THE HANGAR PILOT

ISSUES 39 + 40
MARCH/APRIL 1977

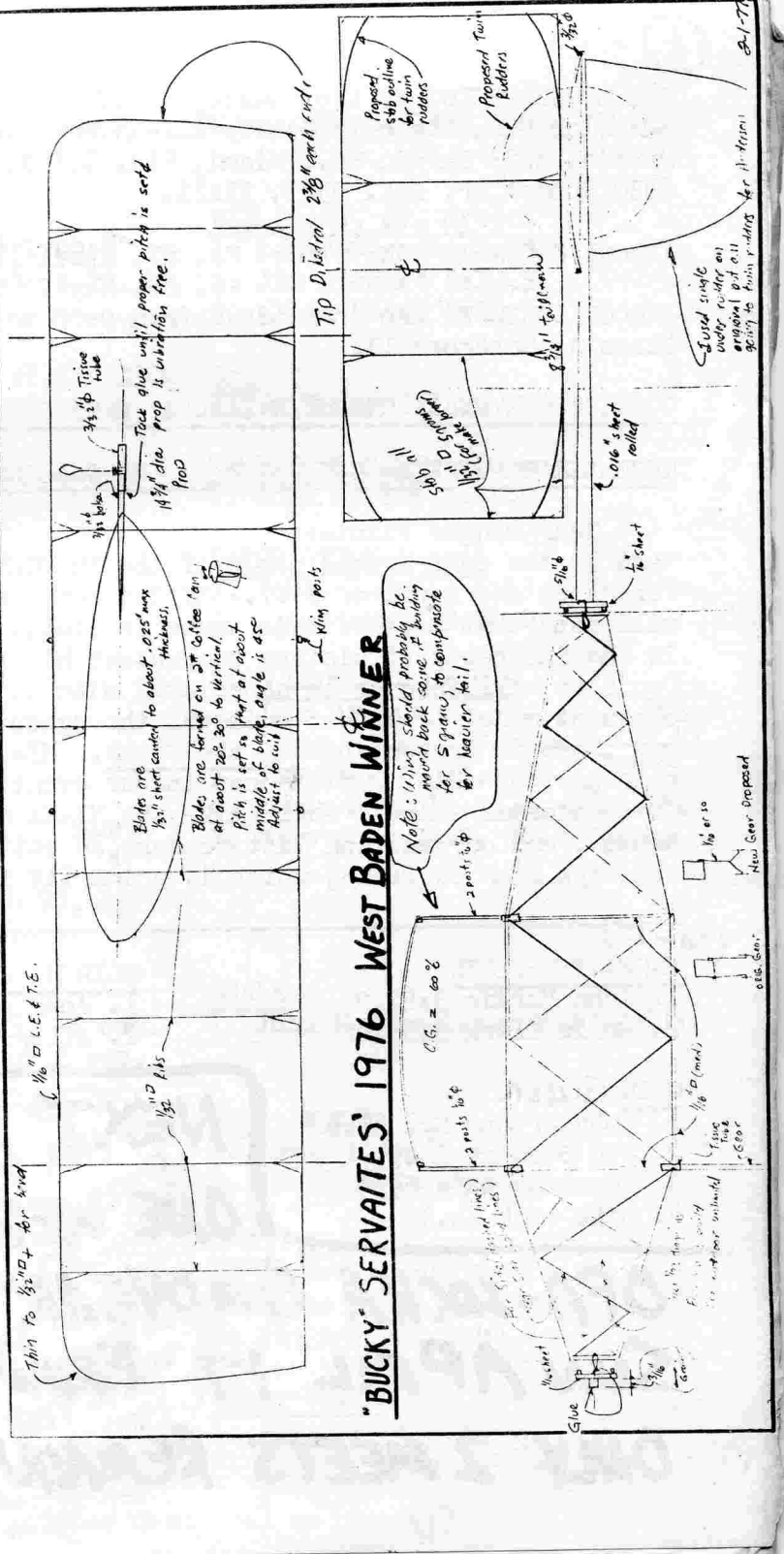
Special Manhattan Issue!!!

PLAN TO BE IN WEST BADEN
JUNE 2+3: N.I.M.A.S. TRIALS

M.I.A.M.A. 1977 RULES

MANHATTAN Rules for 1977, including the Nats and West Baden, were announced in the December '76 issue of 'The Hangar Pilot' with the following comment: "At a club meeting recently we decided to continue the same rules for at least another season without any change except for clarification. We want to see what type of model will emerge, and eventually dominate the event. As yet no design trend is evident, and there is certainly enough innovation to keep things from getting stereotyped."....And so, the rules:

Airframe weight, less rubber....Minimum four (4) grams.
Overall Length...20 inch max. Measured from front of prop bearing aft.
Fuselage..(a) Must support and enclose a single rubber motor. No motor sticks.
(b) Must include or exceed a "box" 2½" x 4" x 2". No diamond shapes.
(c) Must have a windshield of 2 square inches min. area, and a window on each side of one sq. in. min. area covered with cellophane or similar material.
Prop: Solid wood, direct drive, fixed pitch.
Wing: Unbraced monoplane with 4" max chord, and max. span of 20", projected.
Stab: 8" max. span projected, max. chord ..3½".
Landing Gear: Rigid and fixed with at least two wheels of 1" min. diam. Must be able to support plane.
Flying: All flights R.O.G., unlimited attempts to record 5 flights. Flights less than 20 seconds are attempts. Best flight counts.
Covering: Except for windshield and windows...paper covering. No film nor microlite.



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The HANGER PILOT is the newsletter of the Miami Indoor Aircraft Assoc., AMA Club 986, the only active all-indoor Club. Ed., Pres.: Dr. John Martin, 3227 Darwin St., Miami, Fla. 33133, Secretary, Jim Whelan 8830 Sunset Dr. Apt. B305, 33173.

INDOOR CONTESTS REMAINING: No. #7. April 17 CD John Martin
No. #8. May 22 CD Jim Whelan

INDOOR CONTESTS Are on Sundays from 9:00 to 5:00. They are AMA Sanctioned Class A, Catagory II.

CONTEST #SEVEN IS ONE WEEK EARLY! (NOT ON THE 24th)

REMEMBER TO CONFIRM CONTEST DATES BY CALLING 858-6363

Dear Hangar Pilots:
Here is the only double issue of the "HANGAR PILOT" - issues #39 & 40 for March and April of 1977. If Bud Tenny can do it, we can too. You will note that most of this issue is stolen from Ed Whitten's STAR SKIPPERS. In the interests of history we present his review of the Manhattan Formula. Our club will forever be associated with Ed's work in introducing this class of model to indoor builders throughout the world and Ed has done a great job in presenting all the facts. MIAMI members should be proud to be a part of this exciting new indoor event. I feel no guilt in stealing Ed's material since I would like the MIAMI readership to know about Manhattan, and our mailing list readers are an entirely different readership than the STAR SKIPPERS, which is primarily for Junior flyers. Thanks, Ed.

(CONT.)

MANHATTAN CABIN
1. John Martin 3:40.2
2. Ernie Clark 3:35.4

GLIDER: JR./SR.
1. John Arthur Jr. 46.4
2. Allen Honey 38.2

OPEN GLIDER
1. John Arthur Sr. 81.4
2. Jim Stewart 65.9
3. Roman Szymula 65.3
4. Mike Arak 54.3

NEXT MEET NOT APRIL 24
ONE WEEK EARLY

OPA-LOCKA GOODYEAR BLIMP HANGAR
SUN APRIL 17 FROM 9 TO 5
ONLY 2 MEETS REMAIN!

INDOOR IS NOT FOR EVERYONE!

RESULTS OF CONTEST # **FIVE**, OPA LOCKA FEBRURARY 20, 1977
Contest Director - Jim Whelan

Scale Open, Jr. & Sr.
1. John Martin (Lacey M-10 93) 1:09:8
2. Dick Kelso (Fairchild F24C-8) ? 22.5

Peanut Scale Open, Jr. & Sr.
1. John Martin (Weyman-Lepere 27.5) :33.0
2. Jim Stewart (Stinson SR-6B ?) :23.0

PENNY PLANE (Open)
1. Roman Szymula 8:10.8
2. Ernie Clark 4:40.5
3. Jim Stewart 4:35.7

Sr.
1. Allen Honey 4:24.0

Jr.
1. Carl Lindstrum 2:36.8
2. Heather Arak :51.7

EZB (Open, Jr. Sr.)
1. Roman Szymula 6:43.7
2. Jim Stewart 6:19.5
3. Allen Honey 5:14.4

Sr.
Allen Honey 5:14.4

MANHATTAN CABIN (Open)
1. John Martin 3:21.5

PAPER STICK (Open)
1. Roman Szymula 6:43.7
2. Jim Stewart 3:20:0

HAND LAUNCHED GLIDER
1. John Arthur Jr.39.3,34.6,(73.9
2. Blane Miller 37.6,34.8,(72.4)
3. Jim Stewart 31.9,33.5,(65.4)
4. Roman Szymula 36.4, 28.0 (64.4
5. Mike Arak 31.2, 30.2 (61.4)

RESULTS OF CONTEST # SIX, March 20, 1977
Contest Director - Roman Szymula

PEANUT SCALE
1. John Martin (Lacey M-10 22.5) 71 sec.
2. Jim Stewart (Stinson 19.5) 49.2 sec.

