

SEPTEMBER / OCTOBER 1999 ISSUE #158

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- * And some more pretty good stuff!

Greetings, and welcome to this issue. Whew! Almost did not make the cover date on this one. Everybody except those of you North of the border should still receive this in October! Various reasons for the delay of this issue, none of which are really compelling enough to bother talking about.

With this issue, also comes the end of the real flying season. From here on out, we will have to be watching for the weather windows of opportunity to go flying. However, most of us are in Western Oregon or Washington, which means that it could be a lot worse! So ya'll still get out and fly this late fall and winter when it isn't raining, blowing, etc., too hard.

In John Thompson's Round & Round column, we have a few rules considerations in front of us for you racers and combatters. These involve the NW Goodyear, NW Flying Clown Race, and Vintage Diesel Combat events. No sense in rehashing anything here, as John already spells it clear. Just an emphasis: Please do vote on these. Remember the old cliche: if you don't vote, then don't gripe about the results.

Do you ever get a feeling you have somehow missed something???? Yer editor had that feeling when he updated the Northwest competition records. With a large stack of contest results, e-mails, and other correspondence, this information was combed thru for possible records updates. All of you present record holders (new ones, too), please double-check the information in that section and let me know if there are any mistakes. Gracias. REMINDER: Please check your mailing label. If it has number 158 on it, then this is your last issue and it is time to renew.

Looking for some extra reading? In this issue is an order form for back copies of FLYING LINES. Hey, do the editor a favor and buy a few of these to help clean out the inventory. I need the space! The cost is pretty cheap, as it is mainly just postage. If you want a whole lot of issues, price can be negotiable. By the way, the editor has a copy of everything in the archives.

Ye Olde Editor just got off the phone with Clarence Bull, and confirmed the story that he is selling his B-Y&O prop line. Not to worry, it's going into the good hands of the Brodak company. The tooling will be going to the East coast very soon. Meanwhile, Clarence says that he is finishing up a large batch of props to keep some stock in the pipeline while the transfer takes place. The prop business was Clarence's "retirement job", but got to be an awful lot of work. He is now looking forward to retiring again, but this time it will be more of a real retirement.

A public apology goes to Dave Gardner. Dave was good enough to transmit a good writeup of the Raider Roundup, but the editor screwed it up. So, only the scores are included in this issue. Sorry, Dave, I know you went to some work on this.

To contact Ye Olde Editor: Telephone: (503) 364-8593, or e-mail ZZ CLspeed@aol.com

STUNT ENGINE STARTING by Dan Rutherford

While it may not be a problem for all Stunt fliers, (semi-) converted Combat guys like myself and (evidently) one Mr. John Thompson are almost immediately frustrated when faced with starting even a simple Fox 35. The problem centers upon the ubiquitious muffler in that we can't, per usual practice, get the exhaust port facing up, close it with the piston and lay appropriate amount of prime in the port, rotating prop to introduce said prime to engine internals and then closing port with piston to trap the prime right where it will shortly be doing the most good.

So for John and any others who may have trouble getting a fire lit in these mild-mannered Stunt motors, yet do not want to use my personal solution---one big Mutha electric starter, powered by 12 sub-C nicads, 15-plus volts, please note----here's a method I have found to be reliable, repeatable and relatively easy.

The basic trick is simply first to intentionally flood the sucker. For the first start after having motor in storage, a situation John encountered at the Portland contest, this flooding of motor with fresh fuel gets everything lubed and all residual nasties liquified. Depending upon a number of variables the motor might well be quite stiff the morning of a contest and that means quite a lot of fuel, ditto with the number of flips required to get it distributed thoughout.

With this method there is no concern about getting too much fresh fuel into the motor, use as much as is required to get all the whirly bits freed up. Note that in some cases extraordinary measures may be required, these including removing the plug, forcing the fuel from tank and through needlve valve with a syringe, whirring the motor with an electric starter, positioning the model inverted, etc. Whatever it takes, especially with motors which have not seen recent use.

Now it's flooded. And you're screwed. Well, not quite, the next step is to clear all excees fuel and while I will describe the process, all you're really doing is letting the fuel flow through normal channels and ports, trapping it in combustion chamber and then flushing it. Model is first held such that motor is upright. Lower tail of model so fuel runs down crank and into case. Flip prop through a couple times with tail of model still lowered. Level model and then rotate so bypass port is low, allowing this big wad of fuel to enter. Continue to rotate model, fuel will flow up into top of bypass, about now is a good time----using prop as a convenient lever------to lower piston to bottom of its stroke. This lets the fuel dump onto head as by now the motor should be inverted. Again with the prop, move piston up in bore, trapping all this unwanted fuel in combustion chamber.

Now it does get a little tricky in that you need to get motor on its side, muffler low, without turning all that fuel loose. Assuming all has gone well so far I like to position model with tail a bit low, motor still sideways, and simply flip the prop until all excess fuel is blown out the muffler.

Cautions: First time throught this process you're going to lose control of the fuel, especially if there is a lot of the stuff to begin with or a mistake is made in positioning and/or rotating the model. It is not at all unusual to get so much fuel into combustion chamber that prop cannot be rotated throught a full revolution; don't worry about that, just don't try to flip it through and an electric starter would be used a thtis stage and with this condition only if what you really want to accomplish is a rod test. Fuel may puddle at the head, be sure to tip motor just a little bit, making it easier for fuel to dribble out exhaust port.

At this point the motor ought to be free and, believe it or not, almost perfectly primed. Using this method it is simply impossible to get all the fuel evacuated; what's left is almost exactly what you need anyway. So repeating the cycle is not a problem, expecially if not convinced it was done properly the first time.

Place model on ground----don't bother with that makes-us-nervous process of starting model inverted so the motor is upright--light plug and flip. If the procedure has been accomplished correctly, motor will start with first flip. Should it not do so, examine your moves, think about what is really going on inside. For example, some engines, the Fox 35 specifically, can trap a fair amount of fuel between bypass and upper edge of port in cylinder liner, keep this in mind when flopping model down, over and around.

Further details: This process is certainly a goofy-looking act to be performing as the judges wait for your signal. And with lines attached to model can be less than convenient. So while I no longer do so, it is possible to remove th elines immediately prior to getting a pull test (some of the pull-test guys don't like to see folk removing lines after the pull, even if same set is reinstalled), fill the tank, pushing a snout full of fuel into venturi with fuel system.

