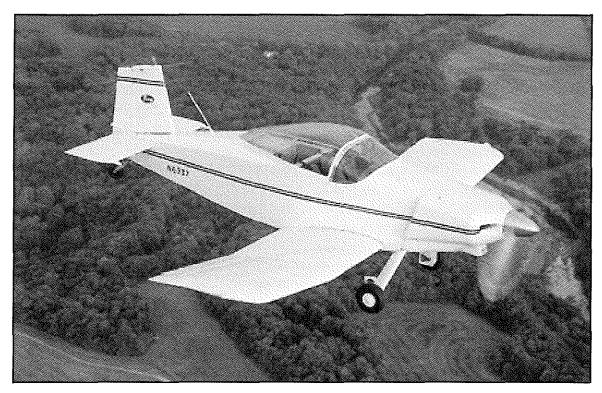
# T-18 Newsletter

December 2006



Frank Baldwin ~ N6937

#### In This Issue:

T-18 MAS Renewal Time!!
Continuing The Thorp Legacy
Sun'n Fun 2006
"The Valley" Gathering
Porterville 2006
Thoughts On Spinner Fractures
Accident Report
Technical How To's
Safety Info
For Sale Items

Notice: (Standard Disclaimer) As always, in the past, present, and future newsletters, we wouldlike 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 responsibilty or liability is expressed or implied and is without recourse against anyone.



I want to apologize to everyone. This is only the second issue of the newsletter this year. We had a terrible storm here in Franklin, Indiana this summer and my new house took a terrible lightning strike. It actually blew a twelve by fourteen inch hole in the east side of the house. Everything that was electrical or electronic was either severely damage or destroyed. Several wall outlets were actually blown out of the wall. Needless to say, my computer and all associated equipment was toasted. I am still battling the insurance company and my home is still in the recovery mode. I have a new computer and unfortunately I also had to purchase a new software program to publish the newsletter as my old Adobe PageMaker would not run correctly on Window XP. I am struggling with this new program so this issue is working me over pretty good. I will dig deeper into this program later on and I am sure that it will get easier as I learn how this thing works. So bear with me on this and I'll get caught up. I have enough material for at least three issues, so I will put them together as quickly as I can so you get your dollars worth. I say this because it is DUES TIME again and I hate to ask for them unless I can give you what you pay for. So don't worry, I will get busy and get you a few issues out real soon.

Membership on the Thorp E-mail Forum is up. There seems to be some renewed interest in the T-18. I have had several people contact me saying that they have either started building or have bought a project that needs to be completed. I have sent out several complete sets of newsletters, and I am going to have to contact my old printer in Illinois to get some more copies printed. I think this is great news. The T-18 community sure needs some fresh blood ... We need to promote and get new people flying our wonderful airplanes. Without a continuous flow of new members ... Well we all know what will happen.

#### **Continuing the Thorp Legacy**

How can we guarantee that the legacy of the Thorp T/S-18 will continue into the future? I have heard some say that the T-18 is dead and that it will fade away never to be remembered. I believe that the fate of the Thorp T-18 could go either way. I think it depends on us ... the people who know, fly, and appreciate the design. We all know that it is probably the best overall homebuilt airplane in history. We also know that it has never been really pushed and promoted. There have always been people that made and supplied the individual parts and plans, but no one that really tried to see the airplane prosper. Richard Eklund has attempted to create a kit, that I am sure would sell, but time and lack of funds has kept that dream from becoming a reality. Recently he has decided not to carry any parts inventory, and I haven't heard lately what the fate of the kit is. I hate that because I know that his kit would be a work of art and that if it was available it would sell. Classic Sport Aircraft has never really promoted their S-18 in the United States either. I know at one time they were selling a few kits overseas, but I don't know what is happening with them lately. They decided to pull the plans off of the market some time ago, and preventing anyone from scratch building their airplane. The good folks at Classic Sport have a good reputation for helping out whom ever calls for assistance. I had dealing with them some years ago, and they were johnny on the spot and supplied me with everything I ask for, including some custom wing spar parts. Somewhere along the way, they have become disillusioned with the T-18 Mutual Aid Society and the Newsletter. They have dropped their membership and support of our organization. I really hate this and I just don't get it .. We are all interested in the same thing .... The Thorp T/S-18.

The fate of the T/S-18 is in all of our hands. We need to work together to promote our airplane and to carry it into the future. Sure the T-18 is not for everyone, but lets get together and keep the legacy alive. Everyone has their own ideas and feelings on how things can be done. Do not take offense when someone expresses an idea ... that's what we are here for. Don't get mad ... just offer your side of the story and lets get on with keeping the Thorp alive and well.

#### 2006 Sun-N-Fun Trip Report

William Hymen

This years Sun-N-Fun ran from April 4th thru April 10th. The weather was superb all week with clear skies and 80 degree plus temperatures. The turnout of aircraft seemed a bit lighter than the last time we attended three years ago, but that was more than made up by the strong showing of all the new Light Sport aircraft and related Light Sport vendors.

Overall, it was big by anyone's measure. About 160,000 people from all countries attended (unconfirmed). In addition to all the showplane parking, there were over 500 aircraft related companies, consisting of 90 small exhibits; 36 medium-size, and 42 of the larger companies like Piper, Cessna, Beecraft, Van's Aircraft, and other 'big-boys'. Inside four large hangars were 340 booths hawking every possible type of GPS, radio, tool, glue, paint, welding equipment and training video you could imagine. My personal favorite toy was the AvMap EKP-IV GPS. It has color-terrain, public and private airports, and a 7" screen large enough to display both map and compass with room to spare. At \$1,400 it is not cheap, but the comparable model from Garmin is at least twice the price.

