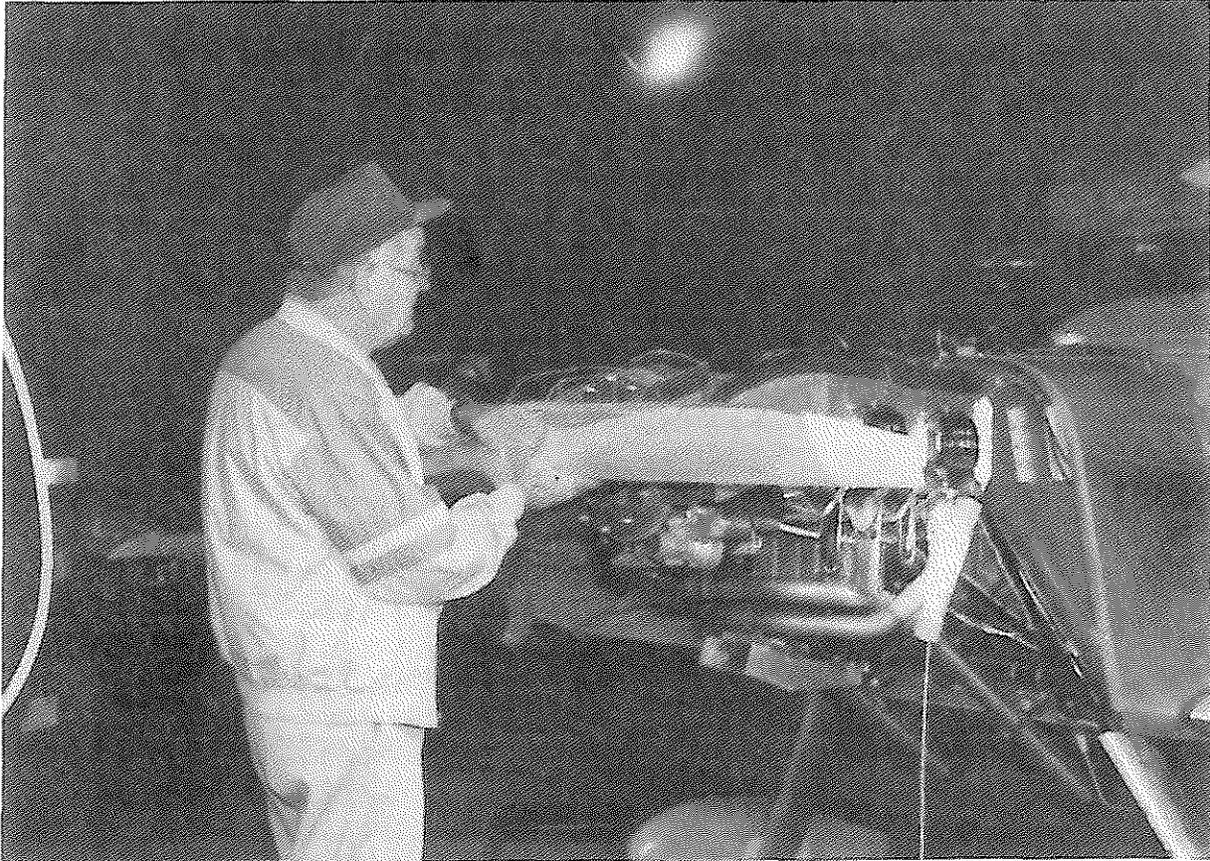


# T-18 NEWSLETTER



*Coyt Johnston of Snyder, OK nearing completion of his Thorp*

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**NOTICE: (STANDARD DISCLAIMER)** *As always, in the past, present, and future newsletters, we would like to make you aware that this newsletter is only presented as a clearing house for ideas and 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.*

# Editor's Column

## Events for Oshkosh 94

### Nature Center for Noon Friday July 29

Plan on joining us for a cookout lunch starting at 11:30, sign up on the flight-line ahead of time so we can get enough food purchased. We will split the costs.

### Friday evening at Butch's Anchor Inn for the Banquet Forum time & date to be in EAA program

### Other Events for 94

Aerospace America, Oklahoma City, OK on July 15-17 contact Larry Eversmeyer at (405) 728-1919 for details (Experimental Aircraft are invited)

Kentucky Dam Fly-In Oct 7-8-9

### T-18 Mutual Aid Society Membership and your dues.

It's time for the **remaining few** that haven't paid, to pay attention to the address tag for the status of their dues. Some owe for 93. And some paid in 94 for 93. If your tag say 93-94 you owe for both years. etc.

Here's the policy for those of you that don't know it. The dues period starts at the first of the year!! If you don't realize that it's because you may have been paying late each year. Please check the tag and send your back dues now. I've been trying to get everyone called that's behind but that is running the phone bill up to the tune of 2 bucks or so a call. So please help out on this. Rich.

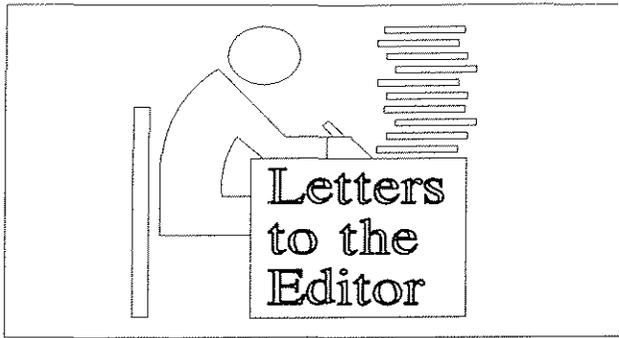
It is with sad commentary that I bring you the news that Bill Warwick lost his life Tuesday May 24 while test flying a new Thorp T-18 in Phoenix, Arizona. Bill was 63 years old at the time of death. I'm sure most of you know that Bill was a T-18 pioneer. He built and flew the first Thorp before John had the plans completed.

Information from Ed Poe who was at the airport when the accident happened: First flight of the new airplane (Owned by Bob Praker) occurred in the morning. Only problem was an out of trim condition requiring Bill to hold the nose down. Before the second flight, the rear servo arms were rebent to correct the out of trim condition. Details about the flight are not clear except the airplane spun shortly after takeoff. Ed reports that a special NTSB Investigator sent to check the wreckage has moved it to a warehouse for closer examination.

Bill and his wife Millie had been living in Aguila, Arizona for the past few years Her address for anyone that cares to write is: P.O. Box 397, Aguila, AZ 85320

Another T-18 Owner, Charles Kenny of Montuck, NY was killed in a T-18 crash in Florida earlier this year. The NTSB Investigator stated that the outer wing panel failed from a very high negative G load. There was no sign of control surface flutter or failure.

3 April 1994



March 16, 1994

Dear Richard,

Enclosed is my ante for the T-18 Newsletter. Please note the new address. Keep up the good work.

I now have my T-18 Operating Limitations amended to include night and IFR. This was very important to me and was not difficult to achieve.

I have 30 hours on my T-18 and a mixture problem that I can't seem to fix. I have to lean about 1" (of mixture control movement) on the ground in order to get smooth power for take off. This also yields the smoothest cruise operation at 2-3000'. Leaning at 7,000 and up gets pretty far out on the mixture control.

1. The mixture is adjusted for 25 to 50 RPM of rise at idle cutoff shutdown.
2. I have a fresh engine overhaul by a reputable shop.
3. I have sent the MA 4SPA Carb. off and had it overhauled to all the new specs. and bench flowed and jetted for the 0320B engine.
4. I have flown it with and without the carb air box and with and without the air filter. Can't tell the difference.
5. My next option will be to install another Carb. I suppose.

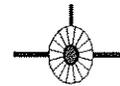
The airplane runs good and is very smooth. You just cannot run the mixture control in the full rich position even at sea level.

