



NEWS OF NORTHWEST CONTROL-LINE MODEL AVIATION

1073 Windemere Dr. NW, Salem, OR 97304

Editor: Mike Hazel

JANUARY / FEBRUARY 1992

ISSUE # 95

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Cockpit Chatter



*Notes from the
editor's desk*
By Mike Hazel

Greetings, Happy New Year, and all that stuff. I hope everybody will keep to their new year resolutions, or maybe we as CL'ers should think, revolutions.

Hot stuff and late breaking news in this issue is what happened with the emergency safety rules proposals concerning the speed events. This news is only about a week old.

Speaking of speed flying, the rules forthcoming will retire all the records, except for the $\frac{1}{2}$ A proto event. This will make for some interesting action both on the NW and the national scene. The competition records summary will return after we have some contests this spring, and hopefully some new records.

Also speaking of speed flying, plans are coming along for the NW Regionals in Eugene. For more years than this writer cares to think about, I have been event director for the speed circle. This makes it difficult to do much, if any, competing. I am asking for a volunteer to take on that position for this year. If you might be interested, but do not want to commit for the entire schedule, then perhaps we can work out a "time-share" schedule so we both can fly.

This issue has the beginnings of the 1992 contest schedule. I will once again request that all club leaders, and contest directors to get their information in to us. Thank you, Paul Rice, for providing the schedule for the Columbia Basin Balsa Bashers.

In the other things to do department, remember the Northwest Model Expo is coming right up, Feb. 1 & 2. Always a good time to be had, looking over manufacturers displays, haggling at the swap meet, oogling display models, and visiting with NW modelers. Plenty of publicity is already out on this event, so we won't repeat any of it here.

Corrections Department: It was pointed out that the photograph caption in the last issue identifying Dave Royer was incorrect. It was really Steve Scott, of the Seattle Skyraiders. Oops! Oh well, they are both newsletter editors, maybe we somehow got mixed up that way.

Pollster Department: Last year there were some contests that were scheduled on Saturday, rather than the almost traditional Sunday. It might be beneficial to hear from you competitors whether or not this makes any difference in being able to get to the meet, and return. One certain advantage is the lack of any rush needed to get home for Monday. Any thoughts on this, troops?

Thanks again to Rich McConnell, for serving as the FLYING LINES statistician, in keeping up with the competition points. In reviewing the results, it is interesting to note that the top point placers in many categories are not the fastest, or highest-scoring competitors. Rather, just lots of participation will tend to put one near the top of the heap. Let's see even more participation and action in 1992!!!!!!!!!!

Here's another plea for some articles regarding Stunt, Racing, and Speed. It would be nice to have a columnist for these categories, but barring that, one-off articles are certainly welcome. Please share.

MIKE HAZEL
FLYING LINE1073 Windemere Dr. NW
Salem, OR. 97304

Jan. 9/92

Dear Mike;

Planning for the 1992 Model Competition season will this year requires some innovative action. Over the last couple of years, "SAFETY" has become the hallmark cry. In some cases it is with legitimate purpose, in others it is merely spiteful retaliation. In any case, we have seen fast combat effected, now C/L speed, and next probably fast rat.

We can not close our eyes to any possible safety problem, real or imagined. We also can not turn a deaf ear to those proposing changes. We must first ask is there any legitimate reason for the proposed changes. Is there any possible advantage to making changes, in either safety or in the possibility to increase the popularity of the events ?

As far as control-line speed is concerned, I believe there has been a hatchet job done on this class of events. I also believe that the counter-proposal submitted by you has merit. In the meantime I suggest that all NORTHWEST COMPETITIONS where C/L SPEED is flown, that we either;

(A) FLY THE 1991 RULES until things settle down and reach acceptable rules to those who participate in the event.

(B) FLY USING THE COUNTER-PROPOSAL RULES submitted by yourself, again until acceptable permanent rules are derived at.

Special Interest groups such as N.A.S.S. can not, out of hand, discard any proposals. I can remember about 2 or 3 years ago the 10% Nitro fuel being scoffed at. That proposal looks pretty good now compared to what we're facing.

May I also propose a committee of active C/L Speed people, one or two from each area, start to put together new comprehensive rules that address all legitimate safety concerns, but also consider how to make this class of modeling more interesting to others. If this is not done it will eventually lead to a few, very few, modellers participating in this class of competition.

As far as record ratio type of competitions, I go back to my discussion with you last year, we don't need to fly against the National Records. Flying Lines has a complete list of Northwest Records that we can fly against, and establish new N/W Records when rules do change.

Anyhow pass along my comments for what there worth, at least it may start some healthy discussions.

Sincerely,


Bruce Duncan, President, V.G.M.C.
P.O. Box 58037, Stn. L
Vancouver, B.C. V6P 6C5

Bruce, your thoughts are right on. Fortunately the emergency safety proposal regarding speed flying has been resolved, more or less positively. Look elsewhere in this issue for the late breaking news.

We do have a committee of speed fliers in place. It is the Speed Advisory Committee (SAC), and it provides input to the control line contest board. Ye Olde Editor just happens to be on the NW seat.

***** HOW TO SET UP THE THREE LINES YOU'LL NEED FOR CARRIER FLYING *****

One of the best ways to get your carrier ship ready to fly, is to right now say to yourself that every carrier plane you will build in the future will have the leadouts the same distance from the center of the model as the preceding one. If you start out with this simple idea, you will save yourself untold grief in the future. So, with that in mind, let's say that you have finished the up and down leadouts at 24" from the center of the model. The third, usually the center line, the throttle line, should be about 3 inches longer. This will allow plenty of leeway as you give the up or down movement to the plane, and the connecting clevises will not so easily become entangled if the throttle line is out of the way.

