

NCLRA

National Control Line Racing Association

October Edition

Editors Lari Dziak, Dave McDonald

What's in this Issue:
Slow Rat Tank Design
Commie Wrenches
New Fox MK VII
Contest Calendar
Plus More

Creating The Vision:
Planning for the Future of the AMA.
by Dave McDonald.

This was the name of the meeting that I attended October 7, 8, 9,th., in Indianapolis. This meeting was called by the AMA to develop a long range strategic plan to enhance the growth of the AMA. Each Special Interest Group was invited to attend and participate in the meetings. It should be noted that with all of the SIG's only three were represented. Ours along with PAMPA, and the RC Pylon group. The interests that were not represented missed an excellent opportunity to help develop plans for the future of the AMA. I worked on the Membership Retention and Development committee, along with Rich Hanson, Charlie Bauer, Jim McNeill, and Joyce Hager. Some of the things this committee recommended was a change in the way memberships are handled. Memberships may become an annualized program. This means that memberships will be expiring thru out the year. Ie. Jan. Jan. or March -March etc. Also a proposal was made to make seperate classes of licenses available such as a competition, sport, etc. I feel that this may take some time to come up with a workable way of doing this, but I think that a change is a thing of the future.

There was a portion of the meetings that did, and continues to disturb me. This was a portion of the meeting called Sunsetting. The part that disturbs me the most, is this was to be a free exchange of ideas that would be talked about later. However, after the initial list was developed no follow on discussion was done. These were even described as opportunities, and I would not call any of them opportunities. Remember these were only ideas that must have Executive Council approval, but it is disturbing that some of these ideas were even on peoples minds. These include such things as Insurance program, Noncritical local information in VP's columns, Non national events at national flying site, N.A.A. affiliation, The Nationals, Officer columns in the magazine, The E.C. it self,

Discounted Senior Citizens memberships, FAI participation, The Magazine, Organization by district, and the AMA itself. Now lets be realistic most of these stand no chance of being discontinued, however I think that most of these will be changed from the current way they are done. The important thing is to remember that the council has the last word so lets make our positions known. These are things that may be discussed at the November E.C. meeting, so if you have an opinion let me know, as I will be in attendance at the meeting.

Tip of the Month

by Dick Lambert

When tearing down an engine to clean carbon and residue off, scrub with baking soda and water, it works great and will not effect the fit.

Buy, Sell, or Trade

The last time we ran this part of the newsletter, I left out this one item. We apologize, and are running the information at this time.

For Sale K & B 6.5 Rear Rotor fitted with Garner Ring (ABCD) NEW. \$ 160.00, or with extra piston/liner \$200.00 Mike Hazel Windemere Drive NW, Salem, Or 97304.

