

Oshkosh '89

We really made our mark at Oshkosh last year, and it was quite a feather in the T-18 cap, but hopefully you who couldn't fly in last year can make it this year. Also, we hope a goodly number of you who flew in last year can do so again. The T-18 dinner is still Tuesday evening at **Butch's Anchor Inn**, as always. I hope to see you there and on the flight line, too. I'll be hitting it in high from daylight to dark each day doing interviews, etc., for EAA magazines (all five), but I'll be up and down the T-18 lines several times, you can bet on it. If you want to get hold of me for some reason, leave me a note at the **EAA Press Building**, behind the tower.

Javelin mates with Electro

EAA headquarters has just OK'ed an assignment for me to go up to Harrison, Arkansas right away and do a story on **Ben Cupp** and his **Javelin engined T-18**. I'll also continue on up thru St. Louis and beyond to do the complete story on **Tom Foster's** on-going test program with the **Electro Constant Speed Prop**. It's mounted on a Javelin V-6 engine. By Oshkosh time they will have about 400 hours of tough, continuous testing on the combination, running it at high power day and night, cycling the prop from stop to stop every few seconds. We always have at least two months lead time on the stories, so it probably will be sometime in the fall before the story shows up in **Sport Aviation**. We are always pretty well "loaded" with Oshkosh award winner stores for quite a while after the convention, too.

This combination of engine and prop is looking more and more like the best power plant package for the money to get max performance out of the T-18 and S-18. It's operating cost per hour will be far less than an O-360/Hartzel package, and initial cost will certainly be only as little as a third of a new Lyco/Hartzel. You will see the test unit at Oshkosh, plus a 3 blade prop on a Cherokee 180, in addition to the **Javelin/Electro** combination on **Davey Blanton's Sport Racer**.

Newsletter going "Down the Tubes"

Dick Snelson (central IL) is now building his second T-18 and he recently called me to ask a question on the T-18. In the course of our conversation he asked me if I had gotten any response to the feeler in the last newsletter about my turning over the NL to someone else not too far down the line. My answer was, "NO". I didn't receive a *single* reply from anyone on that subject. Dick said he might be interested. So we are going to explore the subject at length at Oshkosh this year.

We may go to some arrangement, like Lu Sunderland and I did at the beginning of the Newsletter, 25 years ago. At first, I would write one, and then Lu one. When my wife had her first heart attack I had to have Lu take over.

I would again like to remind you that without a steady inflow of information from builders and owners—**there can be no Newsletter!!!** I've outlined at least a hundred subjects you

can write on in past NL's, so I'll not waste time going over it again. As they say, "**The ball is in your court now, amigo**",—it's sink or swim.

Penman causes Postal Overload

At least some of my wheeling and dealing in the last Newsletter paid off. I received a super 10 page letter from **Dick Penman** (5918 Boardman Rd., Dryden, MI 48428) and it included full size pages of drawings on (1) Vacuum system, (2) Inlet air filter, vac system, (3) a \$5.00 Battery Box, (4) How to wire a Battery Box & Master Solenoid, (5) Alternator hook-up, (6) Exhaust pipe clamp to landing gear, (7) Complete Baggage Compartment Drawings (2 pages)!!! These drawings are all *professionally* done, absolutely! **Really super, Dick!**

I can't run all these drawings in this NL, because too many pages runs our postage bill up too high. We'll have to save some back for NL #73. I also have a report from **Harlo McKinty**, that's another good 'un, and a short one from **F.E. Rogers**.

Our Most profound thanks to **Dick Penman**, **Harlo McKinty**, and **F.E. Rogers** for their efforts. I'm sure all of you are going to rave about the quality of Dick's drawings, even as I did. How about some of the rest of you writing something?

Thin skins & countersunk rivets do not mix well

Warning to new builders: If you intend to flush rivet your T-18, be advised that the minimum thickness metal you can **countersink** and use 1/8" dia rivets is .040. I got a call from a fellow the other day that had bought an 80% finished T-18 and he told me the entire airplane had used countersunk 1/8" rivets, **NOT Dimpled!** There is no .040 external skin on the airplane, with the exception of the forward floor. The problem is the countersink tool makes a hole much too large in .025 or .032 (and you can't include the bulkhead or rib thickness with the skin's to get the .040 minimum). This guy's only out now is to drill new rivet holes in between the present rivets and use universal head (non-flush) rivets, either regular AN's or "pop" or Cherry type where he doesn't have bucking bar access. You can countersink .032 if you use 3/32" rivets, but T-18 plans call for 1/8" rivets. Some T-18's have been built using 3/32" rivets, with closer spacing (on skins only), and apparently have had no problems, but you are on your own if you do so. It's a good idea to remember that some day you, or your heirs, will probably sell the T-18, & some off-beat thing might radically affect the sale. Remember: **DIMPLE ONLY** up to .040.

Newsletter on the MAC

I am sending this copy to this point to **Jim Hidalgo** (POB 1390, Wimberley, Tx 78676) who will typeset and print it on his MAC computer, saving a whole lot of time for me, and I do appreciate! Jim owns Hidalgo Supply Co. and sells a fine line of sunglasses and pre-

scription glasses by mail. *He also has my former T-18* that he's making into a glamour girl (you might want to send for his FREE catalog).

Performance Data Survey

Dear Dick,

Here is the first "Typeset" newsletter done on my MAC. It dawned on me, while entering this stuff in the computer, that I too, had promised you a few (several) articles on what I had run into as a buyer of a T-18 (yours). Since time is down to only a few days to get this newsletter out, I won't be able to submit much. I would like to ask the owners of **EVERY FLYING T-18** to participate in an extensive **Performance Data Survey** (we'll call it a **PDS** to save space) for fixed pitch props.

From reading old Newsletters you can come up with enough data to make a decision on prop selection. But I've found that prop selection is a lot more critical than expected. The difference of only an inch or two in pitch can make a great deal of difference in performance. I also found out that not all prop manufacturers use the same method of measuring pitch—so a Pacesetter prop with 68" of pitch may not be comparable to a Great American prop or other brand with that same pitch. Also, as times change and new propellers become available, we would like to know if anyone has compared two different makes of props on the same T-18. Since propeller selection seems to be as much "art" as "science", **we can make very expensive mistakes by selecting the wrong one** (most wooden props now cost over \$500.00).

I would like to submit the following form to be used to gather information for our T-18 prop survey.

Please send us all the data you can get. We would like comparison data if you can test more than one prop on your T-18, or if you have changed engines and used the same prop, etc. Even if you can't test the prop at all the different altitudes on the form, just provide what you can. Most people need to know the "Static" RPM on the ground, and at least one MAX speed run to see how their T-18 engine/prop combo compares.

Foster wants to mate with French

Tom Foster just announced that he plans to test the Electro prop on **Jim French's** T-18. Maybe we'll have a report by next newsletter.

Brain-picking attempt

Let us know how you like the new format for the NL. We are always open to suggestions, and would like to have your thoughts.

See you at Oshkosh, Dick C.

NOTICE: (Standard Disclaimer) As always, in past, present, and future newsletters, we would like to make you aware that this newsletter is only presented as a clearing house for ideas, opinions, or personal experiences and that anyone using these ideas, opinions, or experiences, do so at their own discretion and risk. Therefore, no responsibility or liability is expressed or implied and is without recourse against anyone.

T-18's Descend on Texhoma

We had 13 beautiful T-18's gracing the parking ramp at Texoma Lodge this year (June 3, 4, 5, 1989), and all present really had a super time.

The weather was a real problem this year. We had strings of really vicious thunderstorms that ran from the eastern slope of the Rockies, down thru the Texas panhandle, into a wide belt that took in Central and North Texas, swinging up NE thru Oklahoma, Arkansas, Missouri, Illinois and on up the Ohio valley. Getting through some of these situations ranged from pretty iffy to impossible.

The weather over northern Arkansas was the source of one big disappointment to us. We had hoped to see Ben Cupp's V-6 powered T-18 in the flesh, but he couldn't make it.

John Walton's T-18 arrives

We did have one surprise, tho', that made up for it. **Wendell Green**, who lives in Argyle (Tx) between Ft. Worth and Denton, arrived in the early afternoon Saturday with his precious jewel—**John Walton's** former T-18 that he had bought just a few days back. As a matter of fact, he had just checked out in it the previous day. After three takeoffs and landings he brought it home. *I thought we were going to have to stop drill his cheeks to restrain that grin of his when he arrived.*

Wendell is a TWA pilot and has been looking all over the country for the last 2 to 3 years to find a flying T-18. He bought a set of plans over 15 years ago and made a start on a T-18, but other things interfered. But, he never lost the thirst for one. He got **Gary Green** to fly with him and evaluate his technique. Gary said he found very little to pick on. He had to leave about 5 PM and go back home, and had planned to return Sunday morning.

Huge Thunderstorm hits Texhoma

Saturday night was a real bummer. Huge thunderstorms brewed up (over 70,00 feet) just about 40 miles west of Texhoma, and strung a path of high wind, big hail, and torrents of rain (4 to 5 inches) for 100 miles to the east! The lodge ramp escaped the hail and 80 mph winds, but I was scared to go look the next morning. A second wave of weather followed the first at 4 AM, it lasted about 5 hours, then cleared off & went to high overcast.

Getting in to Texhoma seemed to depend on the time factor. **Bill Hall**, from Russellville, Ark., was the first to arrive on Friday. **Jim Paine** of Dayton (OH) came soon after, along with **Jim French** from Wimberley (TX). **Gary Green** (TX) was next to show, and then **Leroy Holt** (OK). **Eddie Elland** (Dallas) again flew his Sonerail in Friday. **Jim Paine** was enroute to San Francisco to visit his daughter on his vacation, so had to leave early Saturday morning to get thru the thunderstorm area—before they built up in the PM.

Bad Weather Forces T-18er's to Divert

Tom Kerns, Ed Ludke and Bob Ryan got a late start Friday, and by the time they got down in the area there was weather—so they diverted to Ardmore, OK, where they picked up a car and came on in. They went back and picked up their airplanes early Saturday. **Harlo McKinty** had the same problem, only farther west at Lawton, OK, so he too, drove in to Texhoma, retrieving his airplane the next morning.

Gary Cottner, from Tulsa, was the next arrival followed by **Dave Eby** (Wichita Falls, TX). **Gary Holt** was last to arrive Saturday.

Crook leaves Peppard's T-18 in Dallas, Mob arrives by Car

John Crook (Dallas) had to leave Vern Peppard's T-18 at Dallas, as they didn't quite get through with the annual. **Bobby Collard & wife** also drove up from Dallas. Bobby's T-18 could fly by next spring—he was hoping to see Ben Cupp's V-6 powered bird. Builder **Al Pereira** from Austin also drove in.

Besides the ones that flew in, we had several builders that drove in. **John Mihaila & wife** (Wichita Falls, TX) had to drive in, as his newly completed T-18 only has 5 hours on it to date. He also brought "Stash" Simpson & wife with them. Stash's T-18 should be flying by next summer or late spring. **James Borg** (Minneapolis) rode down with **Tom Kern**. His T-18 has been flying for some time.

Doctor Amputates Back!