Anchor your plane down on the ground, and with a 100 foot steel tape, mark off a spot 60 feet from the center of the plane. Connect the up and down wires and run them out to the 60 foot mark and slightly beyond. At this point, I cannot be more firm. You must get exact level on the elevator at this point, as there is little, if any, leeway in the adjustment of the handle, with the exception of changing connectors (and finding the exact size you need if you goof is a real pain).

So, be sure that the elevator is at neutral when you hold the handle level. This is really fairly easy if you use the crimping tool to give just enough slack on the crimp to allow you to "nudge" the line back and forth through the sleeve. Take your time with this. When you are satisfied, crimp off the sleeves, and paint the up connector loop red at the handle and plane.

Now comes the fun part, and if you are lucky enough to get a helper, you are much the better off. Have your helper pick up the model and hold it level while holding the throttle pushrod so the carb on the model is fully open. Connect a new line with the same size connector as you used on the up and down leadouts. Run the wire out to the handle and temporarily run the wire through a sleeve and a connector. Make sure that the handle "trigger" is fully back, tying it helps. Now, slowly pull the throttle wire tight. How tight? As tight as you can and still keep the up and down wires slightly tighter. Just a very little sag in the throttle wire is OK. Pinch the sleeve just a little, and while your helper holds the plane level, push the trigger forward while maintaining tension on the main wires. Your helper should be able to look into the carb and see it close nearly shut. Then, pull the trigger back, and the carb should be fully open. Be sure that your helper knows just how far you want the throttle to close. You will be able to advise him because you test ran the engine on the bench and found out how far is just right and far is too much....didn't you?

When you are satisfied, complete the crimping and finishing of the lines per the recommended way. If this is done right, and you are lucky, this method of using three lines will last a lot longer than the plane, and you can always use the lines on different planes if you always keep the leadouts the same length.

A final note, and one that works for me. I keep the throttle line on a different storage spool than the main lines. I find that it really is quicker for me to pick up the the main line spool, run out the lines to the handle, match up the color coded lines with the color coded handle leadouts, and then attach the throttle line to the handle and walk it back to the plane laying the line down between the main lines. If you really want to see somebody get real frustrated, you should watch me try to untangle three lines when I've forgotten and wound up all three lines on one spool. My pals at the last three Nats think I'm nuts doing it this way, but they are often still twisting and un-twisting while I'm done and having a pop. Give this storage method a try! It really works.

***** Next Month: I am not paying big bucks for a bellcrank, I am going to build my own three line bellcrank for two bucks!" Can he do it? Tune in next time and see!

1/3 SIZE SHOWN:

OFFSET MOTOR MOUNT
1-2 DEGREES TO OUTSIDE

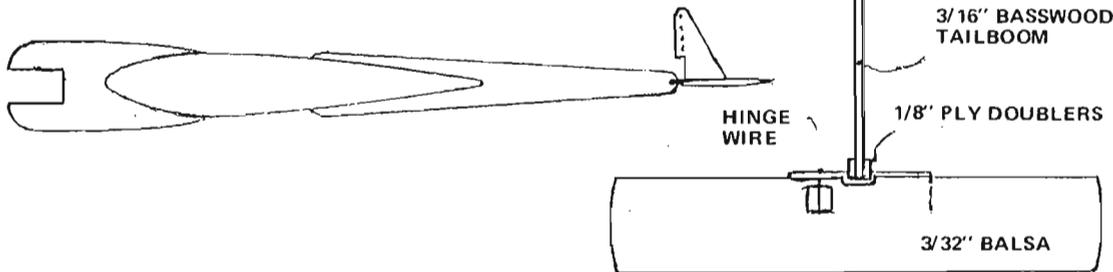
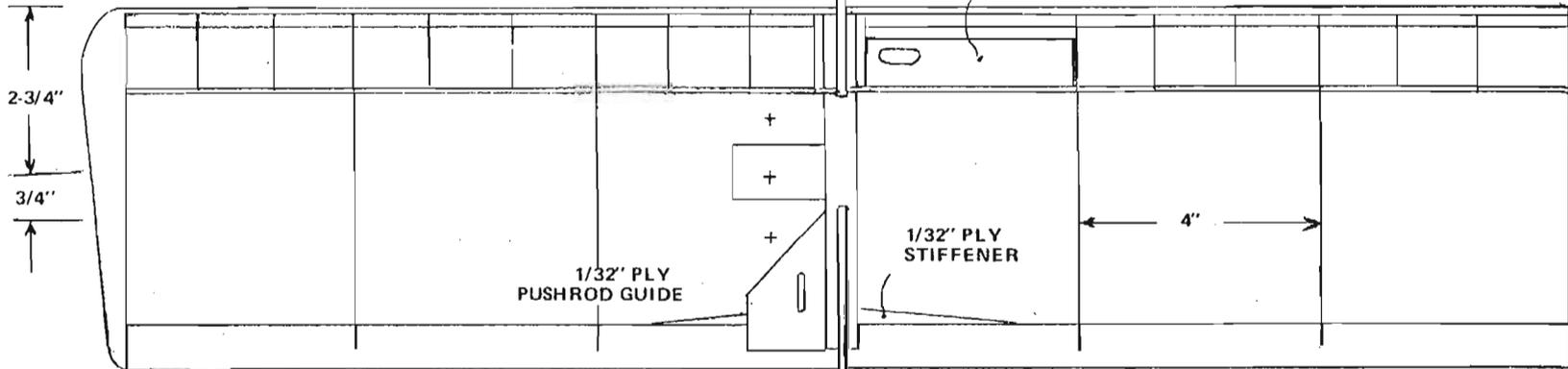
1" DIAMETER
BLADDER TUBE

WING CONSTRUCTION:

- 1/4" SQ. SPRUCE L.E. 1/8" SQ. SPRUCE SPARS
- 1/16" Balsa RIBS & FALSE RIBS
- 1/2" Balsa CENTER RIB & 3/16" FRONT DOUBLERS
- TRAILING EDGE: 3/32x3/4" Balsa

