



NEWS OF NORTHWEST CONTROL-LINE MODEL AVIATION

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JUNE-JULY 1997

ISSUE NUMBER 140

WOW! In this issue.....

- * 1997 Northwest Regionals results
- * Other contest results
- * Round & Round, by John Thompson
- * Club Notes
- * On Lines, by Jim Cameron
- * Northwest CL Competition Standings
- * Zoot's Mixture
- * Updated Contest Calendar
- * Northwest Competition Records
- * and a few more good things slipped in here and there.....

COCKPIT CHATTER

MISCELLANEOUS NOTES AND RAMBLINGS FROM THE EDITOR

Greetings, and welcome to this issue. The original intent was to get this thing out a bit sooner, with a "June" cover date. However, when things run late, we at FL central just pull a little trick with the cover date, and presto! We are back on schedule!

Yer editor has been busy outside of the workshop this year, specifically involved with some home remodeling. It is very time consuming. With all the various things that have been done, are being done, and need to be done; the best comparison I can come up with is that of having 14 stunt ships under various stages of construction all at once. Sometimes the craftsmanship urge gets out of hand, and I have to remind myself that wood joints hidden behind drywall do not require precise fit, nor does spackling compound need to be sanded with 400 grit. Some modeling practices are intentionally included however, such as a few pieces of wood trim moulding put together with CA glue, etc. Meanwhile, the modelling workshop is closed. Hope everything doesn't crash or wear out until the grand shop reopening.

The contest calendar in this issue has been updated with a new contest added, among other things. The "WOLF" group in Salem, Oregon is putting on a contest to inaugurate their flying field, which now has a super quality paved flying circle. A flyer with details is included in this issue. Hope lots of you can come and check it out.....We heard from Dave Gardner recently, and he sez that NW Sport Race is being added to the slate of events at the Raider Roundup (ignore the fact that it is missing on the flyer- they will have it).

This year's Northwest Regionals was again a rousing success. Entry level in the aerobatics events has nearly exploded, making this one of the largest stunt meets around. More tweaking with the schedule will be done for next year to accomodate needs of this growing contest. Read John Thompson's column for more commentary.

For the first time in just about forever, my plan for participation in the NW Regionals was radically different this year. As many of you know, I have been involved with this meet since its inception. Duties have long included being the speed event director for most years, also have done the overall C.D., along with several other miscellaneous details. This year due to work schedule uncertainties, and also wishing to have a break, I declined to participate in any official manner. As it turned out, I could attend the meet for two of the three days, so had a great time doing some time as a contestant. It was an enjoyable fresh perspective on this meet, looking at it from "the other side".

Did you see the "Fox Racing" article in Model Aviation magazine? For you sport racers, and those interested in it, this was a great piece that detailed the basics pretty well. Although the event cited in the article was not our own, the information is relevant. We would sure like to see more entry in our NW Sport Race event, everybody has a Fox 35!.....Elsewhere in the mag, there is an ad from K&B for their sportser line of engines, including control line conversion kits available. This was nice to see, as it seems K&B has almost made it a secret in the past few years that they have engines that are used for control line.

The following is from the VGMC Hothead newsletter, by Bruce Duncan: *"The very first comment I must make is to congratulate Stephen Cox for his quick thinking and honesty. He was assisting the Junior Class I Mouse Racing by timing one of the heats, when he noticed his watch had failed to continue running, he smartly moved over to the next timer and noted exactly what the time was when his contestant passed that position. Even though it made the time out by a fraction of a second, it did get that contestant into the third and final position for the finals. The fourth best time then became that of Stephen's, thusly his quick thinking and honesty eliminated himself. Stephen, again congratulations, for an honest win always outweighs a dishonest one. You are an example that others, Juniors and older could well take a lesson from."* Amen, editor.

1997 Northwest Control Line Regionals Results

May 23-24-25, Roseburg, Ore.

Total entries: 102 individuals, 261 event entries.

First Grand Champion: Todd Ryan

Second Grand Champion: Eric Conley

Third Grand Champion: S&S Racing
Team

Results

(Number of entries in parentheses)

(Northwest Standings points in parenthesis after score)

Mouse Race I Open (17)

1. Bruce Duncan, 5:23.93 (17)
2. Dave Braun, 5:27.94
3. Todd Ryan, 59 laps (15)
4. Nitroholics Racing Team, 2:45.84
heat (14)

Mouse Race I Jr. (9)

1. Nathan St. John, 6:00.78 (9)
2. Stephen Cox, 6:07.4 (8)
3. James Cox, 6:08.45 (7)
4. Kirk Hagman, 3:24.29 heat (6)

Mouse Race I Sr. (4)

1. Travis Morgan, 5:42.26 (4)
2. Aaron Olson, 9:36.03 (3)
3. Jesse St. John, 38 laps (2)
4. Tasha Howell, 5:44.17 heat (1)

Mouse Race II (17)

1. James Cox, 10:00.22 (17)
2. Les Akre, 11:00.9
3. Travis Morgan, 11:43.11 (15)
4. Stephen Cox, 4:00.69 heat (14)

Clown Racing (14)

1. Todd Ryan, 298 laps (14)
2. Dave Braun, 279
3. S&S Racing Team, 251 (12)
4. John Howell, 110 laps heat (11)

Northwest Sport Race Jr. (2)

1. James Cox, 10:52.35 (2)
2. Nick Hagman, 10:58.03 (1)

Northwest Sport Race Sr.-Open (15)

1. Todd Ryan, 9:00.58 (15)
2. Paul Gibeault, 9:26 (14)

3. Ron Salo, 9:52.59 (13)
4. Nitroholics Racing Team, 11:19.83
(12)

Northwest Super Sport Race (9)

1. Mike MacCarthy, 7:56.56
2. S&S Racing Team, 8:21.09 (8)
3. Todd Ryan, 9:02.73 (7)
4. Cleaver Team, 4:10.25 heat (6)

Northwest Goodyear (6)

1. S&S Racing Team, 8:29.51 (6)
2. Cleaver Team, 8:49.69 (5)
3. Dave Braun, 84 laps
4. Bruce Duncan, 4:30.66 heat (3)

Rat Race (5) (heats only, final scratched)

1. Roger McIntyre, 2:45.71
2. Mike MacCarthy, 2:55.94
3. Dave Braun, 4:02.67
4. Cleaver Team, 41 laps (2)

Slow Rat Race (6)

1. Richard McIntyre, 5:59.3
2. Nitroholics Racing Team, 6:55.7 (5)
3. Roger McIntyre, 10:41
4. Dave Braun, 90 laps

AMA Goodyear (3)

1. Cleaver Team, 8:27.78 (2)
2. Les Akre, 61 laps
3. S&S Racing Team, 2 laps (1)

Expert Precision Aerobatics (11)

1. David Fitzgerald, 567.5
2. Paul Walker, 558.5 (15)
3. Ted Fancher, 555
4. Chris Cox, Brett Buck, Jack Pitcher,
528 (tie) (Cox, Pitcher: 9.75)

Advanced Precision Aerobatics (16)

1. Pat Johnston, 500 (16)
2. Bob Parker, 487.5 (15)
3. Bill Swan, 480
4. Bob Swan, 478.5

Intermediate Precision Aerobatics (5)

1. Raul Alva, 396.5
2. Roy DeCamara, 380 (4)
3. Keith Varley, 374 (3)

Beginner Precision Aerobatics (2)

1. Scott Riese, 211 (2)

Classic Stunt (13)

1. Keith Trostle, 501

2. Don McClave, 487.5 (12)
3. Ted Fancher, 480
4. Pete Peterson, 470

Old-Time Stunt (19)

1. John Wright, 329.5
2. David Fitzgerald, 309.5
3. Keith Trostle, 303.5
4. Walt Pyron, 297

80-mph Combat (8)

1. Rich Salter (8)
2. Roy Heppenstall
3. Tom Strom (6)
4. Dick Salter (5)

AMA Combat (6)

1. Norm McFadden (6)
2. Roy Heppenstall
3. Gary Harris (4)
4. Mark Hansen (3)

1/2-A Combat (3)

1. Ken Burdick (3)
2. Gary Harris (2)
3. Jeff Rein (1)

Slow Combat (3)

1. Mark Hansen (3)
2. Gary Harris (2)
3. Jeff Rein (1)

Class I Navy Carrier (8)

1. Eric Conley, 405.9
2. Fred Cronenwett, 289
3. Grant Heistand, 280
4. Don Chandler, 271.9

Class II Navy Carrier (3)

1. Eric Conley, 418.1
2. Jim Schneider, 201.5
3. Don Chandler, attempt

Profile Navy Carrier (9)

1. Todd Ryan, 314 (9)
2. Eric Conley, 300.8
3. Alan Olson, 262.4 (7)
4. Kenn Smith, 229.5

.15 Navy Carrier (4)

1. Eric Conley, 217.8
2. Alan Olson, 212.3 (3)
3. Todd Ryan, 206.6 (2)
4. Don Chandler, 0

.21 Sport Speed (3)