Dr. & Mrs. Bud Payne (Austin) also drove in. Bud's T-18 was a round back, but he removed the round back and replaced it with standard T-18 components. He, too, might fly by summer next year. **Roger Dengler** (DFW) and family drove up to see the airplane he sold to **Bob Ryan** when it was about 80 to 90% complete. He was impressed with the way it finished out. Ft. Worth builder **Ken Morgan** and wife also drove in and thoroughly enjoyed themselves.

T-18er's Forced to Take Hour-long Ride on Boat!

We had an unexpected diversion on Sunday afternoon when Bob and Peggy Cutter (who share a hangar for their Swift with us at Addison) saw the T-18's flying around while they were docked at the Marina with their big 50 foot cabin cruiser. They paged me and nothing would do, but load the boat up with T-18ers and their wives and take an hour cruise. It was a delightful break and thoroughly enjoyed by all.

Award Winning Documentary Available

We again have a video we made, and if any of you would like to add it to your collection we'll send it to you for cost (\$8.00 ppd). There's "nothing" on it very educational—except for

the interviews with **Toms Kerns, Harlo McKinty, Wendell Green, Bill Hall, Bob Ryan, Ed Ludke**, etc.

Shifflett shows Cavin his Cheeks!

Paul Shifflett was there again with his metal cowl, which is now finished. He showed me the cheeks (just finished) and I planned to tape it later when the light was better, but I slipped up and didn't. Paul has made a step by step photo record of the project, and it would be an education to look at them. He'll probably bring the cowl and album to **OSH** if you'd like to see them. Maybe we can do a tape on it there.

Last Re-union!

This will probably be our last re-union at Texhoma, at least for a while. The lodge policy is to require 2 nights minimum stay over a weekend and there is an unfair hardship for some that could only manage one overnight. Nominations for some other locations are now open.

The next location should be a place that has either easy access to a motel (with restaurant), or one within walking distance from the runway (like Texhoma). Most important, it should be a non-controlled field and not within a TCA or ARSA. It should have 3,000' or longer runway(s), hard surfaced. Nav radio facilities aren't essential, but nice. It should have unicom, but this is also not essential. Adequate sized parking ramp with tie down spots for 15 to 20 T-18's is needed. Fuel is not a requirement, but it shouldn't be too far away.

Several spots in Oklahoma have been suggested already: **Mushogee, Shawnee, Ardmore, Durant, Okmulgee**—to name a few. There are also several other state parks in OK that have nice airports—**Arrowhead, Fountain Head (Eufala), Grand Lake**, etc. There's also a fancy place called **Shangri-La** on Grand Lake that caters to conventions.

In eastern Kansas there's **Chanute, Coffeyville**, and **Independence**. In western Kansas there's **Liberal, Dodge City, Garden City, Hays, Pratt**, etc.

In north Texas there's **Gainesville, Sherman** (where they hold the IAC Championships), **Paris**, to mention a few. We had our first re-union at **Temple, Tx.**, but that was a little too far south for some.

Actually, there's no one place that will suit everyone. We probably need several of these re-unions; one for Western states, one for the Midwest, and one for the Eastern states to do it right, but it is obvious there's no easy solution.

Jim Paine (Dayton, OH) has gone to a lot of trouble to check out a State Park in Southwestern Kentucky, **Kentucky Dam Village**. It lies on a line between Nashville and St. Louis, or on a line between Memphis and Indianapolis (see a fuller description later in this NL on Jim's proposal for an Oct '89 re-union). This location would be between 2-3 hours flying time northeast of Texhoma. It would be more convenient for some, a little less for others.

HERE NOW IS THAT GREAT REPORT BY DICK PENMAN:

May 20, 1989

Dear Dick,

I'm sure I was typical of many Thorp builders. I show up at Oshkosh back in 1973, with no real intentions of building anything--let alone an airplane! There was all this hustle-bustle around the T-18 tie down area and I, like so many, was attracted to that flurry of activity.

John Shinn, from Ormond Beach, FL., was giving rides. When John asked if I was interested, I wasted no time climbing in. Incidentally, John took best T-18 that year. Well, for me, there was no turning back. My life would change from that point on. I had to have one!! Walking back to the campground that same afternoon, we stopped by the sheet metal workshop area. This enthusiastic guy, by the name of Lu Sunderland, had the attention of at least 100 people, showing them just how easy it was to hammer out wing ribs and drive rivets. Armed with all that good experience and knowledge, we were on our way to a great adventure.

However, the next 18 months would be spent entertaining myself by studying prints and practicing to drive rivets. Construction started in April 1975, but the aircraft would not fly for another 9 years. During that time I met many fine people from all over the country and learned many new skills. After overcoming typical obstacles, N199DP finally flew on May 15, 1984. The extra time I spent in wing and tail alignment paid off. The aircraft stalls straight and clean and no trim tabs are required. The only two problems to show up after the first flight were brake pedal and trim tab adjustments. I'm sure that all Thorp builders, past and present, recognize that you don't build one by yourself. It takes alot of dedicated friends and an understanding spouse. So, I would like to thank some of those people who have helped so many builders like myself. Gary Copeland, for his time and confidence in testing my ship and checking me out in it. My good friend, Bob Dial, for the many hours of flying, teaching me what the Thorp

DICK PENMAN REPORT, continued:

could really do. Also, to you, Dick, and the late Lu Sunderland for your dedication to the newsletters. Without these newsletters most of us would not have finished our aircraft. It's been a great experience building the T-18 and exciting each time I fly it.

I am sending along some drawings that may help out some new builders; baggage compartment, tail pipe hangers, battery box, vacuum hook-up and alternator wiring hook-up.

Best regards,



Dick Penman

5918 Bordman Rd.

Dryden, MI 48428

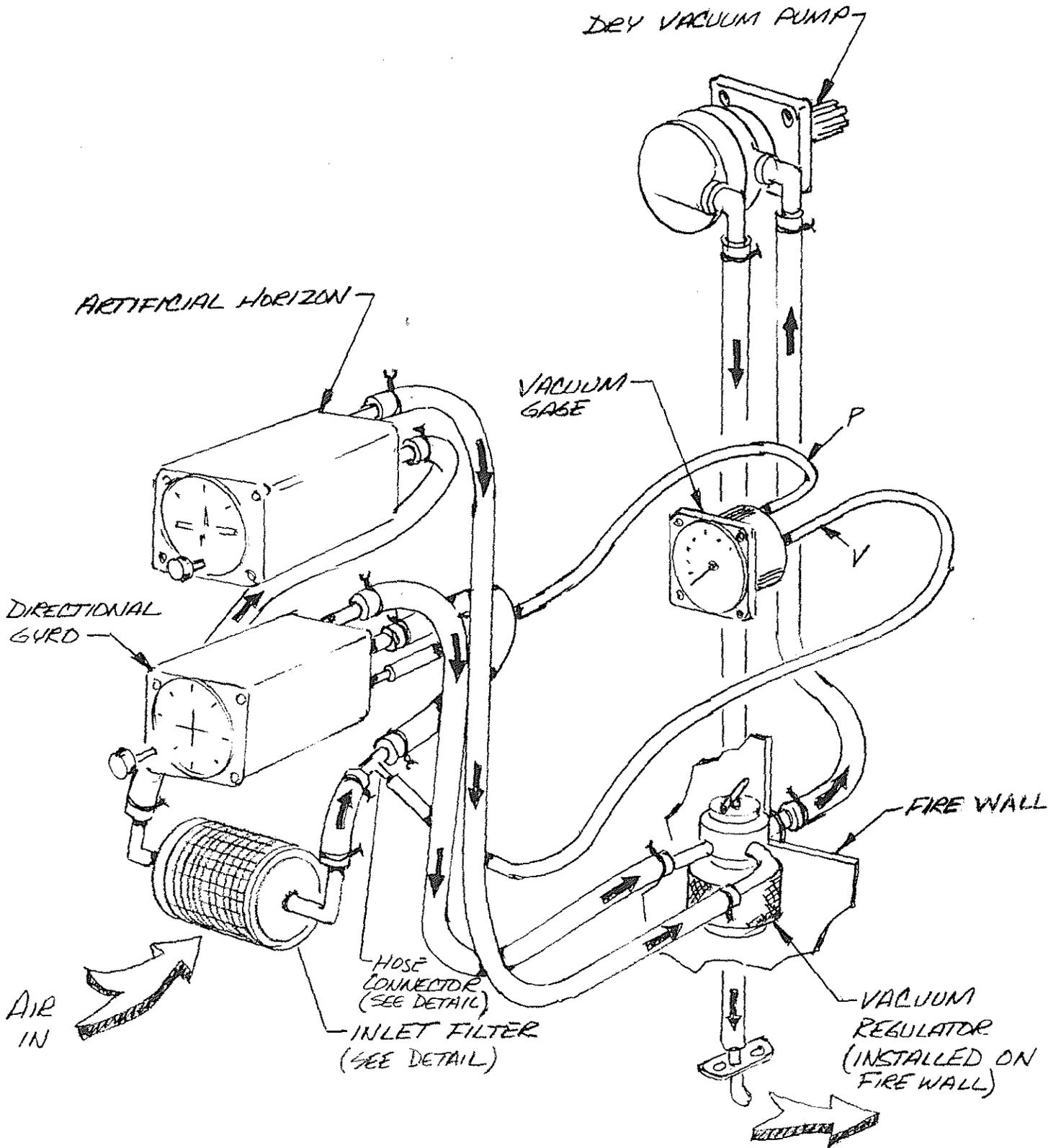
Dick, I was absolutely overwhelmed when I received your letter and all those beautiful drawings. (I still am). We are all truly in your debt for those drawings and I'm sure all of the T-18ers join me in expressing their deep and sincere thanks for your efforts. They are really professional quality. Hopefully they will stimulate others to do some of the same. Again, Dick, a million thanks!

I was also delighted with the new format for the NL that JIM HIDALGO did on his computer. It was really an eye opener for me to see what you can do with a computer. If you, too, are pleased with it, how about sending a post card with your comments?

Since Jim was able to condense the 10 pages of handwritten material I sent him into two pages we now have space for all of Dick Penman's drawings in this NL.....Also LYLE TRUSTY sent me an excellent multi-page report on his airplane since I wrote the material on page 1 and 2. I also got a detailed report from FARLO MCKINTY on his new bird, a report and drawing from F. E. ROGERS, and a letter from MONROE MAXHEIMER, who also sent in some excellent drawings of how he is installing the JAVELIN V-6 engine and attaching the motor mount to the fuselage, so I already have material for NL #73....but, PLEASE, don't lean back on your thumbs and not send YOUR report, just because we have enough material on hand for another NL.

