rule and plane dimensions (i.e., suggest 300 square inches and 24" minimum fuselage length). This rule should qualify the standard Sterling, M&P, Goldberlg, Midwest and similar designs.

2. Do not restrict planes purely on the basis of availability. It should be noted here that many so-called "readily available" (in USA) kits are in fact short-stocked and difficult to locate in many Canadian hobby shops, and additionally, mail-order very often takes forever with no guarantee of delivery! Unfortunately, the post office and customs have relatively little respect for control-line contest schedules.

3. Do not restrict planes to new or currently available aircraft. For example, why should we prevent a flier from entering a Jim Walker Firecat or similar golden oldies, provided these planes fit the required dimensions.

4. Allow faithful reproductions of old out-of-print kits and reproductions from plans (subject to dimensions). I suggest we will maintain modeler interest at a peak if we allow a few Studebakers and Edsels on the same highways driven by Chevs and Cadillacs.

AIR MAIL, continued

5. Consider costs to the modeler. Not everyone can afford a "kit." Furthermore, a Canadian modeler currently pays 37% U.S. exchange plus mailing costs plus duty, as opposed to costs of a USA modeler.

B. FEATURE RACE PIT STOPS:

No change. Leave it at two pit stops in 140 laps, subject also to

C.

C. NUMBER OF PLANES PER RACE:

1. No change. Leave it at 4 planes for feature 140-lap race. Four-up racing has proved to be safe with two pit stops and flier interest is retained on this basis. Spectator interest and response is also increased with four-up racing.

2. Three pit stops with four-up racing in the feature 140-lap race is not to be recommended purely from a safety standpoint. Unlike the Super Sport event, engine shutoffs are not permitted and pit stops will imperil both the aircraft and the modelers. Keep safety No. 1 prerequisite while retaining the excitement of four-up racing.

3. Consider a new rule to limit the preliminary 70-lap heats to three-up racing only. Reason: To enable new or less-experienced NWSR entrants to successfully gain knowledge and experience as they compete for the opportunity of flying in the four-up 140-lap finale.

In summary, let's keep an open mind in regard to Northwest Sport Race. Let's not allow too many restrictions to curb growing interest in a great event. We are headed in the right direction and need only to keep up the pace.

Final observation: We need more young fliers! Why not increase the involvement of our friends, wives and families in a great sport. Let's not just think about it, let's do it! Model aviation would benefit from their help -- and so would we!

--Henry Hajdik, Vice President, MAAC 1712L, Vancouver Gas Model Club, 1629 London St., New Westminster, B.C., V3M 3C8.

DEAR FL:

My first subscription to your newsletter will run out after the September issue, so here is my renewal. You do a super job and I'm sure it contributes to keeping CL alive and growing.

To keep up with CL I subscribe to FL, PAMPA STUNT NEWS, NASS SPEED TIMES, AEROMODELER, FLYING MODELS and MODEL AVIATION. It seems there is enough info out there that CL people could have their own magazine, rather than all special interest efforts. Too bad it couldn't be pulled together somehow.

I am getting started in Speed flying and want to pass along results of my effort to find monoline hardware. Walt Brassell has twist wire units, handles, torque units for all classes for sale. Anyone trying to argue against monoline due to scarcity of equipment only has to call Walt and see how ready he is to set someone up. Scarcity of monoline setups is a myth. Only problem is that it's not in hobby shops, but then again how much other specialty CL stuff ever is any more?

Walt has no incentive to advertise so people have to find him by word of mouth. Perhaps periodic mention in Flying Lines would help stimulate more interest and a market.

Regarding Speed flying dying down, I think this is also a myth, since at the Nats in 1985 Speed entries were No. 3 for all events, behind RC aerobatics and CL Combat! How do you account for that?

Thanks for a great newsletter. I look forward to its arrival every month.

--Lyne B. Spiegel, 50 Prospect Ave., Newton, MA 02160.

DEAR FL:

It is time for me to renew my subscription. Thanks for providing us CLers with news and information about activities in your area. It is nothing less than inspirational.

--Raymond Lefrancois, 465 Chinquapin Trail, Christiansburg, VA 24073.

DEAR FL:

Don't know if it's still vacant or not but I would be interested in the beginners' or engine column. I've written for the old AMERICAN MODELER and am doing an article right now for MODEL BUILDER. Any takers? Let me know and give me some guidelines if you are. I'm also thinking about a new design for the FL header and I also do graphic arts.

--Jim LaBarge, USAFSA CMR2293, APO NY 09458.

(Editor's note: That's what we like, more hands on the oars! Jim has been assigned the beginners' column and may also be providing some new artwork.)