

FLYING LINES

1411 BRYANT AVENUE
COTTAGE GROVE, OREGON 97424

EDITOR: JOHN THOMPSON
PUBLISHER: MIKE HAZEL

November, '82 NEWS OF NORTHWEST CONTROL LINE MODEL AVIATION Number 40

GENTLEMEN, FLIP YOUR PROPS

Yes, fliers, it is time to inaugurate the 1983-84 Northwest Sport Race Drizzle Circuit -- the FIFTH annual five-contest winter racing series designed to keep that old modeling adrenalin flowing during the winter time.

The Drizzle Circuit has traditionally been blessed with actually less drizzle than one might expect in a Northwest winter, as the modeling gods shine favorably upon us (we won't talk about 1981-82 -- we must have been bad boys in 1981).

There will be many similarities this year to the past two years, but some major differences as well. The primary difference is that ALL five contests will be in a central location -- Portland's Delta Park.

Delta Park was selected not only for its central location (allowing modelers from western Oregon or Washington to make it a one-day trip without need for overnight accommodations) but also for several other amenities. Those include rest room and shower facilities for those days it does get damp, along with food concessions. The flying circle itself is asphalt for racing, and well-cropped grass for the events requiring soft surfaces.

The format will again include Northwest Sport Race and Northwest Super Sport Race as the main events. Each of those events will be run at every contest, and points will accumulate toward season-ending trophies. As usual, Flying Lines will coordinate the circuit and compile the appropriate statistics. Race procedure will follow the standard Drizzle Circuit practice of allowing each entry to fly two heats, with placing (not times except in ties) determining who goes to a feature race. Remember that heat assignments will be made on a random draw, with no substitutions when pit-pilot crews are drawn in the same heat.

Each contest also will have a secondary event, as selected by the contest directors. Contest directors are provided by the various sponsoring clubs. Those contest directors also have made the arrangements for trophies and other details regarding the races.

At every contest, the secondary event will start at 9 a.m. sharp, and Northwest Sport Race will start at 11. Northwest Super Sport Race will start at the conclusion of Sport Race. All competitors are asked to plan to spend the entire day at the contest to provide officiating services when they are not racing. Also, any owning stop watches and lap counters are asked to bring them.

There is one minor rule change that Super Sport Race pilots should be aware of. Feature races will require three pit stops instead of the previous two. This change, made at the direction of participants who voted for it, is intended to standardize NWSS with AMA racing events. Northwest Sport Race will continue to have two pits in the feature.

Here is the schedule. Some additional information may be added later.

<u>NO.</u>	<u>DATE</u>	<u>EVENTS</u>	<u>ENTRY FEE</u>	<u>SPONSOR</u>	<u>CONTEST DIRECTOR</u>
1.	Dec. 12	NWSR, NWSS, MOUSE I		FLines	Rich Schaper
2.	Jan. 10	NWSR, NWSS, RAT RACE		Skydrds	Dick Salter
3.	Feb. 13	NWSR, NWSS, 1/2A COMBAT	\$4 1st, \$2	CLAMS	Dave Green
4.	March 13	NWSR, NWSS, SPORT COMBT	\$5 1st, \$2	Prpsprs	John Thompson
5.	April 10	NWSR, NWSS, SLOW RAT		FLines	Mike Hazel

See you at the races -- Portland, Ore., Dec. 12, 1982, 9 a.m.!

PIT STOP ADDED TO NWSS FEATURES

Northwest racing pilots and crewmen have voted to add a third pit stop to the feature races in Northwest Super Sport Race. This rules change was proposed at the end of the 1981-82 Drizzle Circuit by Tom Knoppi of Seattle, and approved by a vote in a Flying Lines poll.

There were no changes made to Northwest Sport Race. Below are the revised NWSS rules. Copies of rules for both events can be obtained by writing Flying Lines. Please enclose SASE.

