

1411 BRYANT AVENUE

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COTTAGE GROVE, OREGON 97424

NEWS OF NORTHWEST CONTROL LINE MODEL AVIATION Number 30 Nov., 1981

"SECOND SEASON" READY TO KICK OFF

You thought the competition season was over for the year, right? Wrong.

Remember, this is the Facific Northwest. It may not be summer any more but there's never really any winter in this part of the country, as our brothers

in Chicago and other snowy climes will attest. All "winter" is here is the Northwest Sport Race Drizzle Circuit! The circuit begins Dec. 13 in Portland, where Rich Schaper (the ghost of the Portland Aeroliners) will be the host. Contests will follow in Kent, Wash.,

, Astoria, Ore., Yakima, Wash., and Eugene, Ore. The format will be exactly the same as in 1980-81. Here's how it works: At each of the five contests, always held on the second Sunday of the month, the main events will be Northwest ^Dport Race and Northwest Super Sport Race. Each contest also will feature a secondary event, differing from contest to contest.

NWSR and NWSS races will be expanded from their usual format for circuit races. In each class, each contestant will be automatically allowed to fly two preliminary heats, with heats based on an absolutely random draw (be prepared to recruit new team members in a pinch -- no draw changes to separate teams). The placing in the heats (not times) determines who makes the final, with times breaking ties. We have a points system for this.

All contestants will collect championship points in each race. Finalists get points based on the number of entries (First place = # of entries, second = # of entries minus 1, etc). Everybody who does not make the final gets one championship point for each heat finished. At the end, in the Eugene contest next April, the top three in each class will get nice trophies. The grand champions will take home huge perpetual trophies. And fast heat winners in each class also get trophies.

To add a little color and interest, all persons planning to race the circuit are urged to register their planes with FL, andthen to decorate them accordingly. Send FL a postcard with your plane name, and ask for a racing number. Racing numbers are issued on the basis of your placing last season, or on a first-come basis for newcomers. We'll send you back a post card

confirming your plane name and issuing the number. Registration and decoration is optional, but most competitors joined in last year. Many of the names were as colorful as the planes: Clockwork

Orange, Screaming Yellow Zonker, Cro-Magnon SS, Mellow Yellow, Kamikaze Express, Miss Take, Stone Ax, Duke, Snake, Seahawker, to name some. This year's circuit promises to be very interesting, early reports indicate.

In sport race, everybody will be gunning for last year's champ, Dick Salter, who found one of the sweetest-running Fox .35 stunt engines ever made.

Things may be a real donnybrook this year, since Dick says he's retiring the killer engine to stud. Since everybody else was running about the same speed, there should be no clear favorites and lots of cloe finishes. In super sport race, last year's "feeling out" season got everybody familiar with the technology, and the real show ought to unfold this season with a spirited race toward the first 100-mph airplane and 7-minute feature race. Spirited race toward the first 100-mph airplane and /-minute feature race. By our quick count, no less than five contestants have the potential to win the race with unknown others sneaking in from the wings. Everyone running sport race is encouraged to give SS a try. All it takes is anything that was legal for power under the old NWSR rules (plain bearing, single bypass .36 max displacement engine). Plane can be a kit like NWSR or your own design to slow rat minimums. Must have outboard tank and no special carbs. Engine rework OK as long as you use factory parts, and racing gadgets are legal. Anybody looking for adesign is welcomed to contact F^{L} 's Mike Hazel for ideas. By the way, the five front-runners we mentioned above are last year's champ Hazel, current feature record-holder Dave Green, John Thompson (new plane!), Dave

Mullens and Dick Salter/Tom Knoppi. Speaking of 'om & Dick, theirs is only one of several creatively named racing teams that have sprung up. They go by the acronym SKARE. We'll have to read the fine print on their wings to find out what that means. Others are the Nitroholics Racing Team (Hazel-Thompson-Newkirk), Dark Ages Racing Team (Green-Varner), KB Team (Kens Burgar and ^Burdick).

SECOND SEASON, continued

Circuit organizers are talking about a couple of other new features as well. Mike Hazel is thinking of making a starting clock, similar to what was used at the 1979 Nats, or similar to a hydroplane starting clock. We're also thinking of making up some starting and other signal flags (white for 1 minute countdown, green for go, black for calling off a heat or disqualifying a plane, and checkered for the timers to signal finishes). Also, the Nitroholics are thinking about pioneering the use of pitmen's helmets to see if the idea will catch on. Some circuit old-timers can remember some times when they would have been welcomed. Let us know what you think about those ideas.

The schedule is in the Where the Action Is column. All you have to remember is the second Sunday of each month.

By the way, FL's reader poll indicates a majority favor addition of the word "stock" into the Northwest Sport Race rules on engines. New rules will be published in FL, but the onlychange will be that the NWSR power plant will be a <u>stock</u> Fox .35 stunt engine. In accordance with past interpretation of that wording, stock will be defined as an engine with absolutely no modifications <u>except</u> that spray bars and needle valves may be modified or substituted. No grinding, chroming, re-porting, timing changes, carburetors, etc.

grinding, chroming, re-porting, timing changes, carburetors, etc. So, come one, come all to the Drizzle Circuit. Plan to make all five contests. These winter events are a friendly, low-key traveling contest bringing us together on a regular basis through the off season. The main events are easy and cheap to get into and the practice is great not only for racing but also for an initiation into competition in general.

And, you get to see some very unusual sights. Such as: Combat fliers not crashing. Stunt fliers not wiping oil off their planes after every flight. Carrier fliers missing the pits by a half lap. Amateur astronauts making skyrocket takeoffs. Rich Porter flying counter-clockwise. Line tangles. Sunshine in Portland. And other oddities.

