

T-18 NEWSLETTER

Issue Number 85




IT'S OUR TURN!!! RICHARD & ROXANNE SNELSON AND N295RS

IN THIS ISSUE:

Young Eagles Flight Program
Engine Power Estimator
California Fly-In by Hal Stephens
Aircraft Painting (Building A Paint Booth) by R Snelson
Thorp Check Out by R Snelson
Flight Safety - Fuel Management
Kentucky Dam by R. Snelson
John Thorp Memorial Tribute Book

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.



Watch for this Emblem in the following newsletters. It will mark articles and plans for Oshkosh 93 and the T-18 30th Anniversary arrangements.

FLASH! FLASH! FLASH!

EAA Director Billy Henderson and Tom Poberezny have agreed to work with us to arrange both a 30th anniversary celebration for the T-18, and a remembrance for John Thorp during Oshkosh '93. This is wonderful news and offers us the chance to tell the world about the fine airplane we fly and its designer. Some of the ideas that have been discussed follow.

* I have asked Mrs. Thorp (Kay) if she would consider coming to Oshkosh 93 for the events. Her answer was yes! So I think we should raise the funds for her ticket and accommodations. Will you help? She said she was there a few weeks ago on a tour and went through the Museum. She told the guide her name and asked about seeing Tom. Unfortunately, the guide didn't do anything about it. That's too bad since I'm sure Tom would have wanted to say hello. She mentioned that he was a little boy the last time they met. Let's bring Kay to Oshkosh for the John Thorp remembrances. Contributions for ticket can be sent to me.

* On Friday the Nature Center may be available for a noon lunch and the John Thorp remembrance.

* That evening the banquet would again be held at Butch's Anchor Inn. With some special guest that might include Peter Garrison (wrote The article Thorp and Me in Flying Aug 92) and of course Mrs. Thorp.

* A T-18 Fly-by using either a select group or anyone that would like to be in it. I have heard that this needs to be better organized than the fly-by for the 25th anniversary since we had airplanes all over the place. I have asked Gary Cotner to help organize this event.

* A T-18 Forum, It would be nice to tie this in early in the week on either Friday or Saturday.

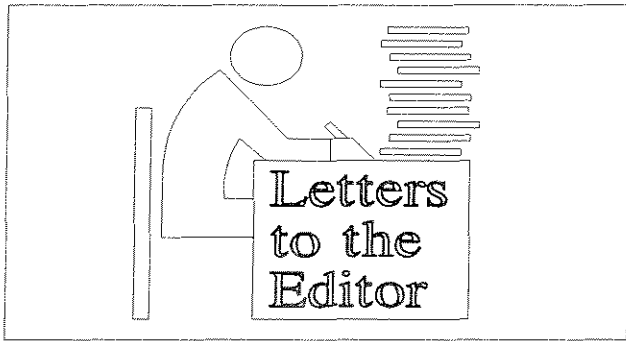
* T-18 special parking area in rows 9 & 10. We will need help setting this up and may need someone there to rope off the area early.

* Let's have at least 60 or more T-18 at Oshkosh '93. This year we had 20 T-18s registered, which just happened to be the third largest group of homebuilts on the field. Next year with a little effort by all of us we should be able to field 60 or more airplanes.

How about it T-18ers? Can we count on you to be at Oshkosh '93 and help us celebrate this occasion? Let me know now if you will plan on bringing your T-18 to Oshkosh. I will start the count now. Step forward folks, Tom has asked his staff to help in arranging this celebration, so we need to match his efforts with all the enthusiasm of a T-18 builder who just made his first flight. I need help in arranging and planning this event. Pick up the phone and call now I want your input to help make this a memorable occasion. Phone 217-935-4215

John Thorp's sister has prepared a book honoring his accomplishments and memory. The book is well done with many pictures taken through out John's life and career. See the details for obtaining it on page 19 of this newsletter.

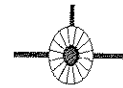
My congratulations to John R. Evens from Arvada, Colorado for winning the award for "Plans built Outstanding Workmanship at Oshkosh 92. John said it was quite a surprise when the box with the trophy arrived after the Fly-In since he had no idea that he had won. As I mentioned in the last newsletter, everyone needs to take some time and look his airplane over. The workmanship is truly outstanding. Everything is done simply, cleanly and shows great attention to detail. Great job John and Vicky.



Dear Richard,

Just a note to let you know how much I appreciate your kind words and the page you did in the last newsletter regarding our "Best T-18, Oshkosh '92" award. I'd like to let you know that we were surprised again about a week after Oshkosh, when a package arrived from the EAA. It was a beautiful trophy for "Plans built - outstanding workmanship". I sure felt about ten feet tall! Dean Cochran, myself and Vicki headed out for Placerville, CA on Saturday morning, Sept.19, but were turned back about a third of the way by solid clouds and thunderstorms in the mountains of Utah. We came back and landed in Grand Junction, CO and then at Paonia, CO to see a friend. Dean stayed on in the area overnight, and we headed home. We did see some beautiful country, but were disappointed in not making the fly-in. We're going to try for Prescott, and possibly Kentucky Dam and/or Kerrville. One other thing - just a comment about the Pacesetter props. Don't know if anyone else has had this experience or not, but it can't hurt to mention it to the guys. The quality and attention to detail that was shown by Bill Cassidy when I bought my original prop from him many years ago, seems to be lacking in the new ones. I bought one on which the bolt holes were not drilled perfectly perpendicular to the face, causing a misaligned front spinner bulkhead and wobbly spinner. There are ways to correct for that, of course, but a guy expects better for \$600.00. Also the leading edge of one tip was badly done. I sent it back and got another with the same poorly drilled holes! If you're thinking of buying
6855 Allison St. p. 2 one, check it out. That's it for now. I sure hope you're getting some good time in your bird, Richard. I know how exciting it is, and

believe me, after almost 2 years and 200 hours, it's still pretty much the same feeling every time. Good luck and thank you again! John Evens Arvada, CO 80004 Phone (303) 420-2724



October 1, 1991

Dear Rich, This letter is ten years in coming, it's been that long since I started the project and longer if one figures the time it took to decide what to build. Back then the hot ticket was the Vari-ease, but I wanted something that I could use off a grass strip and made of friendly aluminum! I guess that was 20 years ago, because I built our home with a basement entrance large enough for a T-18 fuselage to fit through. After the house was completed, I found a Cessna 170B in pieces which was to good a deal to pass up. By this time the folding wings and wide body were partly finished, couldn't made any progress on either project and knee keep it parts! After some soul searching I decided that the best thing to do was rebuild the 170 since it is a whole lot easier to put together parts then it is to make parts then put them together! It turned out well. The Cessna, the home, a side business, nothing, not once for one minute did the thought ever cross my mind not to finish the Thorpe, and a big contributing factor was the newsletter, I'd read the articles, then go into the basement work shop and just look at something. A year or so ago I once again picked up the project, It was hard remembering where I'd put things, but in less than a week it was as if there never had been a break of, well, years! And the newsletters had a good deal to do with it. I tell you this to thank you for taking up the banner. About ten years ago while on a business trip to California I drove out into the valley and visited John Thorpe at his home, at that time he was still able to get around a bit, he took me into his shop and talked at length about T-18 stuff. He mentioned what a treat it was when people buzzed his house with their new T-18's My birds getting there, the wings are complete and hanging from the floor joists, the rest is mostly complete with only the instrument panel and exhaust system left untouched. I said a year ago that I'd have it flying this fall, now I'm saying that I'll

have it done next fall! Can definitely see light at the end of the tunnel tho. I would be proud to have you look her over, I'm located about one hundred miles north of you , four miles from the Lake Lawn Lodge airport, Delavan Wisconsin. It takes me about eight minutes to get there. Sincerely: Bob Pernic 86 Dartmouth Rd Williams Bay, Wisconsin 53191 Phone 414-245-6445 home and 414-245-5555 office



