

2nd ANNUAL T-18 REUNION:

To those of you that couldn't make our T-18 "Family" Re-union that was held at Lake Texhoma Lodge on last May 9th, I can say, "We missed ya!" Yes, we missed you...and you missed a super T-18 get-together. The only thing that could have made it any better would have been to have more of you there to enjoy it like we did. As it was, we had 17 beautiful T-18s and we would have had as many as 7 more if we hadn't held our little bash on Mother's Day weekend. (A gross error on our part, we admit. To actually confront all those suffering wives with their #1 competitor for their hubby's affection on HER day was a gross oversight on our part and we hasten to ask for forgiveness).

In case you've forgotten where Texhoma Lodge is located, it's at almost the eastern end of the lake, on the Madill arm. The lodge is located on the southern edge of Catfish Bay. It is reached by road from Durant, OK, (12 mi. east) or from Ardmore, OK, to the west about 30 mi. It's almost due north from Sherman and Denison, TX, , with about 40 mi. of open water in between.

The lodge is one of a half dozen such recreational installations with their own paved airport nearby and all offer quite a variety of activities for vacationing guests, with something to please everyone's tastes. The lodges offer first class air conditioned rooms and suites at modest prices, with excellent dining and banquet facilities, able to accommodate several at the same time. Texhoma Lodge is located in a dry county, so they have a nice private cork club on the 2nd floor and new memberships are available for a nominal fee (and members may bring guests).

We arrived via car (boring) early Sat. morning and there were three T-18s that had come in on Friday awaiting the arrival of the rest. Greeting us was Dean Cochran, of Broomfield, CO; Bob Highley, of Brandon, FL; and Nicky Buchanan, of Winston Salem, NC. (At least I think those were the first three there. Sometimes I think my Alzheimer's gets active at fly-ins when I try to recall all the details, etc.). Anyway, the rest of the birds began showing up in rapid fire order. By 11:00 AM we had 15 of the 17 aboard and the last two made it by noon. We had 11 states represented with T-18s. We had one from Florida, one from North Carolina, 1 from Ohio, 1 from Michigan, 1 from Colorado, 1 from Arizona, 1 from Nebraska, 1 from Kansas, two from Missouri, three from Texas, and four from Oklahoma. Not bad! We had several members that drove 1000 miles by car and several more that had come 500 mi. or so by airline to the nearest airline terminal.

Was it all worth it? You bet!! It was pure laid back pleasure of the first water. It would have been hard to find a more congenial group anywhere. When someone asked some questions about engine installation it wasn't anytime before five or six guys obligingly peeled their cowlings off , so that builders could look at the way they did it and take pictures. That was just one aspect of the airplane that was discussed in detail. If your T-18 is flying, you've probably forgotten 99% of the problems that arose and how you solved them, as construction gradually and sometimes painfully progressed. Perhaps you can remember how grateful you would have been if you could have had some experienced one explain how to solve the problem that was bugging you at that moment. This was the type of gathering that 99% of those attending were T-18 builders, owners, or enthusiasts. It is made to order for the new builder, whether his questions are on the spinner or the tail wheel, or somewhere in between.



TEXHOMA REPORT, cont'd

When lunch time arrived it was a time to renew old friendships over the coffee cup and make new ones, too. There was a lot of talk going the rounds about different makes of Loran Cs, but it was unanimous that Loran C is the greatest thing since sliced bread. Nearly three fourths of those there with T-18s had Loran and all I talked to were high in their praise of how accurate it was in both course and cross track. I remember one of those telling me his "Miles to go" cranked down to zero in the middle of the airport upon landing! Texhoma Lodge has no nav radio facility that is nearby, other than an ADF homing beacon on Durant Airport to the east a few miles. The weather was almost perfect. Skies were cloudless, but haze aloft somewhat restricted visibility. Wind was light southerly, right down the runway. There is good turf on both sides of the runway (18-36) and can be used for taxiing if traffic gets heavy. It did on Sunday morning, too. It was beginning to look like Chicago O'Hare for awhile, as a dozen or so transients showed up. Texhoma's only drawback is no fuel service available, but it's only a 5 minute flight over to Durant to refuel, but some of the bunch used that as an opportunity to give some buddy rides.

There was a lot of flying on both Saturday afternoon and also on Sunday morning before everyone started home. Gary Holt nearly wore his T-18 out while he was there. It was in the air at least 75% of the time. His dad, Leroy Holt, had his S-18 airborne pretty often, too. Leroy's bird was so new that it was still in zinc chromate. For you folding wing guys, Leroy has made a gap cover for the folding wing that most all present said was more practical than the outboard wing skin tightly overlapping the center wing skins (as per plans). He has xeroxed some sketches of it, so if you are building send him a S/SA envelope for a copy. It does away with the snap-in section at the leading edge, too. Leroy's address is Box 238, Savanna, OK, 74565. He planned to paint it in time for OSH, but I guess he didn't quite make it. Hopefully we'll get to see the two Holt family airplanes at Kerrville in Sept. (18-19-20). Incidentally, if you didn't get to make Texhoma with your T-18, (or OSH, either) maybe you'd like to give the SW Regional EAA fly in at Kerrville a whirl. It's big enough to be interesting and small enough to get to know most everyone, too.

