

# T-18 Newsletter

September 2003



**N71XP ~ Jerry Hajek, Jr. ~ Houston, TX.**

N71XP won the "Paul Poberezny Founder's Award For Best Restoration Of Classic Homebuilt Aircraft" at this years Oshkosh Airventure.

Congratulations Jerry !!

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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.*



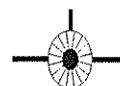
## Editors Notes

By: Roy Farris

I went to a fly-in today in Indiana. This particular fly-in has been going on for years and usually draws a large fly-in crowd. This year only twenty airplanes showed up. The group hosting the event lost a lot of money and told me that they would probably not do it again next year. My father and I used to attend about fifty fly-in's a year in the Illinois/Indiana area, but today it is nearly impossible to find one here to go to. My local EAA chapter hosts two fly-in breakfasts a year, and although we have had good attendance thus far, we are seeing a decline in the number of airplanes that come to our event. I know that there are several issues that are affecting sport aviation, most of them we can do nothing about, but I see one thing that I have never understood. Why don't most pilots like to attend aviation events? I have seen it going on for as long as I can remember ... Most pilots like to do it Alone. We see that right here in our own T-18 group. We have many members that NEVER attend fly-in's, who do not belong to the Mutual Aid Society, and don't really care to. They fly a T-18 but just want to do it alone. WHY? I believe that flying as we have always known it is dying. At the fly-in I attended today, they had the ramp area roped off with security guards posted every few feet. We were not allowed to wander around and look at the airplanes ... Holly Cow .... That's why I like to attend those things .... to look at airplanes. We as pilots need to band together and begin to promote and support aviation. There is and always has been strength in numbers. If we value our freedom to fly and wish to continue to do so in an affordable fashion we need to get off our duffs and get out there. Attend those little fly-in's ... that's what it is all about. Promote sport aviation and promote the T-18 ..... Heck, most people in the aviation world don't even know what a T-18 is. Everyone

that I have ever spoken to that has flown a Thorp, has told me what a wonderful handling machine it is, and that they believe it to be the best bang for the buck. I have had several people call me on the phone who had just sold their RV- whatever because they just bought a Thorp. We know we have a winner .... lets make sure the world knows it too .... get out there and show it off.

This year marked forty years for the T-18. I commend all of the people who flew in to Oshkosh this year for the 40th birthday. I really wish that we could have had more Thorps on the flightline. It's sad to see the rows of RV's, LongEze's, Lanciar's, etc. and to know that the Thorp could have made a better showing. I just can't understand it ... maybe someone could explain it to me sometime. Ok I will get off my soapbox now.



### Credit Card In The Works

I believe that I have finally found a way to accept credit card payments for Newsletter Subscriptions and Renewals as well as for purchasing the Complete Newsletter Sets. Using a service know as Pay Pal I should be able to accept the payments through the T-18 Website. Hopefully I will be able to have it available within a couple of months ... so if you wish you should be able to renew your subscription for 2004. I will post it on the website homepage when it is available ... so log in every once in a while to check on the status. If you have any questions please feel free to email, snailmail, or telephone me anytime.

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### Aviation Quote

To most people, the sky is the limit. To those who love aviation, the sky is home.

## UPDATE FROM CLASSIC SPORT AIRCRAFT

We have over 34 hours test time on our new trigear. Notable items are; plane flies and handles excellent in the air and on the ground with either one or two people. Stick movement was almost nil in holding altitude and heading. Landing and touchdown (if done properly) is smooth and NO BOUNCING. The urethane spring setup gives you a cushion when the wheels touch the ground. The first drop test we had completed was nose wheel only. The nose strut allowed a ground clearance of 4" minimum. Our second test was dropping the airplane from approximately 18" at landing speed. Again, there was NO BOUNCE and the springs again absorbed the drop. This test confirmed that our box structure for the main gear was sufficient enough to carry the load. We did however make a couple of adjustments to give us the added safety factor.

We finally completed our flying hours and started installation of wheel pants, fairings and paint. That was completed just prior to Arlington, Washington EAA Fly In July 9 – 13. Our trip to Arlington was a great flying experience (our first trip of any distance farther than 75 mi). The plane performed very well. At Redding, Ca. We took off (temp. 104 deg) at gross and no problems climbing to altitude. The flight through Oregon was uneventful, except for a little turbulence, which the plane handled very well and arrived at Arlington, WA. just before the start of the Airshow and WE MADE A GRAND ENTRANCE. The details of the landing were – the controller was rushed and we were rushed and tired after two weeks of working very hard to get the plane in tip top shape and it was Gorgeous. He wanted me to land at the red cones. I did not see the cones and told him I did not, so I didn't turn base. The third time he told me to turn base, he was **extremely adamant** - and said **turn base NOW**. I did and put in flaps and pulled power to get the plane down as quickly as possible. This caused me to pick up more speed than I should have and in turning base to final I needed to deepen my angle to keep from overshooting, then I saw the cones and they were very close and I pulled back on the stick slightly and I felt a shudder and the plane stalled. My position was approximately a 60-degree bank at about 50-ft above the ground. The plane rolled to left wing down where I corrected and leveled the wings. Once level I applied power to stop the sink, the plane pitched up and accelerated stalled and hit the runway. The force was tremendous and it drove the main gear into the center section and it sheared the rivets holding the nosegear plate. Needless to say the rest of the weekend was THE PITTS!!!

The plane was put away in a hangar by the airport officials. The thing that made Frankie and I very comfortable was the response and help we received from Betty Scott and Mary Ann Thompson (Arlington Fly-in officers) and others was OUTSTANDING. Also, the Taylor family, Bob, Tyler & Jeff who set up our booth for us, took charge of things for the weekend and helped us load the plane on a truck to bring home. Also, I would like to thank Mark Goss and Tom Swift for their help in loading the plane. All of our friends and customers in that area along with the Arlington EAA officials and volunteers are GREAT and we appreciate all of them very, very much. Our saga continued driving home in the rental truck. The fuel line broke in half in Kelso, Washington and the repair person had to come from Portland, Oregon which was a 1-1/2 hr wait. The ride almost beat us to death on the rough roads.

Analysis of the crash showed several important things. The springs in the main gear absorbed a tremendous amount of the initial impact before the eyebolts sheared and caused the main gear to rotate. The MAJOR point that showed this was the fact that neither Frankie nor I DID NOT FEEL THE CRASH!!

We had NO PAIN, NO SPRAINS, NO HARNESS STRAP BRUISES, NO CUTS or any other problems that one might expect from a crash.

cont pg 4

UPDATE FROM CLASSIC SPORT AIRCRAFT. cont.

We now know that the design did its job very well and we have proven that it is a very TOUGH BIRD. I broke my own rule that I have preached for many years – NEVER TRY TO SALVAGE A BAD APPROACH and NEVER LET THE CONTROLLER FLY YOUR PLANE.....

We can repair the plane. Damage is left wing, center section skins & ribs. No spar damage. Fuselage is intact with very minor damage (some getting it out of the rental truck). We should have the airframe repaired easily. The prop and engine are history. The crankshaft was broken. This has been a setback for us and we are very disappointed that the folks at Arlington, Oshkosh and Copperstate will have to wait until next year to see our gorgeous plane. We think we have a real winner in looks and performance. We had a professional photographer scheduled to take photos when we returned from Arlington, as we didn't have time before Arlington Fly-in. As soon as repair have been completed we will have a photo on the website [www.classicsportaircraft.com](http://www.classicsportaircraft.com)

Like "they" say —we walked away from a good landing.....