1/8 oz.
TIP WEIGHT

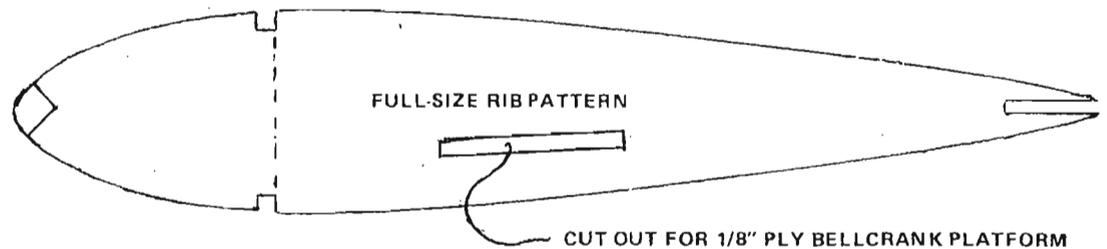
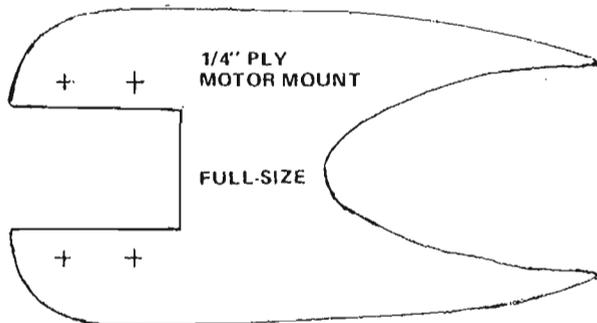
3/32"
TIPS



cheap imitation
for 1/2A combat

BY: GENE PAPE & JOHN THOMPSON
DRAWING: MIKE HAZEL

See CL column in May 1986
Model Builder for const. text.



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CONTEST CALENDAR

Following is the information that FL has received thus far about the Northwest 1992 contest schedule. Reminder is hereby given to provide FL all information as soon as possible, even if it is tentative. The next issue of FL will include a fully updated and complete schedule. This issue it is somewhat abbreviated, since we are still early in the year.

- March 15, Richland, Washington. NW Sport Race, Clown Race. Site and C.D. TBA
- March 29, Portland, Oregon. NW Sport Race, NW Super Sport, Carrier, plus fun-fly events: "limbo", "traffic-jam". Site: Delta Park Sponsor: Portland Fireballs. C.D.: Mike Hazel, 1073 Windemere Dr NW, Salem, OR
- April 12, Richland, Washington. Mouse I, NW Sport Race, NW Super Sport. Site and C.D. TBA.
- May 2 & 3 Richland, Washington. Clown Race, NW Goodyear, Mouse I, Carrier, Speed. Site and C.D. TBA
- May 23 & 24 Eugene, Oregon. NW Regionals "most all CL events" Site: Eugene Airport. C.D.: Craig Bartlett, 205 NE Cedar Ln, Corvallis, OR 97330

*** Other scheduled dates for Richland, Washington, sponsored by the Columbia Basin Balsa Bashers: June 14, August 8, September 6, October 3 & 4



The Flying Flea Market

Classified advertisements — FREE for FL subscribers

WANTED: Sterling Navion kit. Contact John Thompson, 1145 Birch, Cottage Grove, OR 97424

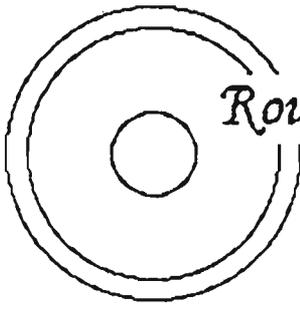
FREE: Original photos from recent issues of FL. Send SASE with request to FL. first come, first served.

FOR SALE: K&B 5.8, no box, but brand new. Missing nva. \$92.00 postpaid. Mike Hazel, 1073 Windemere Dr NW, Salem, OR 97304

WANTED: Fox 40 BB Deluxe CL, Fox 35 Stunt- old 4 bolt head. Contact David Thompson, PO BOX 1652, Wenatchee, WA 98807 or (509) 664-1542

WANTED: McCoy Redhead engines, stunt or rc versions, no speed engines. What do you have you can let go? Call or write: Joe Just, 709 Crescent, Sunnyside, WA 98944 or, (509) 837-5983 mornings, or (509) 837-2299 evenings.

FLYING LINES subscribers: This space is available for you. Your ad will normally run two consecutive issues, unless otherwise requested. Renewals OK anytime.



Round and Round

The Control-Line
modeler at large

By John Thompson

HAVE YOU EVER WONDERED

how these guys who have their model airplane construction articles published in the big deal magazines got so famous that their designs would be published and distributed to a national audience?

Here's how it happened:

Mr. Average Joe Modeler designed an airplane that turned out to fly pretty well. He took pictures of it. If he was thinking ahead, he took pictures of the various stages of construction. He drew up some plans.

He wrote down his thoughts about the design, and step-by-step "how-to build-it" instructions.

Then he put the pictures, the written material and the plans into an envelope and he mailed it to the editor of a magazine.

A few months later, the package was published in the big deal magazine and Average Joe Modeler was suddenly Mr. Famous Flying Expert. His planes appeared on flying fields around the country, strangers approached him respectfully at contests, and magazines were eager for another article.

Here's a tip for all the Average Joe Modeler guys out there in the Northwest. Right now is an excellent time to step up to becoming Famous Flying Experts by submitting articles to the magazines.

Here's a quote from the publisher of the most big-deal magazine currently publishing model airplane plans, spoke on a rainy day in early January to your Round & Round columnist: "If you have any control-line airplane designs you'd like to do an article on, please do! We're really hurting for control-line articles. And they don't all have to be stunters!"

Those were almost the exact words spoken to me in December by the publisher of *another* big-deal model airplane magazine.