Now go through the process described above, clearing motor of all excess fuel, leaving only the amount desired for a starting prime. With model back o ground, pull prop through once just to be certain there is fuel in the needle valve. (at the '98 Regionals and after a series of perfect starts I once had a Fox 35 start instantly, only to quit after the prime was burned. While clearing an intentional flooded condition, fuel had backed away from the needle, returning to tank).

Still with details, cuz that's what is required, pinch off fuel feed line to avoid flooding or fuel in the line returning to tank. Set prop such that exhaust port is closed. If you have timed this procedure about right you've got plenty of time to go ahead and get a pull and then to worry about the upcoming flight. There is a surprising degree of latitude available here when it comes to timing; I have waited as long as 15 minutes between the flooded/cleared process and flipping the prop, would not be at all surprised if one could wait even longer. But do pinch off that feed line or all bets are off!

When actually at the circle, model upright and in takeoff position, lines out, all support stuff at hand, signal the judges, remove clamp from feed line, flip prop through a couple times without choking, light plug and flip it once more. Note the omission. I personally think it is not necessarily a good idea to "get a bump". First, this really is a repeatable process, if you've done it successfully just a few times, of course the motor is ready to start, there is no need for confirmation of any sort. Second, maybe you have done such a good job clearing the engine or there is a delay of some kind prior to your flight that there exists enough fuel to produce just one bump. Make sense to me if that one burn serves to actually start the music instead of wasting it in a process which is not a 100% reliable indication the motor will in fact start quickly.

Finally, while I have described a technique which has been found to be very nearly 100% reliable in gaining that magic start, your results may vary. Of course. The only answer is to experiment with basic procedure, once you've found what works for you try not to change it, expecially under the pressure of contest conditions.

Dear Mike and Flying Line Subscribers,

As many of you may know, I teach a class at Hoquiam High School in Aviation Science and part of my class curriculum for the past 5 years has been building and flying line control airplanes with all the students. This year I have a young man named Roy, who is confined to a wheel chair with Muscular Dystrophy. He is very smart and achieves well academically. His hand movements and coordination are fine at this point, as he runs his electric wheel chair all over the school without problems. I have talked at length with the adult who helps Roy during the day here at the high school. I believe that Roy has sufficient hand eye coordination to move a small control stick so as to control a line control airplane from a sitting position <u>out side the flying circle</u>. I am determined to help Roy build and fly a control line airplane along with the rest of his peers this semester. He already has that "line control" gleam in his eye as we all are looking forward to building and flying this semester.

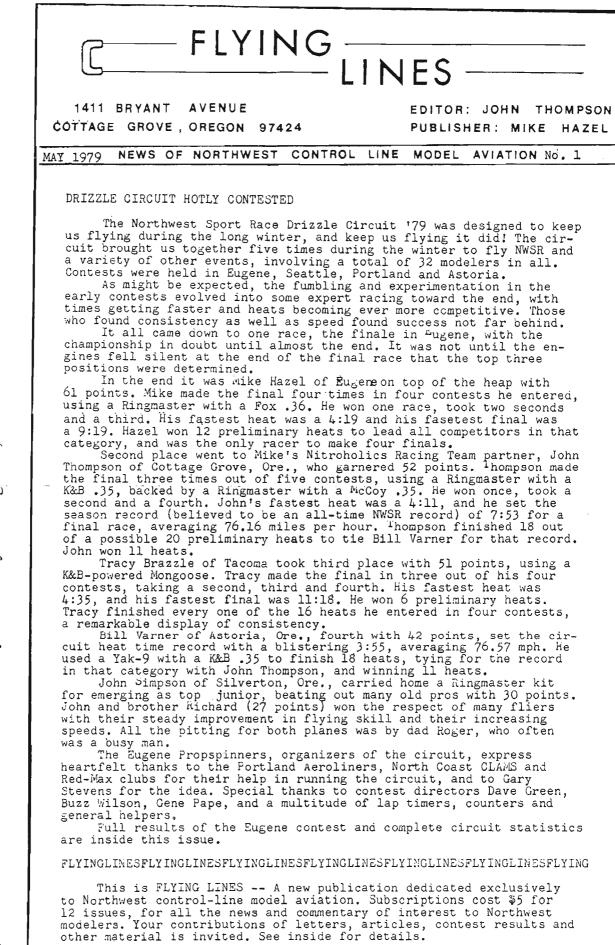
All students will be building a Shoestring or Buster airplane from kits purchased through John Hall at Summit Hobbies. So here is where you and all of the Flying Line readers come in:

I need advice, drawings, designs, materials, plans, ideas, hints on building a device that will allow Roy to sit on the outside of the flying circle in his wheel chair, and through a "push/pull" control stick device, fly his line control airplane. I need one device that will set in the center of the circle that the CL model and flying lines will attach to and another device that Roy will move with his hand. It may be necessary for the device that Roy uses with his hand to be small, like the "joy stick" he uses on his wheel chair. This means we may need to use electronics from his "joy stick" to the center of the circle device. But keep in mind, I want Roy to have as much feel of the line control airplane as we do when we fly our line control models.

Please mail drawings, designs and information to: Alan Olsen 301 19th St. **aclsen** Hoquiam, WA 98550 or email to desen@techline.com

1 appreciate all the time and help any of you can offer and will share the progress and Roy's success with all of you.

Respectfull Alan Olser



In that issue, it was mentioned that we lssue #155 was our special issue, which commemorated the 20 year anniversary page looked like in the very first space Well, the space-available basis. Here's what the front (how many names do you recognize?) ы start-up of FLYING LINES. an occasional re-print on available in this issue. might run of the issue.

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Northwest Competition Records

Record performances established between Northwest CL modelers in sanctioned competition

At long last, here are the updated NW records for the year. All you new record-holders, and any others concerned please check for accuracy, particularly the dates. We will dispense with a blow by blow accounting this time around. Note the absence of the D Speed record. It is now open due to a line size change which negated the previous record.