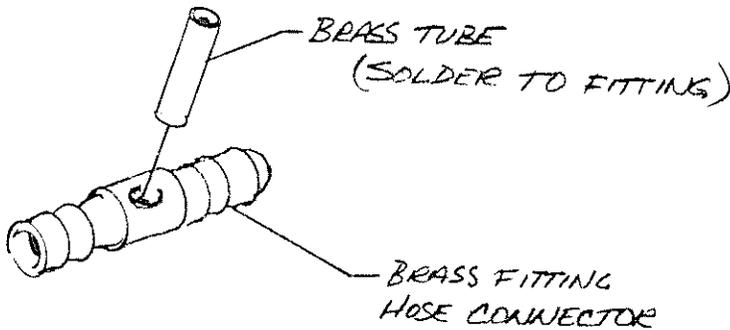
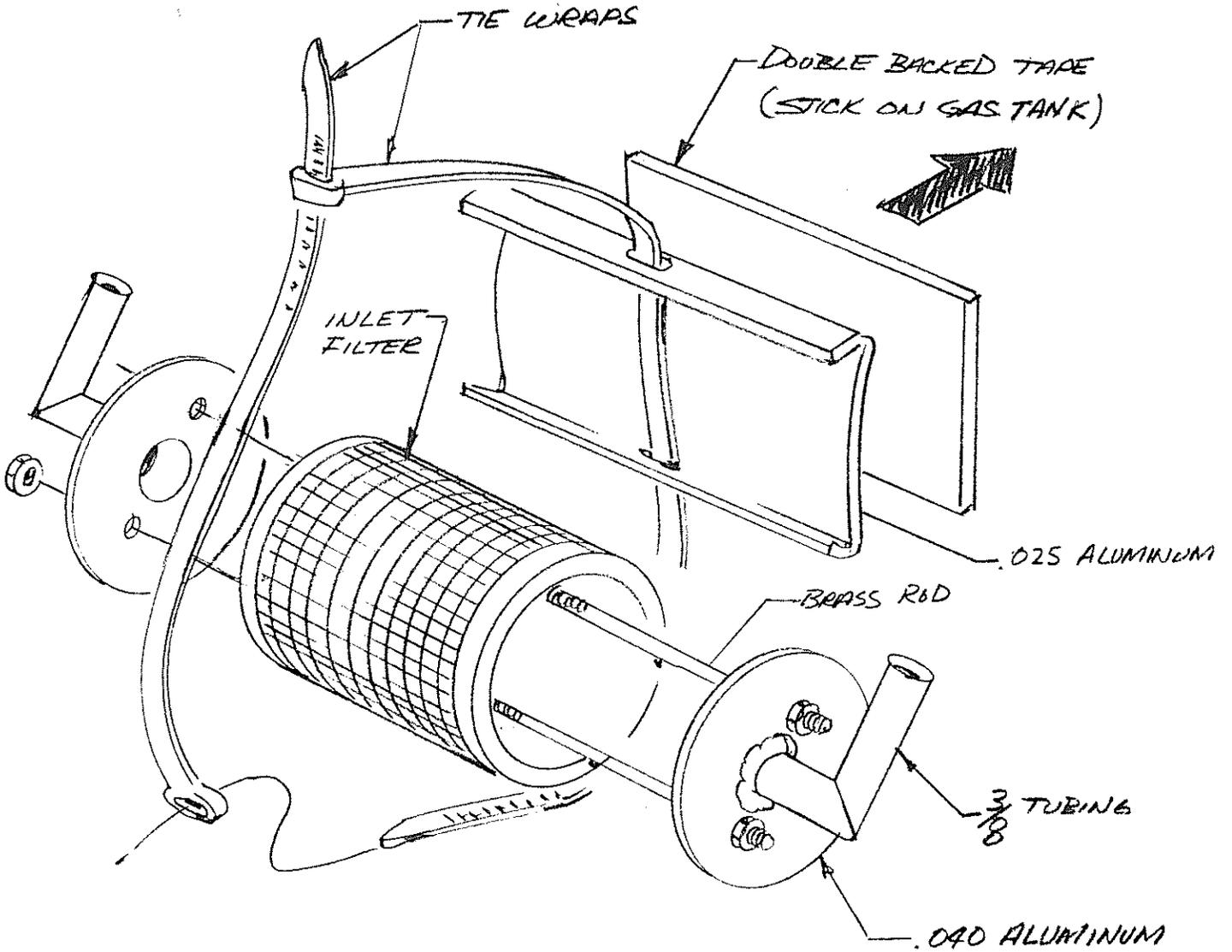
Since I have a little extra space on this page, I guess this is a good time to tell you about a trip I just got back from, an assignment from HQ to go up to Harrison, AR, and do a story on BEN CUPP's V-6 powered T-18, and then over to Wichita, KS, where I was to meet TOM FOSTER, who was bringing one of the LECTRO props over to put on DAVE BLANTON's test bed Cessna 175 first and then to put it on DAVEY BLANTON's Sport Racer for its trip to OSH. (more later in the NL on this).

from DICK PENMAN



N199DP
VACUUM SYSTEM
DICK PENMAN

from DICK PENMAN

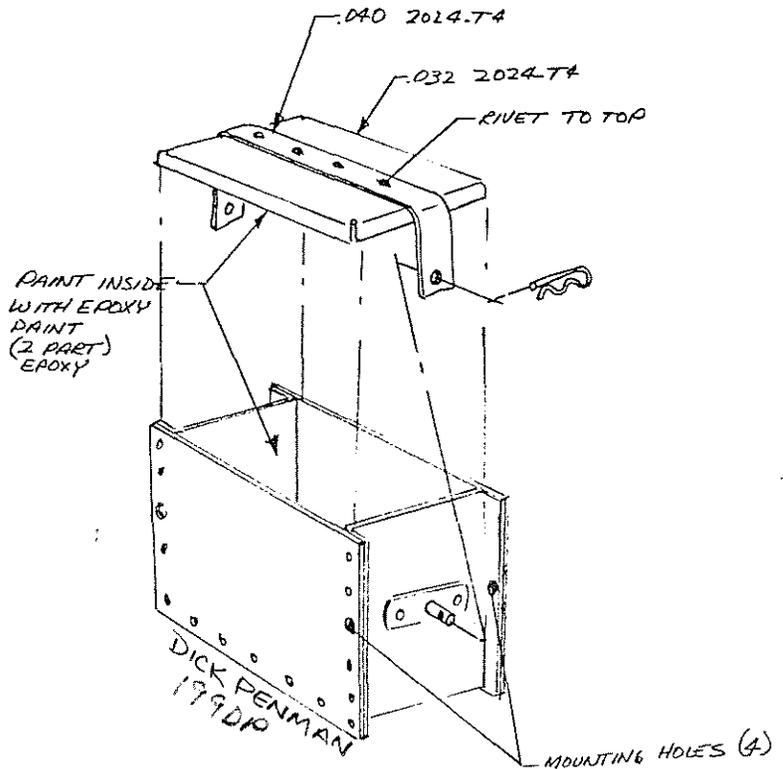
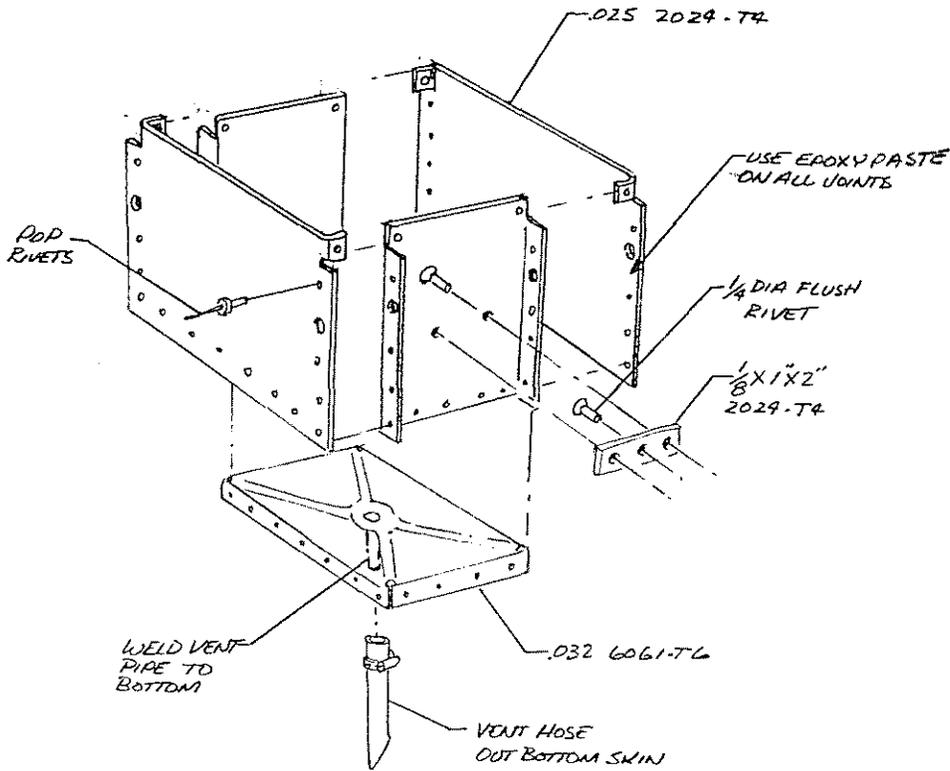