Those two statements help to answer two questions I often hear in my capacity as a columnist for a magazine: "Why aren't there more control-line

airplane articles?" and "Why are all the articles about the same kinds of airplane — profile stunters and 1/2-A trainers?"

The answer is that the magazines aren't receiving submissions of articles on control-line planes in general, and those they do receive often fall into the same categories. It's my observation that the people who write the articles frequently are not competitors and they're fairly new modelers on the national scene, still pumped up for enthusiasm and looking for a little glory. Or, they're longtime modelers whose hobby is designing (read that: modifying old designs) airplanes and having the articles about them published.

What is needed most is contributions from the leading edge of modelers — competitors and active fliers who are coming up with new designs and innovations all the time, but who are devoting their efforts mainly to their own modeling programs. If these modelers were to take some time out to produce articles on their planes, all modelers would be better served than they are now.

My conversations and correspondence with the major magazines indicates that the publishers are still interested in receiving control-line articles and will pay well for them. What they need most is — articles!

By way of encouraging Northwest modelers to try their hand at publishing, here are two offers from yours truly:

Offer No. 1: If you are interested in having your latest design published but aren't sure if you are up to the writing task, contact me. I'll help you prepare and sell the article. We'll split the proceeds in a way agreeable to both.

Offer No. 2: For those who want to produce the entire article by themselves — which is what most modeler/writers do — I offer below a few tips for preparation of the article.

Preparing a construction article.

Selecting a design:

Ideally, your article should cover something new or different, with national interest. Right now, competition airplane articles are in short supply. If you have a successful, contest-proven design for an AMA rulebook event, that would be a good choice.

For competition-related articles, airplanes with only regional applications would be less likely to sell to a magazine than one with national interest. A Northwest Goodyear plane, for example, would be a poor choice. However, a new true Goodyear might be of national interest.

Stunters and scale planes always are impressive and articles will sell. Even more sorely needed, however, are new designs for combat, racing, carrier and speed events.

Sport planes also will sell, but remember that there are already several thousand profile stunt plane designs in print. The same goes for 1/2-A trainers. Then again, no plane is easier to design than a trainer or profile stunter.

Your article should cover a plane that has been built, flown and proven either in sport or competition flying. Don't cheat the magazine and the reader by sending in an untested design — which is done more commonly than you might expect.

Why this design?

The article should include at least a few paragraphs explaining why you selected your design. If it's a scale or semiscale plane, tell a little of its history.

If it's for competition, tell how it evolved, how it's better than or different from other designs. If it's for sport, tell a little about the fun of flying it, etc.

Many readers may not want to build your particular plane, but may want to learn any innovative concepts it contains. Make sure to discuss the philosophy behind the design.

Building the "article" plane:

You can go about it two ways. You can design the plane as an article project from the start. The article, then, is about the prototype.

Or — and this is what I recommend — you can build and test the airplane and then build a second one for the article. In this case, you are able to fine-tune the design using what you've learned from the prototype.

Fliers who are frequently coming up with new designs may want to approach each new plane as if it were intended to be the subject of an article. This will add time to the construction of each plane, but

will shorten the time it takes to produce an article if the design is successful.

Keeping a record:

As you build the "article" plane, you must record every step in the process, both on paper and on film.

Photograph every major step of construction — wings, fuselage, motor mount, control and tail section subassemblies, etc. Photograph any unusual or innovative details. I feel the reader is cheated if the plane is photographed only after construction. This weakens the "how-to" aspect of the article and gives the impression that the article was an afterthought.

To facilitate photography, start the project with a clean workbench — resurface the bench or cover the bench with newsprint before you begin. You can then photograph the construction steps right on the bench without a cluttered, knife-scuffed or paint-spattered background. Detail photographs may need to be taken in a home "studio" created with a neutral background (newsprint works well — your local newspaper will sell roll ends for a buck or two). Make sure the lighting is good — pay attention to shadows, glare, etc. — and adjust and supplement it for photos if necessary.

I recommend using color print film. Good color prints can be published in black and white if the magazine so chooses.

In addition to photographing the construction, the designer also should make detailed notes of each construction step. Don't rely on your memory; you're sure to forget some important detail when you set about writing the article.

Your notes should cover several important details at every step of the way:

- Construction sequence. The article should make clear the order things must go together.
- Materials (including any specifics such as whether the wood should be hard or soft, etc.)
- Adhesives (epoxy, cyanoacrylate, white glue, etc.)
- Tips for assembly, alignment, etc.
- Finishing materials and methods.

Drawing the plan.

Use a good quality paper for drawing the plans; this is one area where newsprint is inadequate.

If you have the drafting skills — or a friend that can help you — you can submit inked plans to the magazine. If you don't have the ability to submit inked plans, draw them clearly in pencil and include every written detail you can.

Magazines can have your pencil drawings inked — but since that represents an extra expense for them, they may pay more for finished plans.

Look at other plans in the magazines for guidance. Think about what you, as a reader, would want to know about every part of the plane.

Writing the article:

The article should begin with an introduction that mentions the philosophy, history or evolution of the design, as mentioned in the "Why this design?" section above.

It should move into a step-by-step construction sequence that covers the details of materials, adhesives and general building and finishing tips that you wrote down as you built the plane. This section should include any tips on where to purchase any hard-to-find materials or products you are recommending.

Finally, it should include some tips on flying and trimming the plane. Offer some troubleshooting advice in case the reader's plane doesn't perform as yours did.

Submitting the article.

There are two possible ways to approach submitting your article for publication:

The query: Before beginning work on your article project, write a letter to the publisher of your first-choice magazine. Explain to him the reasons that your plane would make a good article. Include a photo if you have one. Ask if he is interested in seeing the complete article.