1. Chuck Schuette, 144.92 mph (3)
2. Karl Caldwell, 122.32

1/2-A Speed (1)

1. Jerry Rocha, 132.39

A Speed (4)

1. Jerry Rocha, 151.77
2. M&M Team, 144.34
3. Les Akre, 138.99

B Speed (1)

1. Ron Salo, 156.38(1)

D Speed (0)

Jet Speed (2)

1. Jerry Thomas, 168.22 (2)
2. Dick Salter, attempt (1)

1/2-A Proto Speed (7)

1. Jerry Rocha, 105.38
2. R.J. Spahr, 91.69 (6)
3. Dave Hull, 91
4. Karl Caldwell, 83.91

Formula 40 Speed (3)

1. Paul Gibeault, 146.04 (3)

.21 Proto Speed (3)

1. Chris Sackett, 136.33 (3)
2. Karl Caldwell, 120.58
3. Warren Spooner

FAI Speed (4)

1. Chris Sackett, 175.45 (4)
2. S&S&Sons, 173.68 (3)
3. James Rhoades, 167.18

Junior-Senior Record Ratio Speed (2)

1. James Cox, 1/2-A Proto, 69.07 (2)

Precision Scale (4)

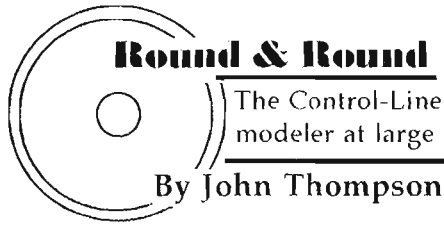
1. Grant Heistand, 565.67 points
2. Keith Trostle, 523.67
3. Ken Long, 505.17
5. Don Chandler, 315.33

Sport Scale (6)

1. Fred Cronenwett, 191.93
2. Ken Burton, 160.42
3. Steve Davis, 176.35
4. Tom Moore, 160.42

Profile Scale (7)

1. Ken Long, 181.85
2. Keith Trostle, 176.5
3. John Wright, 169
4. Ken Burton, 163.4



Modeling thought for the month:

There's just no other contest like it.

— Gene Pape, at the Northwest Regionals, 1981

One of a kind

The above comment was made on a Friday evening as we mowed the grass combat circles at the old (original) Eugene Airport site for the '81 Regionals. It's as true today as it was then.

Gene's point then was that, much as we toiled and slaved away to put it on every year, worn down and worn out by the time it was over, it was just too important an event to let it go. We had to keep the Regionals going, no matter what.

Fortunately for all of us, there's always been someone who thinks that way. Now it's Dave Shrum and his Umpqua Valley Modelers, along with a number of Eugene Prop Spinners members, and a whole lot of individuals from all over the West who pitch in to make sure that everything happens as it is supposed to, and every competitor gets a fair chance to have fun and do his best performance. If you were at the 1997 Regionals, you know who to thank for the hard work. I wouldn't dare try to list them here, for fear of leaving out one of the most important. But a card or an e-mail to your favorite judge, ED, pull-tester or registration worker would be welcomed. Let them know you appreciated their work and will be coming back next year. And don't forget to consider taking a turn as a worker as well.

In a way, all of us who attend the Regionals are like the five blind men and their elephant. It's so big that each of us is only familiar with one leg of the animal. When we venture beyond our own circles, we see amazing things going on up and down the length of the Roseburg Airport.

From my own corner down in the racing circles, here are a few impressions:

- Darn, we have bad luck with weather. We weren't joshing you visitors from afar. It really was sunny and beautiful for a month before the contest! Nevertheless, I saw only smiling faces under the canopy as we waited out the torrential downpour on Saturday afternoon. These were

people who were glad to be there, doing what they love to do. When rat race had to be postponed because of wet conditions, no complaints at all!

- I wish that more of the fliers would have attended the hangar party. There were lots of folks there, but many of the actual competitors were absent. It was a great idea, and I hope attendance will grow. I liked not having to leave the field, so that we could finish the competition and get to the dinner and fun right away.

- Some feedback I got from a flier after the contest indicated that he would have liked a P.A. announcer to narrate the activities during the contest. Any volunteers for next year? We've got a beefy P.A. system that can be heard everywhere. A narration — we did this in the early '80s Regionals — would be great.

- Scheduling is difficult and ever-evolving with that many entries on that site. But my overall impression was of cooperation between event directors, contestants and other officials. I think it all worked well, but talks are already under way for smoothing things out for next year, and possibly adding another circle or two at another location.

- There was a demonstration event for the new vintage diesel combat event. The results were: 1. Roy Heppenstall. 2. Ken Burdick. 3. Jeff Rein. 4. Gary Harris. Looked like fun.

- I'm not aware of any disputes, serious injuries, mishaps or complaints. But there was one horrible event. I heard it with my back turned to the stunt circle, and knew exactly what had happened to some poor soul. Passing by later, I saw the wreckage of Alice Cotton-Royer's Genesis. Demeter had met a similar fate a week earlier. I can't wait to see the new plane, but was very sad to see two beautiful ships lost. Life in modeling can be cruel. We've all been there.

- This was my 21st Regionals. Every one has been better than the previous one. I can't imagine a more exhilarating contest to attend, no matter how much work it is. Work has already started on the 1998 meet. Come Jan. 1, many of us will begin to pour our hearts and souls into it once again. I wouldn't miss it for the world. There's just no other contest like it.

SUMMER CONTEST ALERT: Racing, carrier and speed fliers note that the former Stuntathon has events for you on June 14-15. Be there!

Send comments, questions, and topics for discussion to John Thompson, 2456 Quince St., Eugene, OR 97404...e-mail JohnT4051@aol.com.

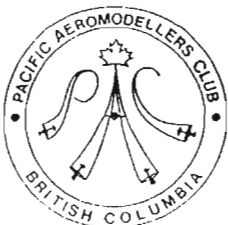
CLUB NOTES



NORTHWEST



BRITISH COLUMBIA



At a recent meeting, the **SEATTLE SKYRAIDERS** flew .020 powered "RTP" (round-the-pole) tethered model racers. This is a good bad weather activity.....The Skyraiders membership rolls continue to grow, maintaining them as one of the largest clubs in the Northwest..... We recently learned that Bill Darkow, the editor of the SKYWRITER, has decided to resign his position. Bill was putting out a good rag.

The **NORTHWEST FIREBALLS** are holding their summer monthly meetings at their usual flying field - Delta Park. Meeting time is 1st Sunday of month at 2 PM, many come early and put in some flying, too.....The FIREBALLS have a large percentage of members come to the meetings, so they are doing something right there.....They are currently working out insurance details for their alternate flying site near Longview, Washington. Site has two grass and two asphalt circles, sounds great!

The **VANCOUVER GAS MODEL CLUB** are doing a series of summer contests, each with a different discipline. The VGMC continue to be a traditional old time style model club, with diverse interests - many members fly free flight.

Everyone was disappointed that the **COLUMBIA BASIN Balsa BASHERS** did not hold their traditional May Balsa Bash this year. It was not held due to a scheduling problem with the usual site.....The CBBB have also backed off on their usual heavy schedule of small meets, they will have their annual two day meet in October.

Members of the **EUGENE PROPSPINNERS** flew in a demonstration fly as intermission entertainment at the Roseburg Speedway in April. They had up to three circles going at once.....PROPSPINNER members continue to use the Eugene Airport parking lot site for non competition flying activities, it's available most of the time they want to fly

The **B.C. ACES** spread club flying activities over control line and free flight, mostly of the competition variety. Their latest club activity was an evening hand launch glider get together.

Lots of the manpower at the Northwest Regionals is provided by the **UMPQUA VALLEY MODELERS**. Although they are primarily an RC club, their participation in our big annual event certainly makes them part of the NW control line community. Word is that they wish to continue the partnership

The **WESTERN OREGON CONTROL LINE FLYERS** is a small club with a big name, but they should be poised for growth with the addition of a premium quality asphalt flying circle. They are putting on a two day contest in August to inaugurate their field

"AIRWAVES", the newsletter of the **PACIFIC AEROMODELLERS CLUB**, continues to be one of the best ones around. It is edited by Karl Brown. Karl has the help of several PAC club members who make significant contributions for publication. Club members stayed busy during the cold B.C. winter flying indoor rubber, hand launch glider and even indoor electric control line!

ON LINES

with Jim Cameron

Happy Anniversary!

It was twenty years ago when members of the North Coast Control Line Aero Modelers Society (CLAMS) first participated at the Northwest Regionals. The CLAMS was formed in March 1977. Initial officers were: John Thompson, secretary; Jim Cameron, treasurer; Bill Skelton, vice president; and Dave Green, president.

Some might remember the club logo of a clam-shell with an engine and tail empennage. For many years the CLAMS erected a tent city at the old Eugene Regionals site (*the site used until 1987 by the beacon tower.....ed.*), and after a day of flying-it was the only place to be for storytelling. The CLAMS had quite an impact on the Northwest for the better part of fifteen years. Thanks for the good times!

