



Editors Notes

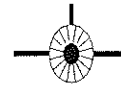
By: Roy Farris

It is the last of August as I write this issue of the newsletter. I apologize for the delay in getting this issue out, but I must put some of the blame on you. I am attempting to fill all twenty pages as I have been doing, but I have not received enough material for even half of this issue. I simply cannot publish five, twenty page issues of this newsletter without some input from you. I plead for someone to send me information in nearly every issue, but I rarely get any. All I can do is continue to beg and plead for material, and publish what I get. I have seriously thought of reducing the newsletter to ten or twelve pages, but I sure hate to do that. Our newsletter is definitely one of the best as far as aircraft type clubs and homebuilt groups are concerned. I would like to keep it that way. I really enjoy putting these thing together, but it would sure make my job easier if I had some neat stuff to put in it. There are many T/S-18 being built out there, and a lot of information seems to be shared on the Thorp E-Mail Group, but it never makes it here to me. I do pick some of the information from the Thorp E-Mail Group and publish it here, but a lot of information is passed between members and not through the E-Mail list. You guys need to forward that information to me, either by E-Mail or by regular mail. I will take it any way I can get it.

I have been publishing this newsletter for two years, and while attempting to collect some of the back dues for the newsletter subscription, I just this month learned something that I never knew. In fact I'll bet that none of my predecessor's knew this interesting fact either. I found out that if I am a newsletter subscriber and I sell my T/S-18 or my project, I am automatically deleted from that mailing list and have no obligation whatsoever to pay for any of the issues I have received, or to notify the editor that I would like to cancel my

subscription. WHAM O it hit me like a ton of bricks !! Now I understand why over fifty percent of the subscribers have not paid this years membership dues. Why heck, lets go ahead and say that if we haven't touched out project for six months then we have no obligation to pay our newsletter dues. Believe it or not that's what I was told.

Our organization has always been considered a "family". The newsletter editor/publisher has always had the give and take attitude regarding the paying of dues, thinking that his family would always do the right thing. Well gang ... it ain't working. As I stated above, nearly fifty percent of the members that receive this newsletter have not paid this years dues and about ten percent still owe for last year. As a result I am running on fumes and cannot continue to do so. I am introducing a new subscription policy that is effective immediately, details to follow.



New Subscription Policy

Beginning NOW the Dues for the T-18 Mutual Aid Society, which includes the subscription for this newsletter will expire on the last day of December. Your newsletter subscription and your membership will expire at that time and no further issue's will be mailed to you and any access to the T-18 On-Line newsletter through the T-18 website will be denied. In order to remain a current member of the T-18 Mutual Aid Society and to prevent your newsletter subscription from being canceled, I must receive your membership dues before January 1, 2003. Of course if you forget, you can be reinstated at anytime by sending in your dues.

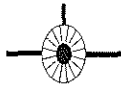
Take a look at the mailing label on the back of this issue. You will notice that above your name there will be a line stating when your subscription will expire, ie .. "Subscription expires Dec 2002"

cont. pg 3

New Subscription Policy, cont.

This is a little different format than we have been using. As you may remember on past mailing labels the amount owed was printed above your name or "PD" if your dues were current. Now by looking at your mailing label you can tell when your membership dues will expire. I do have some members that pay as much as five years in advance, so their mailing labels will reflect their individual expiration date.

For most of you, your membership dues will expire on December 31, 2002. Please check your label, and be sure to send me your membership dues for 2003 .

T/S-18 Brake Pedal Clearance

Recently I attended a fly-in, and saw a couple of T-18's with the brake pedals notched to miss the fuel tank support structure at the firewall.

I am building the widebody S-18 from Classic Sport Aircraft Plans, and decided to check my plans to see if there is a conflict. I think there is, so all of you S-18 and widebody builders might want to check this out.

1. On Drawing 488, Installation-Rudder Pedals, this drawing shows the split between the rudder pedals to be 1.5 inches between BL 8.0 and BL 9.50. This means that the center of the gap between the rudder pedals is at BL 8.75

2. If you go to Drawing 528, it shows the center of the rivet line for the vertical fuel tank support along the firewall to be at BL 6.25, and the center of the rivet line along the top skin of the fuselage to be at BL 7.0. In my opinion, this would cause the right rudder and brake pedal to hit the fuel tank support if the rudder pedals and brake pedals are too close to the firewall.

3. According to my figures, for the fuel tank support structure to split the gap with the brake pedals,

the rivet line along the firewall should be moved from BL 6.25 to BL 8.06, and the rivet line along the top skin of the fuselage should be moved from BL 7.0 to BL 8.81.

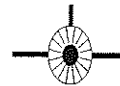
4. If you go to drawing 514, Fuel Tank Assembly, the straps are shown at BL 7.0. In my opinion, this should be changed to BL 8.81 to coincide with the changes described in item 3. In looking at this drawing, I can't see any detrimental effect of moving the fuel tank supporting structure and straps out 1.81 inches

I marked this on my plans, because I am trying to squeeze every inch of legroom I can into mine. Some of you shorter pilots can possibly move the rudder and brake pedals aft to avoid this problem.

Please don't take my word for it, check it out yourself. I don't know if the original T-18 plans reflect this same problem, because I have not seen them. I would suspect they would, because the notches in the brake pedals I saw were on T-18's.

Robert Mardis
SN 214

(Editors Note: The brake pedal clearance problem was discussed in early newsletters. One of the fixes was to notch the brake pedal as Robert indicated. Another fix was to notch the fuel tank supports. Refer to NL# 60)

Technical Tip

Please do not use the foil and adhesive sandwiched black foam sold at some airshows and J.C. Whitney. The foam disintegrated, probably from the heat, into a soft sticky mess that is hard to pick up and hard to clean up where it sticks. You won't believe the mess it created in my cockpit where it rained down from over the fuel tank.

cont. Hurant Karibian karibian@worldnet.att.net

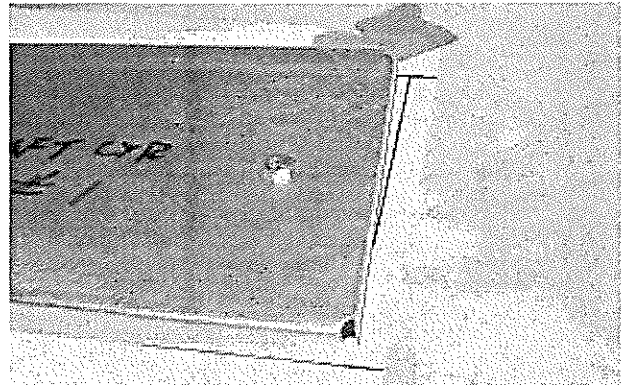
A Project Update

By: Andrew Robinson

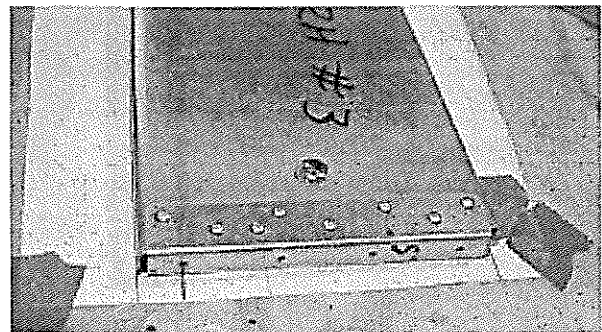
Progress continues on SN #497 at a slow but steady pace. So far, most of my efforts have been concentrated on the center wing. I decided to change from John Thorp's original airfoil to the LDS airfoil, so I ordered some new nose ribs. After fitting up the new ribs to the existing holes in the forward spar, I sighted along the wing and noticed that the ribs did not seem to be aligned correctly. I laid my long straightedge on the ribs and saw that some of the ribs were as much as 3/8 inch out of line with each other. I have an LDS airfoil template, so I un-clecoed a few of the ribs and checked them against the template. It turns out that the spar flange of the ribs was bent at a skewed angle so that all the ribs were pointed "nose up" a few degrees. I decided against rebending the flanges and simply cut them off. I cut new flanges and match drilled them to the spar and bent them on my brake. I then used my LDS airfoil template to make a bit of tooling that would properly line up the ribs and the new flanges. I then riveted the new flanges to the ribs and re-clecoed everything to the spar. Everything lined up exactly! A straightedge now evenly touches every rib. Yes, this adds a few ounces of weight and doesn't look as nice as the properly formed ribs, but I was doing this right before Oshkosh and didn't want to wait until OSH was over before I could get new parts. I will admit to being an impatient soul. The ribs and spars are all piloted and countersunk. I also have the left side wingwalk support angles ready to go and still need to do the right side. Once this is done, the wing will be ready for skins.

