

# FLYING LINES

1411 BRYANT AVENUE  
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## 1981 REGIONALS ISSUE

### '81 REGIONALS LIVE UP TO THEIR REPUTATION -- THE BEST IN THE WEST

Whew!

It's over for another year.

When it was finished, the sunburned and rain-dampened competitors retired from Mahlon Sweet Airport, site of the 1981 Northwest Regional Control Line Championships, to Gene Pape's House for the second annual Flying Lines Birthday Party and Regionals Unwinding party.

The conclusion was unanimous: It was one of the best Regionals in years, with the hottest competition, strong entry in all events, a huge crowd of interested spectators and a good time had by all.

A lot of things sort of fell together for this Regionals, adding some new aspects to the standard routine of competition.

Competition events included some new items that reflect the growth and changes in recent times: Super Sport Race was added to the schedule and  $\frac{1}{2}$ A combat and both mouse race classes became official events. Scale returned with a bang, with four entries in precision scale and seven in Orin Humphries' unofficial profile scale event.

In addition, R. F. Stevenson of Seattle, Wash., brought his vast engine collection display, and control-line inventor Obie St. Clair set up his control-line flying simulator for the spectators to experience. The hobby shop truck was well-stocked and well patronized, and the concession truck was stripped to bare metal by hungry fliers.

A University of Oregon student crew videotaped the whole contest for a program they are putting together, and they showed the unedited tape -- three hours worth -- at the FL party, which was attended by more than 50 persons.

The contest got radio, television and newspaper coverage, and programs on the stands disappeared quickly as hundreds of spectators lined the field.

Saturday's weather was warm, approaching 80 degrees, but muggy, and rain appeared for the Goodyear finals and the evening mouse races. Sunday started threatening, rained a little, and then dried out until -- per tradition -- drenching the trophy ceremony.

Trophies through third place were delivered in all events, and \$1300 worth of prizes were handed out. Best of all, everybody said they'd be back for next year. Start building, guys.

Entrants came from Oregon, Washington, California, British Columbia, Alberta, Montana and Utah. There were 53 in all, entering 165 separate times.

Here's a look at the competition:

### RACING

Awesome.

That's the only word to describe the 12-entry field of rat racers that broke the morning calm with heat after heat of blistering races. Sideline critics timed Vic Garner's beat at 156 mph, for example.

The Dark Ages Racing Team (DART) from Astoria, Ore., made their first rat racing appearance with two planes that looked good and went fast. It was clear sailing to second place for DART's Bill Varner, and partner Dave Green looked good until a shutoff malfunction knocked him out.

First place went to Bob Kerr of Richmond, Calif., finally motored to first place. Tim Gillott of Salinas, Calif., was third and Jeff Hollfelder of Castro Valley, Calif., (Gillott's C&H Racing Team partner) was fourth.

Slow Rat Race as usual was dominated by Californians. Lenard Ascher of Riverside, Calif., was downright impressive with his Super Fli Mk IV high aspect ratio wing airplane, motoring to first place, followed by Quick Vic Garner of Livermore, Calif. and Gary Crawford of San Ramon, Calif.

Bob Boling of El Cerrito, Calif., topped Scale Race (Goodyear), an event that didn't draw much from the Northwest this time. Gillott was second and Garner third.

None of the times in AMA racing events were spectacular, but things got faster in some of the more low-key events.

Dave Green brought the Super Sport Race record for feature races home to Astoria with a 7:57 time, nicking three seconds off the old record. Second and third place went to Californians Gary Buffen and Lenard Ascher. Super

## REGIONALS, continued

sport produced the only accident of concern throughout the contest, when Ascher's pilot Dave Braun of Riverside fell and bumped his head on the pavement, requiring a quick examination at a local hospital.

Dick Salter of Seattle, Wash., continued his domination of Northwest Sport Race with a first place finish. Gary Byerly of Spanaway, Wash., and Greg Beers of Vancouver, Wash., made it an all-Northwest sweep. Aaron Ascher topped the junior-senior NWSR.

Mouse race records for the Northwest got kicked away resoundingly. Boling and the M&M (Fred and Joyce Margarido) Team both broke the Class I record in their 1-2 finish and Edmonton, Alberta's Paul Gibeault (pronounced Zhee-bow) was third, leaving the DART's Dave Green as the Northwest's best in fourth place. Lenard Ascher turned a 9:02 in a very fast Class II mouse final, and the DART team's Varner and Green followed closely, making it three planes in the final below the Northwest record. Ascher used a mini-rat racer that looked like one of Gillott's Sharks that got washed in hot water. What a piece of master craftsmanship!

## COMBAT

Combat didn't enjoy fantastic growth that had been hoped, but it did draw the same numbers as last year. A move to double-elimination in fast, slow and FAI combat kept things going, and spectators loved the fast combat action.

The long-lost Shady Acres Combat Team from Spanaway, Wash., swept slow combat with a one-two-three finish by Byerly, Lowell Paddock and Rick Wicklander. Rory Tennison of Libby, Mont., captured the FAI combat tourney with foam Cartier-kit airplanes. Jarl Boles of Salt Lake City, Utah, took junior slow.

Some of the best matches of the weekend were in 1/2A, and Charlie Johnson came all the way from San Diego, Calif., came all the way to Eugene to win it. He used Gene Pape's own "Cheap Imitation" design -- and Gene's own plane.

It was an all-Eugene final in AMA combat, and will "aemura used a Phil Grandersen-style foamie to beat Pape and his Devastator in the final match. Gene had engine flameouts all day, but managed to win all the way to the final with 10-second kills once he got up. Norm McFadden, perennial challenger and past Regionals winner, was third.

### EUGENE'S TOY AND HOBBY

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## REGIONALS, continued

### CARRIER

Loren Howard of Vancouver, Wash., was the man of the hour in Navy Carrier, setting a Northwest record in winning Class I-II carrier with his Class II ship. He also took profile carrier with a near-record flight. Orin Humphries of Spokane, Wash., and Wayne Spears of Portland, Ore., were second and third in Class I-II carrier. Dick Salter was second in profile and Stan Johnson of Spokane was third.

Carrier enjoyed a strong entry, with six in scale carrier and eight in profile.

Carrier was flown off the domed circle previously used for stunt, and a large pit area was available. One flier remarked during the contest, it sure was good to see that big lineup of planes after some lean years.

### AEROBATICS

Rick Railston of Yakima, Wash., flew that big, beautiful and smooth Vector to first place in advanced-expert precision aerobatics, edging out "Ridiculous" Rich Porter of Salem, Ore., and Jim Rhoades of Salt Lake City, Utah.

Dick McConnell of Seattle, Wash., who did well in combat events as well, topped the beginner-intermediate stunt field, besting fellow Jet City flier Dave Mullens and Terry Miller of Roseburg, Ore.

Stunt fliers expressed satisfaction at the new circle arrangement, which placed stunt on a flat grass circle that had been mowed low and didn't cause any takeoff problems. Looks like that arrangement might be permanent.

### SPEED

Event Director Fred Margarido did a super job handling one of the biggest speed fields in years, and the speed circle was never quiet.

Fred and Joyce's M&M Team, from Fremont, Calif., topped  $\frac{1}{2}$ A speed at 96.74 mph. The M&Ms also turned a winning 166.91 A speed time. Frank Hunt of Merced, California, topped a D-Jet field of seven -- count 'em, seven -- entries with a D speed flight of 191.41 mph. M&M was second at 159.09 and Rhoades followed with a jet flight of 157.83.

Seattle's Scott Newkirk won Formula 40 at 147.85, followed by Gibeault at 128.7 and Dave Braun of Riverside, Calif., at 128.25. FAI speed had entries but no flights. Formula 21 speed drew no entries.

### SCALE

If there was a bright light at the Regionals, it had to be the rebirth of scale after some years in the grave. Orin Humphries topped the field with a beautiful T34C Mentor, followed by Cory Tennison, Dick Salter and Max Thue.

Aaron Ascher of Riverside flew a pretty Skyvan to first place in profile scale, one of two twin-engine jobs. The other was Dave Braun's Whirlwind, second place. Max Thue's P-51 was third. Emphasis in profile was on having fun, and prizes went to fifth place, thank's to Humphries' sponsorship.

All in all, the Regionals were a very positive event in Northwest CL affairs. Scheduling worked well, a side from an overlong racing day that ended at 8 p.m. Some thinking already has been done about rearranging the schedule to prevent that situation again (right now the concept is to move sport race and super sport race to the stunt circle as Sunday events and hold stunt on Saturday. This would avoid racing conflicts and still shorten the race day.)

If you missed the 1981 Regionals, start making planes for 1982.

Here is a complete results summary, starting with details of the first place winners' planes and followed by results through fifth place where applicable:

### RAT RACE (12 entries)

1. Bob Kerr, Richmond, Calif. -- 5:27. Hooptee Mk. III, John Kilsdonk design, 30" span, 34 oz., fiberglass-magnesium-basswood, K&B 40S, Garner rat prop, Garner engine rework, K&B short plug, Sheldon's 40% nitro fuel, crankcase pressure, modified venturi, fastfill, shutoff, Don's custom tank.
2. Bill Varner, Astoria, Ore. -- 5:53.
3. Tim Gillott, Salinas, Calif. -- 6:44.
4. Jeff Hollfelder, Castro Valley, Calif. -- 111 laps.
5. Paul Gibeault, Edmonton, Alberta -- 6:48 (combined heats).

### SLOW RAT RACE (8 entries)

1. Lenard Ascher, Riverside, Calif. -- 5:57. Super Fli Mk IV, Braun-Ascher design, 52" span, 28 oz., balsa-spruce-bass-maple, Varithane finish, garner slow rat prop, outboard wing filled with foam in the leading edge sheeting, built to withstand high speed wing catches. Tune-Hill OS .36, Ascher rework, Garner slow rat prop, swing thing carburetor, GloBee R24L plug, nitro/methanol/Ucon home brew 60% nitro fuel, exhaust primer, Ascher  $4\frac{1}{2}$ -oz. inboard uniflow suction tank, fastfill, shutoff, hot glove.
2. Vic Garner, Livermore, Calif. -- 6:05.

REGIONALS, continued

3. Gary Crawford, San Ramon, Calif. -- 6:25
4. Dave Braun, Riverside, Calif. -- No time.
5. Aaron Ascher, Riverside, Calif. -- 7:10 (combined heats).

SCALE RACE (GOODYEAR) (7 entries)

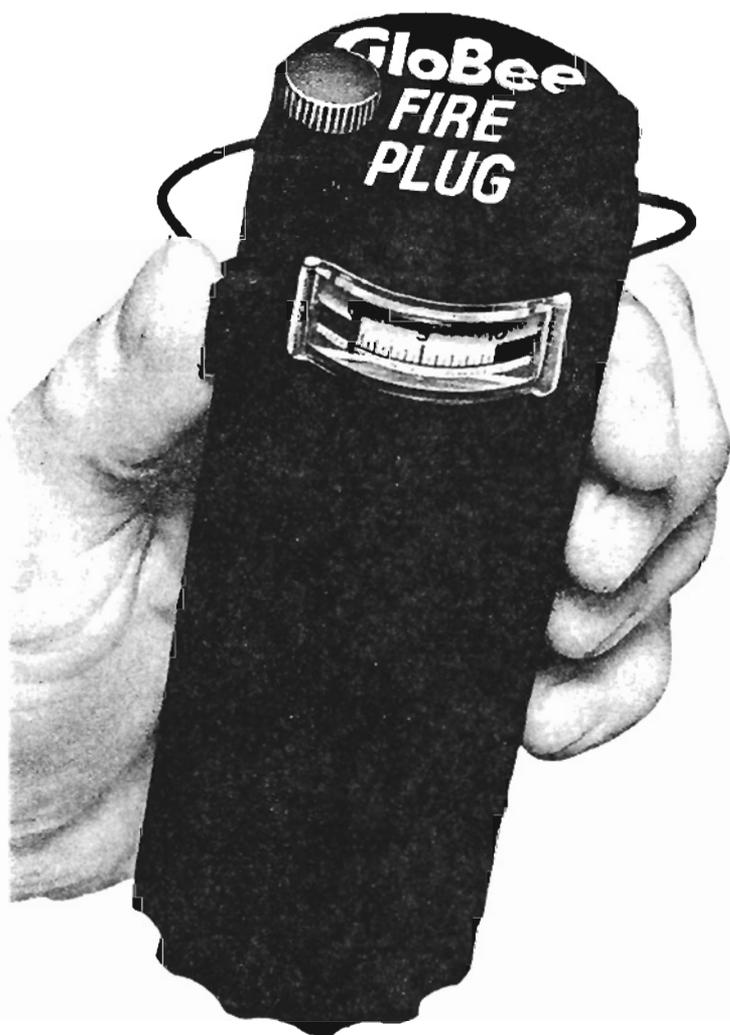
1. Bob Boling, El Cerrito, Calif. -- 8:38. Rivets, Boling design, 24" span, 18 oz., balsa-plywood, polyurethane-dope finish, Master Airscrew 7x5 prop, Cox Conquest .15 reworked by Boling, K&B short plug, Sheldon's 50% nitro fuel, crankcase pressure, fastfill, shutoff, hot glove, Boling 2.5-oz outboard tank.
2. Tim Gillott, Salinas, Calif. -- 8:58.
3. Vic Garner, Livermore, Calif. -- 9:41.
4. Jeff Hollfelder, Castro Valley, Calif. -- 64 laps.
5. Dave Green, Astoria, Ore. -- 5:38 heat.