If you or others have any ideas, please call or write. Sincerely, Evan A. Roberts N89ER Rt. 5, Box 158C Temple, TX 76501 (817) 778-2252

Dear Richard,

Building my center section continues and I hope to begin assembly this summer. In checking my copies of the Newsletter I noticed I am missing #88. The mail is always slow here and the Newsletter is of extreme importance to me. The technical details are priceless and by reading the Newsletter I can resolve questions when working with the blueprints.

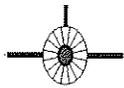
Please keep up the good work. Incidentally, after speaking with you about the Pitot and Static location, I found a heated Pitot and Static head that mounts on the end of a boom. This option appears to be a good one since my friend used the same setup on his during construction in the 70's. This appears to be consistent with Mr. Thorp's views that this item should be mounted in front of the wing leading edge in order to reduce errors. James A. Blaker (Andy) 8947 Vicksburg La. Manassas, VA 22110



Dear Rich, I will soon have some more T-18 caps for sale, as I have been getting requests. I believe these will be improved over the old ones. They are a very high quality golf style cap with a leather adjusting strap, made in Colorado also. The graphics/embroidery are improved. I'll have tan & red ones in oxford cloth, and white & navy in supplex nylon. They are very nice. The price will be \$12.00 each. If anyone orders by mail, please add \$3.00 for shipping. Also, I'm tooled up to make & sell cabin heat boxes. They'll be carried by Aircraft Spruce, but I sell them direct also. It's the lightest, most compact design on the market (less than 5 ounces). It has a stainless steel door & hinge assembly. Designed to mount on firewall & use 2" aeroduct. I've sold dozens to "RV" builders. The price is \$50.00 each plus \$3.95 for shipping & handling.

Sorry for making this letter a big commercial. I also recently received a new Aymar/Demuth prop after waiting 7 months. Preliminary data indicates an increase in cruise speed of over 10 knots. This is based only on GPS ground speed read outs, averaged over several runs in opposite

directions. My old prop was a rather poor example of a Pacesetter 200, 68x69. The new prop is designated 68x75. Preliminary data is as follows: Aircraft -N71JE, standard body, standard wing with new airfoil. Empty weight - 897#, engine - 0-320-D2A, 160 HP. Outside air temp - 65 degrees F. 30.02"HG, RPM @ end of takeoff run ~ 2350 RPM (old prop was 2400) Cruise true airspeed @ 2550 RPM & 7500' MSL -160 Knots, 184 MPH. Full throttle speed @ 7500' MSL over 207 MPH, 180 Knots. I'll get better data on climb performance, etc. at a later date. Best Regards, John Evens 6855 Allison St. Arvada, CO 80004



Dear Richard,

Just received notice of the McAlester fly-in and also the reminder for dues. Frances just called the bank. The check was paid April 5 Th.. Kind of slow. It was mailed March 5 Th..

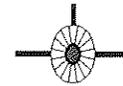
I do hope everyone pays their dues promptly. The newsletter is too valuable to lose. We sure enjoy reading them. A note on every newsletter as follows may help. "T-18 Mutual Aid Society Renewals are due the first of every year. Send check or money order for \$25.00."

I have flown very little the past couple years. I have Dan Dudah's T-18 N22DV. It's a gem. Hope to fly more from now on. Also have a Star-Lite that I built. I want to sell it this spring. Can't keep both of them. You might run an add in the next newsletter. Star-Lite N40SL. Fully flight tested. Cruise 120. Climb 1200 FPM, Stall 42. Time on airframe and engine 50 hrs. It's a tail dragger. Call or write for picture and info.

I hope Frances and I can get to Ill. some day. We would love to stop in to see you and your T-18. Best regards, Hank Steinginga 45528 Newtree, Lancaster, CA 93534 Phone (805) 942-3046

*Editors Note: RoxAnne and I would look forward to a visit from you. Thanks for the kind words about the newsletter. I owe an apology to*

*the members that had already sent in their 94 dues. On very short notice I sent out the McAlester Notice to let folks know that it was coming up shortly. This was because #90 was stuck in the post office somewhere. On the back I put a second notice about the dues. Nearly everyone that had paid got in touch with me by sending a copy of their check or a note. Several good folks paid twice. Some paid no attention to it. I'm still holding the bag for some folks for 93 and more for 94. I've started calling them and that works, but it sure runs up my cost and takes time I could be writing articles. I can't afford to send out four and five first class postage notices to them like the magazines do. Yet if I drop them and they want the letters later it's a real big postage and printing cost to fill them in. If you can tell I really don't know what to do.*



18 April 1994

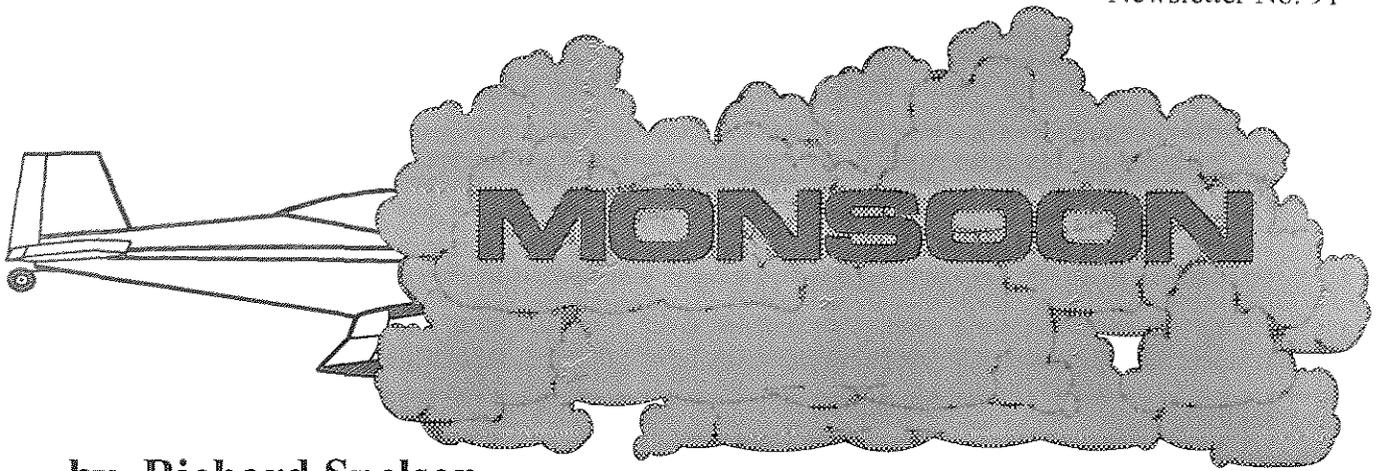
Dear Rich,

Progress on my airplane was proceeding quite well through Christmas but then we found out that my wife had a recurrence of cancer. She had a very difficult operation and is going through radiation now. She is really suffering and I have been very busy with housework, etc. of course, we've got to beat this thing before I can really get on with the project.

I sure did enjoy all of the Thorp events at Oshkosh last Summer. I learned more about John Thorp than I thought that I could and I especially appreciated the time talking to Thorp people about the various aspects of building the Thorp. Thorp people are the best!

If all goes well and my wife gets over this hurdle, I'll see you at OshKosh this summer.

Thanks for the excellent job that you are doing with the newsletter. If I can do anything to help, after we get through this cancer thing, please give me a holler. Sincerely, Don Ruffner



by **Richard Snelson**

Waiting below, the Burma jungle's canopy reaches upward, welcoming the monsoon rain and beckoning to the light aircraft lunging blindly above. The pilot, looking up from the instrument panel for only an instant, prays for any kind of break in the clouds. He sees only a solid sheet of water raging across the windshield. The driving rain has found every crack in the aircraft's canopy and windshield. Now the water streams across the instrument panel, over the gyros and onto the primary navigation radio, causing it to flash its no-op flag from the wet tropical bath. The pounding of the storm is relentless and continues to stress the pilot with 3 to 4 Gs of force.

