

# FLYING LINES

1411 BRYANT AVENUE  
COTTAGE GROVE, OREGON 97424

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March, 1983 NEWS OF NORTHWEST CONTROL LINE MODEL AVIATION Number 43

## SUPER SPORT MAKE HISTORY WITH SUB-8:00 FEATURE

What makes a good race?

Answer: Three very fast Northwest Super Sport airplanes, brilliantly pitted and expertly piloted. Nearly identical air speeds, flawless strategy. Oh, what a thrill!

History was made for Northwest racers Feb. 13 when the first ever all sub-8:00 minute feature race was run as the finale to the third Northwest Sport Race Drizzle Circuit contest at Delta Park in Portland. If you haven't seen the SS planes run lately, come on out March 13 and see what this fantastic event has turned in to. We guarantee you'll hit the building boards!

Dave Green of Astoria, Ore., topped this all-star final with a new record time of 7:17. This is one second faster than the 7:18 turned by Vic Garner at the 1982 Regionals -- until then the fastest SS time -- but Dave's time included the now-mandatory THIRD pit stop. If there is anything Green and pilot Bill Warner could have done better, nobody at the Jim Walker memorial circle could see it. Dave used the popular K&B .35 on his own-design Minotaur.

To top it off, Mike Hazel's weary old Cro-Magnon SS was not far behind at 7:46, as pilot John Thompson fought off Will Naemura, who was piloting Alan Stewart's original SS at 7:49, only three seconds behind at the finish.

Racing in the SS heats was outstanding as well, with the eight entries turning eight sub-4:00 minute heats out of 16 individual plane-heats. There was only one did-not-finish, and the slowest time was 5:41! The days when it takes a long time to get a race over with are long gone, friends. And, racing right in there with the old-timers are some racers who never flew an SS before this year's DC.

Pilots have come to unanimously agree upon the fantastic qualities of SS racing, which uses planes fast enough and clean enough to be stable, predictable and smooth to fly, close enough in speeds to be interesting, and just plain fun. It's a great step up from Sport Race and a great reason to start racing. Learn to work that Fox .35-stunt sport racer and then come on into the SS fray!

The great SS final was a fitting end to a fine day of racing that saw the Greg Beers racing team slip into another Northwest Sport Race win to keep Beers at the top of the circuit heap in that class. There were no record times in SR but good racing all day long.

The 1983 DC has been characterized by clean, nearly accident free and competent-looking racing in both classes. The "pros," most of whom were beginners only a few short years ago, are bringing the newcomers up to speed quickly with the best kind of training -- hands-on racing. So far, 1983 appears to be the most successful series of racing in the DC's five years.

The secondary event for the third contest was 3A combat, which saw the debut of Gene Pape's new ultra-simple foam Pupfighter kit. The Pup is laid out almost exactly like the very successful Cheap Imitation, but built of foam with the quick-build Dogfighter technology. John Thompson flew a Pupfighter to first place, killing off Pape in an all-Pupfighter finale. Dick Salter flew a Cheap Imitation to third place, beating Naemura's Pupfighter in the consolation.

Next DC contest is at Delta Park March 13, with Northwest Sport Combat as the secondary event. Be there!

Here are the complete results:

### NORTHWEST SPORT RACE (8 entries)

1. Greg Beers, Vancouver, Wash. -- 9:23. Sterling Yak-9, 40" span, balsa, epoxy finish. Fox .35 Stunt, 9x8 Grisa nylon prop, Fox plug, Sheldon's 15% nitro fuel.
2. John Thompson, Cottage Grove, Ore. -- 10:23.
3. Dick Salter, Seattle, Wash. -- 11:19.
4. Dave Green, Astoria, Ore. -- 14:59.

### NORTHWEST SUPER SPORT RACE (8 entries)

1. Dave Green, Astoria, Ore. -- 7:17. Minotaur, original design, 33" span, 26 oz., spruce/balsa, K&B Super Foxy finish. K&B .35. Dark Ages Racing Equipment 9x7 epoxy glass prop, K&B plug, Sheldon's 25% nitro fuel, 11/64 venturi, fastfill, shutoff, hot glove, and flow LARE tank.

2. Mike Hazel, Salem, Ore. -- 7:46.
3. Alan Stewart, Vancouver, Wash. -- 7:49.
4. SKARE Team, Seattle, Wash. -- 3:40 neat.

1/2A CCMBAT (6 entries)

1. John Thompson, Cottage Grove, Ore. -- Pupfighter, Gene Pape kit, 24 1/2" span, 5 1/2 oz., foam, balsa, Econokote/Epoxy finish. TeeDee .049, 5x4 Top Flite nylon prop, Cox Tee Dee plug, Sheldon's 50% nitro fuel, Kustom Kraftsmanship needle valve assembly, bladder tank, E-Z-Just Hot Rock handle. 3-0 record.
2. Gene Pape, Eugene, Ore. -- 2-1.
3. Dick Salter, Seattle, Wash. -- 2-1.
4. Will Naemura, Portland, Ore. -- 1-2.

RACING HEAT WINNERS

NORTHWEST SPORT RACE: Round 1: John Thompson (4:58), Dave Green (5:19).  
Round 2: Green (5:16), Thompson (4:45).

SUPER SPORT RACE: Round 1: Green (3:36), Mike Hazel (3:50), Alan Stewart (4:43).  
Round 2: SKARE Team (3:40), Green (3:35), Hazel (3:43).

CHAMPIONSHIP POINT STANDINGS AND STATISTICS, 1982-83 DRIZZLE CIRCUIT

<u>NORTHWEST SPORT RACE</u>	<u>SUPER SPORT RACE</u>	<u>FAST HEATS</u>	<u>(Race)</u>
1. Greg Beers . . . 25	1. Dave Green . . . 19	NWSR: 4:27 -- Greg Beers (1)	
2. Dave Green . . . 19	2. Rich Schaper . . . 13	NWSS: 3:24 -- Dave Green (1)	
3. Glenn Salter . . . 13	3. John Thompson . . . 10	<u>FAST FEATURES</u>	
John Thompson . . . 13	Alan Stewart . . . 10	NWSR: 8:48 -- Greg Beers (1)	
5. Bill Varner . . . 10	5. Mike Hazel . . . 9	NWSS: 7:17 -- Dave Green (3)	
6. SKARE Team . . . 9	6. SKARE Team . . . 6	<u>PRELIMINARY HEATS WON</u>	
7. Dick Peterson . . . 3	7. Dick Peterson . . . 4	NWSR: 4 -- G. Beers, D. Green	
8. Gene Pape . . . 2	Will Naemura . . . 4	NWSS: 6 -- Dave Green	
9. Rod Watson . . . 1	8. Bruce Guenzler . 1	<u>PRELIMINARY HEATS FINISHED</u>	
10. Drew DePauli . . 0		NWSR: 0 -- Green, Salter, Varner, Beers.	
		NWSS: 6 -- Thompson, Green, Schaper	
		<u>TIMES MADE FEATURE RACE</u>	
		NWSR: 3 -- G. Beers, D. Green	
		NWSS: 3 -- Dave Green	

HELMETS -- Flying Lines still has access to cheap helmets good for racing and combat pit use. These are light industrial hard hats with chin straps. Price \$7 if delivered in person, \$8 if mailed. Contact FL for info.

EXPO 83 -- ANOTHER SUCCESSFUL SHOW

From the Skywriter -- Editor Dave Mullens

The Mount Rainier RC Society did another super job of hosting the Northwest Model Exposition, in Puyallup Feb. 5 and 6. The Seattle Skyriders had a booth manned for both days to explain to people that there are still a few of us crazies that really want to know what it feels like to be in control of a model airplane.