NORTHWEST SPORT RACE -- JR-SR (3 entries).

1. Aaron Ascher, Riverside, Calif. -- 10:34. Buster, Sig kit, 26 oz., Monokote finish, Rev-Up 9x7 prop, Fox .35, Hobby Shack plug, 15% nitro fuel, outboard suction tank.
2. Jarl Boles, Salt Lake City, Utah -- 11:07.
3. Niels Madsen, Astoria, Ore. -- DNF.

NORTHWEST SPORT RACE -- OPEN (11 entries)

1. Dick Salter, Seattle, Wash. -- 9:06. Ringmaster, Fox .35, other details unavailable at press time.
2. Gary Byerly, Spanaway, Wash. -- 9:43.
3. Greg Beers, Vancouver, Wash. -- 9:52.
4. Lenard Ascher, Riverside, Calif. -- 13:50.
5. Dick McConnell, Seattle, Wash. -- 5:48 heat.



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REGIONALS, continued

NORTHWEST SUPER SPORT RACE (12 entries)

1. Dave Green, Astoria, Ore. -- 7:57. K&B .35, Cro-Magnon Super Sport (Hazel design, modified by Green) Other details unavailable at press time.
2. Gary Buffon, El Cerrito, Calif. -- 9:28.
3. Lenard Ascher, Riverside, Calif. -- 108 laps.
4. Dave Braun, Riverside, Calif. -- 4:42 heat.
5. Charlie Johnson, San Diego, Calif. -- 4:49 heat.

MOUSE RACE CLASS I (11 entries)

1. Bob Boling, El Cerrito, Calif. -- 5:22. Ignatz I, Boling design, 18" span, 6 oz., balsa-bass, Hobby Poxy finish, Cox 4½x4 prop, Cox Black Widow engine (.049), Boling rework, TD plug, Sheldon's 25% nitro fuel, venturi opened to No. 43, Cox uniflow fastfill suction tank, hot glove.
2. M&M Team (Fred & Joyce Margarido), Fremont, Calif. -- 5:47.
3. Paul Gibeault, Edmonton, Alberta -- 6:04.
4. Dave Green, Astoria, Ore. -- 7:09.
5. Dave Braun, Riverside, Calif. -- 7:20.

MOUSE RACE CLASS II (8 entries)

1. Lenard Ascher, Riverside, Calif. -- 9:02. Rat-L-Air (Ascher-Braun design), 24" span, 7½ oz, bass, balsa, cox pan, Varithane finish, Tornado 5x4 prop, plane built with inverted engine, similar to Shark rat racer, TD .049, Ascher-Klaue rework, TD plug, 40% nitro home brew, cylinder thinned for cooling in cowled plane, KK needle valve, ascher 1-oz suction uniflow tank, fastfill, shutoff, hot glove, exhaust primer.
2. Bill Varner, Astoria, Ore. -- 9:21.
3. Dave Green, Astoria, Ore. -- 9:31.
4. Aaron Ascher, Riverside, Calif. -- 10:31.
5. Paul Gibeault, Edmonton, Alberta -- 132 laps.

AMA COMBAT (9 entries)

1. Will Naemura, Eugene, Ore. -- Devastator, Gene Pape design, 48" span, foam, Fascal, Fox .36 Combat Special, Top Flite 8½6½ pylon racing prop, McFadden pressure regulator, K&B plug, Magnum 10% nitro fuel, bladder tank.
2. Gene Pape, Eugene, Ore.
3. Norm McFadden, Lynnwood, Wash.
4. Dick McConnell, Seattle, Wash.

1/8A COMBAT (11 entries)

1. Charlie Johnson, San Diego, Calif. -- Cox T.D. .049, Cheap Imitation (Pape-Thompson design), 26" span, 5½ oz, balsa-bass-ply, Fascal, Tornado 5x4 prop, Cox plug, home brew 60% nitro fuel, bladder tank.
2. Gene Pape, Eugene, Ore.
3. Ken Burdick, Seattle, Wash.
4. Gary Byerly, Spanaway, Wash.

SLOW COMBAT (Jr.) (1 entry)

1. Jarl Boles, Salt Lake City, Utah -- Fox Combat Special, (Mark Fechner design) Goldtone Shearwater Cox prop, K&B plug, McKie's 10% nitro fuel, lead

REGIONALS, continued

2. Dick Salter, Seattle, Wash. -- 198.3.
3. Stan Johnson, Spokane, Wash. -- 189.9.
4. Wayne Spears, Portland, Ore. -- 185.9.

PRECISION AEROBATICS (Advanced-Expert (5 entries))

1. Rick Railston, Yakima, Wash. -- 496. Vector, Railston design, 57" span, 55 oz., balsa-tissue-Aerogloss, Rev-up 12-5W, adjustable everything, no cowl, camouflage. OS 4CFSR, Fox 1L plug, Tolford 10% nitro fuel, muffler pressure, Mustain 6-oz uniflow tank.
2. Rich Porter, Salem, Ore. -- 470.
3. Jim Rhoades, Salt Lake City, Utah -- 458.
4. Don McClave, Portland, Ore. -- 450.
5. Max Thue, Seattle, Wash. -- 312.

PRECISION AEROBATICS (Beginner-Intermediate) (4 entries)

1. Dick McConnell, Seattle, Wash. -- 299. Sterling Mustang, 38" span, balsa-silkspan-dope, 9x6 Tornado prop. Fox .35 stunt, Fireball regular plug, Sheldon's 5% nitro fuel, Perfect 4-oz. outboard suction tank.
2. Dave Mullens, Seattle, Wash. -- 274.
3. Terry Miller, Roseburg, Ore. -- 219.
4. Rory Tennison, Libby, Mont. -- 216.

1/2 A SPEED (3 entries)

1. M&M Team (Fred & Joyce Margarido), Fremont, Calif. -- 96.74 mph. Original design plane, 12" span, 5 oz., basswood-balsa, K&B epoxy finish, Margarido 1-blade prop. TD .049, Margarido reworked, reworked Cox #1702 plug, home brew 60% nitro fuel. Margarido 1/3-oz. suction uniflow tank.
2. Jim Rhoades, Salt Lake City, Utah, 86.75 mph.
3. Frank Hunt III, Merced, Calif., no attempt.

A SPEED (7 entries)

1. M&M Team, Fremont, Calif. -- 166.91 mph. Original design plane using Newton top, 22" span, 16 oz., Fiberblase -bass-aluminum, K&B epoxy finish, Rev-Up 6x7 prop, asymmetrical wing. Rossi .15, Margarido reworked, K&B standard plug, Margarido 1-oz suction uniflow tank.
2. Frank Hunt, Merced, Calif. -- 159.23 mph.
3. Dave Braun, Riverside, Calif. -- 83.61 mph.

FAI SPEED (3 entries)

1. Scott Newkirk, Seattle, Wash. -- attempt.

FORMULA 21 SPEED (0 entries)

B SPEED (4 entries)

1. Frank Hunt, Merced, Calif. -- 143.65. Original design plane, 30" span, 28 oz., bass-aluminum, K&B epoxy finish, Rev-Up prop. Supertigre X29, Hunt reworked, pressure regulator, .350 carb, McCoy plug, home brew 70% nitro fuel, bladder tank.
2. Greg Beers, Vancouver, Wash. -- attempt.

## REGIONALS, continued

### D-JET SPEED (7 entries)

1. Frank Hunt, Merced, Calif. -- 191.41 mph. Original design plane using Nightingale glass top, 28" span, 32 oz., bass-epoxy glass, K&B epoxy finish, Rev-Up prop. OS .65VF, Hunt reworked, pressure regulator, 1/2" carb, McCoy plug, home brew 70% nitro fuel, bladder tank. (D).
2. M&M Team, Fremont, Calif. -- 159.09 mph (D).
3. Jim Rhoades, Salt Lake City, Utah. -- 157.83 (jet).
4. Chris Sackett, Burnaby, B.C. -- 137.24 (jet).
5. Dave Braun, Riverside, Calif. -- Attempt (jet).

### FORMULA 40 speed (5 entries)

1. Scott Newkirk, Seattle, Wash. -- Hazel design plane, 24" span, 24 oz., magnesium-balsa-bass, glass finish, K&B 6.5 front rotor engine, Newkirk rework, Newkirk glass 8x7 1/2 prop, K&B plug, Sheldon's 40% nitro fuel, crankcase pressure, re-contoured venturi, Newkirk 65 cc uniflow tank, remote needle valve.
2. Paul Gibeault, Edmonton, Alberta -- 128.7 mph.
3. Dave Braun, Riverside, Calif. -- 128.25 mph.
4. Dick McConnell, Seattle, Wash. -- 89.07 mph.
5. Loren Howard, Vancouver, Wash. -- no attempt.

### AMA SCALE (4 entries)

1. Orin Humphries, Spokane, Wash. -- T-34C Mentor, scratch built, 48" span, 92 oz., goam-epoxy-glass, K&B finish, 10-6W prop, flaps, rivets. K&B .40, K&B 500 fuel, Perfect 3.3/4-oz tank.
2. Rory Tennison, Libby, Mont. -- Piper J-3 Cub.
3. Dick Salter, Seattle, Wash. -- SE5.
4. Max Thue, Edmonds, Wash. -- Bucker Jungmeister.

### PROFILE SCALE (7 entries)

1. Aaron Ascher, Riverside, Calif. -- Short Skyvan, Ascher design, Formula U finish, twin Cox .049 engines, Tornado 6x6 props, 40% nitro home brew fuel, spring starters, Cox tank extenders.
2. Dave Braun, Riverside, Calif. -- Whirlwind.
3. Max Thue, Edmonds, Wash. -- P-51.
4. Dan Cronyn, Seattle, Wash. -- AD-1.
5. Terry Miller, Roseburg, Ore. -- Navion.

Organization of a regional championships of this magnitude could not be done without a true region-wide commitment. The 1981 Regionals drew upon the work of modelers from all over the northwest, both in leadership and support roles.

Though we couldn't possibly name all those who helped out, here are a few: Dave Green, Astoria, Ore., registration and racing. Gene Pape, Eugene, Ore., technical advisor and racing. Dave Childs, Creswell, Ore., and family, combat. Orin Humphries, Spokane, Wash., carrier and profile scale. Rich Schaper, Kelso, Wash., aerobatics. Fred and Joyce Margarido, Fremont, Calif., speed. Jeff Shelby, field work and signs, Eugene, Ore. Will Naemura, Gene Pape, Tom Kopriva, Mel Marcum, Mike Shelby, Bruce Guenzler and others, field work. DeeDee, Lori and other CLAMS, registration. Tom Kopriva, pull testing. Earle Morehead and Obie St. Clair, scale. R.F. Stevenson, engine display. Paul Agerter, hobby shop. Chuck Owens, concessions. Bob Shelby, airport assistance. Mike Hazel, flyers, scoreboards and trophies.

The Regionals also was supported by 34 hobby businesses who donated prizes and deserve our thanks.

### FOUND:

Several miscellaneous items were found on the field after the Regionals. They can be claimed by contacting Flying Lines: A baby stroller. A monoline speed handle. A bunch of 1/2 A parts in a Fox .35 box. LOST: Paul Wallace of Cottage Grove, Ore., lent his 12-volt starter battery to the Edmonton, Alberta, speed fliers. He would like to know how he can get it back. Contact FL.

### HERE'S WHO TO THANK...

The Northwest Regional Control Line Championships is known as a class contest -- in part because of the fine array of prizes awarded to winners. The following firms donated prizes to the 1981 Regionals. If you won one of their prizes, please write them a note to say thanks.

MIDWEST MODEL SUPPLY CO., P.O. Box 518-R, Romeoville, Ill. 60441 -- half price on HP engine.

WINDSOR PROPELLOR CO., P.O. Box 112, Windsor, Ca. 95492 -- half price props.