VACUUM GAGE HOSE CONNECTOR

INLET AIR FILTER MOUNTING BRACKET

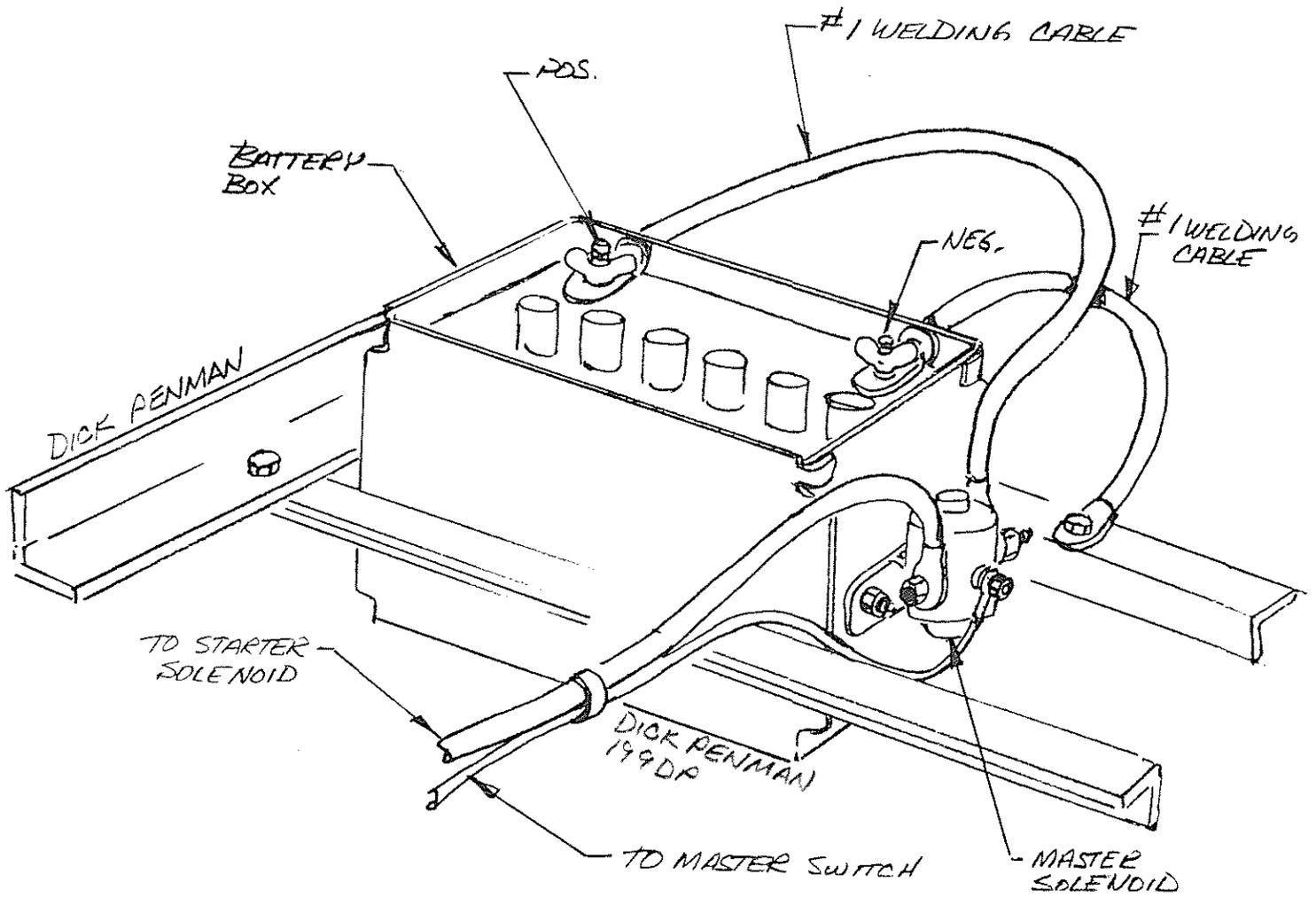
VACUUM SYSTEM
DICK PENMAN
199DP

from DICK PENMAN



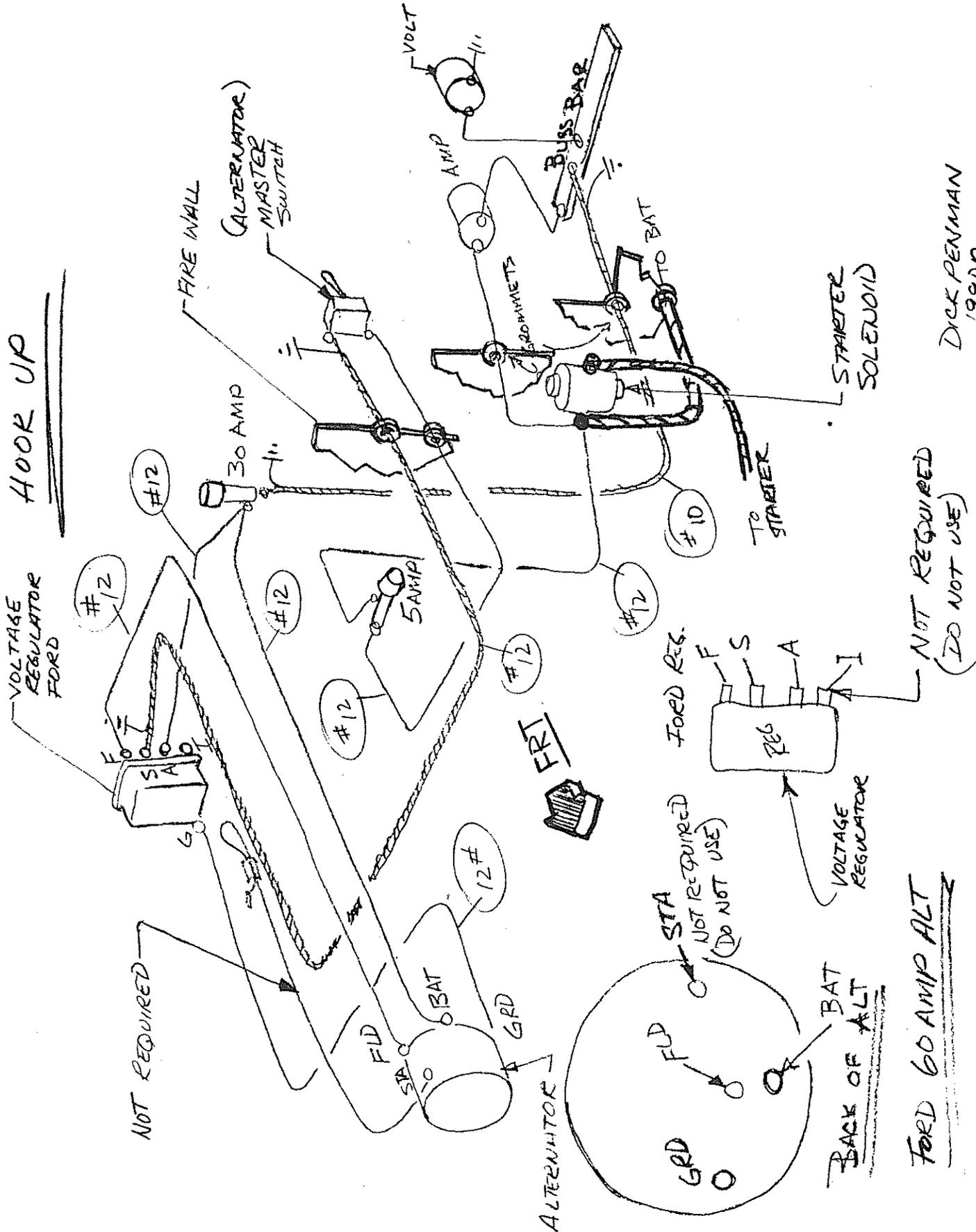
BUILD A BATTERY BOX FOR \$5.00

DICK PENMAN
1990/10



HOW TO WIRE BATTERY BOX
& MASTER SOLENOID

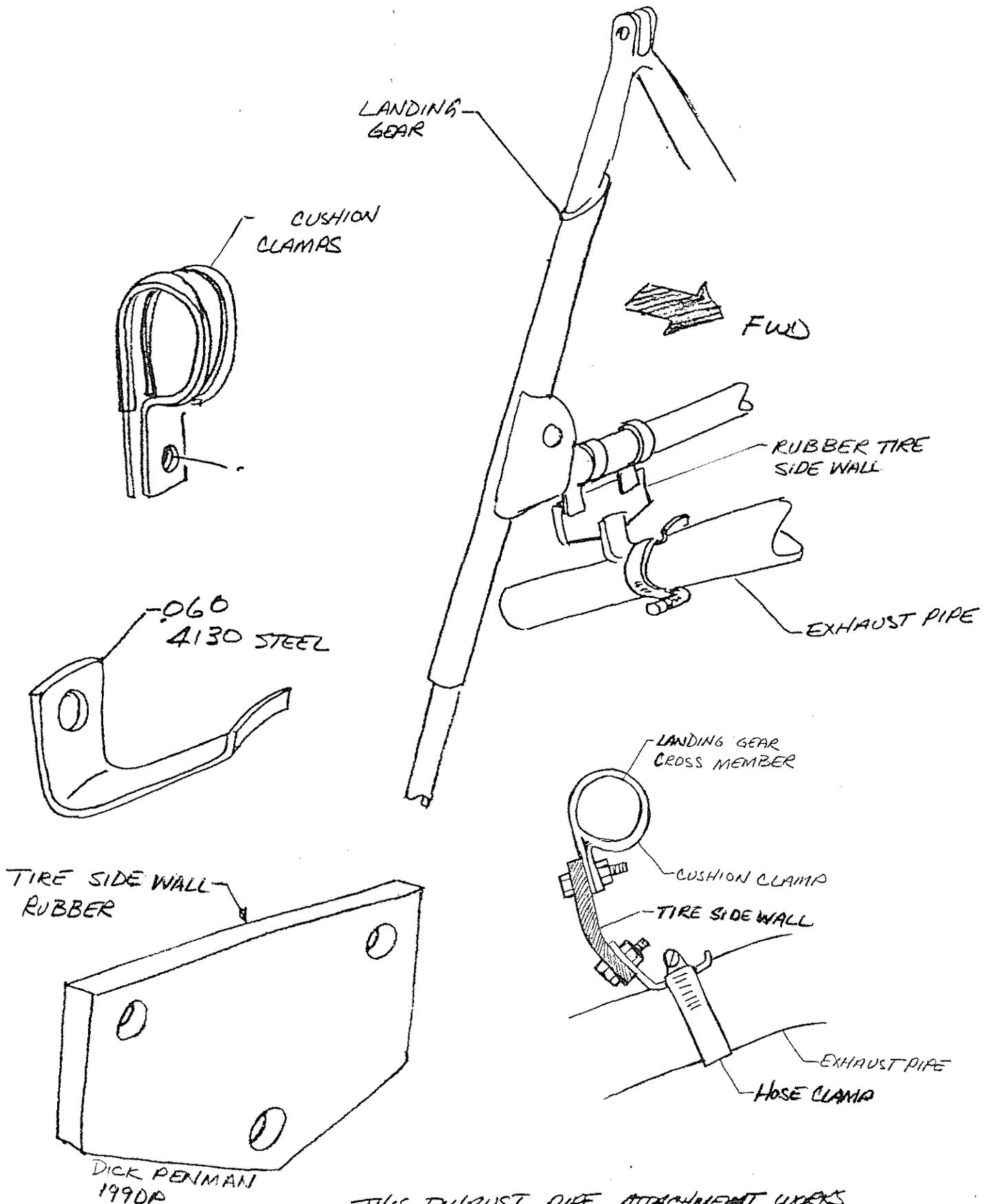
ALTERNATOR
HOOK UP



DICK PENNMAN
1990P

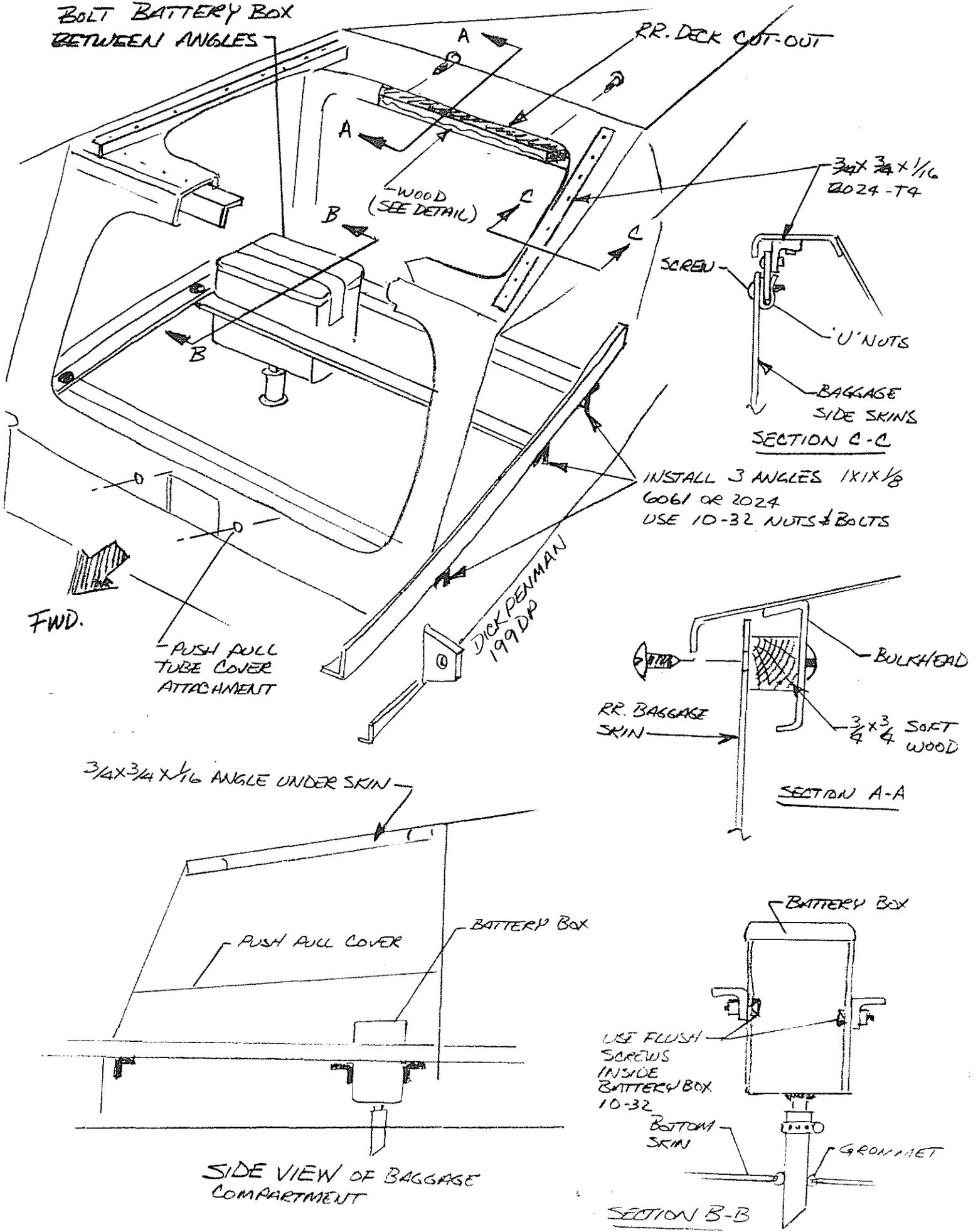
NOT REQUIRED
(DO NOT USE)

FORD 60 AMP ALT



THIS EXHAUST PIPE ATTACHMENT WORKS VERY WELL AND IS SIMPLE TO BUILD.

BOLT BATTERY BOX BETWEEN ANGLES



RR. DECK CUT-OUT

WOOD (SEE DETAIL)

3/4 x 3/4 x 1/16 2024-T4

SCREW

U'NOTES

BAGGAGE SIDE SKINS

SECTION C-C

INSTALL 3 ANGLES 1x1x1/8 6061 OR 2024 USE 10-32 NUTS & BOLTS

DICK PENNIMAN 199 DB

BULKHEAD

RR. BAGGAGE SKIN

3/4 x 3/4 SOFT WOOD

SECTION A-A

3/4 x 3/4 x 1/16 ANGLE UNDER SKIN

BATTERY BOX

PUSH PULL COVER

BATTERY BOX

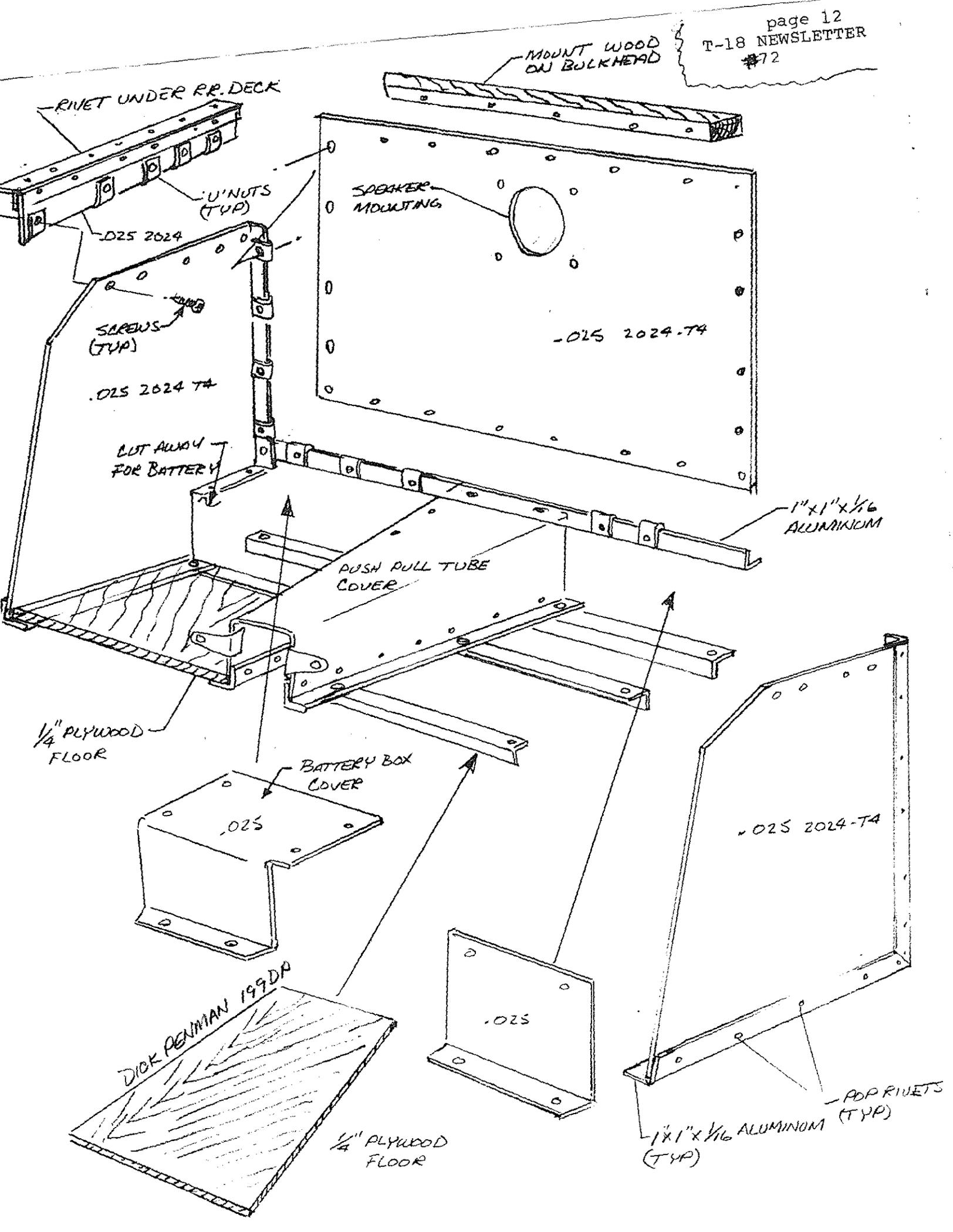
USE FLUSH SCREWS INSIDE BATTERY BOX 10-32

BOTTOM SKIN

GROMMET

SIDE VIEW OF BAGGAGE COMPARTMENT

SECTION B-B



It's always a delight to hear of a new T-18 taking to the air and here is TOM OSTENDORF's story of his brand new bird.

DICK CAVIN,
21 JUNE 89

I'M WAITING FOR INSPECTION OF N54266 S-18 SERIAL # 42
I STARTED BUILDING IN DEC.86.

I DIDN'T ENCOUNTER ANY MAJOR PROBLEMS DURING CONSTRUCTION,
BUT THE CANOPY TOOK SOME MODIFICATION OF THE FRAME AND LONGER
SKIRT AROUND THE BOTTOM TO FIT.

I CONSTRUCTED THE VERTICAL FIN DIFFERENTLY. I HAVE A CAD/CAM
SYSTEM AT WORK. I CREATED THE RIBS ON THE SCREEN WITH THE RIVET
HOLES MARKED AND THE SPACING OF THE RIBS PER PRINT. THE CAD/CAM CAN
GIVE YOU THE LENGTH OF ARCS AND SPLINES SEGMENTS WHICH MADE IT EASY
TO CREATE THE FLAT LAYOUT FOR THE SKIN WITH RIVET HOLES MARKED.

I PLOTTED THE LAYOUT FULL SIZE, GLUED THE LAYOUT TO THE FLAT
SKIN MATERIAL, AND CENTER PUNCHED THE HOLES THRU THE POINTS ON
THE DRAWING.

AFTER DRILLING THE HOLES, IT WAS EASY TO MAKE THE HOLE
TEMPLATES BY TRANSFERING THE HOLES THRU THE SKIN. BY MARKING THE
RIVET CENTER LINE ON THE RIBS I COULD WRAP THE TEMPLATE AROUND THE
RIBS, CLAMP AND PUNCH THE HOLES AS PER STANDARD THORP METHODS.

I HAVE BEEN TAKING SOME DUAL WITH JIM PAINE IN N747JP GETTING
READY TO FLY. JIM OFFERED TO DO THE FIRST FLIGHT AND I TOOK HIM UP
ON THE OFFER. JIM KEEPS HIS PLANE AT THE NEW CARLISLE, OHIO AIRPORT
WHERE I HAVE BUILT A HANGER.

I'M ANXIOUS TO FLY AND HOPE I CAN GET THE TEST TIME OFF BY
OSHKOSH 89.

A PICTURE IS ENCLOSED AS PER YOUR REQUEST. HOPE TO SEE YOU
AT OSHKOSH.

TOM OSTENDORF