1/2 A SPEED A SPEED B SPEED D SPEED	110.34 176.05 168.47	MIKE HAZEL WILL NAEMURA RON SALO	9-06-98 7-14-99 6-14-97	TACOMA, WASH. MUNCIE, INDIANA KENT, WASH.
JET SPEED FORMULA 40 SPEED 21 SPORT SPEED FAI SPEED 1/2 A PROFILE PROTO 21 PROTO SPEED NW SPORT JET SPEED	196.64 153.13 153.78 179.54 106.78 133.03 153.13	JERRY THOMAS MARTY HIGGS LOREN HOWARD CHRIS SACKETT CHUCK SCHUETTE CHRIS SACKETT LOREN HOWARD	8-08-93 6-26-94 9-18-99 8-17-97 6-20-99 5-25-97 8-01-99	RICHMOND, B.C. RICHMOND, B.C. SALEM, OREGON COQUITLAM, B.C. TACOMA, WASH. ROSEBURG, OREGON COQUITLAM, B.C.
MOUSE RACE I -50 LAP MOUSE RACE I -100 LAP MOUSE RACE II -75 LAP MOUSE RACE II -200 LAP AMA SCALE RACE -70 LAP AMA SCALE RACE -140 LAP NW GOODYEAR -70 LAP NW GOODYEAR -140 LAP SLOW RAT RACE -70 LAP SLOW RAT RACE -140 LAP	2:17 4:22 3:32 9:23 3:01 7:13 4:00 8:01 2:47 5:49	STEPHEN COX PAUL GIBEAULT WILL NAEMURA TODD RYAN TODD RYAN TODD RYAN JOE RICE JULIE RICE TODD RYAN TODD RYAN	8-23-97 7-15-99 5-23-98 5-29-99 7-15-98 7-15-98 5-22-98 5-22-98 5-27-95 7-16-98 7-16-98	SALEM, OREGON MUNCIE, INDIANA ROSEBURG, OREGON ROSEBURG, OREGON MUNCIE, INDIANA MUNCIE, INDIANA ROSEBURG, OREGON EUGENE, OREGON MUNCIE, INDIANA
AMA RAT RACE -70 LAP AMA RAT RACE -140 LAP FAI TEAM RACE -100 LAP FAI TEAM RACE -200 LAP NW SPORT RACE -70 LAP NW SPORT RACE -140 LAP NW SUPER SPORT -70 LAP NW SUPER SPORT -140 LAP FLYING CLOWN RACE, LAPS	P 7:00	TODD RYAN TODD RYAN KNOPPI/McCOLLUM KNOPPI/McCOLLUM BRUCE DUNCAN TODD RYAN DAVE GREEN TODD RYAN TODD RYAN	5-29-99 5-24-98 6-84 6-84 5-12-87 7-24-99 4-13-86 4-24-99 7-24-99	ROSEBURG, OREGON ROSEBURG, OREGON SHANGHAI, CHINA SHANGHAI, CHINA RICHMOND, B.C. RICHMOND, B.C. PORTLAND, OREGON PORTLAND, OREGON RICHMOND, B.C.
CLASS I CARRIER CLASS II CARRIER PROFILE CARRIER .15 CARRIER	318.30 330.25 314.00 234.50	ROY BEERS ORIN HUMPHRIES TODD RYAN TODD RYAN	9-13-86 9-19-87 5-23-97 7-25-99	KENT, WASHINGTON KENT, WASHINGTON ROSEBURG, OREGON RICHMOND, B.C.
AMA ENDURANCE	39:56	MARK HANSEN	7-12-98	SALEM, OREGON
wassed as a f 10 10 00				

records as of 10-10-99



Season's end is just about here, and a rush of contests in September and October have brought the standings for Northwest CL competition into a clearer picture of 1999 performances.

The standings below will be the final results for many events. Any additional competition or corrections to the standings below may be published in a later edition, but for most events, this will be it.

Contests added to the statistics this month occurred in British Columbia, Washington and Oregon, and juggled the standings in combat, racing, aerobatics, and carrier. The Salem August meet, the Raider Roundup, the Fall Follies/Really Racing, the August Tailhook, a September speed meet in Salem and a vintage diesel combat meet in B.C. are added, plus a correction to the Old-Time stunt results.

Contests counted to date: Jan. 3, Salem, Ore.; March 28, Richmond, B.C.; April 10, Surrey, B.C.; April 17, Richmond; April 24-24, Portland, Ore., May 8, Surrey; May 8-9, Salem; May 15, Richmond; May 28-30, Roseburg, Ore.; June 12-13, Kent, Wash.; July 10, Surrey; July 11, Salem; July 24-25, Richmond; Aug. 14, Tacoma, Wash.; Aug. 21-22, Salem; Sept. 11-12, Kent; Sept 18, Salem; Oct. 9-10, Salem; Oct. 9, Surrey. The Aug. 29 VGMC Racing Classic was rained out.

Following are the standings for updated events:

1999 STANDINGS

MOUSE RACE CLASS I

1. Todd Ryan, Pasco., Wash.	22
2. Nitroholics Racing Team, Oregon	19
3. James Cox, Delta, B.C.	18
4. Paul Gibeault, Richmond, B.C.	17
5. Stephen Cox, Richmond, B.C.	16
MOUSE RACE CLASS II	
1. Todd Ryan	14
2. Paul Gibeault	13