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THANKS, continued

SEMCO MODEL ENGINEERING CO., 24 Calvin Road, Watertown, MA 02172 -- gift certificates.  
REPLA-TECH INTERNATIONAL, 48500 McKenzie Highway, Vida, OR 97488 -- scale drawings.  
TOWER HOBBIES, P.O. Box 778, Champaign, Ill., 61820 -- catalogs and gift certificates.  
MODEL BUILDER, 621 W. 19th St., Costa Mesa, Calif. 92627 -- subscription and hobby knife.  
SIG MANUFACTURING CO., Rt. 1 Box 1, Montezuma, Iowa, 50171 -- caps and jackets.  
TOP FLITE MODELS, INC., 1901 N. Narragansett Ave., Chicago, IL, 60639 -- props and Monokote.  
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COX HOBBIES, 4400 W. 78th St., Minneapolis, Minn, 55435 -- two engines.  
COVERITE, 420 Babylon Road, Horsham, PA, 19044 -- discount certificates.  
DREMEL, P.O. Box 954, Racine, Wisc., 53405 -- discount certificate.  
HOBBY LOBBY, Rt. 3, Franklin Park Circle, Brentwood, TN, 37027 -- SuperKote.  
AMBROID, 600 W. Water St., Taunton, MA 02780 -- adhesives.  
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CARL GOLDBERG MODELS, INC., 4736 W. Chicago Ave., Chicago, Ill, 60651 -- kit.  
CAROLINA-TAFFINDER PRODUCTS, 8345 Delhi Road, Charleston, S.C. 29405 -- tanks.  
HOBBY HANGAR, 1216 S. Jackson, Albany, Ore., 97321 -- engine.  
COMPETITION CORNER, 101 Forest Drive, Advance, N.C., 27006 -- engine.  
EUGENE'S TOY & HOBBY, 32 E. 11th Ave., Eugene, Ore. 97401 -- kits and engine.

Save this list of Regionals donors, and use it when you go shopping for model products. These are Northwest control-line model aviation supporters!

YO-HO-HO AND A GALLON OF FUEL

Those happy looking fellows walking away from the football field in Astoria recently with jugs of Sheldon's fuel under their arms were the first place winners in the fourth annual CLAMbash, one of the Northwest's consistently enjoyable contests, held June 7.

The CLAMS put on their usual generous pre-contest party with snacks and sprints, which in itself makes the trip to the Oregon coast worth while. All of us talked too much about how it has never rained on an Astoria contest (there had been 6 before, winter and summer) and we managed to bring on a Sunday morning drizzle.

It wasn't enough to dampen the spirits of the competitors, though and the contest went off well. Clams members finished up the day with fine prizes and outstanding hand-made trophies, and sent all home with a good feeling.

The contest featured excellent combat, good racing and hilarious CLAM scale, along with precision aerobatics.

The morning calm was broken by a 12-entry field of 1/2A combat, and the competition was furious. No question about it, 1/2A combat is getting to be a consistently hard-fought, popular and interesting event.

The winner was Bill Varner of Astoria, scoring a kill (one of many that day) over Eugene's Will Naemura.

Gene Pape of Eugene won AMA combat, beating Varner in one of several excellent matches. There were eight entries, all strong competitors.

Max Thue of Edmonds, Wash. took home the gold in beginner-intermediate stunt, and smooth, cool Paul Walker flew his way through to the top spot in advanced-expert precision aerobatics using a beautiful new original plane.

Dick Salter continued his reign in sport race, winning over a seven-entry field. Mike Hazel took first in super sport race, with six entries.

CLAM scale, the informal Astoria version of laid-back fun competition, was won by Max Thue's P-51.

Another highlight of the tradition-rich contest was the awarding of the annual "crowd-pleaser" trophy to Norm McFadden for his AMA combat snip's outstanding crash. Norm crashed once, repaired the plane and sent it aloft for another quarter-lap, at which point it hit the ground with a spectacular spray of balsa chips.

Dave Green, CLAMS president and contest director, along with a host of the other friendly and hospital CLAMS, deserve thanks for another fine contest!

Here are the complete results:

CIA MBASH, continued

AAA COMBAT (12 entries)

1. Bill Varner, Astoria, Ore. -- Airplane details unavailable at press time.
2. Will Naemura, Eugene, Ore. -- Dirty Beaver (Rutherford design), 25" span, balsa-Monokote, TD .049, Top Flite 5x3 prop, high-compression Cox head, Pape 50% nitro fuel, bladder tank.
3. Bruce Guenzler, Cottage Grove, Ore. -- Cheap Imitation, (Pape-Thompson design), 24" span, 4 1/2-oz, balsa-Pascal, TD .049, Top Flite 5x4 prop, Hazel 40% nitro fuel, Cox plug, bladder tank.
4. Ken Burdick, Seattle, Wash. -- Airplane details unavailable at press time.

AAA COMBAT (8 entries)

1. Gene Pape, Eugene, Ore. -- Devastator, (Pape design), 48" span, foam-Kwikcote, Fox .36 Combat Special, Top Flite 8 1/2 x 6 1/2 pylon racing prop (cut to 8 1/2"), bladder tank, other details unavailable at press time.
2. Bill Varner, Astoria, Ore. -- Airplane details unavailable at press time.
3. Ken Burdick, Seattle, Wash. -- STP (Pape design), 40" span, 21 oz., balsa-Pascal, Fox Combat Special .36, Top Flite 8 1/2 x 6 1/2 pylon racing prop, K&B plug, Burdick engine rework, 40% nitro fuel, bladder tank.
4. Norm McFadden, Lynnwood, Wash. -- Airplane details unavailable at press time.

PRECISION AEROBATICS (Beginner-Intermediate) (3 entries)

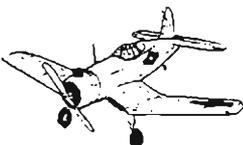
1. Max Thue, Edmonds, Wash. -- 363% Gieseke Mobler (Top Flite kit), 51" span, 45 oz, balsa, Monokote, adjustable leadouts, offset and tail weight, Enya .35BB III engine, 10x6 Master Airscrew prop, Fox 2V idle bar plug, Sheldon's 12 1/2% nitro fuel (castor and synthetic oils), muffler pressure, Fox 4-oz. tank.
2. Dave Mullens, Seattle, Wash. -- 325% Sig Banshee, Monokote-Imron finish, CS Max .35, 10x6 Top Flite wood prop, K&B RC plug, Sheldon's 12 1/2% nitro fuel, muffler pressure, Fox 4-oz tank.
3. Andrew McClave, Portland, Ore. -- 60 Sterling Ringmaster, 42" span, 32 oz., balsa-Monokote-Aerogloss, Fox .35 stunt, 10x6 Zinger prop, Fox RC plug, K&B 5% nitro fuel, suction Fox 4-oz tank.

PRECISION AEROBATICS (Advanced-Expert) (3 entries)

1. Paul Walker, Kent, Wash. -- 517 Frustration's End, (Walker design), 61" span, 60 oz., balsa-foam-glass, Sig clear dope and Ditzler acrylic laquer paint, OS .40FSR, Walker rework, 12x6 Zinger prop, Thunderbolt RC long plug, Toleford 10% nitro-22 1/2% castor fuel, pantyhose air filter, muffler pressure, uniflow Walker 8-oz tank.
2. Rich Porter, Salem, Ore. -- 498 Ridiculous (Porter design), 48" span, 17 3/4 oz., balsa-Monokote, TD .049, Porter rework, Cox gray 5x3 prop, opened venturi, 25% nitro Missile Mist fuel, 4oz bladder tank, shutoff, Kustom Kraftsmanship needle valve assembly.

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### CLAMBASH, continued

3. Don McClave, Portland, Ore. -- 4:07. Jetstream (McClave design), 59" span, 60 oz., balsa-Aerogloss, OS .40FSR, 12-6 Zinger prop cut to 11", K&B RC plug, K&B 5% nitro fuel, air filter, muffler pressure, Robert 5 3/4-oz uniflow tank.

\* Approximate scores...some were lost in post-contest shuffle and provided from the CD's memory.

### NORTHWEST SPORT RACE (7 entries)

1. Dick Salter, Seattle, Wash. -- 9:05. Sterling Ringmaster, Fox .35, other details unavailable at press time.
2. John Thompson, Cottage Grove, Ore. -- 10:44. Sterling Ringmaster, Fox .35, 42" span, 25 oz., balsa-Monokote-epoxy paint, 9x7 Zinger, Glo-Devil plug, Sheldon's 15% nitro fuel, Fox 2-Oz. tank.
3. Mike Hazel, Salem, Ore. -- 13:43 Sterling Ringmaster, Fox .35, Monokote-Superpoxy finish, 9x6 Master airscrew prop, Fox standard long plug, K&B 100 fuel (5% nitro), Hazel uniflow 2.4-oz tank.
4. Dave Mullens, Seattle, Wash. -- 89laps airplane details unavailable at press time.

### SUPER SPORT RACE (6 entries)

1. Mike Hazel, Salem, Ore. -- 8:08. Cro-Magnon Super Sport (Hazel design), 36" span, 28 oz, balsa-ply-Monokote-Superpoxy, K&B .35, Garner glass slow rat prop, Glo-Bee 1-L plug, Hazel 40% nitro fuel, bored venturi insert, fastfill, shutoff, Fox 3.5-oz suction tank.
2. John Thompson, Cottage Grove, Ore. -- 9:26. Sterling Ringmaster, 42" span, 32 oz. (and getting heavier), balsa-Monokote-epoxy soaked in fuel, K&B .35, Garner glass slow rat prop, Glo-Devil plug, Fox 3 1/2-oz profile tank.
3. Dick McConnell, Seattle, Wash. -- 69 lp. K&P Cardinal, 34" span, balsa-dope-silkspan, Fox .35 stunt, Tornado 8x8 prop, Fox standard plug, Sheldon's 10% nitro fuel, Perfect uniflow 2-oz tank.
4. Dick Salter, Seattle, Wash. -- . Airplane details unavailable at press time.

### CLAM SCALE (3 entries)

1. Max Thue, Edmonds, Wash. -- Midwest P-51D Mustang, 48" span, 43 oz., balsa-ply-dope-Monokote, K&B .35, 10x6 Zinger prop, Fox 1.5-volt plug, Sheldon's 12 1/2% nitro fuel, Fox 4-oz suction tank.
2. Dick Salter, Seattle, Wash. -- SE5 biplane, McCoy .35 redhead. Other details unavailable at press time.
3. Mike Hazel, Salem, Ore. -- Cro-Magnon Air Force 1, (Hazel fantasy), 36 1/2" span, 1/2-ton, balsa-dope, Enya .35nC, Top Flite 9x6 prop, K&B plug, K&B 100 fuel, Du-Bro muffler, throttle, Perfect 3.5-oz suction tank.

### SPEED & RACING CONTEST REPORT, KENT, WASH., May 3.

By Scott Newkirk, contest director

We had a very interesting meet in blustery weather. Two entries in rat, four in sport race and 5 in super sport.

The morning started off with a frantic rush to the field as I heard that the autocross guys were setting up a race over our circles. When I got there that was exactly what had happened. So I got to go have a chat with them.

Fortunately, they were understanding. The Boeing recreation group had double-scheduled the field. The autocross guys were very understanding and changed the course they already had set up to allow us the use of two circles. No fuss, even.

Rat started at 10 a.m. with Richard McConnell and Scott Newkirk. Scott had his plane come in on the lines after his pit at 31 laps and demolished his plane. Dick passed my 31 laps in about 9 1/2 minutes and finished in a new lowest record? of 21:37.

Sport race followed. We ran it differently than normal of two heat races back to back with three minutes between for each contestant. The fastest heats decided the winners. Dick Salter was fastest with a 5:02, followed by Dave Mullens with a 5:16. The spread from first to last was 35 seconds (4 entries).

Super sport was run in the same manner. Dave Mullens took first with a 4:35 followed by Salter with a 5:05.

All in all, though we had a small turnout, I think we had a fun little contest. Due to the weather no speed was flown.

Complete results:

### RAT RACE (2 entries)

1. Dick McConnell, Seattle, Wash. -- 21:37.
2. Scott Newkirk, Seattle, Wash. -- 31 laps (1:32 at that time).

SPEED AND RACING, continued

NORTHWEST SPORT RACE (4 entries)

1. Dick Salter, Seattle, Wash. -- 5:03	5:02
2. Dave Mullens, Seattle, Wash. -- 5:16	5:36
3. Ralph Pastor, Seattle, Wash. -- 6:03	5:25
4. Dick McConnell, Seattle, Wash. -- 6:02	5:37

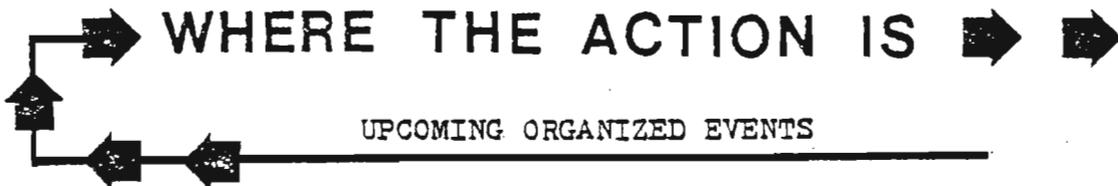
SUPER SPORT RACE (5 entries)

1. Dave Mullens, Seattle, Wash. -- 5:25	4:35
2. Dick Salter, Seattle, Wash. -- 5:05	5:18
3. Ralph Pastor, Seattle, Wash. -- 5:09	6:38
4. Gary Byerly, Spanaway, Wash. -- 10:09	7:41
5. Dick McConnell, Seattle, Wash. -- 9:43	DNF

PLANE DATA

RAT: McConnell -- King Rat, K&B .29F Series 64, Top Flite 9x7.  
SPORT: Salter -- Ringmaster, Fox .35, Top Flite 9x7 wood, TKO tank.  
SUPER SPORT: Mullens -- Bobcat, 9x7 Zinger, K&B .35.