450 KENT RD.
TIPP CITY, OHIO 45371



Monroe Maxhimer
10202 N. 46th Ave
Glendale, Az. 85302

T-18 Newsletter
10529 Somerton Dr.
Dallas, Tx. 75229

Dear Dick,

Enclosed is \$20. Please reinstate me on the T-18 news letter mailing list. The last news letter I received was #69. I should have been keeping you informed on the progress of my project but I am a real procrastinator when it comes to writing letters. The project is moving along, but slower than I would like. The fuselage is basically finished on the outside with the exception of hanging the engine, which I am in the process of doing now. I am using the Javelin engine (Ford 232V6) and am in the process of putting it together. I had the machine work done on it that Dave Blanton suggested, which was honing the cylinders for a .004" clearance. I also had the engine completely balanced, with the lower pulley installed on the crankshaft, to within 1/2 gram. According to the the speed shop that I dealt with, production engines are usually balanced to within 20 grams at best. Hopefully this will make a difference in the operation.

A considerable amount of time on the project was consumed in the development of the firewall attach points for the engine mount. I wanted the strongest possible mount with the least amount of weight. It took me two tries before I was satisfied with the results. Enclosed are detailed drawings of this effort. The one disadvantage of the method I used is the fact that the fuel tank must be modified, as shown in the picture, for clearance of the longeron to firewall gussets. If anyone is interested in further discussion on this mounting method they can call me at 602-939-4064.

I am planning to spend more time on the project in the next few months in order to try to finish it by June of next year. With a little luck I may make it.

Monroe R. Maxhimer

Thanks, Monroe, for your very considerable efforts in your report and the most excellent drawings you submitted. Your approach on the motor mount also looks well thought out. Your solution is the third method we've seen now, all of them different. I certainly hope both you and John Popejoy will soon be flying your V-6 T-18s. This will provide a shot in the arm for some of the builders that have gotten discouraged at the skyrocketing costs of aircraft engines. I already know of several new builders that had aircraft engines on hand, but resold them and are going to install the V-6. They felt that not only would they save quite a bundle on installation, but also much more in operation.