With the Light Sport category now law, there seemed to be no shortage of LSA designs: composite highwings, composite low-wings, plus Piper Cub look-alikes from at least 3 companies. All priced in the range of \$80,000 to \$100,000 new off the assembly line.

Being the Thorp guy I am, I was happy to see John Thorps T211 being manufactured as a two-seat certified light sport with a Jabaru engine. Not surprising, since John Thorp was instrumental in the design of the Piper Cherokee, the T211 looks basically like a small version of that very same plane! It even has the Cherokee style stablilator.

CubCrafters had their Light Sport Cub on display, which was essentially their PA-18 Top Cub design scaled down to fit the legal limits of 100hp, fuel, and speed. Legend Aero, on the other hand, took the basic J3 design and threw out all the things pilots disliked about the J3 (rear seat solo, fuel in your lap, tight cabin, hand start, etc) and came up with a Sport Cub design that has everything a Cub driver ever wished for and then some. American Champion has also resurrected the 7AC design with a nice interior and updated instruments and electrics.

I had the good fortune to be able to test fly the Legend Aero Sport Cub one morning with the factory pilot out of a local grass strip. The sales reps' loaded up myself and my father (Elmer Hymen) in the company van, and drove us about 5 miles to a 3000 foot private grass airport where many of the companies were giving test flights. We both got about 40 minutes flying time in the demonstrators. I flew the Continental J3 look-alike, and my dad flew the Jabaru powered closed cowl model.

The Legend Aero cubs proved to be every bit as nice as they claim. 100hp is plenty of power, and the wings have just enough dihedral to make coordinated turns a breeze. Speaking of breeze, they come complete with TWO split doors for hot days and float operations.

On my last Sun-N-Fun visit three years ago, I attended a metal workshop and got some English Wheel experience. This year, we both signed up for fabric covering classes with two competitor companies - A class with SuperFlight, and another class with PolyFiber. Both fabric classes were taught using ceconite heat-shrink polyester, with the primary difference between them being the initial base coat on the raw fabric. SuperFlight uses a spray-on method, and PolyFiber a brush-on base coat. Not being a fabric guy, I was amazed how easy it was to get the fabric on tight after gluing it to the frame. Both companies used an elevator as the practice part, and both taught rib stitching in a second session. We took both sessions.

When we were not looking at the thousands of planes, we were walking thru the four enormous buildings full of vendor displays. As always, the handheld GPS units and color mapping computers were the most crowded displays. And there was just about every tool and accessory imaginable for sale.

#### 2006 Sun-N-Fun Trip Report, cont.

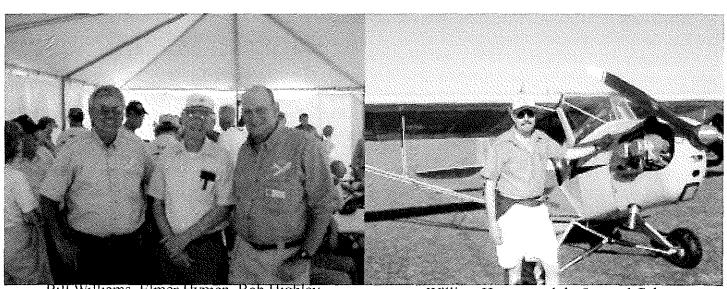
Although a trip to Sun-N-Fun does not come cheap, it is well worth attending every three or four years. And with the Light Sport category growing by leaps and bounds, this years show was especially rewarding and very much worth the effort and planning.

Bill Hymen, T18\_pilot@msn.com

N529BH



Sun,n Fun 2006



Bill Williams, Elmer Hymen, Bob Highley

William Hymen and the Legend Cub

#### The Valley Gathering

Hosted by Gary and Maxine Green

No one actually sent me an article on this gathering. I was there and I can tell you it was a good time. The weather was a little warm, but that didn't stop us from doing what we Thorpies do best ... EAT and FLY and pretty much in that order. I'll post here a couple of comments from those who attended and some pictures provided by David Read.

We just got home from a couple of wonderful days at the spring fly-in at Gary & Maxine Green's place in Arkansas. Just like 2 years ago, it was a great time, with quite a few Thorps in attendance, great food, great weather, and great friends!. Thanks Gary & Maxine! Our trip back to Colorado (Vicki & I, Walt & Bev Giffin, and Dean Cochran) was uneventful. We averaged about 4.5 hrs. each way. The



Green's really have a nice place, right between a beautiful river and a runway. It was our 34th Wedding Anniversary on Saturday, and it couldn't have been spent with any nicer people.

#### John Evens N71JE



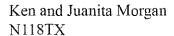
What a wonderful weekend, thanks to Maxine and Gary, the food was great, the companionship superb, and the little perky Thorp's were the stars of the show. We made it back to Pecan non-stop in just over 3 hours. Had about 1/4 tank left when we rolled to a stop at the hanger. The trip up and back in the T-18 was one in a number of wonderful experiences in that great airplane. I was indicating about 145mph, 6500 ft, 2400rpm, 24in mp, and 160 avg on

the GPS. Fuel burn was about 7.5 gph, 160hp Lycoming. I could go faster but with fuel costs as they are why burn more than is necessary. This was also my first trip to use the Tru-trak AP coupled to the Garmin 295 GPS. It worked perfectly and was a great addition to cross country cruising. It was also the first cross country trip for my wife Juanita. She enjoyed the flight and made the trip interesting by spotting lakes, rivers, towns as they passed under the beautiful stubby cranked wing of the T-18. Except for the hot weather, cooler at altitude, you couldn't ask for bluer skies or more favorable winds. did purchase a set of sunscreens at Auto Zone that suction cup to the top of the canopy, they helped a lot in screening the sun from the top of the head.