One night I started looking at the controls drawings and started digging into the various piece-parts that came with my project. There were a few rods that already had rod-ends installed. The push-pull rods were obviously factory parts and still had part numbers stamped on them; I'm guessing Cessna or Piper parts. These rods were threaded on both ends, whereas the controls in the drawings have the rods attached to the tubing on one end

and screwed onto threaded studs on the other end. However the tubes I had were just a little too short, so I figured that they were bought just to obtain the rod ends. More digging turned up more threaded rod ends, still in their wax paper wrappers. Hmm. A little experimenting showed that with the new rod ends screwed into place, the assembly was long enough, and there was plenty of thread screwed into the rod end fittings. On one end of each tube assembly I cross drilled through the thread sight-hole of the rod end and inserted a small cotter pin to prevent the tube from turning in relation to the rod end. The cotter pin was in addition to the jam-nut and Loctite on everything. That took care of the push-pull rods from the bellcrank to the aileron; I have enough rod ends to complete my aileron controls as soon as I get some more tubing. I have the ailerons fabricated and ready to be closed out as soon as I get them hung on their hinges (the outer wings are complete and already have their half of the hinges installed).

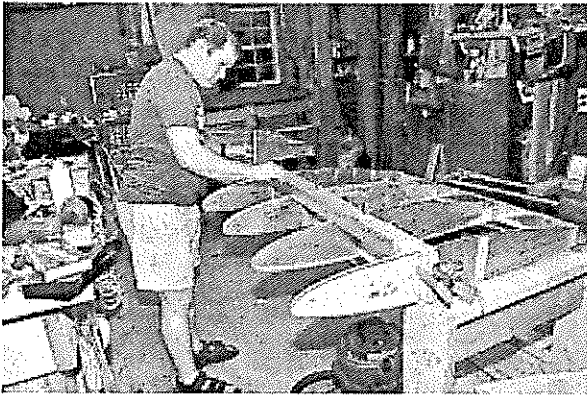


Skewed rib on the template

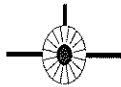


Repaired rib on the template

cont. pg 5

A Project Update, cont.

Andrew checking alignment once it was all done

**Landing Gear Cracking AGAIN**

I've got a T-18 that has about 890 hours on it. Well built airplane built by Ken Pasch in 1980. Last year while doing my annual, we found a crack on the trunnion (sp?). The part of the "A" frame looking thing that the gear is mounted to that mounts to the air frame just in front of the fire wall. Called Gary Green and asked him about it. It seems that a crack in the weld on this part is common. Gary's has had one for about 20 years I think he said. So we marked the length of it and inspected again this year. It grew about 3/8" in 170 hours of flying and about 150 landings, none of which have been hard. The crack is now about 1/3 of the total circumference of the tube. Called Gary back again. We discussed it some more and his crack is in the weld, not the tubing. My crack is in the front part of the tubing below the weld which is below the place where this "A" frame part is mounted to the airframe. NOT the same location of his crack and his has not grown.

Name Unknown

(Editor's Note: This issue has been covered extensively in past newsletters. Because of the serious safety issue we are covering it again)

cont.

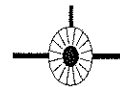
Landing Gear Cracking AGAIN

The outer tube should not crack if properly heat treated. I know: mine bent back 'til the wheel pant touched the wing on a takeoff mishap. The tube did not crack or buckle. In fact, the gear went on to serve on another Thorp, after straightening. This was all on the advise of gear guru Steve Whitman.

I would surmise that your gear was re-welded in the area of the attach plate to repair a crack like Gary Green's (and mine). If it was not re-heat treated after the welding, a crack would most likely occur where you describe it. This would be at the heat boundary of the weld. These parts are some major size tubing and a great amount heat is needed to weld them. Those who made their own have found this out. See the old newsletters for details.

If you elect to repair this gear, make sure it is properly heat treated before you use it.

Bob Highley
N711SH, Ser. # 835

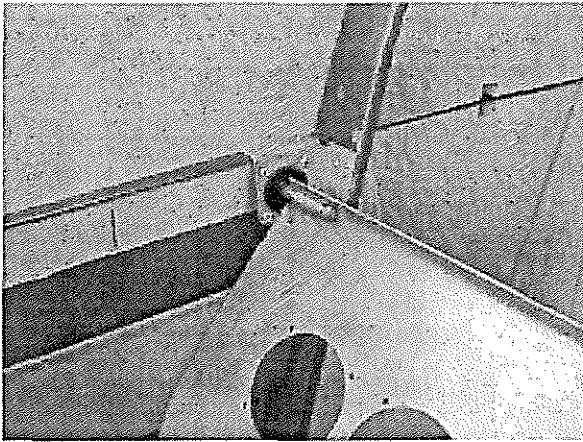
**Building Tips**

From the pictures (on pg 6) you can see the shock/pivot mounts I am installing. I aluminum brazed 1/4" ID tubes to the inside curve of the panel bottom, cut the threads and ground part of the head off a 1/4" bolt, slide it through the tube into the shock mounts and retain it with a piece of safety wire. It's the same method I'm using on my present plane.

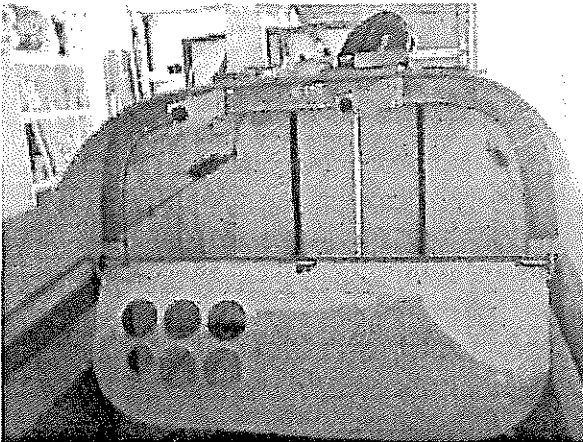
Also note my map side pockets. One worked great on my first plane so I am putting two in this one.

Hurant Kariban

cont. pg 6

Building Tips, cont.

Hurant's Panel Pivot



Hurant's Panel Pivot. Note Map pocket

Bushings

I stumbled over some sleeve bearings that are terrific substitutes for the 490-1 (brake peddle) bushings and 488-1 (rudder pedal) bushings. They are small sleeve bearings made by Garlock Bearings of Thorofare, New Jersey. You can find a local dealer by looking at www.garlockbearings.com or calling at 1-800-222-0147. You may even be able to order directly from Garlock. The dealer I bought them from was Kaman Industrial Technologies. Their main office is in Windsor, CT, but they have branches in just about every U.S. State and Canadian province. Look in the Yellow Pages, or go to Kaman's website. The sleeve bearings that I used are from the DU series. They have a thin 1/32 inch steel

cont.