A brief explanation of the four point engine mount modification.

Along with my drawings I have included portions of Drawing S15, on which I have marked the location of the bolt hole for attaching the engine mount to the firewall.

The parts that I have added are shown on rough drawing M1 and on detail drawings D4, D5, D6 & M2.

Gusset D4 fits below the longeron at WL42.0 as shown on drawing M1 and on detail B of drawing M2. As shown on dwg D4 there is a .060 joggle on this gusset to accomodate the firewall flange and cowl attach doubler.

This piece may not be necessary but I wanted to distribute the stress in this area more evenly to the skin.

Drawing D6 actually shows two pieces. The 4130 steel fitting and a 2024T3 spacer. The fitting rivets to the firewall and overlaps the firewall corner stiffener which runs between the two longerons. To make the overlap even without joggling the fitting I put the spacer between the firewall and the D6 fitting. The size of the spacer is shown on the D6 drawing.

To stiffen the firewall between the right and left D6 fittings I attached a 2024T3 angle (1" x .75" x .093"), which I made by cutting down one side of a 1" x 1" angle. The top of the angle is positioned at WL42.0 and extends to within .25" of the side skins.

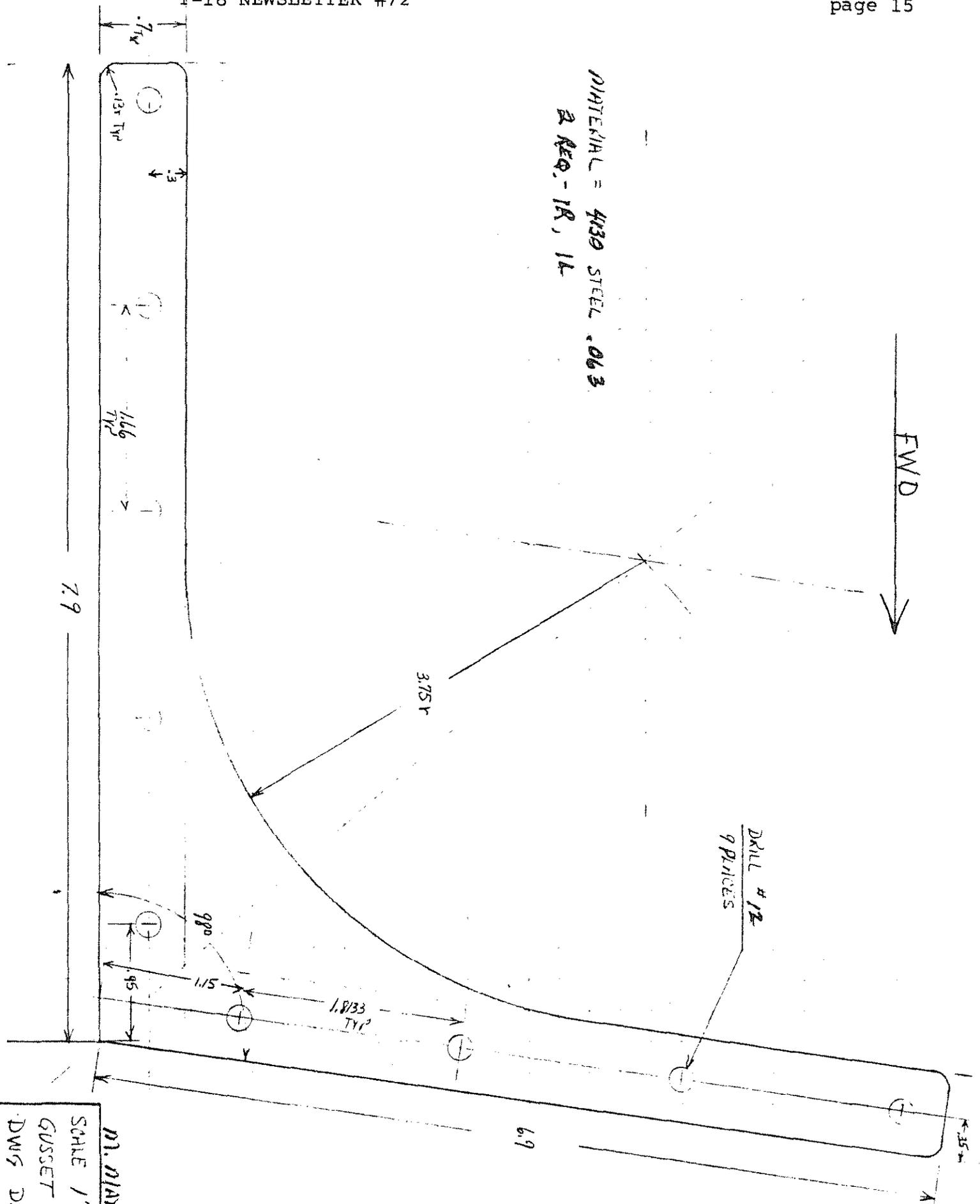
I wanted this angle and the D5 fitting to carry torsional loads. As you can see on dwg D6 there is a 109 degree bend at the top of this fitting. The top of the bend is parallel to and coincident with WL42.0.

Fitting D5 bolts to the top flange of fitting D6 and the longeron at WL42.0. On dwg M1 is shown stiffener S1. I added this for extra insurance. It overlaps both longerons and gusset D4. Drawing M2 is to show the detail of parts in the mount area.

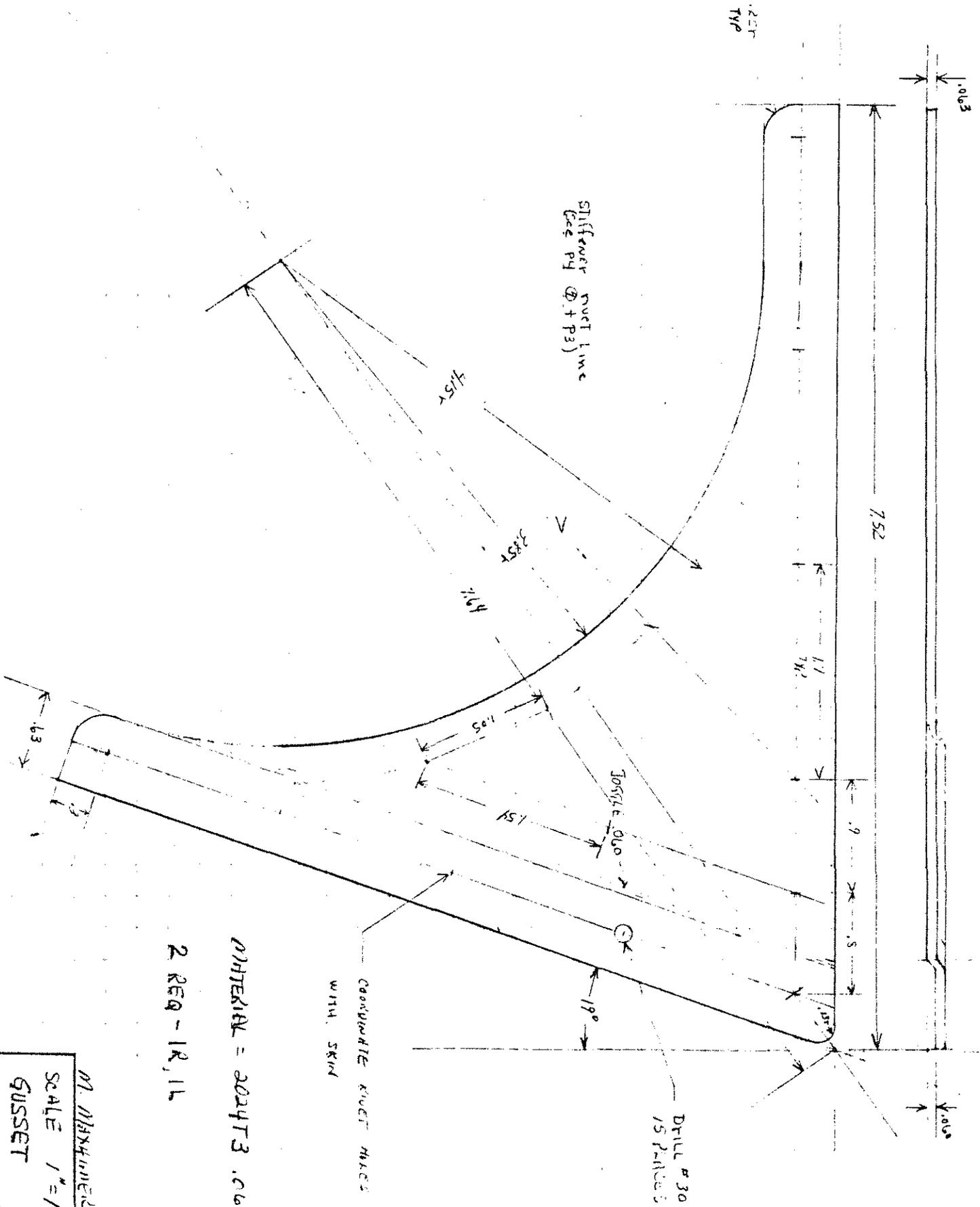
If any questions call me at 602-939-4064.