Beginner Events

This is a topic to which I have given much consideration over the last few months. The problem with most events for the beginner is that nothing precludes a very experienced person from participating. Often the event is fun and easy in which to get started. This brings me to beginner Clown Race. The Portland club ran this event at their spring contest, and I think it's the answer to the above problems.

The Tri-Cities people put everything in place. They invented a race that is appropriate for beginners. The .15 sized planes have good line tension, will cut through wind, and are not extremely hard to build. Then they started the 200 lap club, and Clown Race was split into two groups, beginner and expert. The only stipulation on beginner Clown was that a participant could not be a member of the 200 lap club. Expert Clown Race imposes no prior performance limits.

This has many positive aspects. John Thompson has said many times that beginners learn when flying with experts, and, often, experts can help a beginner during a race. Beginner and expert Clown could be run simultaneously. A person of any age can fly as a beginner and will not need new equipment once the 200 lap stature is attained.

Now, I have an idea that I would like to bounce off of you. I think that a beginner class Profile Carrier event might boost participation. Some experimentation is needed to find out what score should be the division between beginner and expert. As with beginner Clown Race, once expert class is attained, no new equipment is mandated. Again, a beginner could be of any age and would not be in competition with people who have 20 years in the Carrier event.

This might be an incentive to people who are not involved in competition at this time. Remember, I have not suggested any new events, just a move away from age classes to skill classes.

Line Inspection

Line inspection time is here. Kinks are the first thing to look for; but, in my opinion, the line terminations are even more important. I have found the crimps on instant use lines to be the cause of line damage. The problem is that the diameter of the crimp is too large, and this lets the lines chafe against the crimp. Adjust the crimp size to the line size.

You can also fill the crimp with CA glue and accellerator. This will keep the lines in one place inside the crimp. If you use instant use lines, do not trust the length printed on the box. They might be as much as five to six feet onger than marked. (*I have seen them 10 feet off!.....ed.*) Lastly, keep your lines clean!

5 Rounds Nostalgia Diesel Combat, Mission, B.C., Canada, April 20 1997

Report by Mel Lyne.

The rain stayed off, and although the site was a little soggy, 8 fliers flew 5 rounds and had loads of fun

Ken Burdick of Seattle had a load of "Scrappers" using PAW 15s, which were very tight turning. Frank Boden had a pair of "Fingel Bunts". Adrian Duncan used a "Chaos" and a "Pirhana". Most fliers used flying wing types which survived repeated ground hits very well. Flying standard was good with many matches flown 5 minutes of continuous following, and still some streamer left at the end.

Paul Dranfield (our PAW diesel supplier) loaned out planes and motors and managed to tie with junior Derrick Meadows for 2nd. Dad Rick Meadows finished 4th. Eventual winner was Troy Lyne flying very consistently using a lone Rivers. 15 in a flying wing.

Frank and Rick had a barn-burner of a match which ended in a spectacular mid-air sending Frank's motor into the slough. A group effort finally recovered it. Frank won the much coveted "Best Crash" award

Mike Connor very capably score kept, moved things along, and injected dry humour as in "Inverted gopher chasing" when Rick and Mel went down to 6" inverted altitude with streamer curs!

In a very nice gesture at the end of the contest, Ken Burdick gave junior Derrick Meadows a plane and motor to encourage junior fliers

This was a low-key contest with cuts deciding each match. Pit crews pitted either plane, as after a dork, most planes could be picked up, hit once on the prop and launched again. This resulted in most matches running a full 5 minutes of combat, with no lengthy pit stops.

All agreed, "Let's do it again soon".

Results Win= 2pts, Tie= 1pt, Loss= 0 pts

1. Troy Lyne 9pts
2. Paul Dranfield 7
- Derrick Meadows 7
4. Rick Meadows 6
- Mel Lyne 6
6. Adrian Duncan 3
7. Ken Burdick 2
- Frank Bowden 2

Upcoming Diesel Combat events:

May 23 Roseburg N.W. Regionals

June 28 Saturday evening fun fly at Bladder Grabber, Harvey Field, Snohomish.

July 6, 5 rounds at Mission, B.C., Canada.

August 10, 5 rounds at Mission, B.C., Canada.

6 Rounds Nostalgia Diesel Combat, Carkeek Park, Seattle, Wa., April 26 1997

Report by Mel Lyne.

Two Seattle fliers and five Canadians did battle with each other, dog walkers, and picnics to have a very enjoyable day of low-key 6.5mph cuts-only combat.

Ken Burdick flew his usual Scrappers, while Jeff Rein had a trio of foam Yetis. Frank Boden had Fingel Bunts and Warlords, with the rest of the Canadians using flying wings such as Pirhanas, Super-Twisters and a lone Chaos.

Flying standard was good with only the odd mid-air and occasional ground hit. There were no "easy matches", all fliers now being quite accomplished. With all fliers using the obligatory Tornado nylon 8x6, surprisingly not a single prop was broken in 20 matches. One tough prop!

The site did have some "hard" spots. A vertical landing by Adrian Duncan unexpectedly broke his Chaos in half. There were many matches with close following, and some risky "intersection" flying, most matches having 4 minutes plus of actual combat. Streamers would only cut on props or lines. Many wings to streamer hits were heard with no pieces cut.

Engines were mainly PAW 15s with one Oliver and one Rivers. Plane performance levels were quite closely matched, with the true flying wing types having better survival rates in hard dorks.

Bruce Matthews from B.C. arrived late in the fourth round. To catch up he had to fly 5 matches in a row. Both he and his Oliver were into melt-down by round 6. His Super-Twister proved very tough, especially in his first match in which he dug numerous deep holes!

The coveted "Best Crash" trophy passed from Frank Boden (last contest's recipient) to Paul Dranfield, who was well deserving, being on the receiving end of the majority of the mid-airs. Frank, definitely the North West's youngest-at-heart combat flier, still gives a very tough match in his seventies! Wish that we could all do that.

Adrian Duncan used a "charmed life" Pirhana borrowed from Paul Dranfield. It has now survived 9 matches without a scratch, although several opponents' planes have been annihilated. Paul will be taking that one to the British Vintage Nationals next month.

Jeff Rein's foam Yetis flew quite well, but were not as crash-proof as the wooden flying wing type planes.

Final standings after 6 rounds had Mel Lyne in first, Jeff Rein in second and Paul Dranfield third.

Results Win= 2pts, Tie= 1pt, Loss= 0 pts.

1. Mel Lyne 9pts
2. Jeff Rein 8
3. Paul Dranfield 7
4. Bruce Matthews 6
- Adrian Duncan 6
6. Ken Burdick 4
7. Frank Bowden 2

The Scoreboard
Northwest control-line
competition standings.

Big meets mean big changes in the standings, and the Northwest Control-Line Regionals is the biggest. So, on Memorial Day Weekend, everything changed in Northwest competition standings.

Below are the updated standings for all events that were altered by the Regionals or by the three smaller contests held since the last update. A few Regionals events are not listed because there were no Northwest placers.

Contests counted to date: March 9, Coquitlam, B.C.; March 15, Richland, Wash.; April 6, Richmond, B.C.; April 20, Mission, B.C.; April 20, Portland, Ore.; May 10, Vancouver, B.C.; May 23-25, Roseburg, Ore.

Following are the standings for updated events:

1997 STANDINGS
through May 28

MOUSE RACE CLASS I

1. Bruce Duncan	21
2. Todd Ryan	17
3. Nitroholics Racing Team	14
4. Nathan St. John	9
5. Stephen Cox	8

MOUSE RACE CLASS II

1. James Cox	17
2. Travis Morgan	15
3. Stephen Cox	14

CLOWN RACE

1. Todd Ryan	19
2. S&S Racing Team	14
3. John Howell	11
4. Stephen Cox	7
5. Rick Meadows	6

NORTHWEST SPORT RACE

1. Paul Gibeault	20
2. Todd Ryan	19
3. Ron Salo	18
4. Nitroholics Racing Team	14
5. Rick Meadows	4

NORTHWEST SUPER SPORT RACE

1. S&S Racing Team	10
2. Todd Ryan	7
3. Cleaver Team	6
4. Nitroholics Racing Team	3
5. Mark Hansen	1

NORTHWEST GOODYEAR

1. S&S Racing Team	6
2. Cleaver Team	5
3. Bruce Duncan	3

AMA GOODYEAR

1. Cleaver Team	3
2. S&S Racing Team	1

RAT RACE

1. Cleaver Team	2
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SLOW RAT RACE

1. Nitroholics Racing Team	5
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OVERALL RACING

1. Todd Ryan	62
2. Nitroholics Racing Team	37
3. S&S Racing Team	34
4. Paul Gibeault	30
5. Stephen Cox	29
6. Bruce Duncan	24
James Cox	24
8. Ron Salo	23
9. Travis Morgan	19
10. Cleaver Team	16