Dear Richard, Progress on N925RS is slow. That isn't news. Had the engine all assembled only to find that the prop flange was out too much. The crankshaft had been passed by a repair station. Sent it to another shop, they wanted too much for the repair. The third shop gave it a red tag. It was an 0-290 plus cracks in the flange and bearing journals. I found a crank at Gibson and I think it is good. I still need a 0-320 crank or else sell a good case and four cylinders. Regards, Bob Slagle 39 Robin Hood Ln. Clute, TX 77531



Dear Richard,

By now I assume that you have heard that Paul died on August 17, following a decline which began in late January and progressed rapidly from the first of March. He died peacefully in his sleep, at home, where he wanted to be.

The cause of death was mesothelioma of the pleura of the left lung. This is a cancer that does not form a tumor or mass as such, but caused a thickening of the pleura wall. Since the diaphragm is involved, surgery is not an option, and the two currently approved chemotherapy treatments have rather horrendous side effects, according to the doctors, and in only 20% of the cases treated is there a 5% reduction in the size of the tumor. The National Cancer Institute in Bethesda, Maryland, has two experimental treatment programs and would have accepted Paul in one of those programs had he so chosen. But by April, we had planned to go east, he was no longer able to travel.

Aside from shortness of breath, and the cough which was the symptom that first caused him

to seek diagnosis last fall, and the evergrowing weakness, he did not suffer pain, for which we were thankful.

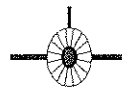
At 73, and in otherwise good health, he was too young, with too much living yet to do, for this to have happened to him and to us. I'm sure one of his greatest regrets, as it is for me, was not to be able to finish his T-18, which was 90-95% completed. We never discussed it--I couldn't and still can't without breaking up.

I am determined that somehow, his project WILL be completed, and will go to Oshkosh, with Paul listed as the principal builder. He deserves that much. I don't know how this will be accomplished--whether I can find a buyer who will agree to such a stipulation. Two members of Chapter 135 in Des Moines, have suggested that the chapter might take it on as a project. Whether that is a viable option, I don't know at this time. I wish there were a T-18er in that group, but there is not.

I will miss the semi annual meetings of the T-18ers , and I'll be thinking of you this weekend as you gather at Kentucky Dam Village. You all meant a great deal to Paul, and we always looked forward to our gatherings. Please give my regards to everyone. Sincerely, Helen Shifflet

P.S. Several years ago at Oshkosh, we purchased small T-18 pins--a replica of the plane. I would like to obtain at least eight more. Do you know whether they are still available, and from whom?

P.P.S. Congratulations, Richard, on completing your T-18!!



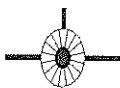
Dear Richard,

A short note to let you know that me, my wife and N711SH (#835) are moving to Lakeland, FL. I will be on the staff of SUN' N FUN and have already gotten permission to include a 30th yr. Thorp Tribute in the festivities - in fact, Tom Poberezny has been notified and is prepared to work with us at Oshkosh also. I'll be in touch with you soon to brainstorm the plan. My new address is Bob Highley 4171 Medulla Rd. Lakeland, FL 33811.

I am presently the proud owner of N8RK, having purchased it from Dr. Richard Wecker about a year ago. This bird is 0320 powered with standard wing, electric flaps, VFR instruments, lights and Loran. It was built by Rudy Kuhoth in 1975. This is the second T-18 I have owned, the first one being Don Thompson's N8DT. I sold 8DT in early 1991 when a neighbor liked my airplane more than his money. I had planned not to purchase another plane until I had an opportunity to fly many more types of homebuilts, having long ago given up on the production models as just not exciting enough. (I also like to go faster for less money than those "truck" drivers!) Well, after 6 months the bug bit me again, and I just couldn't find anything I liked better than a Thorp! So I went out and found another. I really do enjoy this little design. It's exciting to fly and gives me a real sense of pride when I take it out. Also, having been a former "training wheels" pilot, those squeaker three points really give me a sense of accomplishment.

Keep up the good work with the newsletter. I've missed it during my absence. hope to see you at Kentucky Dam next month.

Dennis Mitchell
833 G. St. #1
Salida, CO 81201
719-539-3403



Editor's Note: Larry D. Eversmeyer is getting ready to fuel inject his 0-320 and is looking for ideas, suggestions, drawings or pictures. Send them to Larry D. Eversmeyer, 10721 Eastlake Circle, Oklahoma City, OK 73162 or call him at (405) 728-1919.

Dear Richard, I want to become a member of the T-18 Mutual Aid Association. I do not know the membership fee so I'm enclosing check for \$25.00. We met at Ky Dam St. Park in '90', I'm the one that came in in a Navion. I made my first flight in my T-18 on Oct 10, 1991 after taking some duel from Dave Eby. The flight was uneventful except for stabilator trim system being out of rig badly. I now have 65 hrs. on airplane. It has a 150 HP Lycoming on it. The pitch on my propellor is much too course; Sensenich said to cut 1/2 inch off each tip, I did this and picked up about 75 RPM but I still need about 150 RPM more. This preamble is leading to a question: Do you have any information about any member that is using a 3 blade ground adjustable composite prop? If you know of such an installation, would you please send me the member's name and phone number as well as any printed info you have? I would have joined long ago but did not have your address. J. W. Perrine, 2722 Military Road, Jacksonville, AR 72076

Editor's Note: Sorry but I don't have any infomation on prop. Let's see what the membership can come up with for you.



Dear Richard, Enclosed are photos of all the T-18's at Placerville. Hal was planning on sending you the list of everyone who was able to attend.

N166BC is now ready for sign-off by the FAA. The inspection will be scheduled this coming week! I am still not prepared to fly it, with-out more tail dragger time.

I would like to thank Hal Stevens and everyone for the great time at Placerville. I am planning on holding a Northwest T-18 fly-in at my place. The week-end before Memorial Day is tentatively planned. Locatin Chehalem Airpark, Newberg OR, 14 miles south of Hillsboro. Brad Chapman 17505 Terrys LN. Newberg, OR 97132.



YOUNG EAGLES FLIGHT PROGRAM

I hope all of you get the opportunity to participate in the Young Eagles Flight Program. It's great fun to introduce a young person to flight and then to get a letter saying thanks. This young man has a great memory and recalls many of the details of his first flight in a T-18. I think he also has a great way of letting me off the hook for a couple of bounces on my landing. Thanks Marty, your excuse was even better than mine.