Monroe Maxhimer

DIAPHRAGM = 4130 STEEL .063
2 REQ. - 1R, 1L

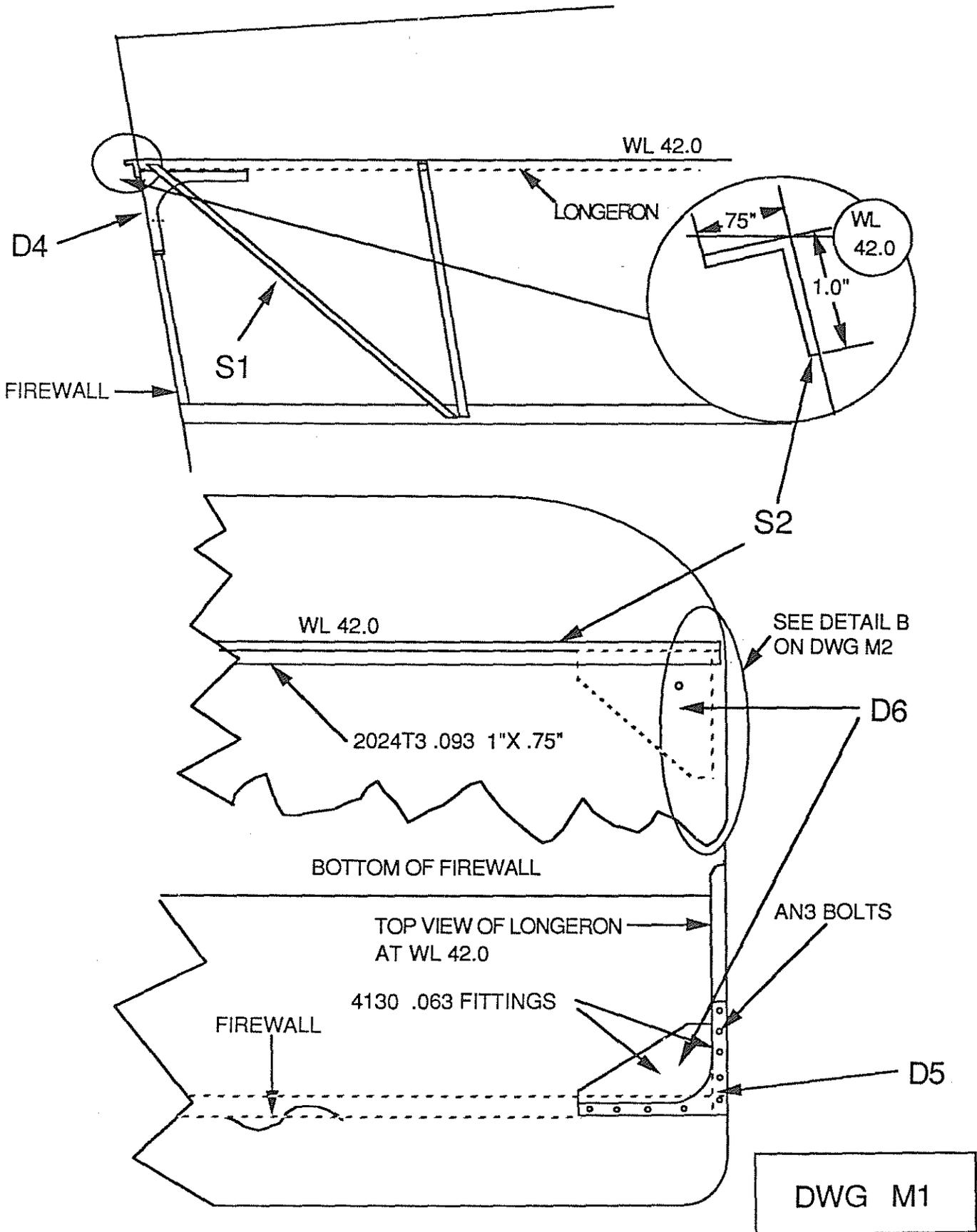


M. DIAMMIMER
 SCALE 1"=1"
 GUSSET GIBBING
 DWG D5 (RIGHT)

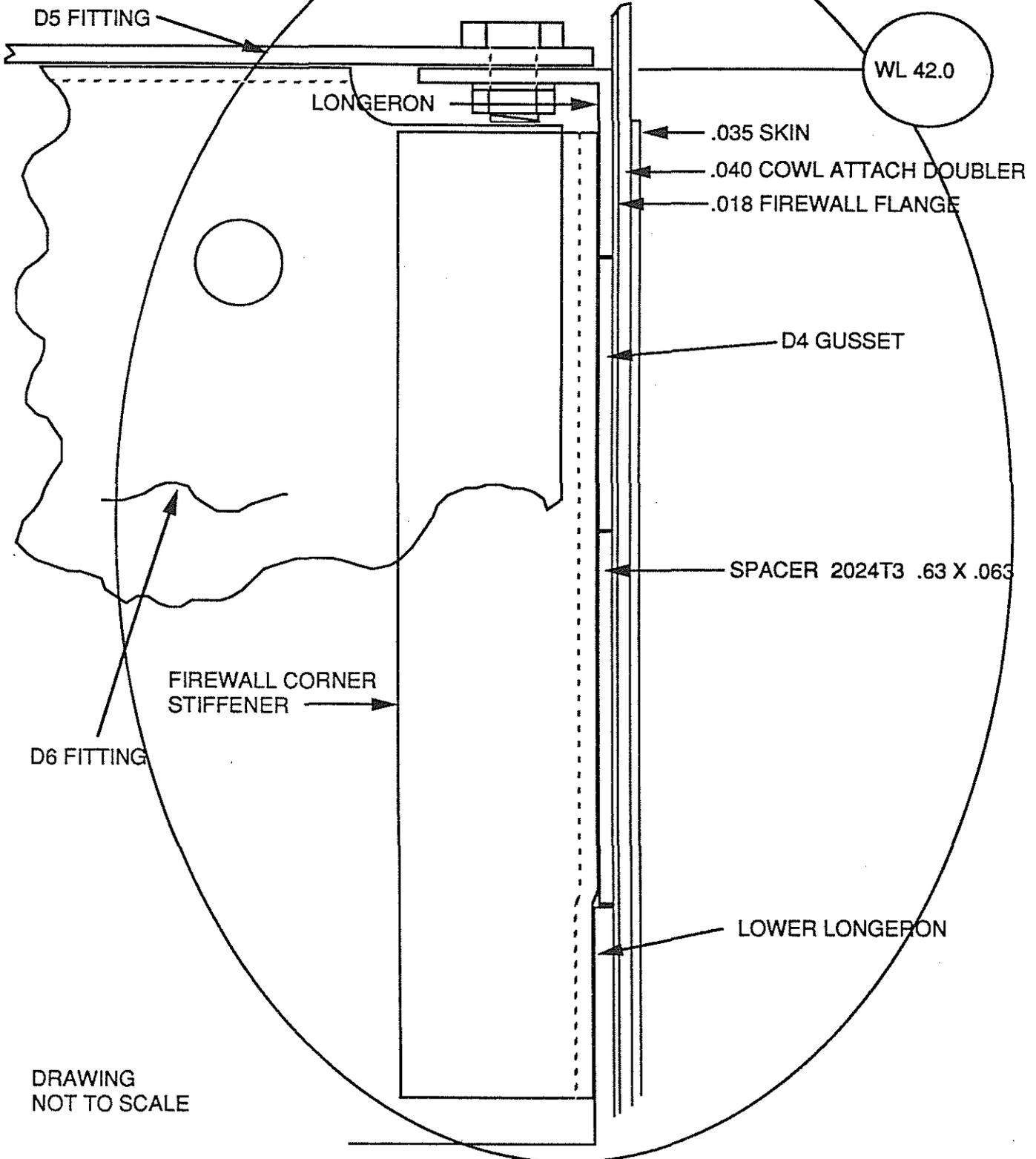


MATERIAL = 2024T3 .063
 2 REQ - 1R, 1L

M. MAXIMILIAN
 SCALE 1" = 1"
 GUSSET
 DWG D4 (RIGHT)



DETAIL B

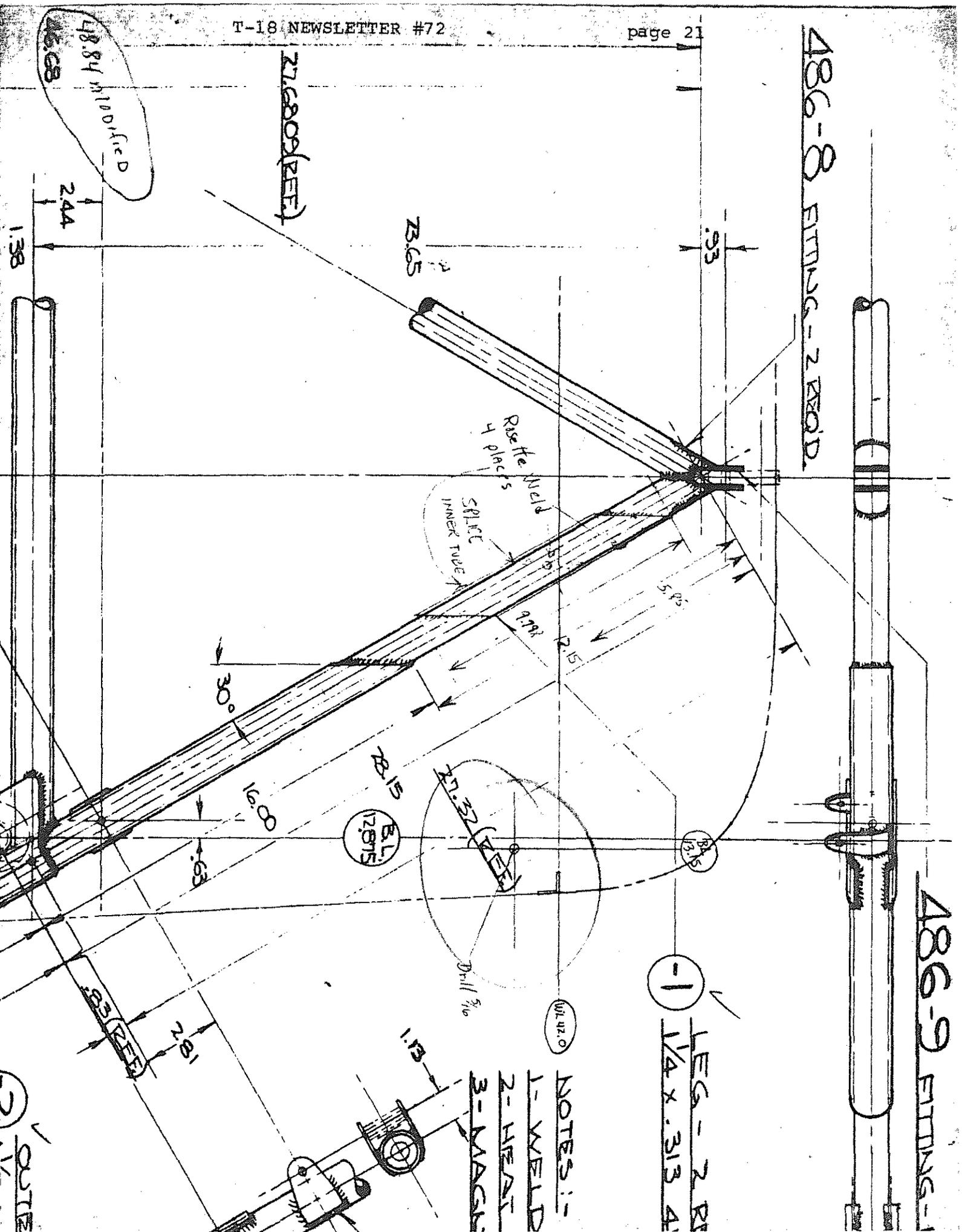


DRAWING
NOT TO SCALE

DWG M2

486-8 FITTINGS - 2 REVD

486-9 FITTINGS - 1



48.84 MODIFIED
K.C.B.

27.6809 (REF.)

2.65

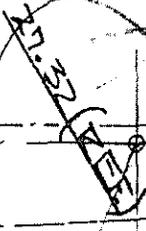
.93

30°

16.00

R.15

BL. 17.975



- NOTES:-
 1- WELD
 2- HEAT
 3- PACK

-1
LEG - 2 RE
1/4 X .313 4

OUTER

If you think you can make the fall get-together , please send Jim Paine a card, so they can make plans for accomodations, etc. It looks like a beautiful spot, with lots to do, in the color brochure Jim brought to Texhoma .

Mr. Dick Cavin
10529 Someton
Dallas, TX 75229

June 22, 1989

Dear Dick,

Regarding the Kentucky State Park reunion in October, would you please publish the following in the next T-18 Newsletter.