EASY B Jr. & Sr.
1. Allen Honey 2:58.5

PENNY PLANE JR. & SR.
1. Allen Honey 3:19
2. Carl Lindstrum 2:57
3. Heather Arak :34

AMA STICK
1. Roman Szymula 7:51.8

SCALE
1. John Martin(Lacey M-10,93)1:17

OPEN EZB
1. Roman Szymula 10:58.8
2. Jim Stewart 9:02.4

OPEN PENNY
1. Roman Szymula 6:24
2. Ernie Clark 6:20.7
3. Jim Stewart 4:40.8

PAPER STICK
1. Jim Stewart 7:42.7
2. Roman Szymula 4:54.6

ON MAY 22 - LAST MEET - THE KILGORE AWARD TO BEST SPIRIT OF ST LOUIS PEANUT

← Continued on page (1)

Manhattan

Manhattan

Manhattan

MANHATTAN

SPECIAL ISSUE

Manhattan

THIS SPECIAL ISSUE OF "STAR SKIPPERS" IS DEVOTED ENTIRELY TO THE DEVELOPING MANHATTAN FORMULA, AN INDOOR CABIN EVENT PROPOSED OVER TEN YEARS AGO AND NOW IN THE FOCUS OF NATIONAL ATTENTION AS A RESULT OF M.I.A.M.A. RULES INTERPRETATION, MONTHLY CONTESTS IN MIAMI, AND THE FIRST NATIONAL MANHATTAN FORMULA CONTESTS AT WEST BADEN, INDIANA, AND COLUMBUS, OHIO. ALL NEW EVENTS DEVELOPE THEIR PROTAGONISTS FOR THIS VERSUS THAT PURPOSE OF THE EVENT, THIS VERSUS THAT SET OF RULES. SUCH CONTROVERSY BOTH ENHANCES AND DEBILITATES. THIS ISSUE PRESENTS COMMENTS BY PROMINENT MANHATTAN BUILDERS/FLYERS EXCERPTED FROM THEIR LETTERS WITH EDITORIAL COMMENT BY ED WHITTEN.

THE MANHATTAN MADNESS

- A REVIEW BY ED WHITTEN

It all started in the early spring of 1965. There I was, sitting there right in the middle of a.....well, anyway, that's when I sent to Bud Tenny of the National Indoor Model Airplane Society a letter and drawing expressing the purpose and suggested rules for the event. It's all his fault...he should never have mentioned it in I.N.A.V. But this was followed by further page 5 articles (supplied by me) in Indoor News & Views, and then publication, with Bill Winter's blessing, of the 'Riversider' and 'Wall Street Special' designs in American Aircraft Modeler in 1968.

There followed desultory interest until a review was printed in a 1974 issue of Star Skippers. Dave Linstrum picked it up in his Model Airplane News VFO column. Jim Whelan caught it there, wrote for background material, and introduced the Formula to the M.I.A.M.A. They have not been the same since.



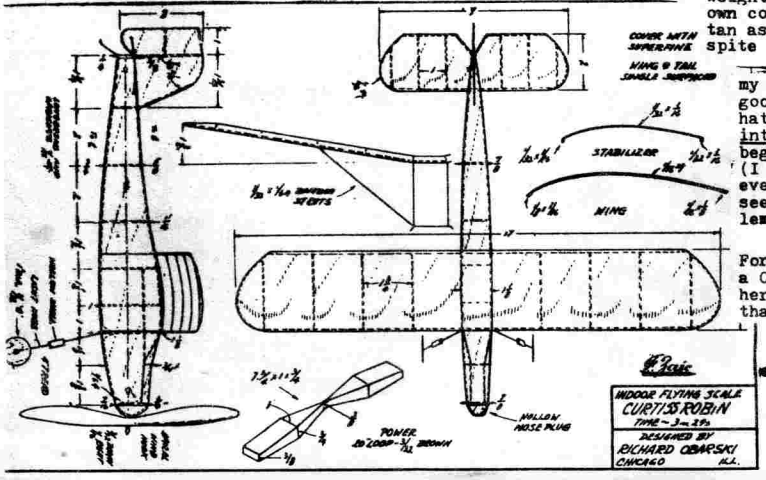
The Miami, Florida, group has now been flying Manhattans, under their version of the rules, for two years. It is the Miami Indoor Aircraft Model Association that has put the Manhattan Formula on the map. (For history's sake, I would like to know of other groups that have flown Manhattans.)The M.I.A.M.A. club, however, besides holding regular Manhattan events at their local contests, sponsored the first national Manhattan Formula contest at the West Baden, Indiana, N.I.M.A.S. Record Trials last July. They followed this with the second national contest at the AMA Nats, providing splendid prizes for both.

So much for history! What about the original inspirations? Number 1 was that AMA Cabin was such a nothing. Number 2 was the trend in Scale to phantom models with the ever present scale rules mess. Wanted was a simple fuselage endurance model somewhere in between that did not get mired down in the what-was-and-what-was-not scale rules quagmire, nor took 30 minutes to find out who could design, build and fly the longest. I have to admit that some of my inspirations probably ran at cross-purposes. While opting for a'Curtiss Robinish look', I, at the same time, advocated microfilm on my 'Wall Street Special'. Obviously, "somewhere in between" was not very definite in my mind. It still seems to be the crux of the debate today.

Dick Obarski's semi-scale Curtiss Robin in the 1937 Zaic Yearbook has always haunted me. I liked the concept as a non-scale model while deploring it as a scale model. I also remembered that Guillow sponsored events at J.A.L. contests in Boston for their scale-like (but definitely not scale) kit models.

My first Manhattan, the 'Riversider' has probably done more harm than good since it was so much overweight compared to my own concepts of the Manhattan as an indoor event. Despite many protestations, my own included, that the Manhattan Formula was a good place to start indoor building/flying, Manhattans are NOT beginner models. The Formula was intended to attract the experts, as well as assure beginners that indoor flying had a place for them. (I deplore some peoples' efforts to always reduce everything to the lowest common denominator...it seems that this desire is one of the biggest problems in American society today.)

Since, at one time, I did state the Manhattan Formula should produce a model vaguely resembling a Curtiss Robin, a picture of one is presented here. Some of our letter writers have complained that the M.I.A.M.A. rules preclude designing Man-



CONT. NEXT PAGE

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DICK OBARSKI IS ALIVE & WELL, LIVES IN PITTSBURGH PA, AND IS PLANNING TO RETIRE SOON TO MIAMI AREA. HE IS STILL BUILDING INDOOR AND IS A MEMBER OF M.I.A.M.A.

MORE OF THIS MANHATTAN MADNESS

hattans that look like certain man-carrying aircraft; for example, the "no diamond fuselage" rule. I can only think of two airplanes with such fuselages, the Frest Baby Pursuit and the Ganagobie. I can name dozens with booms that these letter writers would ban; there must be hundreds that would have to be tossed out by the cabin windshield requirement; hundreds more through not allowing wingstruts; think of all the biplanes, seaplanes, multimotored

airplanes and jets that are doomed!

No, first one must give a definition, or at least an idea, of the airplane one has in mind that the non-scale model should more or less follow as a guide. And, so, the Curtiss Robin...even though the Robin's wing struts make it ineligible according the present rules.

What can be done to the current rules to make them produce a Manhattan more like the Robin?..provided, of course, that such a shift is desireable. (1) Ban wing posts and make wing be mounted flush on top or plugged into the sides of the body. Of course, that makes a more difficult model, and there goes the scale resemblance to the old Lockheeds with their cabane strut mounted wing. But no wing posts makes it more like a Robin. (2) Shorten the over-all length to 18" from 20"...maybe even less than 18". Not many Robins, or other cabin aircraft of the day, had bodies as long as the wings. (3) Limit prop diameter. This allows shorter landing gears. (4) Ban tail booms.

And that's about it....if we want to make our Manhattans look more like the old Curtiss Robin. Of course, one could not allow pushers, or canards, either. So, the thing is, that once you decide what your idea of an airplane is, forget about whether or not the rules cut out this or that shape.

Well, enough from me.....let's get started reviewing the stack of letters we have on hand. At one time I thought I would make editorial comment as this or that point was made in the letters. However, I am getting older and older as this special issue gets bigger and bigger, so I'll just present the letters as they are and let the ideas, dingbats and balsa chips fall as they may. Since Bob Meuser has had a lot to say...and was one of the first... we hand Bob the floor. Take it away, Bob!