We had a lot of response in the booth and ran out of material to distribute

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EXPO, continued

midway through the second day. Here is a rundown of the volunteers who manned the booth: Pete and Donna Bergstrom, Dan and Joe Cronyn, Bob Danielson, Ray Davis, Dave Gardner, Tom Knoppi, Dave and Carolyn Mullens, Don Reed, Dick Salter, Randy and Kathi Schultz, and Paul Walker.

On Saturday Dave Gardner and Dave Mullens put up a few flights that resembled the precision aerobatic pattern. Pete Bergstrom put in a flight with his P-47. On Sunday Paul Walker showed the crowd what a precision aerobatics pattern looks like. R.F. Stevenson was out doing his Jim Walker Impression. Don Reed and Steve showed the crowd what a mid-air looks like.

The booth and flying demonstrations went great, but what happened to all those control-line birds that should have been out on the floor in competition? There were only six control-line entries.

The Skyraiders swept the winners, with Dave Mullens' placing first with his Ryan STA. Dave's new stunt trainer "Off the Wall" placed second. Bob Danielson was third with his Kinner Sportster. Bob's Great Lakes and Dan Cronyn's Genesis won honorable mention. Mike Hazel entered his D-speed plane. The RC boys didn't know what it was, so they displayed it with the RC pylon racers. There are many nice control-line planes out there and I know many of them are nicer than a lot of the RC entries. So, take it off the wall next year and display it.

The AMA had a booth selling patches and things and spreading the word. There was a District XI meeting that I managed to miss for the second year in a row. There were RC helicopter and RC off-road car demonstrations out in the arena. RC race cars and trains were inside with demonstrations. This is becoming an event to play for; you should have been there.

## NW COMPETITION STANDINGS

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

Standings in the two sport racing classes were updated as a result of the February Drizzle Circuit contest, and 1/4A combat standings were established.

The standings below reflect the status of the updated events as of March 1. The racing standings are for 1983 only and should not be confused with Drizzle Circuit standings, which are listed elsewhere in the newsletter.

NORTHWEST SPORT RACE (2 contests, 17 entries)	NW SUPER SPORT RACE (2 contests, 14 entries)	OVERALL RACING (5 contests, 33 entries)
1. Greg Beers . . . . 17	1. Dave Green . . . . 12	1. Dave Green . . . . 25
2. John Thompson . . . 13	2. Mike Hazel . . . . 7	2. John Thompson . . . 19
3. Dave Green . . . . 12	3. Alan Stewart . . . 6	3. Greg Beers . . . . 17
4. SKARE Team . . . . 8	John Thompson . . . 6	4. SKARE Team . . . . 13
5. Glenn Salter . . . . 6	5. Rich Schaper . . . 5	5. Mike Hazel . . . . 7
	SKARE Team . . . . 5	6. Glenn Salter . . . . 6
	7. Will Naemura . . . 3	Alan Stewart . . . . 6
		8. Rich Schaper . . . 5
		9. Will Naemura . . . 3
		10. Bill Varner . . . . 2

### 1/4A COMBAT

(1 contest, 6 entries)

- 1. John Thompson . . . 6
- 2. Gene Pape . . . . 5
- 3. Dick Salter . . . . 4
- 4. Will Naemura . . . .

### NUTS AND BOLTS

(Miscellaneous notes from the publisher)

By Mike Hazel

Here's something for you readers who "have everything." Flying Lines proudly announces the FL Premium Subscription. This is a subscription that basically has a donation kicked in to help the FL coffers.

There are some special extras included:

- 1. First run delivery. Usually it takes FL publishing headquarters two or three days to get all the issues out. Premium subscribers are guaranteed first delivery. Also, contest flyers are sent immediately to premium subscribers as soon as they are received at FL headquarters.
- 2. Your newsletter will be sent unfolded in a large envelope.
- 3. Free classified advertising.
- 4. Automatic entry of one ticket in every FL raffle.

Such a deal! For those in the future who wish to help us out, here is your chance, and you'll receive some bennies along with it. The price is \$25 for 10 issues. To upgrade your present subscription to this status, look at your mailing label and see how many issues you have left. Multiply this by \$1.50, or write us, if in doubt. Be the first on your block!

RENEWAL SYSTEM: For the benefit of our new subscribers, here is how Flying Lines handles the renewal process. Your address label has a beginning and ending issue number on it (42/51). We do not send out notices, because of the cost. For this reason, we ask our readers to send us your checks for renewal when you receive the last issue. Normally a notation will be made on your address label. Thanks!

# NW COMPETITION RECORDS

RECORD PERFORMANCES ESTABLISHED BETWEEN NORTHWEST  
MODELERS IN SANCTIONED COMPETITION

Dave Green of Astoria, Ore., solidified his hold on the Northwest Super Sport Race "fast lane" Feb. 13 by trimming his own feature race record from 7:30 all the way down to 7:17. Even with the new third pit stop this year, that is the fastest Super Sport feature race ever recorded. Dave used his original design Minotaur with a basically stock K&B .35 plain bearing engine.

Flying Lines keeps track of the performances of Northwest residents in sanctioned control-line competition. Here are the records as of March 1:

1/2A MOUSE CLASS I 50-lap: 2:38 (John Thompson)	100-lap: 5:31 (John Thompson)
1/2A MOUSE CLASS 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: 9:50 (John Thompson) <sup>749.58 Hazel</sup>
RAT RACE 70-lap: 2:29 (Mike Hazel)	140-lap: 4:53 (Mike Hazel)
TEAM RACE 100-lap: 3:51.07 (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: 3:24 (Dave Green)	140-lap: 7:17 (Dave Green)
1/2A SPEED: 88.2 mph (Paul Wallace)	FAI SPEED: 155.45 mph (Scott Newkirk)
1/2A PROTO SPEED: 83.63 (Paul Wallace)	FORMULA 21: ---
A SPEED: 125.82 (Mike Hazel)	FORMULA 40: 152.28 (Scott Newkirk)
B SPEED: 153 (Mike Hazel)	JET SPEED: 192.64 (Chris Sackett)
D SPEED: 154.84 mph (Mike Hazel)	PROFILE NAVY CARRIER: 208.9 (Marty Phillips)
	CLASS I NAVY CARRIER: 268.98 (Terry Miller)
	CLASS II NAVY CARRIER: 323.7 (Loren Howard)



FLYAWAYS

## RANDOM TIPS AND RIBS FROM THE FL WORKSHOP FLOOR

====The Seattle Skyraiders now have 30 members, an all-time high for their club, and drew eight beginners at a recent beginners' day flying session. They use a Streak Trainer for instruction. One of the best investments a club can make is some type of trainer. The CLAMS in Astoria use 1/2A "Flip" models, and the Eugene Prop Spinners have a variety of profiles and other hand-down models available for beginners. The basic rule of control-line promotion: Never go flying without something to teach a beginner on. At the Skyraiders beginner day, Dick Salter was the prop-whaker, Pete Bergstrom the instructor and assistance was provided by Max Thue, Dave Gardner and Dave Mullens. Several 1/2A planes also were kept busy on another circle. The Skyraiders also plan to start tooting their horn with new jackets, soon to be ordered.

### EUGENE'S TOY AND HOBBY

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====Control-line historian Frank Macy is preparing to produce a line of Jim Walker American Junior memorabilia under the name of A-J Fun Pak. He'll be selling folding-wing sky-divers, rubber-powered helicopters, fireball plans and other goodies. Watch for his ads, history buffs. Some of the products will include parts from the original A-J company stock. The project is the result of three years of research and work by Frank Macy, one of CL's top promoters since Jim Walker himself.

====The latest RC model design is called the Jigsaw. Every time you fly it, it goes to pieces... --Doug Dahlke.