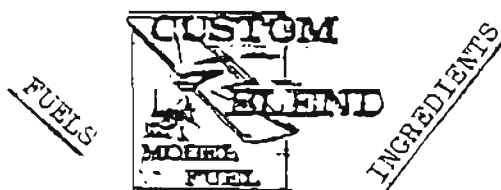
1983
RULES FOR
NORTHWEST SUPER SPORT RACE

1. PURPOSE: It is the intent that this event will serve as an intermediate racing class between Northwest Sport Race and the AMA racing events.
2. All pertinent rules from the AMA control line racing unified rules section shall apply in regard to safety and the conduct of races, except as follows.
3. ENGINE: The engine shall be of .36 c.i.d. maximum, and shall operate on suction feed. The engine shall be of the plain sleeve bearing type, with single bypass intake port. No variable or in-flight adjusting carburetors are allowed as used in AMA slow rat race; however, any other modification of the intake is permissible. There is also no restriction regarding engine rework, although all major components shall be produced by the original manufacturer. No exhaust extensions are allowed except bona fide mufflers, which do not increase engine performance.
4. AIRCRAFT: The model shall conform to the AMA slow rat specifications:
"Models must be of profile fuselage type, and must conform to the general profile definition. The model must have a minimum fuselage length of 24" when measured from the propeller thrust washer face to the leading edge of the movable elevator surface.
"The minimum wing area shall be 300 square inches. The wing must have a minimum thickness of one inch when measured at any point along the span, with the exception of the last two inches before each wing tip.
"All models must have a canopy, horizontal stabilizer, elevator and vertical fin...Models must have a fixed landing gear with a minimum of one wheel."
5. FUEL TANK: The fuel tank shall be fully external and forward of the wing leading edge, and located ~~on the outboard side of the fuselage. The tank~~ may not be designed so as to cowl the engine. The tank may not be pressurized, but the vents may be directed forward into the airstream.
6. PULL TEST: The plane and entire control system shall undergo pull test of 35 pounds.
7. LINES: The minimum diameter of lines shall be .018", and shall be of the stranded type, with a length of 60 feet measured from the handle grip to the fuselage, plus or minus 6 inches tolerance.
8. RACES: Preliminary heats shall be of 70 laps duration, with one pit stop minimum required. The final or feature race(s) shall be of 140 laps duration, with three pit stops minimum required. All races shall be flown with at least two entrants, and not more than three entrants. At contests where entrants fly prelims to determine finalists, at least three entries shall proceed to the final race(s). The decision on the number of finalist entrants shall be made by the event director and be made in advance before the start of any prelims.

11/1982 FL/jmt

UNIFLOW STUNT TANKS

PROFILE: COMBAT: RACING
NARROW & WIDE WEDGE TANKS
STANDARD & UNIFLOW VENTING
CAPACITIES: 1½ to 6 ounces



SYNTHETIC and/or CASTOR
LUBRICANTS
NITRO & NON-NITRO BLENDS

NEW!! Full-Sized X-Sects
in our 1982 Brochure.

SEND 50¢ (check or stamps)

to:

CAROLINA-TAFFINDER

8345 Delhi Road
Charleston Heights, S.C. 29405

WHERE THE ACTION IS

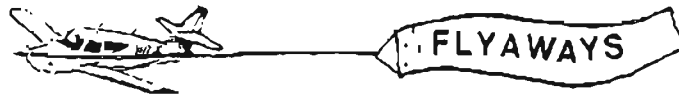
UPCOMING ORGANIZED EVENTS

Here is the list of upcoming Northwest events currently scheduled. Contest directors, get your information in to us now!