Texhoma is a photographers delight. The foto backgrounds are great in nearly every direction. There was some formation flying in groups of three and four and the fly-by passes drove Kodak stock up several points. The 1500 ft. of turf in the approach zone for 18 made it easy to shoot as many as 5 or 6 shots of a T-18 before touchdown. We did lots of video, too. John Crook and I did interviews on video with our respective cameras and after we got back to Dallas we combined our tapes to make a 30 min. master of almost all of the proceedings, including the Saturday evening buffet/ banquet. We shot builders by their airplanes, recording their accounts of building, flying, and owning the T-18s; we zoomed in on as many individual items on each airplane as we could. We had the builder point out features on his panel and cockpit as we scoped it all in color. We got close-ups of engine installations, the great variety of air cleaners, oil cooler location, props and spinners, fuel systems, wheel and axle fairings, canopy treatments, tail wheels, antennae, paint schemes, and of course we got every detail of the cockpits, upholstery, radios, etc. With 17 beautifully built and painted T-18s there one had to look hard to find points of commonality. It was a classic example of what the Custom Built classification means. Each one is an expression of the builder's techniques and personality. Even those who bought their airplanes and



didn't build them had done their share of modifications and were really studying the others for ideas for future changes in cockpits, paint schemes, etc. All three types of T-18 cowlings were there, too. Another point was the difference in size and shape of carb air scoops.

Dick Amsden, of Fraser, MI, was on deck with his immaculately painted T-18. He had a buddy with him and they were headed for South Texas on a visit and the Texhoma event was right on their way at the right time. They were having a ball, too. Dean Cochran, of Broomfield, CO, was parked next to him. He had been mousetrapped by weather up at Gage, OK, for several days. His wife had gotten tired waiting, so went on back home, but finally it got flyable for him to make it. Dean said he had to back off from making the crossover exhausts and kits. Too bad. He is really a pro at that job. Next in line was Karl and Mazie Lipscomb's superb wide body creation from Lamar, MO. It carried the T-18 banner at Dayton a couple of years back. A few

years before that he had taken a Starduster Too to the Wright Bros. celebration, also. Now they are building a Lancair, but Karl complained that the project was moving much slower than he had anticipated. Gary and Maxine Green's lemon yellow standard T-18 from Enid, OK, Gary and Maxine were the co-investigators of our Texhoma gathering, along with Leroy and Mary Holt. Gary is really a major in the USAF and is a training instructor on the Northrop T-38 (That's an airplane I could like almost as much as a T-18)...Next in line was the apple of Randle Woolaway's eye from Cassville, MO. Randle is 76 years young and still flies fire patrol out of his Timberline Airpark, an airport that would scare most people to death. The south half of his runway slopes upward about 30°, so you land south and take off north, unless the wind is about 30 mph. Even then there's some BIG pine trees to clear! Next to Randle was another former Wright Bros. attendee from Kimball, NE, Nate Eastman's remedy against a dull old age. Nate was a former USAF hump pilot in WWII and a fighter pilot in the Korean fracas and he has as much fun in his T-18 as he did in a P-51, I think. Jim Paine, from Dayton, OH, was last year's T-18 rep at the Wright Bros. event and is the only one to come to Dayton from Dayton, so far. Next to him was Bob Highley, of Brandon, FL, and he, too, is a Lt. Col. in the USAF, flying F-16s out of McDill AFB. Folks didn't get to inspect Bob's bird, except at night, as he was in the air with it about 75% of the time and obviously hugely enjoying himself. The parking spot next to Bob was Gary Holt's, from Tulsa, OK, but he, too, was in the air about 90% of the time. Also in the lineup was one of the very early T-18s that Nicky Buchanan brought over from Winston-Salem, NC. His was built by the late Bob Goodwin and has the low cut windshield that was on the original plans. On the other line of parked T-18s was Walt Boener's, from Wichita, KS. Walt was a former ME-109 pilot in the Luftwaffe and later flew with the Free French and USAF, winding up with a combat tour in Vietnam. Walt was our after dinner speaker and he held everyone spell-bound with stories of his earlier exploits. (He should write a book). Still another T-18 rep at the Wright Bros. event was a brand new one from Wichita Falls, TX, by Dave Eby, a retired AF Col. Dave's airplane was so new that he had to fly an extra 2 hours that morning before coming to Texhoma in order to be legal on his hours restrictions. It was so new, in fact, that he hadn't had time to put the upholstery in. He, too, is about to wear it out. He flew it to Pennsylvania and back before heading for Dayton. Next was a trip to OSH, then a trip to Fla., to Beaumont, TX, and a trip to Denver and back. At the end of August he had put 135 hours on it. Another T-18 from Texas was Bryant Rowland's beauty from Wichita Falls, also. He has been flying his several years, but it still looks like brand new. The other Texas T-18 there was Jim French's, from Wimberly, TX, which is back in the hill country between



Austin and Sar Antonio. Jim was the last to arrive and he brought John Walton with him, since John's T-18 was still down for mods. We expect to see Jim and the other Texas T-18s at Kerrville this year, too. In addition to the two Holt T-18s and Gary Green's, there was still another Oklahoma T-18 present. Lee and Edwina Reilly whistled down from Wagoner, OK, and As I remember they all arrived more or less in a group. Lee is an airline retiree and he had just installed a new Loran C the day before our re-union and he was truly delighted with it. Steve Hawley, from Tucson, AZ, also arrived with the Okla. group, as he had been visiting in the Tulsa area, where he was formerly based. Steve's T-18 always gets a lot of quick double takes as people walk by and see his "almost constant speed" Warnke wooden prop. The way the tips are turned and twisted blows your mind. Since he lives close to Warnke this prop was an out and out research project. So far it hasn't produced anything sensational in the way of extra performance, altho' it is a good prop. Steve takes a lot of kidding from yardbirds that ask him if he left it out in the rain, etc., or did he go too fast and bend the tips back? Steve built his own wheel pants, that also beautifully fair in the axle/brake area and DO add mphs.