It was good to see all the Thorp Family there and several new couples that had purchased Thorp's, or were well along in the building process. It was particularly good to see Pat and Dave (Gomer) Eby there in their freshly painted Thorp T-18. I also was pleased to finally meet the notorious Chuck Borden, what a great ambassador he has been for this airplane. I have been a builder, pilot, and enthusiasts of the T-18 since the early seventies. It amazes me that I can still be like a fresh Thorp Newbie with this great homebuilt.

#### The Valley Gathering, cont.

We are indeed fortunate to have this wonderful aircraft to enjoy, along with the great and free country we live in that permits us to have these flying and building privileges. For those that could not come, you missed a great fly-in. Get your Thorp, or auto if not flying, and make the next one. Happy anniversary to John and Vicki Evens and by the way Happy "88th" birthday to Bob Highly.





I want to say Thank You to the Greens for hosting this fly-in. Organizing even a small event like this takes a lot of work and preparation. The neighbors all chipped in for the Saturday evening meal and I must say that it was awesome.

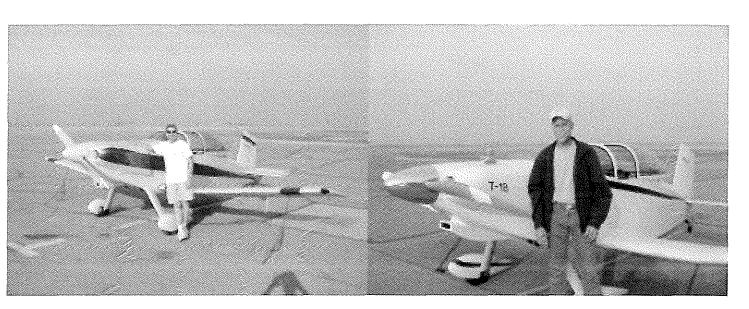
Gary and Maxine have a wonderful place there and I really enjoyed watching everyone try to hit that narrow little runway. I am somewhat glad I was flying a Piper Arrow, I am not sure I could have gotten a T-18 on that postage stamp. Anyway it was a blast, and I hope the Green's will do it again sometime.

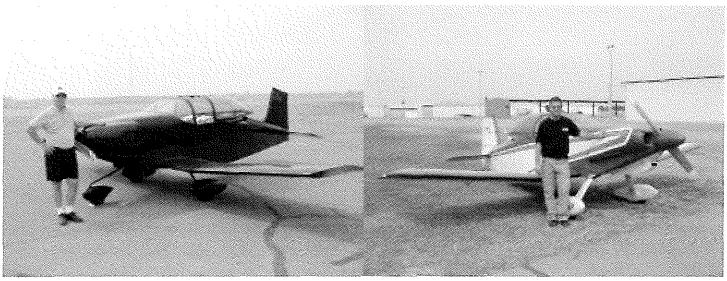
Roy Farris





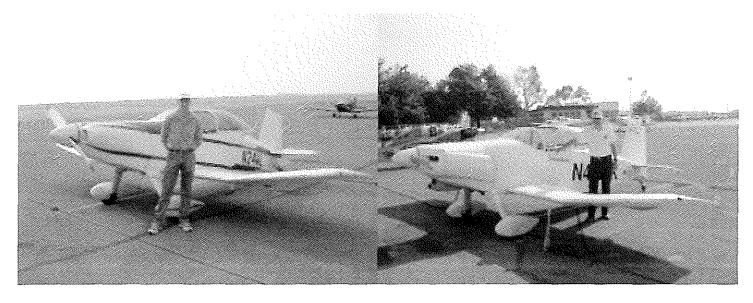
## Porterville 2006 Photo's by: John Evens

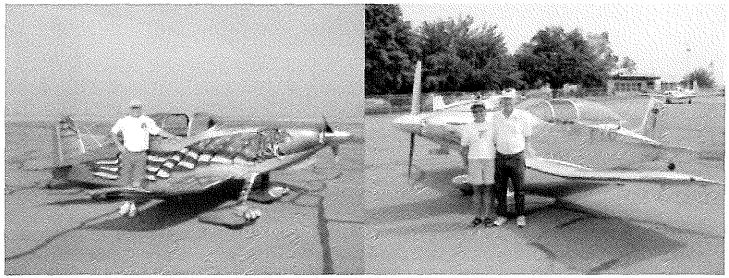


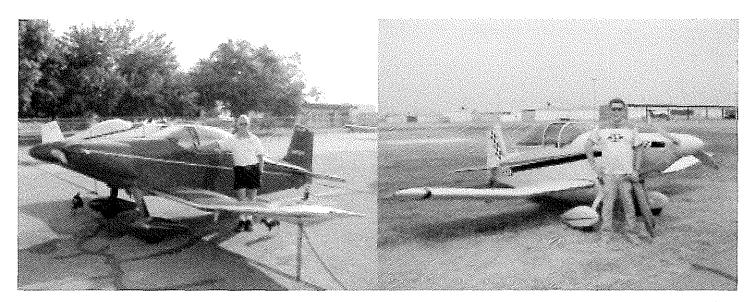




#### Porterville 2006, cont

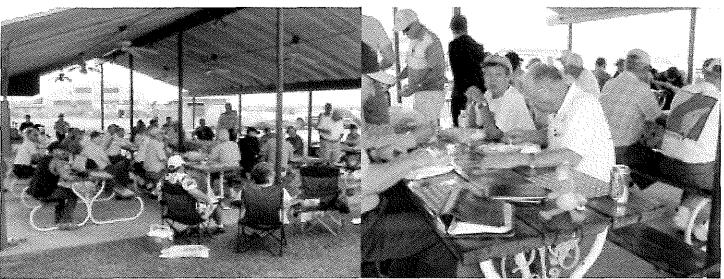




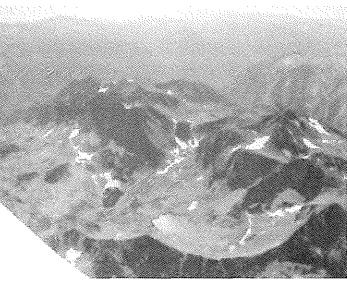


#### Porterville 2006, cont









#### Gee Bee Canopies Sold

Hurrant Kariban informed me that Glenn Breitsprecher of Gee Bee Canopies has passed away. Glenn was the original manufacturer of canopies for the T-18. His mold was sold to Cee Bailey's Aircraft Plastics, 6900 Acco Street, Montebello, Ca. Phone: 1-800-788-0618, ext 317. Ken Faire, President.

