

N M P R A

NEWS RELEASE

NATIONAL MINIATURE PYLON RACING

ASSOCIATION

AMA AFFILIATED

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January/February, 1974

Editor - Loretta Hall, 7546 Balboa Blvd.
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FROM THE PRESIDENT, Glen Spickler - 4208 Santa Cruz St., Bakersfield Ca. 93307

It's a New Year and hopefully we can continue to improve our sporting image within the hobby. I intend to keep all of my articles to a minimum in the interest of more space for other things. Our dynamic new Editor has really entered into this newsletter thing and I believe that this coming year you will find it to be both interesting and, with the help of Don Powell, on time.

We have made a change in the Sec./Treas. position for 1974. Gil Horstman has stepped down as Treasurer but will remain as Secretary. Gill has been a devoted, hard working, unsung officer since N.M.P.R.A. was founded. We all owe him a big Thank You. Our new Treasurer is Ron Schorr, a tight fisted, hard working member who I am sure will make every effort to eliminate the red ink that frequently plagues the treasury of all organizations of this kind.

We hope to continue the programs and policies of our predecessor, Ed Rankin and enlarge on them where possible. Please continue to let your V.P.s know of any improvements or changes that you would like to see. If you have a legitimate complaint, voice it. Not just to friends but also to your V.P. If others feel as you do, say so. The NMPRA is only as good as the individual members make it, so get involved. Let us know what you want and we will do our best to give it to you.

Ran some interesting tests last week on '73 K&Bs. Used eight engines belonging to three local flyers. Three were stock, four were from a well known re-builder, one was from another engine man. The four best ones all turned exactly the same RPM and two of these were stock. This does not prove that it isn't worthwhile to try and improve on the factory product (two of the re-worked engines did not have enough running time on them) but it does show that it is possible to be competitive with stock engines. Two of the four good engines turned times in the low 1:20s with two different flyers, neither of which is among the so called 'hot shots'. I firmly believe that it is time to quit blaming special this or that for the other mans success and realize that a good clean airplane, well practiced thumbs, the right prop, (can't say enough about props) plus the competitive desire are all more important than special engines we hear so much about.

Now, while the weather is cold let's all head for the workshop and build the super models for next year that no one can beat. Fly safe and fast in 1974.

The advertising on this page was solicited by the NMPRA to help defray the cost of printing this Newsletter. The Manufacturers that responded did so primarily to assist and support the organization. Your patronage will be appreciated by the NMPRA Officers and the Newsletter Staff.



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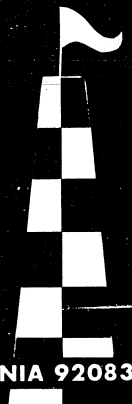
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FROM THE EDITOR, Loretta Hall

Webster defines Editor as "one who directs and supervises the policy and contributions of a newspaper or periodical". Since I have no intention of supervising or directing a darn thing, I should probably be called by some other title but lacking an appropriate one I would like to introduce myself as your new Editor.

My name you have already read elsewhere. My qualifications for this job are; a lot of willingness, some writing experience, a little over ten years R/C experience and an absolutely insatiable desire to race Formula One airplanes (which I do often and win at seldom).

At the moment I have no high minded dreams of saving the sport nor changing it in any way. I will let all of you that are more qualified do this and I will content myself with printing what you write and digesting your opinions until such time as I have formed an opinion of my own that I think merits airing.

My one strong conviction is that the only place to start a job of any kind is at the beginning. The beginning is precisely where we are going to start. This issue is devoted almost entirely to the subject of how to run a successful Formula One Race. Subsequent issues will also deal with this subject until all phases have been thoroughly covered. I have read many requests for such information so I solicited and received articles from very highly qualified people on each phase of setting up and running a good race.

My only regret at accepting this job is that I can no longer watch the mail box for my NMPRA Newsletter to get here and can no longer go into my blue funk while I read and enjoy every line. If I can give you just half of the pleasure this year that Ed and Carol Hoteling gave me last year I will consider myself a smashing success. Please let me know how I'm doing.

The following is a verbatim copy of a letter to Terry Prather and NMPRA from John Clemens, President, AMA:

Dear Terry:

This is a dual purpose letter: First I want to thank you for being so thoughtful in sending me a copy of that beautiful new NMPRA racing Book!

The second purpose of the letter is to congratulate the National Miniature Pylon Racing Association on putting out such a beautiful, informative and dignified presentation as this book is. I am simply gigantically impressed!!!