Sorry, in my rush to get out of the house when I heard about the field I forgot the FL information forms (and a lot of other stuff, too.)  
--Scott Newkirk.



Listed below are the modeling events known to be upcoming in the Northwest at FL's press time.

If you know of a contest or informal event not listed here, remind the contest director to send details to FL for inclusion in the next edition. Give us the outline now so people can start planning, even if the contest is months away. FL will publish flyers free of charge and report results.

All events listed are AMA-sanctioned unless otherwise noted.

- July 4.....KENT, Wash. -- Bladder Grabber VI, triple-elimination AMA combat contest. \$3,800 worth of prizes in stereo equipment. Prizes through fourth place. Entry fee, \$4. Breakfast for all competitors, free, 9 a.m. July 4. Flying starts at 11. For information contact Hoard Rush, (206) 823-6018, or 251-2701.
- July 11 & 12..KENT, Wash. -- Boeing Management Association Scholarship Contest. Scholarship events: Scale race (Goodyear), precision aerobatics, profile Navy carrier, slow combat, 1/4 profile proto speed. Open events: Precision aerobatics (beg, int, adv-exp), profile Navy carrier, NWSR, AMA and FAI combat. Also indoor and outdoor FF events, RC glider, rocketry events. Boeing Aerospace Center, Kent, Wash. Entry fees: \$1 per event, \$5 max for scholarship events (under 19), open \$2 per event, \$8 max. Contact Ted Caputo, BMA, P.O. Box 3707, Seattle, WA 98124.
- August 23.....EUGENE, Ore. -- Eugene Propspinners Annual Summer meet. Northwest Sport Race, AMA combat, rat race, 1/4A combat, profile carrier. Contest director: Gene Pape, 4528 Souza St., Eugene, Ore., 97402. (503) 689-1623. Trophies and merchandise prizes. Site: Mahlon Sweet Airport.
- Sept. 5-6.....SPANAWAY, Wash. -- Shady Acres Combat Bash. Combat and Northwest Sport Race in old-fashioned good-time contest. Details to come! For information contact Gary Byerly, 20810 46th Ave. E, Spanaway, Wash. (206) 847-6589.
- Sept. 12-13...KENT, Wash. -- Raider Round-Up, sponsored by Seattle Skyraiders. Saturday: Goodyear, FAI team race, Northwest Sport Race, Super Sport Race, Class I mouse, Class II mouse, Class I mouse (Jr.), dive bombing. Sunday: Slow combat, AMA combat, precision aerobatics (3 PAMPA classes), Formula 40 speed, FAI speed, record ratio speed, "Sorta Scale." Trophies and merchandise prizes. Site: Boeing Space Center, Kent, Wash. Entry fees: \$4 first event, \$3 each additional, \$13 max. Contest Director: Dave Mullens, 15559 Palatine Ave. N, Seattle, WA 98133.
- Oct. 4.....PORTLAND, Ore. -- Stuntathon '81. Precision aerobatics (beginner-intermediate and advanced-expert). Dave Gardner, judge. Site: Delta Park. More details to follow. For info, contact Don McClave, 7719 SE 28th Ave., Portland, 97202 (503) 771-8453.

# NW COMPETITION STANDINGS

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

Nearly all the Northwest standings changed since the last edition of FL as a result of the Regional championships and two other contests. In the interest of saving space, we'll skip the commentary and list the standings below.

Flying Lines keeps track of standings of Northwest fliers in Northwest contests. Fliers placing first through fourth receive the number of points equal to the number of contestants they beat, plus themselves. Those placing below fourth, and those not from the Northwest, are not scored.

Here are the standings as of June 10:

**SLOW COMBAT**  
(3 contests, 13 entries)

1. Dick McConnell	6
Gary Byerly	6
Dick Salter	5
Lowell Paddock	5
George Mickey	4
Rick Wicklander	4
Buzz Wilson	4

**AMA COMBAT**  
(4 contests, 36 entries)

1. Gene Pape	21
Bill Varner	21
Ken Burdick	18
Will Naemura	16
John Thompson	10
Bruce Guenzler	10
Gary Byerly	8
Rich Porter	5

**SCALE RACING (GOODYEAR)**  
(2 contests, 7 entries)

1. Dave Green	2
John Thompson	1

**FAI COMBAT**  
(1 contest, 3 entries)

1. Dick Salter	3
Dick McConnell	2

**OVERALL COMBAT**  
(10 contests, 69 entries)

1. Gene Pape	37
Bill Varner	28
Will Naemura	25
Ken Burdick	24
Gary Byerly	14
Dick McConnell	13
Norm McFadden	12
John Thompson	10
Bruce Guenzler	10
Dick Salter	7

**SLOW RAT RACING**  
(1 contest, 8 entries)  
\*No Northwest entries placed.

**CLASS I MOUSE RACE**  
(2 contests, 19 entries)

1. Dave Green	15
Bill Varner	8
Mike Hazel	6
John Thompson	5

**HAT RACE**  
(2 contests, 14 entries)

1. Bill Varner	11
Dick McConnell	2
Scott Newkirk	1

**SUPER SPORT RACE**  
(8 contests, 58 entries)

1. Mike Hazel	33
Dave Mullens	32
John Thompson	28
Dave Green	22
Dick Salter	17
Paul Wallace	5
Dick McConnell	4
Cecil Swanson	3
Ralph Pastor	3
Gary Byerly	2

**SPEED (COMBINED)**  
(9 contests, 29 entries)

1. Paul Wallace	9
Gene Bartel	7
Scott Newkirk	6
John Thompson	4
Mike Hazel	4
Chris Sackett	4
Dick McConnell	2
Greg Beers	1

**CLASS II MOUSE RACE**  
(2 contests, 12 entries)

1. Bill Varner	11
Dave Green	9
Paul Wallace	2
John Thompson	1

**NORTHWEST SPORT RACE**  
(9 contests, 65 entries)

1. Dick Salter	62
Dave Mullens	29
John Thompson	27
Paul Walker	16
Gary Byerly	10
Greg Beers	9
George Mickey	8
Dave Green	8
Dan Burdick	5
Mike Hazel	5

**OVERALL RACING**  
(23 contests, 84 entries)

1. Dick Salter	71
John Thompson	62
Dave Green	56
Dave Mullens	53
Mike Hazel	44
Bill Varner	34
Paul Walker	16
Gary Byerly	10
George Mickey	9
Greg Beers	9

STANDINGS, continued

SCALE CARRIER (I-II COMBINED)			
(1 contest, 6 entries)			
1. Loren Howard . . . . .	6		
2. Orin Humphries . . . . .	5		
3. Wayne Spears . . . . .	4		
4. Terry Miller . . . . .	3		
PROFILE CARRIER			
(1 contest, 8 entries)			
1. Loren Howard . . . . .	8		
2. Dick Salter . . . . .	7		
3. Stan Johnson . . . . .	6		
4. Wayne Spears . . . . .	5		
OVERALL CARRIER			
(2 contests, 14 entries)			
1. Loren Howard . . . . .	14		
2. Wayne Spears . . . . .	9		
3. Dick Salter . . . . .	7		
4. Stan Johnson . . . . .	6		
5. Orin Humphries . . . . .	5		
6. Terry Miller . . . . .	3		
PRECISION SCALE			
(1 contest, 4 entries)			
1. Orin Humphries . . . . .	4		
2. Dick Salter . . . . .	2		
3. Max Thue . . . . .	1		
OVERALL SCALE			
(3 contests, 14 entries)			
1. Max Thue . . . . .	9		
2. Orin Humphries . . . . .	4		
Dan Cronyn . . . . .	4		
Dick Salter . . . . .	4		
5. Mike Hazel . . . . .	1		
PROFILE/SPORT SCALE			
(2 contests, 10 entries)			
1. Max Thue . . . . .	8		
2. Dan Cronyn . . . . .	4		
3. Dick Salter . . . . .	2		
4. Mike Hazel . . . . .	1		
PRECISION AEROBATICS			
(10 contests, 34 entries)			
1. Dick McConnell . . . . .	11	6. George Mickey . . . . .	7
Rick Railston . . . . .	11	7. Paul Walker . . . . .	6
3. Rich Porter . . . . .	9	8. Don McClave . . . . .	4
4. Dave Mullens . . . . .	8	9. Rich Schaper . . . . .	2
Max Thue . . . . .	8	Cecil Swanson . . . . .	2
		Terry Miller . . . . .	2

## NW COMPETITION RECORDS

### RECORD PERFORMANCES ESTABLISHED BETWEEN NORTHWEST MODELERS IN SANCTIONED COMPETITION

The Northwest Regional Control Line Championships May 23-24 was the scene for numerous changes in Northwest competition records. Dick Salter of Seattle, Wash., turned an incredible 4:24 heat in Northwest Sport Race, driving the Fox .35 stunt six seconds faster than his previous record. Dave Green of Astoria, Ore., broke into the sub-8 class with a 7:57 feature race in Northwest Super Sport Race. Bill Varner of Astoria, lowered his own Class II mouse race feature record from 9:55 to 9:21 in a second place finish (Lenard Ascher, at 9:02, does not qualify for a record only because he is not a Northwest resident. It certainly was a good time!). Green's SS feature replaces Mike Hazel's 8:00 record.

Scott Newkirk of Seattle, Wash., improved his own Formula 40 speed record from 144.75 to 147.85 mph. Loren Howard of Vancouver, Wash., improved the Class II Navy Carrier record from 319.65 (Orin Humphries) to 320.9 points.

Flying Lines keeps track of best performances by Northwest modelers in AMA-sanctioned competition. Some documentation is required for records claimed set in out-of-region contests. All AMA events or those with established rules that can be compared by times or objective scores are recognized.

Here are the latest records as of June 10:

1/8A MOUSE CLASS I 50-lap: 2:41 (Bill Varner)	100-lap: 5:50 (Bill Varner)
3/8A 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: 10:41 (Dick Salter)
RAT RACE 70-lap: 2:29 (Mike Hazel)	140-lap: 4:53 (Mike Hazel)
FAI TEAM RACE 100-lap: --	200-lap: --
NW SPORT RACE 70-lap: 4:24 (Dick Salter)	140-lap: 8:57 (Dick Salter)
NW SUPER SPORT 70-lap: 3:54 (Mike Hazel)	140-lap: 7:57 (Dave Green)
1/8A SPEED: 88.2 mph (Paul Wallace)	FAI SPEED: 88.05 mph (Bashful)
1/8A PROTO: 83.63 (Paul Wallace)	FORMULA 21: --
A SPEED: 125.82 (Mike Hazel)	FORMULA 40: 147.85 (Scott Newkirk)
B SPEED: 153.00 (Mike Hazel)	JET SPEED: 165.83 (Mike Hazel)
D SPEED: --	PROFILE NAVY CARRIER: 208.9 (Marty Phillips)
	CLASS I NAVY CARRIER: 268.98 (Terry Miller)
	CLASS II NAVY CARRIER: 320.9 (Loren Howard)

AD RATES

Advertisements in FL help support the newsletter and the control-line hobby. Prices are \$6 for a half-page ad, \$4 for a quarter page, and \$15 a year for hobby shop directory listings, and \$1 for five lines of classified advertising. Also available, staple-in brochures (price negotiable based on weight). Club contest flyers stapled in free of charge.