Dear Mr. Snelson,

Thank you very much for letting me ride in your plane. I was excited when we were going out the door to go camping and you called and asked me if I wanted to go flying. It was a little hard getting in the plane. I liked talking to you through the headset and listening to the control tower. It was fun taking off because you started going really fast and all of a sudden you were in the air. When we took off I saw Old Farm Lakes which is the subdivision next to my subdivision. Just after you told me we were at about 2500ft., it started to get bumpy. It felt like we were going down a gravel road very fast and I was a little scared because the wings were shaking. Then we went up to 2600ft. and the ride got smoother. I liked it when you pointed out Clinton Power Station. Then we saw your house and the nursing home where your mother is. After that we turned around and that is when I got to steer. First we turned to the left and you said "Think left" and then we turned to the right and you said "Think right". I was glad you turned the plane a little so I could see better. My favorite part was when we were going to land and we had to go past the runway. Then we did a really sharp turn to the left. I looked out your side because it was down and it was awesome!. The landing was bumpy because of the black stuff on the runway. Thanks again, I had a good time and really like your plane.

Martin Adam

Power Graph

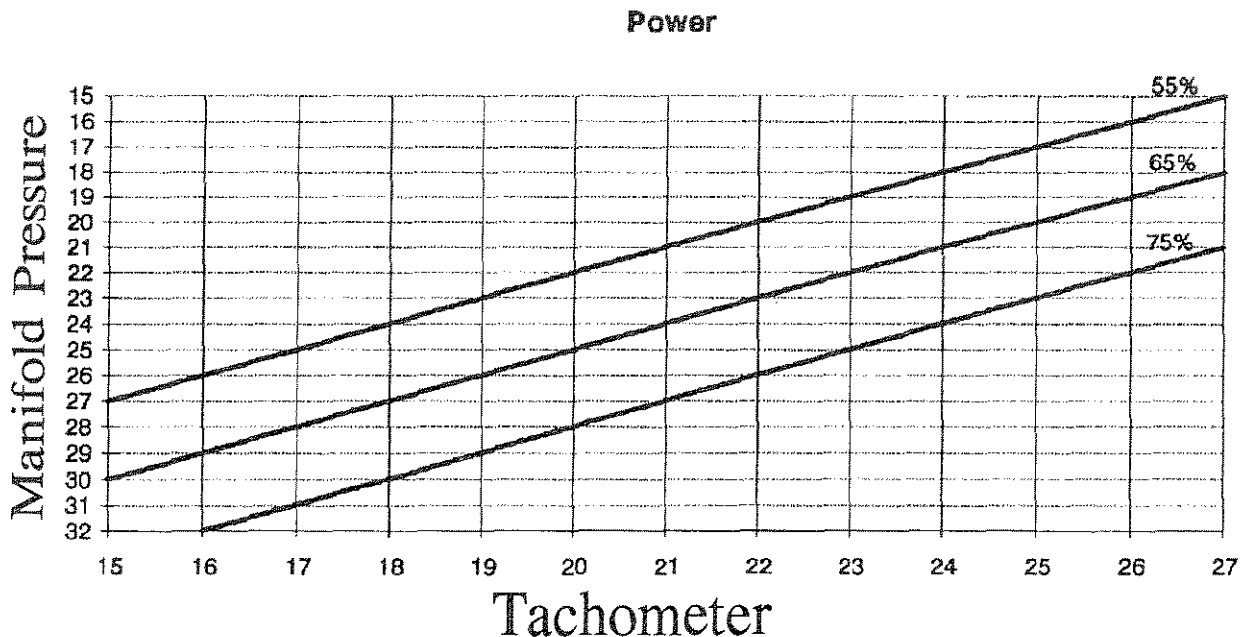
I developed the following graph, that can be used to determine your approximate power setting, from three data points given in one of the RV Newsletters. The data points are:

42 = 55% Power

45 = 65% Power

48 = 75% Power

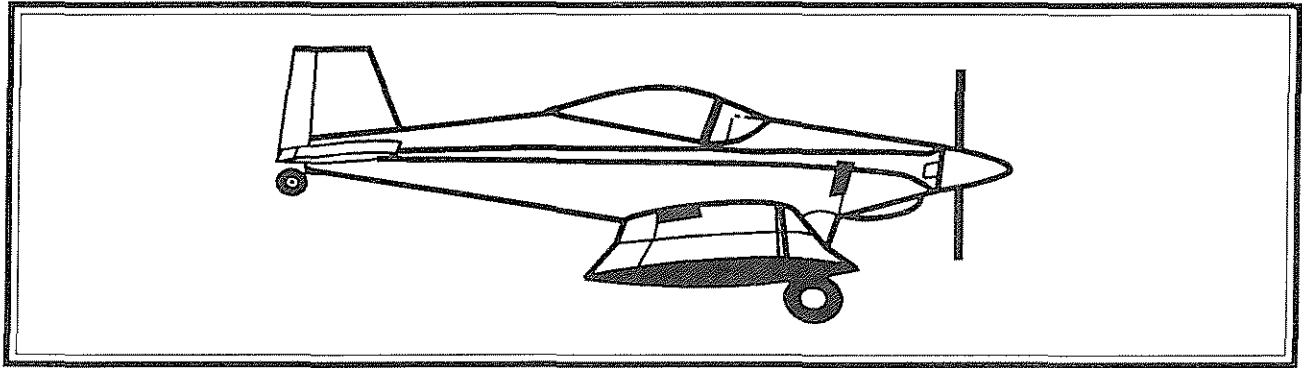
For any power setting you add the manifold reading to the first two digits of the tachometer reading to determine the first number. For example 24 inches of manifold and 2400 rpm gives you 48 which is equal to 75% power. By using the graph you can start with either manifold pressure or the tachometer reading and determine your approximate power setting. You may want to make a copy of the graph and carry it in your airplane for reference.



ITEMS FOR SALE

FOR SALE: Dynafocal Mount for 0-360 Lycoming Engine, large doughnut type, \$175.00 Call or write Les Conwell 1725 Oakland CT. Lutz, FL 33549 Phone 813-920-2931

FOR SALE: 2-Throttle vernier cables (lengths are 48" and 43") \$25each, Scott Tailwheel \$100, 0-250mph airspeed \$45, panel mount wet compass \$35, complete set of wide body plans \$175



California Fly-In

by Hal Stephens

Sept. 20, 1992

The California T-18 Flyin is concluded. We deem it a success! Fourteen airplanes on the field including the two under construction. Attendees included Steve Hawley of Tucson, AZ who was the first on the ground Friday afternoon with Len Robinson of San Dimas in the right seat (he's about 2/3 finished with his bird). Next in was Dave Tennant of Lompoc, California.

Upon orienting himself with the ground for a few minutes and meeting the others, Mr. Dave Tenant invited Jim Critchfield, the person for whom this fly-in honored, a ride in his beautiful T-18 Thorp Tiger. Jim Critchfield has been building his machine for over 27 years (started construction in 1963) and has never sat in a T-18 much less had a ride in one. Upon their return the smile on Jim's face was from ear to ear. His comment was "it sure was responsive and quick!" Dave gave him his first T-18 ride ever. Thanks a million Dave! It's worth all of that.

Later in the evening Harry Paine with his son Matt came in just before dark. Some of us went to the Elk's Lodge for their great Friday evening dinner. Harry and Matt set up their tent and prepared for their father and son camp out.

Saturday morning dawned bright and clear with visibility near 60 miles up at this 2500 foot level in the Sierras. When we arrived at the field after the motel pickup we found son, Matt got fed up with dad's snoring and packed off to the hangar with his bedroll to get the rest of a nights sleep.