Model magazine publishers generally respond quickly to queries. The publisher will write or call you and give you the go-ahead. If for some reason the magazine is not interested in your article, unlike other, mass-market magazines, model magazine publishers will often provide some personal attention to your "rejection," which may include suggestions about how you can sell an article to them.

2. The finished article: If you are confident of the value of your project, you can go ahead and finish up the project and submit the whole package. The publisher either will notify you that he is buying it, or will return it to you. *If you want your article and photos returned, you must include a self-addressed, stamped envelope!*

In either case, if the first magazine you try does not buy the article, send it to your second choice, and then your third choice. Do not send it to all at once; publishers will be angry if they buy an article that someone else also has bought.

When you submit the entire package, either before or after the query, include a cover letter listing all the enclosures (photos, article, plans, drawings). Make sure that the package is well organized.

Make sure the article is neatly typed, with your name, address and phone number on the cover page. If you use a computer, arrange for laserprinting of the text; the magazine may wish to scan the type and dot-matrix printers are difficult to scan. If you must use dot-matrix, use a new ribbon.

Make sure the photos are sharp, clear and well-exposed. Fill the frame with the subject. Shoot each subject from several angles and give the magazine plenty of pictures to choose from.

Number each picture with a stick-on post-it note, or put each in a separate envelope. Write a description of each picture on a separate sheet with number references.

Do not write on the pictures with ink or felt-tip pen if you are putting more than one in an envelope. The ink will transfer from the back of one picture to the front of the next, ruining the image.

Mail the whole package to the magazine, to the publisher's attention.

Magazines currently pay about \$150 to \$450 per article. Some pay immediately upon acceptance and others pay after publication. Either way, it's a good way to support your hobby financially, and to get a little glory as well!

Questions, comments, or questions for discussion in an upcoming R&R column: John Thompson, 1145 Birch Ave., Cottage Grove, OR 97424.

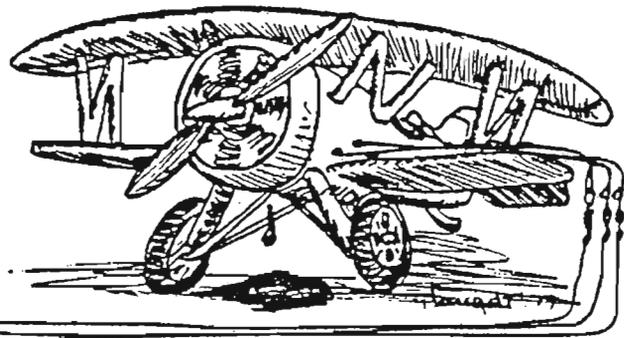


"RING THE COUNCIL, EMMA. THEY'RE FLYING THOSE MODEL PLANES AGAIN"

CONTROL LINE

SCALE

by orin humphries



CG

One of the two least understood things in modeling is center of gravity. Everybody thinks this is some subtle nuance that ivory tower types extol and that modelers, in particular, know all that's necessary already. We are lulled into a state of numbness on this subject by our years of successful experience with models built from kits and plans of **non-scale models**. RINGMASTERS just fly, right? We think that this experience goes straight across to Scale, also, then. What we can't see is that the kits/plans have been iterated until the model flies more or less all right, then it's kitted. These models, then, seem to fly as if models just do that. We turn a deaf ear to discussions on the subject. Modelers with decades of experience in fields other than Scale will not listen, as a result, to anyone. They have to have their own, personal crash on the first flight before they will wake up. The longer you've been modeling, the deafer you are, speaking from personal experience.

The problem arises from the fact that the engines and materials used in modeling are quite different from those in full size aviation. This brings about craft with very different proportions. Models of non-scale planes tend to balance as they are proportioned when designed by master modelers. When a modeler builds a Scale bird the proportions are all off for our materials, and the model will not, in general, just somehow balance such that it is flight worthy.

I will try to have you find out for yourself about this CG thing with a single afternoon's flying of a profile model. It is simple, and convincing! Take a RINGMASTER out and put up one normal flight, noting in particular, the amount of force necessary to pull the up line, the time it takes for the model to respond, and when holding at any altitude, just how much it wanders above and below the desired height. Next, add a two ounce spinner weight to the front of its prop. Now BE VERY CAREFUL on your next flight. DO NOT attempt loops or wingovers! What I want you to do is try quick pullups and then level off before getting above 30° altitude, and gently return to five feet.. Note, again, what the force in the up line is, the response time, and how much it wanders up or down. Do not change where the pushrod is in the elevator horn at any time during this series.

You won't believe the stiffness in the up line, and you have to count ten before the nose comes up. It will seem to be welded to iron rails in the sky. (It grooves.) Don't take my word for it. I can't communicate this adequately; you have to experience it.

Next replace the nose weight with a one and a half ounce. Repeat the tests. Replace with a one ounce, and then a half ounce. I'm not going to yak about it, as I said, it will all be Very clear when you do this. Next, add lead to the tail a QUARTER ounce at a time between flights and do the pullups, noting the three characteristics. Be on guard for touchiness in wandering off desired altitude, as the aircraft will eventually become "hot" like a combat ship as this progresses. Continue to add a little lead to the tail and test. You will reach a point where the airplane becomes so touchy on the handle that you will not want to add any more weight to the tail for love nor money.

What you shall have experienced is the effect of CG. Too many pilots, complaining of a too sensitive airplane, have mistakenly moved the pushrod farther from the elevator hinge line. They should have added nose weight as the problem was a too far aft CG location.

Until you have tried this, I won't explain this powerful effect. You need to know whereof I speak. Until then, do not trust the CG location shown on RC and particularly FF plans. That is a different story and it very well can cost you an airplane. For now, find the chord of the wing at the fuselage side and multiply by .18 or .20. This is the distance your CL model should balance aft of the leading edge at the side, with conservatism built into this suggestion for varying taper ratios and wing style. Orin Humphries, 19805 48th Av.W., #A101, Lynnwood, WA 98036, 206-776-5517

NW Competition Standings

Flying Lines' compilation of event placings by Northwest modelers competing in Northwest region contests

As promised in the last issue, following are the complete competition standings for 1991. Individual events have the top five listed, and event type categories have the top ten listed. The overall top competitor list goes to 20th place. Congratulations to all!