Hurrant ordered a canopy at a cost of \$500.00 plus a \$64.00 shipping charge to Florida. He will let us know how the canopy turns out. That sure is a good price if the quality is there.

#### Some thoughts on Spinner Fractures

Has anyone had experience with repair or a spinner fracture? A screw at the corner where the spinner spaces to fit past the prop came out. A fracture line about 1 in. long developed in the slight bend that forms around the prop. I replaced the nut plate and had the fracture welded. The weldment was smoothed inside and out and looked like new. However, even with the screws holding tight, the weldment fractured again. I thought of asking the welder to leave a bead on the inside giving a little more strength. But I wonder if the additional weight is likely to result in a stress situation as well as imbalance. Could put a counter weight opposite side of the spinner. Anybody had this happen and found a good solution.

#### Hal Underwood

I had this problem a number of years ago with a Hartzell produced spinner. I tried to fix this this with riveted backing plates placed on the inside of the section that cracked as well as on the opposite side of the spinner. The actual crack, @ 1/2 of an inch long was welded and then polished. This band aid fix lasted @ 100 hours, until it started to cracked again. Actually, when it did crack, it seemed to happen all at once and traveled outward to at least a full inch. Upon looking at this, my A&E mechanic friend informed me that it was not a really good idea to try and repair this kind of crack. I hated to depart with this original spinner, as it was a great looker,

but I did eventually find a metal replacement part which, has been mounted crack free for 200 hours. At the bottom line, I feel I was lucky that my band aid fix didn't result in my having the experience of loosing my entire spinner in flight. Anyway, that's my two cents. Maybe someone else with a technical background can weigh in on this to round out your thinking process.

John 118EK

Harold, you need to drill a stop hole of at least 1/16 inch dia. at the very end of the crack. Given that the spinner is of unknown alloy, welding may or not be a good option, if enough bead material is left so that it's strength is at least equal to the original material. I've gone through this whole exercise with my old C170B and found the stop hole technique to work best. One has a small hole to look at but looking at buggered up weld is not so nice either! Good luck.

Bob Pernic N966RP

Attaching the front bulkhead with screws is an invitation for cracks. I cracked several spinners before learning from Ken Brock that the front bulkhead is best used only as a stabilizer. After getting a snug fit by wrapping with electrical tape, I have no more cracks in probably 1500 hours flying.

Walt Giffin N78WG

I dont know about screwing the front bulkhead in being an invitation for cracks, but I also DONT practice that. I to use the tape and snug (read tight) fit on the front bulkhead. I only have 125 hours on my KB spinner, but have a Aircraft Spruce spinner that was on my Thorp and is now on my Hummel Bird spinning at 4200 rpm and it shows no signs of cracking. I think it would be hard to get the front bulkhead locked down just right and keep things balanced as opposed to just pushing the spinner on tight (preloading) and bolting on to the rear bulkhead.

Skeet 7077J

cont pg 11

I have used Ken Brock's spinners for about 2400 hours now and have never had a crack. Since Brock's are out of business, I don't know where we can obtain quality spinners that are the proper dimensions for a Thorp. I understand Classic purchased much of Brock's inventory. Maybe they have a few spinners.

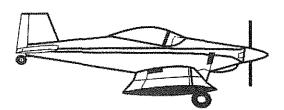
The great thing about Brock's spinners is that the rear bulkhead already has the nutplates installed and the spinner is drilled, it all fits and runs true. One only has to make the cutouts for the prop blades. It is essential to polish the edges of those cutouts to a glass smooth finish. I have had to make shims for the front crush plate to space the front bulkhead properly. I agree with Walt Giffin----follow Ken Brock's advice. Do not put screws in the front bulkhead. I use teflon chafe tape to achieve a tight, press fit.

Gary Green

To anyone not yet over indulged with the spinner fracture issue, I add a followup. I called Johnson Propeller in Bakersfield to see if they had a replacement spinner for me. They said yes, someone with the same prop as mine was changing to a 3 blade and the used spinner was available. I drove over only to find it's diameter was over 13" while mine is 12 1/16th.

However, he had some advise. He's never seen a weld repair successful. A doubler works but ony if done right. First stop drill. Then the fracture can be welded for cosmetic purpose only. The sequence should be weld first then only rivet the doubler in place. Do not weld the doubler because another fracture line eventually occurs probably due to subsequent differential expansion/contraction in the weldment area in contrast to the surrounding metal. The original fracture may open again, but is less likely once stabilized by the doubler. Made sense to me.

Regards - Hal Underwood



#### **T-18 Mutual Aid Society**

#### **Annual Membership Dues Notice**

Check your mailing label on the back page of this newsletter issue. Your membership expiration date will be on the top line of the mailing label just above your name. If the displayed expiration date is Dec 2006 or ealier then you need to renew.

Please continue your support for the T-18 Mutual Aid Society. We need everyones support to continue to promote the building and safe operation of the T/S-18, as well as continuing to be the binding material for the Thorp Family.