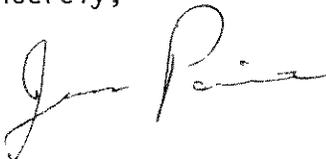
Reservations are to be made with Kentucky Dam Village State Resort Park
General Delivery
Gilbertsville, KY
42044-9999
Phone: (502)362-4271

If reservations are cancelled after 9/7/89, there will be a \$10 service charge. All reservations must be made by that time. The reservations should be made for the rooms being held for the Paine Party.

The rates are: \$42.75 (single)
\$51.84 (double)

I will be sending out invitations to all those who have made the get-together in the past, but perhaps we can pick up some new ones through the Newsletter.

Sincerely,



Jim & Judy Paine

4240 Wagner Rd.

Dayton, OH

45440

513-426-9671

(If you can come, don't forget to get up a "kitty" to re-imburse Jim for his mailing costs. It isn't too hard to spend \$100 for stamps these days).

Have some extra space here, so will use for some FOR SALE notes:

BILL HALL, #2 Normandy Circle, Russellville, AR, 72801, has his T-18 for sale for \$16,500. It has an O-290 in it and is a beautifully painted and finished A/C. It was built by Don Thompson in PA some years back. I have lost Bill's tel. #, but the A/C is 501.

STEVE RIFFE, 3532 Tripp, Amarillo, TX, 79121 has an almost ready to fly project for sale. He has \$11k invested in it, but will sell for \$8900 OBO. The wing is the folding wing (new airfoil) and the wing was built by John Walton. Fuselage is standard T-18. I can't find his letter that had details, but I do know it's a good buy for someone. Steve just lost interest after his dad died, as it was sort of a partnership project. Give him a call.....I forgot to mention that Bill lost his hangar +building new house.

As you can see from the copy on the previous pages, I have made an enroute change in the NL content, primarily to maintain continuity on the articles by Dick Penman and Monroe Maxheimer. I am also running out of time that I have available between now and OSH. Today is July 20 and I leave for OSH a week from today. I am taking the NL master over to VERN PEPPARD's GEOMAP plant today to be printed and collated and with a little luck I can have it in the mail a couple of days before I have to leave. If I run too late to get copies to you before OSH, I'll try to bring a few copies with me. Vern has invited me to be his copilot in his turboprop King Air, so we will have some cargo space. I'll be all over the place doing interviews, so won't see much of you until the Tuesday nite dinner at Butch's. Sorry we slipped up on the T-18 Forum. I thought someone else was handling it & I guess they thought I was. We may still have it.

I'll have to let you in on a little secret: We just got back from a 5 day trip, first driving up to Harrison, AR, (12 hours !) where I did an interview with BEN CUPP for a story in SPORT AVIATION, with pix and a demo flite. Ben has his new cowling on, altho' unpainted, and still hasn't had time to do his gear leg fairings, but it GOES! At 3500' MSL, with surface temps above 90° it indicates 195 mph...and Ben says his A/S is pretty accurate! In my book, the V-6 in the T-18 is a winner. The next day we drove up to Springfield, MO, where I visited with some old school chums, and then the next day we drove over to Wichita, KS, with a brief stop in Lamar, MO, for a quickie visit with Karl & Mazie Lipscomb, and we got to hear a first hand account of how their T-18 took a duck thru the windshield. Mazie's face was a mess, but no permanent damage. Got into ICT in mid afternoon, just in time to see one of the modified Tri-Pacers, with a V-6 engine. It was a beautifully finished airplane and after some taking of pix with the cowl off..and on..I got my second ride in a V-6 powered airplane. Again, I was impressed with the performance. The next day Tom Foster, from the ELECTRO Prop Corp arrived with a 3 blader that they installed on DAVE BLANTON's test bed C-175, where it flew for some 15 hrs. before installing it on DAVY BLANTON's Sport Racer. You'll see it at OSH. Just last nite Tom Foster came thru DAL on the way to Wimberly, TX, where he is installing a two blade ELECTRO prop on JIM FRENCH's 150 hp T-18. I will have stories in S.A. on all these airplanes, etc. You will also see the V-6 STOL at OSH and quite probably French's T-18, too.

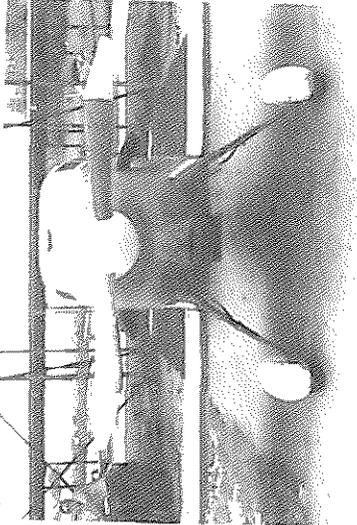
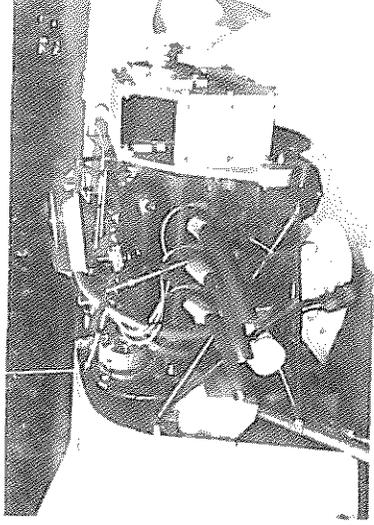
Again, I want to thank all of you that sent in material for the NL and again encourage all of you to contribute a story (please). Thanks, too, for JIM HIDALGO for his work on pages 1 & 2 and the clever captions. We will be getting NL #73 out right after OSH, now that I've got some help. Hope to see all of you at OSH. If you need to contact me you can leave me a message at the EAA Press Bldg (just behind the tower).

Until then enjoy.

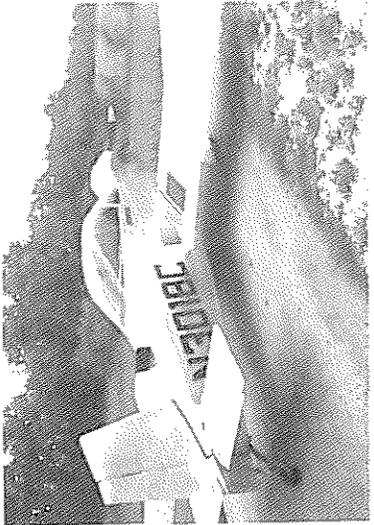

Dick Cavin

PLZ note the enclosed PERFORMANCE DATA SURVEY. Please take a few moments to fill this out and return to me. We NEED this info badly and, remember, it's as much for YOUR benefit as well as others. Okay/???

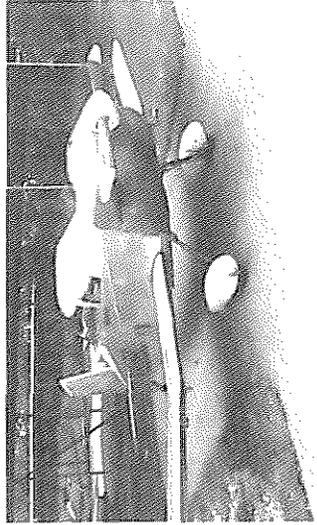
THE AIR CLEANER IS ON THE TOP OF THE ENGINE



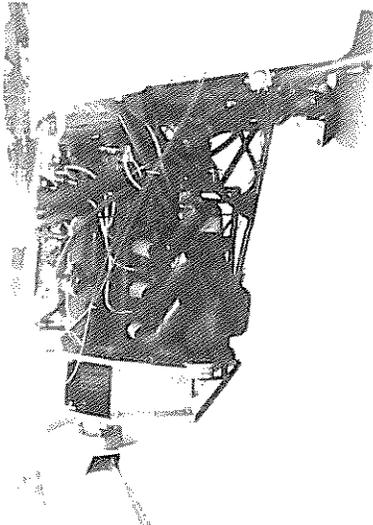
THE AIR CLEANER IS
MOUNTED ON TOP OF THE ENGINE



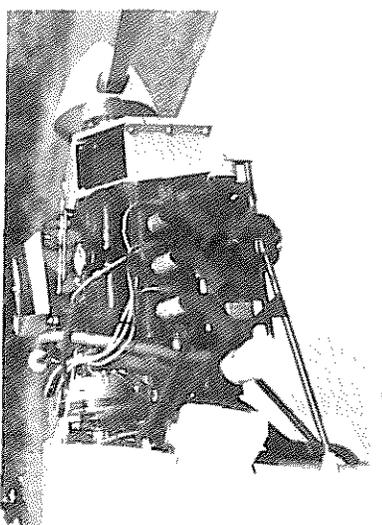
THE AIR CLEANER IS
MOUNTED ON TOP OF THE ENGINE



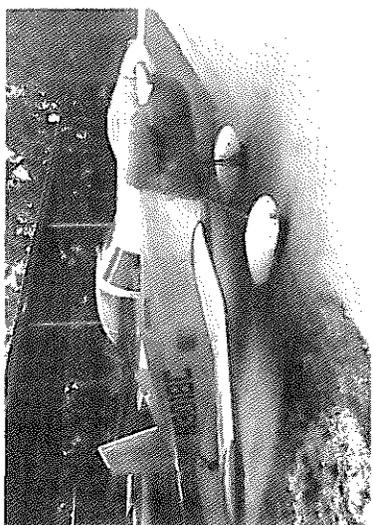
WITH NEW AIR
AIR CLEANER ON TOP OF THE ENGINE



THE AIR CLEANER IS
MOUNTED ON TOP OF THE ENGINE

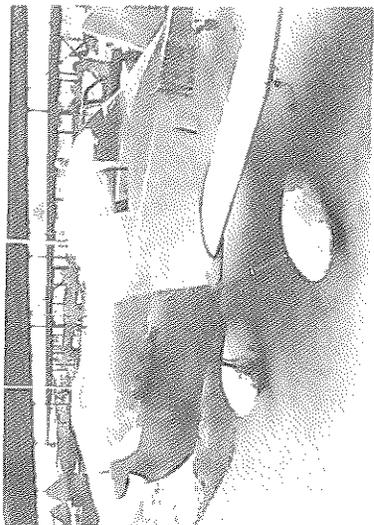


THE AIR CLEANER IS
MOUNTED ON TOP OF THE ENGINE

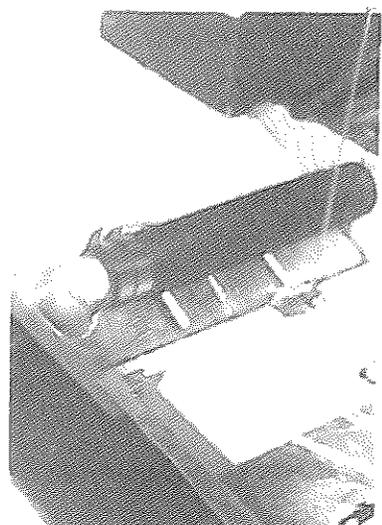


IN FUTURE ONE DOESN'T EVEN
NOTICE THE AIR CLEANER "HUMP"

THE AIR CLEANER IS
MOUNTED ON TOP OF THE ENGINE



THE AIR CLEANER IS
MOUNTED ON TOP OF THE ENGINE



THE AIR CLEANER IS
MOUNTED ON TOP OF THE ENGINE