====A wide variety of stunt plane plans, from the antique to the modern, is available from Tom Dixon, P.O. Box 27540, Contract Station #7, Atlanta, Ga., 30327. Some names include Oriental, Stephens Akro, Dixon Thunderbird, Vantage, Barnstormer, Smoothie, Mustang, Noöler, Thunderbird, Chief, Powwow, Lark, Zilch X, Cougar, Jay Dee Falcon, Phoenician, Ballerina, Stuka, Ares, P-40 Warhawk, and Fierce Arrow. This news from the newsletter of the Precision Aerobatics Model Pilots Association, Stunt News. To join PAMPA, send Wynn Paul \$7 dues at 1640 Maywick Dr., Lexington, KY, 40504, and tell him FL sent you.

====More stunt product news: Chuck Delano Enterprises, 4631 Mitchner Ave., Indianapolis, Indiana, 46226, now produces a wide range of stunt products including several previously marketed by Wynn Paul. These include weighted prop nuts, bell cranks, lead-out guides (adjustable), flap horns, elevator horns, OS and Supertigre venturiers in various sizes, custom control systems, and third hand fixtures. Chuck also does custom engine work and machining. Tell him FL sent you.

====In case you wondered if anybody reads Flying Lines, consider this long-distance FL article's travel: A combat column written by the editor about a year ago has since been published either in complete or excerpt form in the MACA Newsletter, Flying Models, Model Airplane News, and has been subject of an inquiry for future publication by the NCLC Gazette. We would modestly venture to say that FL is currently the most-quoted control-line newsletter in America. Congratulations to all the FL writers and supporters for making FL a force in CL model aviation.

====Speed fans, here's where to get some good information: Mike Hazel's Formula 40 ship, "the move," was featured in a detailed construction article in Speed Times October-December, 1982 edition, along with an article by Scott Hewkirk about reworking K&B 6.5 engines. To get the newsletter, send \$15 dues to the North American Speed Society, Box 82294, Burnaby, B.C., Canada, V5C 5P7.

====With mixed emotions, we just received the latest copy of FMA News, the newsletter of the Florida Modelers' Assn. It's a great newsletter. What pains us is to see that the newsletter's printing costs are entirely paid by Florida hobby shops. Here in the Northwest, only two of the more than 50 hobby shops are currently providing FL with any kind of financial support. If every reader were to sell one \$15 hobby shop directory ad...FL would be in great financial shape! Let's see if we can't find out why the Northwest's hobby shops don't give a hot about CL. And, let's support the ones who do! Thanks again Eugene's Toy' Hobby and Firgrove Model Supply!

====What would racers thing about slowing rat race down by phasing in a change to .21 engines over a period of years? Jim Ong, a top racer from Pineville LA, has proposed such a change informally to the Control-Line Contest Board. Your Dist. XI CLCB member is John Thompson, who can be contacted at the Flying Lines address.

====Mike Hazel, also a FL staffer, is tentatively selected as the new control-line columnist for Model Builder magazine. The only problem now is to convince MB there is enough control-line interest for a monthly column; they only want it bi-monthly at present. Write to MB and insist on a monthly column! Remember the successful crusade to bring CL and FF back to Model Airplane News! It can be done!

====FAI combat has some new rules for 1983 -- FAI fliers take note: 1983 planes will require a safety wire from the bellcrank mount to an engine lug, to prevent engine flyaways. Only two complete plane-lines-handle combination will be allowed -- no changes during the match, except for simply picking up the second combination as is. Only one engine may be running during a match -- no more having the second motor running on the ground. Combat will be stopped on the circle marshal's command and matches completed in level flight after both strings are cut. International rules also have switched to a full double-elimination format.

====Full plans for the Cobra rat racer by the Lambert racing team are included in the latest issue of the National Control Line Coalition Gazette. To get it, send \$10 dues to Laird Jackson, 2322 Wilson Ave., Bristol, PA 19007.

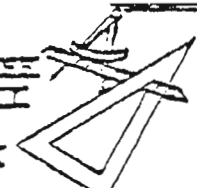

====An amazing array of old junk traded hands at the Eugene Prop Spinners auction Feb. 24. The next flying session was a barrell of laughs as several newly purchased "lead sleds" were flown. Predictions were that the same old stuff would be traded around again at the next auction!

# 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 AMA-sanctioned 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.

- February 13...PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest 3. 1/2A combat, 9 a.m. NW Sport Race, 11 a.m. sharp. NW Super Sport Race follows NWSR. NWSR/NWSS 2-heat+feature, points accumulating for circuit championship. Site: Delta Park. Entry fee: \$4 for first event, \$2 for each additional event. Contest Director: Dave Green, 200 W. Franklin Ave., Astoria, OR 97103 (503) 325-7005. Sponsor: North Coast CLAMS. Prizes: Merchandise.
- March 13.....PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest 4. Northwest Sport Combat, 9 a.m. NW Sport Race, 11 a.m. sharp. NW Super Sport Race follows NWSR. NWSR/NWSS 2-heat+feature, points accumulating for circuit championship. Site: Delta Park. Entry fee: \$5 for first event, \$2 for each additional. Contest Director: John Thompson, 1411 Bryant Ave., Cottage Grove, OR 97424 (503) 942-7324. Sponsor: Eugene Prop Spinners. Prizes: Merchandise.
- March 27.....SEATTLE, Wash. -- Seattle Skyraiders 3xl Event. Three events (NW Super sport race, stunt and balloon bust) with one airplane. Site: Carkeek Park. Contest Director: Dave Mullens, 15559 Palatine Ave., N., Seattle, WA 98133. (206) 365-5430. Trophies through third place for overall winners, first place trophies for individual events.
- April 10.....PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest 5. Slow rat race, 9 a.m. Northwest Sport Race at 11 a.m. sharp, NW Super Sport Race follows NWSR. NWSR/NWSS 2-heat+feature, points accumulating for circuit championship. Site: Delta Park. Entry fee: \$3 per event. Contest Director: Mike Hazel, 1040 Windemere Dr. NW, Salem, OR, 97304. (503) 364-8593. Trophies. Circuit championship trophies and perpetual awards handed out.
- May 15.....KENT, Wash. -- Seattle Skyraiders Spring Tune-Up. Precision aerobatics (3 classes plus junior novice), sorta scale. Site: Boeing Space Center. Contest Director: Dave Mullens, 15559 Palatine Ave. N, Seattle, WA 98133 (206) 365-5436.
- May 28-29.....EUGENE, Ore. -- Northwest Regional Control Line Championships. Rat race, slow rat race, Goodyear, NWSR, NWSS, Class I mouse race, Class II mouse race; AMA, FAI, 1/2A and slow combat; AMA and profile scale; Class I, II and profile carrier, precision aerobatics (three PAMPA classes); balloon bust, 1/2A, A, B, D, jet, Formula 40, and FAI speed. Displays, concessions, camping, hobby shop, party,

<p><b>SCALE DOCUMENTATION</b></p> <p><b>DRAWINGS-PLANS-PHOTOS-BOOKS</b></p> <p>IF YOU ARE TRYING TO DECIDE WHAT YOUR NEXT SCALE MODEL WILL BE....GET OUR SET OF AIRCRAFT CATALOGS.... \$2.00</p>  <p>WE ARE ONE OF THE LARGEST COMPANIES IN THIS BUSINESS, AND WE OPERATE RIGHT OUT OF YOUR HOME STATE OF OREGON!</p> <p>ASK ABOUT OUR ---  <b>EX SCALE DRAWING PACKETS</b>          --- AT YOUR LOCAL HOBBY DEALER</p>	<p><b>SCALE AEROBATIC HEADQUARTERS</b></p>  <p>EARLY BIRDS          WWI          GOLDEN AGE          POST WAR          WWII          MODERN</p> <p><b>REPLA-TECH</b>          INTERNATIONAL</p> <p>28800 MCKENZIE HWY.          VICA, OREGON 97485</p>
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## ACTION, continued

