



# NEWS RELEASE

# NMPRA

## NATIONAL MINIATURE PYLON RACING ASSOCIATION INC.

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April 1981

AMA AFFILIATED

Since 1965

### PRESIDENT'S PAGE

Hi Gang,

I'm listing all Form 1 Area V.P.'s again with their addresses:

North West - Thomas H. Strom - 925 S.W. 132nd - Seattle, Wa. 98146  
South West - Gary Hoover - 1504 - 16th - Los Osso, Cal. 93402  
North East - Tom Dooley - Harbor Hill Rd. - Wappingers Falls, N.Y. 47070  
N. C. West - Leon Elbert - Box 73 - Jefferson City, Montana 59638  
N. C. East - Art Arro - 1014 Woodbridge Blvd. - Ann Arbor, Mich. 48103  
S. C. East - Greg Doe - Rt #9 166 Pony Dr. - Murfreesboro, Tenn. 37130  
S. C. West - Ed Rankin - 6072 Wonder Dr. - Ft. Worth, Texas 76133

I used last years cards for these addresses, if any of you have changed addresses please let us know as oon as possible.

Well it looks as though we finally have things firm for the Championship race. The race will be in Las Vegas, Nev. on Oct 31 and Nov. 1, 1981. Arrangements for rooms at Circus Circus Motel are being made. More on the rates and etc., as we go along.

This years Championship Race will slightly rearrange our Championship schedule for the next several years. Next year the race will be held in Texas and in California for 1983, then back to Florida in 1984.

This will be the last newsletter that you receive unless you have paid your dues. Please send them to John Jennings.

I just received a phone call from Bob Brown. Bob has been working on getting the F.A.I. Rules so that we can compete with the type of planes we are flying in Form 1. Having done this all we needed was a contest. Well, it looks as though our first race will be Nov. 2nd & 3rd, 1981 in Las Vegas, Nev. and you guessed it will be with Circus Circus help. More on this in the next newsletter.

See you next month,

Bill



# NMPRA

**NATIONAL MINIATURE PYLON RACING ASSOCIATION INC.**

Q.M. Executive Wayne Yeager  
Vice President 38235 Castle Dr.  
Romulus, Mi. 48174  
313/941-6661

Hello Dere,

Brother Hager tells me I'am re-elected for another year. Thanks to those who voted. (I think) regardless of who you voted for. I wish there were more of you.

The 1980 National Point Championship has been finalized and Dave Latsha is the winner. Dave had a pretty good year considering he only entered 5 contests which is the maximum NMPRA uses in determining QM championships. He finished 2nd in Atlanta, 1st in Orlando, 2nd in two different Harrisburg meets, and 2nd at the championship in Rough River. All this was accomplished with Daves own design, the D.L. "Rivets" which is not only one of the prettiest planes around but also one of the fastest considering he turned a record 1:20.5 last year. Not too bad Big 7! Congratulations!! For anyone intrested, the "Rivets" is available in kit form.

Have run into another problem concerning carbs. "Caveat Emptor." Translation- "Let the buyer beware." Especially when purchasing a replacement carb for a Cox 15. I've heard reports of barrel openings being undersize. The Cox was produced with a .210 diameter and carbs are around with diameters of .175 to .199. Calls to John Perry, Ron Young, John Brodbeck Jr., and Bobby Tom revealed the following: First off, when Cox designed the Conquest 15 they opted for the max power possible coupled with a reliable idle. (Remember idle?) The standard Perry micro carb had a barrel opening of .175 however Rossi was using the .19 carb with a .199 opening. Cox discovered they could increase "R's" by at least 500 with an opening of .210 and still maintain idle. Anything larger and idle was lost, therefore, they ordered aprox. 10,000 carbs from Perry who broached out the .199 carb to .210 and shipped them. This was a special order and Perry ran none for replacement. Some where and sometime later, various people have ordered replacement carbs through their local hobby shops and the shops have ordered from Perry who shipped their standard micro carb which fit, but had a smaller barrel. If you are one of these people, you are robbing yourself of R's and should change. Cox informs me the engine will be run later this year, by K&B, and K&B will use the same carb as befor because they ordered more carbs than the original engine run. Bobby Tom at K&B informed me he has thousands in stock with the .210 barrel so you Cox users can get them from him or Ron Young. If you order from Perry, beware! He doesn't have any. Keep in mind one other thing, it's illegal to run a .210 barrel in a Rossi! Anyone doing that it is breaking the rules. I would advise all CD's to check barrel diameters befor a race to eliminate arguments after. By the way, the next run of Conquest.15's will carry the K&B name, so we have went full cycle.

