#### 1411 BRYANT AVENUE

COTTAGE GROVE, OREGON 97424

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#### NEWS OF NORTHWEST CONTROL LINE MODEL AVIATION Number 28 Sept., 1981

#### SHADY ACRES CONTEST RETURNS -- WELCOME BACK!

The Shady Acres Combat Weekend, last held in 1977, returned over Labor Day weekend with two days of competition and that little something extra that makes Spanaway, Wash., the place to be on that holiday.

makes Spanaway, Wash., the place to be on that holiday. The combination of model airplanes with the jolly party (including beer fest, water-balloon toss and tug-o-wars) and the strawberry pancake breakfast Sunday morning, followed by more beer and trophies Sunday night, was perfect. Gary Byerly was the mastermind and host, and Margaret Byerly topped off the festivities with the creation of the most unusual and humorous trophies for first place in all events that have been seen in many a year. The contest brought out a field of 12 for the AMA combat basheroo on Sunday, which had been preceded by slow combat, Northwest Sport Race and <sup>1</sup>/<sub>2</sub>A combat on Saturday. Things started off Saturday morning with four entries in all we have been seen in the started off saturday.

Things started off Saturday morning with four entries in slow combat, which finally was taken by Dick Salter. Northwest Sport Race had seven entries, and Shady Acres' own Lowell Paddock cruised to a 9:48 feature and first place. Sport racers managed to keep Dick Salter on the sidelines punching a watch and shouting "Go!", the only safe way to beat him. Racing was close and clean, but no spectacular times were seen.

Half-A combat was fast and furious, with quite a bit of equipment destroyed and some very good matches. Will Naemura ended up in first place, going through the whole 6-entry field with one plane in a double-elimination contest.

Things got serious on Sunday when the strawberry and pancake-stuffed fliers started AMA combat. It was a strong field, but Bill Varmer made it to the finals against Will Naemura and came out on top, having to beat Will Varner also won the Aug. 23 twice in the double-elimination format to do it.

contest in Eugene, making it a two-for-two sweep. The contest was held at a football field near the Shady Acres airport, where most of the SA combat team lives. To the combat fliers who missed it, we can only say, you missed a good one! Here are the complete results: SLOW COMBAT (4 entries)

Dick Salter, Seattle, Wash. -- Spider, scratch from magazine plans, 36" span, balsa-Fascal, Y&O 9x7 prop, Fox Combat Special, K&B plug, Sheldon's 15% nitro fuel, uniflow TKO Racing 3-oz. tank.

2. Gary Byerly, Spanaway, Wash. 3. John Thompson, Cottage Grove, Ore. 4. Dick McConnell, Seattle, Wash. NORTHWEST SPORT RACE (7 entries)

NORTHWEST SPORT MACE (7 entries)
1. Lowell Paddock, Spanaway, Wash., 4:38 heat, 9:48 feature -- Teezer, Hobby Market kit, 41" span, foam and balsa, wrapping paper finish, 9x6 Taipan prop, Fox .35, Duke's Fuel (10% nitro), 22-oz stunt tank.
2. Dave Green, Astoria, Ore., 5:19 heat, 10:41 feature.
3. John Thompson, Cottage Grove, Ore. 5:06 heat, 10:47 feature.
4. Gary Byerly, Spanaway, Wash., 5:06 heat, 12:31 feature.
2. OMBAT (6 entries)
3. Will Naemura. Portland. Ore. -- Dirty Beaver. Dan Rutherford design.

Will Naemura, Portland, Ore. -- Dirty Beaver, Dan Rutherford design, 27" span, balsa-Monokote, 5½x3 Top Flite prop, TeeDee .049, Sheldon's 50% nitro fuel, bladder pressure. 1.

50% nitro fuel, bladder pressure.
2. John Thompson, Cottage Grove, Ore.
3. Lowell Paddock, Spanaway, Wash.
4. Dick Salter, Seattle, Wash.
<u>AMA COMBAT (12 entries)</u>
1. Bill Varner, Astoria, Ore. -- Sam Too, Gene Pape design, 36" span, balsa-Fascal, Top Flite 82x62 pylon racing prop, Fox Combat Special Mk. III, K&B plug, Sheldon's 15% nitro fuel, bladder tank.
2. Will Naemura, Portland, Cre.
3. Phil Granderson, Seattle, Wash.
4. Rick Wicklander, Spanaway, Wash.

SAFETY TIP:

BEWARE of the catalyst for polyester resin (the stuff in the little plastic squeeze bottle). It can cause instant permanent blindness if it gets in eyes!

#### EEK!! RATS ALL OVER THE PLACE!

Rat racers seem to be making a comeback in the Northwest, as far as Eugene contests go, anyway. Following up the 12-entry Regional Championships, six local rat racers showed up at the Seventh Annual Eugene Propspinners Summer Meet August 23 and made a real chase out of CL's preimier racing event.

Rat race was only one of five events in the traditional summer contest -The entry was about average for this particular contest and the weather OK

except for an annoyingly strong and steady wind. The rats needed some dusting off and sorting out, so the contest dragged a bit early on, starting at 11 a.m. and not clearing the rodents away until 2:30. After that, things moved smoothly. Dave Green's Yippie, a Mike Hazel design, blew away the rat competition with a 5:28 feature, following up heats of 2:59 and 3:12. Control-liners wel-

comed back Aen Burgar of Bremerton, Wash., after a long absence from the flying circles. Burgar took second in rat race with a plane he had used before dropping out a decade earlier.

AMA combat came next, and bill Varner started on a streak that carried him right through to first place both in Eugene and at the Shady Acres bash in

Tacoma, Wash., a fortnight later. Varner downed Norm McFadden of Lynnwood, Wash., in the final, one of several good matches. Then came Northwest Sport Race, where John Thompson puttered to a 10:56 feature, good enough to win but still slow. The planes, a combination of old worm out jobs and too-new-to-so-fast ensines, boat unwind like sailboats old worn out jobs and too-new-to-go-fast engines, beat upwind like sailboats and charged downwind like surfboards in the 40 mph gale.

Half-A combat was saved for last, when the wind began to abate. Appla was showered on Bruce Guenzler, 15-year-old Eugene flier who won his first Applause combat contest by beating fellow Eugenean Tom Kopriva in the final.

All agreed that the highlight of the contest was the  $\frac{1}{2}$ A match between FL partners John Thompson and Mike Hazel. Hazel nailed Thompson's kill zone, his engine stopped and Thompson towed the Hazel plane through a series of loops and figure-eights while the delighted spectators roared. The string finally broke and Thompson was declared killed, giving Hazel third place.