MOUSE RACE CLASS I (6 contests, 30 entries)

- 1) Joe Rice (sr) 23
- 2) Joe Campbell 17
- 3) Ron Hale 11
- 4) Nitroholics RT 10
- 5) Kevin Magnuson 7

MOUSE RACE CLASS II (3 contests, 8 entries)

- 1) Nitroholics RT 5
- 2) Joe Rice (sr) 2
- 3) Rich McConnell 1
- Jim Cameron 1

NW GOODYEAR (2 contests, 4 entries)

- 1) Joe Rice (sr) 3
- 2) Rich McConnell 2
- 3) Morris Gilbert 1

AMA GOODYEAR (2 contests, 3 entries)

- 1) Mike Rule 1
- Morris Gilbert 1

NW SUPER SPORT RACE (6 contests, 36 entries)

- 1) Rich McConnell 19
- 2) Nitroholics RT 12
- 3) John Hall 11
- 4) Don Stewart 8
- 5) Wes Mullens (jr) 7

NW SPORT RACE (6 contests, 41 entries)

- 1) Joe Rice (sr) 16
- 2) John Hall 14
- 3) Tom Strom 11
- 4) Dennis Mathews 10
- Todd Ryan (jr) 10
- Nitroholics RT 10

CLOWN RACE (5 contests, 46 entries)

- 1) Joe Rice (Sr) 46
- 2) Ron Hale 34
- 3) Dave Schultz (Sr) 16.5
- 4) Bill Fisher 13.5
- 5) John Hall 13

OVERALL RACING (31 contests, 169 entries)

- 1) Joe Rice (sr) 90
- 2) Ron Hale 54
- 3) John Hall 38
- 4) Nitroholics RT 37
- 5) Rich McConnell 31
- 6) Joe Campbell 23
- 7) Mike Rule 20
- 8) Bill Fisher 19
- 9) Don Stewart 18
- 10) Tom Strom 17

OVERALL SPEED (13 contests, 60 entries)

- 1) Joe Rice (Sr) 29
- 2) Jerry Thomas 15
- 3) Brent Hazel (Jr) 14
- 4) Jeff Cleaver 6
- Chris Sackett 6
- 6) Joe Campbell 4
- Chris Hazel (Jr) 4
- 8) Dave Cleaver 3
- Chuck Schuette 3
- Loren Howard 3

PROFILE SCALE (2 contests, 9 entries)

- 1) Bill Darkow 7

SPORT SCALE (2 contests, 7 entries)

- 1) Fred Cronenweit 4
- 2) Bob Parker 1

OVERALL SCALE (5 contests, 17 entries)

- 1) Bill Darkow 7
- 2) Fred Cronenweit 4
- 3) Bob Parker 1

CLASS I CARRIER (2 contests, 5 entries)

- 1) Terry Miller 3
- Bob Parker 3
- 3) Rich McConnell 2
- 4) Roy Beers 1

CLASS II CARRIER (2 contests, 3 entries)

- 1) Shawn Parker 2
- John Hall 2

.15 CARRIER (3 contests, 7 entries)

- 1) John Hall 7
- 2) Orin Humphries 3
- 3) Dave Schultz (Sr) 1
- Ron Hale 1

PROFILE CARRIER (3 contests, 19 entries)

- 1) John Hall 19
- 2) Tom Strom 11
- 3) Terry Miller 7
- 4) Rich McConnell 4
- 5) Mike Hazel 3
- Joe Just 3

OVERALL CARRIER (11 contests, 38 entries)

- 1) John Hall 31
- 2) Tom Strom 11
- 3) Terry Miller 10
- 4) Rich McConnell 8
- 5) Joe Just 4
- Kevin Magnuson 4
- 7) Orin Humphries 3
- Bob Parker 3
- Mike Hazel 3
- 10) Shawn Parker 2
- Joe Rice (sr) 2

BALLOON BUST (3 contests, 28 entries)

- 1) Rich McConnell 20
- 2) Roy Nakano 16
- 3) Dave Mullens 11
- 4) Randy Schultz 8
- 5) Mike Hazel 6

JR BALLOON BUST (3 contests, 5 entries)

- 1) Tim Strom 3
- Wes Mullens 3
- 3) Todd Ryan 1

AMA FAST COMBAT (2 contests, 52 entries)

- 1) Paul Vallins 46
- 2) Tom Strom 45
- 3) Norm McFadden 3
- 4) John Thompson 2
- 5) Frank Boden 1

1/2A COMBAT (3 contests, 17 entries)

- 1) Tom Strom 11
- Dick Salter 11
- 3) Don Stewart 5
- 4) Tony Huber 4
- Mike Rule 4
- Todd Ryan (Jr) 4

FOX 35 COMBAT (2 contests, 15 entries)

- 1) Roy Nakano 14
- 2) Chris Cox 8
- 3) Randy Schultz 6
- 4) Frank Boden 5
- Tom Strom 5

OVERALL COMBAT (9 contests, 95 entries)

- 1) Tom Strom 61
- 2) Paul Vallins 46
- 3) Roy Nakano 17
- 4) Dick Salter 14
- 5) Don Stewart 11
- 6) Joe Campbell 9
- 7) Ron Hale 8
- Frank Boden 8
- Chris Cox 8
- 10) Randy Schultz 6

NOSTALGIA STUNT (3 contests, 20 entries)

- 1) Don McClave 14
- 2) Bob Emmett 12
- 3) Rich McConnell 9
- 4) Greg Davis 6
- 5) Chris Cox 5

PRECISION AEROBATICS (15 contests, 59 entries)