As the morning rolled on the airplanes rolled in. Gordon MacDonald from Glendale, Ron Carroll and his wife, from Paradise, Lyle and Ann Trusty from Lancaster, Brad Chapman, from Newberg, Oregon, Tommy Thompson from near Las Vegas, Nevada, Wayne Irwin from Groveland along with Kirk Wallace who has recently inherited his father's project, Bob Cianflone and friend from Ventura, Gus Gordon and wife from Granada Hills, and Mel Clark drove in from Huntington Beach. Mel should be test flying within two years if he is to complete his ten year goal. Leo Corbalis and wife Janis drove up from San Jose as did Tom Hunter with friends from the Bay Area. Up from Sacramento in his beautiful blue bird was Harry Arnold who stayed for the day. Last but not least, Jon Hendrickson from Stockton and a friend as well as Gil Garcia and his wife came up to look at the beautiful airplanes

and have steak dinner with the group. Unfortunately, several people who had planned to attend did not arrive, three planes from Colorado and two from the Oakland/San Leandro area were sorely missed.

People were more interested in talking airplanes and critiquing Jim Critchfield's hangared T-18 project than in touring the apple hill orchards however, some of the ladies drove up the hill to taste the fresh apple juice and look at the boutiques.

By dinner time people were very hungry and a bit thirsty for a little processed California grape juice. The charcoal soon blazed in the BBQers and the steaks were sizzling. Lillian Critchfield made a huge pot of her "Santa Maria" baked beans to go along with the salads, french bread and her walnut cake. Needless to say, no one went away hungry. Also invited guests were some of the Chapter 512 EAA members who helped throughout the day.

"The Mountain Democrat", Placerville's newspaper sent a reporter and photographer to document the event for the townspeople. Several of our T-18 owners were interviewed and photographed with their machines. Special 'thanks' to Lyle and Anne Trust who put the reporter in their airplane, had her don the headset and described the thrill of flight through the plane's intercom.

The EAA members and Antique members opened their hangars for the group to see the beautifully restored Stinson, the Airmaster, the Lincoln-Page, the Wizzer motor bike and other wonderful toys of yesteryear.

Talk has it that the T-18 owners in mid-state California are considering another west coast fly-in. Dave Tennant, Harry Payne and others in the Santa Ynez, Lompoc, Pismo Beach/Cameryllo area might be coaxed with requests.

Nancy and I would like to say thanks to all who came to and participated in the fly-in and hopefully we'll see you one day soon. We enjoyed ourselves and hope you did also.

PS: It was beautiful to watch the formation flight of the Tigers leaving Placerville for their homes in South California.



Jim Critchfield's Thorp T-18 located at the Placerville Airport in California. His wife claims that the hanger is Jim's second home since he's there seven days a week. He has been building his tiger for over 27 years.



Bob & Patty Cionflone of Ventura, CA



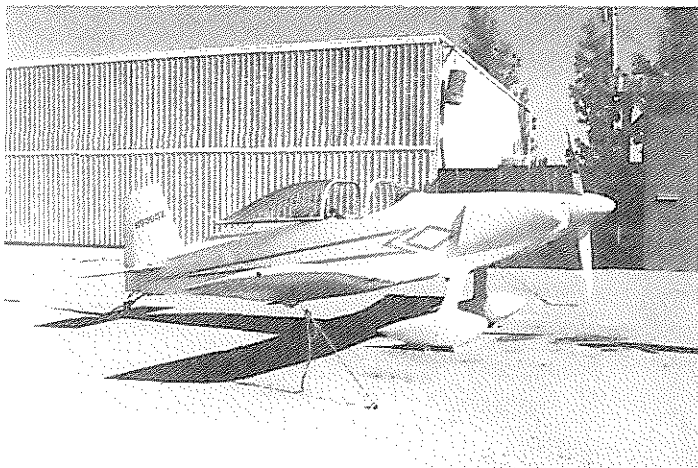
Harry Arnold's fine white with blue trim T-18
Harrys from Sacramento, CA



Tommy Thompson of Jean, Nevada



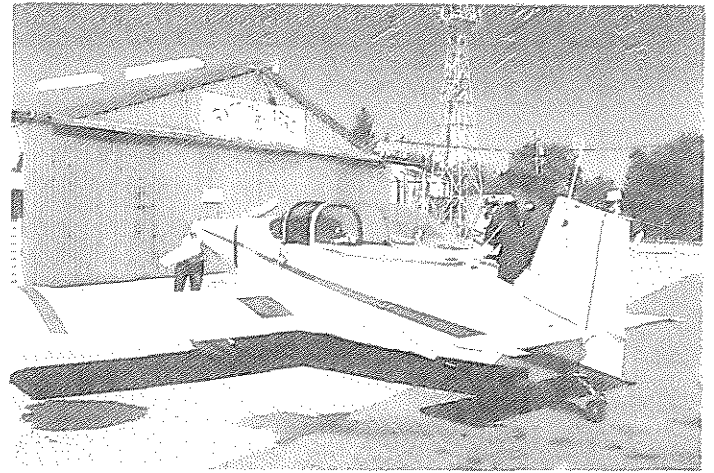
Wayne Irwin and his bright yellow orange "Devils"
paint job. Waynes from Groveland, CA



Steve Hawley of Tuscon, Az. This guy really gets
around with this airplane.

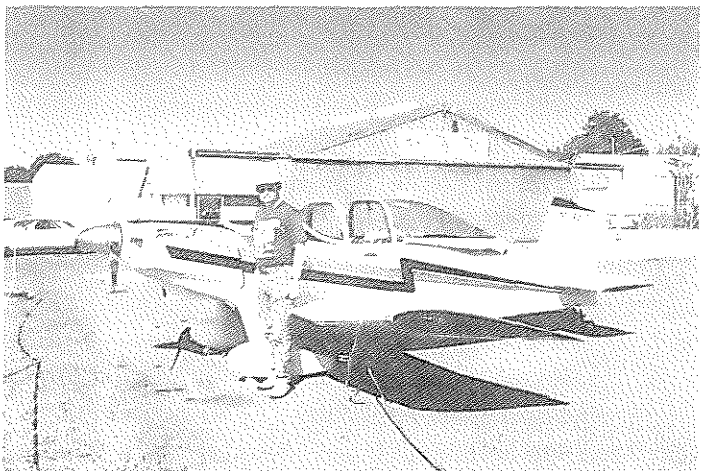


Gus Gordon beautiful star studded T-18, he's from
Granada Hills CA.



Lyle & Anne Trusty's T-18. They're from Lancaster CA.

Gordon Bordon and his bright orange T-18 from Atascadero, CA.



Gordon MacDonald and his T-18 from Glendale, CA

Dave Tennant and his "Sweet Dreams" from Lompoc, CA.

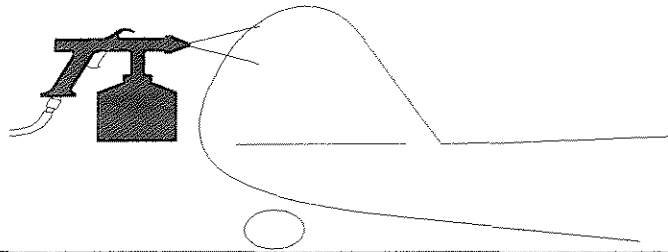


A late arrival, don't have the name of the owner. Records show that the plane was built in 74 by a R. Keller

We weren't sure of the owner or builder on this airplane. Any help fellows?