After more than an hour of the pounding, the tired pilot tries all his old tricks to gain control of himself and to hold the aircraft on course. "Stay alert! Stay alert! "Now look Don," he said to himself, " you're an old 'pro,' a professional! You put this creature together -- you, me -- this Thorp T-18. It's a work of love. It won't come apart. Keep control, pick the wing up, quick! You've started a turn. The old joke always helped before--cheer up things could be worse -- sure enough things get worse. Think, what must I do to survive, to live. Think."

Years before his round the world flight attempt and before the Thorp T-18 was started in his garage, Donald Taylor, the pilot, approached the T-18's designer to get a set of plans. That

first meeting with John Thorp was a disappointment. John felt the plan to fly such a small plane "around the world" was filled with chances for failure, so he refused to sell Taylor the plans. This made Don even more determined to build a Thorp T-18 and fly it around the world, setting numerous world records on the way. So Taylor continued to press Thorp until finally with his blessing and help, Don got the plans and set out to build an airplane that would make history.

After five years in the making, (no kit here) it was finished. Taylor christened it "Victoria" after the only ship of Magellan's fleet to circumnavigate the globe. Don, in moments of panic, would remember John Thorp-- with his always present khaki shirt and pants-- thinking that Don would surely kill himself. That thought really doesn't do much to help Don's confidence now.

Don is a survivor, aware that to continue, the instruments and radios have to be protected. Reaching behind the seat he grabs for his travel bag and starts stuffing its contents on top of and around the sides of Victoria's dripping instrument panel. Underwear, pants, socks and a spare shirt all go to soak up the water. The cockpit quickly looked like a Chinese Laundry. The idea was working. The gyro instruments and backup radios continue to offer a navigational highway for the pilot to follow through the storm toward his destination.

With only a second to spare from the constant instrument scan-- wings level-- altitude-- heading-- airspeed-- Taylor's thoughts turn to his position. "Where am I?" He thinks out loud as he reached for his flight computer. "The time? Let's see, one hour plus forty minutes out of Rangoon. Set 140 knots as my speed and that means 232 miles traveled. Again scan-- wings-- compass-- altitude. Stay on course. Don't lose altitude. Correct now!" Mental math has always been easy for Taylor, even back when he was flying a P-40 over the hump in Burma, but now it seemed hard. "Impossible to concentrate and get the number to come out right." He tries again, "Navigation card shows 620 miles to Pinang, take 232 from that leaves? Think, do the math! Why am I here? Rangoon, Burma, to Penang, ten thousand miles from my home in California, Why? Wanted to be a world record flyer! To leave my mark! The search for the best aircraft, the five years in building and now this solo attempt to fly the smallest plane ever around the world."

A low wing, heavy on the right quickly brings the exhausted pilot back to the reality of flying the tiny craft. "Hold the heading" he tells himself again and again. Quickly he realizes that he needs to switch wing tanks to balance the craft, so over to the right tank. The single pilot IFR work load, along with the beating from the thrashing, tossing aircraft is taking its toll on Don Taylor. The water is still coming in. "Soak it up" he says aloud as he squeezes out the clothing, "Its got to be stopped."

Suddenly he remembers the calculation started only seconds before but now seeming like an eternity ago. "That leaves 388, say 400 miles to go, with seven hours of fuel left. Seven times 140 knots. OK! No problem with fuel." As Don returns to his instrument scan it brings a sinking feeling. The airspeed has gone crazy, the needle is whipping back and forth across the dial and slowly sinking toward the aircraft's stalling speed. Ice? A check of the outside air showed 8 degrees C. How to react? A look at engine rpm

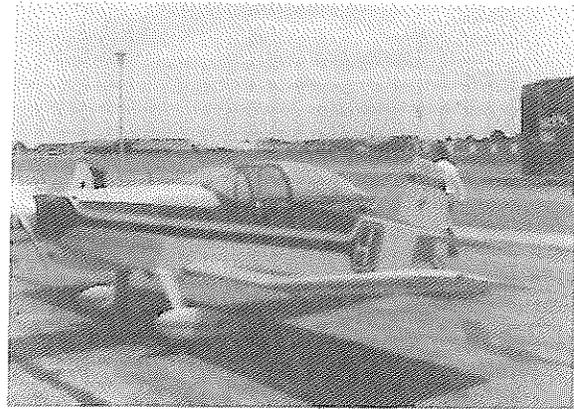
and the altimeter brings reassurance that the craft is still at cruise speed and something is wrong with the instrument. "Water in the pitot tube must be the problem" he thinks, reaching for the drain under the panel" As the water runs from tube onto his hand, the airspeed indicator slowly climbs back toward cruise, 30- 40 -60 -90- 140 bingo! "Another crisis is over and I'm still in the air." He wondered, "What's next?"

There's no waiting for this one. Aircraft engines run best on gasoline not water and the Lycoming up front is rapidly getting enough water to douse it and end Don's misery. But first a warning! Rough engine! RPM jumping! Surging power! All this means another crisis for the tired pilot. This time there is a surprisingly fast reaction by the pilot who has a lot of adrenaline flowing. His frustration with the storm has turned to anger. Quickly he pulls carburetor heat shutting off the inlet air and the deluge of water entering the airbox. With only a small drop in rpm, the engine returns to its normal smooth drone and continues to pull it pilot and Victoria on toward their place in history.

With the engine running smoothly Don again turns his attention to finding his position. Turning on the ADF he finds the target station. The needle centers straight ahead. He wonders "Can I be so lucky?" He checks the frequency and call letters of the station and pushes the test button on the ADF. The needle drops from center and again swings back as the button is released. This confirms his track. The station is dead ahead. Now Don is wondering if he will be out of the storm before reaching Penang! Just as quickly as the thought came, the rain ends, the clouds separate and Victoria emerges over a scattered overcast of tiny "safe" clouds. After contacting air-traffic control Taylor relaxes and gives thanks for getting through the worse storm of his flying career. He knows that soon he will land and another leg of his "around the world flight" will be over. He says out loud, " One leg at a time Victoria" "Tomorrow Singapore!"

# DICK PENMAN WINS

## Outstanding Workmanship Award!



*Editor's Note: Our congratulations to Dick Penman for winning the "Outstanding Workmanship Award for a plans built aircraft for Oshkosh 1993. His beautiful yellow and red "#9" sure rates a 10 in my book. It stands out in any crowd of homebuilts. For this issue of the newsletter Dick has included more of his finely drawn T-18 building details. Also our thanks to him for his help in obtaining T-18 tee-shirts for Oshkosh 93. RoxAnne and I proudly wear ours for flying events.*

March 9, 1994

Dear Richard:

Just a note to say hello to you and your family and to share a bit of news with you. As you know the T-18 tee-shirts and logo that I designed and produced for our 30th Anniversary celebration were very popular among our group at Oshkosh. I have since had a number of requests for other items as well as tee-shirts. So I am going ahead with the investment of digitizing the logo and will try to provide printed tee-shirts, embroidered polo shirts, hats and assorted color decals for aircraft. If you can work this information into the newsletter, it would be appreciated. All pricing will be based on zero profit. I will donate my services as last year.

I have included an article that appeared in a Detroit suburban newspaper about my T-18 and my experience at Oshkosh. I was very fortunate, my Thorp T-18, N199DP, won an EAA "Outstanding Workmanship" award for Plans Built Aircraft. Needless to say, this really topped off my flying summer!!