- December 12...PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest 1. Class I Mouse Race, 9 a.m. Northwest Sport Race, 11 a.m. sharp. NW Super Sport Race follows NWSR. NWSR/NWSS run 2-heat+feature format, points accumulating for circuit championship. Site: Delta Park. Entry fee: \$3 FIRST EVENT, \$1 EACH EXTRA EVENT. Contest director: Rich Schaper, P.O. Box 608, Kelso, WA 98626. Sponsor: Flying Lines. Prizes: Merchandise.
- January 10...PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest 2. Rat race, 9 a.m. NW Sport Race, 11 a.m. sharp. NW Super Sport race follows NWSR. NWSR/NWSS 2-heat+feature, points accumulating for circuit championship. Site: Delta Park. Entry fee: Contest Director: Dick Salter, 7217 S. 133rd, Seattle, WA 98178. Sponsor: Seattle Skyraiders. Prizes: Merchandise.
- February 13...PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest 3. 1/2A combat, 9 a.m. NW Sport Race, 11 a.m. sharp. NW Super Sport Race follows NWSR. NWSR/NWSS 2-heat+feature, points accumulating for circuit championship. Site: Delta Park. Entry fee: \$4 for first event, \$2 for each additional event. Contest Director: Dave Green, 200 W. Franklin Ave., Astoria, OR 97103 (503) 325-7005. Sponsor: North Coast CLAMS. Prizes: Merchandise.
- March 13...PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest 4. Northwest Sport Combat, 9 a.m. NW Sport Race, 11 a.m. sharp. NW Super Sport Race follows NWSR. NWSR/NWSS 2-heat+feature, points accumulating for circuit championship. Site: Delta Park. Entry fee: \$5 for first event, \$2 for each additional. Contest Director: John Thompson, 1411 Bryant Ave., Cottage Grove, OR 97424 (503) 942-7324. Sponsor: Eugene Prop Spinners. Prizes: Merchandise.
- March 27...SEATTLE, Wash. -- Seattle Skyraiders 3xl Event. Three events (NW Super Sport Race, stunt air balloon bust) with one airplane. Site: Carkeek Park. Contest Director: Dave Mullens, 15559 Palatine Ave. N., Seattle, WA 98133. (206) 365-5436.
- April 10...PORTLAND, Ore. -- Northwest Sport Race Drizzle Circuit Contest 5. ^{AMA} Slow rat race, 9 a.m. Northwest Sport Race, 11 a.m. sharp. NW Super Sport Race follows NWSR. NWSR/NWSS 2-heat+feature, points accumulating for circuit championship. Site: Delta Park. Entry fee: \$3 FOR EACH EVENT. Contest Director: Mike Hazel, 1040 Windemere Dr. NW, Salem, OR 97304. (503) 364-8593. Prizes: Trophies. Circuit championship trophies and perpetual awards handed out.
- May 8...KENT, Wash. -- Seattle Skyraiders Spring Tune-Up. Precision aerobatics (JR. stunt, beginner, intermediate and advanced-expert), Sorta Scale. Site: Boeing Space Center. Contest Director: Dave Mullens, 15559 Palatine Ave. N., Seattle, WA 98133. (206) 365-5436.
- May 28-29...EUGENE, Ore. -- Northwest Regional Control Line Championships. Rat race, slow rat race, Goodyear, NWSR, NWSS, Class I mouse race, Class II mouse race; AMA, FAI, 1/2A and slow combat; AMA and profile scale; Class I, II and profile carrier, precision aerobatics (three PAMPA classes); balloon bust, 1/2A, A, B, D, jet, Formula 40, and FAI speed. Displays, concessions, camping, hobby shop, party, rest rooms, restaurant, airline connections. Site: Mahlon Sweet Airport. Sponsor: Eugene Prop Spinners in cooperation with other Northwest clubs. Prizes: trophies and \$2,000 worth of merchandise. Information: Contact Flying Lines, 1411 Bryant Ave., Cottage Grove, Ore., 97424.
- Sept. 10-11...KENT, Wash. -- Washington State Control Line Championships. FAI Team Race, rat race, NWSR, NWSS, Class I&II Mouse race, balloon bust, profile carrier, Class I-II carrier, slow, 1/2A and fast combat, precision aerobatics, sorta scale, sport or precision scale, Formula 40 speed, record-ratio speed. Trophies and merchandise. Site: Boeing Space Center. Contest Director: Dave Mullens, 15559 Palatine Ave. N., Seattle, WA 98133. (206) 365-5436.