3. Stephen Cox	12
4. Ron Salo, Surrey, B.C.	11
5, Nitroholics Racing Team	3
NORTHWEST SPORT RACE	
1. Todd Ryan	21
2. Nitroholics Racing Team	15
3. Ron Howell, Hoquiam, Wash.	13
4. S&S Racing Team, Seattle, Wash.	11
5. Melvito/Markito, B.C./Oregon	4
Rick Meadows, Coquitlam, B.C.	4
NORTHWEST SUPER SPORT RACE	T
1. Todd Ryan	11
.	14 °
2. Nitroholics Racing Team	8
S&S Racing Team	8
4. Ron Howell	6
5. Frank Boden, Burnaby, B.C.	2
CLOWN RACE	
1. Todd Ryan	44
2. Joe Rice, Richland, Wash.	26
3. Paul Gibeault	21
4. Nitroholics Racing Team	20
5. Mark Hansen, Portland, Ore.	16
RAT RACE	
1. Todd Ryan	6
Nitroholics Racing Team	6
3. Ron Howell	1
OVERALL RACING	
1. Todd Ryan	121
2. Nitroholics Racing Team	71
3. Paul Gibeault	50
4. Ron Howell	32
5. Stephen Cox	28
6. Mike Conner, Pitt Meadows, B.C.	20 19
James Cox	19
S&S Racing Team	19
9. Rick Meadows	
	18 17
10. Mark Hansen	17
PRECISION AEROBATICS	05
1. Jerry Eichten, Dundee, Ore.	35
2. Scott Riese, Portland, Ore.	34
3. Paul Walker, Kent, Wash.	30
4. Bob Parker, Renton, Wash.	
5. Jack Pitcher, Gresham, Ore.	26
	26 22.5
CLASSIC STUNT	22.5
1. Dan Rutherford, Bothell, Wash.	22.5 19
	22.5 19 15
 Dan Rutherford, Bothell, Wash. John Leidle, Kirkland, Wash. Scott Riese 	22.5 19
 Dan Rutherford, Bothell, Wash. John Leidle, Kirkland, Wash. Scott Riese Gary Nelson, Tigard, Ore. 	22.5 19 15
 Dan Rutherford, Bothell, Wash. John Leidle, Kirkland, Wash. Scott Riese Gary Nelson, Tigard, Ore. Don McClave, Portland, Ore. 	22.5 19 15 9
 Dan Rutherford, Bothell, Wash. John Leidle, Kirkland, Wash. Scott Riese Gary Nelson, Tigard, Ore. 	22.5 19 15 9 6
 Dan Rutherford, Bothell, Wash. John Leidle, Kirkland, Wash. Scott Riese Gary Nelson, Tigard, Ore. Don McClave, Portland, Ore. 	22.5 19 15 9 6
 Dan Rutherford, Bothell, Wash. John Leidle, Kirkland, Wash. Scott Riese Gary Nelson, Tigard, Ore. Don McClave, Portland, Ore. OLD-TIME STUNT 	22.5 19 15 9 6 6

4. Chris Cox, Delta, B.C.	12
5. Mike Conner, Pitt Meadows, B.C.	11
<u>OVERALLSTUNT</u>	
1. Dan Rutherford	64.5
2. Scott Riese	48
3. Jerry Eichten	35
4. Paul Walker	30
Chris Cox	30
5. Emil Kovac	29
7. Keith Varley	28
8. Bob Parker	26
9. Jack Pitcher	22.5
10. Don McClave	22.5
	21
AMA COMBAT	0 / F
1. Howard Rush, Bellevue, Wash.	26.5
2. John Thompson, Eugene, Ore.	24.5
3. Jeff Rein, Bothell, Wash.	8
4. Rich McConnell, Seattle, Wash.	7
5. Tom Strom, Seattle, Wash.	6
<u>80-MPH COM BAT</u>	
1. Dick Salter, Seattle, Wash.	17
2. Jeff Rein	13
Mel Lyne, Garibaldi Highlands, B.C.	13
4. Rich Salter, Seattle, Wash.	11
5. Robert Smith, Roy, Wash.	9
VINTAGE DIESEL COMBAT	
1. Mel Lyne	43
2. Jeff Rein	20
3. Troy Lyne, Garibaldi Hghlnds, B.C.	18
4. Mike Chies, B.C.	17
5. Paul Dranfield, Mission, B.C.	15
Ken Burdick, Seattle, Wash.	15
OVERALL COMBAT	10
	F/
1. Mel Lyne	56
	46
3. John Thompson	30.5
	26.5
5. Ken Burdick	25
6. Dick Salter	23
7. Troy Lyne	18
8. Mike Chies	17
9. Paul Dranfield, Mission, B.C.	15
10. Tom Strom	14
<u>PROFILE CARRIER</u>	
1. Shawn Parker, Seattle, Wash.	41
2. Mike Conner	28
3. Todd Ryan	23
4. James Čox	14
5. Mike Potter, Auburn, Wash.	6
.15 CARRIER	
1. Shawn Parker	28
2. Mike Potter	22
	A-1 & 2
3. Alan Olsen, Hoquiam, Wash.	10

4. Todd Ryan	9
Craig Bartlett, Corvallis, Ore.	6
OVERALL CARRIER	
1. Shawn Parker	71
2. Mike Potter	37
3. Mike Conner	26
4. Todd Ryan	32
5. James Cox	14
6. Alan Olsen	10
7. Craig Bartlett	6
8. Mark Hansen	4
Mike Hazel	4
10. Darrell Rupnow, Orting, Wash.	
SPEED(All classes combined)	
1. Chuck Schuette, Vancouver, Wash.	15
2. Loren Howard, Vancouver, Wash.	9
Chris Sackett, Burnaby, B.C.	9
4. Jerry Thomas, Edgewood, Wash.	7
Mike Hazel, Salem, Ore.	7
6. Paul Gibeault	4
Ron Salo	4
8. Preston Husted, Myrtle Point, Ore.	3
9. Dick Salter	2
10. Bruce Duncan, B.C.	1

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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 with 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 <u>fourth</u> place and the report also must list the <u>number of contestants</u> in the event, in order for the point standings to be counted accurately.

Also, please include in your report the hometown of the contestants, and note which contestants are juniors. 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.

another popular *FL* feature. **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, or for a copy of the rules for any Northwest event, send a self-addressed, stamped envelope.



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WANTED: DEBOLT STUNT WAGON KIT (BOTH SIZES) AND PLANS, MADMAN KIT (BOTH SIZES) AND PLANS. SCOTT CRICHTON, 10427 30 DR SE, EVERETT, WA 98208 (425) 379-0494 (EVES)

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WANTED: OLD A.M.A. RULEBOOKS FOR THE FOLLOWING YEARS: 59-63, 66, 68, 69, 71, 73. MIKE HAZEL (503) 364-8593, OR E-MAIL ZZCLSPEED@AOL.COM

WANTED: SUPERTIGRE X40 ENGINE OR USEABLE PARTS, ALSO TESTOR-MCCOY .19 REDHEAD. DICK KULAAS, 815 YAKIMA ST, WENATCHEE, WA 98801 (509) 663-4874 FOR SALE: SIG MAGNUM KITS, FOR FL READERS ONLY \$85 PLUS SHIPPING. THIS IS FROM SIG'S FINAL PRODUCTION RUN! EUGENE TOY & HOBBY, 32 EAST 11TH AVENUE, EUGENE, OR 97401 PHONE (541) 344-2117

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WANTED: K&B 4.9 ENGINES AND PARTS. ALSO EARLY VERSION OF VECO TOM TOM KIT. CONTACT: CRAIG BARTLETT AT (541) 745-2025

SPECIAL INTEREST GROUP: If not already a member, DO NOT join PAMPA at this time! Your \$20 will net only a single issue of Stunt News, better to wait until mid-November. Instead, current PAMPA members are urged to renew for 2000 and to vote for national and district level officers. As District 11 Director is on the ballot, Dirt's campaign statement is as follows: "you guys deserve better".