All in all, we had 17 slick T-18s there and a lot of people that had a super good time (which is what it's all about, they say). Everyone said, "Hey, let's do this again!"....so maybe that's the real test of how well the bash was enjoyed. I just talked to Gary Green and he said Leroy Holt had painted his airplane this summer and that it looks really great. He said Leroy had to pull his engine and rebuild it, as his engine builder put some bum parts in it at first. Anyway, they are talking about possibly doing it again for the Oct. 31-Nov. 1 weekend. They will be comparing notes and if it looks good they'll get a letter out to the clan with all the details. Again, remember, it's a gathering of good friends, a re-union, where we all gather to have dinner, visit, talk T-18s, etc...but it's NOT a FLY-IN! It's not organized, there are no events, everyone is strictly on their own as to how they get there and what they do after they arrive. This time we were talking about renting two large cottages where we'll have a bar and have a catered barbeque dinner brought in from Durant or Sherman.

By the way, we have a pretty good video tape we put together from ones that John Crook and I took, so if any of you would like a copy (VHS only) send us a tape plus a little for postage and we'll get you a copy. Go to the Post Office and get one of the padded 7" x 9" mailer envelopes and they are just the right size for a video tape. We'd appreciate your comment and suggestions for improving, too. We tried to capture the flavor of the event and introduce the people and their airplanes, their story of building etc., plus as many construction details as possible, too. We really need one or two more "camera men" to thoroughly cover all the people there, those about to fly, those just starting, those who just bought one. We also might take a camera aloft for some unique air shots, too. Last year Dean Cochran rigged a VCR camera up on his fin and flew back in the Rockies and did some takeoffs and landings, etc. and the result was great. All it needed was a running voice commentary to make it super interesting. The VCR video has some exciting possibilities.

--- BUILDING A WING PANEL ---

I recently had an occasion to build an outer wing panel for a standard T-18 from scratch and we followed every step with black and white photos, that will soon appear in one of the "Tip Bender" articles that I've been doing in EAA's "EXPERIMENTER" magazine (see Light Plane World) for the last 16 mo. We also did a video tape and if you're interested I'll have some copies run off (same deal as the Texhoma tape). I had two sheet metal beginners do most of the work, with me coaching them and

CONT'D



MORE ON TEXHOMA

MORE TEXHOMA TALK



we wound up with about 50-60 man/hours in it (estimated). We used pre-punched ribs and skin that once came from Ken Knowles. The wing panel came from a local area T-18 that had been ground looped, damaging the skin, two ribs, the wing tip, and the aileron. We were able to save the aileron, as its damage was minimal, but we spent a LOT of time fitting hinges to the old holes in the aileron spar and adjusting it for freedom of motion. We could have easily built a new aileron from scratch in less than half the time we spent. We got a beautiful fit on the skin at the leading edge and came out with good, tight skin between ribs, too. We also used the old fittings, which again took extra time to get a perfect dimensional match with center wing fittings. We also took extra time to get the panel flat and perfectly square (without twist) using levels laid on the front spar and parallel to it at other locations. This was a pretty good test of the learning curves of beginner builders, as they had to be taught riveting, bucking, etc. as we went. I don't believe we could have built a composite wing of comparable size any quicker. It had been about three years since I'd built a T-18 wing panel, so I was plenty rusty, too. Admittedly, the center wing or outer wing for the S-18 take much longer because of the wing folding hardware and also because of the additional complexity of the main spars, but the same matched hole tooling principles are still applicable..

'87 OSH REPORT: Each year it gets more and more of more and more. It gets hard to believe. I'm sorry to say that I have very little time available to look over the T-18s and talk with those bringing them in. I have to hit the whole day in high gear to cover all my assignments and interviews for Sport Aviation and the Experimenter. It's always a hassle to schedule the aircraft for photo sessions on the turf out in front of the flight line and also the air to air shots. Anyway I did get to take in a few minutes of the T-18 Forum and the Tuesday nite T-18 dinner. As always, the dinner was a sellout and was thoroughly enjoyed by all. Lee Skillman did his usual good job as the M.C. and Frank Kingston Smith anecdotes and witticisms kept everyone well entertained, too. The number of T-18s at OSH seems to dwindle down a little each year. We only counted 15 this year, which included one over in the aircraft camping area. We again had some superbly done T-18s to look at and admire. Gus Gordon, from Buena Park, CA, finally made it to OSH with his fantastically crafted folding wing S-18 and it was voted the best T-18-S-18. The Lu Sunderland Memorial Craftsmanship award went to Gene Sloan, of Murfreesboro, TN. Gene's blood-red T-18 was immaculately done, but he also qualified for the unofficial Hard Luck award. As he got close to OSH he began developing an engine problem that made him want to get it on the airport without delay. He was following a Cub, who apparently dawdled on the runway after landing and since Gene was already on the deck quite close behind him, so he had the option of trying to go around on a sick engine or take to the grass to avoid overrunning the Cub. He chose the latter. Only trouble, there was a runway light in the way and it dented the right outer panel leading edge almost back to the spar and messing up his right gear fairing, too. All this was told to me second hand, but I think the account is reasonably accurate. Gene wound up having to trailer his bird all the way back to TN. Maybe next year, Gene! Better yet, maybe you'll have time to get it back in A-1 shape for Kerrville, or Texhoma (if there is an Oct. gathering).

Right now I'm looking for the list of all those present at OSH with their airplanes and so far I've sifted thru about a three foot stack of papers on my desk and no luck yet. Maybe I'll find it (and I just did).



There were five T-18s at OSH '87 that were there for the first time. They were: Gus Gordon, of Granada Hills, CA, in N633GG
Tom Kerns, of Eden Prairie (Minneapolis) MN in N10TK
Dave Eby, of Wichita Falls, TX, in N53PD
Gene Sloan, of Murfreesboro, TN, in N805GS
Don Skeele, of Santa Ana, CA, in N927AS

In addition to those five I remember seeing Tom Kern's bird for the first time since it was painted. Tom formerly lived here and I watched his test flight one morning several years back. Tom was an engineer for LTV then. A few months later local builder Lou Falconi retired from LTV and moved to his new home in Roswell, NM, leaving his T-18 in DAL. My first flight in it was to ferry it to Lou, with Tom flying wing on me. Later that day I rode back with him in his T-18, which flew quite well. Tom soon moved to Ohio, then to Minneapolis, his present Home. Another familiar one I saw was Paul Kirik's, from Moline, IL, and this, too, was a first to see it painted. Both T-18s were outstanding in their paint and detail.