Building Tips, cont.

shell and are permanently lubricated by means of a PTFE based bearing surface. They work at temperatures from -328F to +536F. Part number 03DU04 has a 3/16th inside diameter, and is 1/4 inch long, and works perfectly for the 488-1 bushing. For the 490-1 bushing, I used part number 03DU03, which has a 3/16th inside diameter, and is 3/16th inch long. That is a little longer than the .16 inch called out in the plans, so I filed them down, and then realized I probably could have used them as is with a thin washer instead of a regular washer. The DU series range in size from 1/8th inch I.D. to 2 inches I.D. in 1/16th inch increments, so there are probably lots of other uses for them in the T-18 that I haven't found yet. Oh, they cost about \$1.25 each, which seems reasonable enough to me when the alternative is cutting, filing, and reaming small pieces for 4130 tubing.

Bob Hartmaier

AirVents

I installed an air vent system using an inlet scoop located at the wing panel junction and it is very effective. The scoop is on the underside of the gap fairing so there is no rework to wing skins. It then goes through holes in the root leading edge ribs and into the cockpit. A vertical tube goes up to the instrument panel where I have Wemac air vents installed. The system moves a tremendous amount of air into the cockpit, it's very effective. There is one air vent on each side of the airplane.

The one drawback is the tubing on the inside of the cockpit. Currently I just have an aluminum tube (about 1.25 inch dia) going up the side of the cockpit, and it does not look good, although with my leg geometry in the cockpit I don't even touch the tubes. You probably need to fabricate a "flat" tube to go up the side skin, but it needs a big joggle to go over the diagonal stringer on the sidewall.....

Ross Mahon

cont.

Building Tips, cont.

More on Air Vents

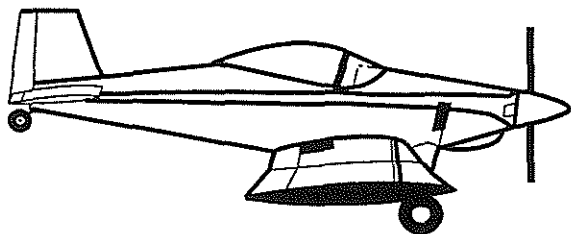
The issue from the get go was that my wife gets a bit nauseous if air is not directed onto her face and this fixed the problem. We tried it out this past weekend with a trip to northern Minnesota with temperatures in the 90 degree range. The inlet is a 3/4 inch hole just below the leading edge of the gap cover (convertible wing). This section of the wing area was sealed so that it would pressurize, using aluminum tape and some dense foam rubber in the area of the joint in the main beam. An one and a quarter inch aluminum tube is centered and sealed in a lightening hole, leading to the fuselage where it necks down via PVC to an one inch hole in the fuselage. Once through the fuselage it makes a right hand turn forward and expands again to one and a quarter inches. It now transitions from the PVC elbow to a one and a quarter inch scat tube which follows the corner forward, under the rudder peddles to the firewall, then upward and back along the gas tank to an eyeball vent in the instrument panel. All this was done with out removing the center wing. We are happy with the result, all way round.

Bob Pernic
N966RP

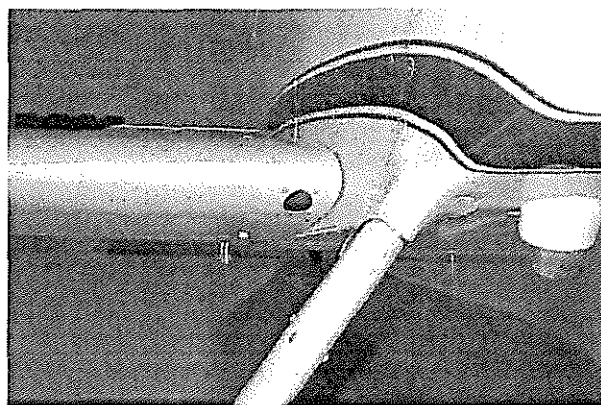
Air Vents,cont.

I have attached some pix of some T-18 vents that work. (pictures on right) They are attached to eyeball vents in the instrument panel. Hope this helps some of you.

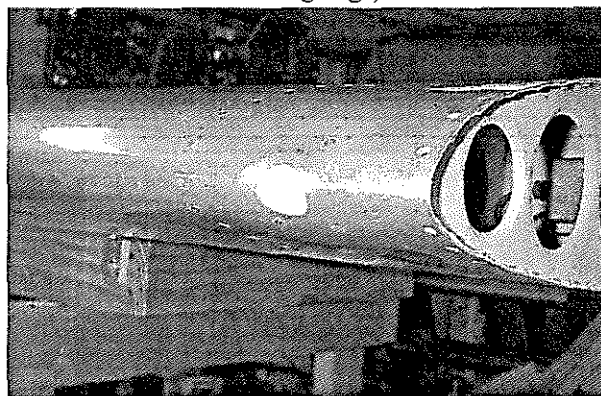
Bob Highley ~ N711SH, Ser. # 835



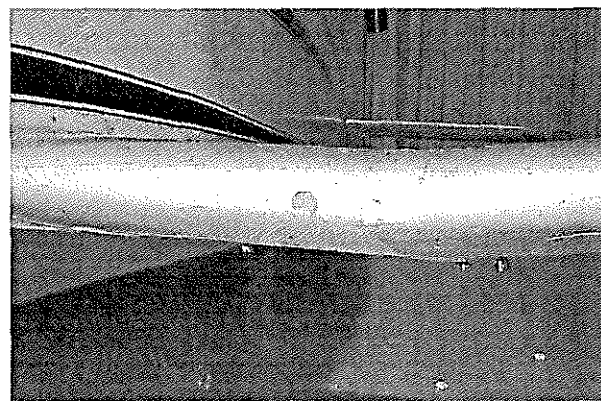
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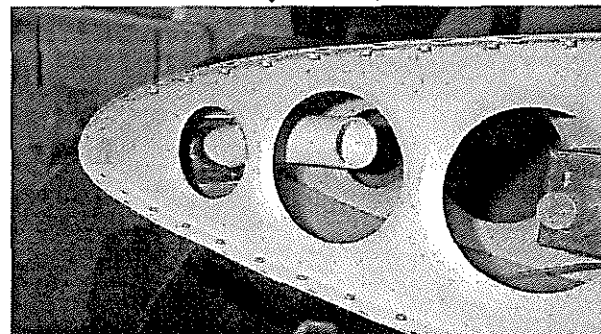
Vent inlet on N711SH (Should be a little higher on leading edge)



Close up of vent location on my new wing



Vent inlet on N30WW (This one will blow the map out of your hand)



Vent duct is formed of PVC glued with waterproof pipe cement. The leading edge piece is split and heated PVC formed to the leading edge.

cont. pg 13

Cannon Creek or Bust

David Taylor N314JA

I took off from Warner Robins, Georgia on Friday May 17th at about 12:45 PM Eastern time. I had planned to leave around 3:30 but the weatherman was forecasting deteriorating weather so I decided to take off a bit earlier. I had just bought my plane when the Kentucky Dam gathering took place and I did not want to miss this one. The flight was uneventful with the exception of having to fly between a TFR due to forest fires and the restricted airspace at Moody Air Force Base. I arrived at Lake City at about 2:00 PM. I had some difficulty finding the windsock but luckily Bill Williams happened to be listening as I flew in to give me the runway and traffic report.