The other event was profile carrier. This event, placed on the schedule in response to the "not enough contests" refrain, drew only three entries, to the disappointment of those who did show. Jeff Shelby of Eugene deserved the competitors' thanks for dragging out the deck, preparing much of the field, and officiating in spite of the low turnout.

Trophies and merchandise prizes were awarded.

Here are the complete results:

RAT RACE <u>(6 entries)</u>

1. Dave Green, Astoria, Ore. 2:5 Mike Hazel design, K&B 40S. 2:59 and 3:12 heats, 5:28 feature -- Yippee,

Ken Burgar, Bremerton, Wash., 3:57, 4:02, 8:26.
 Ken Burdick, Seattle, Wash., 4:26, 3:31, 8:44.
 Bill Varner, Astoria, Ore., 2:39, 2:57, DNF.

AMA COMBAT (5 entries)

Bill Varner, Astoria, Ore. -- VooDoo, Goldberg kit, 38" span, balsa, Fascal Top Flite 82x62 pylon racing prop cut to 8", Fox Combat Opecial, K&B plug, Sheldon's 15% nitro fuel, Austin Craft needle valve, pacifier tank. 1. Fascal, Norm McFadden, Lynnwood, Wash.
 Ken Burdick, Seattle, Wash.

4. John Thompson, Cottage Grove, Ore. NOR THWEST SPORT RACE (4 entries)

Nor InwEST SPORT RACE (4 entries)
 John Thompson, Cottage Grove, Ore., -10:56 ---Sterling Ringmaster, 42" span, 252-oz, balsa, Monokote-epoxy, 9x7 Zinger prop, Fox .35, K&B plug, Sheldon's 15% nitro fuel, Fox 2-ox square wedge tank.
 Mike Hazel, Salem, Ore., 11:14.
 Dave Green, Astoria, Ore., 11:34.
 Ken Burgar, Bremerton, Wash., 11:54.
 Bruce Guenzler, Eugene, Ore. -- Chean Imitation, Pape-Thompson design

Bruce Guenzler, Eugene, Ore. -- Cheap Imitation, Pape-Thompson design, 25" span, balsa-bass-ply-Fascal, Cox 5x3 prop, Cox TeeDee .049, Guenzler 1. rework, Kustom Kraftsmanship needle valve assy., Cox low-compression head, Hazel 40% nitro fuel, bladder.

Hazel 40% nitro fuel, bladder.
2. Tom Kopriva, Eugene, Ore.
3. Mike "azel, Salem, Ore.
4. John Thompson, Cottage Grove, Ore.
PROFILE CARRIER (3 entries)
1. Bill Skelton, Warrenton, Ore. -- Guardian AF2S, Bill Melton design, 38" span, 28 oz., balsa-silkspan=Aero Gloss dope, 9x6 Master Airscrew prop, Supertigre .35C, Skelton rework, ST Mag IV carb, K&B RC long plug, RoGo 5% nitro fuel, throttle, suction uniflow modified Fox 2-oz outboard tank, Sturdi-Bilt belcrank, J-hoberts handle, outboard differential flap, 3/32 tail hook and release mechanism.
2. Dennis Skelton, Warrenton, Ore.

2. Dennis Skelton, Warrenton, Ore.

3. Mike Hazel, Moo.

#### LOW TURNOUT FOR SEATTLE SKYRAIDERS' 3x1 MEET By Al Johnson

The morning of Sunday, Aug. 16 opened under foggy skies at infamous Carkeek Park -- the only officially designated control-line (one circle) flying site in all of Greater Seattle. In this we may be lucky judging from the low turnout. This was an AMA-sanctioned meet no less for the few devoted 'Raiders (no outside competitors were present!!!) (Editor's Note: Maybe a listing in the FL contest calendar would have helped.) Some capable club competitors were noticeable by their absence.

The models flown were rather conservative because the same plane had to be flown in all three events !! Northwest Super Sport Race records were never threatened -- nor were the scores in stunt !! Dive bomb (balloon bust) was interesting -- no crashes.

interesting -- no crashes. Max Thue flew a modified 'Streak over Salter's older Ringmaster for victory in NWSS (OR K&B .35 beats Torp .35 Greenhead). Dick mcConnell was observed giving his Fox .35 a cooling spray in the pits -- starting techniques!! And Dan Burdick suffered from needle valve problems. Stunt was affected by the equipment -- suction feed, some with flaps, some without, fast lap times (relative to real stunt). Max Thue was able to complete more of the pattern in more recognizable maneuvers to win this event also. Dan Cronyn did well for second. Dan Burdick just went too fast!! And Dick McConnell suffered the inevitable impact from a verticle dive in the attempt McConnell suffered the inevitable impact from a verticle dive in the attempt in the wingover (for which Dick received the crunch trophy. One more win an One more win and it becomes permanent!)

Dive bomb (balloon bust) is always a crowd pleaser...But with the climate we had no frisbee-spirits observers to egg the competitors to lower heights!! Some close calls were seen with the hard terrain -- gasp-gasp! Winner

Cronyn was the only flier to cleanly break the 10-pointer besides having the slowest laps time. His total balloon points was adequate to edge Salter who had the fastest lap time. Burdick would have been a threat -- but he

flew under the balloons, breaking three or four of the sticks!! For slow combat, Max Thue switched engines for a Fox Combat Special to duel McConnell with a home brew design with a Fox .35. Air time was close but Max got one clean cut to win.

So Max Thue won both first place trophies. And a pleasant day was enjoyed by all. A special thanks to Dick Salter for assuming contest director duties at the last minute--and to Mike Bogan for judging stunt. Here are the complete results. The racing, stunt and balloon bust events

were combined into one, slow combat was separate.