Thanks,  
Classic Sport Aircraft  
Mike & Frankie Archer

Technical Tidbits

I have a question that I hope can be answered by one of y'all. It is about the requirement of installing a nut on a bolt and there being just 1.5 or 3 threads left showing. No one has been able to tell me exactly why this is.

I have seen instances where to satisfy this requirement, and to use existing fasteners that were too long (on a certified production aircraft, no less) a bolt with 5 or 6 washers stacked up in order to leave just 3 threads exposed. The only rationale that I have come up with is that it limits the number of threads that are being put through the nylon of a nylock type nut.

Andrew

The reason for threads exposed beyond the nut is to make sure the locking portion of the nut is engaged. The old CAA rule was to have three threads. With modern fasteners one thread is sufficient for self locking nut engagement per Mr. FAA.

cont

Technical Tidbits, cont.

The maximum number of washers to be installed on a bolt assembly is three. If you require more than three, go get a shorter bolt. That bolt you saw on that production plane is not an accepted practice. I have seen this also. It's more of a case of "get the plane out the door, we need to sell(or fix, which ever the case)it so we can make the payroll".

Erich

The reason is, 1) have enough thread showing to be certain that full use of any locking feature is had, we use 1-2 threads showing as a baseline. More threads can be bad because, 2) in low clearance areas the extra threads may present a chafe hazard in a moving component, 3) on a non threaded shank the extra threads could mean that a nut is torqued against the shank. You would show torque but the fastener would not actually be clamping whatever it was supposed to be holding. Try to pick a fastener

cont pg 5

Technical Tidbits, cont.

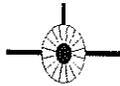
length that puts the nut toward the end of the threads. 4) the most important in my book is Weight. Excess thread and washer stacks adds weight. Pounds are made of ounces and ounces are made of grams.

Tsgt. Dana LaBounty,  
Vermont Air National Guard  
F-16 Phase Inspection Section

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All aircraft bolts are designed so that when the nut and one washer is installed that the nut does not hit the shank of the bolt and run out of threads. There will always be the 1.5 - 3 threads showing after the nut is installed if the correct bolt is used.

Andrew Robinson

Fairing Fabrication

I just made new wing root & gear fairings for my plane. I used the standard sheet metal T18 wing root fairings which I purchased from Sport Aircraft. These are a flat wrap & only cover the wing aft of the main spar. I made nicely radiused fiberglass fairing for the forward & underside sections of the wing. I did not think that the purchased metal fairings fit very well & it took me a very long time to trim & bump the flanges to get them to fit. I also had to fabricate a lower close out piece. I still ended up with some puckering & wish that I had made the entire thing out of fiberglass. Other folks had better luck fitting theirs, so I do not know if it was my plane, or something I did.

The process for the fiberglass fairings is fairly simple. I used weather stripping tape to make a release surface on the plane & built up the fairing shape using regular

Fairing Fabrication, cont.

modeling clay. I made some simple aluminum radius scrapers to help shape the clay. Once I had the shape I wanted, I applied paste wax to the clay & tape to enhance parting the fairing. I used West Systems epoxy & bid fiberglass & laid up the fairing right on the plane. I friend of mine taught me a technique that makes very neat lay-ups. First you develop templates of the shapes needed to make the fairings including trim allowance. Next cut pieces of fiberglass cloth at least 1" larger than the pattern(s). These are arranged so that the weave alternates 90° between plys & is 45° to the axis of the part. The cloth sandwich is placed on a heavy sheet of plastic (3-5 mils) & resin is poured on. A second piece of plastic is placed on the top & you can work the resin in & squeegee out the excess. This let you reduce the amount of resin (weight) in the lay-up. The cloth is fully wetted when it becomes translucent. You can then transfer the required shape from the template with a marker & cut to shape. Peel the plastic off & work the glass to shape on the plane using care to work the air out. You may want to put a thin coat of resin on the mold prior to applying the glass if you have worked most of the excess resin from the glass. You will notice that the glass wants to lift up from regions with a tight radius. You can make various clamps to hold the glass in place until cured. I used a variety of things including foam rubber, aluminum flashing, spring clamps, and clothes pins. Use plastic sheeting or food wrap on top of the glass to prevent sticking. After curing, the fairing can be carefully pried from the plane. To avoid having to cut parting lines for the gear leg upper, & lower cuffs, I imbedded tape covered pieces of aluminum flashing material into the clay molds. After curing, you have a variety of methods to fill the weave & do additional minor shaping. I mixed up thick micro (epoxy mixed with micro balloons - see Spruce & Specialty catalog). It sands very well after curing.

cont Hank Beamer 199MP

Technical Tidbits, cont.

Cheaper parts

Strobes:

Yea they are expensive, yes, the power packs and bulbs burn out.. next time yours does, and you don't want to take it in the shorts from Whelen... go to [www.galls.com](http://www.galls.com).. afterall, 2 million cops and ambulances can't be that wrong.... 12v powerpack and 2 bulbs \$112.99. light weight too ( 1.5lbs) Replacement bulbs are \$30 ea.

Shoulder Harness Kits:

Expensive, and hard to find in colors that you like for the right price..right?? Wrong.... There is no excuse NOT to have them ( or replace your old ones if they are worn, torn or frayed...) [www.summitracing.com](http://www.summitracing.com) great prices for 5 point harness kit ( from \$89.00).

Gascolater's:

No Excuse here sports fans.. and have I seen some real potential bonfires...again Summit Racing... has " Fuel Filter kit" (their description, not mine) Solid Aluminum Gascolator, 60 gph, 3/8" PTT, with removable 30 micron filter. For Carb engines only ( and gravity fed fuel system)... you could exp. with fuel pumps.... I like it to keep it simple.

Battery:

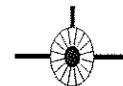
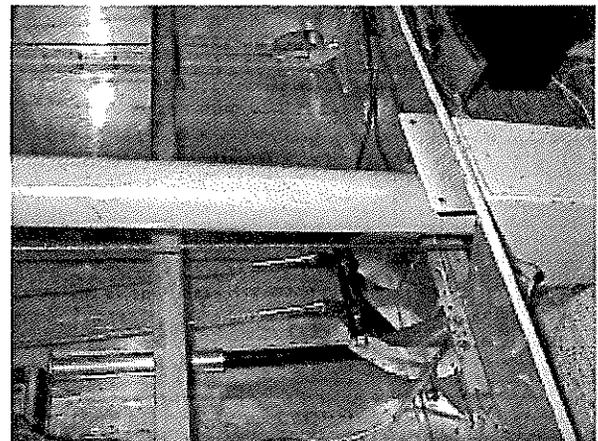
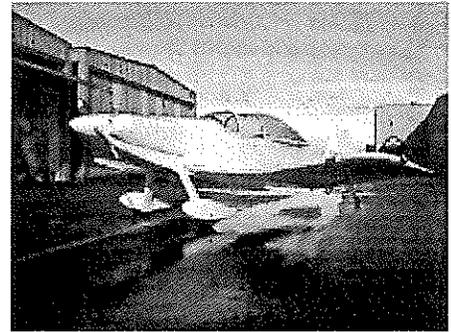
Left that master on too many times and drove off for the week??? Shame on you!! Expensive, is it not?? And Heavy too... Solution: drycell Battery from Hawker... [www.odessyfactory.com](http://www.odessyfactory.com) I am using PC625. Weighs 13 lbs, temp range from -45 to 60C. ( beyond MY limits) 27 min reserve @25Aload. About \$78. I got mine at Batterys Plus Store.