We'll see you at the pilots' meeting.

AD RATES

Advertisements in Flying Lines 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.

	-				
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LAST REMINDER -- WIN YOURSELF A TURKEY, YOU TURKEY!

Cast aside your phony dignity. Swallow your pride. Quit acting so high and mighty. Admit that there's one event you're not so sure how you'd place in. Yes, friends, you can't be an expert in everything. There's one contest this year you're sure to turn out as a turkey. It's the third annual Flying Lines Benefit Turkey Tournament, Nov. 22

at Mahlon Sweet Airport in Eugene.

All it takes is one old beater of an airplane and a measure of good humor. You'll get to use that plane -- and only that one -- in four events. In this

order, you'll fly speed, racing, stunt and combat. You have a chance to win some kind of a prize for first place in each The grand champion will win a frozen 20-pound turkey to feed his category. The grand champion will win a frozen 20-pound turk family on Thanksgiving, which is four days after the contest.

Rules:

Speed: 14 laps from a standing start. Racing: 100-lap prelim, 1 pit stop. 200-lap feature, 2 pits.

Stunt: AMA pattern.

Combat: Slow rules.

Airplane: Anything goes. Must have a wheel and rise off ground. Engine: .36 max displacement.

Lines: .018 x 60.

Allowed changes during contest: Prop, glow plug, fuel, tank. The entry fee is a flat \$10, and anything above contest expenses will go to benefit Flying Lines. Prizes through first in each event, plus grand prize.

No trophies (It's a benefit, you turkey!). As usual, the Eugene Propspinners graciously offer floor space, at no charge (donations of bubbly beverages accepted).



by gene pape

A STICKY SUBJECT

A question often asked of me is "What kind of glue do you use?" The answer is rather involved. I actually use six different kinds of glue. Aliphatic resin, cyanoacrylate, contact cement, 5-minute epoxy, slow-cure epoxy and thermal set glue.

The last of these, thermal set (hot melt) is not very well known. It is also about the handiest of the bunch! It sets in about one minute, fills gaps (even big ones), and is the only thing that will really stick to the golf tubes we use for bladder tubes.

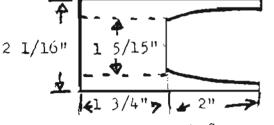
To use thermal set glue you will need the appropriate glue gun. These things range from small and inexpensive to large elaborate devices. The small inexpensive ones are best for model building.

Buy one and fiddle with it. You'll be glad you did.

COMBAT SUBSTRUCTURES

Combat structures have been simplified tremendously in the past few years, The principal areas of these advances have been in the center section of the airplane. Let's take a look at the new style components one by one. You'll find they can be adapted to most any current design.

Starting at the front with the motor mount, you'll find only three pieces of wood will do in most cases. A piece of 1/8" plywood 2 1/16" x 3 3/4", and two pieces of 3/8" x 3/4" maple 3 3/4" long. If your model doesn't have the engine recessed into the leading edge, you'll also need some 3/4" sheet balsa for filler. Either way, the mount is simply epoxied to the outside of a solid center rib.



Motor mount for model with recessed engine

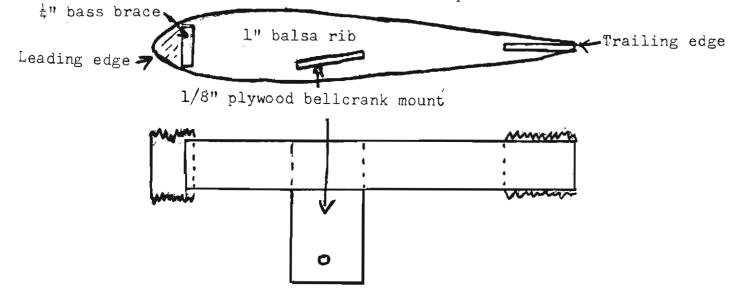
Maple 3/8"x3/4" 3/4" balsa filler 1/8" 5-ply plywood 2

Motor mount for model with engine in front of l.e.

Top view of either

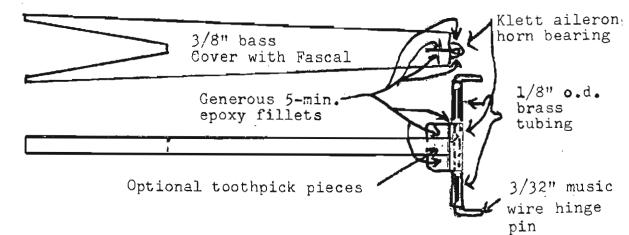
COMBAT ZONE, continued

The solid center rib is what makes the new models so simple. With the solid center rib, center section planking can be eliminated. The simplest solid center rib is a piece of 1" balsa cut to shape.



The monoboom tail is the last of the new wave components. Many of the latest designs published have monoboom tails with needlessly complicated hinges.

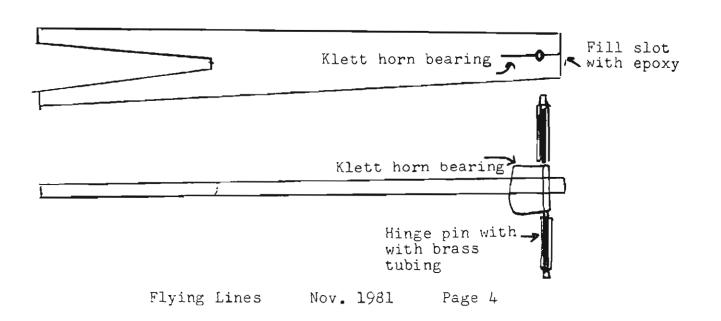
These are the important things to remember when making the hinges. 1. The bushing needs to be only about 1" long. 2. Some method must be used to keep the tail from moving from side to side. Below is a drawing of the simplest boom I've seen to date.