MEUSER TO ESW - 10-29-76

The intent here, Ed, was to put all of my ideas on the subject in one document, so this supercedes everything else I have written on the subject. Rules making is a difficult business! No, I didn't submit a proposal about MF (Manhattan Formula) to AMA. It would, as you stated, have been premature. I'm sending copies of this to people I think might be interested. Maybe it will draw out the opposition to my ideas, and that's GOOD.

As you know, I have shot off my mouth a lot recently about the Manhattan Formula rules, to you, to Doc Martin and Jim Whelan of the M.I.A.M.A., and to John Triolo, winner of the event at the Nats. Some of what I have said may have sounded rather negative. But, if the concept didn't have a lot going for it I wouldn't have bothered. Constructive criticism was the intent, but constructive-sounding criticism has never been my bag. Anyhow..

I have frequently stated that someone should spell out the goals of the event. To argue about the rules-of-play by which those goals are to be achieved is quite a different thing. Until today I hadn't seen those goals spelled out. (ESW comment....I said I wasn't going to but I can't resist....actually Bob had received way last May a complete set of all past published material...including aims ...regarding the Manhattan Formula. Anyone else wanting this material can have a similar set by writing to me, Ed Whitten, Box 176, Wall St. Sta., NYC 10005.) But let me quote from your Oct. 30, 1976 issue of STAR SKIPPERS, received here today. The intent was to promote "a model somewhere between Indoor Cabin and Flying Scale...a strictly indoor cabin endurance model that would have a definite fuselage with a very modest amount of scale appearance and none of the scale judging and rules squabbles. The minimum rules were merely to be met; then it was endurance that would determine the winner...At no time has it ever been considered a beginners event." OK, let's not squabble about the intent for the moment, and concentrate on how well the MIAMA rules satisfied the intent.

The rules call for a 20" max span measured flat. That makes for a model about the right size, in my opinion. And measuring flat span makes it easy on the builder, but makes it a bear for the judges. All other indoor and outdoor models having a span limitation are judged according to projected span, and in the 143 years I have been a free flighter, I have never heard a complaint about that. Let's make it an 18" max projected span.

The 2 x 2½ x 4 inch enclosed box rule seemed, at first blush, like a great thing. But it makes life for the judges, if they do their job properly, considerably more complicated than a simple cross-section rule. I don't mean a cross-sectional area rule, but a cross-section dimension rule; a cross-section area rule is a bummer for the judges. Wouldn't the rule: "The cross-section of the fuselage, at some point, must measure at least 2 x 2½ inches" serve the goals as well? (ESW comment ...No, Bob, a cross-section only requirement, whether by area or dimension, will produce the same fuselages we now have on AMA Indoor Cabin. The box is the only way to ensure a 'definite fuselage'.)

The windshield rule seems like it would promote scale-like appearance. But look at Triolo's Nats winner, and many of the model plans you have published in Star Skippers. They don't have the faintest resemblance to a scale model! Including the windshield doesn't add to the scale appearance, and omitting it does not detract from the scale appearance, because there isn't any scale appearance worth mentioning in the first place. So, I'ld opt for skipping the windshield requirement UNLESS other aspects of the rules were made to promote a more scale-like appearance, too.

On my own 'Manhattan Seranade' model, omitting the windshield would have detracted greatly from the appearance of the model, but it wouldn't have detracted from the scale-likeness of the model. I had different self-imposed goals in mind when I designed that model...more of that later.

The 4" chord limitation seems fine. A 5" chord limitation would seem fine, too. My gut feeling, though, is that a 3" limitation would be too little, and a 6" chord too great. There should be some chord limitation, without question, and 4" is as good as any.

The 20" length limitation seems like a useless hassle on the judges. My model approached that, but it would have been competitively better if it had been shorter. Triolo's model was 20" long, but I really doubt if it would have been a better flier if it had been longer. Unnecessary rules are worse than no rules; let's skip the length limitation....but if the max chord was 5", then a longer model might have a competitive advantage. (ESW comment...I have to disagree. Short coupled models are not the most stable. A long moment arm is definitely advantageous...or why do Wakefields have them...or why do indoor FAI stick models have a boom?)

MIAMA's rule that the rudder may not extend beyond the rear of the stab seems totally useless. Most of the real planes I see at the airport have rudders that extend beyond the rear of the stab. Let's skip it. (ESW comment...This has been eliminated...rules now call for OAL.)

"No motor sticks, motor totally enclosed by the fuselage." That's cool, let's do it. "No diamond fuselages." So a scale Ganagobie is ruled out, yet the event is supposed to promote scale-like appearance. Let's skip that one. (ESW comment...Hold on, Sir Robert, you're nit-picking....I'll wager, since you are against booms on Manhattans, a tin of all-day suckers that I can name ten man-carrying aiplanes that have or had booms for every one you can name that has a diamond-shaped fuselage.)

Stab dimensions of 3½ x 8 are barely ok, I guess. But a rectangular stab 3½ x 8 has barely 40% of the area of a 4 x 18 (projected) wing. That's about right, but it inhibits better looking, more scale-like tapered stabs, and promotes ugly rectangular ones. Let's up it a bit. (ESW comment...Sorry, Robert, I agree tapered stabs are pretty, but lots of man-carrying aircraft have square-cut stabs...and for more scale-like stabs they should be smaller, not larger.)

SORRY, HANGAR PILOT READERS, BUT YOU'LL HAVE TO READ SIDEWAYS AWHILE →

(15)

The "no wing bracing" rule. Wire bracing on an ultra-light model is for experts only. A very light unbraced model is extremely difficult to fly, and is also for experts only. Adding a few simple balsa braces to a model of moderate weight is no hassle even for a beginner, and it also makes the models easier to fly. Pennyplane experience of some five years proves that. (ESW comment...I agree...fooled you, didn't I?) Put all those combinations together and you have a mess. My feeling, though, is that the no bracing rule is detrimental to the goals of the event, even with the MIAMA 4 gram weight rule. With a higher weight limitation, the no bracing rule would be either detrimental or unnecessary.

The two 1" wheels rule is OK. But have you ever seen a real plane with a single-strut landing gear? OK, Indoor Cabin models have single strut landing gears. When I used a single-strut gear on an Indoor Cabin model...one of the first, I think, if not the first, I was called a cheater! That was in the 1930's. So, it depends on whether the event is to lean toward Scale or toward Indoor Cabin. Personally, I'ld opt for the rules requiring two struts, one to each of the two main wheels. Triolo's winner, of course, has a single-strut gear. In fact, the fuselage of my model was built with bracing for a single-strut LG, but, at the last instant, I switched to a two-strut affair because it look better. So there, I'm prejudiced.

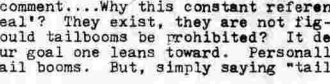
The "no plastic films" rule is OK, but, if the weight rule were a bit higher, such a rule would be unnecessary.

MIAMA's rule for the all-balsa, Easy-B type props....hmmm. Why should I be prohibited from using an all-spruce prop, or a store-bought plastic prop for that matter, if I chose? I can show you some Easy-B type props you wouldn't believe! I think "Built-up props are prohibited" would suffice, and if the weight rule were a bit higher, even that would be unnecessary. (ESW comment...Hold on! Even 3-piece...2 blades and hub spar...Easy-B props are technically 'built-up'. You'll have us bending them from a single sheet or carving them from a block.)

While we are at it, I think we should specifically prohibit geared props, and limit the event to models having one prop and one rubber motor.

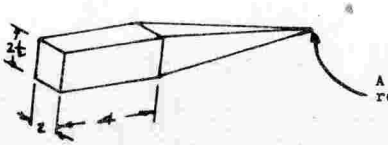
Should there be a prop diameter limitation to promote more scale-like appearance? Well, I guess it depends on whether you lean more toward the "scale" end or the "Indoor Cabin" end of the spectrum in your deliniation of the goals of the event. Personally, I think I would opt for about a 10" prop diameter limitation, as it would promote better looking models; I won't claim they would be more scale-like. There is a danger, however, with a prop diam limitation the better builders will lean toward high-pitch wide-blade props and possibly 3 or 4-blade props. That's the only way you can handle a large weight of rubber, and a large rubber weight, in turn, is the main route toward higher duration. I'm not certain of this, but I think models with such props are more difficult to fly, so it decreases the fun/work ratio, and makes the event less attractive to less-than-expert modelers. I think a far better way to accomplish the goal would be to limit the rubber weight to 2 grams, if the weight-without-rubber is to remain at 4 grams...or half the airframe weight limit, whatever it ends up being. That's a bit of a hassle for both modeler and judges, but it works fine in Wakefield, Coupe d'Hiver, etc. (ESW comment...Say, Bob, haven't you been arguing for simpler rules? Incidentally, the judges at the Nats, I being one of them, did not find the MIAMA rules in force then difficult to check. Also..Wakefields? I thought Manhattan was an indoor model...they're flown differently from outdoor models, Bob.)