Jeff Maynard  
SN 510

Technical Tidbits, cont.

Here is a picture of my T-18. It now has 120 hours. The new electric flaps work great. I have made up a kit for those who would like to upgrade. It is simple and light weight and the whole assembly goes under the baggage tunnel. Anyone with the old Cessna style flap motor can convert to this and save substantial weight.

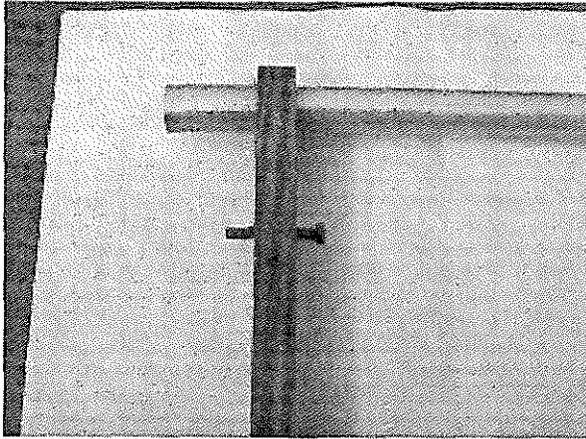
Tom Hunter  
N-18XT



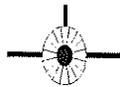
Flap Info

While fitting my flaps I wanted to get the holes in the fuselage just right so I made up this simple jig. Its a piece of 1x1 1/2x10" wood with a 1" hole drilled close to one end and a 1/4" hole drilled 2- 11/16" from the first hole. With a quarter inch bolt, hold the wood up against the inboard flap hinge and swing your arc marking it with a pencil. (See photo on page 7)

Flap Info, cont.



Hurant Karibian



More Flaps

I'm currently working on my flaps for the c-wing and if I had to do it over again I think I would stay with the std wing and avoid the complexity of the split flaps and alignment problems of their fittings. The main thing I want to point out though is that I believe the c-wing flap beam height dimension is too small by about .200. I believe they should be built using the dimension off the std. 636 print that calls out for a height of 1.935 inches instead of the c-wings 1.74 inches. I used the smaller beam but had to slide it aft to match the upper and lower skins. That makes the skin stiffeners shorter also. I don't know if anyone else was bothered by this or if they caught it early enough and used the larger dimension in their flaps.

I've included part of the prints to indicate what I am talking about to make it somewhat clearer.

(See prints on page 8)

Bob Jaeger

More Technical Tidbits  
Fiberglassing Chatter

Has anybody tried waxing a mold directly over plaster. It seems everytime I wax over paint or gelcoat the wax doesn't hold up all over and some of the mold comes off with the layup. I was thinking maybe the wax would soak into the plaster if I heated it up.

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You have to use an unbelievable amount of wax on the mold and when its ready put more on. Then let it sit 24hrs and put more on. As you use the molds over and over again you will be able to just put one coat on every time. For one or 2 time use thats not helpfull I know. And make sure the wax is new and not out of date. (begines to shrink and dy out)

Skeet

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I think I read about using polyvinyl alcohol before but I thought it was used to wipe over the wax on the mold.

Hurant

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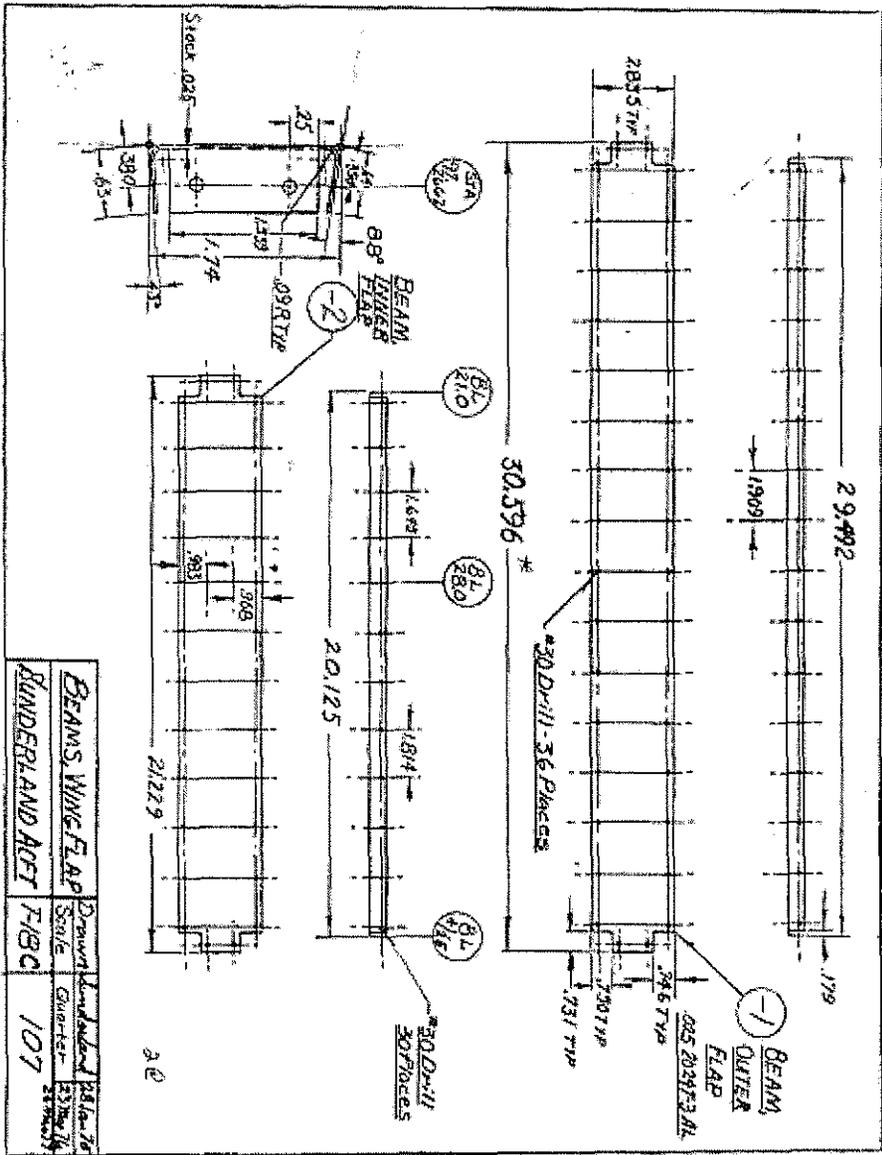
There is such a thing as mold release sold by some of the bigger resin houses. See if you can bum some at a local boat yard. I spray it with a cheap sprayer from Walmart.