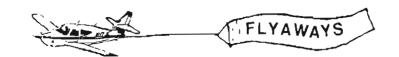


The tail is attached to the boom by drilling 3/32" holes into the leading edge of the tail in the appropriate places and cutting the appropriate clearance notches. Attach the hinge pin to the tail with 5-minute epoxy and cover the hinge pin with 2 layers of fascal. These are the basics. In combat, basic is generally best, but I'll let In combat, basic is generally best, but I'll let

you take it from there.

(Editor's addendum: Since Gene wrote this column, another hinging method variation has been pioneered by Will Naemura that is similar to the one mentioned here but slightly more secure. It uses a different type of Klett horn bearing and slides through the boom, rather than attaching on the end. See drawing below.)





RANDOM TIPS AND RIBS FROM THE FL WORKSHOP FLOOR

=====An item of general interest to all modelers might be the first Northwest Model Exposition, Feb. 6-7, 1982, at the Western Mashington State Fairgrounds, Puyallup, Mash. It will include manufacturers' displays, demonstrations, model displays, door prizes, a banquet, Euest speakers, etc. Mo mention of CL on the flyer, sad to say. They didn't miss anybody else -boats, planes, helicopters, cars, free-flight, RC scale, static scale, RC pattern, RC gliders, etc. Also planned is a big swap meet, a best of show trophy, etc. It's all sponsored by the Mt. Hainier mC Society.

====A new flier in the Tacoma, Wash., area is looking for control-line modelers to fly and build with. Peter Bergstrom is a helicopter pilot for the U.S. Army, stationed at Ft. Lewis. Tacomans, contact Peter at 6919 150th St. SW, Apt. #19, Tacoma, WA 98439.



Price List June 1981

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MONOBOOMS —Worlds highest performance control line airframes. State of the amics, precision manufactured from select materials. Kits include complete complete fessional quality hardware, silkscreened mylar decals, detailed fabrication & perform Send \$.50 for technical briefs.	ment of pro-
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MONOBOOM STREAMLINE RUDDER KIT Two piece fiberglass rudder, thinline clamploc horn, and instructions. Completely encloses stabilator mechanism for maximum streamlining.	\$5.75
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FLYAWAYS, continued

=====FL's editor recently had a nice experience doing something that other modelers might consider. Reading the fine print at the back of Model Aviation, I noticed that it is possible to donate a subscription to MA to a library or school for only \$12. Since MA is the finest publication dealing exclusively with model airplanes, spanning a broad spectrum of interests and not cluttered with cars and boats, I sent in a sub for the library in Cottage Grove, Ore. I got a nice thank-you from the library and AMA. I'd encourage anyone interested in spreading the word to do that for your home library or your local school. It's a type of publication those institutions seldom offer. =====Speaking of magazines, <u>Model Builder</u> has finally given Obie St. Clair, the inventor of our beloved control-line airplanes, the national recognition he deserves. MB's November issue has the first of a two-part

series on Obie, including pictures of the airplane that started it all. Hush out and buy a copy. Shuffle some more pages and look up the column bu that other Northwest guy who used to fly CL, "Dirty" Dan Mutherford. Oh, by the way, for those who don't know, Obie is still an active member of the Eugene Propspin-ners. He flew the first control-line airplane in 1937. He still has that plane, along with just about every other one he ever built!

=====New editor of the Skywriter the Seattle Skyraiders' nifty newsletter,

is Dave Mullens, 15559 Palatine Ave. N., Seattle, WA, 98133. =====Product tip: The Genesis Muffler, designed by Bob Hunt, is now commercially available, according to the PAMPA newsletter. It fits OS .40 FSR, OS .45 FSR and HP .40 engines. For information contact Jim Hunt, JH Design and Sales Co., P.O. Box 599, Saddle Brook, N.J. 07662. Other stunt products and stunt news appears periodically in "Stunt News," publication of the Precision Aerobatics Model Pilots Assn. To join, send \$7 to Wynn Paul, 1640 Maywick Drive, Lexington, KY 40504.

=====More stunt info: Wynn Paul has authored, or actually compiled, a publication called "Bibliography and index of information in publications about control-line precision aerobatics, 1946 to present." It is a 35-page reference manual of "just about everything published in the model magazines pertaining to precision aerobatics. Over 50 subject classifications are listed. The manual does not contain full articles -- only a listing of where they may be found. Send \$10 to Wynn Paul at the address above.

====Speaking of newsletters, one of the finest we get is from the Edmonton (Alberta) Birds of a Tether. It's "The Bird's Word." A recent issue contains a report on the Northwest Regional Championships in Eugene, authored by Roy Andrassy. "The contest proved to be one of the best contests I have ever attended," Roy writes. "The flying facility and the people were all just great." Roy said the EBOAT delegation plans to come again in 1982. They also go to such far-off places as the AAAA U.S. Championships in Winston-Salem. This club runs such interesting events as club carrier, Granny Goodyear, and 100-mile rat race, along with an apple box derby.



Listed below are the modeling events known to be upcoming in the Northwest at Flying Lines 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 below are AMA-sanctioned unless otherwise noted.