AIRCRAFT PAINTING

by
RICH SNELSON



Every time I read another article on aircraft painting that mentions painting outside on the drive way, I think here's a guy that doesn't live in "Windy" Illinois. We have enough trash in the air to turn a wet paint job into #80 sandpaper. An then there's our "B25" bird population. They know the second a wing panel is outside. The cry goes out "it's practice time". They have Norton Bomb sights built right in their butts. To heap even more havoc on a freshly sprayed panel we have "Kamikaze" insects. They impact the new paint and stick there fluttering in gooey circles, while the painter watches and wanders if he should pick the little bugger out of the mess or just opt for his permanent encapsulation. With all these undesirable decorative effects ahead of me, my goal was to build a dust, bird, and insect free paint booth.

I didn't want the booth to be a permanent fixture so it was designed to be quickly assembled in a garage or on a patio by using a few bolts and turn buckles to hold it together. The plans are included and illustrate my paint booth. The construction method uses 2 x 2 lumber and small plywood gussets that are glued and screwed into place with dry wall screws. The skeleton is covered with heavy clear plastic sheeting available from any hardware store. I had a larger area than most garages, so you may have to size the plans down to suit your site.

I started with a plastic floor but found it impossible to keep clean. There's no way to vacuum it, since the hose just sucks it up. The bare concrete floor works better and allows both vacuuming and scrubbing down before each use. Besides you won't believe the sealing job several coats of urethane will do to a concrete floor. Water will just bead up from then on.

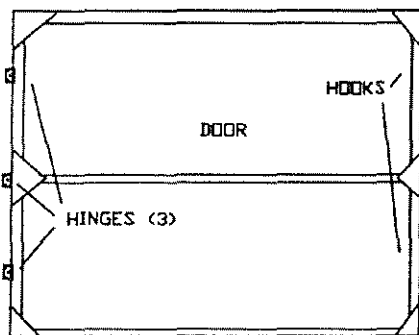
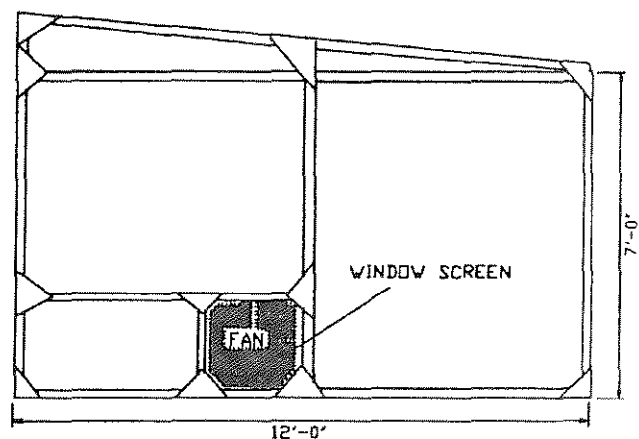
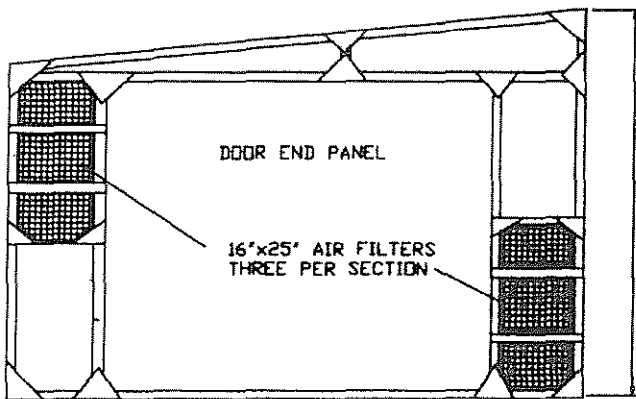
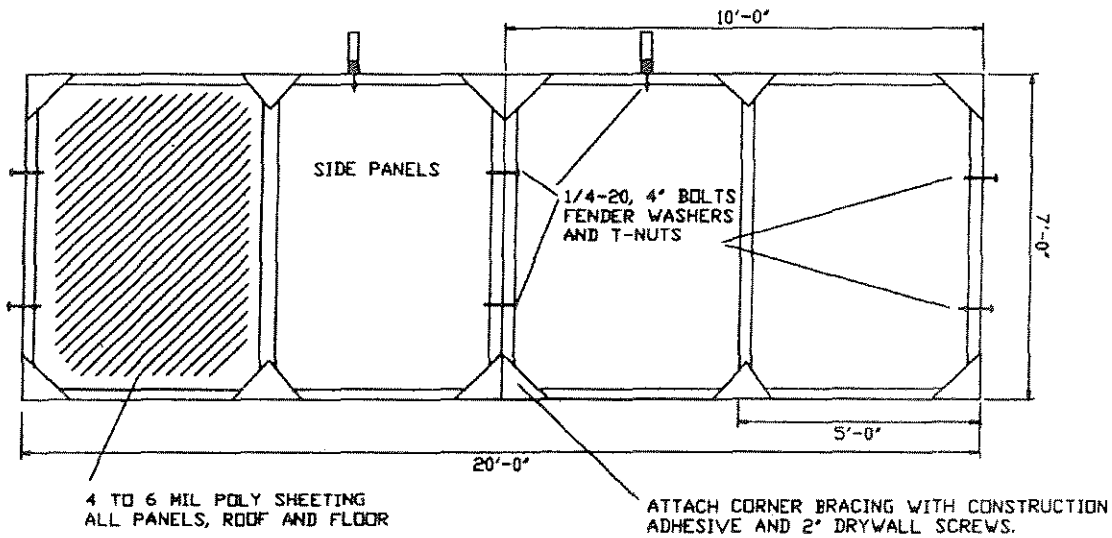
Standard furnace filters are installed on one end using common wood screws to hold them. A large window fan is mounted on the other side for air movement. I used the fan to suck air out of the paint booth. To do it over, I would turn the fan around and blow-in. This would pressurize the paint booth instead of sucking dirt & dust from every opening that's not sealed. To make the system deluxe the air from the fan would come in along a side and not be allowed to blow directly on the newly painted pieces. Another advantage of using the fan in a positive pressure direction would be a safety concern from explosion or combustion of the highly saturated air going across the hot fan motor on its way out.

Do everything you can to keep the booth clean. Don't do any wet or dry sanding in it. This really creates a nasty mess and leaves you with all kinds of dust and dirt that's impossible to get off the walls and floor. Preclean everything that you take inside. Use dry, oil free compressed air to blow parts off, get it to all cracks and crevices. Before each painting run, vacuum the floor and wet it down. Leave the fan off until your ready to paint. Turn it off as soon as your done. This will result in less movement of air and dust.

Lighting the work area and parts to be sprayed proved to be very difficult. After trying a number of combinations of lights it was clear that too much light was worse than not enough. The very bright Halogen shop lights proved to be way too bright. Direct bright light causes a glare on the wet paint that makes

it difficult to tell where you've painted. For those of you that haven't used a spray system, the first coat is easy to put on since you can see exactly where you've been. The second coat is much more difficult since the only way you can tell where you've been is to look for the "wet area" being sprayed. By opening all the garage doors and working in the day time I got the best light. I have two sky-lights in my barn and at midday the light was nearly perfect. Next to that, several 100 watt incandescent bulbs worked out the best for me. Dave Eby the real master at this, sprays with a paint gun in one hand and a light in the other. By correctly positioning the light you can get a reflection from the wet paint area.