Commie Wrenches

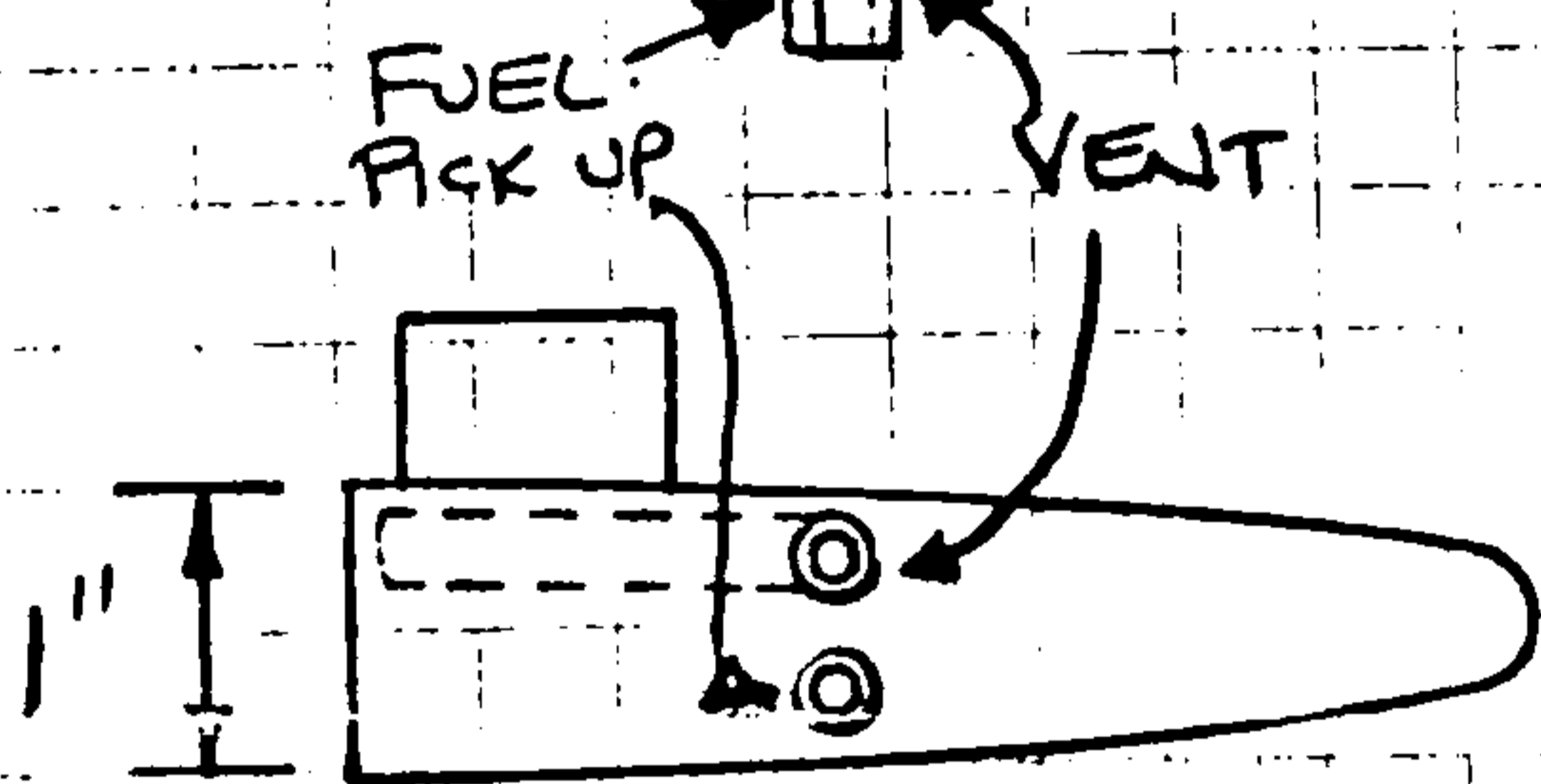
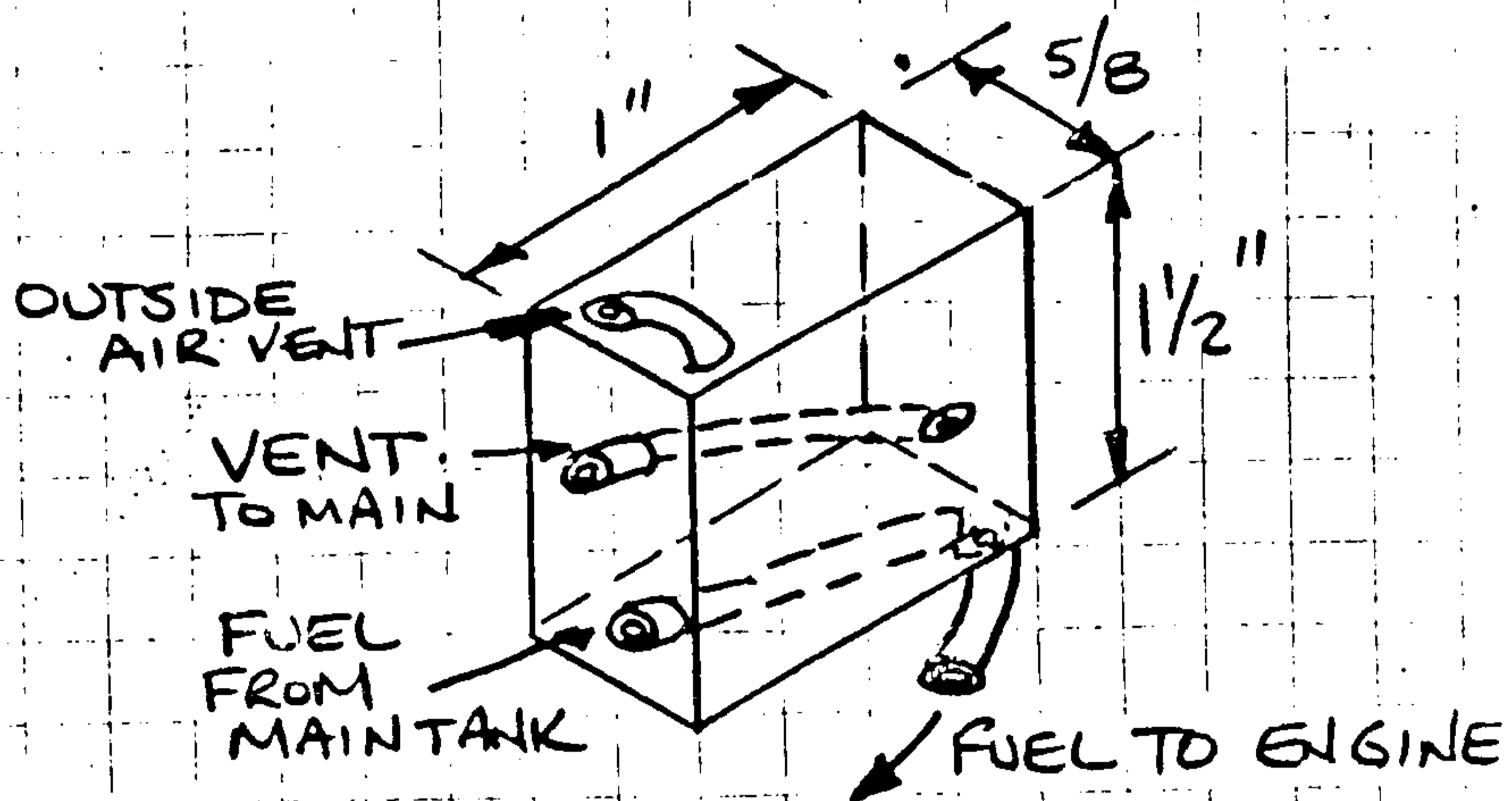