Joe Klause informs me they will be able to certify the 1000 engine requirement for the Nelson 15 in Sept. or October. They will have a "clamp on" "button" type head but will use standard screw in plugs which is a blessing considering glo-head prices.

Yeager

The 27th Annual Toledo R/C Expo is now history and I felt that it was one of the best shows ever. There were numerous hobby manufacturers to talk with and an ample number of beautiful models (of all types) to ogle at. I met and chatted with many pylon racers, both from the NCE District and the rest of the nation. As always, there are changes in people and their jobs. Dave Shadel is now with Airtronics and John W. Brodbeck, Jr. is working for Cox Hobbies in Santa Ana, Calif.

Each year I look forward to new items which may be of interest to pylon racers and report them here. The biggest news this year is in the engine department, specifically QM engines. I saw and handled the new Nelson and Rossi 15 engines and they are both exceptional in terms of fit and workmanship. However, this quality does not come cheap with the Nelson N15G R/C selling for \$169.96 and the Rossi R15 Normal R/C listed at \$191.00. The Nelson 15 will be available on 1 June 1981 or shortly thereafter, which means that they will be legal for competition in August for the U.S. Nationals. The Rossi availability was unknown at the time of the Toledo Show, but Bill McGraw of Bill's Miniature Engines should have some later word. Both engines claim to exceed any previous R/C 15 in terms of specific output which will make QM very exciting. On the other end of the QM engine price scale I learned that the Cox Conquest 15 R/C design will now be manufactured by K&B. Currently, K&B is supplying parts for the existing Conquest engines and plans to incorporate a few improvements--like revised timing and a cast piston--in the updated version.

In the Formula I engine department, World Engines has introduced a completely new engine called the O.S. Max 40 VR-P. This engine is specifically made for Formula I and even includes a mini-pipe. The OS 40VR-P features an ABC piston/cylinder metallurgy and a new rear rotor system. Price and availability were unavailable from World Engines. Regarding their Super Tigre X-40, World Engines stated that about 250 new engines have arrived along with a boatload of parts. Please contact them ASAP if you have any parts on back-order since they are sold on a first come - first serve basis.

During the show I talked briefly with Bob Brown who represents U.S. racing interest in FAI Pylon. Bob showed me the new rules and asked for my opinion. I stated that they looked good on paper, but the real test would be to hold some FAI races. Bob agreed fully and mentioned that he was in "discussion stages" for a sponsored FAI Pylon Race to be held in conjunction with the NMPRA Championships tentatively scheduled in Las Vegas during late October. Bob and I agreed that a suitable purse (\$\$\$) would attract fliers to compete in this event.

The major change to our current Formula I aircraft to meet FAI specs would be a muffler addition and fattening the wheels to about 1/2" for 1/3 of their diameter from the hub. Fuel is standard 80% alcohol, 20% oil and furnished by the contest management. Condor Hobbies was exhibiting the Australian "Magic Muffler" which would be suitable for FAI and at least one other manufacturer is developing a similar design muffler.

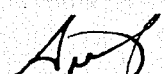
Bob Violett, past king of FAI pylon racing, commented favorably on noise reduction and a lowered nitro content fuel to give Form I a "shot in the arm." However, Bob was not completely satisfied with FAI scoring system - based on elapsed time instead of order-of-finish compared to U.S. Formula I. Again, I would like to see a few FAI races held throughout the country and the results reported to Bob Brown and disseminated via the News Release.

Other racing personalities met at Toledo didn't express any major concerns on any subject other than the new QM engine prices and X-40 engine and parts availability problems. Nitro has come down in price and everyone is looking forward to a prosperous racing season.

Last, but not least, I'd like to congratulate Eric Meyers for winning First Place in the Best Finish category. Eric always has fine aircraft; but this year's Polecat was his best. The judges felt the same and Eric won a new radio system for his efforts. Personally, I'd like to see more pylon racers exhibit their models in static competition shows such as Toledo. It really helps publicize our sport to the modeling fraternity.