On the other hand, I don't know why I should be so impressed, because I have known all along of the quality of people who are involved in the NMPRA.

This book will give us a wonderful tool to use in showing other specialty groups just what can be done when they quit bellyaching and wishing and really knuckle-down to some constructive work. Thanks from all of AMA.

Report on C.I.A.M. 1973 Annual Meeting - Attended by; John Worth, Cliff Telford and Harry Stine from the United States.

RC Pylon. A revised version of the U.S. proposal for a Pylon Racing Procedures Guide was adopted unanimously. In addition, the following wording for rule 5.2.13.1. was approved so as to make more specific the status of any given race: " The winner shall be flagged with a checkered flag. The

Contd'. page 3

results of the heat will be decided prior to the start of the following heat or within 5 minutes after the winner has been flagged, whichever is sooner."

Also, the following new muffler requirement was approved for rule 5.2.3.1., "The motor must be fitted with an effective muffler which must extend from the center line of the cylinder not less than 100mm and not more than 200mm. The expansion chamber must not be less than 25mm diameter. The muffler, fitted to the motor, must be gas tight, except for a single orifice, maximum diameter 15mm." This British proposal was approved unanimously as an attempt to specify positive linear dimensions as a basis for defining a muffler.

In addition, the use of crash type helmets (with chin straps) by competitors and officials is now required. However, the contest management is not obligated to provide these. They are the responsibility of the individuals involved.

Editors Note:

Our new Treasurer, Ron Schorr, requests that you fill out and send in the following form with your dues for 1974 membership as soon as possible. He says that we are in pretty bad shape financially and in order for him to get things rolling for the new year ahead he must have money. Please fill out and send in the form right away.

NMPRA APPLICATION FORM -1974-

SEND TO:
Ron Schorr
5224 Teesdale Ave.
North Hollywood Calif. 91607

MEMBERSHIP DUES \$10.00

NAME _____ AMA # _____ FCC # _____
(Please print or type)

ADDRESS _____
Street _____ City _____ State _____ Zip _____

Please check one: New Membership _____ NMPRA # _____ How Long _____

Please check: Interests, FAI _____ Formula One _____ Both _____

Q M _____ Signature _____

If you have already signed up please pass this along to someone else!!!!!!

KEEP THIS PORTION FOR YOUR RECORDS:

Application for NMPRA mailed _____, 1974

Check Number _____

Amount _____

Membership card received _____, 1974

SETTING UP PYLON HEATS By: Betty Stream

The organization of aircraft and frequencies should be so done as to arrive at an equitable series of heat races. The method outlined can be tailored to suit. The important thing is that frequency groups do not conflict and that there is a ready reference list of flyers and frequencies and their position in the matrix used to make up heats.

From their entry forms, the contestants should be divided according to frequencies. The total number is divided by four, the result being the number of frequency groups for four-plane heats. If this happens to come up a whole number, water will run uphill that day. So, assuming there are 26 entries, each group must be adjusted to whole numbers such as:

- Group 1 - 7
- Group 2 - 7
- Group 3 - 6
- Group 4 - 6

If the frequencies work out this will produce six 4-plane heats and two 3-plane heats. Assume the frequencies look like this:

72.16	2
72.08	5
72.24	4
72.40	3
72.96	2
75.64	2
53.1	1
53.2	1
53.3	1
53.4	3
53.5	2

The frequencies could be arranged as follows:

<u>Group 1</u>	<u>Group 2</u>	<u>Group 3</u>	<u>Group 4</u>
72.16 (2)	72.08 (5)	72.24 (4)	72.40 (3)
53.4 (3)	72.96 (2)	75.64 (2)	53.1 (1)
53.5 (2)			53.2 (1)
			53.3 (1)
7	7	6	6

Often, due to prevalence of one frequency, four groups can't be worked out so the total number of contestants should be divided by three to make three groups, thus flying three plane heats. To avert this problem it is possible to require pre-entry and limit the number of any one frequency to 25% of the total entry.

The next higher number above 26 that four will divide into equally is 28, therefore the numbers 1-28 are to be used as contestant code numbers to make up heats. Match contestant names to frequencies in Group 1 and enter them to the right of numbers 1 thru 7, Group 2 will be matched to numbers 8 thru 14, Group 3 with numbers 15 thru 21 (leaving one number without a name), Group 4 matched with numbers 22 thru 28 (also with one blank). Handicap numbers can be added to this list as they become available.