- Nov. 22.....EUGENE, Ore. -- Flying Lines Third Annual Benefit Turkey Tour-nament. Four events -- speed, racing, stunt and combat -- with the same plane. 60' lines, must R.O.G., .36 max engine. Fee: \$10 for the whole contest. Prizes: 20-1b turkey for grand champ, merchandise for first place in each category. Proceeds to ben-efit Flying Lines. Flying starts at 10 a.m. Site: Mahlon Sweet Airport. Contest Director: John Thompson, 1411 Bryant Ave., Cottage Grove, OR 97424. (503) 942-7324. Dec. 13.....PORTLAND, Ore. Northwest Sport Race Drizzle Circuit Contest 1. Class I Mouse Race, Class II Mouse Race, Northwest Sport Race, Northwest Super Sport Page Mouse atopts at 8:20 a.m. MESP at
- Northwest Super Sport Race. Mouse starts at 8:30 a.m., NWSR at ll sharp, NWSS follows. Circuit championship points will be compiled for NWSR and NWSS. Site: Delta rark. Contest Director, Rich Schaper, P.O. Box 608, Kelso, Wash. 98626. (206) 425-6637. Merchandise prizes.
- Jan. 10.....KENT, Wash. -- Northwest Sport Race Drizzle Circuit Contest 2. Sorta Scale, 9 a.m., NWSR at 11 a.m. sharp, NWSS to follow. Site: Boeing Developmental Center. Contest Director: Dave Mullens, 15559 Palatine Ave. N., Seattle, WA 98133. (206) 365-5436.

ACTION, continued

Feb. 14.....ASTORIA, Ore. -- Northwest Sport Race Drizzle Circuit Contest 3. Rat race, 9 a.m., NWSR at 11, NWSS follows. Site: Port of Astoria. Contest Director, Dave Green, 200 w. Franklin Ave., Astoria, Ore., (503) 325-7005. 97103.

March 14......YAKIMA, Wash. -- Northwest Sport Race Drizzle Circuit Contest 4. Precision aerobatics and Class I Mouse race, 9 a.m. NWSR at 11, NWSS to follow. Site: Valley Mall. Fee: \$5 for any and all events Contest Director: John Thompson, 1411 Bryant Ave., Cottage Grove,

April 11.....EUGENE, Ore. -- Northwest Sport Race Drizzle Circuit Contest 5. April 11.....EUGENE, Ore. -- Northwest Sport Race Drizzle Circuit Contest 5. A combat at 8:30 a.m., NWSR at 11, NWSS to follow. Final circuit trophies to be presented. Merchandise prizes. Site: Mahlon Sweet Airport. Fee: \$3 for one event, \$2 each additional. Contest Director: John Thompson, 1411 Bryant Ave., Cottage Grove, Ore., 97424 (503) 942-7324.

INDEX TO FLYING LINES ISSUES 13 to 24

Below is the index to Flying Lines issues No. 13 through 24. From time to time we at FL receive requests for back issues, which we are unable to fill because of our frugal practice of printing only enough to satisfy our sub-scribers. We always are willing to provide photocopies of specifically requested articles.

In order to let readers, particularly new subscribers, know what to order, we publish an annual index of articles. The one below is the second installment covering the second 12 issues of Flying Lines. The list is broken down into categories. It includes only the more or less major articles and columns, and doesn't include the small items, regular records and standings, routine features, or most letters. A few letters with key commentary on major issues are indexed key commentary on major issues are indexed.

To order, request the article by issue number or month, and headline. Please enclose a self-addressed, stamped envelope and 50 cents to cover copying costs.

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HOBBY SHOP DIRECTORY

WASHINGTON

HOBBY HOUSE -- Control-line, free-flight and RC supplies, 10011 Holman Hoad N.W., Seattle, Wash., 98177 (206) 782-1809. THE HOBBY PLACE -- Control-line and RC supplies, specializing in parts. 1415 N.E. 80th, Seattle, WA 98115. (206) 525-6757. Owned by Dodie Long. "If we don't have it, we'll get it." Radio-control, control-line and gliders. 136th St. East, Puyallup, Wash. 98373. 845-7675. Owned by R.B. (Bob) Pfeiffer. FIRGROVE MODEL SUPPLY --10611 (206)

CALIFORNIA

HERB'S SPEED AND RACING PRODUCTS -- Speed pans, epoxy glass speed tops, and other supplies. Send SASE for info. 1621 M St., Merced, CA 95340. (209) 722-7836. Owned by Frank Hunt.

THE FLYING FLEA MARKET

SOMETHING FOR NOTHING -- Renew your subscription to FL now and get two free SOMETHING FOR NOTHING -- Renew your subscription to FL now and get two <u>free</u> insertions of your classified ad. Send \$9.50 to Flying Lines, 1411 Bryant Ave., Cottage Grove, OR 97424. Flying Lines T-Shirts, \$8. Specify color (give us a second choice, too) and size.
 FOR SALE -- Talk to your flying buddies! One almost new 40-channel C.B. radio, almost never used, for \$55, including antenna. John Thompson, c/o FL. I'll consider a trade, too, good buddy.

> Flying Lines Nov. 1981 Page 9

WHO'S WHO IN CONTROL-LINE MODEL AVIATION?

Dome of you who have been in on Flying Lines from the very beginning may recall that in the first few issues we had a feature called, "Profiles," in which we did little biographical sketches of various modelers. That column sort of died out because readers didn't, in their modesty, respond to our requests for their life stories.

However, reader Rory Tennison has raised the idea again. Responding to our reader service poll in the last issue, he suggests that FL help all of us get better acquainted by running a monthly personality sketch of a featured mobler.