Yours in racing (Form I)

Art ARRO, NCE-VP



P.S. Thanks to everyone who voted for me in the District VP elections.

# Valley Flyers Formula 1 Race

March 28 and 29, 1981

The First Western District was held on March 28 and 29th, in cool, breezy weather at the Sepneveda Basin. Being the first race everyone seemed to be cleaning out the closets since 13 racers bit the dust. The Valley Flyers staged the event with CD George Finch coordinating this year's function which had a turnout of 43 flyers.

Eight rounds were flown with, you guessed it, Dave Shadel leading most of the weekend with a perfect score. Mike Atzei who had been only one point down was finally matched against Dave in the last round with Mike taking the heat after each cut once. Mike repeated his effort by again beating Dave in a flyoff for first, turning a time of 1:12.9.

The victory was Mike Atzei's first, would you believe in some 9 years of racing. (I am told he has a lot of seconds.)

Ron Gilman who lost a racer in a mid-air with Harley Condra in Round 3 turned in the race's fastest time with a 1:12.8.

The next race is at San Luis Obispo on May 16 and 17 and Promises to be better than ever. See you there!

Gary Hover

Place	Name	Time	Score	Points
1	Mike Atzei	1:15.2	31	107.3
2	Dave Shadel	1:16.7	31	104.7
3	Bob Smith	1:13.3	27	102.2
4	Ron Gilman	1:12.8	26	99.7
5	R. Vanbaren	1:21.8	26	97.2
6	G. Hover	1:15.1	25	94.6
7	Laird Owens	1:18.5	25	92.1
8	Bob Nickle	1:20.2	25	89.6
9	Ed Allen	1:23.3	25	87.1
10	Jerry Boyce	1:25.0	23	84.5

## Standards

1	Kim Tucker (S)	1:27.0	18	26.5
2	Tom Kollander (S)	1:35.5	17	23.9
3	Len Curiel (S)	1:30.8	13	21.4
4	Joe Stream (S)	1:30.9	13	18.9
5	Tad Sato (S)	1:43.8	11	16.4

## North East District

### Coming Events

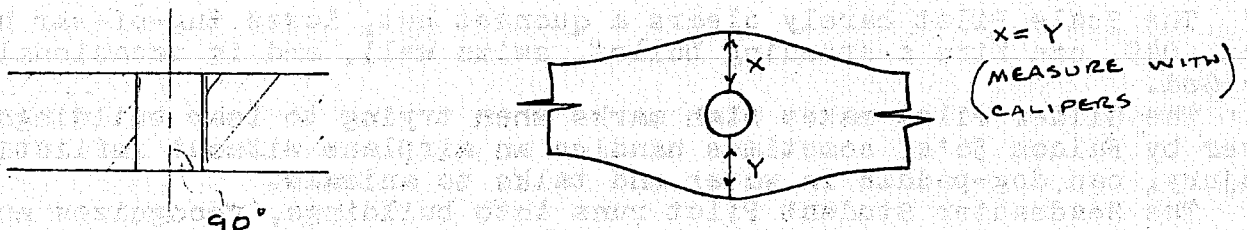
May 3	Hadley, Mass.	F-1 & F-500
June 7	Ware, Mass.	½ A & F-500
June 14	Somers, N. Y.	F-1 & F-500
June 28	NCRCC W. Suffield, Ct.	F-1 & F-500

## IT'S WHAT'S UP FRONT THAT COUNTS: PROPS

In this report we will try to organize and pass along some useful information on props. It probably won't be the last word on the subject because we keep learning more as we continue to experiment and collect information. The subject will be covered in segments - probably three. This month we will discuss wood selection and how to pick potential winners and turkeys.

The first thing to look for in picking a prop is the grain of the wood. Grain lines running lengthwise are annular lines. These lines should be straight and continuous from tip to tip. The spacing of the lines indicates the rate of growth of the tree, and therefore also indicate the density of the wood. Generally, the closer the lines are, the more dense the wood will be, so the more lines, the better. The lines should be counted across the hub of the prop. A good F-1 or Q-500 prop will have 10 to 20 lines across the hub. Props having 6 or less lines should be used with caution, especially on F-1. Although the prop may be perfect in every other respect (straight lines, matched grain, etc.) if the wood is not dense enough, it may shed a blade in flight - don't ask how I know. What we are looking for is the straightest, stiffest prop we can find. All wood props flex to some degree - more flex equals less efficiency. We also want whatever flex there is to be equal in both blades. To check this, simply grasp the prop near the hub with both hands and gently flex both tips simultaneously with your thumbs. True, this is not a very scientific method of measuring prop stiffness, but it will quickly sort out the real dogs. Some of the worst ones feel like they could be rubber.