Cont'd.

Example:

<u>Code</u>	<u>Name</u>	<u>Frequency</u>	<u>Handicap</u>
1	Ed	72.16	3
2	Charlie	72.16	2
3	Bill	53.4	1
4	George	53.4	2
5	Tom	53.4	4
6	Stan	53.5	2
7	Joe	53.5	3
8	Carl	72.08	2
9	Bob	72.08	3
10	Sam	72.08	2
11	Willie	72.08	4
12	Kent	72.08	3
13	Mike	72.96	2
14	Dave	72.96	1
15	Howard	72.24	4
16	John	72.24	3
17	Ike	72.24	1
18		72.24	
19	Fred	72.24	2
20	Tony	75.64	4
21	Bart	75.64	3
22	Gladys	72.40	2
23	Dan	72.40	4
24	Paul	72.40	1
25	Roy	53.1	3
26	Jack	53.2	1
27	Tonto	53.3	4
28			

The code numbers then are divided into rows, making up the "matrix" which will be used during the entire race. Write down the four columns of numbers as follows:

1	8	15	22
2	9	16	23
3	10	17	24
4	11	18	25
5	12	19	26
6	13	20	27
7	14	21	28

This is round 1. Each row, reading across, constitutes a heat. Using the code list match names to the numbers on the matrix. Round 1 thus would look like this:

Heat 1 1. Ed 72.16
 8. Carl 72.08
 15. Howard 72.24
 22. Gladys 72.40

Heat 2 2. Charlie 72.16
 9. Bob 72.08
 16. John 72.24
 23. Dan 72.40

Heat 3 3. Bill 53.4
 10. Sam 72.08
 17. Ike 72.24
 24. Paul 72.40

Heat 4 4. George 53.4
 11. Willie 72.08
 18.
 25. Roy 53.1

Heat 5 5. Tom 53.4
 12. Kent 72.08
 19. Fred 72.24
 26. Jack 53.2

<u>Heat 6</u>	6.	Stan	53.5
	13.	Mike	72.96
	20.	Tony	75.64
	27.	Tonto	53.3

<u>Heat 7</u>	7.	Joe	53.5
	14.	Dave	72.96
	21.	Bart	75.64
	28.		

The three plane heat advantage will change as the positions of the blank numbers move each round.

For Round 2, move column 2 up one row, column 3 up two rows, and column 4 up three rows as follows:

<u>Round 1 (reference)</u>				<u>Round 2</u>			
1	8	15	22	1	9	17	25
2	9	16	23	2	10	18	26
3	10	17	24	3	11	19	27
4	11	18	25	4	12	20	28
5	12	19	26	5	13	21	22
6	13	20	27	6	14	15	23
7	14	21	28	7	8	16	24

Match these numbers with the names as for Round 1 and make up the heats. The same procedure is used through Round 6. After Round 6, contestants will begin repeating heats with contestants whom they have previously raced. (The round on which this will occur will vary depending on the number of heats which are used per round.) There is no way to avoid this, so changes must be made in the matrix. One way is to move column 4 up four numbers for Round 7, modifying the sequence, returning to moving 3 on the following rounds.

It is advisable when making up the heat cards to put the contestants frequency for round 1 and ask the Pit Boss to check each frequency. It is amazing how often a flyer will put the wrong frequency on his entry form. The pit boss can also get the handicap of each flyer in Round 1, which can then be transferred to the contestant code list for listing on future heat cards thus enabling the order of start to be put on the heat cards as they are filled out.

All the heats for the race can be made out in advance, if no modifications are going to be made due to crashes and other unfortunate occurrences. Heats can be consolidated when attrition occurs, by transferring contestants from within the same group into slots vacated by the crashee. This should be done with complete disregard for the name, using only the frequency as the basis for the move. A change should be made only to prevent one plane heats or to shorten time per round. A change is made only when everyone in a heat can be moved to another heat.

The duties of the person who makes up the heats is just that. If you have any complaints or requests for changes, direct the contestant to the C.D. It is his job to make the decision.

Contestants should be listed on the scoreboard as soon as possible after a heat. Heat cards should then be filed for future use. (Keep these cards for reference in the event of an error in posting). The following is a drawing of a sample Heat card:

SAMPLE HEAT CARD

N.M.P.R.A

HDEP No	START	NAME	PLACE					TIME		
			1	2	3	4	0			
3	3	ED			X			2	05	2
2	1	CARL					X		N.T.	
2	2	GLADYS		X				1	43	4
4	4	HOWARD	X					1	43	2

HEAT NO: 1

ROUND NO: 1

GENTLEMEN START YOUR ENGINES: By: Jerry Christiansen

The Starter: Who is he and what is his function? He is an extension of the C.D.s right arm. The main coordinator of the line.