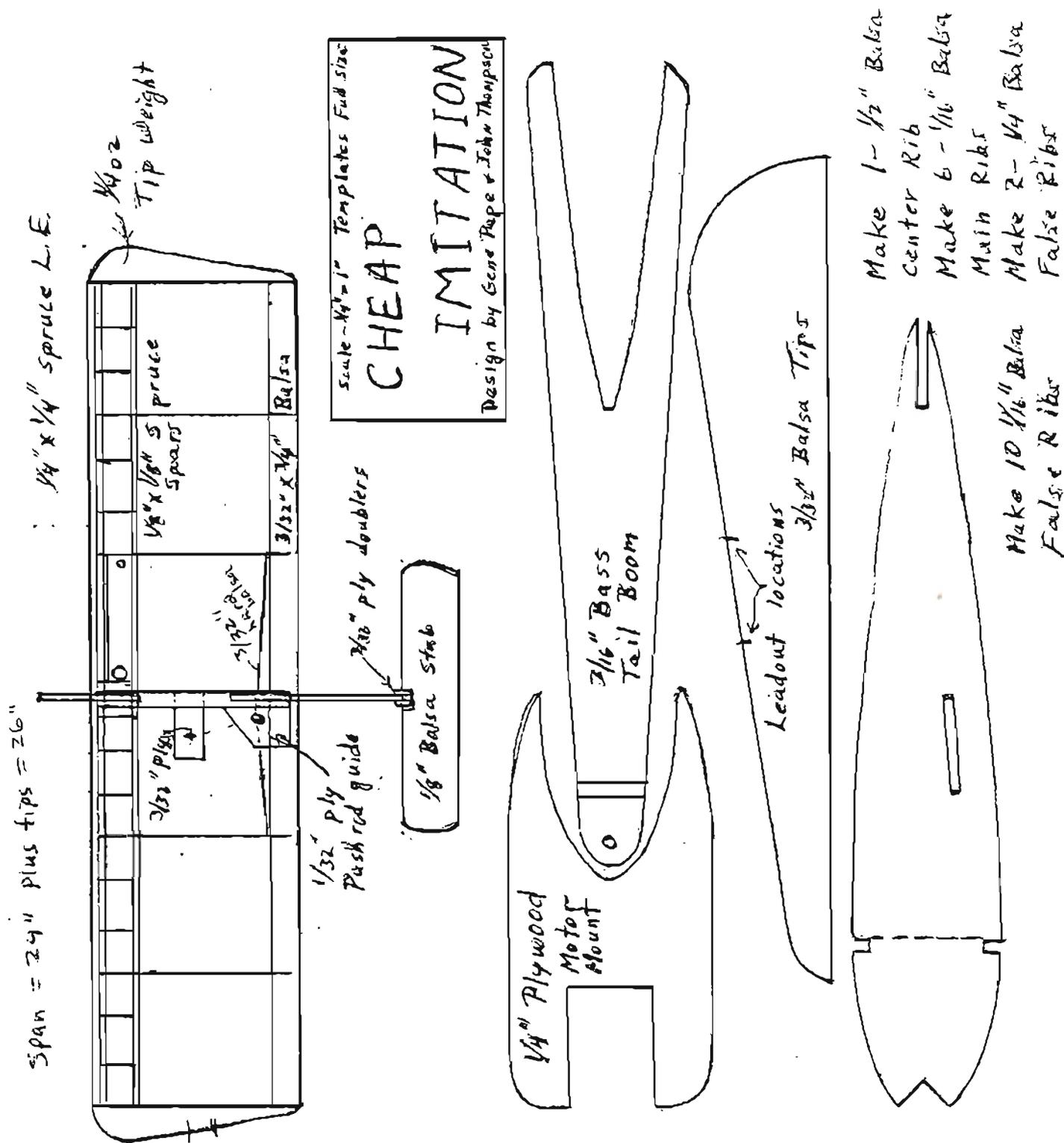
# COMBAT ZONE

by gene pope

Over the past year or so, John Thompson and I have been toying with 1/4A combat models as a means of practice combat flying. While I knew that a 1/4A model could be made to fly well, the planes we were flying just didn't have the feel of full-size models so the practice was of questionable value.

With the winter building season having set in, and a 1/4A combat contest coming up in Astoria, we set out to build some proper models. The most consistent airplane we had flown to date was Dirty Dan Rutherford's "Golly Gee Whiz" which John had plans for. The best flying model we had seen was Dirty Dan's "Dirty Beaver". We didn't have plans for that, so we took the "Golly Gee Whiz" plans as a reference and designed a "Cheap Imitation" of the "Dirty Beaver."

The planes that resulted fly better than any 1/4A that either of us have flown. They closely approximate the performance of a fast model. As a bonus, in their first contest at Astoria, John placed first after defeating me in the semi-final, and I managed third. (Since then, Charlie Johnson has won the NW



COMBAT ZONE, continued

Regionals in 1/2A combat with a Cheap Imitation, and Bruce Guenzler took third at another Astoria contest. Gene topped the Eugene 1/2A Fun Day, also using the Cheap Imitation.)

Construction is very straightforward using standard building practice.

After cutting out all of the parts, assemble the bellcrank mount to the center rib using five-minute epoxy. Attach the two quarter-inch false ribs to the half-inch center rib using Hot Stuff. Attach the two tip ribs and the half-inch center rib to the trailing edge with Hot Stuff. Make sure they are square. Attach the leading edge to these ribs with Hot Stuff.

While doing this, check carefully for warps; you can build in some really bad ones at this point. Install the remaining ribs with Hot Stuff. Install the top and bottom spars with Hot Stuff. Fuel proof the bladder tube and install it with five-minute epoxy. Install the false ribs, tips, tip weight and pushrod guide with Hot Stuff. Go over all joints with Litebond. Install the control system. Sand the entire structure and cover with some type of plastic film. The wing is now complete.

Cover the tail boom with plastic film, leaving the area where the 3/32" plywood doublers go bare. Attach the doublers with five-minute epoxy. Drill a hole through the boom for the 3/32" outside diameter brass tube bushing. Be very careful to insure this hole is square to the boom. Install a 7/16" length of brass tubing in the hole with five-minute epoxy. At the same time, fuelproof the bare wood at the rear of the boom with five-minute epoxy. Sand the stab to shape and cover with plastic film.

Install a 1/16" wire hinge pin in the boom. It should protrude about 3/4" on either side of the boom, then be bent at right angles to stick into the stab about a quarter inch. Make the appropriate notches and holes in the tail to accept the boom. Assemble the hinge pin to the stab with Hot Stuff, then cover the hinge pin with two layers of plastic film. Attach the completed assembly to the wing with five-minute epoxy after cutting away the covering in the joint area. Install the horn and hook up the controls.

Drill the motor mount holes. Cut away the covering where the motor mount glues on to the wing and attach with five-minute epoxy. Be sure to give it 3° to 5° offset. Fuel proof the mount with five-minute epoxy.

Cut appropriate holes in the bladder tube and smear five-minute epoxy around them to fuel proof them.

Unless one of us forgot something, you should now be ready to bolt on your motor and go flying.

--Gene Pape, 4528 Souza St., Eugene, OR 97402

DON'T BE ALARMED...

If it's a while before your next issue of FL arrives. It won't mean we've abandoned ship. It may just mean we're on "vacation." When we started publishing Flying Lines two years ago, we said it would be a "more or less" monthly publication. So far, in 26 issues, we've never missed a month.

However, we now plan to publish one or two combined issues over the next year or so, including a July-August issue. The reason is that the burden of doing FL monthly sometimes gets a little overwhelming, especially at this time of year. We're going to spend a little time getting our stuff ready for the Nats and generally just playing with toy airplanes.

Never fear, you won't lose any issues. FL subscriptions are based on issue number, not months, so if we skip a month it will have no effect on your subscription. We do not plan to regularly skip issues, but, frankly, it's time we took a month off.

See you in August!

THE FL "GROUND CREW"

Flying Lines is produced every month by a dedicated volunteer staff interested in keeping lines of communication open between Northwest modelers. FL is totally independent of any organization, depending entirely on subscriptions and advertisements for financial support.

FL is your link with the rest of the Northwest's CL modelers. Help keep it alive by spreading the word. (How about every one of you getting one other modeler to climb aboard the FL flight?)

The price is \$5 for six issues, and \$9.50 for 12 issues. Canada and Mexico: \$5.50 for six issues, \$10 for 12 issues. Overseas, \$10 for six issues, \$18 for 12 issues, U.S. funds please.

Here is the FL staff:

Publisher.....Mike Hazel	Aerobatics...Rich Schaper	Speed...Mike Hazel
Editor.....John Thompson	Paul walker	Scale...Orin Humphries
Photo Editor..Chris Genna	Combat.....Gene Pape	Sport...we're taking
Racing.....Mike Hazel	Buzz Wilson	applications --
Carrier.....Orin Humphries	Beginners....John Thompson	how about you?

RANDOM TIPS AND RIBS FROM THE FL WORKSHOP FLOOR

====This is the time of year when FL begins receiving 747-loads of news from all around. Contests scheduled, new products, fun flies, newsletters, etc. If you have news of interest to your fellow modelers, pass it along. Here's some of the latest:

====One of the most high-class flyers we've received in years also is part of the most extensive publicity we've ever seen. It's a slick-printed booklet of numerous pages promoting the British Combat International FAI combat bash July 4-5 at Dytchley's, a part of Queen Mary College in London. Contest includes a breakfast for competitors both days, packed lunches and a three-course meal both days, plus RC and CL displays, a bar, tea and other features. The brochure is printed in three languages.

====Sorry, friends across the sea, we at FL will be at the Bladder Grabber that weekend. BG VI promises \$3,800 worth of Carver Corp. Stereo equipment -- and summer weather for a change -- as prizes. It's triple-elimination this year, and there will be a breakfast free to contestants at 9 a.m. July 4. See contest calendar for details.

====Another fine contest shaping up will be the Skyraiders bash July 12-13. Stunt, combat, speed and racing events at the Boeing Space Center in Kent, looking to be one of the bigger NW contests -- a new tradition, we hope. Also, the rebirth of an old tradition: It is confirmed that the Shady Acres Combat team will sponsor their excellent Labor Day contest for combat and sport race. This is always a fun, friendly, family-style contest with barbecue, etc.

====Seattle Skyraiders have gotten tentative approval for construction of a chain link fence around the Carkeek Park flying field, to help keep away the frisbees and jeeps.

====The Portland crew has gotten formal about their October stunt contest. It will be sanctioned and have awards and the whole schtick. Three PAMPA classes to be offered. Don't miss this one, stunters (Asphalt circle!).

====History in the re-making: Modeler's Mansion, 1033 Gardena Blvd., Gardena, Calif., 90247, announces it is producing a new kit of the old Jim Walker Fireball, a pioneering control-line kit.

====Another outstanding stunt plane is now in kit form. Bill Werwage's Juno, used at the 1980 world championships, is available for \$59.95 from Airborne Manufacturing, P.O. Box 113, Sagamore Hills, OH, 44067.

====We've received one of those Viper kits produced by Bear Model Products. It looks like it definitely will make a three-hour combat plane, and not bad at \$9.50 each. Bob Bearden also makes 1/4A and slow combat kits and sells many combat items. Bear Model Products, 17400 South Harlem Ave., Tinley Park, Ill. 60477. If you prefer foam, Phil Cartier's line of combat kits looks good, too. Rory Tennison had some of the FAI Bumble Bee kit-planes at the Regionals. He said they left some of the foam coring (for bellcrank, etc.) to the builder but the final product looked nice. The Core House, Box 300A RD#2, Palmyra, PA 17078.

====In other product news, there's a new handle out, made by Sturdi-Built Model Manufacturing, 4203 S. Cloverdale, Rt. 9, Boise, Idaho, 83705. A nifty pinch-off clip is made by Circus Hobbies, P.O. Box 5213, Reno, Nv., 89513. Tell 'em FL sent you.

====Having seen the Regionals prizes up close, we can testify that the many tanks made by Carolina-Taffinder for all CL uses are top-drawer. Carolina Taffinder, 8345 Delhi Road, Charleston Heights, S.C., 29405. The stunt tanks of Mike Mustain Sheet et al, 455 Decatur St., Kenton, Ohio, 43326, also are excellent.

====The 1981 regional representative for the Model Engine Collectors Association is Ray Chalker, 1522 138th South Tacoma, WA 98444; according to our MECA correspondent, R.F. Stevenson. Steve, by the way, is up to 950 engines and still trying to quit. He displayed 225 of them at the Regionals. He also tells us of a big model engine display at the Arlington Airport Fly-In, 8 miles north of Marysville, Wash., (turn east two miles on Highway 530), Aug. 28-30. Home builds, antiques, quickers, hang gliders, a Douglas DC3, etc., and rides available in old biplanes. For info, contact David Woodcock, 115 Pelly N., Renton, Wash., (206) 226-3192.

====FL's roving correspondent, Jim Cameron, the effusive CLAM from Seaside, Ore., now a U.S. Navy man, has moved again. Those wishing to contact Jim should write: James Cameron SN, 543-74-3362, ITB Company 243, SSC, NTC, Great Lakes, Ill. 60088. Jim promises to send reports soon on midwest contests.

====Looks like the Northwest won that challenge with the Florida Slow Rat racers. This is a rematch, remember, since it was sort of a draw in April. At their May contest, the top three times were 8:52 (Jerry Rimert), 10:45 and 12:34. Ours, at the Regionals, were 7:57 (Dave Green), 9:28 and 108 laps in Super Sport, our comparable class. Everyone interested in drinking a free Lone Star beer on the Florida group's tab, join the trek to the Nats.

## RAFFLE ENDS WITH STREAMER TIED ON NOBLER...T-SHIRT PROMOTION NEXT

This thing has got to stop! First we gave two engines to Dave Green in our periodic FL raffle, much to the irritation of all the faithful who bought tickets every time, and then never won. But the real last straw was giving away our Giesecke Nobler kit to a combat flier.

Yes, friends, Gene Pape of Eugene, Ore., was the raffle winner.

And we have decided to quit the raffle for the time being. We don't want Gene to feel bad, though. It wasn't his fault. We had been planning to quit after this one anyway because the raffle novelty had worn a bit thin, and you all weren't buying the tickets much any more. In fact, we barely paid for the last prize.