PRECISION AEROBATICS

1. Pat Johnston	16
2. Bob Parker	15
Paul Walker	15
4. Chris Cox	9.75
Jack Pitcher	9.75

CLASSIC STUNT

1. Don McClave	12
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OVERALL STUNT

1. Pat Johnston	16
2. Bob Parker	15
Paul Walker	15
4. Don McClave	12
5. Chris Cox	9.75
Jack Pitcher	9.75

7. Roy DeCamara	4
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8. Keith Varley	3
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9. Scott Riese	2
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80-MPH COMBAT

1. Rich Salter	8
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2. Tom Strom	6
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3. Dick Salter	5
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AMA COMBAT

1. Norm McFadden	6
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2. Gary Harris	4
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3. Mark Hansen	3
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1/2-A COMBAT

- 1. Ken Burdick 3
- 2. Gary Harris 2
- 3. Jeff Rein 1

SLOW COMBAT

- 1. Mark Hansen 3
- 2. Gary Harris 2
- 3. Jeff Rein 1

VINTAGE DIESEL COMBAT

- 1. Troy Lyne 8
- 2. Paul Dranfield 6.5
Derrick Meadows 6.5
- 4. Rick Meadows 5
- 5. Ken Burdick 4

OVERALL COMBAT

- 1. Gary Harris 10
- 2. Rich Salter 8
Troy Lyne 8
- 4. Ken Burdick 7
- 5. Paul Dranfield 6.5
Derrick Meadows 6.5

.15 NAVY CARRIER

- 1. Alan Olson 3
- 2. Todd Ryan 2
Rick Meadows 2
- 4. Frank Boden 1

PROFILE NAVY CARRIER

- 1. ToddRyan 9
- 2. Alan Olson 7
- 3. Mike Conner 3
- 4. Frank Boden 2
- 5. Rick Meadows 1

OVERALL NAVY CARRIER

- 1. ToddRyan 11
- 2. Alan Olson 10
- 3. Rick Meadows 3
Mike Conner 3
Frank Boden 3

SPEED (all classes combined)

- 1. Chris Sackett 7
- 2. R.J. Spahr 6
- 3. Paul Gibeault 3
S&S&Sons 3
Chuck Schuette 3
- 6. James Cox 2
Jerry Thomas 2
- 8. Dick Salter 1
Ron Salo 1

JUNIOR OVERALL

- 1. Stephen Cox 29
- 2. James Cox 28
- 3. Derrick Meadows 10.5
- 4. Nathan St. John 9
- 5. Kirk Hagman 6
- 6. Greg Nelson 2

- 7. Greg Nelson 2
- 8. Nick Hagman 1
Mike Nelson 1

Flying Lines keeps track of standings in all AMA rulebook and Northwest official events, in all Northwest sanctioned contests.

Your *FL* editors do their best to keep up on the results, but contest directors can help keep the standings up to date by making sure to send the results to *FL* immediately after the contest. When you send your report to AMA, remember to send the results to *FL*, too. If you spot any errors, please let us know.

Results must include the placing in each event through fourth place and the report also must list the number of contestants in the event, in order for the point standings to be counted accurately.

Also, please include in your report the hometown of the contestants. Only Northwest residents are counted in the standings (AMA Dist. XI and British Columbia). The score of each contestant also should be listed for general reporting purposes and for checking against the Northwest records, another popular *FL* feature.

Send results to statistician John Thompson at the address listed below.

Remember, only results that we receive can be counted, so send them in. If you flew in a contest that doesn't appear to be counted, contact the contest director or *FL* and let us know.

Send contest results, corrections and other correspondence regarding Northwest Competition Standings to John Thompson, 2456 Quince St., Eugene, OR 97404, e-mail JohnT4051@aol.com. For a printed copy of complete standings for any event, send a self-addressed, stamped envelope.



John Thompson launches NW Sport Racer at Portland Meet. Plane is a good 'ol Ringmaster.

CONTEST RESULTS

SPRING TUNE-UP, PORTLAND, OREGON APRIL 26, 1997

FLYING CLOWN RACE-BEGINNER

- 1) MARK HANSEN 166
- 2) DAVE SHRUM 119

FLYING CLOWN RACE-EXPERT

- 1) S & S TEAM 224
- 2) NITROHOLICS TEAM 170

NW SUPER SPORT RACE

- 1) NITROHOLICS TEAM 7:46.75
- 2) S & S TEAM 8:07.59
- 3) MARK HANSEN 10:13.08

NW SPORT RACE

- 1) S & S TEAM 10:21.60
- 2) NITROHOLICS TEAM 10:23.01
- 3) BILL DARKOW 13:15.64

MOUSE RACE I - JUNIOR

- 1) GREG NELSON 6:34.05
- 2) MIKE NELSON 6:44.69

MOUSE RACE I - SENIOR

NO ENTRANTS



The Flying Flea Market

Classified advertisements — FREE for FL subscribers

FLYING LINES SUBSCRIBERS: THIS SPACE IS FOR YOU! SEND IN YOUR AD FOR SELL/SWAP/ OR FOR NEEDS. YOUR AD WILL RUN FOR TWO ISSUES, UNLESS YOU REQUEST OTHERWISE. CHANGE AD AT ANYTIME.

FOR SALE: SPECIAL FIBERGLASS PROPS JUST FOR BREAK-IN AND REFERENCE BENCH TESTING UNDER THE ZZ! PROP BRAND ARE AVAILABLE FROM MIKE HAZEL. BENCH PROPS ARE AVAILABLE IN .15, .40, AND .60 SIZES. PROPS ARE SUPPLIED SEMI-FINISHED, SO YOU CUSTOM TAILOR THE SIZE AND LOAD TO YOUR INDIVIDUAL APPLICATION. SEND SASE FOR PRICELIST AND INFO TO: MIKE HAZEL, 1073 WINDEMERE DRIVE NW, SALEM, OREGON 97304

FOR SALE: FASCAL= CLEAR AIRPLANE COVERING MATERIAL FOR EITHER FOAM OR OPEN FRAMES. IT HAS STICKY ADHESIVE, SO IT'S GOOD FOR ON-FIELD REPAIRS. WORKS WITH HIGH OR LOW HEAT, AND CAN BE PAINTED. A MUST FOR COMBAT FLIERS. PRICE IS 75 CENTS PER FOOT, PLUS SHIPPING. JOHN THOMPSON, 2456 QUINCE STREET, EUGENE, OREGON 97404 E-MAIL: JohnT4051@aol.com

FOR SALE: CONTROLINE AND OLD TIME FF TANKS; SIZES 14CC TO 7 OUNCE. COMPLETE LINE OF FUELS, FAI (0%) TO 75%, AS WELL AS INGREDIENTS. BROCHURE \$1.00 CAROLINA-TAFFINDER, 8345 DELHI ROAD, N. CHARLESTON, SC 29406 TEL & TAPE: (803) 553-7169 E-MAIL: DDTAFF@AOL.COM

BUY/TRADE/SELL: AIRPLANE & CAR GAS TOY COLLECTABLES: COMET, COX, WEN-MAC, AURORA, TESTORS, THIMBLE DROME, ETC. ETC. SHAWN MAGRINI, 31769 TOWER ROAD, SALEM, OHIO 44460 PHONE AFTER NOON & BEFORE 5 PM, AFTER 5 PM LEAVE MESSAGE (330) 222-2314

FOR SALE: FLYING CLOWN KITS, \$25 EACH. SHIPPING IS INCLUDED. MAC RYAN, 590 E. VALLEY DRIVE, PASCO, WA 99301 PHONE (509) 545-5961

FOR SALE: P.A..W. DIESEL ENGINES AND ACCESSORIES FOR C/L NOSTALGIA DIESEL COMBAT. OVER 50 MODELS AVAILABLE IN CL AND RC FROM .033 TO .60 CU IN. SEND ONE DOLLAR FOR LIST TO: PAUL DRANFIELD, 32763 SIXTH AVENUE, MISSION, B.C. V2V 1Y8 CANADA E-MAIL: pdran@bc.sympatco.ca

"I feel a need for SPEED!"

.....sez Zoot Zoomer



ZOOT'S MIXTURE

It looks like there has been a downturn in control line speed activity in the Northwest in the last couple of years. The Zoomer has been pondering on this. It seems like most everyone is still around, but not just as active as in some years past. Methinx we are just at a bottom in the normal cyclical pattern of activity. Let's get out there and fly them speed planes!

Ever wonder why we are still calling class B engines "29's"? Back in the dinosaur days of speed, the rules folks set class B at an upper limit of .299, meaning anything just below .300 would qualify. Look in the rule book now, and you will see that class B extends up to .3051, howcumzit? This is because some all-wise rules makers many years ago noted that the European "29" was sometimes based on a 5cc displacement, which was just slightly larger than the USA counterparts. By moving the 'B' size up to .3051, this allowed some foreign engines into the game which would have previously been oversize. So, even though you can run an engine that is really a ".30", why do we call them a ".29"? The answer: What else.....tradition!