Bob Highley  
N711SH, Ser. # 835

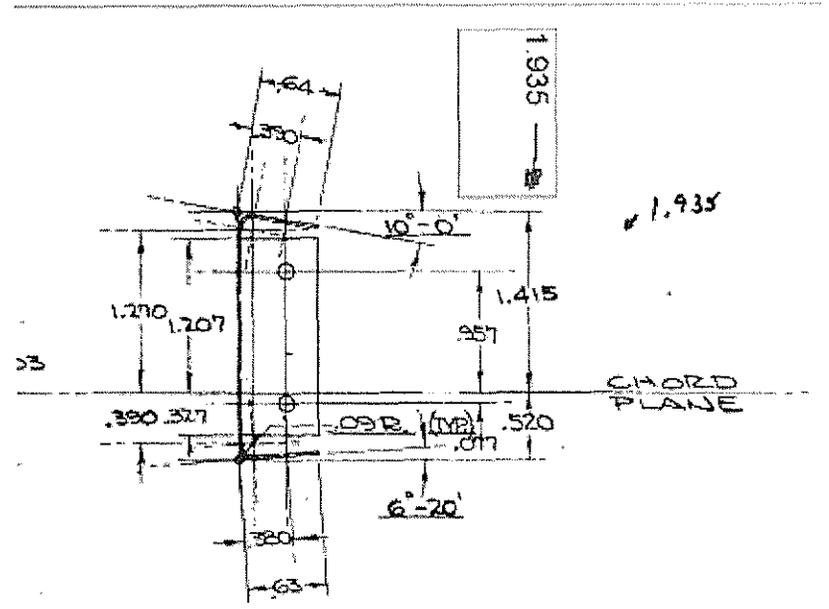
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I asked a friend of mine who I consider an expert in composites what they used to get the glass to break away from the mold. They recently built a real nice cowling for a Quickie Q2 around the engine, on a foam plug that they made. He said that they used polyvinyl alcohol, available from Aircraft Spruce. Hope this helps....

Robert Mardis



Sunderland Flap  
Folding Wing



REZIAL - .025 2024 T-3 ALC. ALUM. SHEET

|                                |          |           |            |
|--------------------------------|----------|-----------|------------|
| BEAM<br>WING FLAP              | DRAWN    | THORP     | 2 APR 1976 |
|                                | CHECKED  |           |            |
|                                | APPROVED |           |            |
| OHN W. THORP<br>NK. CALIFORNIA | SCALE    | HALF FULL |            |
|                                | MODEL    | SIZE      | 11x35      |
|                                | T-18     | -636L     |            |

Standard Flap

Flap drawings from Bob Jaeger  
(See article on page 7)

Lets Talk Saftey

This accident report and comments are printed here to possibly help us to think SAFELY

NTSB Identification: **FTW03LA069**

Accident occurred Wednesday, January 01, 2003 at Stephenville, TX

Aircraft: Wood Thorp T-18, registration: N335BW

Injuries: 2 Minor.

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.

On January 1, 2003, at 1555 central standard time, a Wood Thorp T-18 homebuilt airplane, N335BW, was substantially damaged upon collision with terrain following a loss of control during takeoff from the Clark Field Municipal Airport (SEP), near Stephenville, Texas. The instrument rated private pilot and his passenger sustained minor injuries. The airplane was owned and operated by the pilot, who was also the builder of the airplane. Visual meteorological conditions prevailed for the 14 Code of Federal Regulations Part 91 personal flight for which a flight plan was not filed. The accident was originating at the time of the accident. The flight's destination is unknown.

According to witnesses at the airport, the pilot lost directional control of the airplane during the initial takeoff run from runway 32 at the Clark Field Municipal Airport. The airplane departed the runway and came to rest in the inverted position.

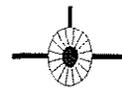
An FAA inspector, who responded to the accident site, reported that the canopy was crushed, the propeller was damaged, and both wings had sustained structural damage.

The nearest weather reporting station is located at the Mineral Wells Airport (MWS), which is located 34-nautical miles north of the Clark Field Airport. At 1453 the weather station at MWS was reporting winds from 290 degrees at 17 knots, gusting to 24 knots. The peak winds were reported from 270 degrees at 27 knots.

Lets talk Saftey.cont.NTSB Identification: **FTW03LA069**

I stopped by Stephenville this afternoon and talked to the guys who dug them out of the wreck and looked at the remains. The horizontal stab, right aileron, right flaps (2 of 'em on folding wing) and some cowling parts are all that are salvageable. The rest is junk. It was a very nice Thorp. There are, of course, lots of internal parts that can be used. It is beyond my wildest imagination why Bob attempted take off on rwy 32. The guys at the field swore the wind was 90 to the runway at 25 gusting to 40. That was no accident—it was an on purpose! Sadly, there was an old, closed (but perfectly usable) runway directly into the wind. With that kind of wind, he could have been airborne in 500 feet. Bob had a broken neck. They careflighted him to Ft Worth and operated to fuse a couple of vertebrae. I think he is out of the hospital now. What the %^&\*! was going on in Bob's mind? I consider a 20 mph direct cross wind (steady—not gusting) to be the limit for a T-18. Gusts to 40 is ridiculous.

Gary

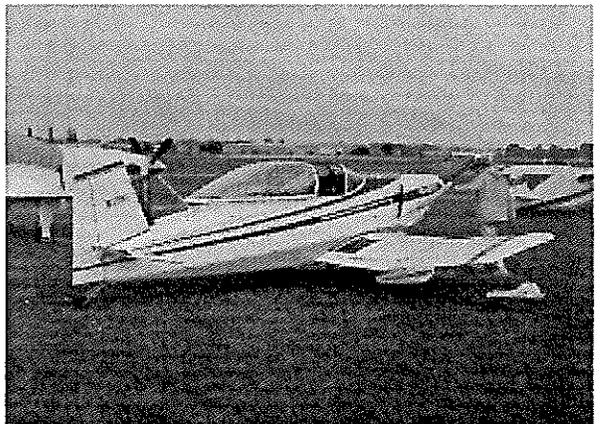
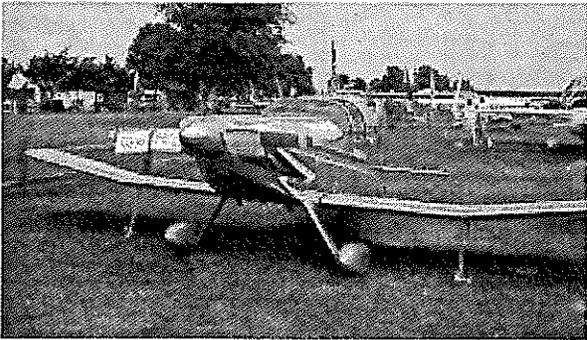
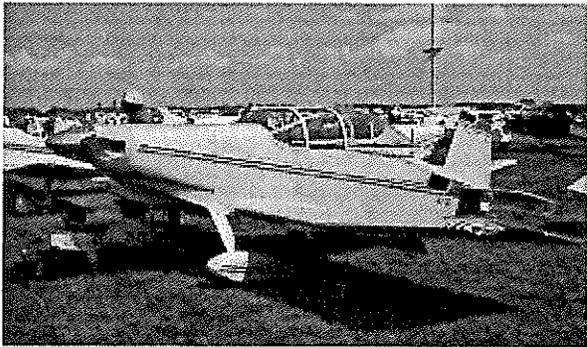
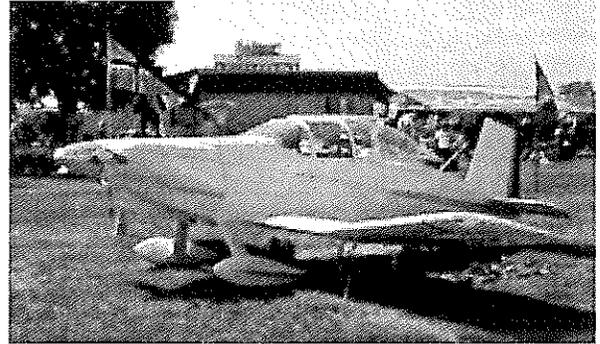
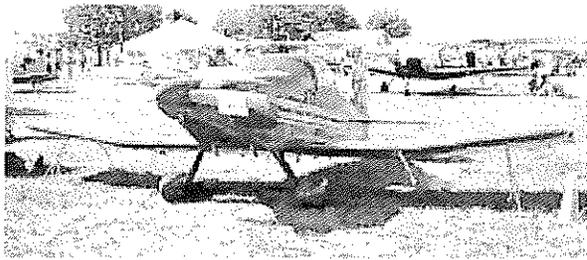
Really Nasty Lessons