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FLYING LINES is produced by a staff of volunteers interested in keeping lines of communications open between Northwest region control line modelers. FLYING LINES is independent of any organization, and is made possible by the financial support of its base of subscribers.

The FLYING LINES staff: John Thompson, Orin Humphries, Jim Cameron, Fred Cronenwett, Paul Gibeautt, Ken Burdick, Chris Cox, Todd Ryan, and Mike Hazel - editor / publisher. Contributions for publication are welcomed. Any material submitted to the editor which is not for publication should be indicated as such. Duplication of contents is permissable, provided source is acknowledged.

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Proposed Northwest Vintage Diesel Combat Rules

Model

(A) A nostalgia combat model must be built in accordance with a design which was in common use prior to and up to Dec. 31,1970 or was kitted prior to that date.

The model must have been designed for a .15cu in. (2.5cc) size engine

(B) Models must be an accurate plan view of the original. The following alterations are permitted:

(i) Addition to or ommission of sheeted areas i.e. centre sheeting.

(ii) Changes to wing section or internal structure.

(iii) Additional booms or replacement of wire booms with wooden ones.

(iv) Recessing the engine into the leading edge.

(v) A balanced elevator may be changed to a conventional elevator and vice- versa. The elevator must retain the original outline.

(vi) Such changes must be carried out using constructional techniques that were commonly used at the time that the model was in use. The use of carbon, kevlar or boron fibre reinforcement is not permitted. Modern adhesives are permitted.

(vii) An upright engine mount may be changed to side mounting.

(viii) Fins may be omitted.

(C) The following alterations are not permitted:

(i) Any change to the original plan view except those outlined in b.1, b.4, and b.5 above, i.e. no smaller or larger elevators, no increase in wingspan, root chord or tip chord.

(ii) The use of metal motor mounts instead of wood.

(D) The model may be covered in any material including films and plastics.

Note: The event director may decide not to accept a model which, in his opinion, has been altered so as to change the appearance or performance of the model as originally designed. The onus of proof in any such case must always lie with the competitor.

Engine

(i) The engine shall be any diesel of .15 cu. (n. (2.5 cc) maximum displacement with iron/steel piston liner. Schneurle ported engines are not permitted.

(ii) Only suction fuel systems are permitted.

(iii) The propeller must be a Grish Tornado Nylon Flexi 8"x 6" prop, modifications are allowed.

Lines

(i) Control line length from the inboard grip of handle to the longitudinal center line of the model shall be 52'-3" (+/- 6 inches).

(ii) Control lines shall be multi-strand and of a minimum diameter of 0.015".

(iii) Line changes during combat period are prohibited.

Number of models

A contestant will be allowed to use one model per bout with a maximum of three models per contest.

Pit Crew

Two pit crew members are allowed per contestant. A contestant may start his own engine.

Officials

A contest shall be run by an event director, who shall be the overall time keeper, and one scorer per contestant.

The Bout

(i) A contestant's flight commences after a 60-second period for engine starting. The last 30 seconds of which shall be counted down by the event director prior to the start signal.

Once both planes have completed two level laps and are 180 degrees apart, a single horn blast will sound to start combat. Multiple horn blasts will sound to stop combat. After a restart, the two planes must get 180 degrees separation when a single horn blast will sound to start combat.

(iii) The flight shall last 5 minutes from the starting signal and its completion shall be signalled by the event director.

(iv) The engine must be started by hand.

Scoring

(i) Scoring will commence at the starting signal and finish at the completion signal.
(ii) One point will be deducted from a contestant's score for each second that their model is not airborne during the flight period.

(iii) 50 points will be added to the contestant's score for each single cut of their opponent's streamer or string with knot.

Conduct

(i) A pilot must remain inside the center circle while his model is flying except at the moment of release of his model.

(ii) After a midair collision the match will stop if one or both models are un-flyable. (iii) When combat is not under way, the plane(s) will fly level with no maneuvering.

Offences

If during the servicing of a grounded model the pit crew breaks or cuts the streamer it must be replaced with a new full-length streamer prior to launch. If during servicing the streamer should become entangled and subsequently fail to unfurl the pilot must immediately land to have the streamer untangled or replaced. No additional penalties other than ground time will be incurred.

Contest Procedure

(i) Each contestant shall compete in five rounds. 2 points for a win, 1 point for a tie, 0 for a loss.

(ii) The total scores of each contestant shall be added to provide an overall winner.

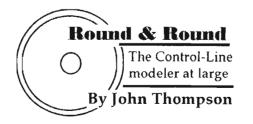
Combat Site

The combat site shall be laid out using two concentric circles to provide a 5-foot radius pilot's circle and a 65-foot radius safety circle.

Pull test

The pull test will be 10 pounds.

kb/edjmt/FL2-17-99



Modeling thought for the month:

"Things go wrong all at once, but things goright gradually."

- Tudisco's Asymmetry Principle

Time to tie up those loose ends

Flying Clown Race, NW Goodyear, Dbat ballots included

Getting the rules right — "right" meaning a set of guidelines that make the competitive side of our hobby the most fun for the most people takes some time and some fiddling.

Over the years, we've been pretty successful in the Northwest at coming up with regional rules for all of our non-AMA rulebook events, and after an initial shakedown period, the rules generally have been stable.

In the past year, we've been shaking down some of the more recently created events. There's been discussion via the newsletter (see the last several issues), along with lots of on-field debate, discussion, digression, chin-rubbing and head scratching. Now it's time for some voting.

Ballots affecting three events are included in this issue: A multiple choice ballot for brand new rules for Vintage Diesel Combat, a yes/no ballot for a fine-tune of the Clown Race rules, and a yes/no clarification of the Northwest Goodyear rules.

Before getting on to specifics, it's always a good idea to toss in this background paragraph for new subscribers' edification and old-timers' review: Northwest rules are those that govern our non-rulebook events in Northwest contests, as defined for purposes of the Northwest standards and records kept by *Flying Lines*. That means, contests held in AMA District XI and British Columbia, under AMA or MAAC sanction. Results of those contests are counted for standings points and records, under the presumption that all contests follow the same rules. Those rules are arrived at via a proposal/discussion/ballot process that has been in place via *Flying Lines* since approximately 1980.