- rest rooms, restaurant, airline connections. Site: Mahlon Sweet Airport. Sponsor: Eugene Prop Spinners in cooperation with other Northwest clubs. Prizes: trophies and \$2,000 worth of merchandise. Contest Director: Dave Green, 200 W. Franklin Ave., Astoria, Ore., 97103. (503) 325-7005.
- June???.....ASTORIA, Ore. -- CLAMBash. More details to come. Contact Dave Green, 200 W. Franklin Ave., Astoria, OR 97103 (503) 325-7005
- July???.....KENT, Wash. -- Boeing Hawks Air Fair. Will somebody tell us what's going on, for a change?
- July 24.....SPANAWAY, Wash. -- Seattle Skyraiders and Bill's Hobby Town Spanaway Spectacular. (tentative). Precision aerobatics, slow, AMA and 1/2A combat. Contact Dave Mullens, 15550 Palatine Ave. N., Seattle, WA 98133 (206) 365-5436.
- Sept. 10-11...KENT, Wash. -- Raider Roundup/Washington State Control Line Championships, sponsored by the Seattle Skyraiders. FAI team race, rat race, NWSR, NWSS, Class I&II Mouse race, balloon bust, profile carrier, Class I-II carrier, slow, 1/2A and AMA combat, precision aerobatics, sorta scale, sport or precision scale, Formula 40 speed, record-ratio speed. Trophies and merchandise. Site: Boeing Space Center. Contest Director: Dave Mullens, 15559 Palatine Ave., N., Seattle, WA 98133. (206) 365-5436.
- October 8.....PORTLAND, Ore. -- Old-timers Fun-Fly, featuring several events to be announced later, 9:30 a.m.-2:30 p.m. Site: Delta Park. Sponsor: Northwest Aeroliners. Information: Frank Macy, 5200 SE Jennings, Milwaukie, Ore., (503) 653-7436. Field available for Stuntathon practice after 2:30 p.m.
- October 9.....PORTLAND, Ore. -- Stuntathon '83. Four PAMPA precision aerobatics classes, 9:30 a.m. Site: Delta Park. Sponsor: Seattle Skyraiders. Information: Don McClave, 7719 SE 28th Ave., Portland, OR 97202, (503) 771-8453. Contest Director: Dave Gardner, 8133 184th St. SW, Edmonds, WA 98020 (206) 771-4787.

## PROFILES

Frank Hunt III of Merced, Calif., casts a big shadow across the West Coast model aviation field in more ways than one. Besides being a human being of impressive proportions, Frank is a modeler whose accomplishments are known nationwide and have done a great deal to improve the stature of speed modeling.

Here in the Northwest, Frank is known for his annual appearances at the Northwest Regional Championships, where he hauls down many of the speed trophies, and also for his sponsorship of Merced contests that draw the participation of a number of Northwest modelers.

Flying Lines is proud to present some information about Frank as part of its periodic Profiles column of biographies of control-line modelers.

Frank lives at 551 Brookdale Drive, Merced, and can be contacted to compare notes about model airplane subjects at (209), 723-5159. He owns a bicycle and hobby shop, an enterprise he has been involved in since 1968.

Though Frank is known primarily for his speed modeling, he lists racing, combat and stunt as other "favorite" events. Frank started modeling in stunt and combat in 1968, and joined the speed and racing fraternity in 1970. He started doing well in speed in 1971 and kept at it.

"I fly speed mainly and work to build speed up," Frank says. "I produce and sell speed equipment to help do this."

Besides his hobby-bike shop and modeling activities, Frank races automobiles in Sports Car Club of America Solo II autocross competition -- and, as usual, is a winner.

"I have placed in the top five at the Nationals I have entered in most events I flew. I won jet speed at Riverside Nats in 1977 and have placed well or won many contest events at various places including the Northwest Regionals and West Coast Regionals," Frank says. "I now run two contests a year, one in the early part of the year and my big Western States Championships on Labor Day each year."

Frank adds that he's a good telephone conversationalist but a slow letter writer, so call him up if you want "speed" in your reply.

Every Northwest modeler has some interesting secrets in his or her background that the rest of us would like to know about. Send us your biography for "Profiles."

## WHO'S WHO IN CONTROL-LINE MODEL AVIATION?

Flying Lines exists to provide communication among Northwest modelers and also to share information with our friends across the country. One of the best ways to do this is to share information about ourselves. One of the most interesting aspects of our hobby is the wide variety of people it draws.

Just for example, look at some of these professions that Northwest modelers have: Dentist, airline pilot, truck driver, bank executive, aerospace engineer; newspaper reporter, shipwright, machinist, restaurant chain manager, college teacher, stereo equipment manufacturer. What a variety!

In order to help in the sharing of information, Flying Lines periodically runs biographical sketches of Northwest modelers. Below is a form for submitting biographical information to the newsletter. Please take a few minutes to fill out the form and share yourself with the rest of us. Mail it to Flying Lines, care of the address on the cover.

Name \_\_\_\_\_ Address \_\_\_\_\_

Telephone \_\_\_\_\_ Club \_\_\_\_\_ Age \_\_\_\_\_

Spouse's name \_\_\_\_\_ Children \_\_\_\_\_

Occupation \_\_\_\_\_ Employer \_\_\_\_\_

How long flying model airplanes \_\_\_\_\_

Favorite activities (circle) Sport Speed Stunt Scale Racing Carrier Combat

Give us a brief history of your modeling career, from when you started through various stages to how you got to your current activities.

What are your current modeling activities?

Tell us more about your non-modeling life: work, hobbies, interests, etc.

List major modeling accomplishments (airplanes designed or published, major contest wins, unusual projects, etc.)

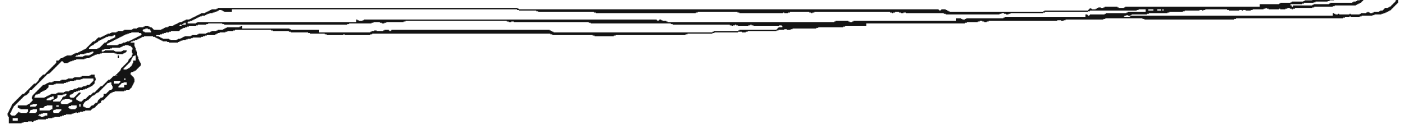
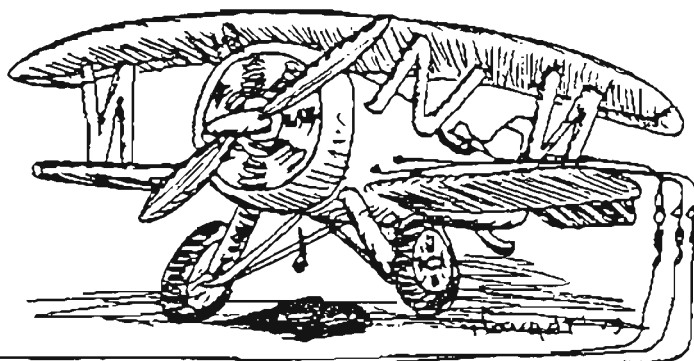
Anything else you'd like to add:

Mail to Flying Lines, 1411 Bryant Ave., Cottage Grove, OR 97424.

CONTROL LINE

SCALE

by orin humphries



At the Canadian Nats in Edmonton, Alberta, in July of 1982, I ran across something I like to jaw about from time to time. In contest rules we have placed the emphasis on documentation via three-view drawings. That has kept more people from going to contests and caused more problems than I care to think about.