Now is the time to express many thanks to all the modelers over the past year and a half who have helped FL finances by buying raffle tickets. We gave away a Fox .35 stunt, a Fox Combat Special, a GloBee Fireplug and Charger, a Top Flite Tutor kit, and the Nobler. Special thanks also is deserved by Eugene's Toy & Hobby, which made some of the prizes available at half price. Also thanks to Twinn-K Enterprises, which donated the GloBee Fireplug.

There may be another raffle some day, but it probably will depend upon our coming up with gratis prizes. We've hit folks up for that stuff so much lately we're going to take a rest.

However, there is a new FL fund-raiser and promotional device we're sure you'll all be scampering to take advantage of.

FL has for two years been admonishing everyone to spread the word about your regional communications network. Here's the perfect way to do it: wear (with price) a Flying Lines T-Shirt.

FL now has available for purchase and contest prizes an unlimited quantity of handsome, high-quality T-Shirts emblazoned with the FL logo. These shirts are available to the general public at \$8 per shirt, which will pay the shirts' costs, plus \$2 profit for newsletter expenses.

The main idea is for you to get the shirts and wear them, so the next time you go to your flying field somebody will say, "What's a Flying Lines?" and you can tell them, and get them "in the know" with a FL subscription. Or, you can just wear your shirt to tell the world you're hip to what's going on in CL, because you read FL!

Contest directors, be sure to contact Flying Lines to get a FL t-shirt for a prize, our compliments.

DO NOT READ THIS UNLESS YOU ARE A FLYING LINES COLUMNIST: Columnists, we're taking this space to let you know that the T-shirts are available to you at cost, \$6. By the way, while nobody's looking, we'll add: You're doing a great job!

### HOW TO GET A FL T-SHIRT:

Write FL and include \$8, along with your preference for a color. We have a variety of colors available. Give us a couple of choices so we can give you second choice if we don't have the right color in your size. All light colors more or less available, depending on the shop's current supply. (Don't order a dark color.) Be sure to specify your size, and include your address.

## THE FLYING FLEA MARKET

FOR SALE -- Five K&B Stallion engines, excellent -- \$21 each. One K&B Stallion, new in box--\$35. Five K&B Series 75 engines, new -- \$37 each. Five K&B .45 stunt engines, new -- \$60 each. Five K&B .45 RC engines, new -- \$60 each. Other stunt engines for sale. Send SASE for list. Add \$1.50 postage and insurance each engine. Gordy Teschendorf, 2213 So. 25th St., Milwaukee, Wisc., 53215 (414) 463-4505 after 5:30 p.m. till 11:30 p.m.

WANTED -- Veco, etc., split elevator horns (U-shaped wire with brazed-on horn), small or large, will pay top dollar! Mike Hazel, 1040 Windemere Dr., N.W., Salem, Ore. 97304. (503) 364-8593.

## HOBBY SHOP DIRECTORY

### SEATTLE AREA

HOBBY HOUSE -- Control-line, free-flight and RC supplies, 10011 Holman Road N.W., Seattle, WA 98177. (206) 782-1609.

THE HOBBY PLACE -- Control-line and RC supplies, specializing in parts. 1415 NE 80th, Seattle, Wash., 98115. (206) 525-6757. Owned by Dodie Long. "If we don't have it, we will get it."

### CALIFORNIA

HERB'S SPEED & RACING PRODUCTS -- Speed pans, epoxy glass speed tops, and other supplies. Send SASE for more info. 1621 M. St., Merced, CA 95340. (206) 722-7836. Owned by Frank Hunt.

# FLIGHT SCHOOL

by john thompson

The first installment of this column was aimed at the experts. The message was about spreading their knowledge to potential beginners.

This time, we'll be laying out some basic information on building that first airplane, but once again part of the message is aimed at experts. Chances are the beginners won't see this column in Flying Lines. It's up to the experienced modelers to get this article, and similar information from their own stores of knowledge, to beginners and then help them put the information into use.

The topic will be how to modify a simple beginner  $\frac{1}{2}$ A (.049) powered model airplane kit to make it virtually indestructible as a trainer when flown over grass, no matter how much abuse the beginner gives it.

Before we get to the airplane, we should get to even more basic details that may be a bit mysterious to beginners.

## TOOLS:

Expert modelers usually are accustomed to working in shops crammed with sophisticated tools, grinders, sanders, power saws, drill presses, etc. However, beginners can start on their first planes with the most basic of common tools. It takes a little more elbow grease sometimes, and a little more care, but the payoff will be in expertise that only can be gained through experience. Nearly every home has the tools a beginner needs. Here are a few of the more obvious ones:

A good sharp razor knife or single-edged razor blade. An X-acto knife available at low cost from any hobby shop or hardware store will do. There are many kinds. Pick one that's cheap and all-purpose. Pliers, slip joint and, if available, needle-nosed. Wire cutters. Small screwdriver. Sandpaper and sanding block (you can make a block out of a chunk of wood, or buy one for \$2). A metal straight-edge or ruler. Some kind of square, preferably small. Any other tool you can get your hands on will help, but those are basics.

## ADHESIVES:

Beginning modelers can be overwhelmed at the variety of glues available. There are almost as many ways to stick things together as there are to take them (or break them) apart. I counted up once that I usually use seven or eight kinds of glue on every airplane. However, the low-budget modeler can get by with a single kind of all-purpose glue. Two or three kinds can speed and improve the building process, but are not absolutely necessary.

If you can afford two or three types, here is what I recommend:

**Cyanoacrylate:** Instant-setting glue such as Hot Stuff, Zap or Jet. I usually don't recommend this for the very first-time builders, because it's awfully easy to make a serious mistake you can't back out of. However, the glue of this type is good for tacking parts together, gluing all tight-jointed areas (except those carrying extreme loads) and can't be beat for fast working. Make sure to have on hand some baking soda to make some of those looser joints stick (a tiny fillet will bridge the gap). Don't use this stuff unless you know what you are doing and observe the safety warnings on the package. Also, steer away from hardware store varieties such as Crazy Glue. They are vastly over-priced, difficult to dispense and usually stale and gooey in the tube.

**Epoxy:** This is the glue used for the most critical joints and those that carry loads or vibration. It's also heavy. While it's possible to use nothing but epoxy to build your plane, I wouldn't recommend it for anything but motor mount and wing joints, bellcrank mounts and such. Epoxy is a style of glue that sets by chemical reaction rather than evaporation, so you have to mix two parts together in equal parts (usually). When you gain experience, you will use mostly the 5-minute variety because of its speed, going to slower-setting varieties when you need more working time. There are kinds that set in 5, 15, 30 minutes and a couple of hours. If using five minute style, make sure you plan before you mix, or you'll be caught with rock hard glue and the job half done. Once again, stick with known model aviation epoxies such as Sig or Devcon. Some of the hardware store varieties (Duro comes to mind) are not suitable for our use.

**Wood glue:** This is a catch-all term for what is commonly called white glue or carpenter's glue. Tite-Bond or Elmer's Carpenters' Glue are good. I've come to like Gluit, a Pica Products hobby shop white glue, because of its light weight, fast drying and sandability. If you can only afford one kind of glue, use this kind. It will work for all applications, including heavy load-bearing surfaces (I'd recommend Tite-Bond for toughest jobs) but does take time to set and will require your use of pins, clamps, etc., to hold things in alignment while it dries.

**Cellulose:** Model airplane cements such as Ambroid, which used to be the modelers' mainstay, still are used to some degree. These acetone-based glues are light and fairly quick drying, but they tend to shrink and come loose with

## FLIGHT SCHOOL, continued

age. Even though I only use them occasionally on non-critical joints, I like to have them around.

Others: There are many more, such as hot melt, contact cement and polyester resin, but stick to the very basics on your first plane. If you want to make the investment, I'd suggest a tube of Hot Stuff, a bottle of Tite Bond, and a package of Devcon 5-minute Epoxy.

### GENERAL TECHNIQUES

There are certain absolutely essential rules that apply to the building of the first model and will carry through until your last model. You might as well learn them now because they will never change.

1. Read the plans first, not after you've already botched the job.
2. Take your time. Hurried jobs look it. You'll be prouder of a slowly done, craftsmanlike product.
3. Alignment of wing to tail, wing to fuselage, motor mounts and all other surfaces are absolutely essential. Crooked airplanes fly crooked, if they fly at all. You must get it straight! Use your square, measuring tape, eyeballs, or whatever it takes to get things lined up right.
4. Spend a little extra time making sure things are sanded, dents filled, finish properly applied, hinges stuck tight, bolts secured, etc. Don't be embarrassed at the flying field. Cover your bases in the shop.
5. If you don't understand the process you're trying to do, get help. Experienced modelers are glad to share their knowledge.
6. Read the model magazines and newsletters. There's a wealth of how-to do-it information.
7. Build it light, build it straight, build it strong and you can't go wrong.

### NOW, ON TO THAT FIRST PLANE

This is a plane that I use for teaching youngsters, but it will work for any beginners. I usually suggest starting adult beginners on full-sized planes such as the Streak Trainer because sometimes they have an ego problem with the little planes.

The advantage to a  $\frac{1}{2}$ A trainer is that it is easy to build quickly and doesn't represent much investment if destroyed. It also bounces much better than a full-sized plane and often can teach several beginners after the first builder gets done with it.

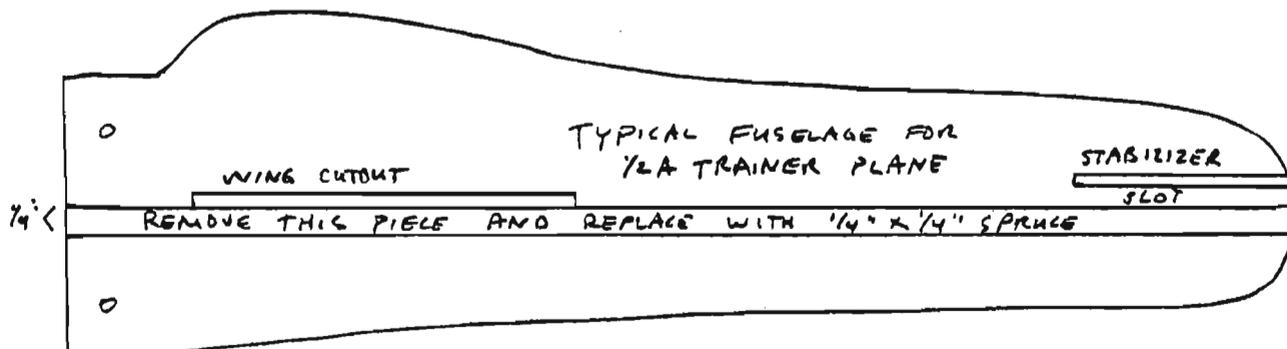
I recommend the Sterling line of beginners' kits. There are a bunch of them: Beginners' Shoestring, Beginners' Ringmaster, etc. The instructions here are for the Sterling kits, but some things will apply to the other good  $\frac{1}{2}$ A trainers available as well.

The Sterling kits have only about seven wood parts and go together in a few evenings (the "build in minutes" on the label is a bit optimistic), even for beginners.

For the most part, the plans show the correct procedures. A few simple changes, however, make a good trainer excellent.

The first and most important change is to strengthen the fuselage. The weak point in these planes is just in front of the wing, where the  $\frac{1}{4}$ -inch balsa fuselage will break on crashing because of the weight of the engine and the rest of the plane working against each other at that point. This is a simple procedure that will quintuple the life of the airplane.

Find the fuselage piece and lay it horizontally before you. Now take a piece of  $\frac{1}{4}$ -inch by  $\frac{1}{4}$ -inch spruce (available at your hobby shop) and lay it lengthwise along the fuselage. Find a location that won't interfere with



the slots for the wing and stabilizer. Draw lines using both sides of the spruce as a guide, on the balsa. Now take your knife and metal straight edge and carefully cut out the  $\frac{1}{4}$ -inch slot you have drawn. This will give you two fuselage pieces plus the  $\frac{1}{4}$ -inch piece you will discard. Replace the discarded piece with an equal length of the spruce, in balsa-spruce-balsa sandwich. (See sketch).

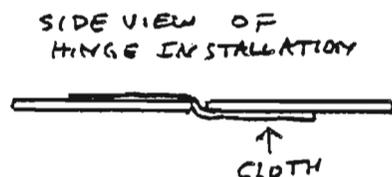
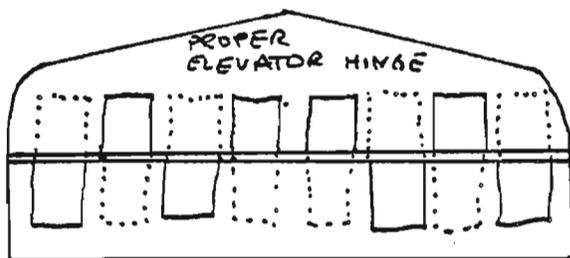
If possible, find a work bench you can pin things down on. I find that a piece of Celotex wallboard is an excellent building surface. Available from any building supply store, Celotex is cheap and stores usually will sell small pieces. Secure it to the bench, making sure it is perfectly flat.