Going back thru my slides of T-18s at OSH and RFD in previous years and comparing them to recent years, it was obvious that overall the paint schemes and finish details have improved tremendously...but even the older ones still looked great to me. There have been some really original paint schemes that some have characterized as being on the wild side, but yet they were tastefully done. I remember Oats Tokles' OSH debut. It had a certain Savatore Dali-like quality in the bold use of color like had never been seen on airplanes before, but it was fantastic! Oh, yes, Bill Warwick's tiger painted down the side was another super original. And then there was the Debut of Kong! Someday, I'd like to publish a book on just T-18s I've seen or heard about, with color pictures, etc., and little side bar stories about the builders. Guess it would cost far far too much to produce and probably wouldn't appeal to a very wide circle of readers. Most T-18 ers would eat something like that up.

ATTENTION!!

Our '87 OSH showing was actually less than our Texhoma showing, but I hope it will be different in '88. I sincerely hope each and every one of you with flying T-18s will make the supreme effort to bring your T-18 to OSH in '88. Here's why: 1988 WILL BE THE SILVER ANNIVERSARY YEAR FOR THE T-18!!! We would like to put 45-50 T-18s in the air in trail formation fly-by in the prime airshow...the flying showcase. We want to bring them in from every point of the compass, from near and far, and they don't have to be super slick showplanes....Just T-18s! This year was the Fly Baby's 25th year and tho' they tried to get a gang, it fell a little flat. Coming from Calif. in an open cockpit at 80 mph gives them a pretty fair excuse, but at T-18 cruise speed it's no big deal to make a LAX-OSH flite in one day. Why not make DEFINITE plans NOW? It's only 10 1/2 months away, you know. Plan it so your airplane won't be half apart or out of license at that time. Get it in the pink by June 1...and then keep it that way. Leave a day or so early and maybe smell the daisies along the way. We'll never have an opportunity like this again, a chance to show the world that the T-18 was and is the best of the best, the Mercedes of the homebuilts. The plastic "compost" type airplane has already outnumbered us, at least at OSH, and it won't be all that long before the RV-3s, RV-4s, & 6s will be barking at our heels, too.

A familiar T-18, N5GL, was again at OSH this year. IT'S 17th STRAIGHT YEAR! That's Gayle LeCount's pride and joy, from Georgetown, IL. I seriously



'87 OSH CONT'D

BUILDING AN OUTER PANEL

'87 OSH REPORT

doubt that there is any airplane (T-18 or no) that can match that record. Gayle certainly deserves our acclaim. We especially hope Gayle will be able to be there in '88, too. He will certainly deserve to lead the T-18 parade on its Silver Anniversary. We also hope Bill Warwick, Doc Cottingham, and all the other high time T-18s will make a special effort to be on deck for the event. We will never have such an opportunity again, so I hope all of you will be there.

The other T-18s at OSH besides the ones that were mentioned previously are: N11DC, Dean Cochran, Broomfield, CO; N711SH, Bob Highley, Brandon, FL; Gary Green's N18GG, Enid, OK; Jim Paine's N747JP, Dayton, OH; C-GEMP, Jim Alexandre, Hamilton, Ont.; N89RB, Mike Wolfe, Negaunee, MI; Jerry Stallings' round back, N1308B, Ferriday, LA; N78SEL, Ed Ludtke, Sioux Falls, SD; N31BD, Chas. Raymond, Shelton, CN. There were 152 people at the T-18 dinner this year (SRO).

We received a note from Gene and Thelma Sloan, thanking us for the '87 award. She also said that the damage was non-structural, all sheet metal and was almost completely repaired by them.

As John Walton always says at the end of OSH, "Only 360 more days until OSH". It's a whole lot less now, too, amigos, so, again, let's ALL make '88 OSH the very best yet in numbers there. With that big a bunch of T-18s there the crowd won't have time to notice whether your T-18 is a 10 or a 4! Just BE there with it guys. Let's show our appreciation to John Thorp by making the T-18 Silver Anniversary a real tribute to a fine design. Above all, let's don't let it fizzle out as a dud!

The '87 Kerrville SW Regional Fly-in is just over and guess who and what was the winner of the "Best Plans Built Low Wing Award"? Dave and Bat Eby's super slick new T-18, that's what! Bad weather cut the number of T-18s there to three, Dave's, Jim French's, and Bill Cox's. Congrats all over again you guys.

Back to future events: Back on page 4 we remarked that if all looked good for another Re-union on the Oct. 31-Nov. 1 weekend that they would send out a letter to members like before, etc. Since that time I talked to both Gary and Mary Holt and it was their opinion that we should all again gather at Texhoma for another non-organized, informal get-together on the above weekend (Halloween), with everyone making their own room reservations by calling Texhoma Lodge (405/ 564-2311). They also suggested we have an outdoor cookout (weiners, hamburgers, barbeque, etc). It's too late in the year to have a catered meal delivered from a nearby city, but the plan was to have one of us bring in all the fixin's and enjoy an evening around the campfire. The two adjacent cottages have been rented and a wet bar will be set up in one of them. We will have a kitty to cover the bar costs for the happy hour and another for the cookout. If some of the group prefer to have dinner more conventionally, the restaurant is available, but it was decided to dispense with the more or less formal, catered dinner for the sake of economy and to let more people have the opportunity to get better acquainted with others.

(NOTE!)
Since time is rather short, it was decided to post the notice in the newsletter. We do need a definite show of hands as to who will be there, so if you plan to come, please call Gary of Maxine Green at 405/233-3186 or Mary and Leroy Holt at 918/548-3412 and advise them of your intentions. They can also answer specific questions. This is not an invitation to a Fly-in. There are no scheduled events, and what transportation method you use to get there is your business only.