The yearly dues are still \$25.00 for U.S. members and \$25.00 or \$30.00 for non-U.S. members depending on weather you receive the printed version of the newsletter or only the web based version. Please send your renewal to: Roy Farris ~ 1220 Stellar Drive ~ Franklin, IN. 46131. Or you can renew by credit card on the T-18 Website at: <a href="https://www.t18.net/newsletterinfo.htm">www.t18.net/newsletterinfo.htm</a>

Please Continue to support the T-18 MAS



#### Newsletter Support

I have mentioned this before but I would like to mention it again. The internet can be a wonderful thing, but as a group focused on promoting the wellbeing of the T/S-18, its builders and pilots, and the future of our little airplane the internet can become very damaging. In the years since the T-18 was designed and being built in our garages, this newsletter became a clearing house for the knowledge and pitfalls of those who struggled to finish their airplane. The newsletter became our bible and building manual, and it continued to gain and store valuable information on the building and flying of the T-18. Later it began to store knowledge of the T-18 as it gained hours of flight time and wear and tear. All of this knowledge was collected and printed into one central location that everyone could go to for reference, cont. pg 12 weather building, flying or maintaining our airplanes. Everyone knew and could reference all of the past experiences by going to the newsletter.

The internet has opened a new world for information exchange. Lots of people have their own personal web pages, and now Blogs that they post information to share with others of like interests. All of this is fine and dandy for the minute by minute and day to day sharing of information, but it does nothing to preserve it for the future or to make it available to everyone. All of you computer savvy people out their need to share your information with the newsletter. How is Joe the potential T-18 builder/pilot going to find all of the necessary information if he has to search the internet for hundreds or maybe thousands of individual web pages and blogs? Their needs to be a central point of data collection and storage ... and that is this publication. If we do not continue to support this newsletter and continue to gather and store ALL information on the Thorp T/S-18 how will those in the future ever find it. Your individual web pages and blogs are fine and valuable, but not as valuable for the future as a detailed collection of ALL the information of ALL the web pages, blogs, written articles, and word of mouth experiences all combined and stored in one central place. Lets all think about that and remember that our group is stronger than any one of us alone ... Lets keep the future exchange of information in our minds and continue the support of the T-18 Newsletter by submitting data to it. Its the only way we can continue to collect it for the future.

#### **Something on Tires and Tubes**

The following is several years old, but I followed it and have had good results:

Tires & Tubes

Steve at Desser Tire and Rubber Company responded to my inquiry about what ply tires to use: Would 4 ply work? You should always use what your manual says (certified planes). The 4 ply is rated at 800 lb. load (per tire) at 31 psi and the 6 ply is rated at 1,285 at 50 psi. You are not going to get softer landings running a 4 ply at higher pressure, versus a 6 ply at lower pressure.

Stay away from the Flight Custom II new, or in the retread. This casing is very stiff, so when ordering (from Desser) note that you do not want these cores. It is fine to put new tubes in old tires, that is OK. You do not put old tubes in new tires, because the old tubes are stretched out and wrinkle when using over. The wrinkle makes a soft spot and eventual failure.

The experience in 295RS (T-18) is that the Desser 6 ply retread is a very satisfactory tire and with the new tubes, my air addition is at least a year or more. Pressure is initially set at 25 psi.

Tom Worth - Tacoma, WA

#### What Tire Pressure?

What is the recommended tire pressure for the 5.00 X 5 tires on a Thorp?

Jerry Meil

I run 40 # in mine and have had no problems in 1400 hrs.

Gary Cotner N57GC

If you want the tires to wear out evenly, don't use a gauge. Inflate the tires so the outside surface of the tire barely touches the surface. There will be a slight "bag" in the sidewall. Check the inflation by looking. If over inflated, the a/c becomes more difficult to steer on the ground, tends to bounce higher, and wears out in the center. This advice is based on wearing out 5 pairs of tires teaching T-18 builders to fly ours, so they could take their T-18 for its first aeroplane ride. (Spelling for J.P.)

Dave Eby

I'm with Eby for better landings. My A&P thinks I un mine too low, but if you must use a guage, I use 18 [low) to 25 (high) psi. I do not have any unusual wear pattern and only check air pressure about twice a year.

Fom Worth - Tacoma, WA

The Goodyear inflation tables recommend 26 PSI for aircraft at our weight on 5.00 x 5 tires. This will give optimum wear. More pressure makes the airplane pounce more and it will be more sensitive directionally on the ground. Less pressure makes it easier, but you do not want to go too low and pull a tire bead off the rim. 15 to 20 PSI n the low side?

Tom Kerns



#### A Virtual Thorp

I'm new to this group, but not to the T-18! I've been creating a Thorp which can be flown in Microsoft's Flight Simulator 2004. It is a very accurate rendition of the real T-18 built and flown by my dad. I put together a very basic page on the web where you can see some pics...The project is not quite done yet, but I'm hoping to make it available by summer.

See it here: http://www.home.nethere.net/kerr/t-18.htm

Robert

#### Finetuneflight.com

#### STATUS OF TAILWHEELS AND SPRING KIT

I am pleased to be offering now the Aviation Products twin fork tail wheel. This will be packaged as a cit with all the parts you need to convert the old leaf spring and Maule tail wheel to the rod spring and twin fork AP tail wheel. I have ordered 10 springs from Harmon Lange and made up a number of the mounting brackets that attach the round spring to the flat

bolster and to your current mounting points. I have the first batch of mounting brackets ready and I am expecting some AP tail wheels tomorrow. Harmon said that I should see my first springs in a couple weeks.

If you have the spring, but not the bracket or tail wheel, you can send me your spring and I will jig and drill it to the bracket and the wheel.

## CARBON FIBER BRAKE FAIRINGS....WHEEL PANTS

The brake fairings have proven to be quite popular and another set is going out today.

The question is: Would you be interested in carbon fiber wheel pants? Sam Lauff in Florida has some wheel pants he can send me that I can use as models to make female molds for the left and right pants. I would make them match the brake fairings and probably in a manner that the brake fairings would attach completely flush to the pants.