On the three events mentioned above, we've had the proposals and discussion of the new and revised rules, and now's the time for the balloting. Ballots will be accepted on all three questions from any Northwest competitor, until the deadline, which is Dec. 1. Final rules will be published in an upcoming edition of *Flying Lines* and will be effective in 2000. Who is eligible to vote: Any CL flier residing in Dist. XI or B.C., whether or not they are *FL* subscribers. Therefore *FL* readers are encouraged to photocopy the ballots and distribute them to their fellow fliers, so that the broadest cross-section of opinion is represented.

Now, on to the matters at hand:

Vintage Diesel Combat:

Noting the explosive growth of VDC, and also noting a variety of rules in use, last year we asked *FL* combat columnist Ken Burdick to pull the various fragments together into a cohesive set of rules. The hope was to create a level playing field, so that the competition conducted in one venue would be substantially the same as that in another, and that contestants could travel from meet to meet and use substantially the same equipment in each place.

In a circumstance unusual in the 20 years that we've been making rules by this process, we encountered a couple of factions of opinion, and the rules that are under consideration may take some selling to get them into general use. However, they will at least be used at the Regionals and other United States contests. Unless they have a change of heart, the Canadian VDC enthusiasts appear determined to continue with the slightly different rules they have been going by for a couple of years. This will have some effect on the Northwest standings, but hopefully will not cause any major difficulties down the road. In a perfect world, we'll all eventually get on the same page.

In any case, the rules produced by Ken, published elsewhere in this newsletter, lay out the basic rules of VDC — the types of engines, airplanes, etc.

The major difference from the Canadian rules is that the engine rule is less restrictive (Canada contests have been requiring use of a single engine brand and model). The proposed rules also specify a pull test and follow certain other U.S. combat rules, such as the prohibition of changing lines during a match. Other than that the rules are substantially the same as what has been in effect since the inception of VDC.

Opinions collected via letter and other communication over the past several months identified one major area where opinions vary, and thus you'll see a multiple choice ballot. Whereas the Canadian fliers have used a singleengine rule to limit speeds, the proposed Northwest rules do not specify an engine; therefore some fliers favor a speed limit to accomplish the same thing. There are two speed limit proposals.

On the ballot, you have three choices:

• Accept or reject the rules as published.

• Indicate whether there should be a speed limit.

• If there is a speed limit, should it be 64 mph or 70 mph?

If the rules pass, and the speed limit passes, the speed selected by the most voters will be the speed in the new rules. If the rules pass, but the speed limit is rejected, there will be no speed limit in 2000.

Flying Clown Race:

The Flying Clown class has evolved gradually from a casual club fun-fly event into the Northwest's most popular racing category, and the rules have had to tighten up as well. At this year's Regionals, one of the weaknesses in the current rules was exposed.

The rules say that the airplane must be a faithful replica of the old PDQ Flying Clown. Unfortunately, the PDQ Clown was kitted in more than one version and even the kit versions varied a bit in terms of the shape and size of the parts, evidently the result of available raw materials at the time of manufacture. Thus several versions of the Clown exist, all of which have been considered legal. The problem is in determining on the field of battle whether a plane presented for competition faithfully represents one of those versions.

A second problem is traceable to the AMA unified racing rules, which apply to all Northwest racing events except as noted in the Northwest rules — and to a precedent set in Northwest Sport Race. The unified racing rules and NWSR rules specify that a cheek cowl may be added to profile fuselages. Some Northwest fliers feel that that provision should not apply to Clown, where, they contend, the strength provided by the cowl is unnecessary to that particular airplane design and thus functions only as a performance enhancement.

Problem No. 1 can be dealt with within the existing rules, and the solution is not involved with the ballot below. By the beginning of the 2000 season, *Flying Lines* will publish drawings based on the various available Clown kits and plans, and will list on those drawings minimum dimensions at certain key points. Thus, a racing event director will be able to take a ruler to any questionable airplane and within a few seconds determine whether it is legal. Publication of the dimensions will let fliers know what they can expect to have approved on contest day.

Problem No. 2, the cheek cowls, is a matter of disagreement among the fliers, and therefore requires a ballot, included below. It is a simple yes-or-no question: Should cheek cowls be allowed?

(The question applies to cheek cowls of greater thickness than the inboard doubler itself — standard practice among Clown contestants has been to close the inboard doubler, which does not change the dimensions of the fuselage.)

Northwest Goodyear:

This is a matter of clarifying additions to the legal engine list approved earlier this year.

The purpose of listing specific engines as legal in Northwest Goodyear is to assure that the engines used in this regional event are affordable to the average modeler. The list is designed to exclude certain high-performance, high-cost engines such as the Nelson and Rossi that are more or less necessary in the more serious AMA Goodyear event, while allowing a range of acceptable power plants.

The list as approved now includes several specific engine models, and also several brands as "any version" legal. Proposers of the additions to the list are airplane people, and airplane engines are most likely what we all had in mind in approving the list.

However, it has been pointed out that there are several non-aircraft engines made by some of those manufacturers which could be converted into "killer" NWG engines — at high cost — which is not what has been intended for NWG. Since nobody is currently using one of these engines, it has been proposed that we head off any possible conflict by specifying that the words "any version" be revised to "any aircraft version."

It's a simple yes/no choice on your ballot.

So, get out your crayons and mark the ballots below, and mail them to your Northwest rules coordinator by Dec. 1, 1999. The address is at the end of the column. Ballots also will be accepted via e-mail at the address at the end of the column.

Cash Y2K rookie award offered to novice racers

In hope of drawing some new blood into the racing circles, Pacific Northwest racing teams have agreed to band together to offer a cash prize for the top racing rookie of 2000.

The prize of \$100 will be offered to the rookie racer who scores the most points in Northwest racing point standings in 2000. A rookie is defined as any contestant who has not recorded a firstplace finish in a sanctioned contest.

The prize concept was discussed by the racers attending the Raider Roundup in Kent in September. The money is being raised via donations from the racers, with a \$10 per team member donation suggested. Oregon's Nitroholics Racing Team already have put in their \$20, and agreed further to guarantee that the prize comes to at least \$100. If more than \$100 is received from the donors, the award program will be expanded to either a second-place award or a trophy for the top rookie, depending on how much cash is available.