SUPER SPORT RAC	E HEAT FRAT	THRE PRECIST	ON AEROBATICS	SCORE
SULSE SLOUT INC	E HEAL TEA.			
1. Max Thue	5:07 11:1	L7 1. Max 1	Thue	340
2. Dick Salter	6:06 12:	18 2. Dan	Cronyn	265
3. Dick McConne	11 6:48	3. Dan	Burdick	195
4. Dan Burdick	7:46	4. Dick	McConnell	30
DIVE BOMBING	7-LAP TIME	TARGETS POINT	S OVERALL	
1. Dan Cronyn	38.36 mph	20 767.3	1. Max Thu	le.
2. Dick Salter	60.58 mph	12 726.9	6 2. Dan Cro	nyn
3. Max Thue	41.58 mph	8 328.6	8 3. Dick Sa	
4. Dan Burdick	58.6 mph		4. Dan Bur	
		_	5. Dick Mc	

EQUIPMENT FOR 3x1 EVENTS

EQUIPMENT FOR 3x1 EVENTSMAX THUE -- Modified 'Streak, K&B .35, Fox plug, Top Flite 9x8 prop, Fox 3-02.profile tank, modified Sheldon's 7.5% nitro fuel, dope and Superkote.DICK McCONNELL -- "Heinz 57", Fox .36 plainbearing, Fox plug, Tornado 9x8 prop,buried 4-ox tank, Sheldon's 5% fuel,dope and heat shrink covering.DICK SALTER -- Ringmaster, Torp. .35 greenhead,K&B plug, Master Airscrew 9-6 prop, Fox 22-oz profile tank, Sheldon's 5% fuel, dope-Monokote.DAN BURDICK -- Cobra, Fox .35 stunt, Fox plug, Top Flite 9x7, modified Fox 3-ox wedge, Sheldon's 25%, dope-silkspan.

#### DAVIS CUP TENNIS TICKETS AVAILABLE TO STUNT FLIERS

Modelers who happen to be tennis fans as well can obtain tickets to the sold-out Davis Cup tennis matches between the United States and Australia, featuring singles and doubles with John McEnroe and Jimmy Connors, the same weekend as the Stuntathon '81 contest in Portland.

The Davis Cup tickets are available at \$20 per seat through Don McClave, contest organizer, who obtained them through First Interstate Bank where he works.

Matches are at 1 p.m. Friday, Oct. 2 (singles) and 1 p.m. Saturday Oct. 3. Of course, you'll be flying Oct. 4 at the Stuntathon at Delta Park, To order tickets, contact McClave at 7719 SE 28th Ave., Portland, CR 97202. Send check for tickets, please.

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#### CONTEST REPORT: WESTERN STATES CL CHAMPS, MERCED, CALIF, SEPT. 5-6 By Mike Hazel

The temperatures were warm in Merced over Labor Day weekend, but the competition was hot in only some of the events. The speed and combat events were fairly well represented. The racing turnout was somewhat modest, however, and the add-this-year stunt was met with a poor showing. It was mentioned that there was a conflicting stunt meet only the week before.

There was a good showing of Northwest folks: Jerry Thomas, Chris Sackett, Howard Rush, Mike Hazel, Scott Newkirk and Tom Knoppi.

Here are some interesting notes: Sackett retained his cool and won jet speed. For once Hazel/Newkirk <u>didn't</u> win Formula 40 speed. Howard Rush received a Fox 15 Schneurle for being Combat champ. Scott Newkirk turned in a faster final than prelim in FAI team race.

Another note to throw in was the fact that the Northwest Sport Racers showed up only to discover that the super sport were allowed to race also. The event director (of national class in wisdom and knowledge) didn't seem to think there was any speed difference between a Fox stunt engine and the smokin' K&B .35s. However, the NW entrants were big about it, and just raced anyway. The ED was also big about it, and just collected his first place without much comment about the whole affair. Here are the results:

mere are one resurcs	٠	
<u>FAI COMBAT (10 entries)</u>	FAST COMBAT (9 entries) 1. Stan Youngblood 2. Howard Rush	<u>SLOW COMBAT (8 entries)</u>
1. Howard Rush	1. Stan Youngblood	1. Jim Womack
2. Miles Lawrence	2. Howard Rush	2. Doss Porter
3. Neal White	3. Chuck Rudner	3. Chuck Rudner
NORTHWEST SPORT RACE (4 et	ntries) CLASS I MOUSE (J)	(2 entries)
1. Vic Garner 8:05.5	(super 1. Joanna McCollum	6:24
2. Tom Knoppi 9:22	sports 2. Jarl Boles	6:41
3. Mike Hazel 10:25	sports 2. Jarl Boles incl.) <u>CLASS II MOUSE RAC</u>	E (2 entries)
CLASS I MOUSE (S-O) (4 ent	tries) 1. Bob Boling	11:15
1. Bob Boling 5:06	2. John McCollum.	. 175 laps
2. John McCollum 5:08	AMA RAT RACE (6 entries)	11:15 175 laps <u>BEGINNER STUNT (1 entry)</u>
3. Miles Lawrence . 5:15	1. Tim Gillott 4:50.11	1. Mitch Nilliams . 317
GOODYEAR (3 entries)	2. Garv Crawford. 5:43.42	ADVANCED STUNT (2 entries)
1. Vic Garner 6:12	3. Bob Boling 6:32.42	1. Jim Khoades 440
2. Bob Boling 4 laps	A PROFILE PROTO (1 entry	) 2. Chuck Halter 370
3. Gary Crawford . 2 laps	1. Jarl Boles 65.4 mp	A EXPERT STUNT (1 entry)
	FORMULA 40 (3 entries)	1. Bill Howe
1. Jim Rhoades 83.15	1. Tim Gillott 139.59	A SPEED (2 entries)
B SPEED (2 entries)	2. Scott Newkirk. 135.79	1. M& Team 173.17
1. Jon DeFries 175.32	3. Mike Hazel attempt	2. Jim Rhoades. 157.56
2. Frank Hunt 162.11	D-JET SPEED (5 entries) 1. Chris Sackett . 185.3	FAI SPEED (7 entries)
SLOW RAT RACE (4 entries)	1. Chris Sackett . 185.3	1. Chuck Schuette . 164
1. Vic Garner . 5:46.47	2. Jim Rhoades 159.65	2. Bob Spahr 162
2. Gary Crawford. 6:08.51	FAI TEAM RACE (4 entries)	3. John Newton 154
3. Bob Kerr 6:33.93	FAI TEAM RACE (4 entries) 1. Knoppi/McCollum 4:2	27.66/8:28.02
	2. Scott Newkirk 11	:22.72/9:55.98
	3. Mike Hazel	laps/0