AD RATES

Advertisements in Flying Lines help pay the bills and help keep control line modeling healthy in the Pacific Northwest. Half page ads cost \$6 per issue. Quarter-page ads are \$4 per issue. Classified ads cost \$1 for five lines. Hobby Shop Directory ads cost \$15 per year. Staple-in brochures, price negotiable. CLUB FLYERS INCLUDED FREE. Help keep FL alive and keep your subscription rates down -- sell an ad!



RANDOM TIPS AND RIBS FROM THE FL WORKSHOP FLOOR

====Club activity seems to be on a healthy upswing throughout the Northwest. The Seattle Skyraiders have added seven new members to their club roster, and had a grand total of 41 people, including wives and kids, at their last club meeting. The Eugene Prop Spinners have been adding a member here and there and now have a club roster of about 17 people, most of which are active. The Prop Spinners spent an enjoyable evening learning all their is to know about full-scale flight training at McKenzie Flying Service's headquarters near the Prop Spinners' flying field, another of the fine programs set up by EPS Prexy Mel Marcum. The North (Oregon) Coast Control Line Aeromodelers Society (CLAMS) are mounting a four-person assault on the Northwest Sport Race Drizzle Circuit this winter, including junior Rod Watson and senior Niels Madsen along with old regulars Dave Green and Bill Varner.

====A technical tip from The Skywriter, Skyraiders' newsletter edited by Dave Mullens: Did you know that alcohol is hydrophilic? I'm sure you know that the primary ingredient of your model airplane fuel is alcohol. Take care not to allow your fuel to absorb water. Winter is coming, along with the cold damp drizzles. Secure the caps on partial jugs of fuel and store the fuel off cold cement floors and keep it out of a storage area where the temperature fluctuates wildly. Do not store fuel in the house.

====Open to Debate Dept.: The Eugene Prop Spinners Meeting Bulletin, edited by Tom Kopriva, reports that new Prop Spinner Gerald Schamp has the motto stenciled to his box: "If God would fly model airplanes He would fly stunt." Boy is Gerald going to be surprized when he gets to heaven and finds the sky crowded with Peanut Scale models!

====District XI Control Line Contest Board member John Thompson thanks all of you who have submitted suggestions and comments about current rules change proposals. He will be sitting down over Thanksgiving weekend to try and sort out all the proposals and come to his decisions on votes. Boy, is this an educational process!

====If you think this issue of FL looks a bit smaller than usual, you are right. In fact, it is about half the normal size. This is a rush "economy" issue that was intended to get the word out about the final Drizzle Circuit details, while costing as little as possible. Yes, friends, FL is broke again; time for all of us to get out and start stumping the bushes for more subscribers and advertisers! In the meantime, get ready for a big December issue with lots of our regular features.

EUGENE'S TOY AND HOBBY

Your Northwest Regionals contest headquarters!

ET&H has provided one of the Northwest's most complete stocks of control-line hobby supplies since the sport was invented -- the Agerter family has owned ET&H for almost half a century!

- | | | |
|-------------|-------------|-------------|
| * Fuel | * Props | * Magazines |
| * Hardware | * Plugs | * Engines |
| * Tools | * Kits | * Wood |
| * Coverings | * Adhesives | * Paints |

If we don't have it, we'll order it!

We ship daily, UPS or mail. Give us a call.



**Eugene's
Toy and
Hobby**

32 East 11th Avenue, Eugene, Oregon 97401

(503) 344-2117

HOBBY SHOP DIRECTORY

FIRGROVE MODEL SUPPLY -- radio Control, Control-Line and Gliders. 10611
136th St. East, Puyallup, Wash. 98373. (206)
845-7675. Owned by R.B. (Bob) Pfeiffer.