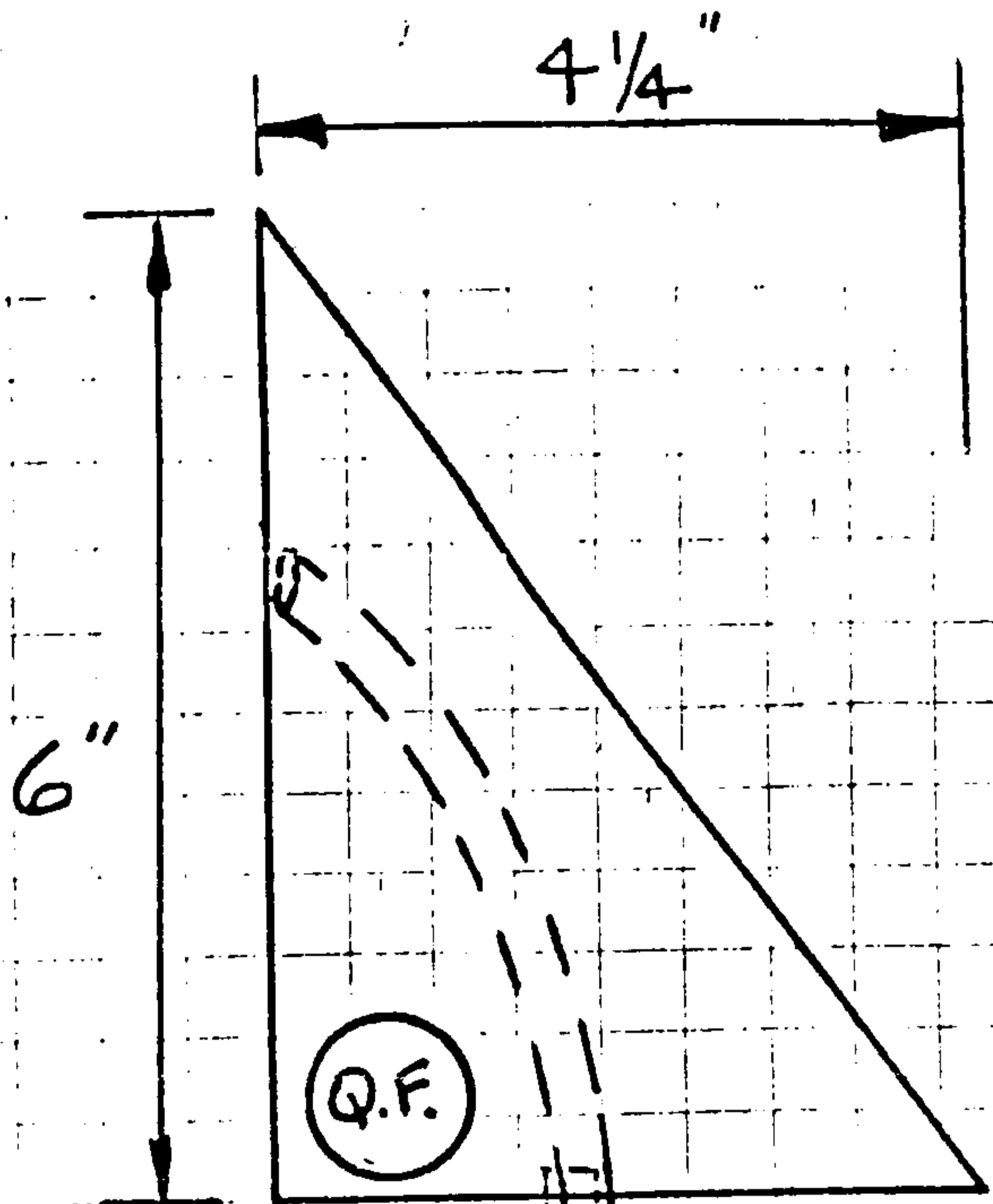
by Stewart Willoughby