All indoor cabin models have tailbooms, and have had for 35 years or so. But no real planes do. (ESW comment....Why this constant reference to 'real' planes? Aren't models 'real'? They exist, they are not figments of the imagination!) So, should tailbooms be prohibited? It depends, again, upon which end of your goal one leans toward. Personally, I lean toward the prohibition of tail booms. But, simply saying "tailbooms are prohibited" won't hack it, because then you have to define 'tailboom. For example, does the model at the right have a tailboom? In effect it does, but actually the fuselage is one continuous unit, so it probably would not be ruled out. In any event, it sure is ugly!



Here is a possible alternative rule. It ain't neat, but I see no major loopholes. "The outside surface of the model must enclose an imaginary solid body as shown." The sketch below would be part of the rules. (Sketch is at top of next column.)

NEXT GOAL FOR MANHATTANS — 10 MINUTES!



A point 1" forward of the rearmost part of the model.

If a simple cross-section, rather than a box, were required, then the box part would be deleted. Such a rule would permit scale-like tails that overhang the rear of the fuselage by up to an inch. But it would prohibit a guy from putting the whole tail behind the fuselage and using a heavy center rib that ineffect acted as a boom. And it certainly rules out genuine tailbooms, and it rules out the phoneyboomer I sketched, too. (ESW comment....Getting sort of complicated, but maybe, maybe.)

Now about the weight rule. I guess a real indoor builder would have little trouble building down to 4 grams, using good indoor wood and the lightest condenser paper. (ESW comment....Note that John Triolo's first 'Skyscraper' and Richard Whitten's 'Eastsider' both weighed only 2.5 grams.) My model would have been close to 4 grams if I hadn't had to add nose weight to make it stable, or a few other things. But, frankly, it is far too fragile for my money. I kept breaking things while I was building it, and while I was flying it, simply due to my clumsiness and my unfamiliarity with Indoor models in general. A 3-gram Pennyplane is a far more rugged model than a 4-gram M-Formula model. I'ld suggest that the rule be such that the minimum weight could be met using Sig 1/16 square, and regular Japanese tissue. I think perhaps an 8-gram minimum weight would hack that, and make the event more fun with less work, yet be just as challenging. Even with the 4-gram rule, there were few entrants at the Nats that weighed as little as 5-grams. Maybe even 10 grams would be better yet. (ESW comment...I discuss minimum weights elsewhere, but stick to weights.....you're not going to get me as a judge determining if the balsa came from Sig or not...or measuring the longerons...or making sure the tissue is "regular Japanese", whatever that is.)

Now about the goals. To me, Indoor Cabin seems like a useless, nonsensical anachronism that has no part in modern competition modeling. If you want to fly for pure duration, do so with stick models. Why the added hassle of a built-up fuselage, and a phoney "landing" gear. I have seen guys make official flights where the wheels never got within two inches of the ground when the model was launched. So, I don't think much of M-Formula rules that promote Indoor-Cabin-like models. (ESW comment....Bob, your reasoning condemns the fliers and timers rather than the models.)

At the other end of the spectrum you defined in the goals is the Flying Scale. There is no possible way the M-Formula rules could be bent to promote models that would bear any resemblance whatsoever to full-size aircraft! Scale-like is simply the wrong word.

Yet, in the thirties and later, a certain sort of model evolved that had a certain look that many, if not most, modelers learned to love. There was a certain "cabin-model" idiom. Korda's Wake, Lidgard's 'Sparky', the current KeilKraft 'Gypsy', 'Pixie', 'Robin', and 'Ajax', and thousands of others, had that certain look. Bare essentials are a transparent cabin with a forward-facing genuine windshield, a two-wheel gear, and no hollow-sided fuselages or tailbooms. In those days we cared what our models looked like, even though it offered no competitive advantage, and in fact probably decreased the performance. But "scale-like" they weren't. However you define or describe it, that cabin-model look is what I'ld like to see promoted by Manhattan Formula. Many MF models have the look, but at the expense of competition potential.

Well, there you have it, kiddo: My condensed capsule summary of a few of my ideas concerning MF rules. Now aren't you glad I didn't lay the whole thing on you?

However it turns out, MF will be a good event. I'ld like to see it be a great event.

(ESW comment...Phew! Bob, you have done us a service by thrashing each aspect this way and that. Let's turn now to a reply by John Triolo.)

TRIOLO REPLY 11-11-76 TO MEUSER

I gather from your Manhattan rules suggestion that your main objective is to have that "certain" cabin look which you have learned to love even at the expense of competitive potential. Here is the rub. "You can't have your cake and eat it, too." Either you compete to win or you opt to fly the lovely "look" of the old cabin-like model, and to hell with winning.

TRIOLO REPLY CONT. ON PAGE 6

TRIOLO REPLY (CONT. FROM 5)

There really is no such thing as a "fun" event when winning is the goal, especially at the Nats level. If there were a no-win event like, for instance, an obstacle clearance course, and your model either made it or did not, and nobody won, then that would be a 'fun' (?) event. As soon as you declare a contest with rules, it is no longer a fun event. You make an attempt to win, or you're nuts to be in the game. Fun is a fringe benefit of competition, and it varies from person to person.

Since we fly indoors without the aid of thermals, there is a demand for a continuous prop run in order to gain endurance. Therefore, the Kordas and Sparkys are not in the same class as indoors, and it is illogical to try to do it. Outdoors is the opposite of indoors, and environment shapes design.

As for builders' skills being different, of course they are, and today's klutz builder is tomorrow's expert. The klutz builder is only temporary, and if he tries harder he gets good. So, the rules should not be aimed at any level of building competence, because it really is a moot question as to the relevancy of that approach. As for your breaking your model because you were not used to this light stuff, you have to learn to keep your cotton-picking hands off those weak spots and keep your mind on your work. If you don't, you'll be breaking your 10 gram model, too.

And this brings up another bone of contention. Ten grams is 250% of the present weight. With your suggestion of a reduced span to 18", you're going to knock off the performance so much that, as an indoor man, I would not bother to put all those sticks together to get only a flight of 3 or 4 minutes. That's going backwards, as I see it. If we raise the weight that much, I'm afraid you will lose the character and main attraction of indoor models, that being the ability to sustain flight as long as possible. I love those old timers, too, but I don't think it's practical to formulate rules that would produce just what you are looking for in indoors. Besides, it only happens to be your whim that you wish to satisfy. Nostalgic, but not practical in our idiom.

When I designed my 'Skyscraper' I thought of all the things that experience has taught me, with one objective in mind...endurance. That means build to minimum weight and use all the area allowed in the rules, large prop, keep drag to a minimum, etc. Cabin matters little, except to meet the rules. To say that few guys had built under 5 grams is a reason to up the weight is catering to mediocrity, and it negates the quest for increased indoor skills. I don't believe this should be our standard. If you go that heavy you should at least up the chord to make a reasonable wing loading. And drop the word scale-like. Merely say cabin model... period. No mention of indoor type or other should be in the rules.

Since you gain no points for appearance or scale-like qualities it makes little difference to me that you think the type fuselage I used was "sure as hell ugly". Beauty is in the eye of the beholder, and remember Gable had those big ears...like mine. It may be ugly, but it is no phoney boom. It was a case of functional design, like it or not! You stick to those old timer designs, and I'll stick to what the rules allow in order to gain my best advantage. You can't legislate anybody's aesthetics with rules.

On limiting rubber to ¼ model weight, Wakefield and Coupe d'Hiver are outdoor events, and there is no relation to indoors. Besides, all the weighing involved requires too much time on the part of the judges and the fliers, in making up precise motors. This would turn me off completely, it being a real hassle for the limited flights one would get. I think you shot from the hips on this one. Outdoor success is indoor failure, and vice versa.

Now let me state where I agree with your stuff. You are "right on" with your two-dimensional cross-section at some point on the fuselage, which I believe should be in the wing chord dimension. (ESW comment... John, we'll be right back with the bubble on a tube style now prevalent in AMA Indoor Cabin.) Up the tail area for better looking stab...okay, great. (ESW comment...Nope, just bigger rectangles.) Wing bracing optional. Two strut landing gear okay. Cabin windows also optional. However, if you agree we can't be scale-like, there is no reason to limit the prop. If you up the weight, up the chord and length of fuselage.

Oh, hell, this is enough! I thought Whitten's idea for a Manhattan was good, and, as I said before, I had no quarrel with the NFAMA rules that was strong enough to turn me off, but, since we are talking about it, I still would opt for a "home-built" Proto event, but then it wouldn't be a Manhattan. I guess this idea is too "advanced" in concept at the present time, but I believe it gets at the heart of what you and I are longing for... good-looking models that fly well, are not too light, are "easy" to build, and do not fly solely for endurance, and that's a whole new bag. Now try to write those rules, if you dare! (ESW comment...I like it, I like it. [redacted]

It is incomprehensible to me that anyone could believe he could write a set of rules so he could win. People who entertain that notion or who accuse other people of it, are silly, to say the least. How can you prevent other competitors from showing up?...shoot 'em? Rules are rules, and everybody follows them, and no one is a guaranteed winner. However, making rules that pander to mediocrity rubs me the wrong way. My Proto-type event would allow a modeler to express himself according to his own building skills, and that should draw all levels of competence as it is creative in concept. The key word is creativity...a worthy objective.