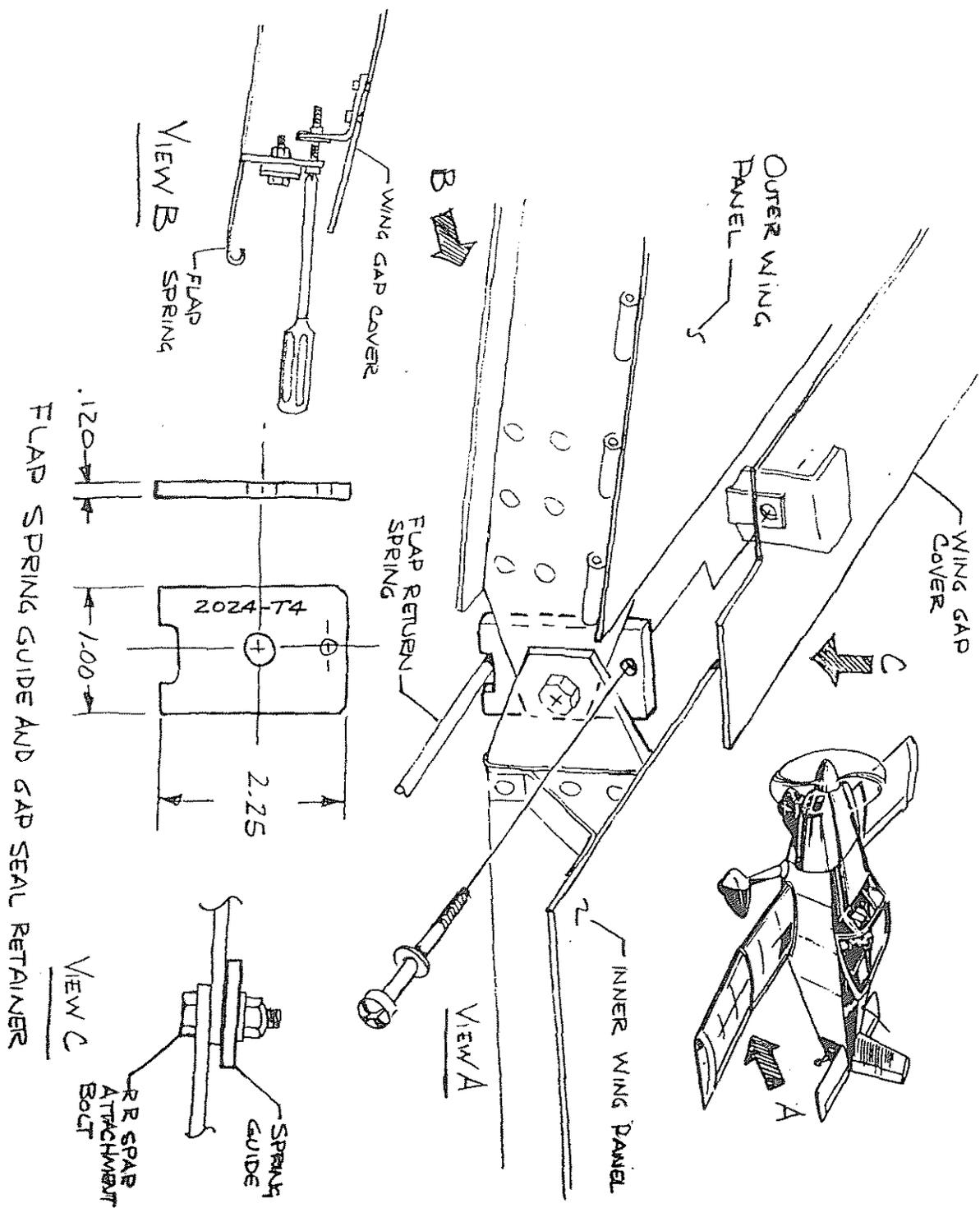
Based on my observation, we need to somehow give more recognition to those individuals who have contributed their time and effort to promoting the T-18 movement, as you have done. Our Annual T-18 dinner would be a great opportunity to recognize those who have organized fly-ins and/or associated events or otherwise contributed in some way to advancing the T-18 movement. We need to turn new people on to the T-18 as a Home Built project. It was the enthusiasm of the builders/pilots that got me started twenty years ago. This past year has been extraordinary for the Thorp T-18, let's keep up the momentum and do even better next year.

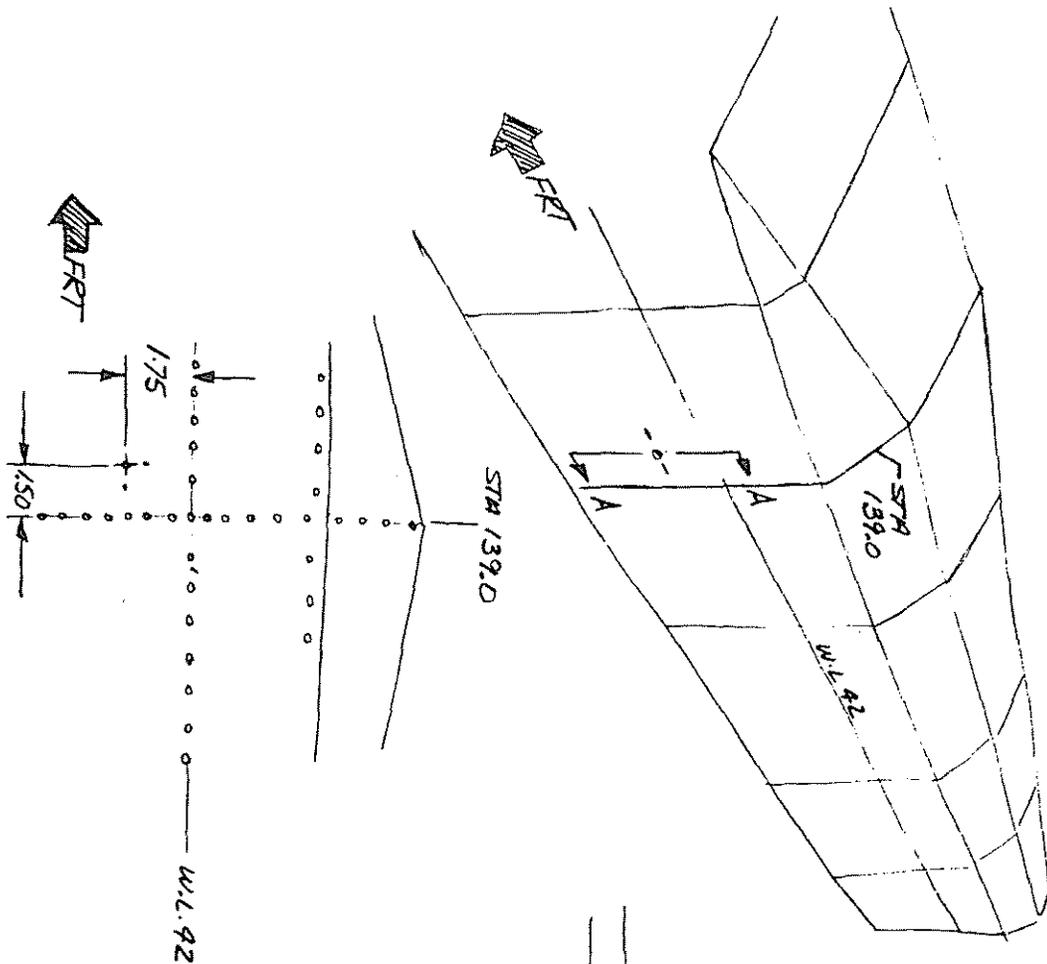
Also, a question came up about using a Flap Spring Guide to insulate the spring wire from the rear spar attachment fitting, a potential wear point on that fitting when the flaps are retracted. I have included a sketch of the guide that I used. It serves a dual purpose, to both guide the flap spring and retain the wing gap cover. Another question was raised about the static port location, so I am including a sketch on this as well. This location was worked out by Bob Dial in the early 70's and it works extremely well. However, a port must be installed on both sides of the fuselage to function properly.