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

FOR SALE -- Three K&B S-40 engines, excellent, \$37 each. K&B 5.8, new in box,
\$55. Johnson .35 C.S., excellent, \$28. Johnson .35 C.S., ex. filed,
good runner, \$18. Three K&B #8056 .40 RR, new in box, \$45 each.
K&B .40 RR, good runner, excellent, .20. Supertigre .40 RR old
model, good runner, excellent, \$20. Two S-40 K&B cases, \$8 each.
Supertigre .35 plain bearing, new in box, \$50. Have old glow and
ignition engines for sale, also parts. Send SASE for list. Gordy
Teschendorf, 2213 S. 25th St., Milwaukee, Wisconsin, 53215. Home,
(414) 672-2629. Work, (414) 463-4505 after 5:30 p.m. (40-41)

SAFETY!! -- Flying Lines has located a good price on lightweight plastic bicycle
helmets with chin straps, if we order in bulk quantities. These
helmets are excellent for racing and combat pit crews. The price
would be \$20 postpaid or \$19 if delivered in person at contests.
We must have orders for four helmets (besides our own) before
we can get this price. If interested, send your order, including
head size, immediately. We would like to order in time to get them
for Drizzle Circuit racing. Flying LINES, 1411 Bryant Ave., Cottage
Grove, OR 97424.

Manufactured by Twinn-K Inc. P.O. Box 31228 Indianapolis, Indiana 46231

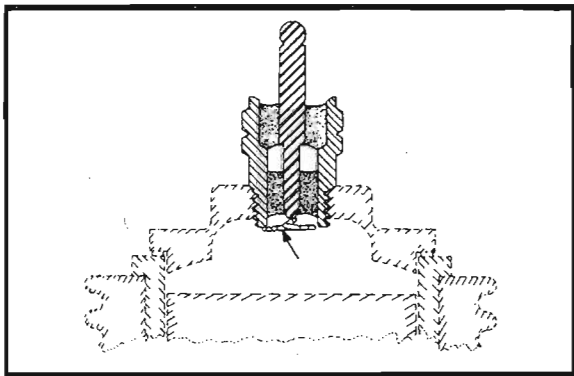
THE SUPERIOR GLOW PLUG — GLOBEE

The GloBee glow plug has a unique design. The flat coil is fully exposed to the combustion chamber at all times. Everyone knows that the fuel in the combustion chamber must reach a certain temperature in order to ignite. The conventional plug's coil has a spiral design. The ignition temperature is usually found near the center of the coil wire. In the conventional plug this point is found inside the plug where only a small amount of gas reaches before ignition takes place and starts burning the remaining gas in the combustion chamber. This process takes time and will slow down the engine's speed and power.

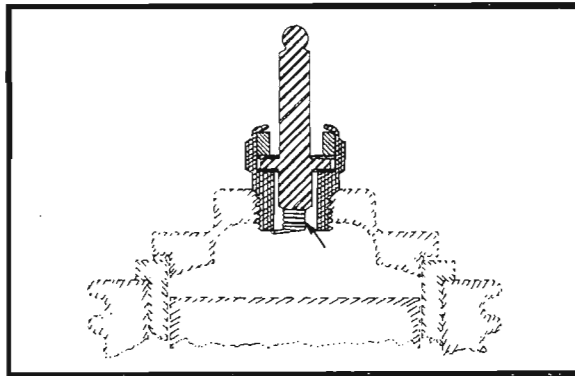
GloBee plugs' flat coil is fully exposed to the combustion chamber. The ignition temperature is always in the best position to get the most efficient combustion. This will give your engine faster ignition, higher RPM, more power and higher fuel efficiency.

In addition to the coil design, GloBee plugs have a patented glass to metal seal which is fused at extremely high temperatures. This glass acts as a heat sink to allow excess heat to escape.

All these quality features cost money, but hobbyists around the world demand GloBee's high quality and many say GloBee is more economical because of the long life of GloBee plugs.