MEUSER'S REPLY 1-3-77 TO TRIOLO

(ESW comment...The following are excerpts only from this letter. Much was repeated from Bob's first letter.)

I don't recall saying your model was "sure as hell ugly". But it was. Your model is exactly what the rules promote, and you well proved that! Please don't think I was putting you down for building a model geared to win within the constraints of the rules.....I was not putting down your model design, or you for designing it that way. I was putting down the rules that promoted precisely that sort of model you built. One can't design rules that will guarantee good-looking models, unless you give "beauty points". But you can design rules such that there is no competitive disadvantage to including those features that make a model good looking.

Clearly you are in favor of rules that favor a model capable of high duration, and don't like a lot of restrictions that limit duration. Clearly I favor rules that would rather severely limit duration in order to achieve other goals...good looks, ease of building and flying, something for outdoor modelers to do on the off season. I don't think that is exactly "pandering to mediocrity". Within that framework, some limitation on prop diam is essential.

It appears that the "Proto" event you suggest might be close to what I had hoped Manhattan Formula was, but clearly is not. I don't think I like putting a "max" on the flight time, but one might give "Proto" a decreased reward for anything over a certain max like they used to do for flying scale. Say, half credit for anything over two minutes. And, give "beauty points", that is really the only way to promote good looking, well built models; by giving competition-score credit for such features. Clearly such an event would not be in competition with Manhattan Formula, for the goals are diametrically opposed. Cater to the "klutz builder", as you call them! I think such an event would have a lot of drawing power. We'll call it...the very thought brings tears to these tired old eyes...FORMULA FRISCO!

(ESW comment regarding Formula Frisco or Frisco-Proto.....The intent, obviously, is good. The rules and judging, however, would be a can of worms. I doubt if the "klutz" or beginner has any chance at all. If a plan is published, how 'inovative' is the builder from such plans? And who gets the 'inovation' points, the builder or the designer?)

JOHN TRIOLO TO ESW - 9-18-76

(ESW comment...We've gotten a little out of chronological order, and should probably have started off with this letter.)

Re your question " What direction now?" for Mnahattans you said that some people want a weight increase "to shift the emphasis more toward scale". Raising the weight will in no way result in a scale-like Manhattan. The problem lies with the rules and the proportions that result in following them.

Any plane that has equal length for the fuselage and the wing, with the present chord restriction, results in a model that will not be scale-like in design if duration is the objective. To be scale-like you will have to shorten the fuselage length and/or allow more chord and wingspan to the present rules. Also you will have to restrict propeller diameter in order to achieve a more scale-like landing gear. I don't care what weight rule you use, but there should be an established ratio between wingspan and the propeller diameter. Creative design concepts would be opened up, and that should be the objective. The event could be called the "Manhattan Prototype" if you like.

I would also include a special category for the bi-plane lover. No prototype would be complete without it, and it should attract even more participants. This would be the first design event for prototype ever offered. We need a program that will give expression to the innovative and creative "genius" of our fellow modelers, and this is merit enough for the existance of the Manhattan Proto. Can't you imagine how many modelers would want to show their thinking on some fancied, full-size, home-built craft he would like to fly? I know I would.

I have no personal quarrel with the present Manhattan Formula rules, but if there is need for a change, I offer this as a suggestion on the

BOB CLEMENS TO JOHN TRIOLO - 1-17-77

Bob Meuser, knowing of my participation and interest in the Manhattan Cabin event at the 1976 Nationals, was kind enough to send me copies of your recent exchange of correspondence on the subject of M.C. I feel I must throw in my own 2¢ worth at this point.

We already have a dandy event for super-light, long-flying fuselage models. Of course, I'm referring to that delight of all modelling masochists, A.M.A. indoor "cabin". Having talked to Ed Whitten on the subject of M.C. on several occasions, I think it can be definitely stated that he never invented the event as even a faint imitation of A.M.A. indoor cabin. I think he intended it to be sort of, as Bob Meuser put it, "in order to achieve other goals...good looks, ease of building and flying, something for outdoor modellers to do on the off season." (ESW comment...Not quite, Bob, it was originally hoped that experts, as well as others, would be interested in competing keenly in Manhattan. But the type of model would be neither scale nor AMA Cabin, but "somewhere" in between. Endurance was its prime objective, with a weight penalty. Determining just what that minimum weight and the overall shape of the model should be is what these letters are all about.)

I think the existing MIAWA version of M. C. has gotten off to a good start in this direction. But I also think some rules changes are in order, among them a higher weight minimum. 10 grams sounds just fine to me, and I'm in total disagreement with you that this would somehow cater to mediocrity. Frankly, with all models entered weighing 10 grams, I could see a very close, exciting competition. So what if three or four minutes is all they would do. The evenness of competition would more than make up for high flight times. Those that choose to fly super-light R.O.G. "cabin" airplanes can fly in the existing A.M.A. event. If we are going to have a new indoor cabin duration event, let's make it a totally different concept, not a near-miss carbon copy of something we already have.

I'm also taking issue with you on handling of these models. A 10 gram model would indeed be easier to handle than a 4 gram ship!

And all klutz builders will not become experts, no matter how hard they try or how good their intentions. There is a limit on indoor building skill level, and it varies all over the place from one modeller to the next. We already have enough events (mike stick and cabin; paper stick: Easy-B; F.A.I.; Penny Plane) where the ability to build light and well is very important. Who needs still another? Let's have M.C. allow us to bear down on other areas of construction and design.

Finally, the question of "fun". In the May, 1974, issue of Indoor Views & News, Manny Radoff rebutted my letter in an earlier issue on Keeping Penny Plane "fun" by saying, "There is no such thing as a fun model airplane if you are going to compete in a contest." In your letter to Bob Meuser, you say, "There really is no such thing as a 'fun' event when winning is the goal, especially at the Nats level." Hey, guys, what's happening here? This is a hobby, not a life-and-death struggle! I flew Manhattan at the Nats, and I wound the hell out of my ship trying for second place. I just made it, too, and I did have fun in the process. Maybe the gloom of those Lakehurst hangars is getting to you or something.

Manhattan should be, can be, and...at least to some of us...is a fun event. And I support most of Bob Meuser's suggested rules changes as a means of making even more fun.

P.S. to ESW...I was disappointed that MIAMA is not going to change weight minimum.

JOHN TRIOLO TO BOB MEUSER - 1-26-77

Reference your 1/3/77 letter, I guess I read between the lines and over-reacted to your "book", but I couldn't help it, being a conservative and a purist about the indoor model. The dilemna is the result of the inability of the Manhattan rules to satisfy Bob Meuser, who wants a a Korda and Sparkey-like model, Bob Clemens, who wants to up the weight to ten grams so that competition can be more even, and John Triolo, who wants the event to be strictly endurance-oriented. Obviously, the three combined are not compatible.

Ever since I can remember, the main appeal of indoor modeling has been the freedom and challenge to build as light as possible in order to gain endurance. That was the name of the game. There were no restrictions as to weight, chord, prop, material, wing span or rubber. The only restriction was wing and stab area according to classification of model. And even that was varied enough to maintain challenge and interest. There was no erosion of these freedoms in an effort to draw anybody into the game.

Since the advent of F.A.I. competition, a decision was made first to drop the wing span from 90 cm to 65 cm. Then they proposed a weight requirement of 1 gram. Now there is talk of reducing the span again! A lot of modelers mastered each phase and then had the rug pulled out from under them with a new set of rules. All because some guys said they couldn't get good wood...which was a lot of baloney. Add to this, the EZB, which isn't easy any more, to draw in new modelers. Then came the heavy Penny Plane to draw in the outdoor guys, which, in my opinion, is the ugliest and most self-defeating event ever invented, if the inception was to even out the competition. You know who nearly always wins...the specialist or expert.

I submit that all these developments on restricting weights and parameters has resulted in a viscious circle, and the products are models that have sameness of design and very little eye appeal...excepting of course Bob Meuser's Penny Plane, which I thought the best looking of any to date...and that's stretching my aesthetics. Incidentally, I know you are not a klutz modeller.

Maybe all this stuff is good for modelling, as evidenced by the increased numbers, but it results in stagnant, stereotyped models. This is what I object to...the erosion of the free concepts stated earlier. The Manhattan sparked new interest and was successful at the Nats, and, here we go again, changing rules, hoping to draw in outdoor men for "something to do in the off season". It makes a joke out of our efforts, not to mention the whole game! What the hell is wrong with trying to beat the 8 minutes Dan Domina made proxy flying my model? Where are the guys who will say, "If he can do it, so can I?" Let's not lower our standards. Believe me, you will get just as much fun by raising them, rather than going soft for any level or group of modelers. We've had enough of that!