Good flying,

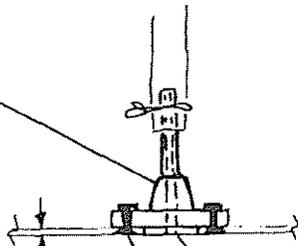
Dick Penman, EAA 60368  
5918 Bordman Road  
Dryden, MI 48428

*Dick's drawings follow on pages 8 and 9. Thanks to Dick Penman for some good tips!*





STATIC PORT LOCATION



MACHINE OR FABRICATE  
STATIC PORT FITTING FROM  
6061-T6 OR 2024-T4

SECTION A-A

Eddie Eiland



Project Report

My project is almost all primered and I hope to have the paint all done within another couple of months. Weather, the kids and running low on motivation have slowed progress on the finishing. I still have many things to do and complete besides the weight and balance and FAA paperwork. It has taken 4 months but I finally got my N number.

Here is a list of several minor things I've done to my project that might interest some.

1) ----- The Engine Cowling -----

I laid up my 4 piece cowling in molds loaned to me by Dick Cavin. I used as few layers of cloth as I felt would hold up in use. I used safety-poxy attempting to keep the weight as low as possible yet the strength up. The parts turned out lighter and thinner than most other cowlings I've seen but a problem showed up that I had not counted on. Because of how thin parts were after I assembled the 4 parts I was not pleased in having the cowling pucker between each fastener and that there were so many fasteners. After many hours of looking at it I decided to glue and rivet the 4 pieces together and then split the cowling all the way down each side and use 2 piano hinges to assemble the cowling, just like my Sonerai, I have not flown and there are some other problems introduced by doing it this way but it looks smoother that it would have otherwise, weighs 16 pounds unpainted, is quite strong and can be removed quickly.

2) ----- The Engine Baffeling -----

Partly because of the way I built the cowling and partly just because I think it could be sealed better I built my engine baffeling with a top. Basically it is a box with 2 front openings that

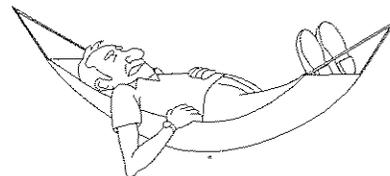
line up very accurately with the cowling. Because of this only about 20 linear inches is required to seal each side of the box to the cowling. The conventional method requires sealing about 118 inches to the top and front of the cowling. Also there should be much less load on the cowling and its attachment since there is no large pressure difference across the total area of the engine.

3) ---- Regreasing the Aileron Bellcrank ----

Once the aileron bellcrank is assembled into the wing it can't be regreased. Most of my controls are mounted in sealed ball bearings and I hated to build in a plain bearing that I could not even lubricate. With this thought I drilled and tapped a 1/4 -28 hole into the middle of the bellcrank and screwed in a grease zerk. To lubricate this crank takes only a small part of a stoke with the average grease gun and is accessible when the outer wing panel is removed. It might not need a shoot of grease even every other annual but at least I can easily regrease mine if I want to. I think with a bit of care a person could drill and tap the bellcrank even on the airplane.

Sincerely, Eddie Eiland.

I've been putting off sending this thinking I would get off high center on my painting but it hasn't happened.



FOR SALE      FOR SALE      FOR SALE

Sensenich Wood Prop (Brand new) 66x78 complete with the fitted spinner assembly. Call 817-766-2523

**For Sale:**      T-18 Parts  
                          New Gear  
                          Flat 0-320 engine mount (used)  
                          Center section needs one skin

Call make offer also some other parts & projects

**I want to buy Piper PA-20 Gear.**

Corky Downer P.O. Box 1258 Mt. Vernon, Tx 75457 Phone 903-588-2773



## **FUEL STARVATION EMERGENCY LANDINGS!**

- 1. Before the next flight remove the gas tank cap and using a flashlight look to see that a filter standup screen is installed in the tank outlet.**

Thanks to Rick and LouAnn Jones for this tip: On their trip back to Texas from the McAlester Fly-In the engine quit. Rick managed to get the aircraft down on a service road with no injuries but some damage to the landing gear and bottom of the wings. Rick reported that just a few minutes earlier they were flying low, due to low ceilings, over a large lake and if it would have happened their they could not have made it to shore. The analysis of the problem later showed that some RTV had been pumped into the aircraft's gas tank during a refueling transfer from Rick's auto. The RTV had been used to repair a breather line on the car earlier. LouAnn commented that she was not impressed with the T-18's glide ratio with the engine out and the prop windmilling. (See Steve Hawley's letter on this subject, following)

- 2. Check the gas tank breather line to be sure it has not collapsed from age.**

This can be done by taking the tank gas cap off and blowing into the breather tube. Another T-18 just made it to an airport with a blocked breather. The engine was about to quit from fuel starvation.

### **Steve Hawley's letter:**

I was sorry to hear of the forced landing of the Jones's but am happy that no one was hurt We don't like to think about it but it could happen to any of us at any time! As 'you know, I also had a forced landing several years ago. The experience has convinced me that every person who flies a T-18 should find an airport with a long runway, and practice engine-out emergency. I can assure you that the T-18, (or any other airplane) is a different animal when the engine is just windmilling, compared to pulling the throttle back to a slow idle, As an illustration, just think how much sweat you would generate hand turning the prop at about 600 RPM. This is what is happening when there is no power available and the prop is windmilling. All of that energy goes some where and you can bet it is not in extending the glide.

I also had bad weather coming home last Sunday. From McAlester I went northwest and hit I

-40 about 60 miles east of Oak City. The ceiling kept getting lower and lower until I was only about 200 feet directly above the west bound lanes. It cleared about 10 miles east of Oak City so I flew around the Class B airspace to the north. About 25 miles southwest of Santa Rosa NM and about 10 miles north of the White Sands Missile Test Range, I was following a little two lane NM state road heading for Socoro at about 200 feet above the ground on a SW heading when 4 F-14 Tomcats and 1 A-6 Intruder went over and around me only 75 or so feet above me. You can bet I was startled, They were heading due west. One of the F-14 pilots waved at me! I didn't wave back, I was busy! Regards,

Steve Hawley

## Non-Instrumented Rated Pilot flies into Clouds at night

I recently heard a testimonial to the merits of stall strips on the T-18 wing. A non-instrument rated pilot in a stall strip equipped T-18 flew into clouds at low altitude at night. He reduced power, initiated a turn, and pulled up a bit knowing that the ground was near. The pilot told me that after a few moments, he realized that he, was flying with the stick FULL AFT and the turn coordinator ball FULL to one side. He then centered the ball with rudder, eased the stick forward, and re-applied full power. The T-18 descended out of the bottom of the clouds at that time, roughly, 800 feet AGL over dark farm country. Any T-18 without stall strips would have departed in a spin with very little chance of recovery from low altitude at night.

The stall strips really do tame the T-18 stall to where it is relatively benign. Wind shear, wake turbulence, pilot tasking from an emergency situation, or disorientation in clouds could put any of us in a stalled situation at low altitude. The four T-18's I have flown with stall strips all experienced dramatic improvement in stall characteristics. All four aircraft behaved differently when stalled without stall strips, and there were differences between the aircraft with strips on, but all four saw dramatic improvement.

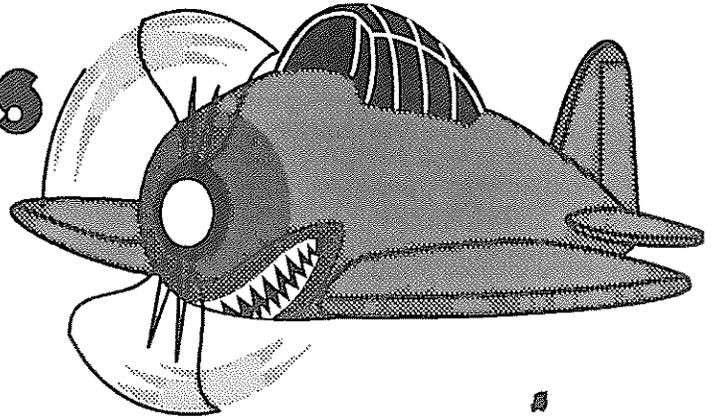
I recently had an opportunity to experiment with stall strips on a folding wing wide body with the LDS airfoil (Dave Fox's N444DD.) Stall characteristics in 4DD were altered from abrupt wing drop to the right to a stall in which the nose bobs up and down for several seconds before eventually breaking right (stick held full aft). Buffet is very pronounced as with the standard wing T-18.