GloBee glow plug (flat coil design)



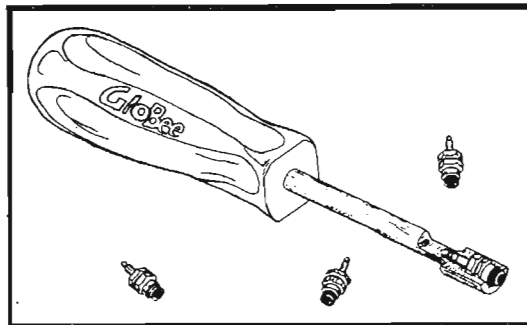
Conventional Plug (spiral design)

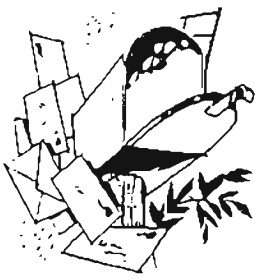
THE SUPERIOR GLOW PLUG WRENCH — GLOBEE

GloBee has the finest fuel-proof glow plug wrench. A wrench designed for the serious hobbyist. Twinn-K inserted a fuel-proof gripper inside the GloBee wrench. The gripper holds the glow plug securely — no more expensive glow plugs dropped into the dirt or in the water. This fine product will pay for itself in saving lost or damaged plugs due to inferior wrenches.

The wrench is long enough for easy use. The bright distinctive red handle identifies it as your GloBee wrench. It's easy to locate in your tool box too. Order your GloBee Wrench today.

Catalogue #4228





AIR MAIL



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

DEAR FL:

Glad to hear the Drizzle Circuit lives. Depending on secondary events, I doubt if I will attend many of the races myself. Yes, Lick Salter has agreed to CD the secondary event at the January DC...

We had our club meeting last night. Would you believe we had 41 bodies present for a Seattle Skyraiders club meeting? That count includes wives, sweethearts and kids and to say we were overwhelmed is an understatement. We signed up two more juniors that are already flying and show the enthusiasm it is nice to see.

Our tentative schedule of events for next year so far is: 3xl at Garkeek Park March 27. Spring Tune-Up at Boeing Space Center May 8. May 7 we will hopefully conduct a stunt clinic for new fliers and planes by Paul Walker. At least three PAMPA classes plus junior stunt and Profile Scale will be the events. Sept. 10 and 11 will be the dates for the RR-Up 83, the WSLC. Same format as this year with the addition of 1/2A combat, precision scale or sport scale and probably all four classes of precision aerobatics.

I would still like to make my case for having all four classes of precision aerobatics offered at the Regionals. If assuring every contestant of a trophy by offering more classes is the issue, only award two trophies per class. This is what Emmett did at the Boeing Air Fair this year. In the recent past I haven't seen any precision aerobatics trophies left on the table at the awards presentation, which can't be said for some of the events which could be run as a class and figured as record ratio. One of the ideas the Canadians have used also makes sense, for carrier. They have been using record ratio when Class I and II are combined. It would sure seem to give the guy with a Class I more incentive to get out and do it. We're going to give it a go at next year's Roundup.

Lots of luck on the Drizzle Circuit. Hope to see you down there a couple of times. New Skyraiders are: Pete Bergstrom, Kent Davis Jr., Ray Davis, Dave Gardner, Kristopher Bondeson Jr., Ken Jensen and Paul Walker (he who does not like model airplane clubs).

--Dave Mullens, 15559 Palatine Ave., N., Seattle, WA 98133.

DEAR FL:

I'm looking for the address of Terry Miller and my flying friend here in Spokane (Orin Humphries) told me you might fix me up.

I've got an old owner's manual for an old plastic Cox P-40, which I'd like to give to Terry so he can add it to his collection of plastic airplanes.

If I've got the wrong name of the fellow who displays his plastic planes at the contest at Eugene please set me straight.

--Stanley Johnson, E. 527 Courtland, Spokane, WA 99207

(Editor's note: It is indeed Terry Miller who displays the extensive plastic RTF collection. We're sure he'd appreciate correspondence from anyone with similar interests. Terry Miller, 2823 W. Sherwood, Roseburg, OR 97470.