Class B has for sometime been considered kind of an odd duck size of engine. However, there are still several engines available for the event. The SuperTigre X29 has been out of print for a long time, but there are still plenty of them out there. The K&B 4.9 cc is also workable. Most of these made were in the front intake configuration, but can easily be changed to back door using K&B parts. I see that Tower Hobbies is now carrying the OPS line, including a rear intake-rear exhaust .29 and tuned pipe. And of course you can always custom order a Nelson. Wow! Be cool, and fly a "B"!

Speed Contest Update: We still got three meets this season you can attend, and they are scattered about, too. No excuse not to get to one in your own neighborhood. In July we got the Can-Am Champs in B.C. In August, check out the new flying field in Salem, Oregon. And in September of course, there is the Raider Roundup in Kent, Washington. Check out the contest calendar listing elsewhere, and see you there, dude!

CONTEST RESULTS

VANCOUVER, B.C., MAY 10, 1997

.15 SPORT RACE

1) MIKE CONNER	8:28.77
2) RICK MEADOWS	9:13.28
3) PAUL GIBEAULT	9:41.88
4) MEL LYNE	57 LAPS

NW SPORT RACE

1) PAUL GIBEAULT	8:40.97
2) RON SALO	10:10.81
3) RICK MEADOWS	10:33.86
4) HENRY HAJDIK	11:42.43

SUBSCRIPTION EXPIRATION DEPARTMENT

time for the following to renew!

Mark Wahlster, Howard Rush, Mark Wahlster, Homer Smith, and Mark Wahlster.

The article below was taken from a workplace newsletter, and with hot weather coming for you contest goers, the information is very relevant.

Beat the Heat

Imagine small icebergs floating on an opaque blue sea. Imagine penguins strutting through the snow. Imagine ice fishing, huddled over that small hole of surreal azure into which your line disappears. No?

Okay, so it's summer, the temperature is 95 or 105, and you're hot! What can you do to safeguard yourself while working in the heat? Here are some tips, if the winter rains haven't started again by the time you receive this.

What factors cause heat to stress the body? Four environmental factors play a role - temperature, humidity, radiant heat (from the sun or a furnace), and air velocity. Additionally, personal characteristics may increase the level of stress felt due to heat - age, weight, fitness, medical condition, and acclimatization to the heat.

Let's talk about what this means to you. Your body reacts to high external temperatures by circulating blood to the skin, increasing the skin temperature and allowing the body to radiate away its excess heat through the skin. If you are doing strenuous work requiring use of big muscles, less blood will be available to flow to the skin and release heat.

Sweating is another means the body uses to cool the body and maintain a stable internal body temperature. However the humidity must be low enough to permit evaporation in order for sweating to cool the body, and salts and fluids lost in the process must be adequately replaced. Dehydration and imbalance of the electrolytes can occur rapidly in excessive heat.

If the body can't dispose of excess heat, it will store it. That's when the body's core temperature rises and the heart rate increases. As the body continues to store heat, the individual begins to lose concentration and has difficulty focusing on a task, may become irritable or sick, and often loses the desire to drink fluids. The next stage is fainting, and then possible death if the

person is not removed from the heat stress.

These are environmental factors that increase heat stress:

- Elevated air temperatures and humidity
- Absence of a breeze or wind
- Exposure to direct sunlight
- Vigorous work or exercise
- Work around hot machinery or where there's intense heat reflection/radiation

Following are personal characteristics which increase the likelihood of heat strain on a person's body when exposed to environmental factors above:

- Overweight
- Poor physical condition
- Advanced age
- Lack of experience with heat-stressing work - inability to acclimatize
- Alcohol consumption - causes dehydration and impairs the body's ability to fight heat stress
- Certain medications - antihistamines are particularly dangerous as they can suppress sweat-gland activity
- Inadequate information - know the warning signs of heat strain and how to cope
- Gender - some evidence indicates women tolerate heat better than men

Now you know the environmental factors and personal characteristics that govern how you may be affected by heat. You also need to know the warning signs of heat stress:

- Visible sweating - indicates physical condition is poor and your body is overworking.
- Increased heart rate - normal response to strenuous work, but in hot weather can be caused by moderate exertion.
- Clumsiness or confusion - (noticeable) or a need to concentrate to do routine tasks.
- Unexplained irritability - tempers flare, people easily frustrated.
- "Feeling kind of funny" - mild or moderately severe flu-like symptoms.

Heat disorders become increasingly severe as the body continues to be exposed to heat without relief:

Heat rash or prickly heat - may occur in hot, humid environments where sweat is not easily removed from skin surface by evaporation. Prevent by resting in a cool place and allowing skin to dry.

Fainting (heat syncope) - Recovery usually requires a brief period of lying down. More common when forced to stand still in heat rather than move around.

Heat cramps - painful spasms of the muscles, caused by drinking large quantities of water but failing to replace the salt lost by the body. Relieve by taking liquids by mouth or saline solution intravenously (under medical supervision).

Heat exhaustion - resulting from loss of fluid and salts. Sweating, but experiencing extreme weakness or fatigue, giddiness, nausea, or headache. Skin is clammy and moist, complexion pale or flushed, and body temperature normal or slightly higher. Treatment: rest in a cool place and drink a beverage used to quickly restore potassium, calcium, and magnesium salts, i.e., Gatorade. A severe case involving vomiting or losing consciousness may require longer treatment under medical supervision.

Heat stroke - The most serious health problem from heat, caused by failure of the body's internal mechanism to regulate its core temperature. Sweating stops and the body can no longer rid itself of excess heat. Signs include: (1) mental confusion, delirium, loss of consciousness, convulsions or coma; (2) a body temperature of 106 degrees F or higher; and (3) hot dry skin which may be red, mottled, or bluish. Victims of heat stroke will die unless promptly treated. While awaiting medical help, remove victim to a cool area and soak clothing with cool water. Fan the victim vigorously to increase cooling. Requires prompt first aid to prevent permanent injury to the brain and other vital organs.

So, now you have it, the full scoop on heat disorders, what to look for, how to protect yourself (and your coworkers), so you can beat the heat! ☐

NORTHWEST CL CONTEST CALENDAR

THE FOLLOWING LISTING IS A SUMMARY OF ALL KNOWN A.M.A. AND M.A.A.C. SANCTIONED EVENTS AS OF 6-19-97. FOR FURTHER INFORMATION, PLEASE CONTACT THE INDIVIDUAL LISTED. CONTEST DIRECTORS AND CLUB LEADERS ARE ENCOURAGED TO CONTACT FLYING LINES AS SOON AS POSSIBLE WITH THEIR PLANS, INCLUDING REVISIONS AND TENTATIVE DETAILS. CONTEST FLYERS CAN ALSO BE INCLUDED AT NO CHARGE, ON A SPACE-AVAILABLE BASIS.

JUNE 28 & 29: SNOHOMISH, WASHINGTON **BLADDER GRABBER XX**
 EVENT: AMA FAST COMBAT SITE: HARVEY FIELD CONTACT: JEFFREY REIN
 (206) 823-6053, OR HOWARD RUSH (206) 746-5997

JULY 6: MISSION, BRITISH COLUMBIA
 EVENT: B.C. NOSTALGIA DIESEL COMBAT SITE: CALL FOR DIRECTIONS SPONSOR:
 MISSION WINGS MODEL CLUB CONTACT: PAUL DRANFIELD PHONE (604) 826-
 3376 E-MAIL: pdran@bc.sympatico.ca

JULY 12 - 19: MUNCIE, INDIANA **A.M.A. CL NATIONALS**

JULY 19 & 20: COQUITLAM, BRITISH COLUMBIA **CAN-AM SPEED CHAMPS**
 EVENTS: ALL CLASSES OF SPEED, PLUS SPECIAL JUNIOR EVENT. SITE: UPPER
 COQUITLAM PARK. SPONSOR: VANCOUVER GAS MODEL CLUB CONTACT: VGMC,
 PO BOX 58037, STATION L, VANCOUVER, BC V6P 6C5, OR BRUCE DUNCAN (604) 241-
 8255, OR FAX LINE (604) 241-8166

JULY 26 & 27: RICHMOND, BRITISH COLUMBIA **P.A.C. INVITATIONAL**
 EVENTS: NW FLYING CLOWNRACE, NW SPORT RACE, CARRIER, OLD TIME STUNT,
 PRECISION AEROBATICS, SCALE. SITE: RICE MILL ROAD SPONSOR: PACIFIC
 AEROMODELLERS CLUB CONTACT: MIKE CONNOR (604) 465-7277 OR CHRIS
 COX (604) 596-7635

AUGUST 10: MISSION, BRITISH COLUMBIA
 EVENT: B.C. NOSTALGIA DIESEL COMBAT SITE: CALL FOR DIRECTIONS
 SPONSOR: MISSION WINGS MODEL CLUB CONTACT: PAUL DRANFIELD PHONE
 (604) 826-3376 E-MAIL: pdran@bc.sympatico.ca