I am far too embarrassed, depressed and totally humiliated to write this, but if my writing might spare any novice builders from making my mistakes, then all is not lost. My S-18 with its I-O360 CS prop. has been approaching completion for a long time. About 2 mos. ago came time to trial run the engine, test the gauges etc. I had many warnings about how easy it is to pitch over and get a prop strike. "Be damn sure to keep the stick in your crotch" Several times, I tied the tail down and tests were going fine. Then one time

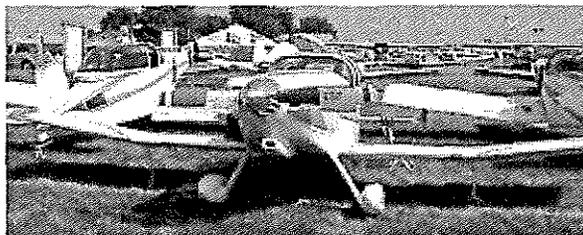
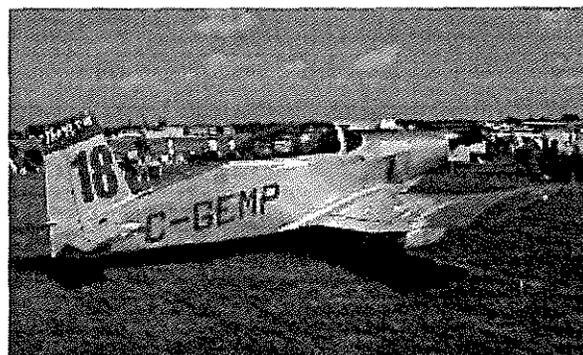
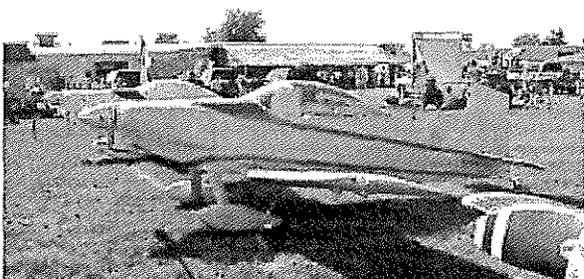
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# THORPS AT OSHKOSH 2003

PICTURES BY: RICHARD EKLUND



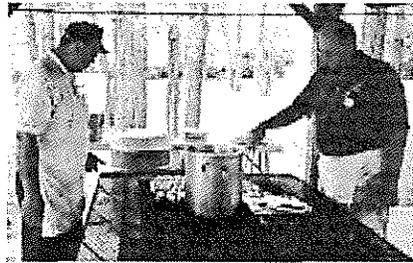
**THORPS AT OSHKOSH 2003, cont.**  
**PICTURES BY: RICHARD EKLUND**



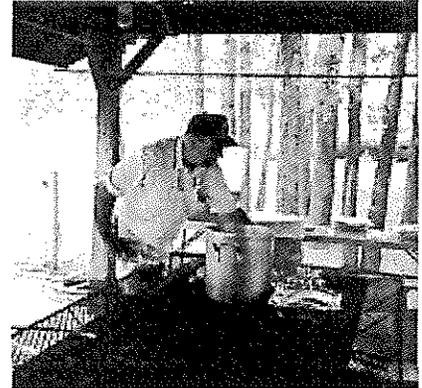
These photographs were sent to be by Richard Eklund. I do not believe that everyone that flew in is represented here. I know that there was no picture of Bernie Fried's Award winning T-18 included. I apologize for those of you that we missed. It's really difficult to keep track of who and where everyone is.

## THORPS AT OSHKOSH 2003, cont.

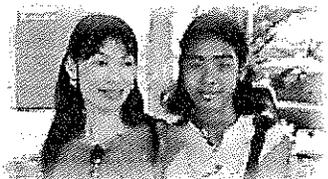
The T-18 Lunch/Forum went as scheduled at noon on Friday. Master Chef Bill Williams, assisted by Bob Highley prepared the main course, which consisted of Bill's secret recipe for Bratwurst cooked over charcoal. For those of you that have eaten Bill's



cooking before you know that you are always in for a treat. Well this year was no different, and we had a really nice meal, complemented with sauerkraut, chips and cookies for desert. The event was attended by somewhere around ninety people. Following the lunch we had a nice family forum, led by Bob Highley. Everyone introduced themselves and then several items of interest were discussed.



Of special note to the group .... The legendary Mr. Don Taylor was in attendance, and his wonderful company was enjoyed by all of us. We must really consider ourselves lucky to have a man like Don in our family. After the forum, most of us went to the T-18 flightline area for a "Cowlings Off" session. This gave all of those building a way to get some good ideas of what others have done and what works. Those of us that were at Oshkosh 2003 had a great time ... we will do it again next year.



Really Nasty Lessons.cont.

I had the throttle cracked a bit too open- engine started with a burst of power and over it went (even with stick full back), faster than you could blink your eyes. There was not a convenient tie down directly under the tail and the rope was back about 4 ft probably with a bit of slack, tied to a metal piece at the hanger corner. Also I had chocked the wheels. The rope angle was enough to let it tip over and the chocks made certain the nose came down instead of forward.

Lycoming of course, says with any prop strike, its tear down time. Old timers say, not so fast. Measure the runout at the prop flange face and prop pilot hub where you have a tolerance of .003 at the hub and .018 on the flange. Mine measured zero on the hub and .002 on the flange. I thought "God I'm lucky and have learned a lesson I'll remember all my life." The prop had mostly ridden on top of the asphalt, bending about an inch at the tips.

I had numerous subsequent occasions to run the engine working out gauge problems etc. I was super diligent about barely opening the throttle, never chocked wheels, kept stick back etc. I taxied about the airport a few times seeing how it steered etc. I had learned that with fuel inj. the start procedure is- full rich, boost pump a few seconds, full lean cutoff, start eng. and ease in the mixture to rich. I was getting my confidence up.