So, we'll give it another try. This time, to make it easier, we'll give you a form to fill out. We urge everyone, even you superstars, to take part. Just fill in the form and mail it to FL, and we'll initiate the monthly feature next month.

Add anything you'd like that's not on the form -- just use a separate sheet. Make your own sheet if you don't want to cut up the newsletter.

Name	Addres	s	
Telephone	Club	Age	
Spousa's name	Children_		
Occupation	E	mployer	

How long flying model airplanes_

Favorite events (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 would like to add:

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

POLITICAL STATEMENT

(Editor's Note: Flying Lines, in the interest of informing its readers to all pertinent modeling information, by policy accepts political statements offered by candidates for Academy of Model Aeronautics offices. The following is from Horrace Cain, a candidate for AMA secretary-treasurer. F^{\perp} does not endorse political candidates.)

ATTENTION: Mr. Member, Academy of Model Aeronautics (AMA), your support is now in urgent need. The AMA needs you and it also needs directors that are dedicated to ensuring the AMA serves you.

dedicated to ensuring the AMA serves you. The AMA <u>can</u> pursue and obtain new frequencies. The AMA <u>can</u> promote flying site acquisition, develop new modeling concepts and interests, and still maintain the highest standards of national and international competition programs.

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POLITICAL STATEMENT, continued

Who can be a significant asset to these operations? The AMA's secretarytreasurer can. read on and see how the ST can contribute.

The ST can work between AMA and the modeling industry to promote cooperative efforts to solve common problems concerning the FCC, FAA, flying sites, etc. The ST can provide the Executive Council with an impartial analysis of

financial information to assist them to better allow for the cost-efficiency of impending policies and directives as they may be consi dering.

The ST can provide a more complete informational file for review than a formal set of minutes can allow. This will save the EC time and therefore

save your money. The ST can collect and coordinate information concerning new modeling interests and trends. He can assist special-interest groups gain EC attention when needed. He can assist those with ideas and plans tarbeted at better management systems for modeling programs.

"ho has the dedication, the time, the experience, and the insight to perform these tasks? Horrace Cain, Buffalo Grove, IL, has for three years as AMA Dist VI VP displayed an intense desire to have AMA become a mature association dedicated to member service and the advancement of aeromodeling as a worthwhile sport.

A modeler since childhood, Horrace progressed through the rubber kits,

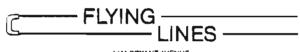
A modeler since childhood, Horrace progressed through the rubber kits, solid models, ignition CL, on to glow CL and started CL contest activity in 1956 after he completed the USAF Aviation Cadet Program. In the mid-60's he could compete in any of 17 different CL and FF events. A CD since '63, he started RC in 1971. He is now active in RC Q-500, sport scale and fun-fly events. He flew with some AF teams, worked at the '72-'73 "ats, owned a hobby shop, '70-'75, and still flew with local clubs. He served as Bist VI RC contest coordinator, '73-'75, and as AMA VP since Jan. '79. Horrace is from Livingston, TX, north of Houston. He spent his teens in school and construction work during the summers. He worked in Canada, Arkansas, Louisiana, Missouri and Pennsylvania. He entered the USAF in 1955 and graduated from the AVN/CDT program four months prior to his 21st birthday. He left the AF in '68 and was employed by United Airlines. He is now flying DC-8s out of Ohare in Chicago. He has flown B-737, B-727, and DC-10s. During this time Horrace has also served with the Iowa ANG, Des Moines, and with the AFRES in Pittsburg, FA.

with the AFRES in Pittsburg, PA. Horrace has developed a RC Club-Team Fun-Fly program within AMA District VI. He is assisting the development of a Warbird Sport-Scale event. (See the November <u>Model Builder</u>). Horrace is also promoting new CL concepts. These events are now being tested by the Peoria Area Wyre-Flyers. Horrace is always open to new ideas andmethods.

Horrace firmly believes in AMA. He knows the dangers that now exist if some entrepreneurs decided to go into the model fliers insurance business. It could be very profitable for a short term and destroy the AMA as we know it.

AMA is not perfect by a long shot. It <u>can</u> be improved. Horrace does not accept "It <u>cannot</u> be done" as an excuse or reason. He only listens to "Can Do."

So, Mr. AMA Member, if you are interested in AMA's future and your future to have clear frequencies and acceptable flying sites, then cast your vote for the one individual who is dedicated to the AMA as a strong secure association that listens to you and performs for you. Give AMA a working secretary-treas-urer, and not just a status-seeker that only knows to say, "Yes, sir, Mr. Worth!" Give AMA Horrace Cain. Don't delay. Vote today.



1411 BRYANT AVENUE COTTAGE GROVE, OREGON 97424

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 on subscrip-tions and advertisements for financial support. FL is your link with the rest of the Northwest's control-line modelers.

Help keep alive by spreading the word. Wear your FL T-shirt and tell your buddie: what it stands for. T-shirts available at \$8 -- name your size and color. Price for subscriptions 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 6 issues and \$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 ... Larry Miles Racing......Mike Hazel Buzz Wilson Carrier..... Grin Humphries Beginners....John Thompson

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BRINGING MODEL AIRPLANES TO THE PUBLIC -- A COORLINATED PROGRAM PROPOSAL By Larry Miles

I guess about every "sericus" modeler at some stage wonders about why more people aren't enjoying his hobby/sport. He knows it's such fine enjoy-ment plus having lots of educational benefits that are applicable to every other facet of life as well. Some guys try to get beginners programs going. Others try to simplify events such as Northwest Sport Race to make it hopefully more appealing to a larger segment of the modeling fraternity. Some devote hours to writing, editing and publishing local newsletters, regional newslet-ters writing articles in magazines, etc. Clubs sponsor delta dart programs. A few modeling teachers form school

clubs. But I think we all wonder at times why more people aren't enjoying modeling. It just seems that as much enjoyment as it brings, more ought to be involved.