Since the MIAMA Manhattan Formula is "fait accompli", 'bravo' for the inspiration and tired, heroic tears shed at the naming of the magnificent Francisco Formula (Proto?). Now, setting Manhattan aside for a while, let's discuss rules for the Frisco event.

I don't care what weight you settle on for Frisco. As you say, the goal is the thing, and few outdoor modelers would admit they couldn't build a 10 or 12 gram model. I have a model in mind, but can't do it because of these questions:

1. Single surface, or double covering on wing and tail?
2. Box fuselage, or formers and stringers for contour? Any credit?
3. Chord restriction and tail area?
4. Fuselage cross section dimensions?
5. Prop size?
6. Method of awarding "beauty" points, or is neatness alone the factor?
7. What restriction on duration? Minimum and/or maximum?

Since this would be a new and possibly transitional event for outdoor guys, heh, heh, I would hope to see a simple model without complex contours, which take a long time to build. I would rather have emphasis on scale-like design....That proto pitch again. And, please, no mention of Sparkeys and Kordas with the idea they "look good". It is too suggestive and restrictive. Let's open up creativity and new concepts. Which leads me to conclude there should be no restrictions except in wing area. This would allow a variety of aspect ratios and result in many fancy designs.

With regard to "beauty" points, I think it more practical to drop the word "beauty" and substitute practicality of original design, with scale-like qualities, but still give points for neatness. This does away with the "beauty is in the eye of the beholder" bit. "Beauty" points are too abstract and subjective on the part of the judges and they could cause hard feelings, whereas neatness and practicality of design could be judged more objectively.

In the past, I remember an event sponsored by Air Trails such as this, only it was simply conceptual drawing. The innovative proto event would be the first design contest ever offered which would require a flying demonstration for proof of air worthiness, not based on endurance alone... a real, miniature aircraft proto event not restricted to cabin or high wing. I can see this catching on in outdoors, too, with all types of power plants. I'm certain that with proper exposure this event would give modeling a great boost in that everybody would start from scratch with new goals. It would take the "toy" image out of our hobby and give more meaning to our endeavors. This is what we pay a PR man to do. This event would give AMA and the PR man another good argument for their existence, and it could be the most important event of the past fifty years...tears? Confucius say, "Ignorance of objective results in confusion." Also, one picture worth thousand words. (See 3-view drawing of John's Frisco-Proto model, the "EZE-Lander", on page 8.) (ESW question...John and Bob, aren't Paul McIlrath's series (albeit outdoor) of sport models, the 'Cabinaire', 'Tiger', '29er', 'Customaire', and others, already kitted by Sig Manufacturing Co. as their 'Sig Classic Series' very much in line with your 'Frisco-Proto' style? Could one of them be entered?)

FROM A.M.A. – JOHN WORTH TO ESW – 10.28.76

In regard to your request for comments concerning the Manhattan indoor event, Frank Ehling and I have the following:

1. Unless the rules get into the AMA rule book, Manhattan will be strictly an insider's event, fostered mainly by NIMAS, Star Skippers, and the MIAMA group.
2. We note that no rules proposal was submitted by the Sept. 1 deadline, which means that Manhattan cannot be part of the 1978-79 rule book. So, 1980 is the next opportunity.
3. Manhattan is more of a true Cabin event than AMA Cabin is...the latter is for the super sophisticates and the word 'Cabin' is hardly descriptive of typical models in this event. This is not to put down Cabin...it's a very special event...but Manhattan should have appeal to more people. We are for anything that tends to increase interest and participation.
4. We like to see events which tend to get new people involved (not necessarily Juniors) rather than simply adding more events for the same people to fly. So far, Manhattan seems to be one of the latter...it could be both if aimed that way.

TO JOHN TRIOLO FROM BERNARD ASLETT (ENGLAND) 10/31/76

Many grateful thanks for your prompt letter, with its wealth of information on your Manhattan Cabin. I really couldn't have expected more if I had spoken with you at the World Championships, which only goes to show how thoughtfully it was composed.

I have delayed this letter hoping to include a 'flight report', but fate decreed otherwise. During trimming flights the motor dowel dislodged when removing the model from the winding harness, this with 1000 plus turns! Fortunately, it caused only a broken longeron and a couple of spacers and local tissue, but it was beyond field repairs. However, I hope to try again in a week or so.

Construction went smoothly, and I had to admit your 'double-up' wing post technique and also the idea of hard 1/16" diameter rounded spars on centre wing. My 'ship' came out on the light side and I had to ballast approximately 2/3 gram.

From what trimming I had, I seemed to be underelevated. I had guessed at 2 degrees down thrust, with plus 2 degrees wing/zero degrees stab. I had also cheated a little, using a 13" x 23" prop...looking for your ten minute potential, I confess.

Prior to your letter arriving, I had completed my own M-Cabin design, which looked quite accidentally like a customised Nesmouth Cougar. It weighed 9¼ grams minus motor and does 4 minutes on 2200 turns. I fly it right pattern and use a 7½" x 7½" prop with a long, long 4 gram motor...potential 3000 plus turns. So you can see that your info was something of an eye opener. I guess that the 'Cabin' bit led me to think in terms of semi-scale. It flies very smoothly, and really only utilizes the flat part of the torque curve. Even stretching the imagination...larger prop/lighter weight...I cannot see a potential of greater than 6 minutes, so I shall turn now to your design pattern.

Well enough of the chat, and back to the building board. There have been two new CO2 motors recently introduced to the British market, and a competition is to be held next Sunday at Cardington, so we are all busy. I hope to have the Triolo Man/Cab doing its stuff as well.

Again, John, may I say how kind and helpful you have been, and that I would be more than pleased to return the favor when you feel the occasion arises.

BOB CLEMENS TO ESW – 11.4.76

Here are some fast facts and figures about my Manhattan Cabin model, "The Spirit of Fatigue":

Covering is condenser paper; fuselage has one thin coat of clear dope on it.

Wing has 1/16" square front and rear spars, sanded on top leading and trailing edges to conform to airfoil section. All curved tips are formed from single strips of model railway basswood. Fuselage is 1/16" square throughout. Wing is mounted with four struts into tissue sockets. This made all flying surfaces...horizontal ones, that is...fully adjustable, a feature I wanted since I had no idea what sort of incidences I might need to get the ship in flying trim. They proved to be useful.

Wheel struts also plug into sockets; model fits into fairly small box as a result.

Photo shows my noseblock assembly, sort of a stub Easy-B front end. Again, I didn't know what sort of prop I might need, so I wanted to be able to interchange them easily. I may eventually fair this in with thin balsa panels.

Prop is a very simple monospar constant-chord sheet balsa type, 9½" in diameter. The pitch was eyeballed in, so I have no figure to give you, but it's medium high. Blades baked on metal jar at slight angle to give both camber and helical twist. Prop diameter determined by starting with an old Easy-B prop and cutting it down at the tips progressively until "right" RPM was obtained...How scientific can you get?

The second place flight at the Nats of 5:28 was obtained by cranking in 2,500 turns into a 30" loop of 2mm Pirelli. Approximately 2/3 to 3/4 available altitude was obtained. I would like to think the ship could do 6 minutes with more testing of motors and props. I used a winding tube religiously; never did break a motor. Model flies in a nice left circle. No wing offset.

About the existing Manhattan Formula rules: I have just received Bob Meuser's fine letter. He makes a number of telling points, most of which I agree with. I definitely feel the weight rule is 'way too light'; Bob's idea for an 8-gram minimum sounds good. 4 grams is too light; makes for a fragile model and definitely gives an advantage to those FEW indoor flyers who can build light and strong. Let's concentrate on other areas of design and construction.

Bob's "imaginary solid rule" sounds good. I would not want to see M-Cabin become a slightly heavier version of our present, dumb indoor cabin event. I'ld definitely like to see the "box" idea continued, to avoid the rod-and-bubble appearance of mike "cabin" models.

Additional "yes" votes to Bob's suggestions for: two-strut landing gears; 10" prop limit; why not diamond fuselages?; slightly bigger stabs; O.K. for wooden bracing; "built-up props prohibited"; "cabin model look" including windows and windshield.

I enjoyed building and flying my Manhattan; with these rules changes, it would be even more fun and would make for some very interesting, closely-contested contests with these models.

DUTCH HADLAND (ENGLAND) TO ESW – 12.8.76

Herewith our views on the Manhattan class of indoor models. We like the general rules as published by Doc Martin's Miami club, but we think there should be two changes, i.e. The minimum weight should be raised to 6 grams...this will ensure that Manhattan does not become an experts only class! The other rules change would say that wing posts and pylons are not allowed. This would preserve the cabin/semi-scale appearance which I'm sure you envisaged when you invented the class.