For Dave's folding wing we experimented with strip positions immediately inboard and outboard of the dihedral break, with no noticeable difference in behavior between the two positions. We elected to place the strips on the center section. The folding wing appears to respond to stall strip treatment just as well as the "standard" wing.

The stall strips we have been using are described in Newsletter number 92 and may be made from scratch or by cutting Piper Cherokee strips in half. Piper part number 765399, approximately, \$53 at an FBO, includes two strips which may be cut in half to treat two T-18's. Best Wishes, Tom Kerns T-18 N10TK

# THE MCALESTER INTERCEPTORS

by Richard Snelson



At 6000 MSL and 75 NM out, McAlester traffic was loud and clear on 123.0 MHz. "That sounds like Bob Highley and Bill Williams" I said to my co-pilot Roy Farris. Then the familiar voice of Ron Hayes joined in. Ron & Jane Hayes, from Blue Springs, Missouri were just ahead. A call to Ron alerted our welcoming committee at McAlester.

The Highley and William's interceptors at McAlester quickly locked on their target to the north, and for the next 10 minutes it was a read back and forth of our "GPS" mileage indications, altitude and headings.

"Were showing 35 miles Bob."

"OK, Rich I'm at 18 miles out." The exchange continued until we made visual contact with the two speeding bullets coming our way. This was my first experience with 350 mph closing speeds and it did make my heart race. Highley made a steep banked climbing turn and was suddenly at my wing tip. All this from visual contact to interception in "5" seconds. The experience was an eye opener and showed just how little time you would have if meeting an unexpected aircraft head-on. It also proved that I wouldn't want to fly combat against "The Ace" Col. Bob Highley. Roy and I arrived at the fly-in with the welcoming committee strapped to our wing tip. I was glad to be back among the T-18 family and anxious to see old friends.

One friend that made it was Mac Booth.

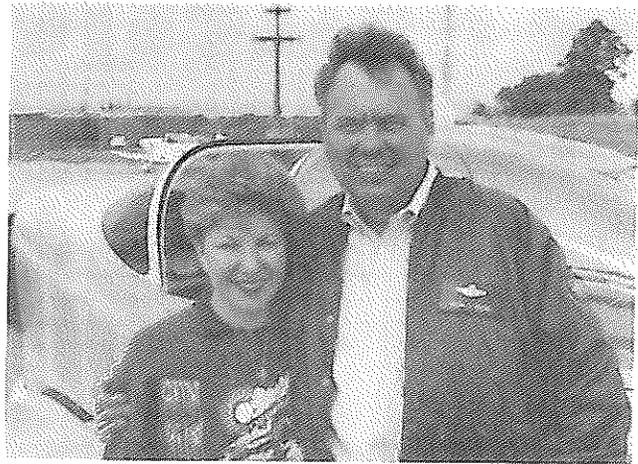
Mac is from Daleville, Alabama, and has attended every T-18 event that I can remember. In the past he has flown his white and orange trimmed Thorp through all kinds of weather to be with us. It was good to see Mac, realizing that he had serious health problems and two major surgeries this past year. Mac said his flying days are over and quickly added that he could still drive. He certainly proved that by driving over 600 miles to be with us at McAlester. That's real dedication.

A new T-18 called "Spot" was on the flight line this year. This chromate decorated Thorp belongs to Bill & Debbie Williams of Lakeland, Florida. Bill's metal work is top notch and I'm sure the aircraft will be beautiful when painted. Ask Bill why his T-18 is called "Spot" when you see him? Another Florida pilot and his wife making the trip to McAlester was Jim & Sue French with their newly purchased white with blue trim Thorp N66WT. I didn't think Jim would be out of the T-18 business very long.

If you noticed a lady walking the ramp taking down airplane numbers, don't worry it wasn't an FAA Inspector. It was Pat Eby. She makes it a point to get a list of the pilots and airplanes in attendance at each fly-in. Pat counted 19 airplanes this year. Thanks Pat. I'm still trying to get my count straight: let's see there were three look alike T-18s from Wichita Fall, Texas, Dave & Pat Eby, Stash Simpson flying with Doug

Ripley, and John Mihahla flying with Steve Kirik. Another Texas couple that makes it to most of the T-18 events was Bob & Helen Slagle of Clute, Texas and I don't want to forget Ken Morgan was there he's also from Texas. Gary Cotner's (Collinsville, OK) new paint job is beautiful and his Aymar-Demuth Prop (goes real fast) is costing the T-18 pilots lots of bucks as they try to slip a small upgrade, past their wives. Also from Oklahoma was Gary Holt and his T-18. Didn't get much of a chance to talk to him since he spends all the time in the air. Another Oklahoma couple will be spending their time in the air next year, that's Coyt and Wilma Johnston of Snyder, Oklahoma. He reports that it's down to the finishing touches on his T-18. Hurry up Coyt! We want to see your T-18 at Kentucky Dam this year. Gar Root & Paul Kellas made a long trip from California. It was good to see California represented at the event. A surprise person, heavy beard and long hair asked me, "Remember Me?" "I'm Marion Smallwood." I had given Marion his first tail-dragger check-out (case of the blind leading the blind) about 15 years back when we lived in Missouri. Marion has purchased a single place, retractable gear T-18 and was looking for tips on flying it. He lives in Lowell, Arkansas.

Saturday evening was another famous "Cook Out at McAlester". Leroy and Mary Holt of McAlester did a wonderful job getting our plates loaded with Big Burgers and lots of tasty side dishes. After stuffing our selves we set around the "camp fire" and watched the sun go down in the west. Don't believe the camp fire bit! We really did sit around the old flight service station, and talked T-18 adventures. An unnamed T-18 pilot asked, "What does a T-18 pilot do when he flies into bad weather? Well he does a 360 degree turn and gets the heck out of there." As the stories got deeper Jim and Judy Paine slipped away for a hop into the clear Oklahoma sky to watch the sunset. Judy says it's their favorite time to fly. There's romance folks!



*Bill & Debbie Williams with "Spot"*



*Ron & Jane Hayes, Tuning up to go to Dayton for the Wright Brothers Award!*



*Steve Kirik and John Mihahla*

Sunday morning brought an overcast sky and good flight conditions to the east. Not so lucky to the west and south. Steve Hawley, from Tucson, started home early and returned after about 40 minutes. He said he was down to 200 feet and it was time to do a 180. A little later Rick & LouAnn Jones from Cedar Hill, Texas, made it in to say hello. Rick said he had grass all over his tail wheel from the low flying on the way up. It was good to see the Jones and we're sorry about their bad luck on the way home, but glad they're safe and the airplane can be repaired. (See the Flight Safety Note on their

Fuel Starvation Problem) I left McAlester early and didn't get an opportunity to thank Gary & Maxine Green for their effort in planning and setting up another successful McAlester event. Thanks to the Greens!

When you attend a T-18 gathering, like McAlester, make sure that you're not the last person to fly or drive away. One minute you will be on the flight line with the T-18 family of friends and their airplanes and just a little later, they will have flown away and you will be there staring at the empty ramp. Boy does that spell l-o-n-e-l-y.