Now is the time for all racers who are in support of the effort to build entries for next year to do two things: 1) send in your donations to the rules coordinator (address at the end of the column) and 2) Spread the word among fliers in your area.

The rookie award won't mean much if we don't have some new racers going for it, so besides just offering the prize, we need to beat the bushes to flush potential contestants. If each team can produce one new contestant to compete for the rookie prize, we'll have a much more robust field of entrants in 2000 — and a lot more fun at each contest!

So, get out there and encourage the casual fliers who might like to begin competing. Teach the kids in your church group or neighborhood. Let's see some new racers on the circle in 2000!

Ballot

Vintage Diesel Combat

The issues: Elsewhere in this issue are proposed rules for Northwest Vintage Diesel Combat. Are those rules acceptable? If so, should there be a speed limit, and if so, what should it be? Check the appropriate boxes below.

- Approve the rules as proposed? Yes___ No___
- Should there be a speed lmit? Yes___ No___
- If a speed limit is approved what should it be? 64 mph ____ 70 mph____

Flying Clown Race

The issue: Should cheek cowls be allowed on Flying Clown Race aircraft? Yes____ No____

Northwest Goodyear

The issue: Should the words "any version" in the engine list be changed to "any aircraft version"? Yes____ No ____

All ballots must be signed, and the name and address of the person voting must be included below. Ballots must be returned to the address at the end of the column by Dec. 1, 1999.

Name	
مممسلماته	
Signature	

Photocopies ballots will be accepted. Ballots will be accepted by e-mail to the address below. Email ballots must include the name and address of the voter.

Send comments, questions, and topics for discussion to John Thompson, 2456 Quince St., Eugene, OR 97404. E-mail John4051@aol.com. World Wide Web: http://members.aol.com/ JohnT4051/NorthwestCL.html

AUGUST 14, 1999 TACOMA, WASHINGTON 1999 TAILHOOK

PROFILE CARRIER (3 ENTRIES)

1)	Todd Ryan	307
2)	Shawn Parker	235
3)	Mike Conner	224

.15 CARRIER (3 ENTRIES)

1}	Todd Ryan	233
2)	Mike Potter	215
3)	Shawn Parker	198

CLASS | & II CARRIER (1 ENTRY)

1) Mike Potter 287

AUGUST 21 & 22, 1999 SALEM, OREGON

WOLF 3RD ANNUAL SUMMER MEET NW SUPER SPORT RACE (3 ENTRIES)

1)	Nitroholics Team	7:24.1
2)	Ron Howell	8:29.9
3)	Mark Hansen	10:12.6

MOUSE RACE (3 ENTRIES)

1)	Nitroholics Team	6:12.1
2)	Ron Howell	7:38.6
3)	Dave Shrum	8:35.5

NW SPORT RACE (4 ENTRIES)

1)	Melvito-Markito Team	9:24.6
2)	Ron Howell	9:47.9
3)	Nitroholics Team	10:31.9

4) Dave Shrum 39 laps

NW FLYING CLOWN RACE (6 ENTRIES)

1)	Mark Hansen	244
2)	Nitroholics Team	230
3)	Mike Conner	194
4)	Dave Shrum	119

CLASSIC STUNI (7 ENTRIES)

1)	Dan Rutherford	496
2)	John Leidle	489
3)	Scott Riese	476.5
4)	Keith Varley	447.5

PRECISION AEROBATICS - INT. (3 ENTRIES)

1}	Bruce Hunt	402.5
2)	Bill Veselik	374
3)	Nits Norling	65.5

PRECISION AEROBATICS - ADV. (7 ENTRIES)

- Scott Riese
 489.5

 2)
 Jerry Eichten
 475.5

 3)
 Gary Nelson
 468.5
- 4) Mike Conner 460.5

PRECISION AEROBATICS - EXP. (4 ENTRIES)

1)	Jack Pitcher	572.5
2)	Chris Cox	568
3)	Dan Rutherford	537
4)	John Leidle	518

80 MPH COMBAT (7 ENTRIES)

1)	Jeff Rein	4 W	1 L
2)	John Thompson	зW	2 L
3)	Mel Lyne	3 W	2 L
4)	Ken Burdick	2 W	3 L

SEPTEMBER 11 & 12, 1999 KENT, WASHINGTON RAIDER ROUNDUP 99

MOUSE RACE I (3 ENTRIES)

Nitroholics 7	Team	6:21.72
Joe Rice	(watch error?)	?

Ron Howell 7:57.40

NW SPORT RACE (4 ENTRIES)

1)	Nitroholics Team	9:30.47
2)	Ron Howell	11:26.03
3)	Frank Boden	DNF
4)	Todd Ryan	Scratch

NW SUPER SPORT RACE (4 ENTRIES)

1)	Nitroholics Team	7:40.20
2)	Ron Howell	13:36.56
3)	Frank Boden	65 laps
4)	Todd Ryan	scratch

NW FLYING CLOWN RACE (10 ENTRIES)

1)	Todd Ryan	297
2)	Joe Rice	286
3)	Rick Meadows	268

1) 2)

3)

4)	Paul Rice	heat	134
	VINTAGE DIESEL COMB	AT (7 E	NTRIES)
1) 2) 3) 4)	Mel Lyne Dick Salter Jeff Rein Rick Meadows		3W 3W / 1L 2W / 2L 1W / 2L
	AMA FAST COMBAT	(8 ENT	RIES)
3)	Jeff Rein Rich McConnell Tom Strom Howard Rush		4W / 1L 3W / 1L 2W / 2L 1W / 2L
	80 MPH COMBAT	(<u>8 ENTR</u>	IES)
2) 3)	Mel Lyne Dick Salter Jeff Rein Rich McConnell		5W / 1L 4W / 2L 3W / 3L ?
	PROFILE CARRIER	(3 ENTE	RIES)
1) 2) 3)	Shawn Parker Mike Hazel Mike Potter		236 208 194
	.15 CARRIER (2	ENTRIE	<u>S)</u>
1) 2)	Shawn Parker Mike Potter		199 195
	CLASS & CARRIER	(3 ENT	RIES)
1) 2) 3)	Mike Potter Shawn Parker Mike Hazel		293 220 215
	OLD TIME STUNT	(7 ENTF	<u>NES)</u>
1) 2) 3) 4)	Dan Rutherford Emil Kovac Scott Riese Keith Varley		279.5 275.7 255.8 255.5
CLASSIC STUNT (7 ENTRIES)			
1) 2) 3) 4)	Dan Rutherford Gary Nelson John Leidle Scott Riese		511 494 471 469.5
NOTE: Precision Aerobatics was blown out, and there were no Scale entries noted.			