So, why aren't more kids getting into modeling and what can we do to change things if appropriate and practical.

Several "whys":

1. Craftsmanship in the U.S. percentage-wize, is on the decline. More and more machine-produced products, more assembly lines, fewer handcrafted hore products including models.

2. Nice toys and sporting goods are readily available. Why build when you can buy, especially in an increasingly non-craftsmanship oriented society? 3. Modeling doesn't have high visibility of most other activities kids and grownups too indulge in. Very few manufacturers of model products

advertise outside the model press.

4. Increasingly population is metropolitan. Kids don't have farm chores Chores taught discipline and more importantly self-discipline as in days past. as supervision was often absent. Modeling requires self-discipline.

5. Modeling, even elementary modeling, is fairly complicated and without experienced counsel a would-be modeler stands a good (bad) chance of failure. Many won't seek assistance out of ignorance, shyness, foolish sense of pride,

or simply not knowing where to look for it. 6. In days past variety stores, 5&10, drug stores and hardware stores would carry kits like the Comet line that I and many others learned on. Not so today --it's more and more the local hobby shop or hobby combined with crafts and-or toys or nothing. So source is also a problem for some. What is the solution? I'm not sure but I think the modeling community's

approach has been too sporadic -- too much hit and miss.

The February, 1980, issue of <u>Model Airplane News</u> had an article on what is happening in Red China with modeling. In a way somewhat sobering in my They are treating model aviation as a serious classroom subject in view. their nation's schools in the hopes of developing career interests in science, math, engineering and technological fields. So why should that fact be sobering? I have a couple of degrees in engineering and I consider that my early years in modeling made a significant effect on my studying engineering in later years. As soon as I felt that I wanted to go into engineering, aeronautical was the area. I didn't get it -- the school I attended didn't offer it. I also wanted to be a Naval aviator (again modeling influence). No way -- eyes wouldn't pass.

Perhaps most modelers with many years' experience would say at this point, "nold it, you don't need to convince me. I can clearly see where teaching model aviation would be a good idea, but how about school boards ... how about convincing them?"

For the past couple of years, Earl Van Gorder has reported of about half a dozen school teachers in various parts of the country teaching model aviation either as a regular subject or extracurricular activity. Earl writes Flying Things for Fledgelings in <u>Flying Models</u>. Everything I've read about the teachers' reaction to students' enthusiasm

for learning model aviation is fantastic.

Ed Whitten's Model Aviation column, Junior Flight, has made similar ts. I recall one in particular where a teacher in the New York City area howing kids how to make models of cheap readily available materials reports. was showing kids how to make models of cheap readily available materials like styrofoam plates from the school cafeteria.

Modeling is such a diverse subject that history through its tie with aviation, reports on significant contributions to aviation becomes more interesting. Technical writing can be readily introduced by requiring papers on some aspect of model aviation.

Science's ties to aerodynamics are obvious. A thorough study of model two-stroke and four-stroke glow, diesel and ignition, wankel (rotary) and multiple-cylinder and jet engines would give a science student more understan-ding and interest in internal combustion engines than probably 99 percent of the U.S. adult population has. Torque power RPM curves and why bore is longer than stroke or vice-versa. Why cylinder-piston and crank carburetor timing are readily handled subjects for a small model ensine.

An introduction to chemistry is afforded by taking a look at various achesives used in modeling as well as components of model fuels.

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COORDINATED APPROACH, continued

Mechanical drawing becomes less of a bore and more fun if you're dealing with three-views of model engine crankshafts or drawing plans for a plane to be discussed in science as to whether it will fly or not.

Cooperation with an art teacher by a modeling instructor whose student wants to paint a butterfly using as his canvas the outboard wing of his controlline trainer might yield more interest from the student.

A study of model airframes is one step away from studying auto boay design or architecture.

The list of tie-ins to regular academic subjects and everyday life goes on and on as any modeler of several years' experience can tell you. Electric flight -- electric motors, radio control transmitters and receivers, servos, batteries, model engine fuel pumps, big pumps (the heart), model engines -metallurgy, castings, machining, die-cutting tools, honing, grinding. So back to the question of how do we get school teachers, administrators,

educators, etc., to take a look at the benefits of teaching model aviation. AMA announces its intention to publish a booklet to aid teachers in

AMA announces its intention to publish a booklet to all teachers in beginning model aviation and-or intermediate modeling and asks the other model publications, <u>Flying Models</u>, <u>Model Airplane News</u>, <u>Model Builder</u>, <u>Radio</u> <u>Control Modeler</u>, to announce it also, requesting that teachers, modelers and other interested people send their suggestions to AMA headquarters. Hobby Industry of America education committee is contacted for their input. Out of this data is compiled a booklet to help teachers to start and-or advance their program of model aviation. Plans for planes that have been proven, sources of materials (don't forget to mention checking the local hobby shop first), tie-ins to other areas of studies that teachers have tried and found beneficial, suggestions for broadening basic model aviation programs, references such as Scientific American's paper airplane contest (scientists from all over participated several years ago), which resulted in a book with full-size plans for many paper planes; or Bill Dean's Book of dalsa Hodels, by an English author, with about a dozen simple plans. Parry Higley's Einiature Engine Book, Hannan's Peanut Power, and maybe Jim Harris's book on teginning control-line, and model magazines also could be used as references.