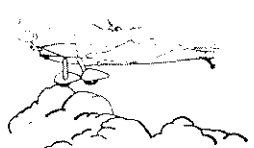


"SOLD"
Last weekend was a pretty sad day for me. I ran an ad in Sport Aviation on my T-18 and the very first day it came out I could have sold it a dozen times, at least. I had it priced below the market, so I could be sure it would have a good home. Jim Hidalgo, an almost next door neighbor of Jim French, of Wimberly, TX, is the new owner. Wimberly is one of those very picturesque spots in the Texas hill country between Austin and San Antonio and they have their own airstrip that bisects several homesites. Jim and Jim are looking forward to a lot of hours of happy T-18ing in the days ahead. It's not so far down there that I can't go down there once in awhile to pet the old gal a little. You can look for this pair to be at OSH '88, too.

"FOR SALE"
Also in the DFW area another builder, Roger Dengler, is having to put his S-18 project on the market. Like me, Roger has given up on ever getting his medical back. It's a real buy for someone, too, at \$11,500, which includes an O-320 150 hp engine with only 100 hrs. since NEW, and everything needed to complete. The fuselage is complete, except for canopy installation, even to wheel and gear fairings installed. Engine completely installed, hooked up, baffled, oil cooler in, st. steel X-over exhaust, Pacesetter prop, Brock spinner, Thorp FG cowl all complete. All new instruments (IFR) in, upholster done in blue suede, controls all in except ailerons. Elect flaps, trim, Fuel and brake systems complete, lighted in and out. Has two new nav-comms and a II Morrow Loran that will sell for \$2500 extra, or sell separately. Has all ribs and skins pre-punched for wing, skins formed, main spars done, plus all other wing, aileron, flaps parts on hand. If you've priced a S-18 "kit" you know this is a steal...and the workmanship is superb (Roger is a tool & die maker/ machinist by trade). You can call him at 817/ 261-6910 for other details. His address is 1811 Hilltop, Arlington, TX, 76013.

Another FOR SALE: If you live in the western U.S. Greg Halverson also has a T-18 project he recently acquired to keep company with his own T-18 project. Details are here below:

Dear Dick,
As per our recent phone conversatin, here are the details on the additional T-18 project I recently aquired locally.
Entire airframe is flush riveted with very good workmanship. It has the standard body on the longer gear with 15' side skins. Engine is an overhauled O-290-G with Otime on the new rebuild. It has a Dix crossover, Bendix mags and new harness, Corvair alternater, fuel pump, and dry vacuum pump. It has a Thorp fiberglass cowl, prop extension, and a Ted Hendrickson 68x68 prop. Wings are standard with standard airfoil and include fiberglass tips. Canopy, wheel pants, tires, brakes, and tailwheel are included. Uninstalled instruments include a new Escort 110 nav/com, all basic instruments, and an older DG and artificial horizon.
As I previously stated, the entire project will be available for about 9500 dollars to an interested builder otherwise I plan to finish it and sell after it is flyable. My project is currently nearing completion and first flight is tenetively scheduled for spring. I'll keep you informed of its status.



Greg Halverson
1811 Hilltop
Arlington, TX 76013
503 287-4823

87 OSH CONT'D

KANSAS

TEXHOMA TALK AGAIN

About a year ago Lee Skillman sold his airplane to a Don Perry, of Concord NH (not a MAS member). Lee called the other day to give me an account of the new owner's account of what he felt to be problems never experienced by Lee during his ownership). Lee has an H model 160 hp Lyc, the one used in Cessnas a few years back and recalled for mods by Lyc. (Cessna called it a Cessna engine, he said). Perry said Lyc. told him it had wrong valves & springs, too small a fuel line, and shouldn't have a metal prop, Lee said. Said it should have 1/2" fuel lines, plus other things hard to believe. He cut off Lee's vent line for tank, said it over-pressurized tank and caused fuel in cockpit, etc. Vent was cut to 45° below FW, but Lee didn't know which direction, whether it now sucked or blew. Anyway, if any of you have the H engine and want to talk it over with Lee, his address is 623 Southern Way, Spanish Fort, AL, 36527 (That's Mobile, AL) Don't have his number.

STANDARD DISCLAIMER NOTICE: In all past, present, and future Newsletters of the T-18 and S-18 Mutual Aid Society (now known as the T-18/ S-18 Builders and Owners Association), that from its beginning we would make you aware that these newsletters are only presented as a Clearing House for ideas, opinions, and personal experiences of both members and non-members in both building and flying the T-18 and S-18, and anyone using these ideas, opinion and experiences do so at their own discretion or risk. Therefore, no responsibility or liability for the accuracy of material presented is either implied or intended and is presented without recourse to anyone. (Editor).

ANOTHER FOR SALE: Long time MAS member Warren Spencer, 1512 North Ave, Crystal Lake, IL, 60014 (Chicago area) has his T-18 project for sale in a distress situation. The slip he gave me with details has vanished and I'm sorry I don't know the price or the current state of the project, but as my memory serves me the price was a bargain and the project is quite far along. Anyway, any of you Upper Midwest guys, here's a chance for one of you to get a long leg up on your T-18. The last phone # I had for Warren is 815/ 459-2578, but I can't guarantee it.