FLIGHT SCHOOL, continued

Place a piece of wax paper down on the bench and then position the three fuselage pieces on the board, on top of the paper (wax paper keeps glue from sticking your plane to the bench). Using epoxy, apply adhesive to the pieces (TiteBond will work if you don't have epoxy) taking care not to overdo it with glue. Then push them together in the proper fit, pin them so they can't move apart and weight them so they can't lift up under the pressure held by the pins. The assembly should be perfectly flat.

You can then proceed with building according to the plans.

When you get to the stabilizer-elevator assembly, it's time for another deviation from the plans. The kit instructions are too simplified here. They tell you to use the piece of cloth tape hinge glued on one side of the slot



between stabilizer and elevator. This method will result in an elevator that wants to turn one direction as the glue shrinks, making it difficult to get proper control movement. Instead, use an over-and under hinging method as shown in the sketch. It's a little more work but will give proper control movement. I find Ambroid to be an excellent glue for hinging. Put on several coats.

Take special care to get everything lined up straight when assembling the plane. I usually get the control system all constructed as per plans and then remove it for painting. When you put the controls in, make sure to put a pushrod guide about halfway between bellcrank and elevator. The spring end of a safety pin is an excellent guide.

Throw away the puny landing gear that comes with the kit. Since this is a trainer you will be flying over grass and hand launching. The landing gear is not strong enough to take the pounding and adds extra weight.

Use steel braided lines instead of dacron lines. About 25 feet by .008 or .012 is good, 35 feet would work. Leadouts can be made of old .018" lines, available from any neighborhood adult flier.

By the way, your Cox engine out of a plastic plane can be used. You probably will have to buy a tank and needle valve assembly from the nooby shop if your engine does not have an integral tank. If you have to buy an engine, a Cox Babe Bee or Black Widow .049 is the one.

Make sure your handle is fully adjustable so you can hold your hand in a natural position for flying. Get the help of an expert in starting and flying your plane.

You'll soon be soloing and before you know it, you'll be the expert.

--John Thompson, 1411 Bryant Ave., Cottage Grove, OR 97424.



## AIR MAIL

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



DEAR FL:

Please enter my subscription to Flying Lines...I am new to C/L speed and am looking forward to your newsletter,

--Pete Zimmerman, 4 Hazelnut Ct., Florissant, Mo. 63033.

DEAR FL:

Hope Mrs. Flying Lines is feeling better, and I hope your combat fingers (yeh, likely story for the wild and furious violence of the combat engine that tried to devour you) get better. Watch out for those basketballs next time, especially the ones with either a fearsome Fox or a terrifying Tiger attached to them.

Enclosed is a check for another year's subscription to Flying Lines. Did you notice the two Jan, 1981 issues of FL? Like we suggested before, combat can cause strange things to happen.

Also enclosed is a little info that might be very useful in view of our staggering economy concerning Tee Dee performance characteristics that might be useful for economy minded fliers who could find such a power plant a very desirable alternative to perhaps not being able to fly at all due to the outrageous inflating costs necessary to stay in the flying business.

Take care of yourself and the family and try not to work too hard.

--Rich Porter, 386 Benji Court NE, Salem, Ore., 97301.

AIR MAIL, continued

DEAR FL:

Please sign me up for another year. I've been building so much to prepare for the Regionals that I forgot my subscription expired last month. The gaping hole in my mailbox told me something must be wrong. FL is far too highly valued around my house to let this situation exist very long, so I'm rectifying it right now. Now, if you can just tell me how to get it away from my wife so I can read it, too...?

Well, back to the work bench. There's still a scale job to finish. Thanks again for the outstanding work you're doing.

--Max Thue, 22002 Highway 99 #46, Edmonds, Wash., 98020.

DEAR FL:

Sleep with my motor??? I don't even let it in the house except for cleaning and repairs. It lives in the van. (Editor's note: I was just trying to tell Terry how to get to know his engine. No wonder it won't restart, if you keep it pouting in the van all the time. Sheesh.)

Thank you for all the helpful hits about racing. I know most of it, but it still helps. I converted some Veco tanks to uniflow about 11 years ago, when I was going to start trying sport race. Left the baffles in like Charley Johnson said not to do recently but I think the baffles should be left in. When I built this new racer a couple years ago, I put a rubber quick fill thing on one of those tanks. It has caused me some trouble, and I'm trying to find a cheap easy way to make a self-sealing quick fill. Like the car racers use, but not as heavy or expensive.

I found the tank troubles I mentioned to you were all in my head, ah, er, rather in the Enya head. I had put the high comp. head on it because I figured it would be broken in well enough that it could use it. The engine is 10 or 11 years old. Changing heads fixed it so it didn't overheat, for a while. What you told me about overheated engines and cooling them off, is really the hot tip. I am going to try everything in my power to keep fuel off my plane from now on. In three events I have had four fires. Burned the covering off in the last one. Having to strap the tank on with new rubber bands and putting out fires slows down my heat times a lot,

What is really embarrassing is the fact that I had second fastest heat anyway. We had one of those kind of days. Half the people couldn't even do their heats in Class I mouse race. If you even ran races this month I guess you will win that beer. First in Florida Slow Rat was Sandy Parmerter with a 12:04, second John Ebersbach with 12:27 and third was Bill Avera with 13:23. Aint that something? The Lamberts told me that the last time they ran FSR they turned 6:40. That will give you something to aim at. I think you will find that when you really start going fast and are trying to go faster that you will switch over to S.T. .35 plain bearing engines. They definitely make more power. I know you don't use PDP, or ball-bearing motors. I was referring to the race Bill Lee is doing at the Nats this summer. I'm so embarrassed I may hide over at the free flight area during the Nats and send someone else to find you and give you the beer.

Only good thing at the Florida Championships was my mouse racer. I did a 5:32. Class I I have half a dozen reed valve motors, and 1 good one, and the others are all erratic, and are lucky to do 7 minutes.

Next month, Memorial Day weekend, with no pressure, a bunch of people will probably do Florida Slow Rat in the 7s. Hope to see you at the Nats.

--Terry Rimert, 367 Orange Ave., Baldwin, FL 32234.

DEAR FL:

We need to do a re-run. We have races on Memorial Day weekend, too. So if it's OK with you, we will count the results from those races.

The fires were not your fault. I had two fires last year using the Fox .35 and Sig fuel. This time it was the Enya and Fox fuel.

People here don't use Enyas because they won't restart, but most fliers in the northeast wouldn't use anything else 10 years ago. STs work if done right. I'm not sure what right is. The Lamberts were not kidding when they said they were doing their races in the 6-minute bracket.

Dick Lambert told me about a guy who held a water bottle in his mouth and sprayed his engine with it while pitting. I'm just going to take a real damp towel out to the pit area with me to use to smother fires if I have any more. I've only had them at two races now, and no trouble any other time. I'm going to have to work real hard to get even with all the people who laughed at me last time. My airplanes have a new name. "Fire Alarm."

Keep out of the circle when you are pitting from now on (I was, I was! -- Ed. See you at the Nats. I can't believe I said free flight circles. Must have been your mistake (Mistake? Don't you use circles over there?) Or maybe you should watch free flight once to see what it is. (We thought that meant no entry fee --Ed.).

--Terry Rimert.

AIR MAIL, continued

DEAR FL:

Just finished reading No. 25 issue of FL and got to thinking about some of your comments and send-us-your-opinion requests, so here goes.

I don't think there can be any doubt but what your newsletter has done much to revitalize CL flying in the Northwest, and in other parts of the country as well, probably more than we might suspect.

In particular I think it has really given a boost to racing -- other areas too -- but racing in particular. Your NWSR makes it particularly easy for the relative newcomer to get into racing without need of selling the family jewels or developing ulcers trying to cope with the sophistication of most of the AMA race events.

How about something similar to introduce modelers to the other areas of modeling as well. For instance, you could put a hardwood block into the fuselage of your NWSR planes. Fuel them up and go for high speed for 7 laps. Every contestant does same. Then attach carrier hooks, refuel, richen up needle valves and go slow for 7 laps and try arrested gear landing. Cheap -- minor modifications required.

A beginner entering combat has to be crazy, have unlimited building time or a source for ready-to-fly airplanes and money to purchase or a combination.

Slow combat is faster than fast was just a few years ago. Lap times on  $\frac{1}{2}$ A are as fast as big ones. Their saving grace is low initial cost and tendency to bounce instead of bust. But they really suffer under windy conditions. How about a slow combat design for .09 TD suction-fed? They'd be small and slow enough that crash damage could be minimized, powerful enough to better fight wind than a  $\frac{1}{2}$ A, and slow enough for relative beginners in combat to react to without over-reacting.

Concerning your comments about losing good newsletters by combining under auspices of a national CL coalition newsletter I think I know where you're coming from.

How about this? National CL coalition head sets up date when newsletter is to be published. Present editors of the individual newsletters continue writing and send to Doc Jackson or whoever in time for individual newsletters to be printed and fastened together and mailed. Say, for example, MACA editor doesn't get his copy in on time. Doc prints and mails anyway. Next month old MACA newsletter included with new issue.

Until the national CL coalition gets its feet firmly planted, some fundamental ground rules established and a going viable organization I share your concern for losing a lot of good news copy. Otherwise I'm concerned that Doc and whoever is working with him to get our national CL organization going may quickly find themselves in over their heads.

Keep Flying Lines flying.

--Larry Miles, Apt. 89, 7707 Mission Gorge Rd., San Diego, Calif. 92120

DEAR FL:

I read about your bulletin in Flying Models magazine. I would like to receive this publication...

I haven't flown since 1969 when my interests turned to racing motorcycles. Suddenly I've rediscovered all the fun and satisfaction of control-line flying. I came across a couple of old ships in an attic, stored for at least 20 years. One has a Johnson 40 engine. Could you give me any info on this mill?

--Steve Ligon, Rt. 1 Box 166 B86, Galveston, TX 77551.

(Editor's Note: Anybody who can give Steve any info about the Johnson .40, please write him).

DEAR FL:

This is to inform you that as of June 1, 1981, Interlake Hobbies is facing a lot of changes.

1. New owner. My name is Dodie Long. I don't intend to change our basic line of products or advertising.

2. New name; From June 1 it will be known as "The Hobby Place."

3. New address: We have been asked by the landlord here to move. The new address is: 1415 NE 80th, Seattle, Wash. 98115.

Other than that we will try very hard to remain the same.

--Dodie Long, 1415 NE 80th, Seattle, Wash., 98115.

DEAR FL:

A few days after I received the issue of Flying Lines that contained my request for information about G-S bell cranks, I got a note from Bill Skelton suggesting that Eugene Toy & Hobby might have some. I called and they did. I got my bell cranks in short order. Nice folks you have out there in the land of ooze. Thanks to all of you.

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

\$3,800 WORTH OF PRIZES

**BLADDER**

**GRABBER**

**VI**

TRIPLE - ELIMINATION MODEL AIRPLANE COMBAT  
TOURNAMENT

JULY 4th AND 5th, 1981

BOEING SPACE CENTER, KENT, WASHINGTON

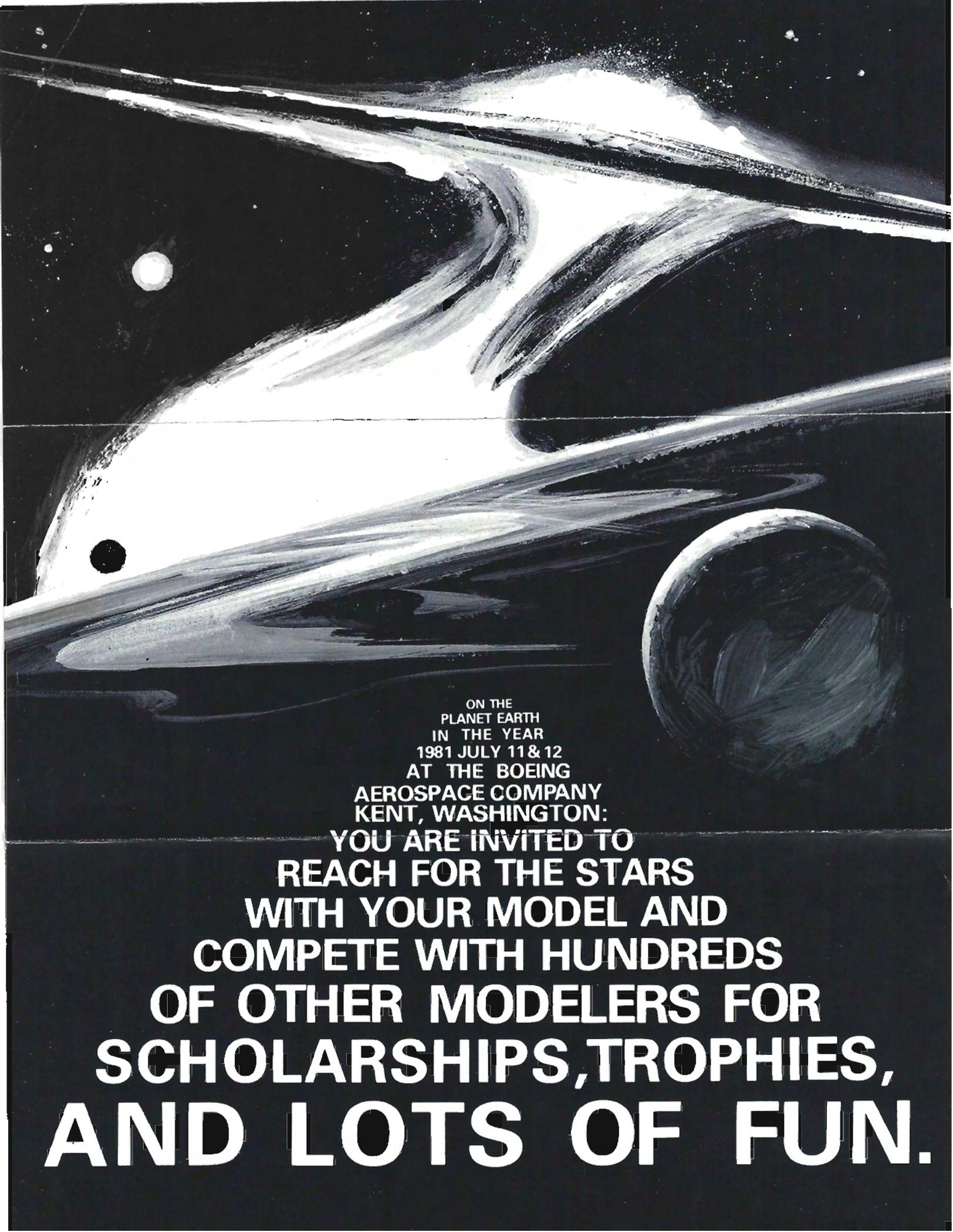
Prizes through 4th place include both trophies and Carver Corporation stereo equipment. Entry fee is \$4. The proceedings begin with breakfast at 9 AM July 4th, free to contestants. Call Rush for the breakfast location.