I had arranged for Bob Highley to bring his incidence board so we could check out my heavy left wing. I had forgotten tie-downs but Ray Dalbow was nice enough to loan me a set. By 3:00 PM we had 5 or 6 builders looking at the plane ascertaining the situation. As it turns out my right wing has already been reskinned but with a twist in the wing. It was determined by all that the right wing should be skinned again with new skins. I'd like to thank Bob Highley, Jim Paine and Ben Scola and the others for all of the assistance. If you haven't flown your plane to a T-18 gathering I highly recommend it. T-18 folks are more than happy to give advice. Some have built more than one plane so they are very knowledgeable about the airplane. At least one member has been involved with the airplane since 1965!

We were able to get in a little formation flying before the weather turned too sour. Not long afterwards we found ourselves at a local restaurant called Phishead's. One thing is for sure, you won't leave Phishead's hungry. I saw plates there that were big enough to feed 3 or 4 people. After Phishead's we headed back for some hangar flying and some much needed rest.

Saturday morning we found ourselves at the Chapter 977 pancake breakfast. The breakfast was fantastic. They had scrambled eggs, bacon, biscuits, fruit, pancakes, cinnamon rolls and more. The trip was worth it just for the breakfast. The price was good too. I believe it was \$5.50 or so for all you can eat and that included the 9:30 cake.

Bad weather had us grounded for a good portion of the day but we did finally get in some more formation flying. I rode right seat in Bill Williams S-18 and got 75 or so formation shots. While we were getting pictures 2 more T-18s made it in. I wanted some in flight pictures of my T-18 so Jerry Sheets and Bob Jaeger were kind enough to go up and get some in-flight shots for me (Bob is almost as good as Roy when it comes to bumming rides). I believe Cannon Creek has the narrowest runway I've landed on.

Saturday evening brought us the low-country boil. Now if you've never had this don't knock it. It is a combination of shrimp, corn, and sausage. Bill Williams and his crew did a great job. The food was excellent and we found ourselves drinking beer, eating, and hangar flying. I got the chance to speak with Billy Williams (Sun-N-Fun founder). He and his wife shared some wonderful memories with my wife and I. It was a real treat to hear him tell about the good ole days.

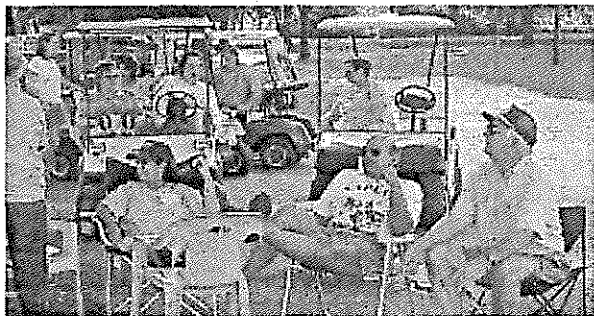
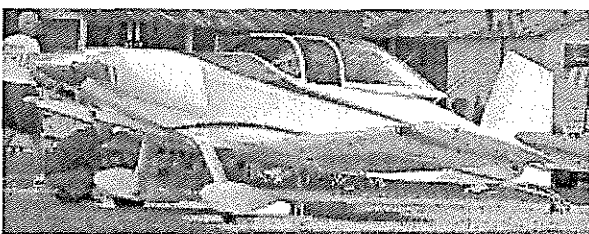
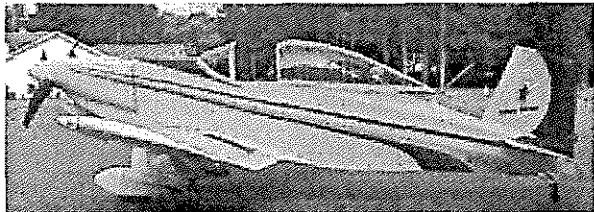
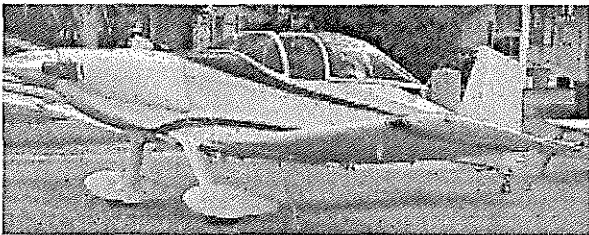
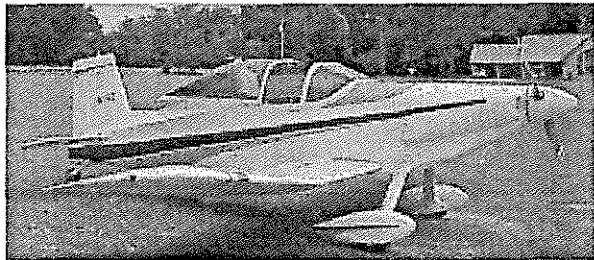
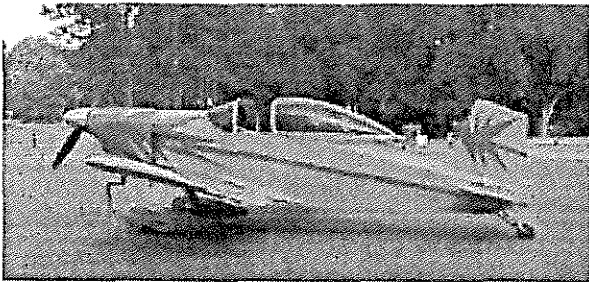
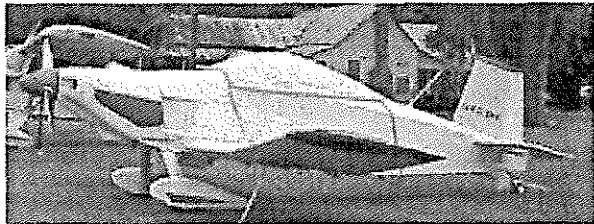
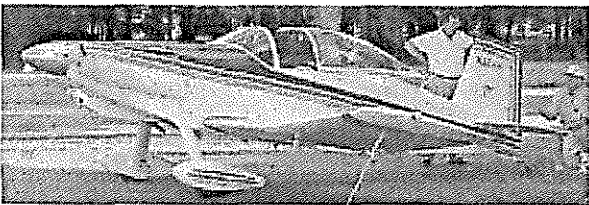
After dinner we went back to the hotel for some rest for the next days flight but it wasn't meant to be. The weather did not cooperate. The ceilings stayed around 900 feet all day on Sunday. I wanted to go fly out pretty bad as I had to work the next day but it wasn't meant to be. Bob Jaeger and his wife Carolyn were nice enough to taxi me around on Sunday. When I got back to the airport I realized that Ray Dalbow had already tied my plane back down. Shirley Roos was gracious enough to put me up for the night. I was beginning to like this place.

All in all it was a great time. The weather was

cont. pg 9

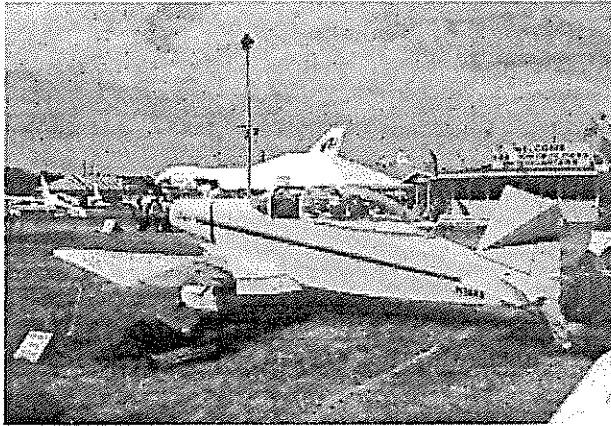
Cannon Creek or Bust, cont. ~ Photo's by: David Taylor & Hurant Kariban

was good on Monday and everyone started filtering out around 8:00 am. I flew back home at 8500 feet. There was a little haze but the winds were very calm. The T-18 is a great airplane but one of the things I find outstanding is the people. It's truly a family that I'm proud to be a part of.