AUGUST 23 & 24: SALEM, OREGON
 EVENTS: NORTHWEST RECORD RATIO SPEED, 80 MPH COMBAT, CLASS I MOUSE
 RACE, NW SPORT RACE, NW SUPER SPORT RACE, BALLOON BUST, PRECISION
 AEROBATICS IN FOUR SKILL CLASSES. SITE: BILL REIGEL MODEL AIRPARK
 (SALEM AIRPORT) SPONSOR: WESTERN OREGON CONTROL LINE FLYERS
 CONTACT: MIKE HAZEL, 1073 WINDEMERE DRIVE NW, SALEM, OREGON 97304
 PHONE (503) 364-8593

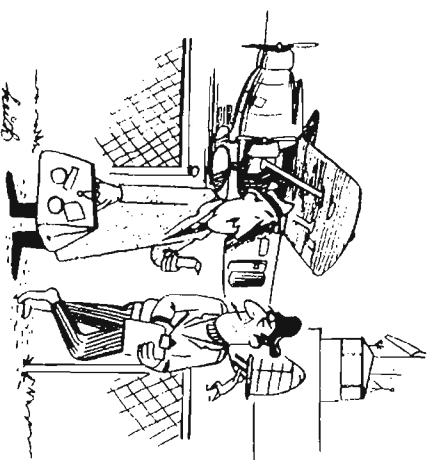
AUGUST 24: VANCOUVER, BRITISH COLUMBIA
 EVENTS: NW FLYING CLOWN RACE, MOUSE RACE CLASS I. SITE: ? SPONSOR:
 PACIFIC AEROMODELLERS CLUB CONTACT: MIKE CONNOR (604) 465-7277

SEPTEMBER 13 & 14: KENT, WASHINGTON **RAIDER ROUNDUP**
 EVENTS: MOUSE RACE CLASS I, NW SUPER SPORT RACE, NW FLYING CLOWN
 RACE, NW SPORT RACE, PROFILE CARRIER, 15 CARRIER, CLASS I & II COMBINED
 CARRIER, 80 MPH COMBAT, 1/2 A COMBAT, OLD TIME STUNT, CLASSIC STUNT
 NORTHWEST RECORD RATIO SPEED, NATIONAL RECORD RATIO SPEED, SPORT
 SCALE, PROFILE SCALE, PRECISION AEROBATICS, (BEGINNER-INTERMEDIATE-
 ADVANCED, EXPERT) SITE: BOEING SPACE CENTER - KENT SPONSOR
 SEATTLE SKYRAIDERS CONTACT: DAVE GARDNER (206) 226-9667 FAX (206)
 226-2759

SEPTEMBER 28: COQUITLAM, BRITISH COLUMBIA **VGMC RACE-O-RAMA**
 EVENTS: CLASS I MOUSE RACE, NW SPORT RACE SITE: UPPER COQUITLAM
 PARK SPONSOR: VANCOUVER GAS MODEL CLUB CONTACT: BRUCE DUNCAN
 (604) 241-8255 FAX (604) 241-8166

OCTOBER 4 & 5: RICHLAND, WASHINGTON
 EVENTS: CLASS I MOUSE RACE, NW FLYING CLOWN RACE, NW SPORT RACE,
 NW SUPER SPORT RACE, 15 CARRIER, PROFILE CARRIER, CLASS I & II COMBINED
 CARRIER, OLD TIME STUNT SITE: TBA SPONSOR: COLUMBIA BASIN BALSA
 BASHERS

OCTOBER 11 & 12: PORTLAND, OREGON **REALLY RACING & FALL FOLLIES**
 EVENTS: MOUSE RACE CLASS I, MOUSE RACE CLASS II, AMA GOODYEAR, SLOW
 RAT RACE, RAT RACE, NW SPORT RACE, NW SUPER SPORT RACE, NW FLYING
 CLOWN RACE, PRECISION AEROBATICS (IN FOUR SKILL CLASSES) SITE: DELTA
 PARK SPONSOR: EUGENE PROSPINNERS & NORTHWEST FIREBALLS
 CONTACT: MIKE HAZEL, 1073 WINDEMERE DRIVE NW, SALEM, OREGON 97304
 PHONE (503) 364-8593



"I'm curious! How come your rates are
 so much lower than the other airlines?"
 AMERICAN MODELER ANNUAL 1964

RAIDER ROUNDUP '97

Washington State Controline Championships
September 13th and 14th , 1997

Boeing Space Center, Kent, Washington

Sponsored by the Seattle Skyraiders--- AMA Sanctioned

Flying site is at the Boeing Space Center, off S. 212th St in Kent

Take Orillia Rd / S 188th exit East from I-5, down the hill, approx 2 miles.

Entrance is opposite KOA campground on S. 212th

SCHEDULE:

SATURDAY, September 13th:			SUNDAY, September 14th:	
9:00 am	MOUSE RACE I - JSO		9 am-4 pm	RECORD RATIO SPEED - NAT'L
9 am - 4 pm	CARRIER:	PROFILE,	9 am-4 pm	RECORD RATIO SPEED - NW
		CLASS I / II,		
9 am-4 pm	COMBAT:	15 CARRIER	9:30 am	PRECISION AEROBATICS: BEGINNER / INTERMEDIATE ADVANCED EXPERT
		80 MPH		
		1/2A		
10:00 am-	OLD TIME STUNT			
12:00 noon	NW SUPER SPORT RACE		10:00 am	ALL SCALE STATIC JUDGING
1:00 pm	CLASSIC STUNT		11:00 am	SCALE: AMA SPORT PROFILE SCALE
1:00 pm	NW PDQ FLYING CLOWN RACE			

ALL EVENTS ARE JUNIOR - SENIOR - OPEN CLASS COMBINED

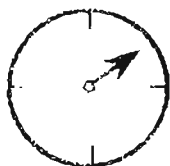
THERE WILL BE 1ST and 2ND PLACE AWARDS FOR BEST JUNIOR IN ANY EVENT

SATURDAY NIGHT DINNER WITH ALL CONTESTANTS INVITED

PLACE TO ANNOUNCED (SEE PROGRAM AT THE FLYING FIELD)

1. Registration is from 8:00 am until start of event, or Noon, whichever is earlier.
2. Entry fees: Sr / Open: \$10.00 first event, \$5.00 for each additional, \$20.00 max.
(US Funds) Junior: \$5.00 total for all events
3. AMA or MAAC Membership is required of all participants and mechanics
4. AMA membership is available at registration.
5. AMA events are per 1996-97 Rule Book.....KNOW THE RULES !!!!
6. Northwest Events to be per current NW rules. (Super Sport Race, Clown Racing)
7. SPEED: Separate entry fees apply to NW and National Record Ratio Events.
8. CARRIER: Multiple Entries allowed in each event, but separate entry fees apply to each entry.
9. ALL EVENTS TO BE FINISHED BY 4 PM ON SUNDAY
10. AWARDS PRESENTATION WILL BEGIN AT 4:30 PM ON SUNDAY.

For Information, contact: Dave Gardner, C.D. (206) 226-9667 or fax (206) 226-2759



Northwest Competition Records

Record performances established between Northwest CL modelers in sanctioned competition

A few records were set at the Roseburg Northwest Regionals, and have been the only records up to that point this year. The Class 'A' speed record held by Bob Spahr has been retired, due to a new line size change effective a few weeks ago. That class remains vacant at this time. The FAI lines were lengthened, and Chris Sackett posted a good time to fill that spot. Chris also upped his own .21 Proto record by better than 10 mph.

James Cox flew a ten minute flat time in Class II Mouse Race, taking away the Hazel/Thompson teams ten year old record. And over on the Carrier deck, Todd Ryan upped his mark again in the Profile class. Congratulations, all.