Prior to all races he must confer with the C.D. to find out the condition and arrangement of the field, starting and landing area and those safety precautions peculiar to that field.

Once on the field the starter meets his owrkers; Lap Counters, Pylon judges, and communications personnel. Here he answers any last minute questions and makes sure that they are all settled and safe in their proper places.

Now down to business: Before giving the start, the planes must be identified with the number one pylon and lap counters. Following this the start. The start order should be loud and clear and given from a spot just in front of the starting line. This spot should be maintained until all of the planes are flagged off. This makes it easier for the pilot and caller to find you in case of a last second problem. Setting the planes off should be done at one second intervals, and consistently. This is made easier be the use of a 10 second sweep stop watch if available. For safety reasons I watch each plane off the ground out of the corner of my eye to make sure that they are going straight. (so should the caller). Flagging should be quick and deliberate for each plane. Once they are off and the race has begun the starter should concentrate on the 1st and 2nd place planes. (3rd and 4th also if possible). This means observing the lap counters and the planes themselves. When time permits the starter should observe the No. 1 flagmen to verify the proper planes with the proper flag color.

The final act is to give the checkered flag to the winner, at which time the lap counter should be standing and pointing at the plane.

The job of starter can be made or broken by his line workers and of course experience at any of these jobs is highly desirable, including the job of starter. However, such people are rare and their numbers certainly need to be increased!

PYLON COMMUNICATIONS FOR MINIMUM ERROR: By, Jack Fabbri

"Hey, which one of those red ones are you flagging?" "I think the second one coming is mine, isn't it?" "No, that one is orange, the red ones are first and third!"

The above is not an uncommon conversation at turn one these days. With the two class system and the number of entries coupled with the state-of-the-art of engines, electronics and aircraft the days of the real fast one, the real slow one and two of different colors in between are all but extinct.

This article deals with a subject which has been taken rather lightly in the past; the accurate identification of each aircraft in a heat to each member of the event crew who must keep track of the aircraft during the race.

Four airplanes sitting on the starting line may be pretty easy to tell apart. When, however, the airplanes are the length of the course away, all stacked together and heading your way at 140-140 MPH, the picture is somewhat different. Especially if two or three are the same basic color.

It has become apparent that an additional function is necessary, a body whose primary responsibility is communication and identification, not just for turn one, but also for turn two and three and even lap counters. Although the greatest impact is turn one, with the speeds of today's aircraft, many turn one cuts are missed by lap counters, particularly where cut-boards are being used (by the time the board has dropped, the airplane is going around turn two).

Let's discuss this new function in general and let's also agree that this is not just another duty to be performed by the head lap counter (the latter's responsibility to keep track of lap counter progress and aircraft position and the tabulation paper work is more than enough to occupy his time).

To begin, a communication network from the start line, to turn one, to turns two and three and to the front desk is mandatory! Telephones are nice but inexpensive walkie-talkies do very nicely (we used W/Ts at the '73 NATS).

The first order of business for our new function is to describe each airplane to its respective turn one flagman in such a manner that the flagman knows what the airplane looks like (or will look like to him), not just what color it is. Of course, if there is one white airplane and three orange ones at the line, "the white one" is obviously an adequate description, but what about the three orange ones? This is where the communications part of the game is paramount. A little imagination will help too. Assume you are doing the job; what can you tell turn one over the phone about each airplane? Well, should the case be, you could say "number two is a minnow, number three is a Miss Cosmic Wind, and number four is a Miss Dara". Of course, you could have all three held up at once and save your breath because to turn one eight or ten times, they are just three orange airplanes unless someone points out some unique features. Now, if you stop and use your imagination for a moment to describe what those little monsters look like in flight, you might come up with something your friendly flagman might recognize, should he accidentally take his eyes off the target for an instant, e.g.,

cont'd

- a) The Minnow is a low wing airplane, lots of dihedral, straight leading edge. Also, maybe it has longitudinal stripes or spanwise stripes or whatever. The "low wing lots of dihedral jazz" is probably the thing that will help the flagman pick it out if all three orange airplanes are stacked one above the other coming out of turn three.
- b) The Miss Cosmic Wind is a mid-wing airplane, large wing span, tapered, looks more like a glider in planform than do the other two. Also, it can have stripes (color), white bottom, or whatever. The wing description will help pick this one out while it's turning two and three.
- c) The Miss Dara (although it is a mid wing airplane) .. it appears to be a shoulder wing airplane, lots of fuselage area just aft of the wing, long hump-back profile, low aspect ratio, wing appears stubbier than the other two. Also has diagonal stripes, checkered tips or whatever.