Yesterday I was to move the plane from a 1/2 hangar to a full one where I could put the wings on and prepare for the FAA airworthiness inspection. When I started the engine to make the move, over it went again. This time the hub runout is .004 and flange .005. I can't take a chance on flying with that engine this time, and I feel that the best thing I could possibly do is to sH\*&^%.

I'm not absolutely certain what led to such a ridiculous blunder. Here are some thoughts. Without wings, the CG is way forward. When you prime a fuel inj by running the boost pump, if you pump too long there is a burst of power even with mixture at lean cutoff. If you have your toes on the brakes, its as bad as chocking the wheels.

cont.

Really Nasty Lessons.cont.

If you have 40 yrs with tricycle gear (I'm in mid training for tailwheel endorsement) the stick in the crotch requirement may slip for a moment as old habits pop up before you know it. The throttle on fuel inj should not be opened at all to start. It will start anyway and then you can adjust the throttle.

Would appreciate a few prayers as I try to climb out of this black hole.

- I meant to include another point- don't wait until you are ready to fly to make and use a checklist. A boring compulsive ritual may spare you heart ache during the phases preceding the actual flight test.

Hal Underwood

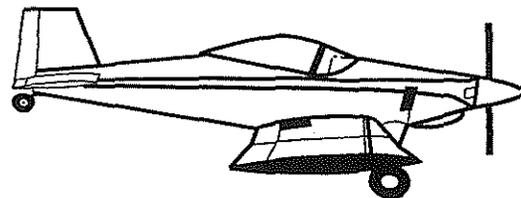
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To add to the lesson — when I completed my airplane, it would bounce the tail wheel in the air when I "practice taxied" it. There is no such thing as "practice" aircraft operation. When I got around to doing the dreaded weight and balance, I found that I needed 16# of lead in the tail to counter the weight of the constant speed prop and the 180 engine. I also had the longest main gear available. This served to move the point the tires touched the ground aft.

Ground attitude balance is almost as important as flight CG. Charlie Hillard would be alive today if the ground balance of his Sea Fury had put more weight on the tailwheel.

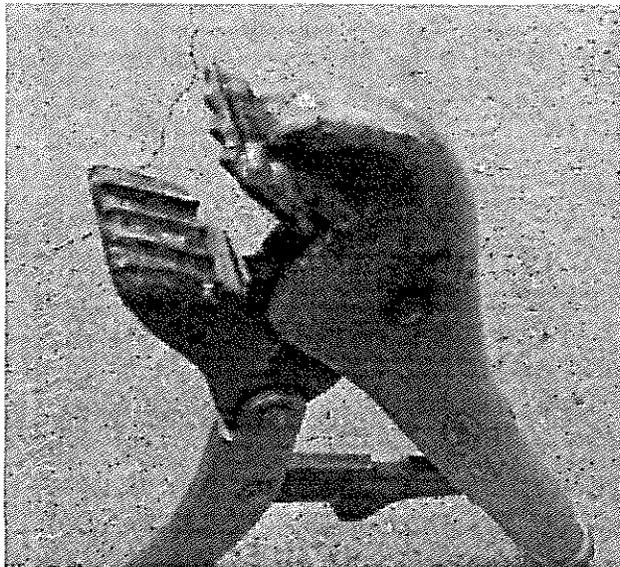
Y'all be careful out there!

Bob Highley  
N711SH, Ser. # 835



**Crimping Tool**

I bought one of those huge phenolic block crimping pliers a long time ago but could never see using them anywhere. When I bought the new airfoil nose ribs about ten years ago I liked the cute little ripple crimps they had so I braised 1/16" welding rod space 7/32" apart on to 1/16x1x3/4" 4130 plates, three rods on one plate and four on the other, put a .025" strip of aluminum between the two pieces on the front and a .032" strip between at the rear and clamped them together with vise grip pliers after grinding the plier jaws to the angle I wanted and welded them in place. They work great.



Hurant Kairbian

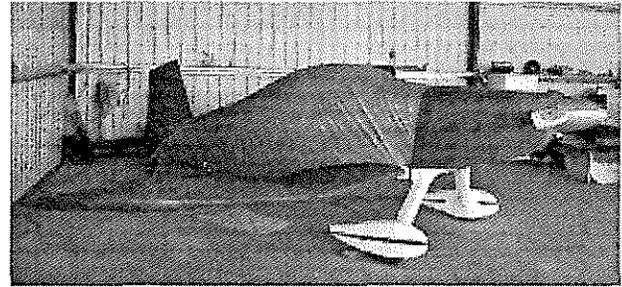
**Covers**

I recently had a custom cover made for my Thorp. The workmanship is fabulous. I thought there might be others interested in having one of their own (especially those with polished airplanes). It's made of very lightweight rip-stop nylon so it packs nicely into a stuff sack for portability. People can email "[teamabel@juno.com](mailto:teamabel@juno.com)" for info about getting one made. (See photo next column)

Thanks for all the good work.

cont.

**Covers, cont.**

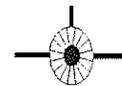


Tony Ginn

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Hi all, Go to [WWW.Aircraftcovers.com](http://WWW.Aircraftcovers.com). They make covers for everything including our T-18. Excellent quality.

Dana Labounty



**Maintenance Questions?**

T-18ers,

Check out the following website... it is packed with a lot of technical data as well as very practical maintenance/fabrication Info... <http://www.tpub.com/air/>

NOTE: the web-banners are a pain... but I think the site is worth it.

Wil Taylor

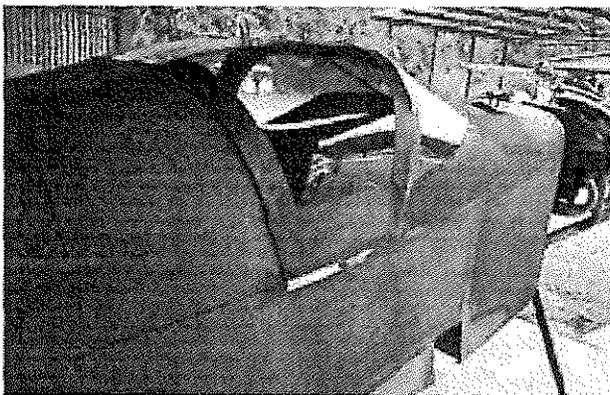
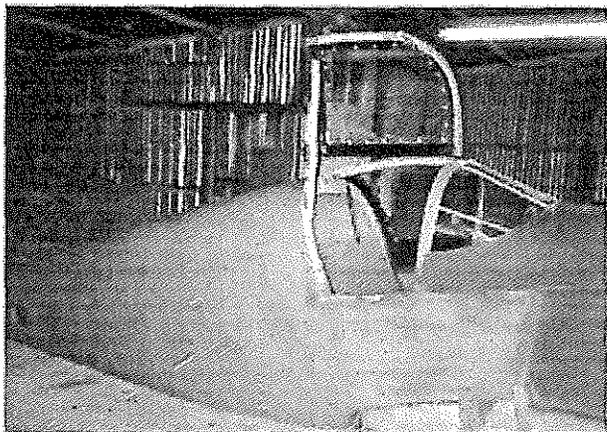
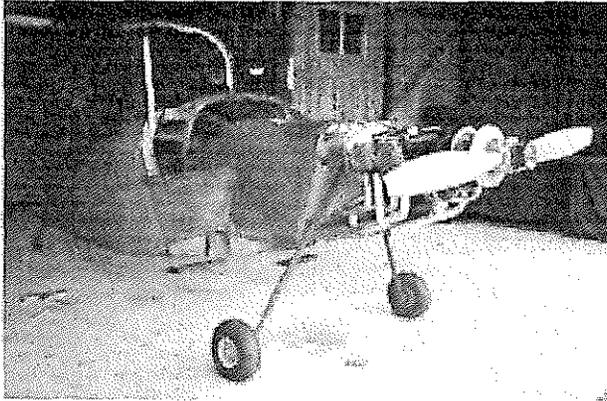
**Handy Tidbit**