In the RC scale division there was a scratch-built P-51B. It was like another one seen at Reno or Las Vegas a year or so ago that was a quarter-scale bird from drawings. Both of them had bad nose profiles. This was from the poor quality of the three-view the builder worked from. The one in Edmonton was so bad that it was, from the wing forward, in fact a Heinkel 100B vice a P-51!

Both builders had done admirable jobs in building without the aid of a kit or plans and must be credited. Both had made the same mistake, though in not



SCALE, continued

comparing their enlarged, model-sized drawings to photographs of the Mustang to check the accuracy of the drawings. Photos are available by the hundred in Mustang books; they are not rare and hard to find. The people simply didn't know that three-views are notoriously bad.

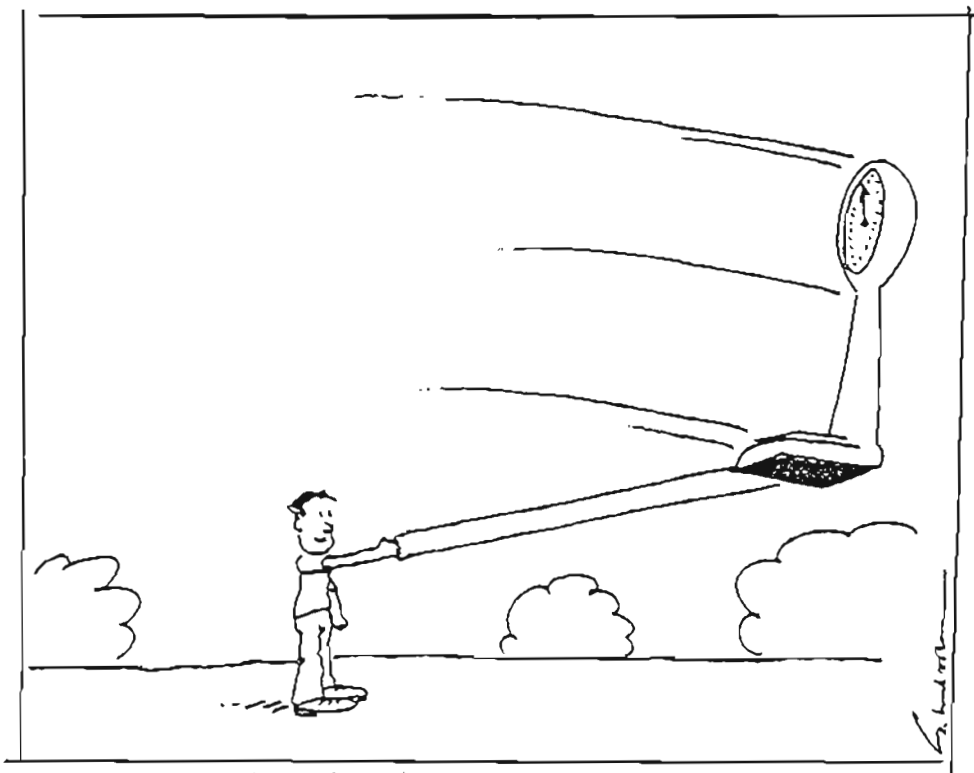
Why is this so? First, the factories in general assigned their most junior draftsmen to the projects, so they wouldn't screw up anything costly. Second, book publishers are precisely that; book publishers. They are not airplane nuts. They assign lay-up artists and graphic artists to the material in the book, not airplane nuts. They don't pay them much and give short deadlines. There is no push for accuracy.

Even people with big reputations who publish very impressive drawings in model magazines are not immune to gross error. I have drawings by Nye on the P-82 Twin Mustang that look great. Until you compare station number data from the factory to them. This data tells you how many inches aft of the nose the components of the craft are to be. On the P-82 drawings the canopy is off 18" and the horizontal stabilizer is 12" forward. Four P-82s, all RC, have been made in the last five years and three of them are wrong because they use the Nye drawings and the builders didn't carefully compare them to photographs.

A writer's material is no better than that supplied to him, and in all cases, photographs must be consulted for accuracy. Your drawing may be of the A-model and you want to build the C-model. There may just be a different rudder balance tab profile or something that you must check out in pictures.

Write your scale columnists for data and picture sources' addresses. These are abundant and we are here praying someone will write for assistance.

--Orin Humphries, N. 5208 Elgin, Spokane, WA 99208 (509) 325-9773.



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# STUNT SCENE

by paul walker

Being able to fly and trim an airplane well are dependent on the plane being straight and light in the first place. Being straight is the number one concern in building a competition stunter. Following closely behind in the number two concern is weight. (In my opinion, a far distant third concern is looks, which is not nearly as important as being straight and light in weight). Given everything else the same, a light airplane flies much better than a heavy one. (I know I have not told you anything new!) So the job is to build a light airplane.

To start building a light airplane requires having a set of scales. I use two. The first is a dieter's scale (available at most hardware and variety stores). That has a range from 0 to 16 ounces. The second is a scale that measures from 0 to 5 pounds. The smaller scale is used to weight wood in the hobby shop. the larger one is to weight the entire plane throughout different stages of development. It is obvious that each scale has an optimum measuring range. The large scale cannot read with any accuracy one small piece of balsa, hence the use of the smaller one.

Now, the stage that can make or break a good stunt plane is in the wood selection. Most of the balsa in a stunt plane should be of the 4 to 6 pound range (contest grade). This simply is the density of the wood in units of pounds per cubic foot. A conversion factor from pounds per cubic foot to ounces per cubic inch is needed. That relationship is:  $lb/ft^3 \times .00926 = oz/in^3$ .

If you go into a store and weigh a  $\frac{1}{2} \times 3 \times 36$ " piece of balsa and it weighs 1.5 oz., the density in  $oz/in^3$  is:  $1.5 / (\frac{1}{2} \times 3 \times 36) = .0555 oz/in^3$ . Converting to  $lb/ft^3$ :  $.0555 / .00926 = 6 lb/ft^3$ .

This piece of balsa qualifies as being contest grade balsa. Below is a chart showing different sizes of balsa and their associated weights for 4-pound and 6-pound balsa.

STOCK SIZE	VOLUME	4-POUND	6-POUND	
1/16x3x36	6.75	.25	.375	Weights are in ounces
1/8x3x36	13.50	.50	.75	
1/4x3x36	27.00	1.00	1.50	
3/8x3x36	40.50	1.50	2.25	

With this handy chart, or one you make up for all different sizes of wood you need, and a scale, you can hit up all the hobby shops for their light wood.

Strength and weight go hand-in-hand with balsa. Generally, the lighter the wood, the weaker it is. Building a plane with wood too light may turn out worse than wood that is too heavy. It might not be strong enough to withstand the flight loads and break. But there are places in the plane where this light wood can be used. Generally, if you keep the wood in the range of 4 to 6 pound stock you will be all right. Next time we will discuss where in the airplane certain types and weights of wood go for best results.

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

## FLYING LINES

1411 BRYANT AVENUE  
COTTAGE GROVE, OREGON 97111

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 T-shirt and tell your buddies what it stands for. FL T-Shirts available at \$8 -- name your size and color.

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.

Staff openings: FL would like a volunteer to act as advertising representative. Contact the editor. A photo editor also would be welcomed.

Here is the FL staff:

- |                             |                          |                          |
|-----------------------------|--------------------------|--------------------------|
| Publisher....Mike Hazel     | Aerobatics...Paul Walker | Speed.....Mike Hazel     |
| Editor.....John Thompson    | Rich Schaper             | Scale.....Orin Humphries |
| Photo editor..John Thompson | Combat.....Gene Page     | Sport.....Larry Miles    |
| Carrier.....Orin Humphries  | John Thompson            | Beginners..John Thompson |
|                             | Racing.....Mike Hazel    |                          |

Are you a motormouth on the subject of engines? How about writing an engine column for FL -- contact the editor!