## SPEED SCOOP by mike hazei

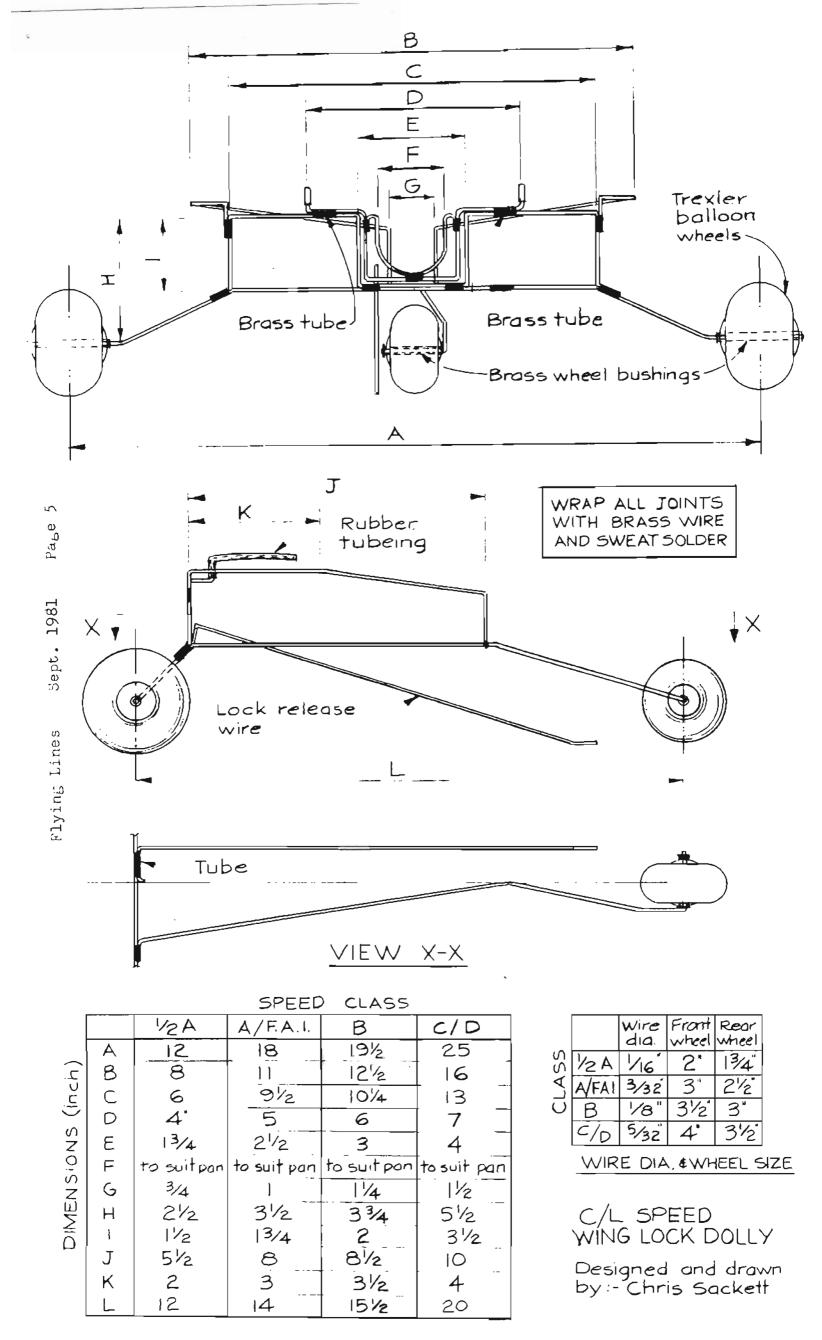
The first scoop is some information about takeoff dollies. The information is from Chris Sackett, who has also drawn up some excellent plans. Here's Chris on the subject:

"At the last couple of speed meets I have attended I have been struck with the fact that a lot of speed fliers, new and old, have spent very little time designing and constructing speed dollies. Although the experienced fliers get the model out of the dolly (barely) they could certainly do better. If an inexperienced flier would try the same dolly the results could be, and usually are, disastrous. The first thing wrong is the size. Dollies should be large and light and in most cases be wing lock mousetrap type.

"I think the last time I saw a good article or three-view of a speed dolly was the ones Beb Lauderdale used for his Dizzy Boy and Dizzy Bee designs in the early sixties. These were well thought out designs, carefully built and used very light Trexler balloon wheels. We used these type designs in all the speed classes including  $\frac{1}{2}$ Å and I can tell you we never if ever failed to take a model off.

"I think these three-views will help newcomers to speed flying as well as offer good sound designs to the experienced speed man. Remember, build them strongly and use huge lightweight wheels. Also balance the doily to the C.G. of your airplane. A good dolly is the first step toward reliable speed flying."

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#### SPEED, continued

Thanks for the information, Chris. Another note I will slip in here is regarding the lock release trip wire. Hake sure that is adjusted at that it does not release the plane on any less than 4 to 6 inches altitude. Any less than this and your plane can get out before suitable flying speed is reached.

This usually means shaft-run city. Also, at each flying session, check to see how your dolly tracks. It should roll exactly straight. Many fliers like to put electrical tape on their wheels. This reduces the traction and allows you to gently pull the model sideways toward you during the takeoff roll and maintain good line tension. For those interested, Chris also has some speed model plans for sale. Write him at 1001-7474 Halifax, N. Burnaby, B.C., Canada TóJ 202. I had planned on doing some writing regarding jets, but it looks like

time and space are running short. Anyone interested in any espect of jets is welcome to write me with questions. I can't promise 1 have an expert answer, but will give it a shot.

Fly Fast.

--Mike Hazel, 1040 Windemere Dr. N.W., Salem, Uregon, 97304.



#### Price List June 1981

Prices subject to change without notice.

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#### navy carrier notes by orin humphries

This year was the best turnout at the Regionals in some time for us hookers. I am naming Wayne Spears "Hooker of the Year" in a first ever award for his successful fielding of a muffled Profile Carrier model. He grabbed a third with it so noone can say a muffled ship isn't competitive. I am cona third with it so noone can say a muffled ship isn't competitive.

vinced it is the way to go, and will follow his mature example in the near future. Attaboy, Wayne! And he did this in a field of nine planes. All hail the new king; the might Corsair of you-know-whose hath fallen! Loren Howard has to feel pretty good over his performance this year, as he swept carrier with a double win in profile and Class II. He got 207 with a Vulture and 320 with a Guardian (Tigre X60). The profile record still stands at 208 (Marty Phillips); but the Class II record of 319 was edged up. Class I record was not changed. Five big birds made attempts. I record was not changed. Five big birds made attempts.

Lemme give you a few stats (just what you wanted, right?). In profile, we were on the deck on the first pass 80 percent of the time and in the water 36 percent. The figures for Class I/II were 50% and 62%, which says, among other things, that the lighter wing loadings of profile were easier to fly. All the big birds were the same size and shot 60-second lows regardless of the engine. The Class IIs however, were faster. Still, I firmly believe that one should have a kit Guardian or Mauler or Corsair (with a few changes) as his first and second big Carrier ships. Stay away from the plane built birds

his first and second big Carrier ships. Stay away from tiny plans-built birds for a while. Say, the rest of your life. Let me reward diversity by mentioning the following. Dave Bullens brought an F6F, Wayne Spears had a bipe (Wild Turkey) derived from the Mo-Bipe. Roy Bears had an F4U profile, and of course, there was Jeff Shelby's F8U, and two profile Guardians by Bill Skelton and Dick Salter.