I hope this article is helpful and will get you on the way painting or repainting your airplane. I'll have another article on the spray painting process in the next newsletter.

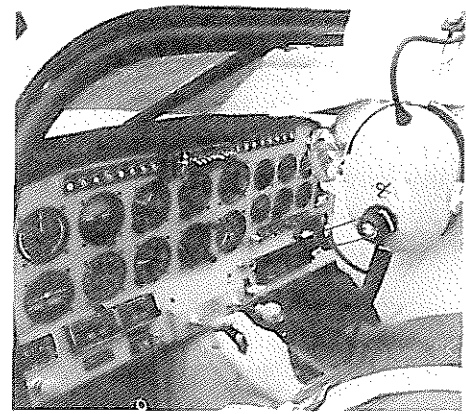


SPRAY BOOTH PROJECT
March '92

FRAME LUMBER IS 2"x2" PINE/SPRUCE
CORNER PLATES OF 3/8" PLYWOOD

Thorp Check Out

by Richard Snelson



White man's legend has it that Wichita Falls was named by an Indian woman wading in the river there. Finding it waist deep she said "Wichita" the Indian word for that depth. Before my trip to Wichita Falls I felt "up to my waist" in problems and details about flying my new T-18. However during the four days I spent in Wichita Falls the problem and details for that first flight were all worked out. This article is about the advice and tips from two very experienced T-18 pilots, Dave Eby and Bryant Rolland. I hope it proves valuable to future T-18 pilots or their instructors.

Wichita Falls claims fame for the most T-18s for its population size. That number is now four. The first was built by Bryant Rolland and completed in 1978. Bryant can claim fame as being "current in Mid-Airs" after his run in with a Cessna while on approach to Oshkosh in 1990. With his wing bent and a stall speed of 140 mph, he was able to spiral and land. His plane is now rebuilt with a new wing and flies as good as new.

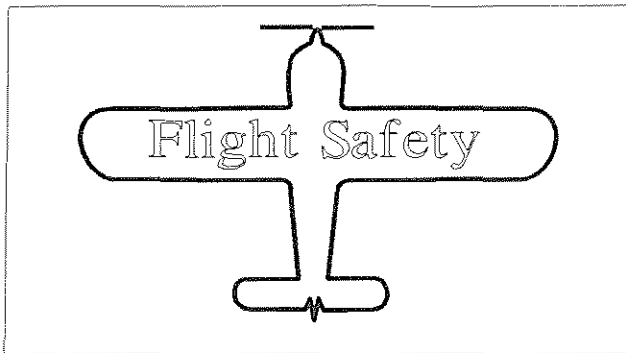
My check-out started with Bryant on Friday afternoon, lucky fellow was filling in for Dave Eby, who was returning the next day. He's flown many hours in his career as a professional flight instructor, flight examiner, and commercial pilot. As our goal Bryant wanted to introduce me to the T-18 and how to handle it in steep turns, slow flight and stalls. His advice centered on pitch control and what to look for over the nose of the in flight T-18. Since I'm tall and sit up near the canopy top, in a climb I could see about 1 inch between the cowl and the horizon. This pitch attitude resulted in an airspeed of 100 mph and a safe climb. Close behind pitch in importance, Bryant placed rudder control. He continually stressed the need to keep the ball centered when maneuvering and backed it up with demonstration of what occurs in uncoordinated flight. He knows of at least one T-18 accident caused by cross controlling while getting too slow on approach. After getting control of the nose in turns to the right and left we moved into stalls and stall recoveries.

Recognition of approaching stalls was not difficult, each could be felt and heard as the fuselage shuttered at the onset. Recovery was normal, drop the nose slightly and apply full power. Bryant then had me move into a much deeper, more developed stall that broke sharply straight ahead, but Wow! nose down. My reaction, which was wrong, was to quickly pull back on the stick and apply full power. This resulted in "wham" a secondary stall that I was not expecting. Bryant recovered and explained the correct method for stall recovery. First level the wings, no power, especially with the nose straight down, and give the plane a couple of seconds to gain some flying speed before starting back with the stick. A trade off is involved to get enough speed, not too much, and return to level flight without excessive G loading. With the air work done we headed back to the hanger for a discussion of our flight and what I had learned. My thoughts were already on tomorrow and what Dave Eby called a piece of cake, take offs and landings.

For those of you that haven't meet Dave Eby he likes to be referred to as a 62 year old crop duster. During a TV interview the reporter asked, "Isn't it exciting flying around way up there in the sky?" Dave replied "No, but it sure gets exciting when your flying 4 to 5 feet above the ground!" That statment really sums up Dave and his personality. As mentioned in a previous Newsletter, Dave has wooden block inserts in each of his brake pedals. They are very effective in helping to slide your feet from the rudder pedals to the brakes. He was quick to point out that the quicker my feet got sore the better my rudder control would be. So guess what folks! Off with the shoes and do it barefooted. Were talking in basic here so for those old time tail-dragger pilots your excused, go read someting else. For all the rest: For take off line up just to the right of the runway center line, this puts you in position to watch the line with your peripheral vision, while watching some object at the far end of the runway for aircraft nose alignment. It's tricky here because the nose of a T-18 is built pointing five degrees to the right, you sit on the left side of the nose and if you aim the spinner right down the runway your won't be going straight ahead. Pick your aiming point, put in power, and feed in right rudder to hold your alignment. Keep it right there along side the runway center line. If you can't and your headed for the bushes, only adjust your direction enough to get it straight, then in small amounts correct your travel to bring it back to the runway center line. If you don't you will find that you're overcorrecting in both directions. Assuming a no crosswind condition you will know that you've got it down when you can put your left foot on the floor and do it all by just applying gradual right rudder. Dave taught me to begin the takeoff roll with the stick back and to let the tail fly it self off as speed permits. A note here,I didn't remember this later in one of my early solo T-18 take-offs and managed to horse the tail up way too quickly before I had enough speed for the rudder to be effective. This was with a left cross wind, that made it worse and proceeded to cock me to the left and caused the darn thing to act liked it was possessed by the devil as it ran off the runway, barely missing a runway light. Normally by the time the tail flies its self off you are well on the way to a good takeoff since rudder control in a T-18 is very effective.

Dave's instructions for landing started with airspeed control, his recommendations included slowing to no less than 100 mph on base with 90 mph targeted for final. Control coordination is critical through out the approach turns, use the rudder, keep the ball centered. On final Dave brought in full flaps, at that time a small pitch adjustment was needed to maintain airspeed. Right on down starting the flare at 15 to 20 feet. Dave's instructions for landing were to flare as if you were going to just put the mains on then continue to hold if off and convert the landing to a full stall three point touchdown. After three point contact the stick is brought full back to assure solid tailwheel contact for directional control. He showed me how to judge this attitude by sitting in the plane during taxi and noting the nose position. It's very important to keep the nose there, and no higher. With a bounce or nose high attitude, apply a little power, gentle with the stick, keep it comming back, avoid oscillations that could lead to loss of directional control. If that fails, go around, you need the practice anyway. Make the landing just to the right of the center line and don't cross it. Use a point on the distant end of the runway to steer and correct heading errors quickly. At touch down it very important to have the airplane headed exactly parallel to the runway centerline or side. Any cocking at that point is hard to correct and can result in a rough ride and possibly a ground loop. Dave gave me some practice at wheel landings but advised the use of the three point until I had the directional control down pat.