Images from Oshkosh 2002

Photo's submitted by Richard Eklund
and Robert Jaeger



Congratulations

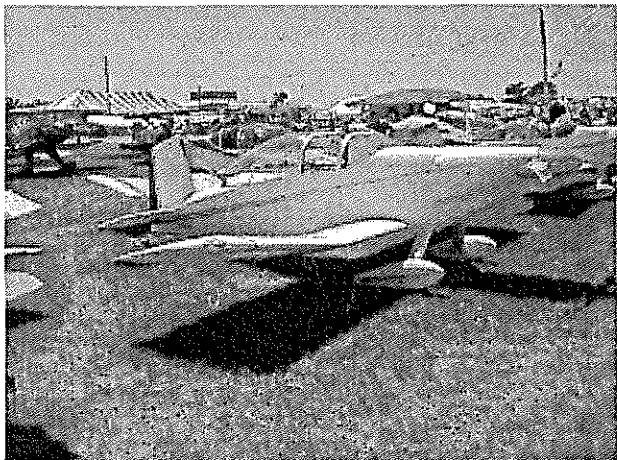
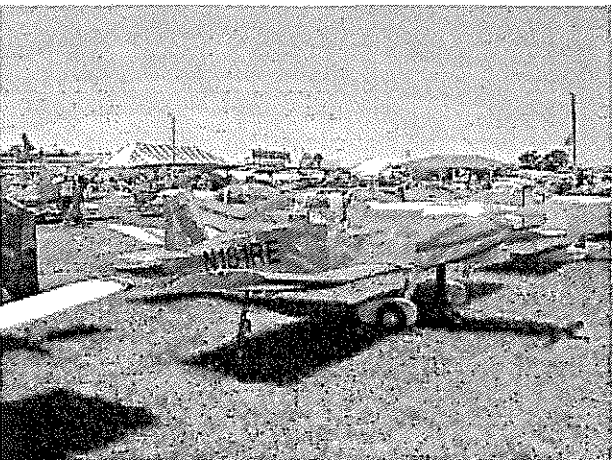
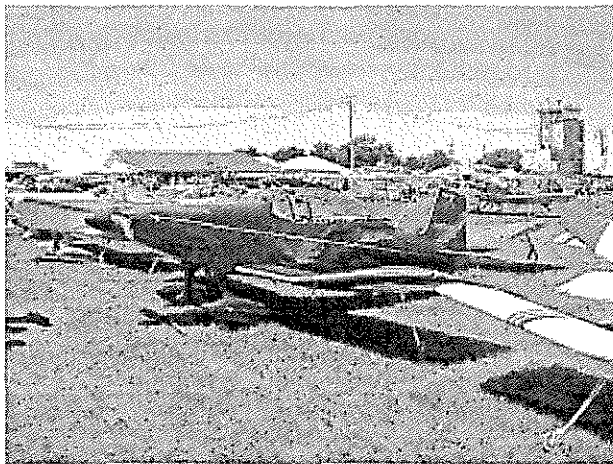
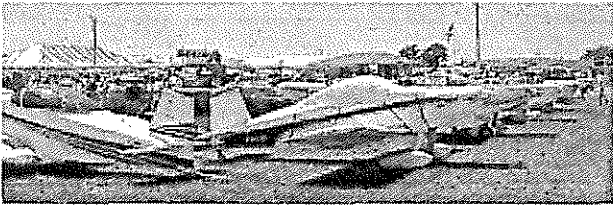
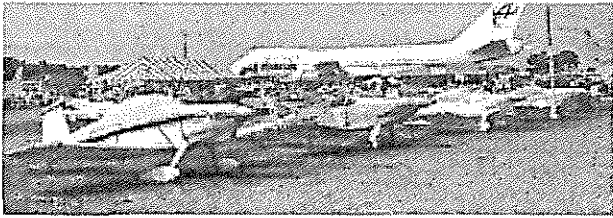
Bernie and Melva Fried

Bernie and Melva took home the Oshkosh 2002 Grand Champion Plans Build Award. They came really close last year, and this year returned to take the honors. Their T-18 is really a beautiful machine. It shows us and the world that the T-18 is still in there with the best airplanes of all time.

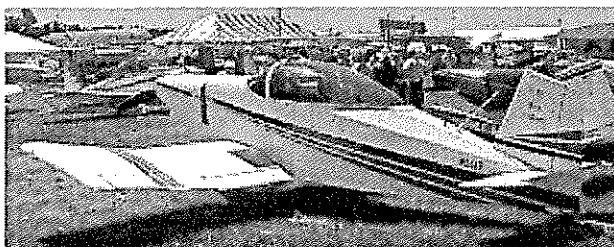
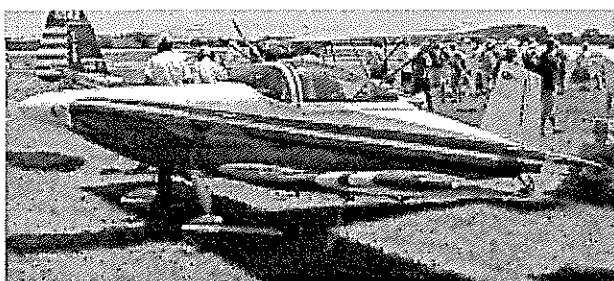
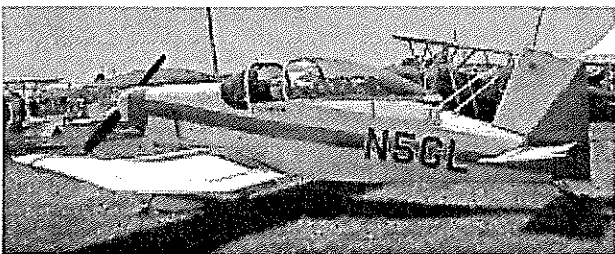
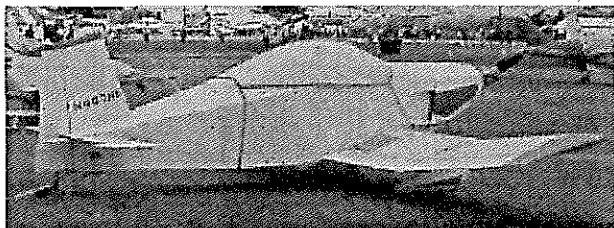
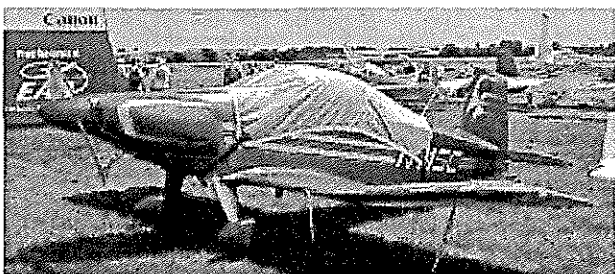
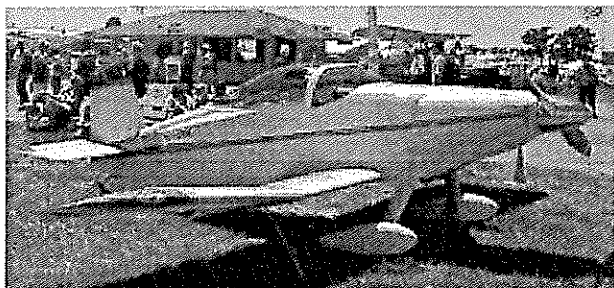
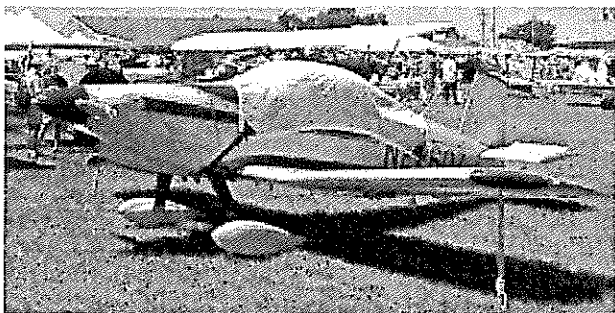
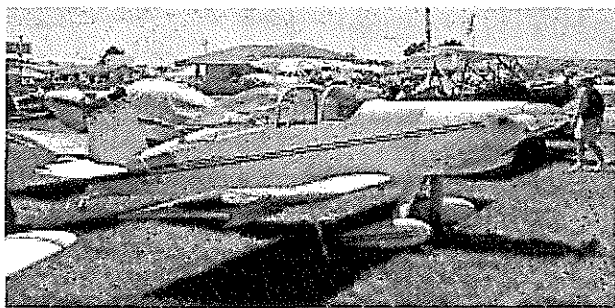
Words from Oshkosh 2002