FOOD FOR THOUGHT DEPT.: Had a long chat with Loren Houston, who lives in the Indianapolis area. Loren had a purchased T-18 that he flew some 600 hours before putting it over on its back in a field totally saturated with water below the turf and invisible from above (on clearing pass at 3 ft). When the wheels touched they dug UNDER the turf, instantly bringing the wheels to an absolute halt, throwing the a/c inverted, in the air and going backward some 250 ft. before coming to a stop. Most of the airframe wasn't hurt too badly, but the roll bar was shoved down 2.5" and the canopy also squeezed down and cracked badly, pinning him in, while gas and oil ran out. His scalp was cut badly and bled profusely...and he was stuck there for almost an hour...upside down, hanging from his belt and shoulder harness (the latest approved FAA type) which WOULD NOT RELEASE BECAUSE OF HIS WEIGHT AGAINST THE BUCKLES. THE PRESS TO RELEASE WON'T WORK WITH MUCH TENSION ON THEM! Help never came and he had no way to knock the canopy out. After a long and desperate struggle he finally got the harness loose and somehow squeezed out. After a lot of plastic surgery he's okay and wants another T-18. He's going to have an aft roll bar, too, if he gets one and would put some sort of an escape hatch in the canopy, so vivid is his experience. He was expecting something to ignite the fuel any second and be burned alive....and he was lucky it didn't happen.

Think about this subject carefully and please send me your thoughts on ways to prevent such a tragedy from happening. After the OSH accident we warned against the thermos bottle cap fuel cap and how it will easily pop



(cont'd)

out on a fairly small force inverted. A couple of our members came up with solutions...like a pivoting bar over the cap to act as a stop (see back NLs) and apparently that solves a potentially lethal problem as long as the tank itself remains intact. Now what do we do about the new type safety belt and shoulder harness? One solution might be to have a sharp hunting knife close at hand to saw thru the belts...or perhaps YOU may have some other suggestion???? I have always carried some sort of a canopy smasher with me when I did initial test hops, a short, heavy ball pein hammer or equivalent that you could use to beat your way out, too. Even then it might not be easy....How about your idea on this subject, too?????

Please don't think, "It can't happen to me. It CAN". I know personally of four T-18s that went over on their backs (like Rick Keller losing a wheel on landing at a wilderness strip in Idaho, etc). An engine failure at the wrong time and place could do it, or an unseen ditch, etc. Any number of things COULD do it to you. ANY low wing with a canopy is vulnerable. Maybe we need to take a long look at our canopy frames, possibly making them of laminated Kevlar/ epoxy, with a fore and aft center bow and a crossbar frame just aft of the pilot's head that would tie in with a crossbar at deck level. Bubble canopies are super for looks sake, true, but common sense tells us there isn't much in protection there in an overturn. We also know that even tri-gear airplanes wind up on their back, too. Please, gents, let's not dismiss this subject as one of those freak things that can't or won't happen again, so please give it some thought and send me your comments.

Here's another subject that deserves your attention: TOE IN OR TOE OUT? Dave Eby (Wichita Falls, TX) sends this note:

"CROWFEET OR PIGEON TOES?"

Serial # 1202 first took to the air in late April '87 and has now flown close to 150 hours since then until late Sept. I fly various agricultural aircraft from narrow single lane dirt roads on a daily basis in my work and think nothing of it. I also fly Pitts off narrow runways frequently, so I am used to having to work at directional control. I have let a number of experienced tail dragger pilots fly my bird with me in there, too, and all of them have found my T-18 to be a bear on the ground..a real squirrel. All of them were back and forth across the runway on landings and T/Os.

I took two yardsticks to measure the problem after I found 1/2 of the tread gone off the inside of the tires after 120 hours. To check toe in/toe out I hoisted the wheels off the ground and then gently lowered them back down, not rolling the A/C forward or backward after that. With sticks on each side of the wheel I drew a line on the floor about 30" out f'w'd on each side of the wheels, doing the same thing to the rear. Measuring from a C/L plumb bob mark on the floor to each of these points on the lines showed I had about 1° toe out. Cross checking the comparative distances on the front and rear marks confirmed this, so I ordered a 1° shim from Aircraft Spruce & Specialty (part #0441157-3) and installed them. Wheels are now TOED IN about one-half degree each. The aircraft is now MUCH easier to control on the ground. I now feel that I can check Pat out in it without worrying about it getting away from her on roll out.

We printed an article by the late Dr. Shinn in a previous NL, but we always favored either zero toe in/out or a slight toe in, personally. How do you feel on this subject? What's YOUR experience??? Again, PLEASE comment!



▲ LYC 0-320 H

DISCLAIMER

FOR SALE

INVERTED LANDING - TRAPPED!

"TRAPPED - INVERTED CONT'D"

TOE IN OR TOE OUT

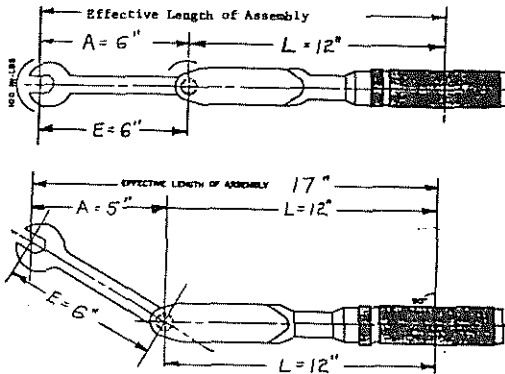
STEERING CHAIN REPLACEMENT:

For an unknown length of time, and for reasons known only to God, we have not been supplying a sufficient length of sash chain to complete both sides of the tail wheel steering system. The correct length supplied should have been 17" which is more than enough for the approx. 8" needed on each the right and left sides. Should you have cut in half the 13" length sent, neither piece will be long enough. If so, let us know and we will send you whatever length you need. Or, if it is more convenient, you can probably get it (#40 Sash Chain [plated]) from your local hardware store.

PROPELLER BOLT FAILURES (Revisited):

In the Dec. '86 Rvator I talked about a prop bolt failure I had experienced on the RV-6. From numerous conversations I have had since, it is obvious that either I didn't explain very well or many didn't read very well. Yes, I think that I have figured out what the problem was. Over the service life of subject prop, prop bolts had not been checked and re-torqued at regular intervals. I am still confident that wood props, correctly torqued through a three-step sequence upon initial installation, and then re-torqued at 50 hour or three month intervals thereafter, will provide trouble free service.