Need a wrench to get the head off that new T/R engine? You don't have to buy the expensive set at the hobby shop. 3mm nut drivers are easy to make from M6 set screws or M4 cap screws available individually for about .50 cents each at the hardware store. Check to make sure that the hex socket has been broached cleanly and is centered in the screw head. The set screws usually have a deeper socket and are good for making "L" wrenches which you probably got used to using with the Nelson. The arm of the wrench gives you good control for tightening the head screws evenly. Get the longest set screws you can find (usuaiiy 12mm), turn off the treads down to .185 diameter, cross drill the blind end with a #43 and press in a 3" length of 3/32" piano wire. Although hardened, these screws can be easily cut with H.S.S. tooling.

The cap screws are more convenient for making regular nut drivers. Turn the head down to .185 and turn off the threads down to a diameter suitable for press fitting into a length of tubing. I used stainless steel tube (Small Parts Inc., Fl.) with .148 O.D. but I guess 5/32" O.D. brass tube would also work. Make a suitable knurled aluminum or plastic handle to press on the other end of the tubes. I suppose you could also cut the tip of a cheap (soft steel) screwdriver, drill the end, and press the nut driver tip into this. Avoid hard soldering as this will likely anneal the hex socket wall.

JERRY MEYER'S

SLO RAT TANK



MAIN
(INBOARD)
TANK

CHICKEN HOPPER
(OUTBOARD)
TANK

NOTES:

- 1) NOT TO SCALE!
- 2) INBOARD TANK MUST NOT HAVE ANY AIR LEAKS!
- 3) FUEL LINE INTO HOPPER SHOULD BE SAME DISTANCE FROM FUSELAGE AS SPRAYBAR
- 4) USE A .360 DIA VENTURI

Fox .36 MKVII

by Kevin Seaton

Here is the basic info on the Fox .36 MKVII. The engines we used at the Nationals were box stock except the head insert. The insert has a Nelson plug (standard) in it. Bob Oge sells a insert that works very well for this motor. Take his insert and cut a 5 degree angle on the base of the insert. This runs better for me than the stock one. The aircraft has a inboard tank with a flapper valve in the intake. The valve consists of a 5/16 brass tube flattened over a 1/8 brass tube. The tube is silver soldered together. The valve is cut to .375 wide and the inside is threaded to 4-40. I use blind nuts as bushings on the case. The swing arm was made out of .032 x .25 brass strip folded 4 times starting with .1 wide fold. I use a .008 wire return spring to keep it closed on the ground. I drill and tap the case where the valve hits in front to 2-56. This acts as a stop for the valve for on the ground setting. A drawing is included to help out building this. The way I setup the motor is to run it on a bladder to set the top end. I then run the motor on the ground opening the valve with the screw until the motor is at top RPM. This gives me a clean takeoff. The motors at the nats had .016 head clearance, nelson plug insert, standard Nelson plug, 35--65 degree shaft, 132 degree intake and boost ports, 158 degree exhaust. We ran the APC 7.8 x 7 prop. We have fatigued the blades on this prop after a couple of runs. I will make a better prop for this motor this fall. I plan to modify the motors to the numbers that I found to run good on the Mark VI motors. If this works good in a race I will write about the change.

I would like to thank Melvin Schuette, John Lowry, Charlie Thacker, and Mike Stephens for working to put the Fox MK VII from just an idea to a reality.

Editors Note: See the last page of the newsletter for the drawing that was talked about.

Slow Rat Tank

by Jerry Meyer

Jerry has enclosed a diagram for the Slow Rat tank design that he uses. This tank works very effectively, and is simple to build. Jerry says there is a few simple rules to follow such as the inboard tank must not have any leaks, the fuel line into the hopper should be the same distance from the fuselage as the spraybar and the inboard tank vent should go out as far as possible. The material for the tank is not critical, however you must put some threaded inserts in the inboard tank, so this can be attached to the fuselage. The screws that go into the inboard tank are sealed with a silicon to prevent any leakage due to vibration. If you have any Questions write Jerry, or give him a call between 6 and 9 PM Chicago time.

~~The Diagram is on the following page.~~

Contest Calendar

We have received some positive comments on doing the contest calendar, so we are starting that part of the Newsletter again. If you have information on a contest please send it to Dave McDonald, and please remember this publication is done every other month.

October

22-23 Eugene, OR Really Racing/Fall Follies for 311-314, 317, 323, 326, along with Northwest Sport Race, Northwest Super Sport Race, Northwest Goodyear. Site: Eugene Airport Contact J. Thompson at 465-1088 for information.

22-23 District V CL Champs, Jacksonville, Fl. Mouse Race 1 Florida Slow Rat, Texas Quickie Rat, AMA Scale Race, AMA Slow Rat, Foxberg. Site: Jacksonville International Airport, A.N.G. Hanger Contact Ron MacKnet P.O. Box 813, Yulee, Fl 32097 for information.

30th Middlesex, NJ AMA Slow Rat, event 312 Foxberg, and 312 Warbird, call CD for rules. Site Mountain View Park, Contact J. Waskiewicz at 908-755-1646 for information.

We have no information regarding any contests held in the month of November.

December

11 South El Monte, CA Toys for Tots AMA Events 310-318 plus more non racing events. Site Whittier Narrows Contact V. Wilbur at 310-864-0790 for information.

World Champs

Just a note to wish all of the participants good luck in the upcoming World Champs. We hope that you all do well, and would like to encourage you after coming back to the United States to drop us a line on what went on so we can share it with our readers. Good luck to all of you.