- 1) Bob Emmett 25.5
- 2) Paul Walker 15
- Bob Parker 15
- 4) Barrie Shandel 13.5
- 5) Dave Mullens 12

OLDE TYME STUNT (5 contests, 25 entries)

- 1) Richard McConnell 18
- 2) Don McClave 12
- 3) Bill Tucker 9
- 4) John Hall 8
- 5) Joe Campbell 7

MR. COMPETITION TOP TWENTY OF 1991 (71 entrants)

OVERALL STUNT (23 contests, 104 entries)

1)	Bob Emmett	40.5
2)	Rich McConnell	37.5
3)	Don McClave	26
4)	Barrie Shandel	16.5
5)	Paul Walker	15
	Bob Parker	15
7)	Dave Mullens	12
8)	Rich Brannan	11
9)	Chris Cox	9.5
10)	Bill Tucker	9
	Randy Schultz	9

1)	Joe Rice (sr)	126
2)	Rich McConnell	97.5
3)	Tom Strom	89
4)	John Hall	77
5)	Ron Hale	65
6)	Joe Campbell	47
7)	Paul Vallins	46
8)	Bob Emmett	40.5
9)	Nitroholics RT	37
10)	Roy Nakano	33
11)	Randy Schultz	29
	Don Stewart	29
13)	Don McClave	26
14)	Mike Rule	25
15)	Dave Mullens	23
16)	Bill Fisher	19.5
17)	Bob Parker	19
18)	Todd Ryan (jr)	18
	Rich Brannan	18
20)	Dave Schultz (sr)	17.5
	Chris Cox	17.5

MR. JUNIOR COMPETITION 1991

1)	Todd Ryan	18
2)	Brent Hazel	14
3)	Tim Strom	12
4)	Wes Mullens	10
5)	Chris Hazel	4

FLASH!!!! UPDATE ON EMERGENCY RULES PROPOSALS FOR SPEED.....

As reported in the last issue, the AMA safety committee had pushed through an emergency safety rule concerning speed flying. It involved increased line sizes, very high pull tests, and changes in line construction. Because the changes would have obseleted almost all equipment, and made some of the events difficult to participate in, it was viewed at the best, a well-intentioned but uninformed effort to increase safety margins. At the worst, it was seen as a politically motivated underhanded dirty trick to destroy the event.

Speed fliers from the NW and all over the nation were up in arms over this matter, and there was no small amount of letters written, and phone calls made. The Speed Advisory Committee worked to make a counter proposal of going to a standard fuel, which would slow the planes down, which is the main objective.

Carlos Aloise was able to arrange a meeting with the AMA safety committee, with the AMA executives sitting in. Carlos brought with him, a small group of hand-picked experts in regards to the issues surrounding the rules proposals. The meeting took place on Thursday nite, before the IMS trade show in Pasadena. Carlos and his group then proceeded to present much data, which substantiated many speed fliers opinions that the rules proposals which were authored by CLCB chairman Bill Bischoff, contained erroneous information, and several mistakes in calculations. Perhaps I am getting too far ahead here for those not familiar with what all went on. Here is some history:

There were some that believed CL Speed was not safe, and wanted some study done. At the 1991 Nats, some tests were done on in-flight pull loads of speed planes. Taking that data, and strength ratings of various sizes of wires, the safety committee then determined that at current record speeds, there was not a sufficient safety margin in place. To make a not too long story even shorter, then there was the knee-jerk action of the emergency safety rules proposals to make sweeping changes. The concept of studying the pulls and stresses is good, but the testing and resultant conclusions were quite inaccurate. Now, back to that meeting.....

After the speed representatives spent considerable time picking apart the AMA proposal, our own AMA president then announced to the group that the emergency rules proposal as authored, was rescinded. It was admitted that the emergency proposals were a mistake, and not the proper course of action. However, the safety committee was still hard in the position of the actual 50% safety margin that had been originally factored in. Test results and data presented convinced the AMA officials that the counter-proposal of a standard fuel to slow the planes down would be quite satisfactory in meeting the overall objectives. The standard fuel, and some other small adjustments for the time being, are now being considered the emergency rules proposal, and should be considered as law immediately. They are now being written up for CLCB ratification.

Another interesting point that came up at the meeting, was the AMA official's acknowledgement that the idea of abolishing the safety net requirement was a bad idea. When it all came down to it, some of the AMA officials admitted to having never even seeing a speed model; and not being totally sure of what they were doing. (guess we already knew that!)

Most of the speed fliers know the politically motivated story of how this all came about. There are some details regarding that, and some repercussions that may come about, but prudence will prevail right now, and you won't see it in print from this source. What I will say, is that when this whole thing is over and finalized, there should be a close examination of the process and people that railroaded this scam.

At this point everybody is probably wondering what the actual changes are. So, following is a basic summary.

- For all two wire flying, aircraft end of button type wire connections must be double looped.
- There is a maximum weight established for each speed event class. Unfortunately, I do not have that at hand. However, they do allow for heavier than average planes. Unless you have a real lead sled, not to worry.
- Standard fuel in specified events is as follows: 10% nitro, 20% oil, remainder methanol. For Jet speed: 80% methanol, 20% methyl ethyl ketone.
- 1/2A Proto, except for wire end modification, the only unchanged event.
- 1/2A Speed, line length increased to 47', 5-5/8" (metric size) This change was already made by the normal rules process. Unlimited fuel.
- A Speed, 10% fuel, increase pull test to 48G.
- B Speed, 10% fuel, increase line length to 70' (previously passed rule for '92)
- D Speed, 10% fuel, no other changes.
- Jet Speed, Std. fuel of 80% methanol, 20% M.E.K., no other changes.
- Formula 40, 10% fuel, increase line diameter to .020, increase pull test to 48G.
- 21 Speed, increase line diameter to .018, no other changes.