Oops, Loren's profile may have been a Condor. Sorry. The wind was 90° off of the weather bureau's prediction so I didn't have the deck in the best spot. The weather until 2 p.m. Saturday was the best ever for Eugene, but it raised almost steadily after that (Oh, come on, Orin, it did not! -- Editor). Didn't slow Loren down one bit, though. Nice to see 16 carrier ships in the pits again! Pilot cooperation and sportsmanship were at their usual high standard. Nice flying with you,

Gentlemen!

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

PRECISION AEROBATICS AT THE 1981 U.S. NATIONAL CHAMPIONSHIPS By Paul Walker

Precision aerobatics at the 1981 Nationals was one of the most enjoyable Nats I have attended. The weather almost cooperated  $(95-100^{\circ}, 40-50\%$  humidity), the site was reasonable, plus I did well. This Nats left me with a good feeling

and an eager anticipation of next year's Nats. Stunt, for most of the stunt fliers, started on Monday with some practice. Everybody always rused out and had a flight in before the sun even rose. As the sun rose, there were between 12 and 14 stunt planes in the air all at once. Practice continued at this pace until 10 a.m. The wind (10-15 mph) came up at 9 a.m. and by 10 most people had had enough. I have been spoiled by seattle weather as it was quite a shock to me how much the sun and heat took out of weather as it was quite a shock to me how much the sun and heat took out of me. By noon most people were back at the motel, by the pool, telling each other how good they were flying, or airing their excuses early. This same set of events happened on Tuesday also.

Tuesday afternoon was different, though! Not so many people around the pool, as it was time to wax up theplanes for appearance judging. Some people really spent a lot of time on this. I didn't. I only spent three nours on mine! The one thing I really liked about this year's Nats was the air-con-ditioned auditorium where the planes were appearanced judged. This was the first air-conditioned one that I have ever been involved with. As they were first air-conditioned one that I have ever been involved with. As they were arranged and re-arranged, grumblings were always heard about how such an airplane shouldn't be getting such a high score, or "My plane is worth more than that!" After judging, the famed "pilots' meeting" where someone always has to ask a stupid question. Good luck this year, only lasted 10 minutes (The guy with the stupid questions was over at the combat meeting -- Ed.) Then came the moment of truth! The dreaded first official flight on Wednesday. It always takes a while for the nerves to calm down and the judges' scores to come up. Consequently, 90% of the first flights don't figure in the scoring! As each successive flight takes place, eyes become more and more fixed to the scoreboard, trying to figure out where everyone sits. Along

more fixed to the scoreboard, trying to figure cut where everyone sits. Along came Wednesday evening and everyone knew. Those who were in good shape are back at the motel getting cool and those in jeopardy of not qualifying were out practicing.

Thursday, the moment of truth was drawing near for some, as there would

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#### NATS STUNT, continued

only be 20 finalists left after the day was over. For those that had early flights, they were relegated to watching the scoreboard to see if they would hang on. Others who had late flights spent what seemed like forever waiting for their turn. After it is over, it is a sign of releif for some, and a "if the judge would have given me 2 more points I would have qualified" for the others.

Friday dawned early for the 20 finalists as they were all out practicing early. This was really Rolaids time. On Friday there always seem to be three distinct groups of people. The first group consistes of those who were pleased just to qualify and are somewhat less intense than the others. The second group (the largest) are those who have qualified before, had no trouble qual-ifying and who are looking to make it well into the top 10. The third group are those who have actually won in the past or who have the ability to win. This was, and always is, the most interesting day for me as I like to watch each group of people and their respective reactions to first their flights and then their scores. It's pleasure for some, disappointment for others, even though the person who is pleased may have finished lower than the person who is disappointed. This year, this was my last day of flying as I finished 10th. This was pleasing for me, as this was my best Nationals finish.

Saturday, the Walker Cup flyoff. Thre are only five open fliers plus the junior and senior champs flying. Everybody else watches. After it was all over, just one champion. This year, it was Bill Werwage. Rounding out the top ten: 2) Ted Fancher 3) Les McDonald 4) Wynn Paul 5) Kirk Mullanix 6) Bob Gieseke 7) Jim Casale 8) Dennis Adamisin 9) David Fitzgerald 10) Paul Walker.

Paul Walker. Just a few more comments and observations. This was the first year that all the contestants were "seeded" into position. This resulted in much more balanced qualifying circles, which produced one of the best top 20s ever. Also, I was very impressed with the quality of judging this year. The judging was consistent with very little ballooning. Thanks again, judges! --Paul Walker, 25900 127 Ave. SE, Kent, WA 98031.

### **GloBee Fire Plug...** an integrated system for fast. variable power starts.

The new GioBee Fire Plug is the world's first com-pletely integrated glow plug starting system. Just attach your own favorite plug connector to the terminals. This hand held unit not only ignites your plug but also monitors your starting condition-a "O" ammeter reading indicates a burnt out plug, and a higher than normal reading reveals a flooded engine.

#### Some of its outstanding features include:

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- high impact polypropylene case with a fluted base for nonslip, one hand operation.
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- monthly, overnight recharge will maintain power level for a long service life.

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Flying Lines Sept. 1981 Page 8

#### HOW TO SET UP THE US LOFSR STUNT ENGINE By Don McClave

Stunt fliers of all ability levels can now rejoice at the arrival of a powerful, durable .40 size stunt engine which can be made to run superbly well without any special modifications or machine work. It's not at all tempermental and will pull planes of all sizes and weights through the pattern without missing a beat. Last, but not least, it's reasonably priced! You can make your FSR run as well or better than the expensive custom-

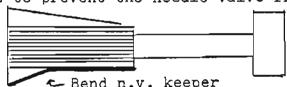
tuned, chrome-lined, Dykes-ringed creations of the various engine experts by simply following the suggestions contained in this article. They work on my engines, on Rich Schaper's engines, and they'll work on your engine, too.

As it comes from the box, the stunt engine is identical to the KC version except for the crankshaft, which has slightly altered timing to "de-tune" the engine and make it more tractable for stunt usage. It comes with two stunt venturis, a large one with a .285 opening and a smaller one with a .268 dia-meter. It also comes with a muffler and an OS needle valve assembly of the same design used on their .35.