Since the spacing on the wing ribs are pretty wide, I recommend installing a tube (metal or plastic) through the front or rear ribs of each wing section for wire, pitot and fuel lines. Pitot and fuel or pitot and wires can go together but not fuel and wires. Its not easy to

cont. pg 19

### A Different T-18

Airframe, T-18C, Roundback with Gull wing Doors. Engine, Lycoming IO-360 A1B Wide Deck 200hp Prop, Hartzel Constant Speed {Ken Brock} Landing Gear, extended 2"



Here are a few pictures of my project, #1151 some what modified/mutated, I have named the machine {Schnupper} German term of endearment.

Gordon I. Cronin

### For Sale

Lycoming O360 A4J from Beech Sundowner converted to A1A (M4-5 carb) for installation on Thorp T18 - no data plate means you don't have to comply

with AD's

\*845 hr. TSTOH 1594 hr. TTSN

\*Complete with all accessories

\*Carb & Mag just replaced with yellow tagged rebuilt units

\*Lightweight Skytec Starter

\*Engine log complete & up to date

\*Oil analysis records from AOA since 1994 -

Doesn't make any metal -filters opened every oil change and found clean.

\*Compression at annual on 6/25/03 78/80, 73/80, 75/80, 78/80

Still flying on Thorp 647C

I've had the left mag rebuilt and put on a new harness, replaced spark plugs, replaced a valve lifter assembly that showed some wear, replaced engine mounts, put a rebuilt carb on.

Come see it, hear it, fly with me at Santa Maria, California.

\$9,995 obo, barely more than Lycoming's \$8000 for completely run out engine core. I'll ship it anywhere.

Call Carl (805) 481-3338 or email [carlsue@juno.com](mailto:carlsue@juno.com)

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### S-18 PLANS

I have a set of SA-18 plans that Lou Sunderland sold me years ago... with the folding wings for sale... never made the plane ...nor do I think I will due to age... if interested or know of someone who is..

Please contact me thru the E mail... I am located in Northern Calif...

Thanks G.M.  
[gmas@inreach.com](mailto:gmas@inreach.com)

For Sale.cont.

Attention Thorp T18 Builders in Australia.  
I have for sale brand new left & right hand grey tinted perspex panels for your T18 project. The price for the pair is A\$850.00 GST exempt firm, F.O.B Kingaroy Qld. or fly/drive in & collect them yourself.  
Please email any enquiries or call me on 0427633547 (mornings only).

Graham  
grahamsplace@dodo.com.au

T-18 For Sale

I have a nice, basic T-18 up here in GA that I have about decided to sell. She has a Lycoming O-290G and just basic avionics (not all working) I can have a Microair radio installed. I am asking \$19,000. We just finished an annual in May and she is ready to fly. I am selling N9323A because my CFI is very concerned about my very low tail-wheel time. He says she flies very clean. Let me know if you are interested.

David Martin  
jdmartin54@aol.com

T-18 For Sale

N467JF is a standard T-18, narrow fuselage, short gear legs, 150 HP, and drop formed aluminum cowling. I'm the third owner, it was completed and first flown by Ford Hendrick's and showed up in a couple of editions of Jane's Aircraft. Instrument panel includes full gyros, vhf nav & com, and transponder. The interior is good with a great instrument panel. Engine is Lycoming O-320-E2D, 1900 hours since new, and a Ted Hendrickson 68 X 72 prop. Canopy is tinted, so it's not so hot under the sun. I'm asking \$23,700. The aircraft is located in Washington State. Email or call for more details and photos.

Ross Mahon 425.827.2493 rossair@aol.com

For Sale, cont.

Project

I have a T-18 Project for sale. Airframe is complete from firewall aft, no engine. Needs electrical, plumbing, instruments, upholstery and pant. If you or anyone you know would be interested call me at home 775-738-5278. The price is \$7,000. and the buyer will need to transport from Elko Nevada.

Also have a Lycoming O320 E2D 150 HP, with 440 original hours since factory new. Engine was removed from a Cessna in the early 70's, it was pickaled and is rust free. I'm asking \$10,000.

Richard Bouge  
bouge@frontiernet.net

Project

I have a completed airframe: spinner to tailwheel, wing tip to wing tip. Zinced, wet sanded and ready for assembly, less the canopy. \$7,000 OBO. FOB Reno, NV Call or E-Mail

Stan Campbell 775-424-2273.  
scrambellreno@yahoo.com

Engine

I have for sale a Lycoming O-360 A3A, prop extension, prop (Serba 70X82) and spinner for sale. About 400 SMOH, with mags, lightweight starter, carburetor, plugs and harness. It has been on my Thorp, I have recently ordered a XP360 from Superior. I wanted an engine with a constant speed prop.

Bill Beswick  
wbeswick@chartermi.net

Subscription Renewal Notice

This is just an advance notice to all T-18 Mutual Aid Society Members and Newsletter Subscribers that your membership and subscriptions will expire on December 31, 2003. Just for your reference you can always look at the mailing label on the back of each newsletter to see when your subscriptions expire. Look just above your name for the information. The yearly subscription rates will be the same for 2004. The rate will be \$25.00 for United States memberships, which includes the printed hardcopy and access to the web based version which you can download. For those of you living outside the United States you have two options. For \$30.00 U.S. you can have both the printed hardcopy and web access to the downloadable version on the T-18 website, or for \$25.00 U.S. you can choose to have the web based version ONLY.

Please provide the information below with your renewal or go to the T-18 website at: <http://www.t18.net/membersignup.htm> and fill out the form. Don't forget to click on the "SUBMIT" button when you have completed the form.

T-18 Mutual Aid Society/Newsletter Subscription Renewal

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Country: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Email Address: \_\_\_\_\_

Aircraft N Number: \_\_\_\_\_

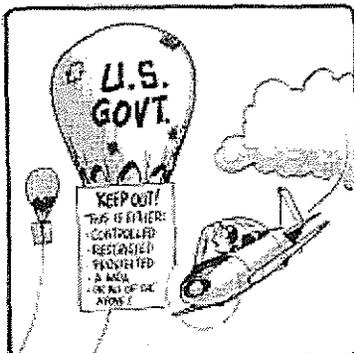
Type Of Subscription:  U.S. \$25.00  
 Non U.S. \$30.00 Printed Hardcopy and Optional Web Access  
 Non U.S. \$25.00 Web Based Version Only

Comments:

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Please send all payments to: Roy Farris P.O. Box 182 Noble, IL. 62868

For more information contact me at: (618)723-2594 Email at: [rfarris@shawneelink.com](mailto:rfarris@shawneelink.com)  
 or visit the web at: [www.t18.net](http://www.t18.net)



**AIRSPACE RESERVATION**  
 - Any geographical location set aside by the U.S. Government for the exclusive occupancy of airspace

THOUGHT FOR THE DAY

When one engine fails on a twin-engine airplane, you always have enough power left to get you to the scene of the crash.