Editors Comment: The Nationals

by Dave McDonald

I would like to take a little time here to discuss some issues that I feel need to be addressed concerning the Nationals, and the impression I am getting from the AMA. First I think the Nationals as we know them are almost a thing of the past. There is talk that if an event does not have a minimum of 10 (that is a number that has been thrown around) pre entries to cancel the event. The problem I see with

that especially in racing is that a lot of the contestants fly more than one event. An example if you fly Goodyear and Fast Rat and the Fast Rat event only has nine entries and is canceled then are you going to make the trip to only fly Goodyear. The way I see it is, there is no decrease in cost of running the Nationals by doing away with the one event. Not to mention that we could have an open day in the middle of the schedule. The people are already there, the nets are already up, and without the one event then you may lose a participant in the other event. The other idea that I have heard is to only have the FAI events, plus one event from each category. This for example would give us Team Race and let's say Goodyear. If you are not a Team Race person are you going to travel to wherever to fly only Goodyear, probably not.

I think we must ask ourself what are we doing wrong with the Nationals. I have some very strong opinions on this. First and foremost in my mind the nationals should be run for the competitor, and not because someone or one particularly group feel it should be at a particular place. We need to look at the entries from past Nationals and see if there is a portion of the country that leads itself to high participation. After that we should look and see that the site selected offers the participants the finest facilities available to fly their aircraft. Then the participants should feel welcome, after all they are the reason for holding a nationals. The participants are the customers of the nationals and just like any other endeavor without the customer we do not need the business.

Then on the question of rules the AMA needs to step up and take the lead with the antiquated micro-management approach to the rules. If for example a rule proposal is made the Special Interest Group should be allowed to conduct a poll of it's members and comment on the proposal. Too many times we have people who offer rule changes who do not fly the event, and we have people vote on these rules who do not fly the event. If it is a general safety question the AMA should take the lead in the implementation of the rule. An other idea would be that if a rule proposal is made that effects an event, some form of testing should be conducted to see if that rule does what it is intended to do, or just makes everyone change equipment.

If you feel like I do then please take a moment to write your district V.P. along with the new Competitions Director Steve Kaluf at the AMA 5151 East Memorial Drive Muncie IN, 47302 or Call at 1-800 I FLY AMA. Only you the membership can make the difference. You may also drop me a line on your opinions, I will bring these to the attention of the AMA at the Nationals Meeting conducted by the AMA.

NCLRA MEMBERSHIP APPLICATION

Yes it is time to renew memberships. Some of you have already done this, and the membership list that was sent out indicates the expiration date of membership. We are attempting to improve the organization at all times, it has been a learning experience and we are starting to get some information from you the members. Dues again are \$10.00 for the year. Please take a moment to fill out the application and send it to NCLRA 8 S. Grace St. N. Aurora, IL.

NCLRA Membership Application

Name _____

Address _____

City _____ State _____ Zip _____

Phone# _____

AMA# _____

New _____ Renewal _____

Willing to serve on any Committees _____

Yearly Dues are \$10.00 Expiration 1-1-96

Send to NCLRA
8 S. Grace St.
N. Aurora, IL 60542

Please take a moment to comment on what you would like to see from the Newsletter/ NCLRA. Remember anyone can criticize the question is what can you do too make this organization better.

Product information

We would like to start a list of who does what. If you sell a product, offer a service please send the Name of business, service offered, address and telephone number, and we will publish this list in January of 1995. The advertising is free to all NCLRA members. Please send the information to Dave McDonald P.O. Bx 384 Daleville, IN 47334 by December the 1st so the list may be sent out the first part of January.

What is coming next.