Dave asked me to write this so he would have it to give to any new T-18 pilots he would check out. His advice worked well for me and helped to get me through my test flying and the first 25 hours, some of which caused me more than just a few grey hairs. My advice for those that are just finishing a project and haven't been flying for a while is to get tail dragger instruction and practice under your belt. After that take Dave up on his offer to put you in the left seat of his airplane and check you out. Thanks Dave



Fuel Management Problems Involving General Aviation Non-corporate Aircraft:

By Betty Hicks Reprint from NASA'S Aviation Safety Reporting System Number 151 Dec 91

Editor's Note: Betty Hicks is an ASRS Research Consultant. She has been Coordinator of the Aviation Program at Foothill College in Los Altos, California since 1972; holds an ATP certificate; and has logged more than 6,000 hours as a pilot and flight instructor in a wide variety of aircraft. This is Part 1 of a two-part research article by Ms. Hicks. Part 2 will be published next month.

"I charted a course from ABC to XYZ," wrote a pilot on his ASRS form. "The distance is 35 nautical miles. I figured a 15 to 20 minute flight. We took off with close to 1/4 tank in the left wing, and 1/8 in the right tank, which I figured at 10 gallons remaining. It was pitch dark. I climbed at full power to 11,000 feet from the 5,900-foot airport. The climb rapidly brought the tank gauges to empty about five minutes before arriving over XYZ." The pilot saw no rotating beacon at the destination airport, and no runway lights. A mayday call on UNICOM brought a response from another pilot working on his airplane in an XYZ hangar. The airport was closed for construction, was the bad news, but the Samaritan on the surface volunteered to align his truck lights down the one available runway. The engine quit as the pilot turned base leg. The frightened and angry pilot protested to the FAA that his predicament was caused by an inefficient NOTAM distribution system, and that even if he had filed a VFR flight plan, the information about airport closure would not have been available.

Yet research by ASR determined that the *Airport /Facility Directory* (a critical inclusion in the "all available information" pilots are required to seek prior to cross-country flight) clearly stated that the airport was closed indefinitely for construction and specified the proper source of NOTAM information.

A Persistent Safety Problem. *Fuel exhaustion (out of fuel) and fuel starvation* (fuel in tanks but unavailable to the engine due to system problems or pilot mismanagement) are leading causes of general aviation, non-corporate accidents and incidents nationally. A recent review of incidents reported to the Aviation Safety Reporting System (ASRS) confirmed that fuel mismanagement incidents are a persistent occurrence in these data, as well. The ASRS study set included 111 fuel exhaustion/starvation reports submitted to the ASRS by general aviation, non-corporate pilots between January 1986 and April 1991. Our objectives were: 1) to classify and quantify the reasons pilots allow tanks to go dry; 2) to suggest, after examination of research findings, preventive procedures and attitudes that might be incorporated into basic flight training and into the various formats of general aviation recurrent training. A survey of reporters' qualifications revealed that, contrary to the research team's preliminary expectations, these were not only neophyte pilots running tanks dry, or failing to throw the switch to another tank. They were certificated as student through airline transport pilots. Over half had logged 500 hours or more total flight time. One out of every seven reports was submitted by a flight instructor. Why did the 111 pilots reporting to ASRS fly through their fuel reserves, so that 107 of them had to make unscheduled landings? What can we learn from them about procedures and judgments that contribute to fuel exhaustion/starvation incidents?

Primary Causes of Fuel Emergencies. The reporters in the ASRS study set identified several primary causes for their fuel emergencies: trust in unreliable fuel gauges; careless preflight inspections; inaccurate flight planning; weather fac-

tors; and fuel system malfunctions and mismanagement.

Trust in Unreliable Gauges. Twenty-two pilots in the ASRS study set attributed their fuel emergencies to trust in the notoriously unreliable light aircraft fuel gauges. Yet almost half of these pilots also stated they knew the gauges were unreliable before their incidents occurred. "My fuel computations and fuel gauges indicated that I still had one hour of fuel remaining when both engines flamed out," wrote a ferry pilot who left his out-of-gas twin on a farm.

Careless Preflight Inspection. Loose or missing fuel caps and quick drains stuck in an open position were overlooked during preflight in 13 cases. At the same time, three-fourths of the study reporters made no mention in their ASRS reports that they had checked fuel supply and the fuel system visually. Typical was this account of inadequate preflight: A pilot on a photo mission assumed the FBO had topped the tanks, but he preflighted nonetheless. "I stuck two fingers in the tank and was convinced that I felt fuel to the top." Forty minutes later he landed, fuel exhausted, on a road running through a cotton field.

Inaccurate Flight Planning. Of the 111 reporters, thirty reported both their preflight estimates of aircraft endurance and also the time in flight at which the fuel exhaustion occurred. The average error overestimated endurance by 55 minutes. Yet only one third of these same reporters indicated they had ever calculated actual fuel burn for the aircraft involved in the incident, and half of these performed their calculations after the fuel exhaustion incidents occurred. One of these reporters was breaking in a new engine at a higher RPM than settings previously used. "I now see my error," wrote the pilot, following a safe out-of-gas landing in a field. "My fuel burn calculation should have taken into consideration the higher RPMs." Ten reporters asserted that the aircraft owner's manual had given incorrect figures on expected fuel burn, or misinformation

on usable fuel. "According to the manufacturer's manual there should have been sufficient fuel to make this flight, plus another hour's extra time," wrote the pilot of a twin that landed out of fuel on a busy city street.

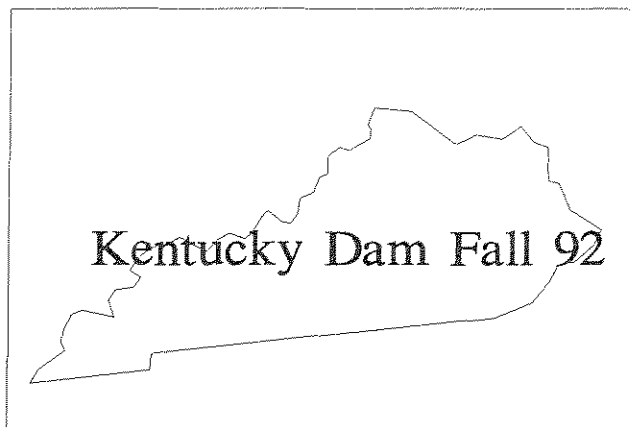
Weather factors. Sixteen pilots reported that weather especially misplaced faith in winds aloft forecasts was responsible for their fates. "I didn't think such a fast airplane would be so drastically affected by headwinds," confessed one shocked reporter. Thirty of the fuel exhaustion/starvation incidents involved pilots on IFR flight plans. Several of these pilots accepted IFR clearances beyond the range of their aircraft.

Fuel System Malfunctions/Mismanagement. Twelve pilots reported fuel system malfunctions, but most of these problems could have been detected by a thorough preflight inspection. In ten incidents, failure to switch tanks caused fuel starvation.



Ron & Jane Hayes builders of a beautiful T-18 that was completed and flown for the first time this summer. The Hayes are from Blue Springs, MO. Pictures of the plane in the next newsletter.