	1/2 A SPEED	99.78	BRUCE DUNCAN	5-29-94	EUGENE, OREGON
	A SPEED				
	B SPEED	158.53	RON SALO	7-13-95	RICHLAND, WASH.
	D SPEED	183.41	BOB SPAHR	7-14-95	RICHLAND, WASH.
	JET SPEED	196.64	JERRY THOMAS	8-8-93	RICHMOND, B.C.
	FORMULA 40 SPEED	153.13	MARTY HIGGS	6-26-94	RICHMOND, B.C.
	21 SPORT SPEED	147.97	CHUCK SCHUETTE	9-12-93	KENT, WASHINGTON
*	FAI SPEED	175.45	CHRIS SACKETT	5-25-97	ROSEBURG, OREGON
	1/2 A PROFILE PROTO	101.60	CHUCK SCHUETTE	5-26-96	ROSEBURG, OREGON
*	21 PROTO SPEED	136.33	CHRIS SACKETT	5-25-97	ROSEBURG, OREGON
	MOUSE RACE I -50 LAP	2:31	PAUL GIBEAULT	9-14-96	KENT, WASHINGTON
	MOUSE RACE I -100 LAP	4:42	REMY DAWSON	9-29-96	COQUITLAM, B.C.
	MOUSE RACE II -75 LAP	3:40	DAVE GREEN	5-24-86	EUGENE, OREGON
*	MOUSE RACE II -200 LAP	10:00	JAMES COX	5-24-97	ROSEBURG, OREGON
	AMA SCALE RACE -70 LAP	3:25	MARTY HIGGS	7-20-89	RICHLAND, WASH.
	AMA SCALE RACE -140 LAP	7:47	JOE RICE	5-25-96	ROSEBURG, OREGON
	NW GOODYEAR -70 LAP	4:12	JOE RICE	5-30-93	EUGENE, OREGON
	NW GOODYEAR -140 LAP	8:01	JULIE RICE	5-27-95	EUGENE, OREGON
	SLOW RAT RACE -70 LAP	3:10	HAZEL/THOMPSON	5-30-93	EUGENE, OREGON
	SLOW RAT RACE -140 LAP	6:38	HAZEL/THOMPSON	10-17-92	EUGENE, OREGON
	AMA RAT RACE -70 LAP	-----	-----	-----	-----
	AMA RAT RACE -140 LAP	6:32	HAZEL/THOMPSON	10-22-94	EUGENE, OREGON
	FAI TEAM RACE -100 LAP	3:36	KNOPPI/McCOLLUM	6-84	SHANGHAI, CHINA
	FAI TEAM RACE -200 LAP	7:40	KNOPPI/McCOLLUM	6-84	SHANGHAI, CHINA
	NW SPORT RACE -70 LAP	4:00	BRUCE DUNCAN	5-12-87	RICHMOND, B.C.
	NW SPORT RACE -140 LAP	8:48	TODD RYAN	10-8-94	RICHLAND, WASH.
	NW SUPER SPORT -70 LAP	3:14	DAVE GREEN	4-13-86	PORTLAND, OREGON
	NW SUPER SPORT -140 LAP	7:03	DAVE GREEN	3-8-87	PORTLAND, OREGON
	FLYING CLOWN RACE, LAPS: 305		TODD RYAN	10-5-96	RICHLAND, WASH.
	CLASS I CARRIER	318.30	ROY BEERS	9-13-86	KENT, WASHINGTON
	CLASS II CARRIER	330.25	ORIN HUMPHRIES	9-19-87	KENT, WASHINGTON
*	PROFILE CARRIER	314.00	TODD RYAN	5-23-97	ROSEBURG, OREGON
	.15 CARRIER	224.19	ALAN OLSEN	10-6-96	RICHLAND, WASH.
	AMA ENDURANCE	18:37	WESLEY MULLENS	8-15-87	KENT, WASHINGTON

records as of 6-01-97

The following is a once a year feature. FLYING LINES has long been the official overseer of NW competition records. A couple of years ago we thought it would be interesting to note best performances at the NW Regionals, with everybody eligible, not just NW folks. Lots of records fell at the 1997 Roseburg edition.....

Jerry Rocha set a new 'A' record, which was vacant due to rule change, and tied his 1/2 A performance from the previous year. Jerry also upped his 1/2A profile proto mark by 2 mph. The FAI event was also open due to line size change, and Chris Sackett grabbed this one with a good mark. Chris also blasted the .21 Proto event by over 10 mph from his last years score.

In the racing circle, James Cox better Paul Gibeault's old record in Mouse II by half a minute. In Slow Rat, Richard McIntyre retired Vic Garner's 10 year old record. And Todd Ryan upped his own Flying Clown mark.

On the Carrier deck, Eric Conley nearly dominated. He bumped up the Class I mark by nearly 100 points from Roy Beers, and retired Orin Humphries' 10 year old record in Class II. He also beat out Todd Ryan's .15 class record. Todd held onto the Profile class by upping his own record up to 314.

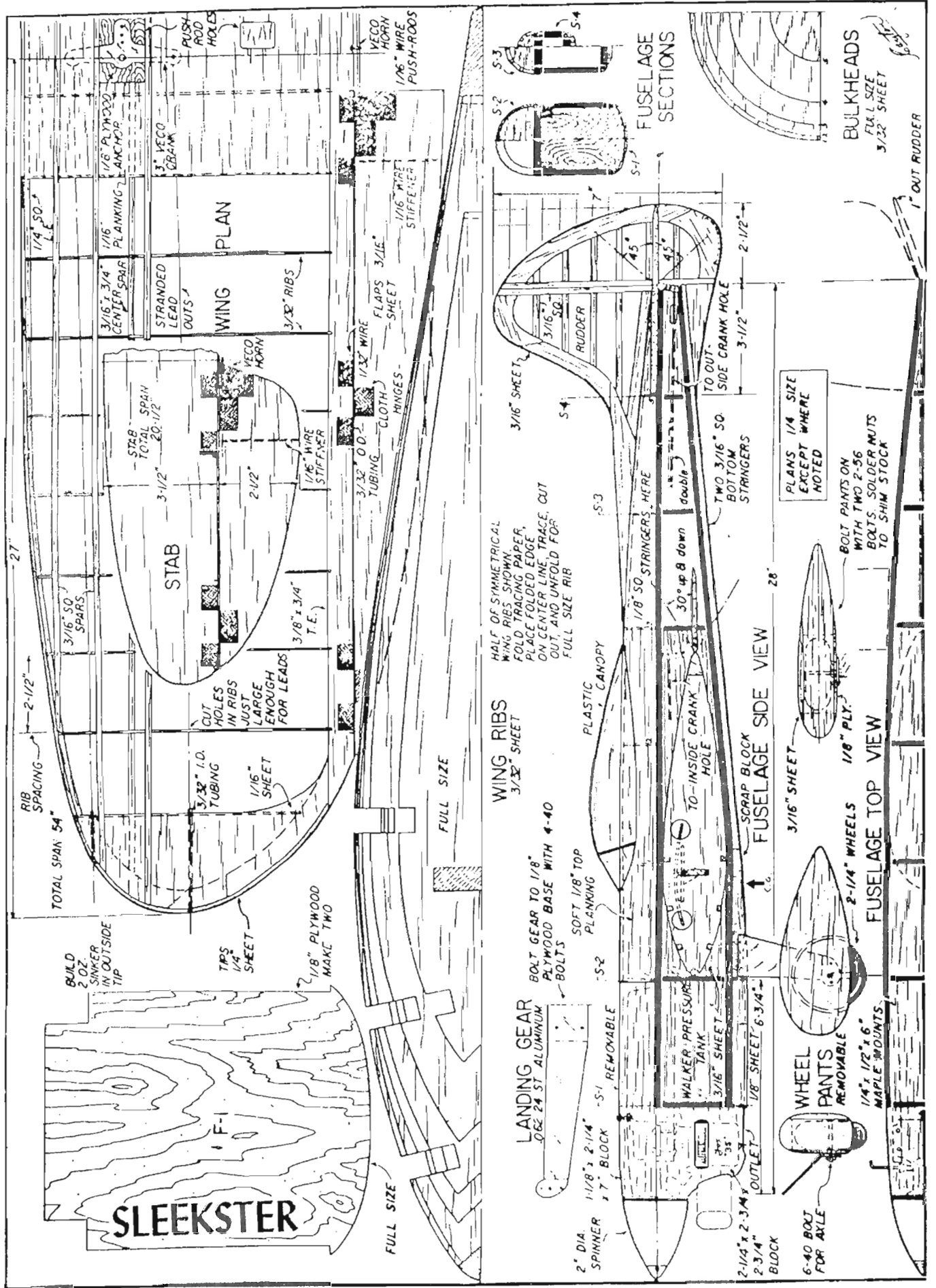
NW REGIONALS COMPETITION RECORDS
BEST RECORDED PERFORMANCES AT THE EUGENE AND ROSEBURG,
OREGON NORTHWEST REGIONAL CL CHAMPS BY ALL ENTRANTS.

1/2 A SPEED	132.39	BILL NUSZ	1992
		JERRY ROCHA	1996
		JERRY ROCHA	1997
A SPEED	151.77	JERRY ROCHA	1997
B SPEED	179.75	FRANK HUNT	1994
D SPEED	185.88	GLEN DYE	1996
JET SPEED	187.62	BILL NUSZ	1995
FORMULA 40	152.04	BILL NUSZ	1996
21 SPORT SPEED	147.00	CHUCK SCHUETTE	1994
FAI SPEED	175.45	CHRIS SACKETT	1997
1/2 A PROF. PROTO	105.38	JERRY ROCHA	1997
21 PROTO SPEED	136.33	CHRIS SACKETT	1997

(RACING RECORDS REFLECT ONLY FINALS)

MOUSE RACE I	4:34.59	PAUL GIBEAULT	1992
MOUSE RACE II	10:00.22	JAMES COX	1997
AMA GOODYEAR	6:00.34	LES AKRE	1995
NW GOODYEAR	8:01	JULIE RICE	1995
SLOW RAT RACE	5:59	RICHARD McINTYRE	1997
RAT RACE	6:04	BILL CAVE	1994
NW SPORT RACE	8:32	ROGER McINTYRE	1996
NW SUPER SPORT	7:57	RICHARD McINTYRE	1996
NW FLYING CLOWN	298	TODD RYAN	1997
CLASS I CARRIER	405.9	ERIC CONLEY	1997
CLASS II CARRIER	418.1	ERIC CONLEY	1997
PROFILE CARRIER	314.0	TODD RYAN	1997
.15 CARRIER	217.8	ERIC CONLEY	1997

This old stunter reprint from VGMC "Hothead", George Moul, editor



CONTROL LINE COMPETITION COMES TO SALEM !