## T-18 FALL GATHERING KENTUCKY DAM STATE RESORT PARK

THE DATES FOR THE 2003 T-18 WEEKEND AT KENTUCKY DAM ARE OCT. 10,11, AND 12. A BLOCK OF ROOMS HAS BEEN RESERVED FOR OCTOBER 10 AND 11. THE PRIVATE DINING ROOM HAS BEEN RESERVED FOR SATURDAY NIGHT AT 7:00 P.M. WE WILL AGAIN BE ENJOYING THE BUFFET. PLEASE MAKE RESERVATIONS WITH THE PARK DIRECTLY.

YOU MUST SPECIFY YOU WANT THE PAINÉ PARTY IN ORDER TO GET THE SPECIAL RATES. THE LODGE MAY BE FULL OTHER THAN THOSE ROOMS RESERVED FOR OUR PARTY.

YOUR RESERVATIONS NEED TO BE MADE PRIOR TO  
SEPTEMBER 10, 2003  
RESERVATION REQUESTS RECEIVED AFTER THIS DATE WILL BE FILLED IF SPACE IS  
AVAILABLE

ONE ADULT - \$55.75 AND TWO ADULTS - 64.75  
EACH ADDITIONAL ADULT AFTER TWO IS \$5.00 EXTRA  
CALL 1-800-325-0146 FOR RESERVATIONS

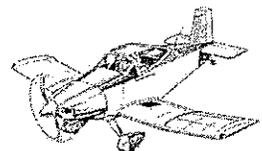
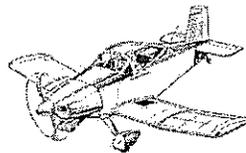
CAMPING AND COTTAGES ARE ALSO AVAILABLE ON A FIRST COME, FIRST SERVED BASIS.  
CONTACT THE RESORT FOR MORE INFORMATION

KENTUCKY DAM STATE PARK AIRPORT (M34) IS 30 MILES EAST OF THE CUNNINGHAM VOR (PADUCAH) ON THE 90\* RADIAL, 8 MILES SOUTH OF V178. THE RUNWAY IS PAVED AND 4000 FEET LONG. THE AIRPORT IS APPROXIMATELY A MILE FROM THE RESORT, AND TRANSPORTATION IS AVAILABLE BOTH TO AND FROM THE AIRPORT FOR THOSE WHO DO NOT WISH TO WALK.

PLEASE BRING YOUR OWN TIE DOWNS

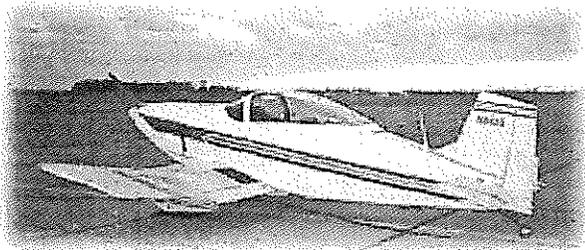
FOR ADDITIONAL INFORMATION ON THE FALL GET - TOGETHER, EMAIL TERESA SCOLA AT:  
[btscola@aol.com](mailto:btscola@aol.com)

PLEASE PLAN TO ATTEND AND HELP US MAKE THIS YEARS  
GET - TOGETHER THE BEST ONE EVER.



For Sale, cont.

FOR SALE: 1975 Thorp T-18 N-8428 , 1016 TTAF; IO-320 Lycoming 812 SMOH. Great x-country flyer, award winning appearance. Nice panel w/GPS, Transponder, Electronic s International gauges, etc. 10gal aux fuel tank, landing light, strobe, electric pitch trim. New Sensenich metal prop, old Sensenich M-76 included in sale price. \$32,000 Free (CFI) check-out for buyer. I can ferry a/c anywhere for fuel expense. Russ Verbael, (406) 476-3315



For Sale: Oil Coolers and Msc.

I checked Iternet prices for antique Corvair parts and would sell my inventory as follows:

- 12 Plate/5005806 \$30.00 ea.
- 8 Plate/3005903 \$25.00 ea.
- Folded Fin/8528632 \$25.00 ea.
- And Remote Filter Mount \$15.00 ea. plus \$5.00 for postage etc. for each cooler or remote.unit.

I only have 3 of the 12 plate types and 3 of the remote mounts. I have a few more of the other types. Considering their rarity, I think these prices are quite reasonable. All units have been cleaned out and pressure tested to 75-85 psi. but obviously have no guarantee since I do not know their history.

I have some left over 2024-T4 aluminum plate stock that I'll sell at the right price. I have some small bits and some larger pieces that I'll sell by the pound. Best again is to have the guy contact me by e-mail and I'll see if I have what he needs. I have plate from .063 to .75 in a variety of sizes. I've set prices at approximately 40% of Aircraft Spruce Catalog listings but on a per pound basis. It may be tough to cut the .75 stock at home

cont.

For Sale, cont.

so a larger piece than needed may have to be the way to go. I'll negotiate by e-mail. Prices range from \$7.30/# for .125 inch, to \$3.84/# for 3/4 inch. It's all plus cost of shipping and any outside cutting costs if required.. I'll do a similar deal on tubing needs of the T-18 family, again mostly on short lengths.

John Cragin, s/n #554, tel/fax 508-351-9767  
[jqcragin@juno.com](mailto:jqcragin@juno.com)

T-18 For Sale

Licensed and flying in 1995, about 5 hrs TT, tail wheel spring problem caused ground incident & prop strike but due to wood prop and flange reinforcement, crank checks out OK on up-graded 0-290G4. Basic needs are finish rudder rebuild, assemble fin, buy and install plexiglas on canopy frame; windshield is installed, fix-up or replace 4 piece fiberglass cowl. Mount needs repair or replacement. VFR panel, KX 170B, xponder and encoder, I'comm, ELT , Whelen strobes, etc. Longer gear, wheel pants etc. Engines Also have 0-320-E2D core, needs camshaft and oil pick-up tube. Believed complete otherwise; no papers or accessories. Also have extra set of case halves. Another 0-290G4; overhauled, not converted, no accessories. Assembled and had just run-in time. I converted and added accessories as I overhauled the one in the T-18.

**I'd like \$17.5k for the T-18, \$4k for the 0-320 core and \$3k for the majored 0-290G4 or Best reasonable offer for each.**

**Location is near Worcester, Massachusetts**

John Cragin tel/fax 508-351-9767 e-mail  
[jqcragin@juno.com](mailto:jqcragin@juno.com)

Handy Tidbit, cont.

string anything through the wings after they have been covered.

Kairbian

PRSR STD  
U.S. Postage  
**PAID**  
Decatur, IL  
62525  
Permit #30

**T-18/S-18 Thorp Newsletter**

**Roy Farris**

**P.O. Box 182**

**Noble, IL. 62868**

**Phone: (618)723-2594**

**email: rfarris@shawneelink.com**

**Sept. 2003**



**I Believe This Says It ALL !!**