## AIR MAIL

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



DEAR FL:

Have you ever been to an AMA Nats? Are you planning on attending a Nats in the future? Certain factions within the AMA, and some special interest groups are proposing a permanent Nats site.

There are some important questions that need to be answered. Some factions are advocating a split Nats with control-line here, free-flight there, RC over there. What do you think? Is the Nats only for the hard-core competitor?

Should the sportsmen and club fliers get a chance to see the big time and compete with the high flyers in their own regions? If a permanent site should be decided on would you be happy with a nice central location like Dayton, Ohio? There has even been a proposal to only have the Nats every other year.

As the associate vice-president for District XI control-line activities, would you please drop me a line and let me know what you think. I'll gather the responses together and pass them along to Ed McCollough. If you don't get involved now, don't complain about the result later.

--Dave Mullens, 15559 Palatine Ave. N., Seattle, WA 98133 (206) 365-5436.

DEAR FL:

I'd like to introduce a good friend of mine, a fellow control-liner, and one heck of a talented sort...Doug Dahlke, of Oshkosh, Wisc. Doug is into old-time stunt, PAMPA and CL in general. He's also interested in hand-launch gliders old Wheaties box top flyers, new engines, old engines and pretty young ladies. Not necessarily in that order, either. He has designed, built, flown and is now writing an article about his new precision stunt machine he calls The Sandbagger. We'll be hearing (seeing) more on this in the near future, I'm sure. He also has several other goodie projects on the front burner...busy fellow.

Being a dedicated control-liner, Doug admits he has a low saturation point for the Mega-Buck Brigade, and excels in reminding them of their very innoble role in life. In fact, one may easily get the idea that he is militant in his message. Enclosed are a few of his lines. (Editor's note: watch the nooks and crannies of FL for some Dahlke gems)...

Doug, Steve Lindstedt and myself are seriously contemplating compiling and publishing a model aviation humor and cartoon booklet of some sort. Question: Do you think a booklet of this nature would be of interest to modelers, if done well and if moderately priced? Also, do you think it would be better to lump it all together? And finally, what would you consider to be a reasonable price for a booklet of jokes, jabs, jibes and jests, adequately cartooned and illustrated say 100 pages or so? I would appreciate your comments at your earliest convenience.

Doug's address is 1037 Eastman St., Oshkosh, WI 59401.

--Frank Macy, P.O. Box 548, Oregon City, Ore. 97045

DEAR FL:

Regarding the comments by Bert Quenzer of Sturdi-Bilt Models: Another manufacturer of control-line equipment has been forced out of business by the careless actions of the few.

The majority of the control-line fliers observe the AMA safety rules as well as the manufacturers' recommendations on how to use their products safely. The AMA safety code warnings printed right on the plans by the kit makers, warning labels contained on each set of lines, and labels printed on all the handles should alert anyone who is able to read and follow a set of plans of the danger of being present in the vicinity of power transmission lines.

As if this isn't enough, the power companies themselves run spot commercials warning about the danger of flying kites and other stringed objects around them. Also, they warn about construction equipment, booms, cranes and ladders around power lines. With all this, it would seem that anyone with any amount of common sense and the ability to reason would figure out that it just makes common sense to stay away from power lines and yet some people will even pick up a downed power line. What happens then? Do the families sue the power company for having a line down, or what. It seems just as logical as the other where the person is just as careless, wouldn't it?

The attorney who handled the E-Z-Just suit made it known that he was going to pursue that matter further, and to petition the Consumer Product Safety Commission to ban the manufacture and use of control-line handles and lines. I resent the concept of someone acting, supposedly in my behalf, for my safety, because a very few did not observe full safety precautions dictated by good common sense. I am a free thinker and can make my own decisions without the help of some doc-gooders acting on his own to force his opinions down my throat. Also, what about the incidents involving RC model aircraft where glitches in radio gear or outside signal interference from an overpowering transmitter

AIR MAIL, continued

caused some kind of incident involving an injury or death? Have the attorneys named the manufacturers of RC radios as being liable? No! They have held the pilot was solely responsible, holding him negligent and careless. What's fair about that?

With a ban on the use of CL gear, can you imagine a future Northwest Regionals where all CL category events were static displays with awards going for finish and craftsmanship? Or, for that matter, an RC meet without radios in the planes. Why not ban propellers on engines because some of the combat pitmen stick their fingers in the props of a running engine? It makes as much sense.

--Bill Skelton, Box 105, Warrenton, OR 97146

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FOR SALE -- Profile Carrier combo. Sterling Hellcat kit, K&B plain bearing .35RC, J-Roberts 3-wire bellcrank. All new in box, \$75 value. Sell for \$49 plus shipping. Mike Hazel, 1040 Windemere Dr. NW, Salem, Ore., 97304.

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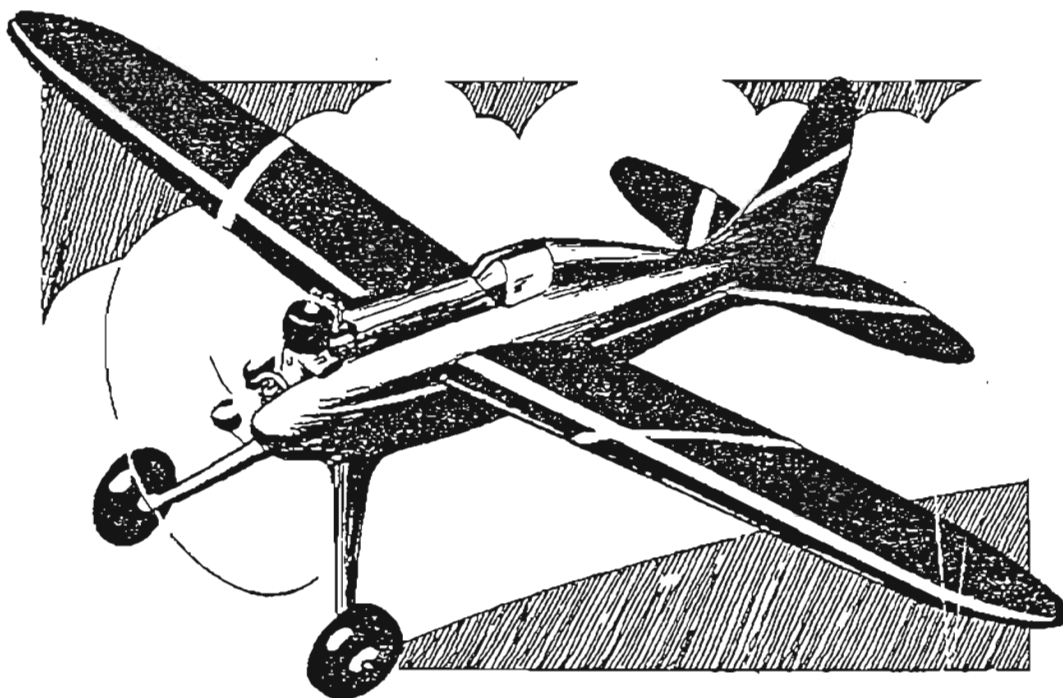
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# SPEED SCOOP

by mike hazel

This installment will deal with getting ready for the season's flying. If you are like most people, most of your winter activity has been limited to building and fixing planes and engines, and dreaming about warm weather and contests to come. The following is a suggested check list, but not in any priority order.