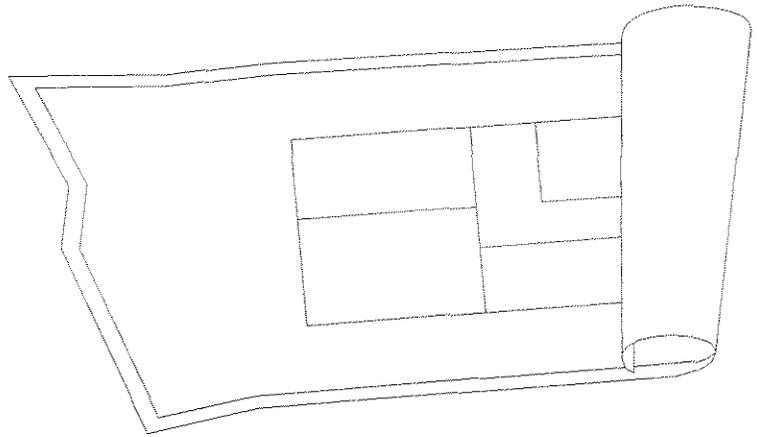


*Left to right Roy Farris, Rick Jones, Mac Booth and Jim Paine*

# I

## Starting a T-18 Project

by Joseph L. Kroupa



Joseph L. Kroupa, #800  
505 Twinning Dr. Dayton, Ohio, 45431

My interest in the T-18 started about two years ago, when I arrived at Oshkosh looking for a simple, cheap, and clean flying machine. I narrowed my choices down to the RV-6 and the T-18. Finding out that the RV-6 requires a massive permanent jig and blind drilling into underlying parts, I looked closer at the T-18. Learning the impressive design experience of John Thorp gave me confidence that the T-18 was the airplane for me.

Where to start? Get educated!! Join the local EAA chapter and get to know your fellow airplane builders. Find a person who exhibits great knowledge of aluminum construction, and adopt him/her as your mentor. Obtain copies of the old newsletters and start reading. The first task is to determine what you want from your airplane. Learn the possible options and the success other builders had with these options. Some options include, power-plants selection, folding wing, IFR capability, and wet wing. The knowledge gained from the newsletters will help you chose the right options for you.

The second task is building and furnishing a work shop. This includes, the purchase of hand tools, air tools, and a compressor. Working with your mentor can help you figure out which tools are required or just nice to have.

Some of the newsletters articles don't make a lick of sense until you start building an actual component. The ailerons are a good place to start. There are so-many little tricks and traps to fall into that you going to make that first mistake anyway, so don't be afraid. You will soon learn that 1) your work bench need not be 38 inches high, 2) predimpled holes may not necessarily line-up, 3) deburring your holes before and after dimpling is not required and can enlarge your holes, 4) driving rivets into enlarged holes is not the easiest thing to do, 5) drilling out bad rivets from enlarged holes can enlarge your holes, 6) driving rivets into enlarged enlarged-holes is the worst thing to do, and 7) working with a fancy \$12.95 back-bucking tool with a nylon sleeve is not as good as a hammer and a small steel block.

When you start to fully understand the news-letters and encounter your first experience that causes you to sweat profusely, then you will be proud to say that you are building your own T-18.

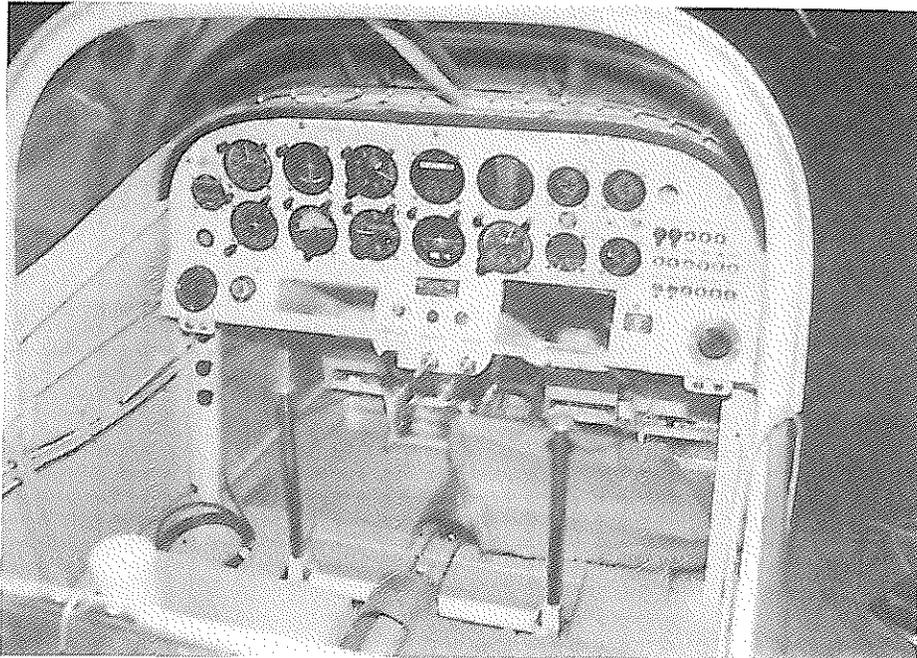
## A letter from Coyt & Wilma Johnston:

Dear Richard,

I am again going to try and send you a progress report on my T-18. I have been spending about 6 hours a day and 6 days a week on the T-18. It has a 0320 B1B Lycoming with B&C Alternator, starter and voltage regulator, an Oberg oil filter, all the instruments are electric, Northstar Loran, MKII 760CHG comm., AT-150 transponder/Alt encoding, Softcom intercom/recorder.

I have reached the tedious small operations which seem to take more time than all the rest. I have the cowling fitted and installed, I have had the canopy on order the last 2 months, no canopy yet. I am now fitting the carb heat box and preparing to once again cut the lower cowling for it. All electrical completed, am only waiting to complete the heat box and am making molds for exhaust fairings and modifying the wing tips to accommodate nav lights and strobes.

I am enclosing some photos of the T-18 for your use if you see fit. I am expecting to complete the project by June, and can hardly wait but you know all good things take time. I appreciate the newsletter and your time spent on it. We have a private airstrip and an annual fly-in, next to the last weekend in October. Am hoping to get some T-18s here next year. The closest we got to a T-18 was Charles T-18-6 from Enid. (An RV-6 folks) This year we had 22 aircraft fly-in and about 65 persons for our free barbecue lunch. Hope you and RoxAnne can make it sometime. Keep up the good work we appreciate it. Coyt & Wilma Johnston Pleasant Valley AP. Snyder, OK 73566. N160CJ.