We were level at 3000 feet with the airspeed indicating 170 mph. Our course was due south toward Kentucky Dam. The project had become a flying reality. My thoughts were of my first trip to Kentucky Dam in 1989 with Paul Kirik in his T-18. That trip and the people I met, were to provide the inspiration, and encouragement needed to “keep building”. With our Loran providing the heading and RoxAnne following our progress on the sectional we were nearing “our own” arrival at Kentucky Dam. T-18 activity could be heard on 122.8. “Ky Dam 747JP is turning final for 27”.

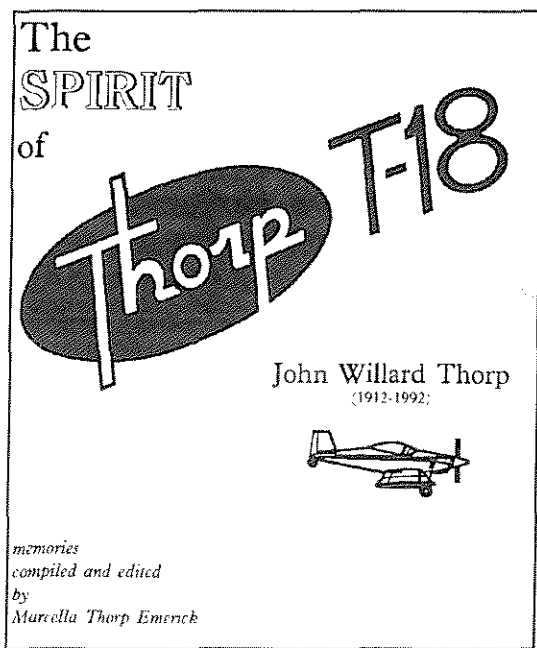


Being a little nervous about my first landing in front of the T-18 elite of the world I called at about 15 out. “Kentucky Dam 295RS is 15 to the north inbound.” Well Lee Skillman was waiting and his reply was immediate. “295RS Kentucky Dam, come on down Rich there’s about 40 people here, all waiting to watch you land.” Well I decided right then that no matter how good or bad this landing turned out I would say RoxAnne did it. With my black & white pride stable on final with full flaps at 90mph and everything under control my confidence returned. The landing was a squeaker.

Later after watching Lee with Jim Paine in N747JP, make a couple landings for each approach I paid him back by telling him how easy it was and that RoxAnne really made our squeaker landing. Little did he know that it was nothing like the one I’d made earlier in Lincoln, Illinois as I landed to pick up RoxAnne near her school. After that one I looked around hoping no one was watching. As I taxied up she came around the hanger. She quipped, “Bet you hoped no one was watching”. Oh well! We had arrived at Kentucky Dam on a great weekend of seeing friends and flying was still ahead.

Saturday morning found everyone at the airport. By my count we had fifteen T-18s present. To prove T-18 building is alive and well, we had 15 builders present. Jim Paine is one great trooper. He made sure all the builders and family got a T-18 ride. Thanks Jim! The highlight of the weekend came late Saturday as a six plane formation took to the air. As the group of six was passing over Ky Dam airport Dave Eby and I were turning on final. Dave was flying my plane and firewalled it. The group of six became seven! "The Magnificent Seven" After several passes over the airport they formed up for the landing and peeled off on a five count. All the planes were recovered in order! RoxAnne said she didn't know whether to cheer or salute! Jim French got the whole thing on video and sent me a copy. Thanks Jim! Mine is nearly worn out from watching N295RS in the fly-bys.

We had a full house at the Saturday evening banquet with over sixty people in attendance. We discussed a Spring 93 get-together, possibly in Texas and a return to Kentucky Dam in the Fall. The food was great and the company even better. Without question, the small local T-18 get-togethers provide the very best opportunity for learning about the airplane and what it takes to build one. Hope to see a lot of new faces at the Spring T-18 Get-Together. More will follow!



Richard, ----May I please introduce myself--John W. Thorp's sister Our friend Dick Eklund advised me to send you this enclosed blurb and copy of the memorial tribute I have compiled honoring the accomplishments and memories of my brother. Any help you and your-colleagues can offer to help in the distribution and sale of these booklets will be greatly appreciated ...

He also tells me of plans for honoring my brother's contributions to EAA with ceremonies at the next conference. I would like to be included if that is possible, as J.W. and I are among the few last members of our generation in a large California pioneer family. If you have comments regarding this and plans, I would appreciate hearing from you. I think his wife, Kay, will be making plans to also attend. She is doing well.

I hope you will forgive me for using some of your

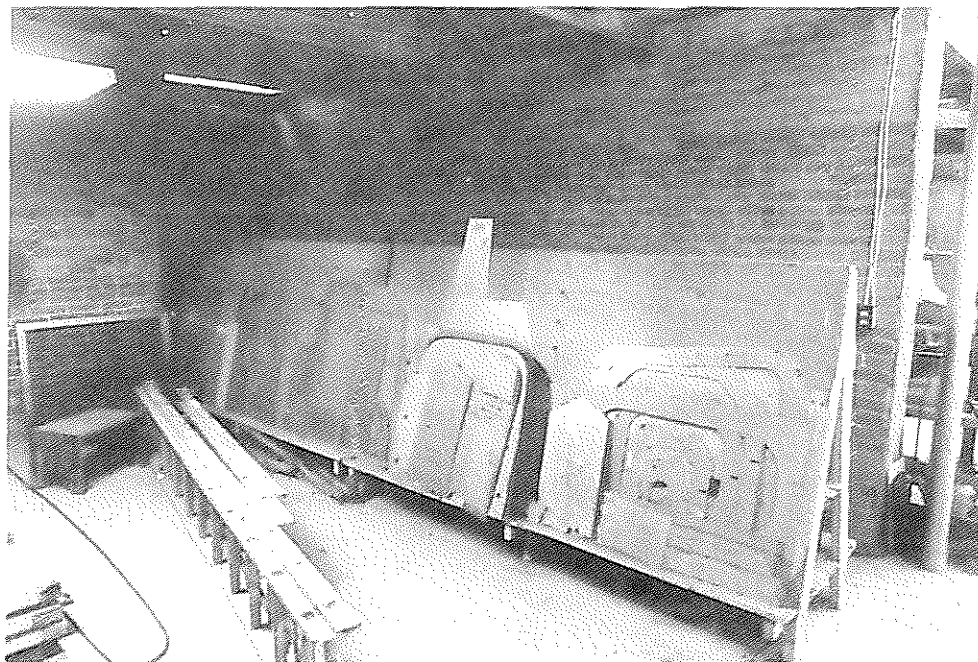
NEWSLETTER material in the book. You will doubtless recognize it, and I hope any editing I did meets with your approval. Sincerely, Marcella Thorp Emerick

Editor's Note: I liked the book and think you did a great job putting it together. It should be a part of every T-18 builders keepsakes. Richard Snelson

The memorial tribute booklet THE SPIRIT OF JOHN WILLARD THORP is now available for \$5.00 per copy, and includes tax, handling and mailing. It contains 26 pages of text with 35 b/w photos reminiscent of his life, his family, friends and associates. Send request and check or M.O. to:

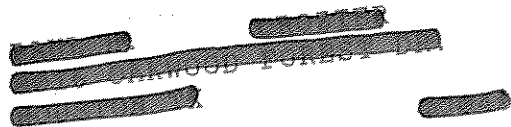
MARCELLA THORP EMERICK
7218 Linglestown Rd.
HARRISBURG, PA 17112
Ph. (717) 545-5219

This is a photo of John Thorp's shop. His templates for the T-18 are still stacked neatly on a rack.



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