A couple of us have built the Triolo Nats winner and we both agree that this kind of model is for experts only (who have access to top quality materials).

We have beginners and experts in EZB already, and I can see that if the 4 gram limit stays then Manhattan will go the same way as EZB, which is a retrograde step in my opinion. We have some 6 gram models which are approaching the 6 minutes mark and the nice thing is that you can handle them...they'll last longer, too!

I think that's about all, Ed, thanks for inventing Manhattan...keep 'em flying.

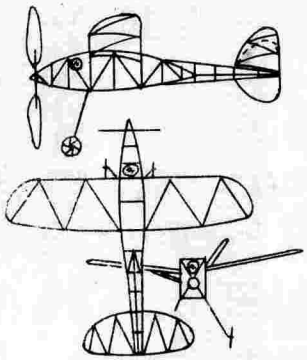
BUCKY SERVAITES TO ESW – 1.20.77

Sorry for my delay in writing, but I have been caught up in this Indoor FAI Program, holidays, flu and general family business. I've read Meuser's letter concerning his views on Manhattan and don't have a whole lot to add. My only strong feeling is that If we want to attract newcomers into Manhattan, the 4 gram limit should be raised. I would not want to see it raised too high as this would develope 50 mph bricks that wouldn't appeal to someone experienced in indoor flying. I would hate to say just what it would be...5, 6, 7 grams? Maybe you could be the better judge of this as you have heard of or seen many different weight Manhattans fly. I agree with many of Bob's views from his Oct. 29, 1976 letter, but many others seem to be nit picking. Why not try the event as it is, but up the weight next time? I think the rules are basically O.K., but slow, deliberate refinements are in order. No picture yet of my Manhattan...will send you one soon.

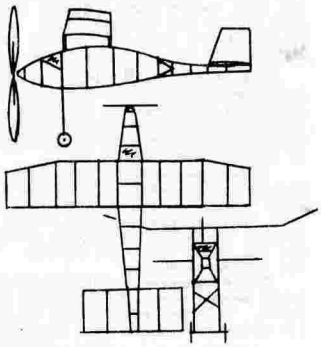
SERVAITES TO ESW – 2.3.77

Enclosed are plans for my Manhattan. I made these plans for some other fellows who are planning to attend an indoor meet 3/27/?? in Anderson, Indiana.

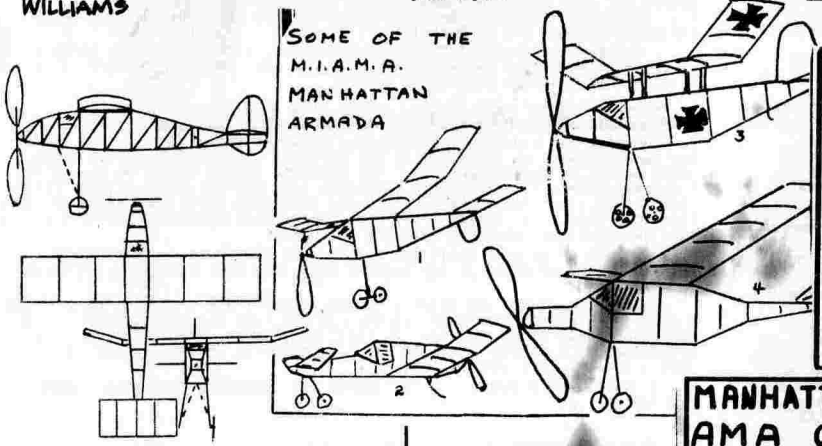
They are going to have a Manhattan Formula event there, but use 5 grams minimum weight rather than 4. It should be an interesting meet. We hope to have at least 6 people there from Ohio flying Manhattans... I hope. Will mail you results and pictures from meet.



WILLIAMS



NUSZER



GAROFALOW

MANHATTANS AT COLUMBIA

(Continued from Page 5)

Weights range from 4.0 grams (Nuszer's and Garofalow's) to 4.25 (Williams') and up. Joe Nuszer didn't find 4.0 hard to make....his Fike E only weighs 2.0 grams.

Don Garofalow's ship has the wing mounted by rubber bands on small wire hooks. His wheels are made of .008 music wire. The writer's plane sports a spinner faired into the fuselage.

Recently, Gerry Mallett of Massachusetts has added an approximate replica of John Triolo's Nationals winner with a Bob Clemen's nose bearing as seen in MODEL AVIATION.

Most of the flying at Columbia is confined to testing at this time as rubber and propellers are sorted out. An informal event for the class is planned for late April '77. Check out the 3-views on this page of Williams', Garofalow's and Nuszer's Manhattans, the belles of Columbia.

WEST BADEN ON JUNE 2,3,4&5 WILD!

1976-77 AEROMODELLER ANNUAL PUBLISHES MANHATTAN HISTORY

You ought to get a copy of this Annual...it's the one with the yellow twin pusher on the cover. Ron Moulton has made the Manhattan Formula a truly international event with his article. Who knows, maybe Manhattan will become an FAI event, and be competed for at the World Champs every other year. After all there are three outdoor free flight events, why not two indoor?

We didn't give Ron any new material, and all he had to work with was what had been previously published. It's a good review, gives a sparkling presentation, and those drawings are super! (We do have to mention, however, that in listing the M.I.A.M.A. rules, max. wing chord was put at a whopping 9" and not the correct 4".)

Many thanks, Ron.....here's to Manhattan in England!

MANHATTANS AT COLUMBIA

by Ron Williams

Recent developments in Manhattan Cabin have moved Penny Plane to a secondary position in our flying sessions at the Low Library Rotunda of Columbia University here in the home of the Manhattan, New York City. Ed Whitten's first flights at the Rotunda were captivating as the plane rose into the sun's rays. That ship , his original 'Riversider', was followed by the planes of his son, Richard, Robert Geyer, Jr., Ron Williams, Joe Nuszer, and Don Garofalow.

Bob Geyer built replicas of both Ed's and Richard's planes, modifying Richard's design in dihedral and with a solid tail boom. The writer built a shoulder wing, V-tail ship, Joe Nuszer a parasol wing, and Don Garofalow a top-wing plane. All are characterized by smooth, stable flight, except for the writer's plane which rocks and rolls.

(Continued

6

MANHATTAN FORMULA AS A REPLACEMENT FOR AMA CABIN

(Comment by Ed Whitten)

The original intent of the Manhattan Formula was for event somewhere between scale and AMA Cabin, with no intent to replace either. It was prompted by both the phantom scale jobs of the time and the wretched AMA Cabin rules.

The West Baden and Nats winners have more similarity to the AMA Cabin models than to scale, particularly Bucky Servaites'....obviously much more than the scale-prone buffs were happy to see. The requirement in the Manhattan rules of a measured box minimum in the fuselage was put there very specifically to overcome the rotten length squared divided by 100 cross-section rule that has caused the decline in popularity of AMA Cabin and so many squabbles over its interpretation, let alone outright subversion of its 'intent'.

If Manhattan Formula, under the PRESENT M.I.A.M.A. rules, were to take the place of the present AMA Cabin category, I, personally, would consider the introduction of the Manhattan Formula very successful, even though the original intent was for Manhattan to be more towards scale.

Such a development would give more reason for an event like "Frisco-Proto" to exist. Personally, I can't see too much difference between "Frisco-Proto" and the Fikes and Laceys. Because of the emergence of these popular home-builts as the winners in AMA Scale and Peanut,I believe they could very likely become a separate scale class. The Laceys, Cougars and Fikes also make it less necessary for the Manhattan Formula to be so close to scale. What I am saying is that I like the Manhattan Formula right where the M.I.A.M.A. rules have put it.

FROM RICHARD WHITTEN'S NOTES

(At Christmas time Richard scratched out some notes regarding Manhattan, and the following is Ed W's attempt at making a part of them readable. Note that, at 17, Richard was the only Jr/Sr to fly in last summer's two National Manhattan contests.)

As a young builder/flier I recognize a required minimum weight for an indoor model as an aid to beginners in getting started. The beginner has a better chance of successfully building a heavier indoor model than one with no minimum weight requirement. The 1 gram minimum weight requirement for the FAI category did enable me to get started competitively. I doubt if I could have handled a 95 cm FAI with no minimum weight requirement. Although the minimum weight requirement for Manhattan should make it easier for beginners to compete, the minimum should not be so high that it is met too easily.

The concept of a 'fun' model only sounds good, but a contest event takes the emphasis on competition, and the so-called 'fun' must come from an enjoyment of competing with one's peers and betters. The Manhattan is definitely not a novice's event, and I hope it does not become one.

As to the future direction of the Manhattan Formula, it could split, with one element remaining a light-weight endurance event and the other element much heavier and tending towards scale. Actually, it is the scale events that should have high minimum weight requirements, not endurance cabin models.

Improvisational scale...the Frisco-Proto... of John Triolo and Bob Meuser...will result in an expertly built, practically indestructable model that will win time after time...as is the case with true scale.