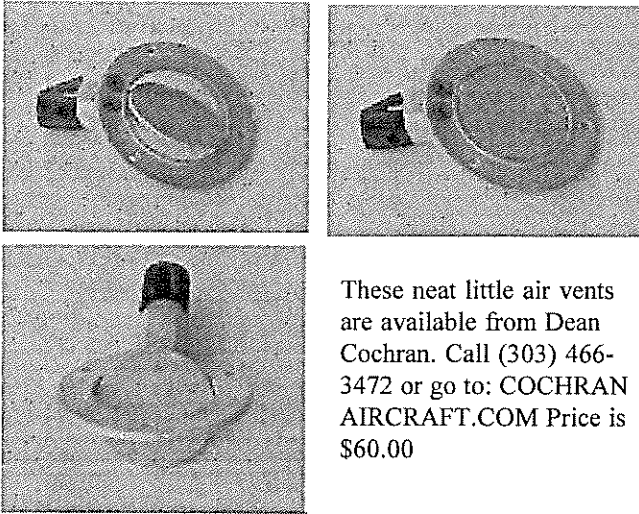
Phil Key and wife were there representing Classic Sport Aircraft. Bob Highley flew in the homebuilt review. One of the Blanton Ford powered T-18s was there and two of the owners of Ford powered were at the forum. Marie Brock was staffing the Brock booth and let it be known that Ken's nearly complete 2nd T-18 is for sale. I got pix of most of the attending airplanes but missed Tom Kerns who was only on the field for an hour or so. Also was at least one in camping area."

Images from Oshkosh 2002, cont.



Images from Oshkosh 2002, cont.



Building Tips, cont.More on Air Vents

These neat little air vents are available from Dean Cochran. Call (303) 466-3472 or go to: COCHRAN AIRCRAFT.COM Price is \$60.00

How about Heat?

I have a very strong heater in my T-18, I fly in shirt sleeves down to 20 degrees F, add a sweater below that. I fly in below zero comfortably (I am in Minneapolis). My heater uses a 2 inch SCAT off of #3 cylinder baffle to the muff, airflow is sufficient to have my pant leg buffeting in hot output air. My cockpit is well sealed except for two outlets so I am not fighting a lot of leaks. A friend duplicated the heater in his T-18 and has miserable lukewarm heat but....The only difference I see between my system and my friends is in materials. My tailpipes are mild steel, his are stainless. Stainless steel has 1/3 the thermal conductivity of mild steel, greatly reducing heat flow! My friend tried baffles in the muff, not much help. Second material difference is the heat muff itself where LOW conductivity is desired: I used stainless steel (low conductivity, low loss), while his is aluminum (very high conductivity).

Other T-18's: do you fly stainless VS mild steel pipes and what is your heater effectivity?

Tom Kerns
T-18 N10TK

cont.

Building Tips, cont.CO2 Detector

I have a First Alert home CO detector mounted behind the copilots shoulders. It gets a new 9 volt battery when I do the annual, and I test it on each preflight. The unit cost about \$15, and is loud enough (mounted close) to be heard at cruise speed with the intercom turned off. It did warn me of leaks in my spar close-out panel this past winter. It would beep after 45 minutes at cruise, I found poor seals on the spar close-out and cured the problem. The electronic CO detector is hard to beat!

Tom Kerns
T-18 N10TK

It's true that stainless is far less conductive, but the material is so thin and surface area so great that it will not make much difference under those conditions. I rather think that it depends on how much pressure one has in the cowling and that probably is a product of how good the cowling seals are. Of course that does not explain the luke warm air. It may be how the air is routing through the muff, ie taking a short cut from inlet to outlet!

Bob Pernic
N966RP

Tailwheel Saftey Issue

Just a quick letter to warn anyone with a Maule tailwheel not to make the mistake I made. During a few landings the other day I was picking up a little shimmy. At the hanger I thought I'd look the wheel assembly over and see if there was anything noticeable. I popped the cap off and seen the large fork retaining nut and it seemed not as tight as it should be based on movement. With the appropriate wrench and a small amount of torque applied the nut simply snapped off in the wrench.

cont. pg 14

Building Tips, cont.

Tailwheel Saftey Issue, cont.

The threaded top of the fork itself broke off. In further review it seems the movement I noticed was simply the spring loaded plate beneath the nut for centering the tailwheel.
Just a word of caution.

James
N2NE

Brakes

I would avoid Matco products. I worked with their stuff on UAV's I engineered for Uncle Sam 5 years back and was very disappointed in the quality. Cleveland is pretty good stuff, Grove aircraft had some great looking stuff at OSH this year (see Grove spring aluminum gear ad in the back of Sport Aviation)

Tom Kerns
N10TK

Tires

When I got tired of constantly putting air in my tires, because natural rubber aircraft tubes breathe, I substituted 13x500-6 TR87 tube I found at Northern Tool & Equipment Co. The part number is 13460 and it has a bent stem like the regular tube but is shorter, and the price is \$7.50. There is no company address on the box but I assume it is a national chain. Auto parts stores carry stem extenders if you need one to top off your air pressure.

Hurant Kariban



Loops in A Thorp

What is the prevailing view regarding doing basic aerobatics in a T-18?

I have a friend who is an ex-ACM instructor, and he recently taught me how to do rolls. We're wondering if loops are OK, and what else you can do. If anyone out there has (mild) aerobatics experience in a T-18, and would like to share info, I'd be glad to hear from you. Also, if there are any warnings, I'd like to hear those too.

Thanks,
Bob Shrank
N126TT

Yes you can loop the T18. It is a typical hi wing load aircraft and will hi speed stall if you are not gentle. Entry about 140 kts. Keep the weight down as far as possible and fit a "G" meter. It is extremely easy to pull G especially the entry and the pull out. Acceleration coming down the back side of the loop is extremely rapid and this is where you will get into trouble if you are not concentrating! Get the power off down the back side. Have plenty of altitude below you!! You should be proficient in spin recovery as well in case you lose it at the top of the loop.

Have fun but TAKE care.

Tony Schischka
ZK-VMS

I usually use no more than 120 kts IAS for a loop (although I sometimes feel a nibble at a stall going over the top). My barrel rolls need help. The military aerobatics training was 40+ years ago, so my technique could be improved. The airplane, however, does it fine. I do not particularly find the spins to be comfortable and haven't done one in over a year now. Spin rotation does seem slower if you can think to hold the stick back until

cont. pg 15

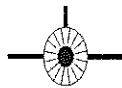
Loops in a Thorp, cont.

you really want to stop. I like to have 5000' under me — just for comfort.