I would like some indication of the interest in upgrading your wheel pants before I embark on this effort.

Advantages would be: slightly lighter. No bulkheads. One piece mold. Price will depend on how many I might sell.

#### CARBON FIBER AIR SCOOP AND HIGH PER-FORMANCE AIR FILTER

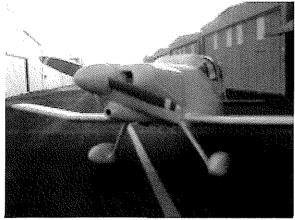
Last week I flew my T-18 for 1,200 mile round trip Paso to Tucson and return. The new air scoop and filter on my IO-320 worked great. My average speed to Tucson was about 196. Fuel burn for 600 miles was 24.5 gals. Winds were not much of a factor on this segment since they were mostly cross winds. Climb out going thru 5,500 was 500 fpm at 180MPH ground speed. Average 4 way speed runs over the airport at 7,500 feet show a cruise of 200 mph but I can't use full throttle. My prop is limited to 2600 rpm. This worked OK on my old engine, but on my new hot rod Ly-Con motor, the prop is too limited, so I am going to have to attend to that.

My new air scoop uses the front portion as a plenum chamber. A simple round rubber seal made of baffle material provides a rear seal against a top and bottom bulkhead. The scoop is removable to allow you to easily drop the lower cowl.

An adapter allows the ID of the high performance K&N filter to mate with the intake tube which attaches to the front of the fuel injection servo.

One of the major benefits of this set up is low restriction to inlet air. This filter is rated at over 550 CFM. A 320 or 360 requires much less. Then there is the service life of the filter. Lifetime. Better fuel economy with fuel injection as well as slightly more power. Add electronic ignition for a little more power.

IF you already have fuel injection on your T-18 it is simple to convert. If you have a carb and would like to convert, you may very well find that the cost to make the change is very reasonable. I will be happy to quote you on what you need.



Toms New Airscoop

#### YOUR IDEAS

I am very much interested in hearing your ideas. Limiting cowling inlet size has been mentioned. In my case I see that at 200 mph, my oil temps are too low. Gear leg fairings. Top of gear leg to fuselage fairings. Please let me know your thoughts.

Tom Hunter N18XT 805-227-4571

#### Accident Report

By: Jerry Hajek

I have no real problem with the Trusty design and the Scott 2000 is one of the best on the market. I like the round spring and it did lower the tail a bit all good things. The Scott also breaks over nicely and the Trusty aluminum housing looks great and the Brass bushing was a great idea to not ware the aluminum. All Good things so what the heck happened to Jerry at OSH.

It was a quartering tail wind landing that OSH tower was using all day but by 15:30 it was a little gusty but still light about 6 kts. I was near gross with my son and our bags and some tools, aft CG was at 68". Been there done this before no problem for a T-18. I landed 3 point because they asked for a midfield landing. No problem add a little power stay above 80 mph. I was down on all three and raised the flaps started toward the edge of RWY36L (the East taxi way was 36R) and now at about 40 mph or less we were along for the ride with little air flow now across the rudder time to depend on the tail wheel which was not locked and castered us into a hard left weather vane turn. As I corrected with right brake I slid sideways into a landing light that damaged my left wheel pant and brake caliper as well as slightly bending the gear leg. I was still sliding sideways in grass across the west taxi way and heading for the ditch then I decided I was going slow enough to let up on the right brake and use full left brake to ground loop before we slid into the ditch. That worked and I stopped after 180 degree change in direction. No real damage, no prop strike, no one hurt except my pride. A great bunch of guys from Chapter 75 and the Emergency Repair Barn helped me get back on my feet and fly home. Bob Olds a former T-18 driver designed a rig he welded up from steal stock we scavenged and borrowed a 10 Ton Port-A-Power and we straighten the slight off set in the gear. Aircraft Spruce shipped in a new brake caliper and I removed all the gear fairings and pants, inspected the welds and motor mounts and flew it back to Houston.

Why the tail wheel was not locked on landing was my own fault for not properly servicing it. Two buddy's of mine from Houston Greg Bordelon a Mustang II driver and David Grover a RV-8 driver, and cobuilder of my new RV-8 project, came by and I asked them to take a look at my tail wheel and all they found was dirt. I grease it but had not taken it apart in a while to clean it... a very important step I missed. They cleaned it up greased it and it is like new again. My only dislike for the Scott is \$1800 price and the price of replacement parts. Also the Aviation Products can handle a larger and wider wheel and I don't care about the extra drag I want better rear traction. That's my story and I sticking to it.

They say bad things come in threes... as I was driving to the airport what looked like two 8" wheels oined by a steal shaft was in the road and was push not my lane and I ran over it puncturing my transmission pan and being a 2006 Toyota pickup it's too new for any one to have the part so four week delivery that's #2. I was in the hangar welding a patch on the transmission pan today and the wind whipped up through the doors and knocked over two 15 foot leading edge slats from a German Storch we're rebuilding and scratched the paint on the truck that #3. Only good uck for me now right?

Ely Safe! Jerry



## Build a Spinner Bulkhead The Bob Highley Method

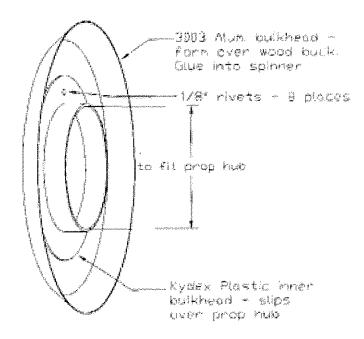
My bulkhead was for the Hartzell Compact CS Prop. The reason for the slip fit rather than using the tooling holes was so I could get it off. The Kydex inner flange just slips over the hub to stabilize the front of the spinner. The bulkhead itself is glued into the spinner and is now part of the spinner. Where the bulkhead sits on the hub is not super important as it just rides on the hub. This makes it easier to place the bulkhead as you have a range of about 1/2" either way. You can make up any small difference between the floating bulkhead ring and the prop hub with tape. I used Teflon tape

You can probably use .050 or .063 3003 as it is not concritical. The important thing is that it is symmetrical so the spinner assembly is not out of balance.