The point is, describe the airplane how the guy watching it in flight may see it. Also remember pin stripes cannot be seen, blue, green and sometimes grey all look the same 1/8 mile away under certain sun conditions. The same for bright red and deep orange. In addition, only Howard Cossell can read numbers going by that fast, so don't bother telling him it's "number forty-two" Now if all three of those orange airplanes were of the same make (i.e., three orange El Banditos) you really have to work at describing them. Use things that people are familiar with or can visualize, such as, it has tiger stripes on upper aft fuselage, it is basically orange but trimmed like a K&B fuel can; this one doesn't have wheel pants, diagonal stripes on wing, spanwise stripes, whatever very obvious thing sets it apart from the others, that you can see 1/8 mile away! Don't give up the ship until you are certain that the guys at the other end of the 'phone really know what it looks like.

The second order of business for our new official (assume you) is to communicate with turn one, two and three and the lap counters while the race is in progress. If the turn one chief is doing his job, he'll call every cut to you (cut on white, cut on orange, etc.). You must see that the lap counters have picked these up, if they haven't tell them. You and the lap counters are a team and you must operate like one. When the horns go off on turns two or three, the turn judges should be talking (or yelling) to you... "Cut on the pink airplane with chartruese mud flaps", he should be jumping up and down and pointing to it (jumping up and down anyway). Your job again is to be certain that the lap counters have picked up any cuts on two or three.

Having considered this job for what it really is, one finds that it is nowhere as simple as it sounds. Describing the aircraft, trying to remember which airplane belongs to which flag and lap counter so that when you hear "cut on white, cut on number three, cut on lavender airplane" and getting the right message to the right lap counter while squatting down, turning around, and trying to carry on three simultaneous conversations on the inter-com does cause one to develop a technique (or ulcers!). Even though, this job looks like it will become a most important part of race management.

The final order of business is that the person blessed with this job can assist the head lap counter by running an extra stop watch, calling his attention to aircraft which have "cut-out" and most important -- running like mad for a hiding place when those who-beat-who discussions (free-for-alls) happen after the race.

Note: Having had this job at the '73 NATS, the author is now happily working on his son's N-GAGE railroad.

TREASURERS REPORT: By Ron Schorr

Hi fellow racers; PLEASE SEND IN YOUR DUES!!!!

As you will notice, there is a slight bit of commercialism in your Newsletter. This was absolutely necessary if the NMPRA is to survive financially in 1974. I will not bore you with the details at this time except to say that I am starting the year with \$224.49 in the treasury and over half of the 1974 dues have been paid. This money was used to pay 1973 expenses.

I, for one, would appreciate you patronizing our advertisers. If you would like to place an ad in the Newsletter the price is \$15.00 for 1/8 of a page per month. We are limiting the ads to one page only and this page is presently sold out but if you will send me your name and address if you are interested I will be glad to contact you as space becomes available.

Editors Note: As you can see, this issue of the Newsletter encompasses two rather than one month. We found it necessary to do this for several reasons; First, money. We don't have much right now as you no doubt have surmised. Second, the extra time it takes to change printers and get set up for mailing etc., (After we get this one under our belts things will go more smoothly). Third, and perhaps the most excusable reason, is that our newly acquired advertisers had to have time to get there art work and copy to us, so if you will remain calm things will work out I promise you.

COMING ATTRACTIONS - NEXT ISSUE

Plans & Instructions for Building Pylons By: Bob and Chuck Smith

(The kind you fly around, that is)

Plans & Instructions for a Portable Lap Counting Unit By: Glen Spickler

The Fine Points of Lap Counting By: Howard and Gary Nupen

Safety Inspection By: Kent Nogy

DON'T MISS THESE EXCITING ARTICLES AND MORE, MUCH MORE!

Right now, turn to page three of this issue and tear out the application form and send it, along with your dues, so that you will not be eliminated from the mailing list.

Recd
2/4/74



E. Rankin
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Ft. Worth, Texas 76133