If there is any priority, perhaps enthusiasm and mental order need to be looked at. If you are going crazy waiting to fly speed, then all is in order.

## Engines:

At the end of last season, you did remove engines from your planes, oil them up and store in a plastic bag, didn't you. If not, I hope you didn't store the planes in a dusty area. If you suspect balsa dust fallout or similar hobby atmospheric phenomena has found its way into an engine, they you had better clean it out. If you pulled your engines out of a plastic bag, then the job is much easier.

Do check to make sure things are still well-oiled. The only dismantling that should be necessary will be to tear down the carb assembly. Soak all these parts in alcohol and reassemble. This will help prevent any grief associated with the "old gunk in the intake" ploy.

When reinstalling the carb, check all the other engine bolts. They won't loosen up just by sitting around all winter, but do you know for sure they were all tight at the end of last season?

At this point you may twist the needle valve in and out and make engine noises to psych yourself up. Avoid making shaft run sounds though, as it is bad luck, and someone might come expecting to find you caught in a vise. Notice that nothing was said about the glow plug. You check this every flight anyway, right?

## Airplanes:

Shame on you if any work needs to be done here. You had all winter long. Check the airframe all over and throughout for stress cracks and any signs of less than satisfactory structural integrity. Make sure that the control system is solid, free of corrosion, and works freely as it did before.

The inside of the fuselage and pan should be cleaned out, as any dust and gunk may be sucked up into the engine. Use alcohol or brake drum degreaser for the job. Actually, this should be done before or after every flying session. Remember that sanitary is a positive buzzword around the speed circle.

Next, check out the tank. If you use a bladder, you will want to start off with a new one. If a metal tank is used, it should be thoroughly flushed out with alcohol. Also, do a ~~pressure~~ pressure test of the tank. When hooking up the fuel plumbing, start with all new lines, and a clean filter if used.

## Flying wires:

Obviously, this is an area of proper care and concern take all your flying wires, including spare sets that you might need, and string them out. Check closely for corrosion or funny bends. If everything looks good, then clean the wires if necessary. I prefer to just soak a rag with alcohol and run it up and down the wires a couple of times. A couple of people have told me that dirty wires make no difference in drag. I have a hard time swallowing this. Even if it was true, I would still clean my wires so my hands don't get filthy rolling them out. Sanitary, y'know.

Next, take a look at your control handles. There isn't much to do with a two-wire handle. If you use a handle with adjusting cable leads, such as a Fox, check for frays in the cable, make sure the adjusting screw holds the cable tight, and again check for corrosion. For monoline handles, clean the twist unit with alcohol, and then oil with WD-40 or similar. Get a couple of drops of oil into the bearing surfaces of the twist unit. And, of course on all handles, check out the safety strap.

At this point, you may want to hook everything up and check out the controls. After you have gone through this, it is time to move on to the support equipment.

This starts getting kind of general as equipment can vary so much depending upon preferences, priorities, and procedures, not to mention class. Check the operation of your engine starter, along with the glow plug batteries and leads, clips, etc. If you fly jet, they you will want to nook up the T-coil ignition system and check the spark. Also check out your air system, whatever it may be.

Next, it is on to tool boxes. I have only two suggestions here. Number one, no matter how much or little equipment you have, set up a "pit kit" tool box for use on the circle. This includes just the bare essentials that will

## SPEED SCOOP, continued

help ensure getting in a flight while you are on the clock. This was covered in an earlier column. Number two suggestion is to put an equipment check list inside your large toolbox.

Now that you have done all this, grab some fresh fuel and you should be ready to start flying.

The next topic is concerning the Northwest Regionals on Memorial Day weekend. All indications point to a good turnout overall, but particularly excellent showing in the speed circle this year. With good numbers of Northwest and Californian speed contingents coming, this promises to be one of the hottest meets for speed in recent years.

I would highly suggest being practiced and ready for this one, as I foresee less circle practice time this year. Official flights must take precedence, you know.

If at all possible, try to get some flights posted in the early morning. There usually is a mad rush in the late afternoon. And, do remember your speed circle proper etiquette; help with stopwatch duty when you can. As the saying goes, be there or be square!

### Engine Notes:

T&S Hobbies (Scott Newkirk) is carrying the Picco line of engines. Of interest is the .40 pylon for Formula 40, and a .61 and .65 for Class D. Scott thinks these might be real killers. Check with Scott for more details.

A semi-short column this time around. Look for another Speed Scoop soon, and meanwhile, fly fast. See you at the Northwest Regionals!

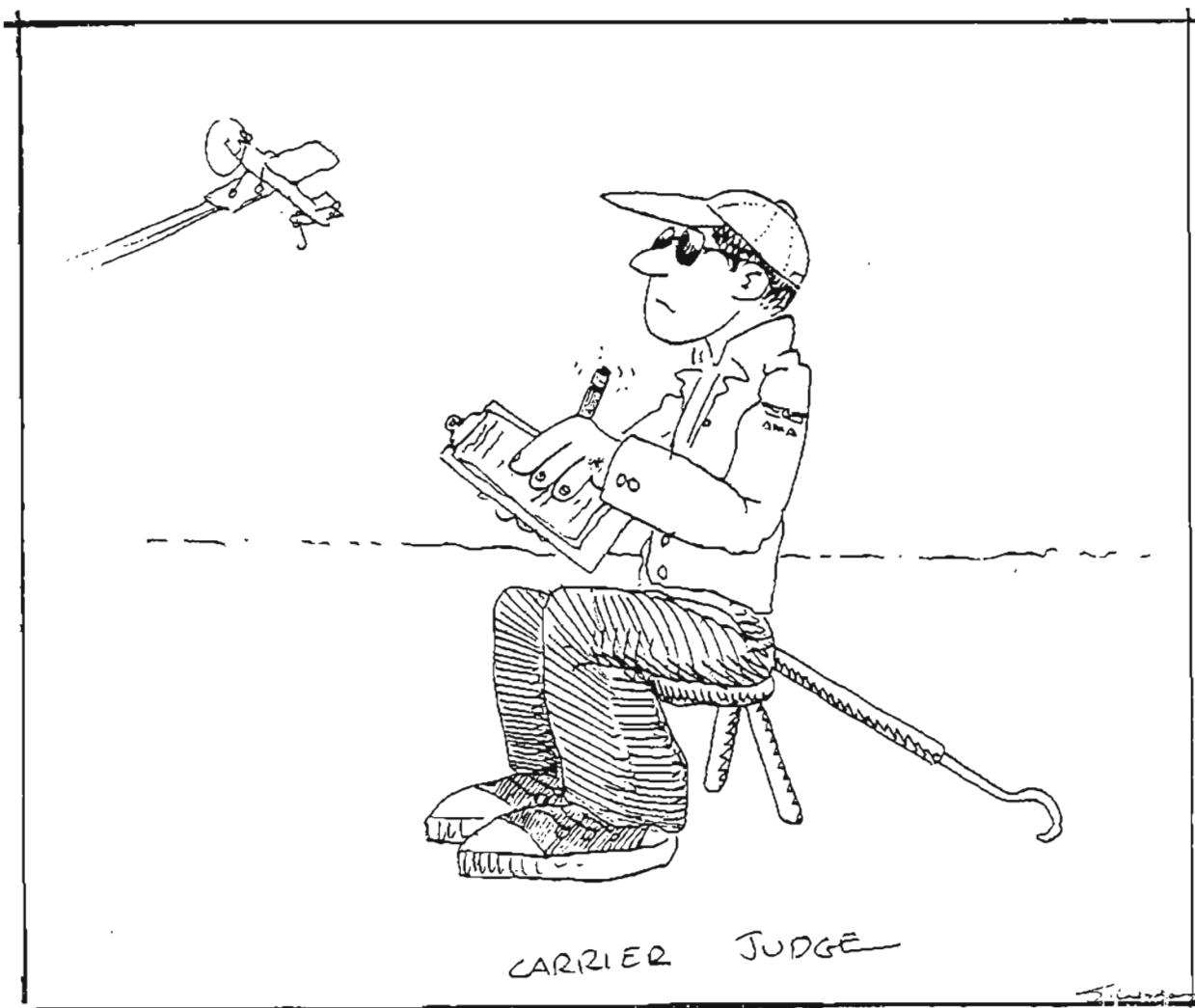
## CONTROL-LINE RETURNS TO MODEL BUILDER