The flange on the front bulkhead only needs to be 5/8 - 3/4" as it only needs to be wide enough to glue it in. I used an epoxy called PC-7, but I suspect you could use JB Weld. All found at the hardware store.

Annealing aluminum is easy! An old Indian trick I learned at Oshkosh: Use a black magic marker (the cheaper, the better) to blacken the area you want to anneal. Then take a neutral torch and play it over the area until the black is just gone. Keep the torch moving or you will burn the metal. Don't overdo it - it only takes about 750 degrees to do the trick. Let it air cool - don't quench it!

Here is a drawing of what I am attempting to describe:



I took some soft aluminum, 3003, and formed it on a lathe over a wood (MDF would do) form that was cut to fit the inside of the spinner. This operation resulted in a pie pan looking piece. You might have to anneal the piece halfway through the forming process. You only need the flange to be 5/8 - 3/4". I cut the center out so it would fit loosely over the prop hub. Next, I made a male form duplicating the prop hub. Additionally, I made a collar to slip over this. Using 1/4" Kydex (www.kydex.com), I hot formed a plastic inner flange to go over the hub. This was cut out and riveted to the pie pan. The whole thing was bonded into the spinner with PC-7. I suppose you could use JBWeld.

#### Build a Spinner Bulkhead, cont.

The placement is not supper critical as the Kydex collar just slips over the hub with no particular longitudinal position.

This rig has lasted 2000 hrs. All this was because my Brock spinner began to crack! Fortunately, the crack was around the perimeter where the screws attached to the rear bulkhead. I cut about 5/8" off the spinner and redrilled the holes. Next time you see N711SH, see if you can detect that the spinner is shorter than stock.

Bob Highley N711SH SN 835



#### **Landing Gear Heat Treating**

Hey All, This is mostly for Frank Barnett but may be of interest to others. I just sent Frank's one piece gear off for heat treating. I found a furnace here on the east coast big enough to do it as designed in one piece. If others are interested I will be putting together a fixture for welding the gear together this winter and will be able to do the gears on the small batch basis. Frank, I don't know if you looked at the gear legs you gave me but they are the most beautiful tapered pieces I could ever hoped for. Truly nice work.

Regards,
Dana LaBounty (MMP4)



#### **Stuff For Sale**

It has been a while since I was able to post any For Sale items. I am not sure how current these items are, but I wanted to list them here in case they are still available and someone out there needed one of the items ... so here goes

#### For Sale

Having installed an EFIS system in my -18 I have the following instruements for sale.

All plus shipping.

Voltmeter \$20 Suction Gauge \$20 Fuel presure with sender \$30.00 Amp Meter \$20.00 EGT with sender \$40.00 Oil Temp with sender \$30.00 CHT with senders (2) \$25.00 Vacumn regulator \$20.00 Vacumn air filter \$20.00 Rate of climb \$25.00 Altimeter \$100.00 Takem Digital Tach shows 196 hours \$100 Rapco Vacumn pump \$100 RCAllen Gyro Hor 22-7. 50 hours since overhaul by Kelly in March of 2005 \$300.00 RCAllen DG 11A-8. 50 hours since overhaul by Kelly

All working well when removed. I can provide pictures for anyone interested.
Bill Beswick N54WB

Send an Email to: wbeswick@chartermi.net

in March of 2005 \$300.00

I have a flap handle for sale with detents for 20 and 30 degrees. I bought it from another Thorp owner with the intention of using it to replace the 20 and 40 degree handle in my airplane. We ended up grinding a 30 degree detent into my current handle instead. The handle is powder coated beige with a handsome wood hand-grip. It looks very nice. If you own a Thorp with a flap setting detent at 40 degrees, you may want to consider replacing it, given the bunting issue demonstrated in SOME Thorps. You can have it for \$70 plus shipping from San Diego, CA.

Call 858-342-3077

Roger,

#### For Sale, cont

Since my diagnosis of MS I am mostly confined o a wheelchair and unable to continue to work on my project. I have at this time FOR SALE pair Goodyear wheels and brakes 600-5 type III never used—asking \$350 + shipping

Lyle Trusty tail spring with attach clamp never used best offer + shipping

Please respond to docvd1@msn.com

George A. Van Dorpe MD 2661 S Sable Way Aurora, Colorado 80014

O-290-D2 as removed from a milkstool (Piper Tri-Pacer) as the result of the owner installing an O-320. It has about 1600 hrs on it and was running good at he time of removal. It has all the accessories with it, was told the asking price was \$3,800, but the owner night accept less.

t is located in Zephyrhills, FL. Let me know if you are interested and I can arrange the details.

3ob Highley 2919 Deerbrook Drive Lakeland, FL 33811 363-646-3466 (H) 363-944-4941 (C)

I bought the plans a few months ago and have decided not to build, so plans are for sale make an offer. stphnjohnston@yahoo.com

Last summer I replaced my long gear with a new ong gear from Ken Brock because I surmised that my original long gear purchased form Merle Jenkins had cracked. (Jenkins was in the aerospace business and built a T-18 in his shop and supplied welded Thorp parts back in the 60's and 70's.)