Contest Calendar

Shut off designs

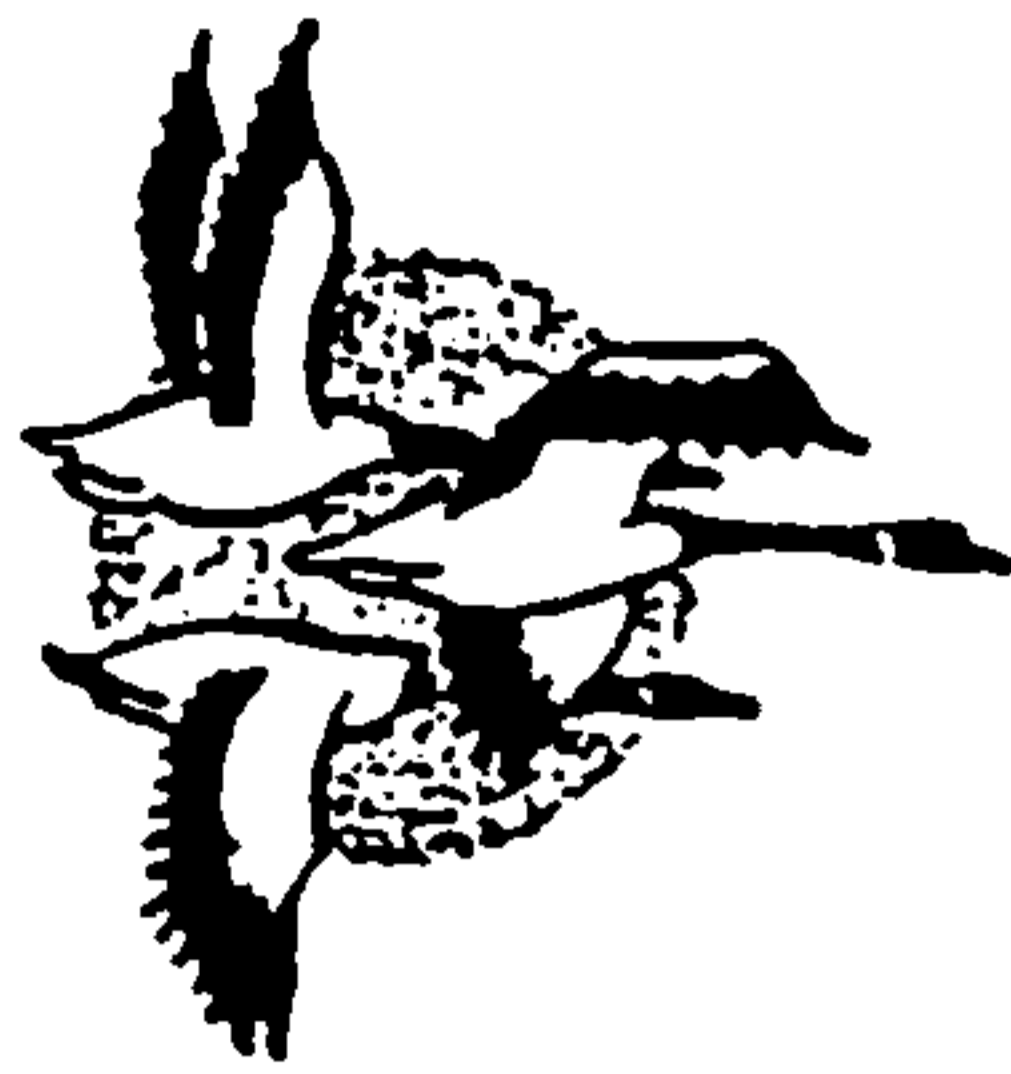
Report from Nov. E.C. meeting

Sell, Trade (remember you send it we print it)

Plus more.

LESSONS FROM THE GEESE

As each goose flaps its wings, it creates an "uplift" for the bird following. By flying in a "V" formation, the whole flock adds 71% more flying range than if each bird flew alone.



LESSON- People who share a common direction and sense of community can get where they are going quicker and easier because they are traveling on the thrust of one another.

When a goose falls out of formation, it suddenly feels the drag and resistance of trying to fly alone and quickly gets back into formation to take advantage of the lifting power of the birds immediately in front.

LESSON- If we have as much sense as a goose we will join in formations with those who are headed where we want to go.

When the lead goose gets tired, it rotates back into the formation and another goose files at the point position.

LESSON- It pays to take turns doing the hard tasks and sharing leadership with people, as with geese, interdependent with one another.

The geese in formation honk from behind to encourage those up front to keep up their speed.

LESSON- We need to make sure our honk from behind is encouraging not something less helpful

When a goose gets sick or wounded or shot down, two geese drop out of formation and follow their fellow member down to help provide protection. They stay with this member of the flock until he or she is able to fly again or dies. Then they launch out on their own, with another formation, or to catch up with their own flock.

LESSON- If we have as much sense as the geese, we'll stand by one another like they do.