There you have it! Where we go from here, is to have the speed fliers to some of their own testing and research in regards to in flight aircraft pull, and any rules proposals regarding control system construction, aircraft construction, etc. Anything having to do with the safety of speed flying, speed fliers must take care of before the AMA does. We have already seen that we are our own best policemen for the event, self-regulation by the experts is always best.

By the way, the very next issue of MODEL AVIATION will have in it the original emergency safety rules proposals. Don't get excited when you see it, just remember that it is a dead animal.

RECORD REVIEW

The event focused upon this issue is CLASS II MOUSE RACE - 200 lap final race. This is another one of those old racing records, which should have been bettered by now, but hasn't. The record is 10:04, and was set on 9-19-87. Mouse II is not a highly entered event in the NW, but has seen some good competition before. Anyone wishing to get semi-serious in the event should have little problem dropping that feature mark down into the low 9's.

The record is held by the team of Hazel/Thompson, known to most as the Nitroholics Racing Team. Following are the vital statistics and data.

The aircraft is of the profile type, construction differing slightly from the norm. Fuselage length is 11-5/8 inches, and is built from maple, balsa, and plywood. The 1/32 inch plywood is used to make a sandwich around the maple motor mounts and balsa mid-section. The top maple motor mount runs the full length of the fuselage. Very stout, yet not overly heavy.

The wing spans 17-3/8 inches, and has an area of 42 square inches. Airfoil is a flat bottom lifting type. It is built with a 1/32 inch plywood foundation, and 1/8 inch balsa on top, with a small spruce stub spar in the center.

The tail spans 6-7/8 inches, and has 17 inches of area. It is made from 1/16 inch ply, and features a single sided elevator.

The engine is a Cox TD .049, modified by Kustom Kraftsmanship. Mods include a pressure backplate, and enlarged venturi. A standard Cox high compression glow plug was used.

The fuel tank was built by Dave Green (Dark Ages Racing Equipment). It has a 1-1/2 oz. capacity. It is set up to be run on pressure, and is also equipped with a fastfill.

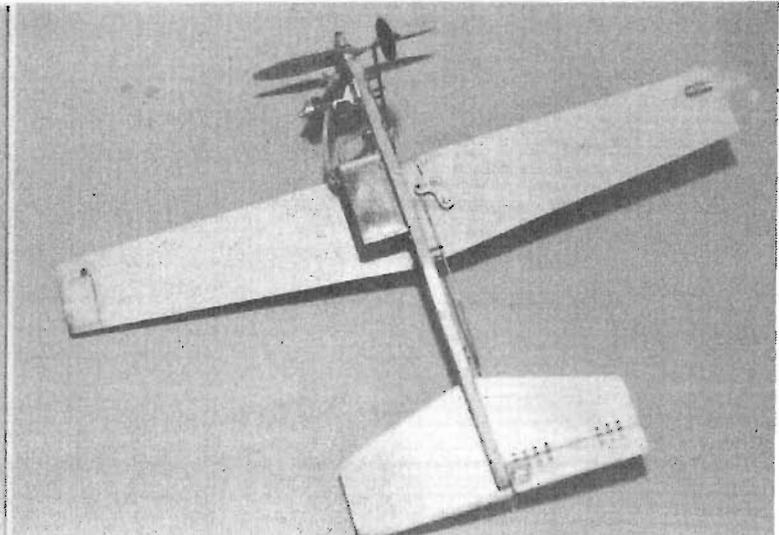
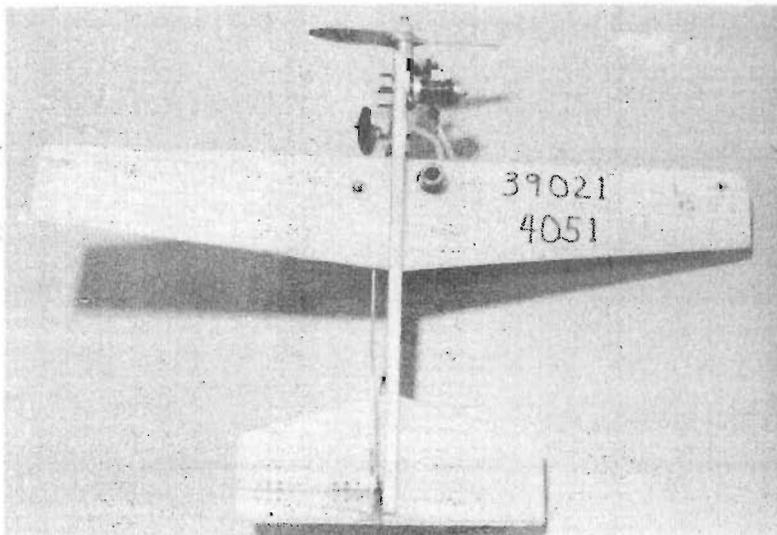
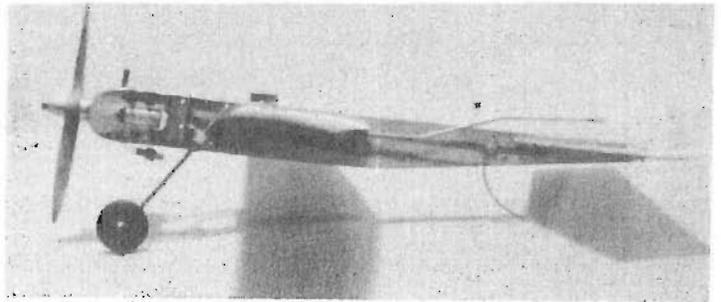
A fiberglass type 5 x 5 propellor was used, as was 50% nitro fuel.

Ready to fly weight is 7 1/4 ounces.

Control system: Kustom Kraftsmanship bellcrank with button connectors. .010 x 42' solid lines, original wood handle.

John Thompson was the pilot, and Mike Hazel took care of the pitting duties.

A clear epoxy paint finish was used.



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