SCALE DOCUMENTATION

DRAWINGS-PLANS-PHOTOS-BOOKS

IF YOU ARE TRYING TO DECIDE WHAT YOUR NEXT SCALE MODEL WILL BE....GET OUR SET OF AIRCRAFT CATALOGS.... \$2.00

PLANEY OPERA/C
 COLOR SCHEMES
 NEQUALLY
 AEROBATIC
 MILITARY

WE ARE ONE OF THE LARGEST COMPANIES IN THIS BUSINESS, AND WE OPERATE RIGHT OUT OF YOUR HOME STATE OF OREGON!

ASK ABOUT OUR ---
BK SCALE DRAWING PACKETS
 --- AT YOUR LOCAL HOBBY DEALER

SCALE AEROBATIC HEADQUARTERS

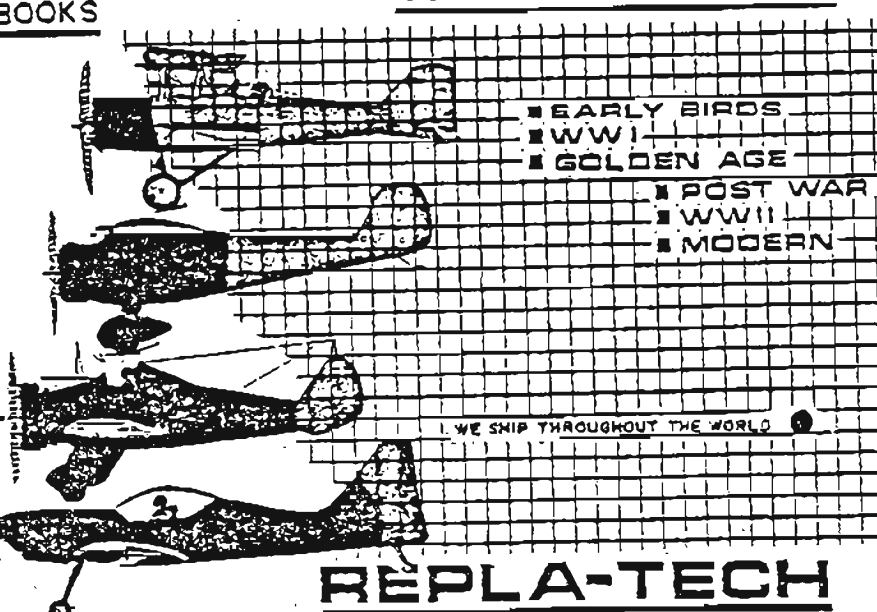
- EARLY BIRDS
- WWI
- GOLDEN AGE
- POST WAR
- WWII
- MODERN

WE SHIP THROUGHOUT THE WORLD

REPLA-TECH

INTERNATIONAL

48500 MCKENZIE HWY.
 VIDA, OREGON 97488





STUNTATHON '82 ACTION AND NOSTALGIA

The annual celebration of stunt and control line flying's origins in Portland last September was caught in these pictures by John Thompson and Frank Macy. Clockwise from top: Four perspectives of NW stunt "master" Paul Walker on his way to winning expert stunt. Stunt judges Jim Parsons (l) and Bob Emmett. Terry Miller receiving congratulations from Dora Walker, widow of Jim Walker, for best craftsmanship in display event. "Mr. Fireball" CL historian Frank Macy. Don Schultz, with Chip, 2nd expert. Fireball show moderator Pat Webb. Display planes. Lineup of stunters.

NEXT MONTH IN FLYING LINES!

Rules for sport combat. Columns resume with Beginners' and sport flying topics. More great pictures. Turkey Tournament and Drizzle Circuit results. And much, much more!

FLYING
LINES

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 upon support from subscribers, advertisers and donors.

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

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

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

Here is the FL staff:

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