Well a couple weeks ago I took the gear to T-18 builder Dan Eggilston who has a welding business and has repaired several Thorp landing gear. He carefully

Newsletter No. 134

#### For Sale, cont

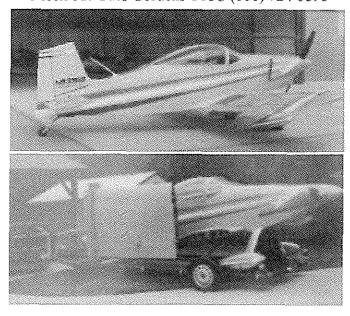
inspected the "cracks". They turned out to be only in the paint! I had been told not to paint it with Imron... now I know why!

So, if anyone needs a long gear,,,,I've got an extra one.

Tom Hunter

T-18C

Check out Guss Gordens T18C (661) 724 0898



T-18

Its been fun but I need to order the IO-390x power for my RV-8 project so I have to let the T-18 go. I put more money into the restoration than I will ever get out of it but it was a great learning experience and the 2003 Oshkosh "Best Restoration" award was the icing on the cake. I've had a great time with the little bird learning its strengths and its weaknesses and getting great support from you guys. Here's the "unofficial" Sales Page Link.

www.geocities.com/jahajek/t18forsale.html

Jerry Hajek

#### **Carbon Monoxide Poisioning**

Now that the Australian T18C accident is posted in the members only section of T18.net, I recommend you review the conclusions relative to Carbon Monoxide dangers. This aircraft had developed holes in the exhaust ramps aft of the firewall. This was likely caused by short exhaust pipes allowing the exhaust to directly impinge on the ramps.

Since there is always a chance of CO leakage into the cockpit I once again endorse Tom Kern's recommendation to carry the Kidde Model 900-0102 Carbon Monoxide alarm. This unit costs less than \$50 and can be easily mounted to the seat back."

Richard Eklund Eklund Engineering, Inc. www.thorpt18.com



#### **Cockpit Noise**

I really don't think you can easily determine where the noise is coming from by listening, especially the low frequencies. The inside of the canopy is a cavity and the sound will set up standing waves, with nodes which contain the air vibrating (noise) and nodes where the air vibrations are very little. In N966RPI can move my head around, with or without headsets and find areas of quietness. It's quite dramatic with moving as little as a couple of inches making a big difference. In my preferred head position, having any kind of headset makes it worse. ( I often fly without any headset which is quieter) The NR headsets don't do any good and actually may make it worse. I figure the little pocket of air that is vibrating is imparting the low frequency vibrations to the skull, via the headset. I believe to have two sources of noise. One is the floor boards which vibrating because of the exhaust impulses and these are felt easily by placing my feet directly on the floor. Attaching extensions to the exhaust stacks made a big difference! I think some other means of reducing that impulse can be made and I would be interested in what others have to say about that. The other source of vibration, is the windshield. I have the 1/8 inch thick one and ifI hold my hand against the shield, I can

feel it vibrating like gang busters. Using different pressures I can easily influence the noise level inside the cockpit. To minimize the resulting noise, I figure there are two options. (1): go to the thicker windshield. (2): stiffen the windshield by attaching it to the center support. Both these actions will result in raising it's resonance frequency. Attaching the shield in the center is easier and I intend to do this in the coming weeks when doing the annual.

I'll report my finding when I have them.

Sincerely, Bob Pernic N966RP



#### Some Thoughts From Eklund Engineering

Eklund Engineering will still support T-18 owners who built from plans sold by John Thorp or Eklund Engineering. Also those who bought a T-18 and have a current plans set for the airplane. We will phase out carrying any parts inventory. Orders will require 50% down and delivery will be quaranteed in 90 days or a refund can be obtained. We will be listing the current parts and kit inventory for sale at 25% off. The list will be posted on the Thorplist.

I spoke of oxygen requirements increasing with age at the 2006 OSH T-18 Forum. The following site gives a lot of technical info but also some practical advice on supplemental oxygen use.

http://www.dr-amy.com/rich/oxygen/

Richard Eklund www.thorpt18.com

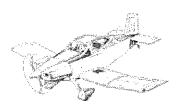
#### **Aviation Quotes**

If you're faced with a forced landing, fly the thing as far into the crash as possible.

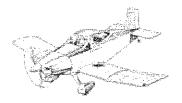
- Bob Hoover

Never fly in the same cockpit with someone braver than you.

- Richard Herman Jr, 'Firebreak'



#### **T-18s IN THE BLACK HILLS**



Richard and Kathy Brandiger and Ken and Donna Post wish to extend an invitation to all T-18 enthusiasts to gather in the Black Hills of South Dakota for a weekend of aviation fun.

WHEN: June 8, 9, and 10, 2007 WHERE: Rapid City Regional Airport

#### **ACTIVITIES AND SCHEDULE:**

FRIDAY, June 8. Arrive in p.m. Tie down, greetings, and transport to lodging. Assemble for eats and drinks (venue to be announced.)

SATURDAY, June 9. Transport to airport. Group aerial tour of Black Hills including Mt. Rushmore, Needles, Crazy Horse Monument, etc.

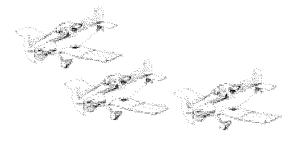
Lunch at airport.

Informal aerial activities and fellowship.

Transport to lodging, then drive tour into The Black Hills for dinner at The Gaslight Restaurant and Saloon in Rockerville, followed by the lighting ceremony at Mt. Rushmore.

SUNDAY, June 10. Check out and transport to airport. Fly to Wall for brunch at Wall Drug. Aerial tour of Badlands National Park.

Please put this on your calendar and watch for details as they develop!



Newsletter No. 134 December 2006

T-18/S-18 Thorp Newsletter Roy Farris 1220 Stellar Drive Franklin, IN. 46131

Phone: (317)736-8903

email: royfarris@earthlink,net



Mike Stewart ~ N118KM