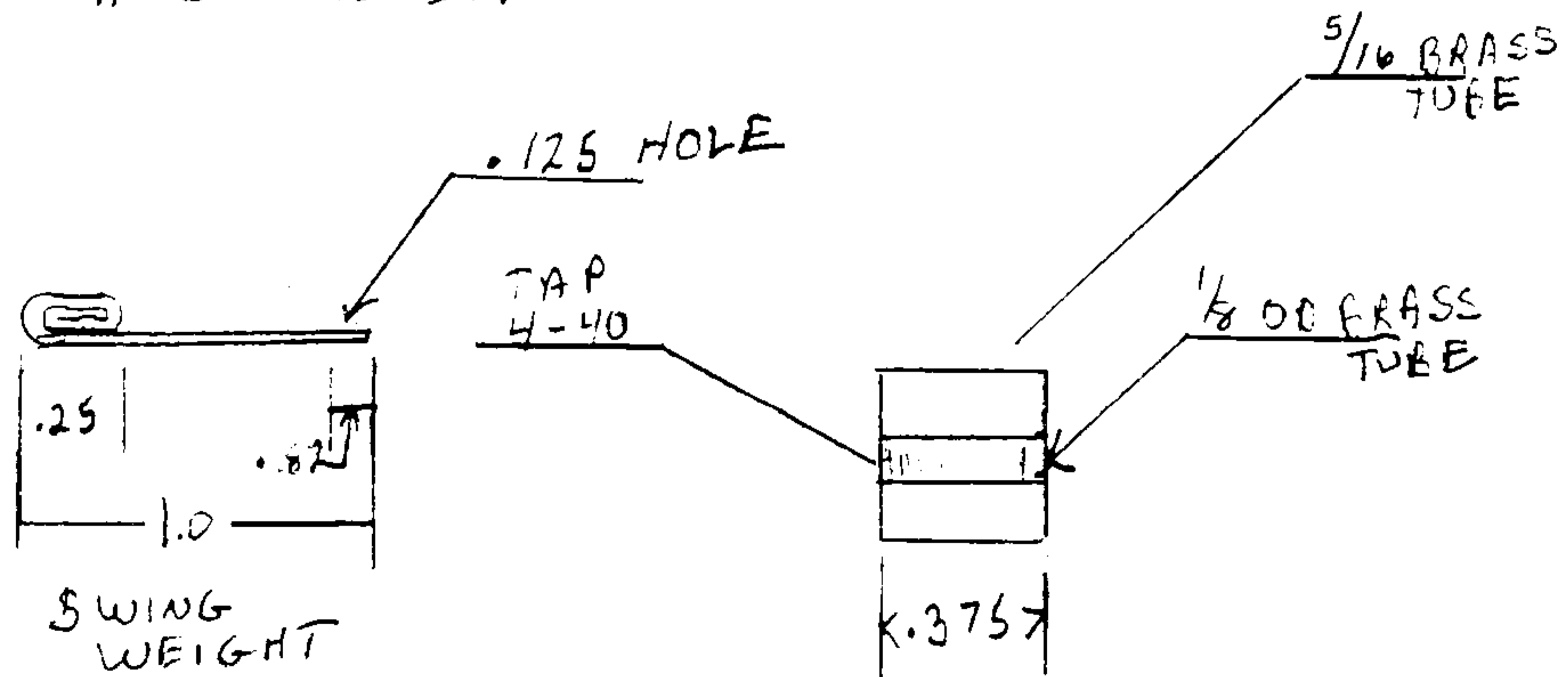
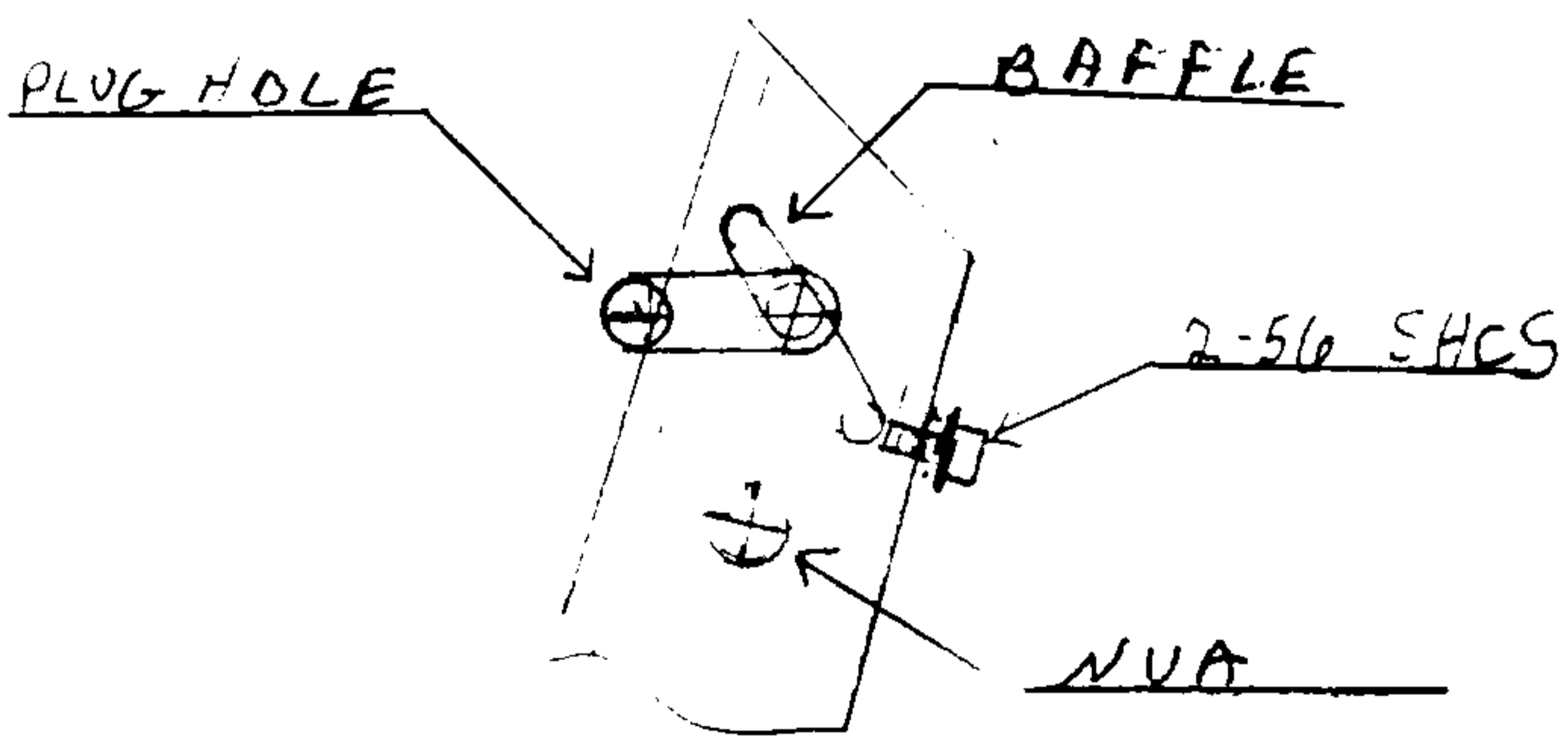
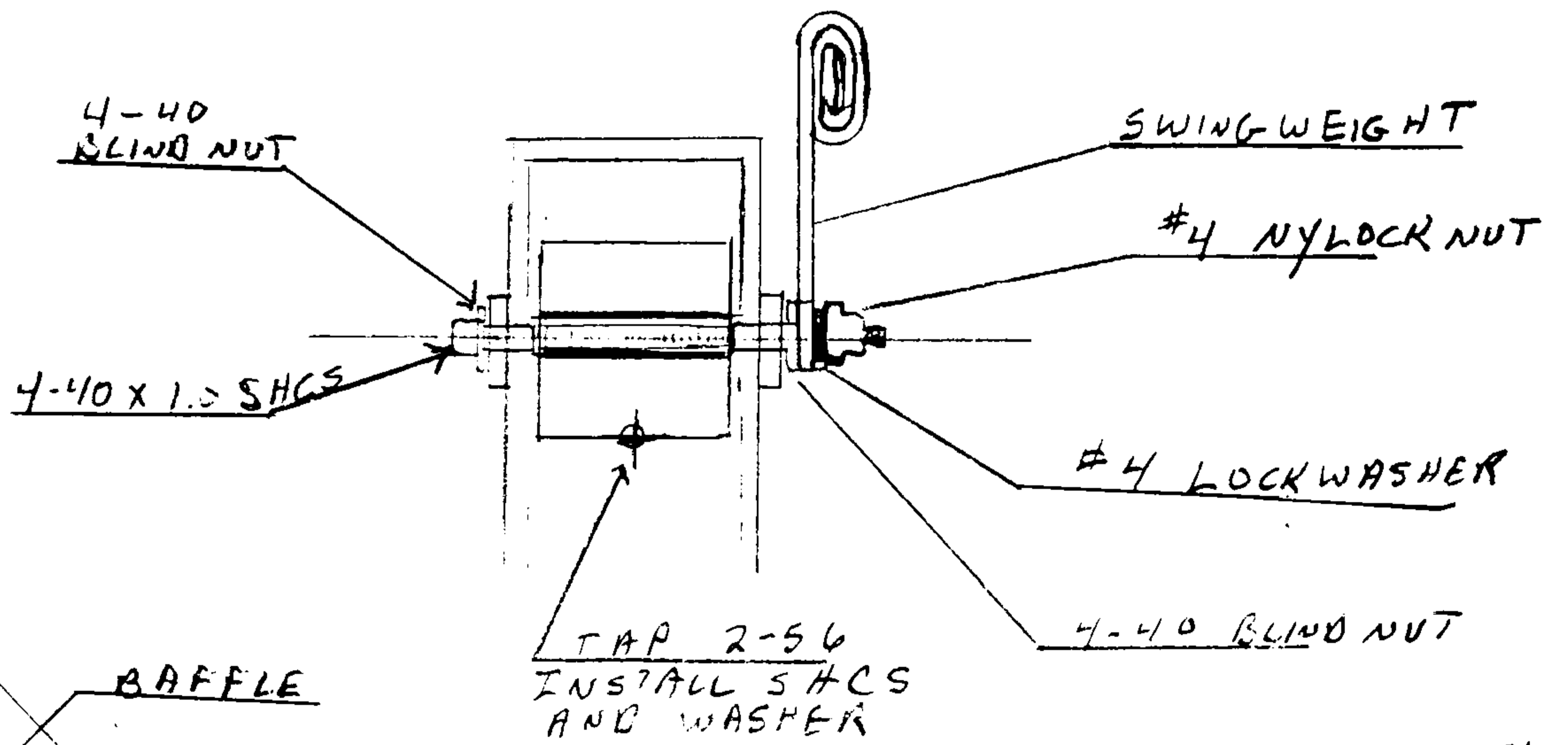
(from: Agricultural Notes. Issue 97, Merle W. Boos, editor, ELCA)

Go for the Gold!

Tips and Secrets for Racing Success

- Build for strength and dependability from the beginning. Don't over/under-engineer.
- Develop a working team from day one. Good teams win races!
- Perfect one race plane at a time. It's better to win with one than lose with four!
- Fly every chance you get. Use the "patch and fly" approach, until the pilot and plane are one.
- Build a second racer after perfecting systems and proving concepts with the first one.
- Use only products with proven track records and good customer support.
- Record every construction experiment and every flight test for later analysis.
- Make templates of each part of the aircraft. Plan out repair procedures in advance.
- Assume every hard landing produces hidden damage.
- Use only the highest grade hardware. Sport plane hardware is generally too weak.
- If you must add weight for balance, add reinforcement - not lead.
- Plan on ten flights to fully break in any new racer.
- Learning to land a new racer without damage is the single hardest lesson. Have patience!
- Engine vibration is still the number one killer of race planes. Solve it or lose it!
- Study the rules *before* you get to the races. It will save you grief.

from The Racer's Edge
Rob Wood, Editor
San Francisco, CA



5/16 TUBE FLATTEN OVER 1/8 TUBE