In the Dec. article, I mentioned a Rube Goldberg method suggested by one RV-4 builder for checking the torque since conventional torque wrenches cannot be used on the nut end of the prop bolts. As a result, several informed builders sent in information about commercially available torque wrench extenders. Following are excerpts from this:



When using an extension on a torque wrench, the torque applied to the end of the ext. is not the same as the torque set on the wrench. The formula below applies.

$$T_w = T_a \left(\frac{L}{L + A} \right)$$

T_a = Torque applied to nut
 T_w = Torque setting of wrench
 L = Length of wrench (center of handle to center of drive
 A = Length of extension parallel to handle of wrench.

Example:

$$T_w = T_a(25) \frac{L(12)}{L(12) + A(5)}$$

$$T_w = 25(12/17) = 17.64 = 18 \text{ Et/1b.}$$

In the above example, we used the wrench with the extension set at an angle to the handle. For simplicity, we suggest keeping the wrench handle and extension parallel so that the "A" dimension will not need to be measured or calculated. Also, since we are normally using lock nuts on the prop bolts, the torque value needed to overcome the friction of the lock nut should be added to " T_a " before doing the calculation.

As a result of the attention brought to the prop attach issue, PACESETTER PROPS have developed an optional prop extension intended primarily for the 180 HP engine/wood prop combination. The basic difference is that the prop bolt holes are 1/2" dia. and the drive bushings have an outside dia. of 3/4" with a protruding length of 3/4". This contrasts with 5/8" dia. and 5/8" protrusion for standard extension. While we do not at this time feel it necessary, this optional extension could be used with 0-320 Lyc. engines as well. For more information, call or write PACESETTER PROPELLER WORKS, LTD., P.O. Box 1245 Hillsboro, OR 97123. (503)628-2797

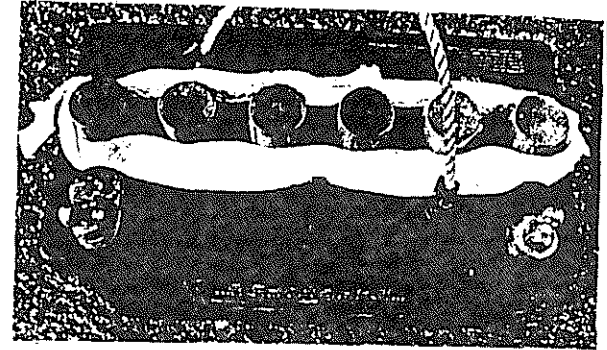
FROM THE RV-4 NEWSLETTER 'RVATOR'

RVator - RV-34 NL.

"SEVEN COMMON BATTERY CARE MISTAKES" (from Light Plane Maintenance)

You wouldn't think something that's as heavy as lead, gives off highly corrosive fumes, vents explosive gases, and has the potential to make sparks, would ever be allowed in an airplane. But wet-cell, lead acid batteries (combining all of the above traits) have been with us for years—and likely will continue to be, until something better (i.e., less expensive) comes along.

Meanwhile, getting maximum value for your battery dollar is largely a matter of taking battery maintenance into your own hands. (Neglect is the almost certain alternative.) Doing your own battery servicing isn't difficult. But whatever you do, don't be caught committing one of the following blunders.



A baking-soda-treated paper towel wrapped around vent caps will neutralize corrosive overspills. If towel becomes saturated, however, acid bridging could result.

1. Boost-Charging

Someday when you're in a hurry to get going and your battery is dead, somebody will try to talk you into a boost charge (i.e., a high amperage charge for 10 or 15 minutes). Don't do it. First ask yourself how the battery got into such a state that you think it needs a boost charge to begin with. If the battery is elderly (specific gravity varies more than .050 between cells) and badly sulfated, you won't accomplish anything with a boost charge except, possibly, to overheat one or more plates and spall the grids. (As the plates heat and warp, small bits of active material will shed from the grids, further deteriorating the battery.)

There's no harm in boosting a battery whose cells are in perfect condition, containing clean, fresh electrolyte—i.e., a new battery. (Even here, though, it's not wise to go much above 10 amps for 10 to 20 minutes.) The best remedy for a sulfated battery—short of replacing it—is to put it on a trickle-charger and slowly bring it up to snuff with an amp or less of current for 48 to 72 hours. If that doesn't revive it, nothing will.

2. Acid Bridging

Take a look inside your battery box. See that damp stuff on top of the battery? That's electrolyte (concentrated sulfuric acid). And when the damp stuff reaches from one battery cap to another, that's called an acid bridge.

Hydrometer for aircraft use should have small fluid chamber (for working with small samples) and give a numeric reading of specific gravity.

It means your cells are shorting out, and you're on the way to buying a new battery.

Any time you see wetness on the top of a lead-acid battery, you should stop to ask why. Batteries do fizz a lot (especially in hot weather), and if you don't inspect the battery compartment often—at least once a month—you're apt to get some buildup. If the buildup is persistent and excessive, it's either because someone has been flying aerobatics (no, the "no-spill" caps aren't perfect), or—more likely—somebody has been overfilling the battery with water. Or, the plane's voltage regulator is set too

high and the battery is overcharging. (Or a combination of the above.) Find out the cause, and fix it.

Meantime, wipe up any wetness with a paper towel. Baking soda will neutralize the acid and make it safe to touch with fingers, but will not make it electrically neutral. Dryness, not soda, is the key to preventing bridges.