Before running the engine, there are a couple of things to be done in preparation. First, decide whether or not to reverse the crankcase so that the exhaust will point to the outside of the circle when the engine is mounted in the inverted position (obviously, this doesn't apply to profile stunters. Having the exhaust on the outside simply reduces the amount of engine oil which collects on the aircraft, cuts down on the noise you'll hear in the center of the circle, and means that you'll need less wingtip weight. It makes no difference whatever in the way the engine runs. If you decide to reverse the case, simply remove the backplate and front end and switch them around.

Next, be sure that the large venturi is installed (save the small one; we'll discuss that later) and that the hole in the spray bar points straight down into the venturi throat. While you are at it, remove the needle value and bend the dimpled side of the retainer as shown in the diagram to provide better friction. This is very important to prevent the needle valve from turning due to vibration in flight.

Now you're ready to break in the ne. Install a K&B RC long glow engine. plug and a 12x4 prop <u>cut</u> down to 10". Mount the engine to the test stand without the muffler and connect it to a 4-oz. tank filled with K&B 100 fuel (castor oil variety) or Fox Super



Fuel. Open the needle valve 4 turns and start the engine.

The purpose of the break-in period is to seat the piston ring, and this is accomplished through five or six bench runs. The first run is a rich 4-cycle. On subsequent runs, alternate the speed between a rich 4-cycle setting and a brief two-cycle bursts. The heating and cooling which takes place as a result of doing this is what seats the ring. After each run, the compression should improve. When the compression stops increasing (5-6 runs), the engine is ready to go in your plane.

When installing the engine, the first consideration is cooling. The FSR needs a steady stream of air over the <u>crank</u> <u>case</u> as well as the head for best The FSR results. If the engine speeds up in the air, it is overheating and this usually is due to inadequate cooling. Be sure air can flow freely around the crank-case and drill a couple of 1/4" holes through the nose into the crankcase area if necessary.

The next item is installing a fuel tank. Clunk tanks don't work with Schneurle-ported engines and the FSR is no exception, Instead, a 5½-oz. uniflow tank with muffler pressure is used. Ed "obbert's tanks are excellent, and I highly recommend them. The tanks made by Mike Mustain, Randy Hancock and Carolina-Taffinder also work very well. If you make your own, make it 1" high. Mount the tank directly on the engine bearers, which will place the pickup tube slightly above the spraybar (closer to the mounts) in level flight. This will ensure that the engine runs at least as fast inverted as it does upright, an added safety factor. Be <u>sure</u> to use a fuel filter between the tank and engine.

Now we come to the muffler. The stock OS muffler works OK, but it weighs three ounces and the power loss is greater than other mufflers. However, it will perform adequately, if that is your only choice. The best muffler is the Martine muffler, if you can find one, but a very good alternative is the Genesis (Hunt) muffler, which is once again in production. It weighs a half ounce, costs a reasonable \$15 and delivery time is only a week or two as of

this writing.

You've probably read about the gigantic propellors that some people put eir engines. Don't do it -- it simply overloads and overheats the on their engines. Don't do it -- it simply overloads and overneads one engine. When this happens, the engine leans out and your stunt model will

begin turning in lap times like a rat racer. Instead, use about an llx6 or llx5 wide blade propellor. My best results have been with a 12x6 Zinger cut to ll". Bob Baron uses a 12x5 Zinger cut to ll". This lets the engine purr along without everloading.

OS 40FSR, continued

Fuel is also important. Not 100 fuel with castor oil is the best commercial fuel I've tried, and Fox Superfuel works all right, too. Sig 5% fuel is acceptable, but fuels with castor oil work better. If you mix your own fuel, use 5% nitromethane, 25% castor oil and 70% methanol alcohol. Don't use 10% fuel, or fuel with 100 percent synthetic lubricants, because these cause the engine to run hotter.

You have no doubt gathered that an important goal is to keep the operating temperature as low as possible. There are two reasons for this. First, the engine will run much more smoothly, if it is cool. Second, it will last a lot longer. Remember, the FSR was designed to run on fuels containing little or no nitromethane. It doesn't need hot fuel to develop power.

Your first flights should be decidedly on the rich side to continue the break-in process. It's all right to take the plane through the pattern, just try to avoid a lean run, if you can. The engine may sound a little rough in flight and may break into a 2-cycle during some maneuvers. This is normal as the engine wears in, and things should smooth out after 25 or 30 flights. You may notice that the engine will speed up slightly on the ground after 15 seconds or so. This is normal, and is simply the engine heating up, should

You may notice that the engine will speed up slightly on the ground after 15 seconds or so. This is normal, and is simply the engine heating up. About four laps after takeoff the engine should settle into a steady 4-cycle and stay locked in throughout the flight. If it doesn't, it's a little lean or you don't have adequate cooling.

If the engine speed drops noticeably after a sharp pull-out, the engine is too rich. Set it just a tad faster. The FSR likes to run at what I call a "medium-speed" four-cycle. This sounds awfully complicated, but it's easy and you will get used to it quickly.

and you will get used to it quickly. At the beginning of the article, I said to save the small venturi which comes with the engine. This is to use on the engine, if you put it in an extremely small airplane (a Sig Banshee profile, for example) and don't need all the power. A small prop, such as an 11x5, will also help tame the engine when used with a small aircraft.

While this article has dealt with the stunt version of the FSA, it is also applicable to the RC version. Just make up a .280 venturi, install an OS or SuperTigre .60 needle valve assembly and follow the instructions. The second annual Portland Stuntathon on October 4 is only a few weeks

The second annual Portland Stuntathon on October 4 is only a few weeks away as this is written. It's the only stunt contest in the Northwest with all four PAMPA classes, so get your Ringmaster, Nobler, Stilleto, or whatever, off the wall and come to the Rose City for the biggest stunt contest of the year. You're bound to beat someone, and there will be plenty of experienced fliers around to help you get in an official flight.

In addition, the special demonstration of Jim Walker's aircraft and the

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ceremony at which they will be donated to the Gregon Ristorical Society and the Model Aircraft Ruseum will be highlights of model aviation in the United States this year. Don't miss it! -- Lon McClave, 7719 SE 28th Ave., Portland, CR 97202

#### NW COMPETITION STANDINGS

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

Combat standings in the Northwest underwent the most juggling during August and early September contests.

Norm McFadden edged into first place in AMA compat, moving Gene Pape into second. Will Naemura pushed Pape and Bill Varner down from their first place tie into second place. Gary Byerly and Dick Salter slipped ahead of Dick McConnell in slow combat.

There was some juggling in other events, too, but no changes among the leaders.