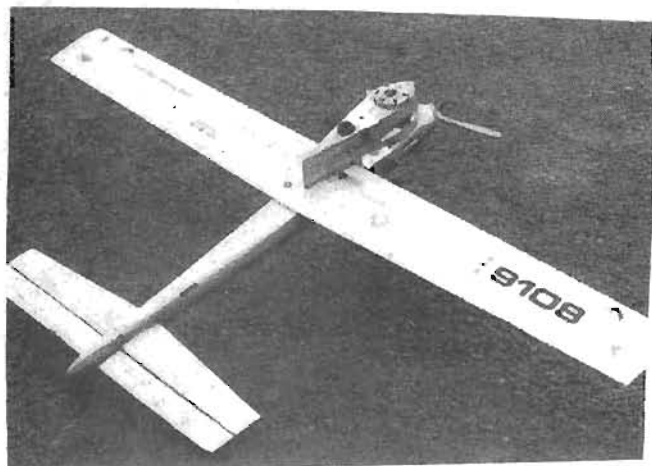
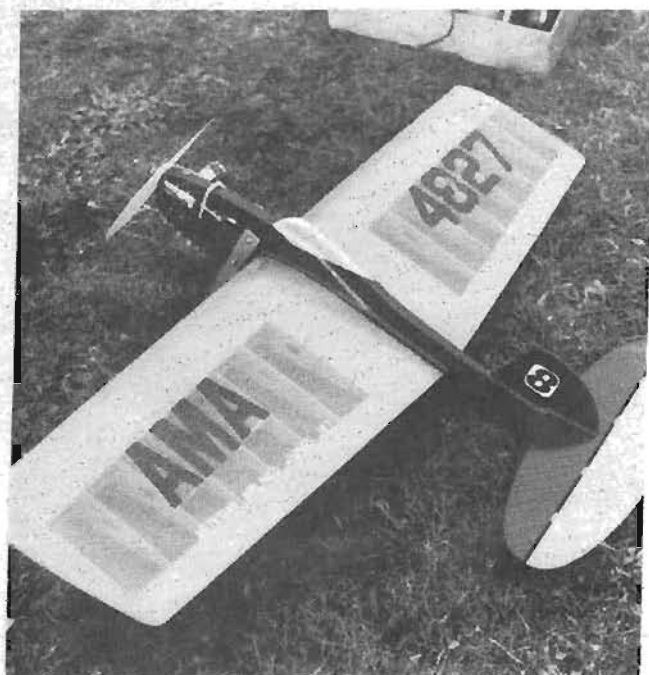
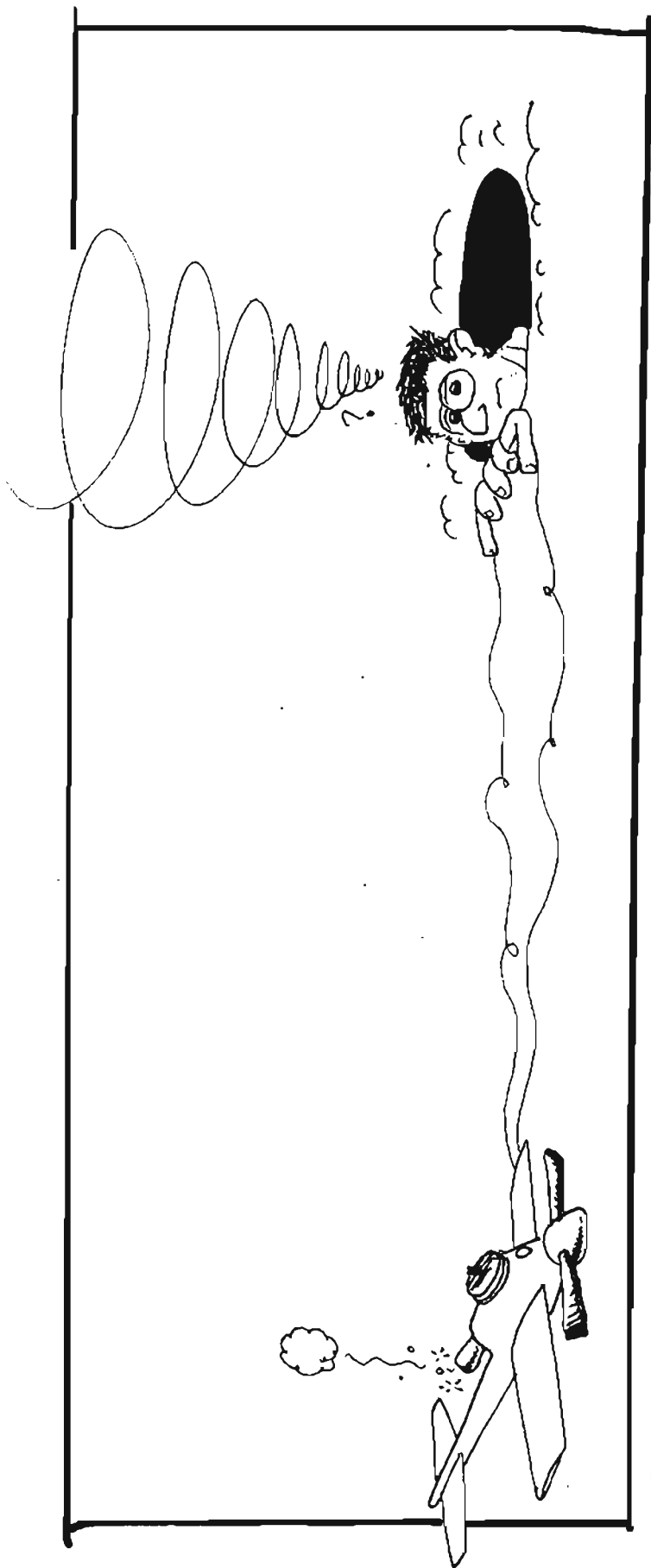
By Mike Hazel

Control-line is returning to the control-line column in Model Builder magazine. I am taking the authorship of that column on at least a temporary basis, and will see how it goes.

The first column will be in the July issue. Until then, there is not a control-line column. I would like to ask for everyone's support with this endeavor, not for my benefit but the benefit of continuing control-line coverage in a major magazine. The plan at Model Builder is to now have the CL column in only every other month, until sufficient interest warrants otherwise.

This is where your support comes in. Obviously you can't do anything with this yet, but be remembering it when that issue hits the stands. More on this later.





#### PICTURES AND SNICKERS

Being short of pictures this month (the photo processor is a little slow) gave us a chance to get in some more of Steve Lindstedt's control-line cartoon humor, this time dwelling on the speed fraternity. On the right, some scenes from the 1983 Northwest Sport Race Drizzle Circuit. At the top, Will Naemura with one of the hottest new Super Sport entries, a K&B-Powered copy of the Nashville Rats slow rat design. Center is Dick Peterson's Artesian Airlines Jumbo Jet. Bottom is very successful Yippie rat racer, Mike Hazel design, campaigned and built by Dave Green of Astoria, Ore. -- beautiful craftsmanship.