Jack Kenton

I routinely do aerobatics with my 180 HP T-18, Loops, Rolls, Immelmans, Split S's, Hammerheads, Half Cuban 8". Keep your weight down. Light passenger load and Half or less fuel, Watch speed buildup, Never exceed redline, Have a G meter and keep G's below 4. I enter loops at 170 to 180, 3.5G on pullup, float over top and 3.5G on the bottom. An Immelmann is easy in a T-18, half of the loop, when you see the horizon in the windshield, Half roll it. Mine does a cool Hammerhead but be careful not to get the nose too vertical. once it pitched over on it's back and the engine quit. I just unloaded it and it ended up pointing down and I got it restarted without any problem. It once fell out of the top of a loop with similar results, My fault, I went in to the maneuver too slow and without full throttle. I have not found the T-18 to be eager to enter a spin. My friends T-18 Shudders at the top of a loop but gets around OK (150HP constant speed) It also behaves differently in a hammerhead, I think because of Gyroscopic forces from the heavier prop.....Remember all T-18's will not fly the same in aerobatic mode. Good luck and be careful!

Roger

First Flights

Well at last it's off the ground. It's been a long road finishing up the other 90% of the project T-18 that I bought which was 90% finished when I got it. I picked the project up in 91 and sat on it for a few years and finally realized that if I didn't

First Flights, cont.

get with the program that there would be a problem when I did get it finished. When it came to fly the thing I wouldn't be able to hear the take off clearance or remember what the controller said and even if I did I would probably have to get out of the plane by that time and go to the bathroom. I managed to get N174P off the ground on 13 June and spend 1.1 hrs flying in the vicinity of the airport in Ellensburg WA. Making sure that nothing would fall off before I put it back on the deck. All went well and other than a oil leak which plagued me for quite some time the forty hours have gone well. I did make a sincere effort to fly to OSH this year but felt that I was getting behind the power curve in that effort so decided to bag it until next year. I want to thank Cecil Hendricks, Jack Dugan in the building phase and Ross Mahon, Tom Worth in the in the learning how to fly phase. Of course I can't forget the NEWS-LETTERS and how invaluable they and the Thorp list have been in this project.

Paul Mac Michael ~ N174P

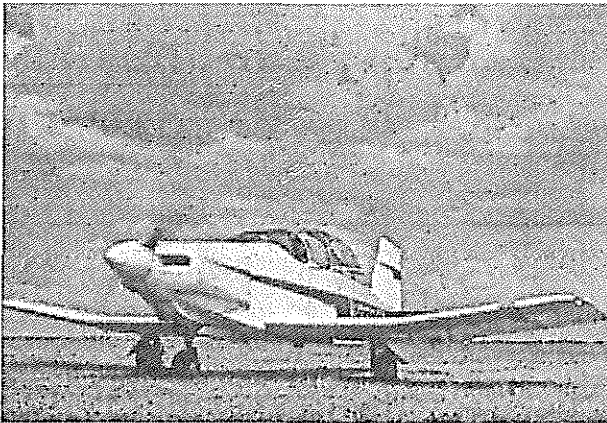
On June 11, 2002 at 5:11 PM, Thorp T-18 N78NP took to the air for the first time at Mojave airport with Steve Irving at the controls. The flight was uneventful, lasting about 20 minutes, consisting of several circles over the airport and a flawless landing. Squawks included a small oil leak and above normal oil temp, but beyond that the plane flew "hands off". Many thanks to all the people who helped me with this project and the Thorplists subscribers for answering so many of my questions. Without your time, patience, advice, teaching skills and tool loaning it would have never gotten off the ground. (look on page 16 to see Nates T-18)

Nathan Palumbo ~ N78NP

Aviation Quotes:

You've never been lost until you've been lost at Mach 3. Paul F. Crickmore

Readers Comment



Russel Basye's Retractable T-18 ~ Fresno, CA

In newsletter# 120 This picture was published and the question ask What happened to this T-18. Following is some comments from our readers.

This airplane was built by Russel Bayse. He designed and built his own retractable landing gear. This airplane was 1969 Grand Champion at Rockford.

Roy Medan
64EC

Basye, according to John Thorp, could do anything. As a dentist in Fresno, he was a "hands-on" fellow. His mind never 'slept' as one can see by the retractable ldg. gr. installn'. John told me in '73 that he advised Russ Not to do the retract gear because the extra weight would cancel any gains in performance due to the associated drag generated producing the required lift to haul the gear around. Russ apparently didn't believe the numbers & did it any way. He was a 'smoker' & died in the airplane at the 11,500 foot level of the high Sierra north of Mt. Whitney while searching for a downed pilot. He & his passenger were both fatal. The wreck remained there after the bodies were removed. I acquired the Geo coordinates from the National Rescue recovery ctr. and flew up there in 3/74 but could never find the site because of snow. It was took risky, I was in a Navy jet,

cont.

Readers Comment, cont.

couldn't fly slow enough, and the winter turbulence was too great. I gave up plans to 'trek' to the site that year.

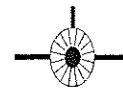
G.M. Dail

I believe that the info about the crash of this airplane is basically correct. The gentleman's name was Russ Basye, out of Fresno, CA. It was a beautifully built airplane, but was very heavy, and did not perform at all well (Russ himself admitted this). It had a lot of innovative workmanship... electric flaps, wing tanks of 13 gallons each plus a fuselage tank of 13 gal. for 39 total, and other details. I believe it first flew in 1969. The tires stuck out a little when retracted.

Another retractable was built by Bill Johnson in Washington state. Again, a lot of engineering changes and innovation. Bill was going to sell drawings of his mods... don't know if he ever did, or how successful his ideas were.

As for me, I'll take mine "down & welded", thank you.

John Evens
N71JE



Nathan Palumbo ~ N78NP

For Sale

"I call my plane Fat Cat because she is a wide body tiger, but with non-folding wings. By the way, John Thorp hated that name, Tiger - he thought people might think it is hard to fly. It's not. Student pilots have flown them.

A standard T-18 has a very sharp stall with little warning unless stall strips are added to the leading edge. I changed the wing airfoil to a modern, computer generated Ribblett airfoil and Fat Cat stalls like a pussycat. Similar to a Cessna 152. Lots of warning and a gentle break. She has a Lyc. IO360 (180 hp). Top speed is 200 mph true. I flight plan for 180 mph. I use 10 gal/hr for flight planning. Total fuel load is 55 gal. Absolute range is 990 mi. Climb rate in 1800 fpm. Stall without flaps 68 mph, with flaps 64 mph. Turns need very little rudder, you can turn with your feet on the floor. The ailerons are very responsive. (Robin Reid did an 8 point roll in Fat Cat). Cruise is stable, hands off after trimming (she has electric trim).

Fat Cat has 230 hr. total time on the airframe and on the engine since major overhaul.

Fat Cat is IFR equipped, but with only one Nav-Com. I use a King handheld for my second nav-com. The radios are a Narco NCS812 nav-com with localizer and glideslope, Narco 812 DME, Narco AT150 transponder, Narco AR850 Encoder, Pronav GPS 100, Flightcom intercom. With the GPS for navigating, I think I have forgotten how to use a VOR.

Fat Cat has a small removable jump seat in the baggage compartment for a small child or pet. The cowling is my own design and reduces cooling drag compared to the standard Thorp cowl.

Cooling is good even in 120 deg Arizona weather. I have truly enjoyed this A/C."