Registration will be open until 11 AM at the field, July 4th only. Flying will begin promptly at 11. For further information, call Howard Rush at (206) 823-6018 or (206) 251-2701. Let us know if you need a place to stay or a ride from the airport.

If you're less than 21, please have this form signed and bring it with you:

Parent's Consent, Waiver, Release: As parent or natural guardian of.....  
a minor, I hereby give my full and unqualified consent to his/her participation  
in this model airplane contest. I further release the sponsors, promoters, and  
officials of said contest from responsibilities for any claims of loss, damage,  
or injury resulting from any cause in the course of the contest. I also assume  
full responsibility for any damage or injury caused by above named or his/her  
model aircraft to any person or property.

SIGNED (PARENT OR GUARDIAN).....



ON THE  
PLANET EARTH  
IN THE YEAR  
1981 JULY 11 & 12  
AT THE BOEING  
AEROSPACE COMPANY  
KENT, WASHINGTON:

**YOU ARE INVITED TO  
REACH FOR THE STARS  
WITH YOUR MODEL AND  
COMPETE WITH HUNDREDS  
OF OTHER MODELERS FOR  
SCHOLARSHIPS, TROPHIES,  
AND LOTS OF FUN.**

# More Than \$3500 in Scholarship Prizes, Trophies Awarded Through Third Place. Trophies & Merchandise Awards for "Open" Winners

Here are the events you can compete in:

OUTDOOR HLG	★	★	DESIGN CRAFTSMANSHIP	★	★
A1-A2 TOWLINE GLIDER	★	★	R/C SAILPLANE THERMAL SOARING	★	★
UNLIMITED RUBBER	★		STANDARD CLASS		
OUTDOOR PEANUT SCALE	★				
1/2A GAS	★	★	BOOST GLIDER DURATION CLASS A		★
COUP D'HIVER		★	(NO R/C)		
INDOOR EASY B	★		ROCKET GLIDER DURATION CLASS B		★
INDOOR HAND LAUNCH GLIDER	★		STREAMER DURATION CLASS B		★
			PARACHUTE DURATION CLASS A		★
SCALE RACE	★		PAYLOAD ALTITUDE CLASS B		★
PRECISION AEROBATICS	★		EGG LOFTING ALTITUDE CLASS B		★
PRECISION AERO-BEGINNER		★	SUPER-ROL ALTITUDE CLASS C		★
PRECISION AERO-INTERMEDIATE		★	BOOSTER GLIDER DURATION CLASS 1/2A		★
PRECISION AERO-ADVANCE/EXPERT		★	PARACHUTE DURATION CLASS 1/2A		★
PROFILE NAVY CARRIER	★	★	STREAMER DURATION CLASS C		
PROFILE NAVY CARRIER	★	★			
SLOW COMBAT	★				
CL 1/2A PROFILE PROTO SPEED	★				
NORTHWEST SPORT RACE		★			
AMA COMBAT		★			
FAI COMBAT		★			

Scholarship contest entry fee: \$1.00 per event, \$5.00 maximum regardless of number of events entered.

Open contest entry fee: \$2.00 per event, \$8.00 maximum regardless of number of events entered.

Open events are open to all ages - separate entry and fee required but to be eligible for scholarships, contestants must be less than nineteen years of age on July 11, 1981.

Here are the contest rules. . .

- ★ Category scholarships will be awarded to the contestant compiling the highest number of points within a category, regardless of number of events flown within that category.
- ★ No contestant shall be eligible to win more than one scholarship; however, any number of events may be entered to be eligible for trophy awards (through third place).
- ★ Scoring in all events will be on a point basis only; 5 pts. for 1st Place, 4 for 2nd, 3 for 3rd, 2 for 4th, and 1 for 5th Place.
- ★ Ties will be broken based on total number of contestants competed against, the higher number being the winner.

## Overall Aeromodeler Rules:

- ★ Entrant must select 7 out of the following 11 contest events at time of registration to earn points toward the scholarship. Winner will be contestant with highest number of combined points.
- ★ Models from any event may be entered in Design Craftmanship.

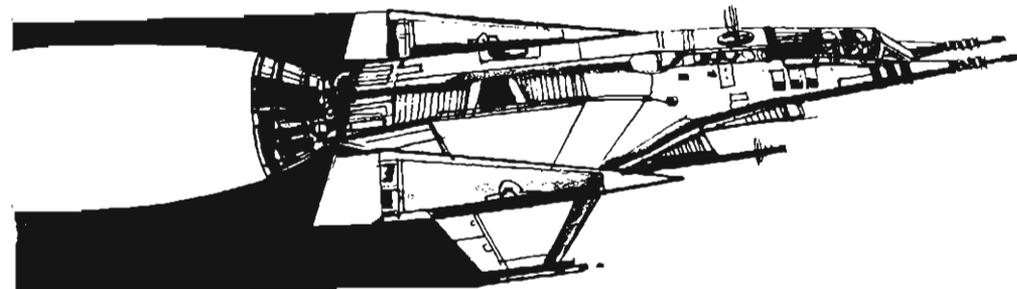
ROCKET	FREE-FLIGHT	CONTROL LINE	SPECIALTY
★ Parachute Duration Class A	★ Easy B (I.D.)	★ Prec. Aerobatics	★ Design Craftmanship
★ Rocket Glider	★ Peanut Scale	★ Carrier	★ R/C Glider
★ Egg Lofting	★ A-1/A-2	★ Slow Combat	

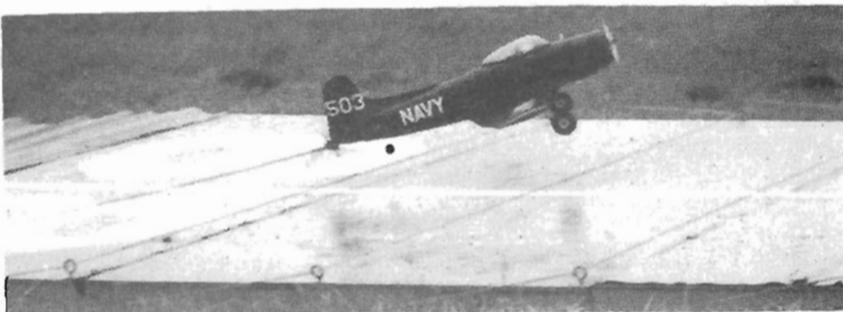
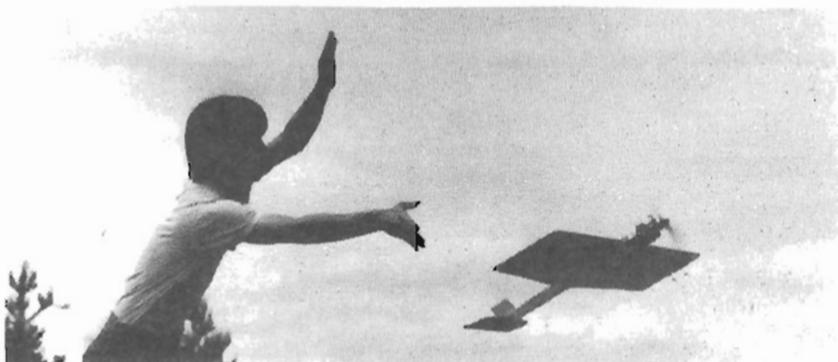
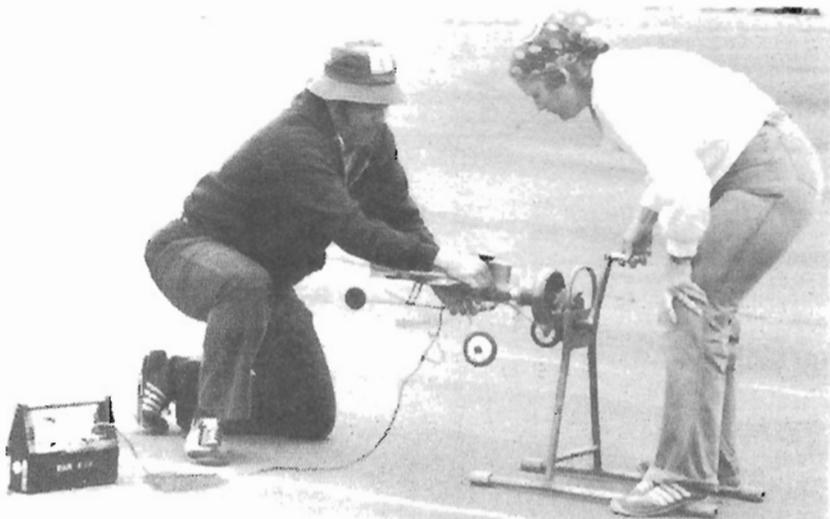
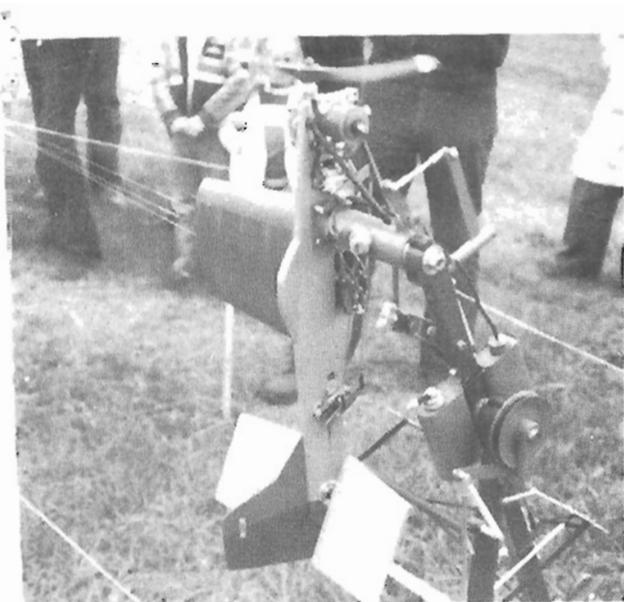
Watch for an "official entry blank". We'll be mailing it to you in the Spring of 1981.

Get busy now building these models, and plan to come to Kent, WA next July and REACH FOR THE STARS.

For further information, contact:

The Boeing Management Association  
P.O. Box 3707  
Seattle, WA 98124  
Attn: Ted Caputo  
4-1800  
Mail Stop 63-10





### THE REGIONALS IN PICTURES

Flying Lines photographers Dan Cronyn and Dave Gardner captured the spirit of the 1981 Northwest Regional Control-line Championships on film May 23 & 24 in Eugene, Oregon.

Left column, top to bottom: Obie St Clair, inventor of CL modeling, taught many how to fly Sunday with his control-line simulator. Amazing! Lenard Ascher, Riverside, Calif., pits a rat racer. Rick Railston, Yakima, Wash., with "Vector". Aaron Ascher with Short Skyvan, first in profile scale.

Right column, top to bottom: Piper J-3 cub precision scale entry by Rory Tennison, Libby, Mont. Fred & Joyce Margarido fire up D speed plane, from Fremont, Calif. Will Naemura, open AMA combat winner, launches Lowell Paddock's slow job, from Tacoma, Wash. Breathtaking shot of carrier plane making arrested landing. Small part of huge crowd of spectators.