Flying Lines keeps track of the standings each year in all control-line events. Northwest fliers in Northwest competitions are scored on the basis of their placings in the top four. Here are the standings in the events that have changed, as of Sept. 11.

	~
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SLOW COMBAT (6 contests, 21 entries) Dick McConnell, 6 5 George Mickey Fick Wicklander 7 Buzz Wilson John Thompson John Thompson John Thompson 8 Max Thue. 2 John Thompson 7 8 Mill Naemura 6 contests, 46 entries 1 1 1 Will Naemura 6 contests, 46 entries 1 2 1 8 Rich Porter 7 6 Gruce Guenzler 1 8 Rich Porter 7 6 Gruce Guenzler 1 8 Rich Porter 7 6 Gruce Guenzler 1 8 Rich Porter 7 6 Gruce Guenzler 1 8 Rich Porter 7 6 Gruce Guenzler 1 10. Tom McFadden 2 8 Rich Porter 7 6 Contests, 54 entries 10. Tom McFadden 2 8 Rich Porter 7 8 Rich Porter 7 6 Gontests, 54 entries 10. Tom McFadden 2 8 Rich Porter 7 8 Rich Porter 7 6 Contests, 54 entries 8 Rich Porter 8 Rich Porter 9 Lowell Varner 8 Rich Porter 10 Tom McFadden 10 Varner 8 Will Naemura 10 Varner 10	FEED (combined) FEED (combined) FEED (combined) Paul Wallace

#### UTAH STATE AEROMODELERS' ANNUAL CONTEST SET

This year's annual AA contest, sponsored by the Utah State Aeromodelers Club, will be held Oct. 3 and 4 at Bingham High School in Salt Lake City. Here is the schedule: <u>SATURDAY -- 8 a.m. start</u> <u>JA MOUSE RACE CLASS I -- 27' • 6" lines.</u> PRECISION AEROBATICS NORTHWEST SPORT RACE NORTHWEST SUPER SPORT RACE <u>SUNDAY -- 9 a.m. start</u> <u>AMA COMBAT</u> <u>JA REED VALVE "AMBUSH" COMBAT -- Contact C.D. for special rules.</u> SPORT SCALE -- Muffler not required, lines 25' to 70', acorn nut not required. BALLCON BUST OPEN -- Best time from release to balloon bust wins, ROG or hand BALLCON BUST JR-SR launch, 27' minimum lines. Trophies will be awarded for first through third places, and a sweepstakes trophy also will be awarded. Contest director is George Swanson, (801) 466-3003.</u>

#### GOBBLE, GOBBLE

Yes, friends, that sound means the Flying Lines Turkey is flying overhead, ready to drop good fortune on the winner of the third annual Flying Lines Benefit Turkey Tournament.

The Turkey Tournament, designed to give some winter fun along with raising some money for the always-scrounging Flying Lines, awards one large frozen turkey to the turkey who does the best in the contest.

turkey to the turkey who does the best in the contest. The TT is a quadrathon, FL's answer to the Stoo Willoughby English Tourmament. Actually, this is the second quadrathon, since last year we broke off and tried some other events. But we're going back to the immensely successful format of two years ago.

All yoursed to compete is one airplane, one engine, and your \$10 entry fee. Actually, the FL treasurer says you can just bring the fee and forget the plane.

In any case, you take that plane and fly, in this order, speed, racing, stunt and slow combat. The only requirements for the plane are that it be on 60-foot lines and be able to rise off ground on takeoff. Speed will be run by Formula 40 protocol -- 14 laps from a standing start. Racing will be 100 laps for the heat (one pit stop) and 200 laps for the final (2 pits).

be 100 laps for the heat (one pit stop) and 200 laps for the final (2 pits). Stunt will be AMA pattern. Combat will be slow combat, r.o.g. required. The grand championship winner will get the turkey, and the winners of each individual event will get some other kind of prize. Money from the entry fees

individual event will get some other kind of prize. Money from the entry fees will help Flying Lines survive. The contest will be Nov. 22 at Mahlon Sweet Airport in Eugene. That's

The contest will be Nov. 22 at Mahlon Sweet Airport in Bugene. That's the weekend before Thanksgiving. See you there.



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## WHERE THE ACTION IS 🖬

UPCOMING ORGANIZED EVENTS

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. Oct. 3-4.....SALT LAKE CITY, Utah. --- Utah State Aeromodelers Annual.

- Saturday: 2A Mouse Class I\*, Northwest Sport Race, Northwest Super Sport Race, precision aerobatics, novice aerobatics.
- Super Sport Race, precision aerobatics, novice aerobatics. Sunday: AMA combat, slow combat,  $\frac{1}{2}A$  reed valve Ambush combat\*, sport scale\*, balloon bust (JS)(0)\*. Trophies. Site: Bingham High School. Contest Director: George Swanson (801) 466-3003. \*Contact CD for special rules. Oct. 4.....PORTLAND, Ore. -- Stuntathon '81 all-stunt contest. All PAMPA classes separated -- beginner, intermediate, advanced, expert. Registration at 8 a.m., flying at 9. Trophies and prizes. Fees:  $\frac{1}{95}$  for 19 and up,  $\frac{1}{93}$  for 15-18,  $\frac{1}{92}$  under 15. Special features: Demonstration of American Junior Fireballs. Present-ation of American Junior Aircraft memorabilia to Oregon Historic ation of American Junior Aircraft memorabilia to Oregon Historical Society and the Russ Barrera Model Aviation Museum. Historical display. Site: Delta Park. Contest Director: Dave Garaner, 17870 Shasta Trail, Tualatin, UR 97062, (503) 638-4224.
- Nov. 22.....EUGENE, Ore. -- Flying Lines Third Annual Benefit Turkey Tour-Nov. 22.....EUGENE, Ore. -- Flying Lines Third Annual Benefit Furkey 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. Frizes: 20-1b turkey for grand champ, merchandise for first place in each category. Froceeds to benefit Flying Lines. Flying starts at 10 a.m. Site: Mahlon Sweet Air-port. Contest Director: John Thompson, 1411 Bryant Ave., Cottage Grove, Ore., 97424. (503) 942-7324.
  Dec. 13......(tentative) -- Northwest Sport Race Drizzle Circuit starts. Watch this space for details.

this space for details.

#### NWSR, NWSS DRIZZLE CIRCUIT NOTES

Just a reminder to persons interested in the Northwest sport racing classes and the winter racing circuit. Three things:

1. Please send us your opinions about any possible adjustments to the regional rules, specifically, to engine restrictions in NWSR -- stock or not? 2. If you are planning to race on the Drizzle Circuit, December through April, send us your plane name and get your racing number. This is not required

but is desirable for our planning purposes. 3. Clubs and contest directors planning to sponsor LC contests, please

contact FL this month.