Asking Price - \$49,000

Steph Mickelsen
(530)885-9467
harvey@ncws.com

For Sale

N467JF is for sale! I'm selling my Thorp T-18, too many projects and not enough time or money to fly it (I know, I'll regret this decision in a couple of years..... But maybe I'll build one!). This Thorp is a standard T-18, narrow fuselage, short gear legs, 150 HP. 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.

Mechanically the aircraft is in good shape, the interior is good with a great instrument panel, but it really needs a new paint job in the not too distant future.

I'm asking \$27,500. The aircraft is located in Washington State. Email or call for more details and photos.

Ross Mahon
(425)827-2493

Rossair@aol.com

I received a call from long time E.A.A. Chapter 49 member Al Chivars. Al, an aeronautical engineer, mechanic, certified flight instructor and T-18 builder has decided to sell his standard T-18. It has an O-320 engine recently overhauled. Al may be reached until June in Youngtown, AZ at 623-815-8486 or after that in Sandpoint, ID at 208-263-4618 for all the information.

Hank Steinginga, Lancaster, CA.
GmaFS@aol.com

For Sale: Bernie Warnke 68X72 wood composite tipped prop for 0-320/150 HP. Newly refinished by Margie(daughter)Warnke. Prop guard leading edge protection installed, like new: \$500

Also, Ed Sterba 68X72 wood prop for 150HP 0-320, good cond: \$200 Contact Rob Ray at 850-543-3737 or smokyray@yahoo.com

cont. pg 18

For Sale, cont.

3 O290-G engines for sale, 1 engine is together and the other two are disassembled. Complete I think, but no accessories of the old GPU. And, to the seller's knowledge no modifications performed or conversions. There is some surface rust on some parts. He wants \$1000.00 for everything.

Contact Dr. Dennis Lundin
4605 East Taylor Road
Denair, CA 95316
209-632-8692 Home

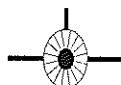
T-18 Plans

Plans for the THORP T-18. I THINK that they are set 418, if memory serves me well. I purchased the add-on of the wide body configuration. I do not think that we opted for the fold-up "wing" set of plans. These plans have been in storage in Seattle for over 20 years. They come very close to the specs. of the Cherokee 140 we used to own. We opened the plans while I was helping to build a Christian Eagle, and have been in storage since. We saw a completed T-18 in Seattle. Piqued our interest in building again..... That was almost 20 years ago..... We don't think we will ever use them? We don't like to think of mice using these plans to build nests with. If things haven't changed much these T-18's were certified to be pop- riveted in Australia. Think you could find a good home for these plans?

Ron and Barbara in Morro Bay Ca. Still paying storage for these and other priceless items for years! in Whidbey Island.

Barbara Arnoldsen

bobbiantthebear@earthlink.net



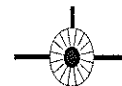
For Sale, cont.

I also still have a few items for sale:
A complete rudder and fin assembly for \$250.00.
An aluminum windscreen frame for \$100.00.
Elevator push-pull tube with fittings installed for \$50.00.
Standard landing gear (orig. length) for \$500.00.
New Maule tailwheel \$100.00.
You pay shipping.

Robert Jaeger
Lake City, FL.
(386)365-7033
n5533g@yahoo.com

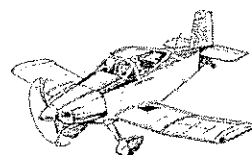
T/S- 18 Canopies

Check with Judy at 562-430-8108 10871 Kyle St Los Alamitos CA. 90720 For T & S Canopies.



I contacted G.B. canopies a short while ago and he quoted me \$750.00 for canopy and windshield and \$700.00 for canopy alone. Try him at g.breitsprecher@worldnet.att.net or phone 253-841-4614. My other notes say that price was with the 1/8" windshield and \$810.00 for 3/16" windshield plus \$110.00 which I think was for shipping from Washington to Florida.

Robert Mardis
Robert.Mardis@Halliburton.com



Is this your LAST issue of the T-18 Newsletter ??

THE T-18 MUTUAL AID SOCIETY HAS ADOPTED A NEW POLICY REGARDING THE COLLECTION OF MEMBERSHIP DUES AND THE SUBSCRIPTION OF THE T-18 NEWSLETTER. BEGINNING IMMEDIATELY, THE MEMBERSHIP DUES, WHICH INCLUDE THE T-18 NEWSLETTER SUBSCRIPTION, WILL BE DUE ON JANUARY 1 OF EACH YEAR. DUES MUST BE PAID PRIOR TO THAT DATE TO REMAIN IN GOOD STANDING WITH THE T-18 MUTUAL AID SOCIETY AND TO INSURE THAT YOUR NEWSLETTER SUBSCRIPTION IS NOT CANCELED. NEWSLETTERS WILL ONLY BE MAILED TO CURRENT MEMBERS IN GOOD STANDING.

UPCOMING THORP EVENTS

Porterville ~ NOTICE -- DATE CHANGE --- THE DATE FOR THIS EVENT HAS BEEN CHANGED TO SEPT. 28 & 29 ~ Porterville, CA. 11th Annual Fly-In , Likely we'll do another P'ville Thorp Gathering as we have done in the past ten years. We have used the Labor Day week end as late as it doesn't conflict with the Reno Air Races which took our former weekend. You can post it as a tentative as I have not conversed with "the committee" a dedicated group of Thorp people who work with me as the organizer of the event. Hal Stephens ~ aerohal@earthlink.net

Kentucky Dam Fly-In ~ October 11-13, 2002 at the Kentucky Dam State Resort in Gilbertsville, KY. A dinner party and small meeting will be held in the private dining room at the resort. For reservations phone 1-800-325-0146, You must specify that you are with the Paine Party. Reservations must be made before Sept 10, 2002. For more information contact Teresa Scola ~ btscola@aol.com

For Sale, cont.

I have an extra project for sale. It's a standard t-18 fuselage, canopy (new in crate), fuel tank and quantity system, landing gear, wheels and about \$3k worth of other stuff. I bought it for the wing materials needed for my project. I don't need any of the extra stuff. we can work out a price for all or part of the stuff. it's located in San Jose, CA. anyone interested can E-mail Me direct at av8tnbum@aol.com
Juan M. Raya

Lyle Flemming

Lyle passed away on April 23 in Lancaster CA. He was one of the early T-18 builders and was a true pioneer in the homebuilt world. Lyle was widely known for giving T-18 rides to hundreds of eager builders and potential builders and led many of us to the Thorp. Lyle passed away at age 89 Always good natured and pleasant, he will be missed.

T-18/S-18 Thorp Newsletter

Roy Farris

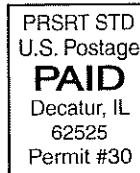
P.O. Box 182

Noble, IL. 62868

Phone: (618)723-2594

email: rfarris@wworld.com

September 2002



IS THIS YOUR LAST ISSUE !!

Please check your mailing label. Look at the line just above your name and you will see when your membership to the T-18 Mutual Aid Society expires. Please be advised that unless your 2003 membership dues are received before January 1, 2003, no further issues of this newsletter will be mailed. Please continue to support the T-18 Mutual Aid Society and the T-18 Newsletter by sending your dues today. Please send to: Roy Farris PO Box 182 Noble, IL. 62868

THORP T-18 MUTUAL AID SOCIETY ----- 2003 DUES

Please continue your support of this valuable exchange of ideas, building tips and safety information covering John Thorp's greatest design. Please make checks payable to: Roy Farris P.O. Box 182 Noble, Illinois 62868. Make check for \$25.00 US, \$30.00 for outside.

Name: _____

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I would Like Website Access to the newsletter: Yes No (circle one)

Comments (Building, Flying, etc.): _____