I find the fact that indoor models break to be very helpful to me because my building and designing technique is constantly improving. A winning "Frisco-Proto" model will last too long and the same model will be entered in every meet, with the chances that the same models will also keep winning since the flying portion of the event plays such a small part.

I have been flying the same Penny Plane for three years, and, despite innumerable catastrophes, it still requires ballast to bring it up to 3 grams. I'm only going to build a new one because I'm starting to hate this one.

On the other hand, I go through about 12 to 15 FAI ships each summer. So, my construction is getting better, and I'm gradually modifying the design to what suits me better.

People ought not to keep flying the same scale models in contests for five years. It's stifling. I don't want Manhattan to be that way: I want Manhattan to live!

WHAT MINIMUM WEIGHT?

(Comments by Ed Whitten)

The original Manhattan rules called for a minimum .3 ounces including rubber, and were later changed to .2 ounces without rubber. The N.I.A.M.A. rule is a min. 4 grams without rubber, and this has been kept (and I think properly) for 1977.

Several proposals have been made to increase this, some all the way up to 12 grams. Do the proposers of the very high minimums realize what they are suggesting? The Manhattan is a true INDOOR model, not an outdoor model brought indoors. Twelve grams must be more than some of the strictly outdoor Embryo Endurance models of the Flying Aces Club.

Manhattan was originated to be "somewhere between indoor flying scale and indoor AMA Cabin". Many indoor scale models today weigh only 5 grams. Should a purely indoor endurance model be required to weigh more than a scale model?

A 4.0 to 5.0 Manhattan is an INDOOR MODEL, and Manhattan is an indoor event. At the Nats Richard Whitten's 4.2 'Eastsider' collided with an Easy B. Both separated near the floor without any damage.. and that's the way it should be. At Columbia, in NYC, Ed Whitten's heavy 12.6 gram model sliced through an Easy B as if it weren't there. The 'Riversider' didn't even shudder...and that's NOT the way it should be.

Those who point out that many Manhattans flown at the Nats weighed more than 6 grams, and therefore the minimum weight ought to be raised, are overlooking the fact that the heavy models were not at all competitive, the top models all weighing 5.5 or less.

For the record these are the weights: (1) Triolo 4.0, (2) Clemens 5.5, (3) Meuser 4.75, (4) Servaites 4.0, (5) R.Whitten 4.2, (6) Lounsbery 5.5, (7) E.Whitten 12.6, (8) Geyer 11.4, (9) Gregory 7.3. Unflown: Martin 5.5, Whelan 6.5 and Smith ?.

The writer feels an increase in weight might possibly be in order, but definitely to not over 6 grams. Frankly, I don't see much purpose in increasing the minimum from 4 grams. Raising the weight will NOT make the model more 'scale-like', only changing the design limitations will do that. Not until the model gets over 10 grams does it become any easier to build...and then it is no longer an indoor model. I found out years ago that my 12.6 gram 'Riversider' was not the way to go, and only flew it at West Baden and the Nats for sentimental reasons. I wish I had not, for so doing has misguided others. Incidentally, I have flown it outdoors on calm days, and it goes just great.....

TO BOOM, OR NOT TO BOOM

(Comments by Ed Whitten)

Aye, that's the question...whether 'tis nobler to be more 'scale-like' without a boom, or more pragmatic with one.

Perhaps the Bard would also question just what a 'boom' is...and what is not a boom. Certainly, I question it! The rolled balsa tubes, following indoor AMA Cabin practice, used by Servaites and R.Whitten definitely are booms. Can one really, however, insist that Triolo's, Williams' and Kilgore's Manhattans have 'booms'? These models have a narrower built-up permenently attached extension aft of the rubber. While the rear ends of Servaites' and R.Whitten's models detach for winding, those of the later three do not.

Detachability, however, should not be the determining factor. Certainly Linstrum's 'Big Apple' could have a detachable tail, even though the fuselage longerons continued on at the same angle relative to the center line.

Since my original idea was to have an indoor endurance model with somewhat "Curtiss Robinish" lines, I would like to see detachable tails and rolled balsa tube booms abolished. I do not, however, know how to write an acceptable rule to eliminate attached built-up fuselage extensions, and would, therefore, accept them. I recognize that this solution is, of course, not satisfactory to the purists of either side. It is a compromise.

LIMIT PROP DIAMETER?

(Comment by Ed Whitten)

Why are indoor scale flyers so eager to limit the diameter of Manhattan propellers? Frankly, and stepping outside the realm of Manhattan into that of scale, I wish all indoor scale rules (Peanut included) required all scale models to ROG all flights with scale landing gears without the propeller hitting. That would put scale jobs back into the realm of realism a bit! If a scale model can't take off, how can one call it scale flight.

But back to Manhattans, however, since this event is supposed to be somewhere between scale and AMA Cabin, limiting the prop diameter might be in order to reduce those long, sometimes wiggly, landing gears. Perhaps, 10 inches would do. More thought, however, is definitely needed on this.

PLAN TO BE IN WEST BADEN, IND. ON JUNE 2, 3, 4, & 5 FOR THE BIGGEST INDOOR SHOW ON EARTH. A FLYING CIRCUS OF ALL INDOOR MODELS, CAT II: THE N.I.M.A.S. INTERNATIONAL RECORD TRIALS.

MANHATTAN SUMMARY BY ESW

— READ THIS ARTICLE LAST —

The idea of this "special issue" of STARSKIPPERS was thought up way last October as a round-up of Manhattan activity through the Nationals with questions about possible new rules for the coming season. After finally settling down to planning the season's NFFS Junior Postal schedule, the "special issue" was set for December 10th...then February 10th with the number of pages growing. It will finally be published about March 10th.

The opportunity to present the Manhattan story in the glow of two national contests has been missed. At this time, however, perhaps our message is even better. It seems that, with the passage of the winter months, during which the Manhattan Madness has spread, a lot of rules questions have not only been posed and mulled over, but the answers are starting to firm up. I have noticed that my own views have changed even while working up this issue...from first pasting up the plans and pictures, to questions in boxes on Page 8, to reviewing the Manhattan's origins and reasons for being, to typing up...and studying them as I went...all the thinking and experiences in these letters. I appreciate everyone's contribution to the Manhattan Formula via their letters... but, whether or not all points of view have been presented is not definite, nor am I sure just what the balance of opinion is, least clear of all is the "perfect" set of rules.

Although we still have a lot more Manhattan flying to do this spring before the big contests sponsored by MIAMA at West Baden and the California Nationals, I am, however, ready to propose for consideration a modified set of Manhattan rules for discussion and possible use starting in the fall. When I started out with this issue I had no such intention. I hope that your study of the views in this issue will help you to some conclusions, too.

(1) Airframe weight: (Less rubber) Minimum six (6) grams.
(2) Overall Length: (Measured from front of prop bearing aft)..18"
(3) Fuselage: (a) Must support and enclose a single rubber motor; NO motor sticks.
(b) Must include, or exceed, a "church steeple", a 2-1/2" x 4" x 2" "box" (with 4" dimension vertical) plus an extension to a point 1" forward of the rearmost part of the body.
(c) Must have a windshield of 2 sq. in. min. area, and a window on each side of 1 sq. in. min. area, covered with cellophane or similar material.
(4) Propeller: Maximum diameter 10", EZB type, direct drive, no pitch changing mechanism.
(5) Wing: Monoplane only with max. chord 4" and max. span 20" projected. Wood bracing allowed, but no wire bracing.

(Continued on [illegible])

ESW SUMMARY - Read this last!

(Continued from Page 7)

Wing must be mounted flush on top of the fuselage, or plugged into or abutted to sides.
(6) Stab: Max. span projected 8", max. chord 3". wood bracing allowed.
(7) Landing Gear: Rigid and fixed with two struts, from body, one to each of two wheels of 1" min. diam. Must be able to support airplane.
(8) Covering: Except for windshield and side windows, paper covering (including condenser paper) is required. No film nor microlite allowed.
(9) Flying: All flights by 3-point R.O.G. with unlimited attempts to record 5 flights. Flights less than 30 seconds are attempts. Best single flight counts.

You will note some of my earlier opinions have definitely been modified. I still insist the Manhattan Formula model be an indoor endurance model, but reluctantly concede to 6 grams minimum to make the models a little easier for the less experienced. Other changes are obviously intended to give the models more "scale-like" proportions....maybe even somewhat "Curtiss Robinish"!

I have given considerable space in this issue to the Frolio/Meuser idea of a "Prisco-Proto" event in order to bring out what a very heavy, really scale-like, non-scale event might be. I plan to propose in 1980 a change in the present AMA Indoor Cabin category by introducing a required "box" in the fuselage rule.

SEND COMMENTS TO HANGAR PILOT, OR ED WHITTEN PO BOX 176 WALL ST STA. NEW YORK, N.Y. 10005, OR BOTH!

MIAMI 33133 FLA.