Perhaps a couple of Walt Hooney's simple peanut model plans and how to build them, plans and instructions for Belta Bart I and Delta Bart II AMAzer control-line plane. Maybe a section on model rocketry and even kites (there are some rather sophisticated varieties these days that might challenge a few aeronautical engineers to explain their functioning).

Add some endorsemenets from prominent industrial, political and military, space and a viation personnel. Send one copy to each of the 50 states' departments of education with a cover letter from AMA president or executive airector asking officials of those departments of education to corefully subdy the contents and consider recommending to local school boards that they offer model aviation courses in their schools. Extra copies of booklets could be available from AMA headquarters, at AMA cost. HIA might be interested in helping with the initial financing as they stand to benefit most economically from the effort.

As more and more schools offer model aviation the federal government might want to finance printing as a government book. They already print a teachers' guide to the Delta Dart.

Not only would this solve a problem for the modeling community in setting people into modeling, making modeling better for all, but also an even more serious problem would be solved -- deckining enrollment in science, math, engineering and technical fields in our nation's post-high school educational system.

--Larry Miles, Apartment 89, 7707 Mission Gorge Road, San Diego, CA 92120.



AIR MAIL



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

DEAR FL:

My name is Gerald Schamp. I live in Lebanon, Ore., and am an avia modeler and have been for some 25 years. I am very much interestest in control-line flying, especially stunt. I am really turned on to this "oldtime stunt." I found out about you through correspondence with Dave Gardner in Tualatin who is heading up the...control-line contest in the first part of October.

My modeling has been dormant for about 10 years as far as being really active but the interest has been there. Family raising and one thing and another have not let me stay active up until about two year ago when 1 picked up an old Veco Chief. That got the ball rolling and since then I have really gotten

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AIR MAIL, continued

into the sport with lots of enthusiasm. I built and flew some planes, I got all my old stuff out of storage, set up a good workshop and am really hyped I got on the whole thing.

When I first read about OTS in a magazine I knew right then I had to pursue it to find out as much as I could and get involved as much as possible and find out how much interest there is around. I missed the contest this year. In fact, I haven't ever been to one. Always wanted to but just never made it. Now, I'll just have to try and make up for lost time the best I can. Dave tells me in correspondence that there is not sufficient interest yet

in OTS To include it in the contest in Portland this year, but wants to have it next year. I myself have sparked some interest around my area here in

Lebanon and the Albany area. I would certainly like to promote as much in-terest as possible in order to get control-line flying "Back on the road again." ...I would certainly like to get on your mailing list, subscribe to it or whatever, in order to find out more what's going on. Even better, I have a fairly flexible schedule, maybe we could get together and get something going and promote some interest and participation in control-line flying, especially old-time stunt.

-Gerald Schamp, 368 Isabella, Lebanon, Ore., 97355 (503) 451-4283 DEAR FL:

I was very pleased to see the big turnout at the Regionals this year. Just like old times! Pat yourselves on the back for a job well done ...

Well, my Corsair dies yesterday. I was flying from an unfamiliar field and it tripped in a crease, breaking the control system. I failed to detect that in the exam, and on the next takeoff I had no elevatorcontrol. I can tack it back together and hang it on the wall, but it will never fly again. What a grand old bird it was. At least it died in action instead of a

suitcase falling on it.

I have finished a profile Staggerwing and am looking forward to flying it soon. What a monster -- 840 square inches! --Orin Humphries, 5208 N. Elgin, Spokane, WA 99208. (Editor's Note: And thanks back to you, Orin, for helping make the Regional great by running carrier and profile scale, one of the most popular events!)

DEAR FL:

Congratulations on your September, 1981 issue! Best "Speed Scoop" Section I've seen so far. I urge you or Chris Sackett to submit his drawings and specifications on dollies to Gene Hempel (speed column editor) at <u>Model</u> Aviation.

Possibly Gene could reprint it in MA to the benefit of other modelers that might not yet subscribe to <u>Flying Lines</u>. Chris also mentions Bob Lauderdale and his speed designs, Dizzy Boy and Dizzy Bee. I have full-size reprints of Lauderdale's All American, a Class D speed plane and accompanying article. I will send these to any readers that request it from me and send \$1.50 to cover printing and postage. --Lester Edward Deily, 241-05 52nd Ave., Douglaston, L.I., N.Y. 11362

DEAR FL:

the paper boy, grocery clerks, etc., about my "Shadow Racing" T-shirt, to wit: "Hey, mister, how do you race shadows?" etc., I just get tired of providing entertainment (joke butt) for all these people!

Seriously, I really enjoy FL, especially I admire all of those lone CL enthusiasts who inhabit the great Nunthwest. Us 4 ukie fliers here in Northern California are really lucky to have each other to share a common interest with

--Bob Kampmann, 6312 Kenneth Ave., Orangeville, CA 94010.