The next thing to check is the back of the hub for squareness. When the prop is placed face up on a smooth, flat surface (such as a glass plate), both tips should be same distance off the surface. If they are not, the hub can be squared up with a rasp, file, or sandpaper. At this point you might want to check and make sure the front face of the hub is parallel to the back, again making any necessary corrections with the rasp. Now we check the hole in the hub for two things: it must be exactly 90 degrees relative to the hub faces, and it must be exactly in the center of the hub. Thus:



If the hole is not centered, it will be impossible to balance the prop. There is not much you can do to correct a hole that is off center or out of square unless it's going to be necessary to ream the hub to fit the crankshaft of your engine. If this is the case, you may be



able to use a round file very carefully prior to reaming. Reaming is definitely better than drilling - it leaves a cleaner hole and is less likely to split the hub or move the center of the hole. This operation should be done with a straight (not tapered) reamer held in a drill press for best results. Ok, so now we have a beautiful, stiff, rock-hard maple prop with a perfectly centered hole which fits the crank shaft of the engine. Before we begin hacking on it, let's discuss some of the factors influencing the selection of pitch.

Pitch is the angle of the blades relative to their plane of rotation. It is expressed in inches and represents the distance that the prop would travel along the line of flight in one revolution, assuming 100% efficiency with no slippage. Of course, no prop is 100% efficient, but we try to approach that goal. As the efficiency of a prop increases, the effect of changes in pitch will also increase. As pitch increases, so does top speed - but acceleration declines. Pylon racing is a game of acceleration. If you don't believe that, just count the number of turns versus straights in a 10 lap race. And every turn slows your plane and we want it to accelerate back up to top speed quickly as possible. The more smoothly a plane is flown around the course, the less the speed will vary. So if you tend to fly a very smooth, even course, you can pull more pitch than another pilot who files a very tight course with minimum radius turns. On the other hand, if you prefer to fly the shortest possible course and really bend it around the poles, you would probably be happier with a lower pitch.

To be continued..... *Serge Parba*

### SUPERMEN OF FLIGHT

The Tournament of Champions Pilot leaps tall buildings in a single bound, is more powerful than an OPS .65, is faster than a speeding bullet, walks on water, and gives policy to God.

The Formula 1 Pilot leaps short buildings in a single bound, is more powerful than an X .40, is just as fast as a speeding bullet, walks on water if it's calm, and talks to God.

The Quarter Midget Pilot leaps short buildings with a running start and favorable wind conditions. He is almost as powerful as a Cox .15, and faster than a speeding bullet, walks on water of an indoor pool, and talks to God if special request is made.

The Scale Pilot barely clears a quonset hut, loses tug-of-war with Cox .049, can fire a speeding bullet, swims well, and is occasionally addressed by God.

The Glider Pilot makes high marks when trying to leap buildings, is run over by Falcon 56's, sometimes handles an airplane without inflicting self injury, can dog-paddle in water and talks to animals.

The Headmaster Student Pilot runs into buildings, recognizes an Ugly Stick two out of three times, is issued a parachute, can stay afloat if properly instructed, and talks to water.

The Full Scale Private Pilot falls over doorsills when trying to enter buildings, says "Look at the airplane", wets himself with a water pistol, mumbles to himself, and thinks he can fly R.C. 'cause he flies REAL airplanes

The Contest Director lifts buildings and walks under them, drinks Formula 1 fuel, catches speeding bullets in his teeth and eats them, and freezes water with a single glance. THE CONTEST DIRECTOR IS GOD!

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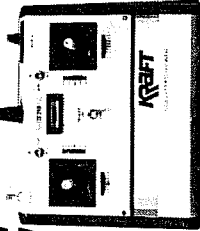
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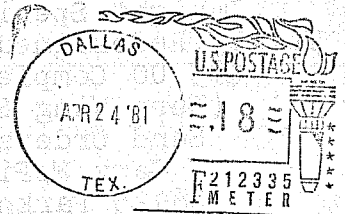
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