4. We're thinking of jazzing up the racing this winter with the use of flags. If you have a source, or a seamstress in the family, let us know. We need the following flags: 1 white flag. 1 green flag. 1 black flag. 4 checkered flags.

On any of the above matters, contact FL. We also have current rules available.

#### THIS EDITION OF FLYING LINES BROUGHT TO YOU BY ...

Flying Lines recently has gone through one of its periodic financial crises. The trouble with money isn't over, but it's certainly eased a bit as a result of the generousity of two Northwest clubs.

The Eugene Propapinners donated \$40, the entire proceeds from the Summer Meet in August, to the newsletter. Two weeks later the CLARS of Astoria, Ure., followed with \$50 from their treasury. Together, the clubs gave FL enough money to put out almost one entire issue of FL, and kept the wolves away from the door for the time being. All Northwest control-line modelers owe a debt of thanks to these clubs

for he lping keep your communications network alive.

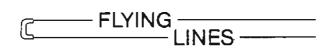
Naturally, we're still urging all FL subscribers to get their flying buddies signed up. Every time you let somebody mooch your copy of FL, you're weakening the financial base. Get those guys signed up, and FL will keep coming your way.

> Sept. 1981 Page 13 Flying Lines

SEATTLE

SEATTLE AREA <u>NOBBY HOUSE</u> -- Control-line, free-flight and RC supplies, 10011 Holmen Road N.W., Seattle, WA 98177. (206) 782-1609. <u>THE HOBBY PIACE</u> -- Control-line and RC supplies, specializing in parts. 1415 NE 30th, Seattle, Wash., 98115. (206) 525-6757. Owned by Dodie Long. "If we don't have it, we will get it."

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



Flying Lines is produced monthly 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 control-line modelers. Help keep it alive by spreading the word. wear your FL T-shirt and tell your buddies what it stands for. T-shirts available at \$8 - name your size and

color.

The 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:

PublisherJohn Thompson	AerobaticsRich	Schaper Walker	Spee Scal
Photo editorChris Genna RacingMike Hazel	CombatGene		Spor
CarrierOrin Humphries			

ed...Mike Hazel le...Orin Humphries rt...Larry Miles

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#### AD PAT

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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.

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# ALL-STUNT CONTEST -AMA SANCTION 1117 OCTOBER 4<sup>TH</sup>, 1981 8:00 AM - 5:00 PM AT JIM WALKER MEMORIAL FIELD (DELTA PARK PAVED CIRCLE - PORTLAND)

~THON

STUNT~

Precision Aerobatics Model Pilots Association CategoriesPAMPA Beginner (AMA Novice Pattern)0 to 300 point averagePAMPA Intermediate301 to 400 point averagePAMPA Advanced401 to 500 point averagePAMPA EXPERT501 to 650 point average

AWARDS AND MERCHANDISE PRIZES for THREE PLACES IN EACH CATEGORY ENTRY FEES: Age 19 & up, \$5.00; Age 15 - 18, \$3.00; Under 15, \$2.00

VOLUNTEERS ARE NEEDED FOR FLIGHT LINE CONTROL, FLIGHT JUDGING, PULL TESTING, CROWD CONTROL, WRECKAGE SHOVELING, ETC., CALL THE C.D.!

<u>SCHEDULE</u>: First Official Flight In the Air by 9:00 AM - LATEST! All of Round 1 will be flown before lunch break. All of Round 2 will be flown after 1:30 P.M.

NO HARD CIRCLE PRACTICE AFTER 8:45 AM !!!

SPECIAL FEATURE - 11:30 to 1:30 - HISTORY IN THE AIR - SEE OTHER SIDE

This Contest sponsored by:	CONTEST DIRECTOR:
The NOR'WESTERS	Dave Gardner
Free Flight Model Airplane Club	17870 Shasta Trail
Portland, Oregon	Tualatin, Oregon 97062
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# **SPECIAL FEATURE!** FIREBALLS in the SKY!

FROM 11:30 A.M. to 1:30 P.M., THERE WILL BE FLIGHT DEMONSTRATIONS

OF A. J. FIREBALLS, JIM WALKER'S PREMIER AIRPLANE!

SEE THREE FIREBALLS FLOWN BY ONE PILOT, AT THE SAME TIME !!!

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IN ADDITION, MRS, JIM WALKER, THE WALKER FAMILY AND FRANK MACY WILL OFFICIALLY PRESENT A LARGE & COMPLETE COLLECTION OF

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THE OREGON HISTORICAL SOCIETY AND THE RUSS BARRERA MODEL

AVIATION MUSEUM IN MORGAN HILL, CALIFORNIA.

<u>JIM WALKER WAS ONE OF THE MOST PROLIFIC AND PROMOTIONAL PEOPLE</u> <u>IN THE MODEL AVIATION INDUSTRY.</u> <u>FROM 1929 UNTIL HIS DEATH IN</u> <u>1957, HIS AMERICAN JUNIOR AIRCRAFT COMPANY IN PORTLAND, OREGON</u> <u>PRODUCED OVER TWO HUNDRED MILLION MODEL AIRPLANES!</u>

AN EXTENSIVE DISPLAY OF THIS HISTORY WILL BE ON DISPLAY (BETCHA DON'T REMEMBER THEM ALL!), FROM THE ORIGINAL RUBBER-POWERED PLANE OF 1929 TO THE U-CONTROL FLYERS OF THE FIFTIES.

OLD TIMERS!!! DIG INTO YOUR ATTICS AND BASEMENTS...BRING OUT ANY OLD FIREBALLS OR OTHER A.J. AIRCRAFT FOR YOUR OWN DISPLAY!!!

THIS IS A HISTORICAL EVENT IN MODEL AVIATION! BE A PART OF IT !!!

~



#### BLADDER GRABBER SCENES

FL photographer Bill Varner caught all kinds of action at the 1981 Bladder Grabber AMA Combat contest. Left column, top to bottom: Norm McFadden launches Bob Carver's plane. Next photo, right, action in match between Gene Pape (front), and Gary Byerly. Left: some of the Carver Corp. stereo prizes. Norm McFadden's plane takes off. Dick Salter holds as Howard Rush fires up. Typical pit scene....Fliers working, others watching. Right column, top to bottom: Rush and McFadden race to take off. Bob Carver closes in for a cut. Phil Granderson flies, while McFadden's plane spurts fuel after a crash. Gene Pape's Devastator shows string snagged for wing kill. Who is the man under that extroardinary hat?