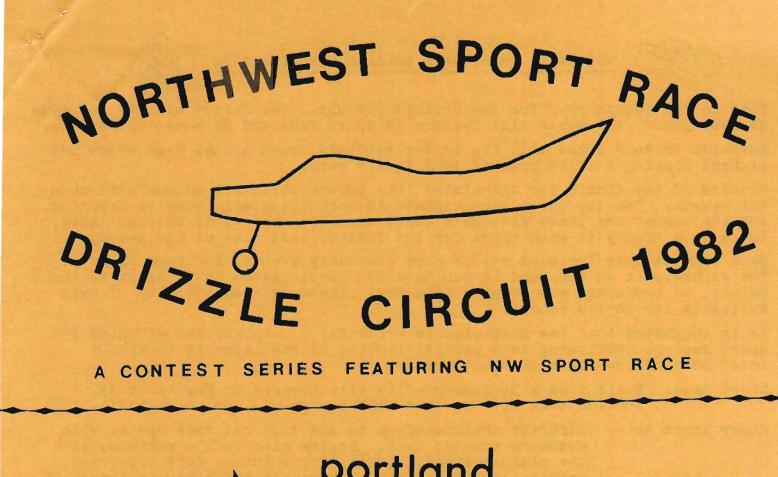
FL RAFFLE RETURNS -- STILETTO KIT IS PRIZE

The Flying Lines raffle returns thanks to the generousity of Don McClave, Portland stunt flier extroardinare, who has donated a very fine prize. The prize is a Stiletto kit manufactured by Dick Mathis Design Group.

Now out of production, this kit was one of the finest stunt kits ever made, and it was a very expensive item. Stiletto is the airplane designed by Les McDonald and used by McDonald to win two world championships. To sign up for the raffle, these are the ticket prices: 1 ticket for 50 cents, 3 tickets for \$1, and 7 tickets for \$2. Fill out the form below and send it to FL. All proceeds support the newsletter.

Name_ ___Address____ Telephone Number tickets Amount enclosed

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portland december 13

1

2

3

5

seattle january 10

astoria february 14

> yakima march 14

april 11

ONCE AGAIN, NORTHWEST AREA CONTROL LINE CLUBS AND FLYING LIMES NEWSLETTER ARE SPONSORING THE SPORT RACE DRIZZLE CIRCUIT. ALL THE CONTESTS INCLUDE NW SPORT RACE AND NW SUPER SPORT RACE, AND INCLUDE OTHER VARIOUS EVENTS. PLEASE SEE REVERSE SIDE FOR ALL DETAILS



NORTHWEST SPORT RACE DRIZZLE CIRCUIT 1982

This is the fourth year for the drizzle circuit. The format will be the same as last year. All meets will feature NW sport race and NW super sport race.

Entrants in each class will fly in two randomly drawn heats, from which the highest placing entries proceed to a finals race.

Results of the finals are translated into points which are accumulated thru the season. The top three participants in each class will receive trophies, and the number one place also gets their name on a perpetual trophy. Also, there is a trophy in each class for the fastest heat time of the season.

Each contest also includes one or more secondary events, for some variety. The emphasis is on fun, and if you have not participated in NW sport racing before, we encourage you to give it a try. There is always plenty of help available for novice racers.

It is suggested that new participants write for a complete set of rules for sport racing. Following is a partial listing of requirements to give a brief idea of the class distinctions.

Sport Race: Built from a 35 size profile kit, powered by Fox stunt 35, suction tank with no fast fill equipment, and no shutoffs.

Super Sport Race: Aircraft shall conform to AMA slow rat race specs, with outboard mounted tank. Engine size is .36 maximum, of the plain bearing, single bypass intake port type, and operate on suction feed. Shutoffs and other equipment OK.

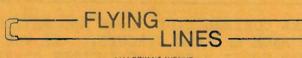
Both Classes: .018 x 60 multi strand lines. Heat is 70 laps with minimum of one pit stop, and the final is 140 laps with minimum of two pit stops. All other pertinent rules from the AMA CL racing unified rules section shall apply in regard to safety and the conduct of races.

December 13----#1 Portland. Secondary events: Mouse Race class I & II. Mouse starts at 8:30 AM, NWSR at 11:00, followed by NWSSR. Site: Delta Park. Contest Director: Rich Schaper, Po Box 608, Kelso, WA 98626 (206) 425-6637

- January 10----#2 Seattle. Secondary event: Skyraider's "Sorta Scale" at 9:00 AM. NWSR at 11, followed by NWSSR. Site: Boeing developmental Center, in Kent. Contest Director: Dave Mullens 15559 Palatine Ave N, Seattle, WA 98133 (206) 365-5436
- February 14----#3 Astoria. Secondary event: AMA rat race at 9 AM NWSR at 11, followed by NWSSR Site: Port of Astoria Contest Director: Dave Green, 200 W Franklin, Astoria, OR 97103 (503) 325-7005
- March 14-----#4 Yakima. Secondary events: Precision Aerobatics and Mouse race class I, both at 9 AM. NWSR at 11, followed by NWSSR. Site: Valley Mall Contest Director: John Thompson 1411 bryant Ave, Cottage Grove, OR 97424 (503) 942-7324
- April 11-----#5 Eugene. Secondary event: A combat. NWSR at 11, followed by NWSSR. Presentation of circuit trophies at conclusion of meet. Site: Eugene Airport Contest Director: John Thompson (see above)

All meets are AMA sanctioned, and AMA membership is required to participate, and will be available at registration.

The Drizzle Circuit is sponsored by NW control line clubs and Flying Lines newsletter. Please write Flying Lines for complete rules and any other info desired. Please contact the appropriate contest director for directions to flying site, and details of that contest.





PHOTOGRAPHIC POTPOURAI

Traveling modeler Rory Tennison of Libby, Mont., sent a variety of photos for FL readers. At top left, a shot of Tennison's Nobler, which flew away from .012" lines. Clockwise, lineup of planes at a typical Montana flying session. Judging of "Sorta Scale" entries at Seattle Skyraiders' Raider Houndup. Sport Race mishap aftermath. Ubiquitous Don McClave prepares the venerable Stiletto. Nifty cake at Shady Acres Combat Weekend in September ('hompson photo.)

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