*That's a good looking instrument panel Coyt*

## FOR SALE

### T-18 PROJECT #1070

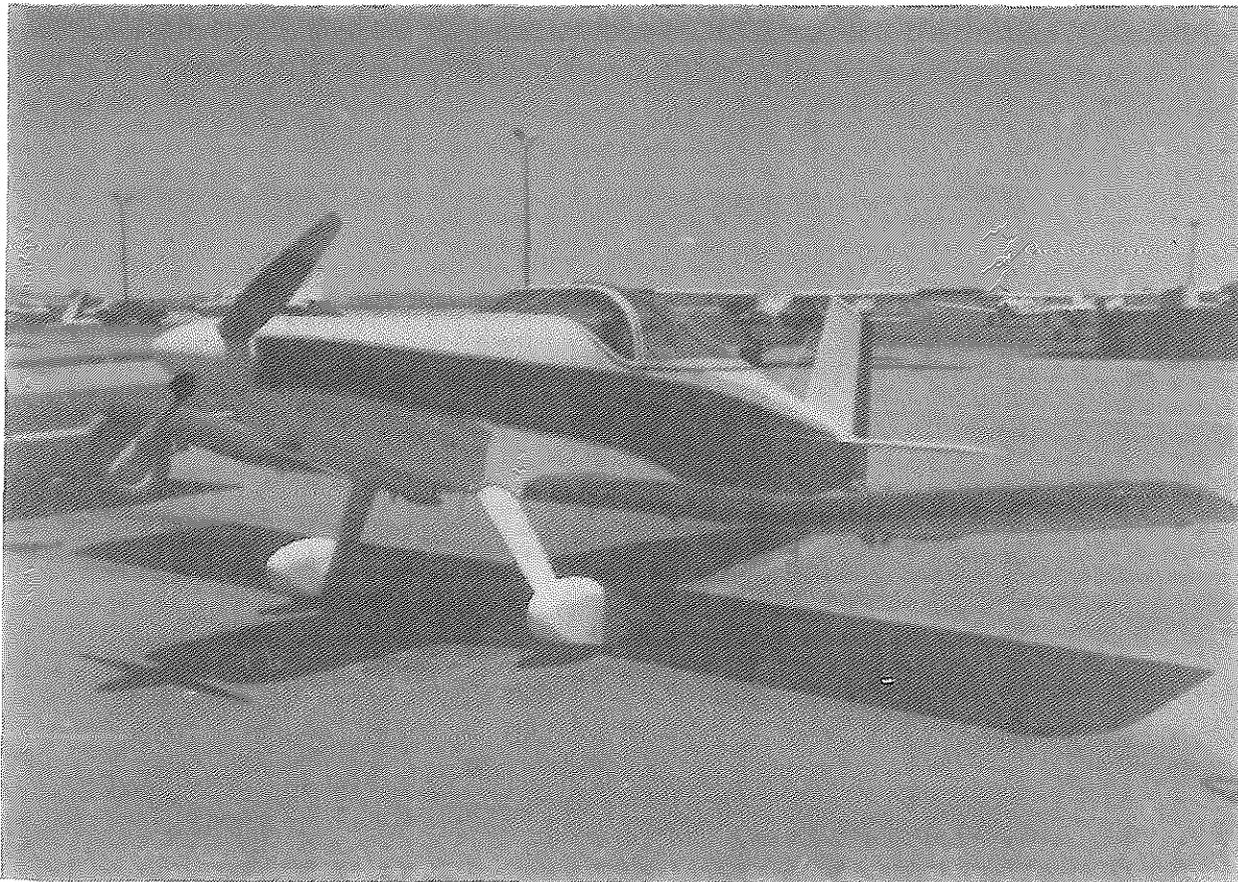
Standard Fuselage, Standard Wing, Fuselage metalwork 90% Complete, Wing, Ailerons, Flaps, Vertical Fin, Rudder, Stabilizer : Complete  
.2" Gear, Roll Bar, Windshield, NEW Cleveland Wheels and Brakes (Chrome), Tailwheel, Instrument Panel, Main Tank, Flap Actuator, Control System, Tunnels, All Fiberglass (Thorp Cowl), Metal Prop (M76), Some Flight Instruments. Basically, everything to complete, less : Engine, Electrical, Canopy, and Paint, All of the fun stuff is left to do! Price: \$8000  
Call Me in Texas (713) 440 - 8093 (Lee Walton)

This really is a great project, the previous builder was an **engineer**, had a machine shop, etc., and did really nice work. I hate to give this one up! I hope all is well with you, your family, and the T-18. See you in Oshkosh!

*Editor's Note: The pictures that Lee sent with the letter show fine workmanship on the project.*

## FOR SALE

THORP T-18 0320 150 HP, TT A 740 SMOH 275  
Escort II, Terra Xponder W/mode C, Flybuddy, Intercom, 10 out, 9 inside. \$20,500  
Contact, Jerry Brueckner Phone 805-944-6061

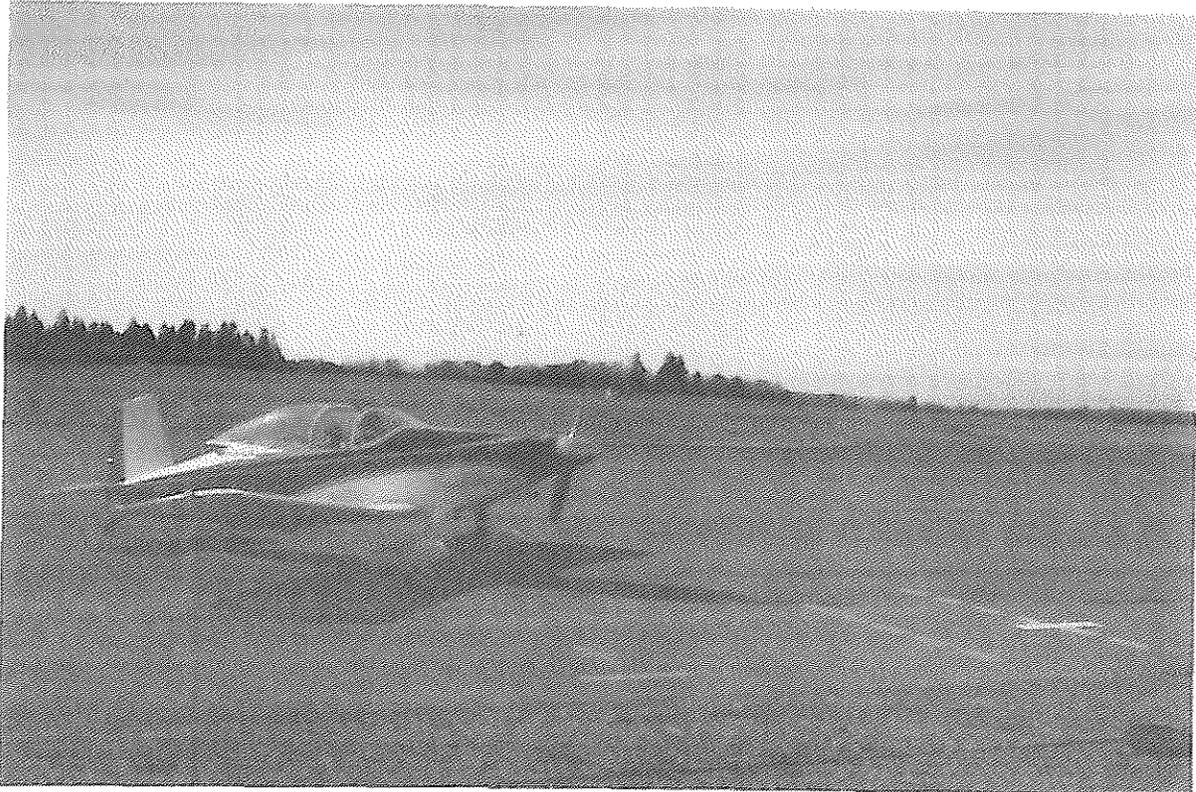


*Jerry Brueckner's Thorp ----For Sale*

## For Sale.

Thorp T-18 std. cockpit, folding wings serial number 2 6 2  
constructed by C.N.Fast Aug.1970 empty wt. 900# , loaded 1400# Metal Cowl  
Brakes Cleveland (Hyd)  
Prop Hendrickson 466F63  
Lycoming 0290-G H.P. Max 140 7:1 comp. ratio  
installed 1989:  
KT 76A Transponder  
AR 850 Encoder  
Flitcom 401 intercom  
Loran II Morrow 604  
A23 Loran antenna  
New Altimiter

WILLIAM L. AIRIS  
6416 EAST MERCER WAY  
MERCER ISLAND, WASHINGTON 98040



William Airis's Thorp T-18 "For Sale"

### FOR SALE

Stick Grips: Hard rubber 7/8" hole- will make full length spacer (alum) sleeve for \$5.00 each, The grip are \$24.95 plus ship & handling of \$3.00 each. Only have 5 pr. Really nice - If not satisfied return for full refund. I may have more coming from manufacture. Erwing Darby, Grants Pass, OR. Phone 503-862-2074

### FOR SALE AND WANTED

Howard Colling of SanMateo California has a T-18 project that he would consider selling. He would like to buy a completed or damaged T-18. Would also consider paying someone to do the work on his project. His phone #s are: (415) 358-9036 after 6:30 PM and (415) 349-9009 work.

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