**The WESTERN OREGON CONTROL LINE FLYERS
are proud to present.....**

**the BILL RIEGEL MODEL AIRPARK
INAUGURAL CONTEST**

AUGUST 23 & 24, 1997

SALEM, OREGON

A.M.A. SANCTIONED CLASS 'A' CONTEST FOR:

AEROBATICS

RACING

COMBAT

SPEED

BALLOON BUST

SPECTATORS WELCOME!

SITE: BILL RIEGEL MODEL AIRPARK, AT THE SALEM AIRPORT

PLEASE SEE REVERSE SIDE FOR MORE INFORMATION



**WESTERN
OREGON
CONTROL
LINE
FLYERS**

**the BILL RIEGEL MODEL AIRPARK INAUGURAL CONTEST
AUGUST 23 & 24, 1997**

**Meet hosted and sponsored by: the Western Oregon Control Line Flyers,
A.M.A. charter club # 3464, Salem, Oregon**

Schedule of Events:

SATURDAY

9:00 MOUSE RACE CLASS I
**10:30 SPEED - record ratio
(AMA, FAI, NASS EVENTS)**
**11:00 BALLOON BUST
(see below for rules)**

SUNDAY

9:00 NW SUPER SPORT RACE
**10:00 PRECISION AEROBATICS
(all four PAMPA classes)**
10:30 NW SPORT RACE
Noon NW 80 MPH COMBAT

EVENT AND SCHEDULE INFORMATION

- * Registration will open at approximately 8:30 AM each day.
- * Event schedule is subject to minor variations, based on entry levels.
- * Entrants in Speed event may fly any class, scoring is on record ratio basis against current Northwest region records.
- * All events will be flown as per applicable A.M.A. and Northwest region CL rules. Write or call to receive copy of Northwest region event rules.
- * Northwest Sport Race will be flown on a grass circle.
- * NW 80 MPH Combat will be matched double elimination. Flyaway shutoffs are strongly suggested
- * Balloon Bust event rules: any plane on 60 foot lines - subject to appropriate safety inspection; plane may not have any special balloon breaking devices or engine throttle; after takeoff plane is timed for 7 laps; after timing pilot gives hand signal when ready to attack balloon targets; pilot then has next 10 laps to break 5 balloon targets; no aerobatic flying allowed during balloon target flying; entrants may make 2 flights; score is calculated by multiplying miles-per-hour X number of balloons popped = point score.

OTHER IMPORTANT INFORMATION

- * A.M.A. or M.A.A.C. membership is required of all entrants and participants. A.M.A. membership is available at registration.
- * No alcoholic beverages or intoxicants are allowed on the field.
- * Only entrants and officials are allowed in the flying areas - others must stay behind barriers.
- * Merchandise awards will be given thru third place in all events. All events are all age groups combined. There will be special award going to best Jr or Sr entrant in each event.
- * PARKING: We must use the two paid parking areas immediately adjacent to the flying field, both are within 100 feet. Cost is one dollar for entire day. You may unload on field, and then park.
- * LODGING: Advance room reservations are a must. The Oregon State Fair will be in operation during this weekend. Contact the contest management for a complete lodging list.
- * DIRECTIONS: From Interstate -5, take exit number 253 heading West; go about one mile and turn left on 25th Street; then go about 3/4 mile and you will see the field on the left. (Can't miss it)

CONTACT: W.O.C.L.F., 1073 Windemere Drive NW, Salem, Oregon 97304;

or M. Hazel (503) 364-8593

A Model of Efficiency

Model-Airplane Engine Maker Stays Competitive

Story and photo
By Mitch Maurer
World Staff Writer

Reprint from
Tulsa World
Jan. 17, 1993

FORT SMITH, Ark.—Betty Fox has never built a model airplane, but it has been a hobby much of her 75 years.

As president of Fox Manufacturing, Betty has been involved with the 45-year-old model aircraft engine manufacturing company since 1952. When her husband and founder, Duke, died nearly two years ago, many of the company's ideas and much of the knowledge died with him.

So, Betty and her employees took over operating the company and today business is strong.

Each day, the 45 workers in a cinderblock building at the back of an alley produce up to 500 model airplane engines. Each engine still is hand made and tested before shipping. If the engine doesn't run as expected, it is reworked or put on a back shelf, likely never to see the light of day.

"Betty could have closed down this shop and never wanted for food or money when Duke died," said sales manager John Lowry. "But she has a heart of gold. She knew that 45 workers would be out of a job and I really think she would miss the model airplane community."

Betty downplays her role in the success of the company. Duke had started the firm in North Hollywood, Calif., right after World War II. He had designed a model airplane engine during the war because he was not pleased with the way other engines ran.

While that engine was not a hot seller, the next engine he made, a 0.35-cubic-inch stunt engine took off immediately. The company still produces that engine today.

Shortly after the couple was wed, Betty started keeping the books for her husband's company. As the years went on, and millions of Fox engines were sold to modelers, Betty found herself more and more involved with the running of the company.

"I love going to the model meets and seeing friends I have known for years," Betty said. "This company is really my life and we intend to be here for a long time."

In 1955, tired of endless hassels from the city of Los Angeles, the Foxs decided to move their company. Duke looked at a map of the United States and drew a hundred-mile circle in the middle of the country. He sent letters to the chambers

of commerce of the towns in the circle and soon decided Fort Smith was his sort of town.

"We wanted to be far enough north so the winter froze the bugs, but far enough south so we didn't freeze to death," Betty said. "We settled on Fort Smith and will be here as long as the company is around."

In 1956 the company moved into the facility it still occupies. In back of the cinder block manufacturing facility sits a group of metal buildings where model airplane fuel, containing highly flammable nitromethane, is blended. Behind that is a field where new engine designs are tested on real model planes.

Inside the main building, workers still assemble the engines by hand. Supervisors walk around armed with

"It is a tougher climate we're in now because of the foreign competition. We're now looking at some new engine designs and other things we might introduce."

— Betty Fox, president
Fox Manufacturing

micrometers to measure the small pistons, cylinders and other parts necessary to assemble a small running two-stroke engine.

"Since we still make the engines by hand, if we make a mistake, we don't have to throw away 10,000 parts," said Malvin Adams, who does everything from overseeing the shop to answering the telephones. "If something doesn't work perfectly, it's put aside."

Fox manufactures a complete line of model airplane engines. Along with California-based Cox, which makes a line of small model engines, and K&B, which makes model boat engines, it is the last remaining U.S. manufacturer of model engines.

Today, most competition for model engines comes from overseas. Fox buys every model the competition produces and maintains its manufacturing process produces more consistent performance in its engines.

"It is a tougher climate we're in now because of the foreign competition," Betty said. "We're now looking at some new engine designs and other things we might introduce."

A Fox engine was used in the 1970s by a National Aeronautics and Space Administration engineer to power a scale mockup of the space shuttle.

One of the things the company is considering is an engine larger than the 0.74-cubic-inch model that now is the largest it makes. Radio-controlled model airplanes are getting bigger and bigger, prompting the need for larger engines. At one time, Fox produced a two-cylinder, 1.2-cubic-inch engine, but it was not a big seller because of the high price and few models that needed that displacement.

Fox also recently introduced a new carburetor for its engines. Most radio-controlled carburetors have two adjustment needles that must be adjusted before each flight. The new Fox part requires just one needle.

But while the company is eager to widen its line of engines, any new model will be considered carefully: Adams estimated it costs \$250,000 to design and start manufacturing a new engine.

Much of the design workload falls on the shoulders of Dennis Shackelford, who started working for the company in 1972, when he was 17 years old.

"Duke kind of took Dennis under his wing because he was really interested in how these engines operate," Adams said. "He really grasped how they work and what it takes to make one."

When Duke was hospitalized following a stroke leading to his death, Shackelford promised his boss he would keep the company alive.

"This type of work is a challenge," Shackelford said. "These parts are nowhere as simple as someone might think."

Fox sells engines around the world. The company also produces glow plugs—small sparkplug-like filaments that ignite model fuel — to some Japanese model engine makers.

During the summer, Betty and a few workers jump in a van to hit the model airplane meets around the country, often including a Tulsa Glue Dobbys meet. Because of the number of miles logged each summer, the van is traded in about every two years.

Modelers in Australia even hold a Duke Fox Memorial model meet each summer.

"When Duke died, we were busy as the dickens," Betty said. "I kind of went blank, but our workers kept it going and now things are going great."

FLYING LINES

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