SEPTEMBER 18, 1999
SALEM, OREGON
NW SPEED WRAP-UP

1/2 A SPEED (1 ENTRY)

1) Bruce Duncan 94.58

21 SPORT SPEED (2 ENTRIES)

 1)
 Loren Howard
 153.78

 2)
 Chuck Schuette
 151.45

NW SPORT JET (1 ENTRY)

Loren Howard 153.00

1)

1) 2)

3) 4)

1) 2) 3)

1)

2) 3) 4)

AMA JET SPEED (2 ENTRIES)

1) Jerry Thomas attempt Loren Howard attempt

OCTOBER 9, 1999 SURREY, B.C.

NOSTALGIA DIESEL COMBAT (8 ENTRIES)

1)	Mel Lyne	14 pts
2)	Preston Briggs	8
3)	Ken Burdick	7
4)	Jeff Rein	5

OCTOBER 9 & 10, 1999 SALEM, OREGON REALLY RACING / FALL FOLLIES

MOUSE RACE | (8 ENTRIES)

Nitroholics Team	5:39.48
Travis Morgan	6:08.42

j	
Larry Hyder	6:27.40

Nathan St. John (heat) 3:09.72

MOUSE RACE II (3 ENTRIES)

Nitroholics Team	11:41.31
Nathan St. John	14:48.07
Travis Morgan	73 laps

NW FLYING CLOWN RACE (4 ENTRIES)

Mike Conner	250
Nitroholics Team	247
Ron Howell	225
John Howell	183

NW SPORT RACE (3 ENTRIES)

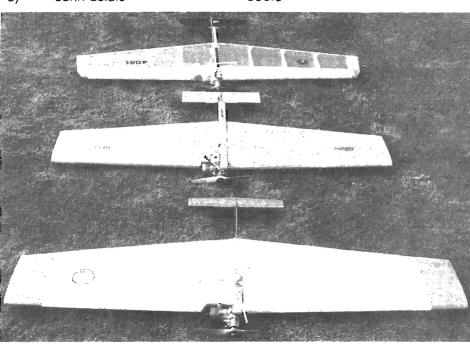
1) 2) 3)	Nitroholics Team Ron Howell Jesse St. John	10:56.23 12:02.89 14:03.08					
	NW SUPER SPORT RACE	(3 ENTRIES)					
1)	Ron Howell (other entries scratched)	14:23.40					
RAT RACE (2 ENTRIES)							
1) 2)	Nitroholics Team Ron Howell	8:49.17 11:11.65					
PRECISION AEROBATICS - INTERMEDIATE (4 ENTRIES)							
1) 2) 3) 4)	Bruce Hunt Jim Johnson Nils Norling Mike Hazel	456.0 338.0 335.0 307.0					
PRECISION AEROBATICS - ADVANCED (7 ENTRIES)							
1) 2) 3) 4)	Scott Riese Jerry Eichten Gary Nelson Dave Royer	505.5 503.0 488.5 473.0					
PRECISION AEROBATICS - EXPERT (3 ENTRIES)							
1) 2)	Jack Pitcher Dan Rutherford	545.5 536.0					

3) John Leidle 530.5



"Now What!?", looks like the thought on Ron Salo. The scene is the pit area of a Portland racing contest, long, long, ago.

Ron is a top Northwest Racing and Speed competitor, and hails from British Columbia.



A trio of AMA Fast-Class Combat ships:

top: Czech design, with Fox Mark VII .36 belongs to John Thompson.

middle: Pape/Thompson "Underdog" design, with Fox Mark VII power.

bottom: Cartier "Gotcha" design, built by Gary Harris. Stels .36 power.

FLYING LINES BACK ISSUE ORDER FORM

Listed below are the FLYING LINES issues that are still available. Here's your chance to complete your newsletter library. Most all issues include technical information, and certainly a nostalgic look back at past NW events and affairs. The issues are listed by issue number and date. Circle, check, or underline the issues you wish to receive. The price: Just \$2 for three issues, or \$6 will get you ten issues.

(4) Aug 79	(11) Mar. 80	(13) May 80	(23) Jan 81	(32) Jan 82
(33) Feb 82	(36) Jun 82	(37) Aug 82	(38) Sep 82	(39) Oct 82
(40) Nov 82	(44) Apr 83	(45) May 83	(49) Nov 83	(50) Dec 83
(52) Feb 84	(54) May 84	(61) Feb 85	(62) Mar 85	(66) Oct 85
(68) Dec 85	(70) Feb 86	(73) May 86	(74) Jun/Jul 86	(75) Aug 86
(76) Sep/Oct 86	(77) Nov 86	(78) Dec 86	(80) Feb 87	(84) Jul/Aug 87
(86) Nov/Dec 87	(87) Jan 88	(91) Jul/Aug 91	(94) Dec 91	(96) Mar 92
(98) May 92	(99) Jun/Jul 92	(101) Sep 92	(103) Dec 92	(104) Jan/Feb 93
(105) Mar 93	(106) Apr/May 93	(108) Jul/Aug 93	(111) Dec 93	(112) Jan/Feb 94
(113) Mar/Apr 94	(114) May 94	(115) Jun/Jul 94	(116) Aug/Sep 94	(117) Oct 94
(119) Jan 95	(120) Feb/Mar 95	(121) Apr 95	(122) May 95	(123) Jun/Jul 95
(124) Aug 95	(125) Sep/Oct 95	(126) Nov 95	(127) Dec 95	(128) Jan-Feb 96
(129) Mar 96	(130) Apr 96	(131) May/Jun 96	(132) Jul 96	(133) Aug 96
(135) Nov 96	(136) Dec 96	(138) Mar 97	(139) Apr/May 97	(140) Jun/Jul 97
(141) Aug 97	(142) Sep/Oct 97	(143) Nov 97	(144) Dec97/Jan9(8 (146) Apr 98
(147) May 98	(149) Aug 98	(151) Nov 98	(153) Jan/Feb 99	(154) Mar/Apr 99

(155) May 99 (20 yr anniversary issue)

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