3. Failure to Inspect More Often in Hot Weather

All batteries should be inspected more often in summer. Inactive batteries go dead faster in hot-weather storage; likewise, active batteries tend to outgas more freely in warmer



weather. The reason is simple. Chemical reactions of all types tend to speed up exponentially with increases in temperature. Since batteries are actually miniature chemical factories, it's not surprising that everything a battery does happens a little faster in hot weather—and as a result, more maintenance is indicated.

First, be sure the battery is getting enough water. Twice a month is not too often to check the cells in hot weather. Keep a log of how much water the battery is using between checks (and the time between checks), and you'll practically be able to predict when the battery will next need watering.

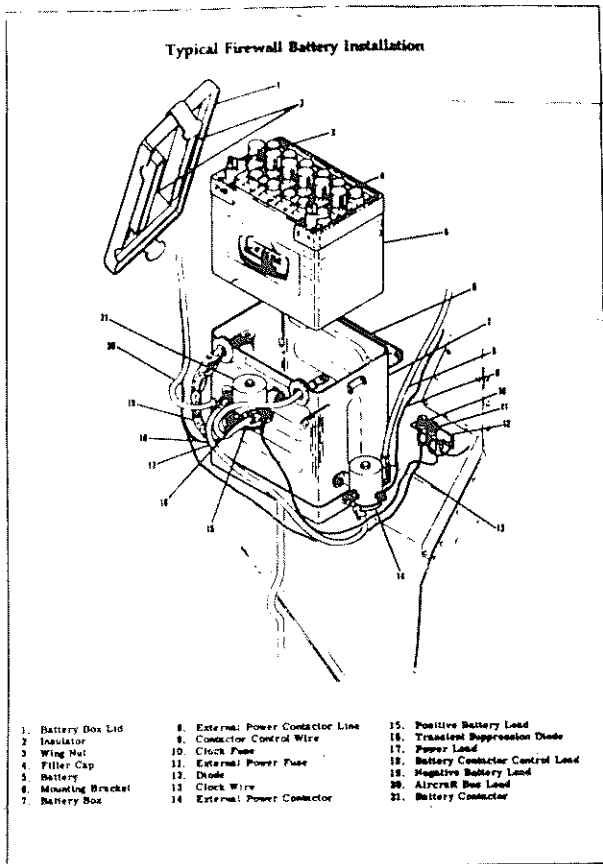
Second, make sure the battery is not being overcharged. If the top of the battery is constantly wet and the cells are while you're at it, check the specific gravity of the fluid in each cell, and compare readings. All cells should be within .050 of each other; if the average reading is 1.225 or less, take the battery out of the plane and charge it at a rate equal to approximately 10 percent of the ampere-hour rating of the battery. (Example: Charge a 35-amp-hour battery at 3 to 4 amps.) Discontinue charging when the cell gravity reaches 1.265 to 1.270 (add .004 for every 10 degrees F above 80 F), or when three consecutive hydrometer readings taken an hour apart show no change in gravity—or any time the battery temperature exceeds 120 degrees Fahrenheit (very warm to the touch).

4. Overfilling

While it's true you do not want to let cells go dry (sulfate forms on plates at the air/fluid interface), you also do not want to overfill the battery—which is a common problem (at least as common as overfilling the engine with oil). Look inside the mouth of each cell and you'll notice that the polypropylene filler neck does quite deep down inside the cell, then terminates in a slotted or "split ring" opening. Remember these two rules of thumb: (1) If you can see dry plate-tops, the cell needs water. (2) If the fluid level reaches above the split ring, the cell has been overfilled. (Remove excess fluid with a syringe or eyedropper—but make sure no one uses the eyedropper as an eyedropper any time soon!)

5. Overcharging

The rules for bench-charging have already been cited (above). If your battery is constantly going dry and



leaving wet residue on top of the polypropylene case, check the system voltage with a voltmeter (or Volt-xcator) plugged into the cigaret lighter (engine running at 1,200 rpm or more). At 80 degrees F ambient temperature, the system charging voltage should be no more than 14.8 volts for 12-volt systems (28.9 volts for 24-volt systems). Have your mechanic adjust your voltage regulator if system voltage is excessive.

6. Poor Connections

Battery and cable terminals should be cleaned up with a wire brush periodically to ensure good conductivity

(Copper cable ends will corrode in normal service.) Remove the terminal wing nuts and visually check things out yourself. When everything is shiny, twist the wing nuts back on as tight as you can get them with your fingers; don't overtighten.

7. Failure to Keep a Log

Quick: How old is your present battery? Who installed it? What was the specific gravity of the original acid put in it? How much water (in ounces or cups) did the battery use last July? And: If you're not keeping good enough log records to enable you to answer these questions, why?

Harry Paine
477 Prantz Rd.
Arroyo Grande, Cal 93420

May 1987

T-18 Mutual Aid Society

Dear Fellow T-18ers; -

Since Dick is so hard up for news I thought I would give him about One Years worth!

In November of 86 after ruining my 3rd 577 hinge plate on my project and realizing I was not going to make my finish date of 1-1-87, I decided to quit my project and start looking for one to buy. There were some good reasons for quitting and perhaps my sharing them will prevent someone else from giving up.

1. Premature move from garage to hangar. Do not move to hangar until you're ready to start taxi testing! I could have moved back to a garage but then I would have been put on a 2 year waiting list to get another hangar.

2. The urge to fly is very strong and I was not satisfied during the building process. During the 5 years I spent on the project I was only able to get one T-18 ride! In an area with at least 10-20 T-18's in a 50 mile radius I thot that was not too cool. So you T-18 flyers who know a T-18 builder, give the poor bugger a ride every now and then to give him some inspiration to get finished!

After about 3 months worth of looking and checking I finally bought 8613A, from Rich Oribe in Apple Valley, Ca. This is the one built by Rudy Adler. Chuck Borden checked me out in about 2hrs and I proceeded to really learn about the airplane. I love it! It has a O-290G converted by John Thorpe. The Specs are as Follows:

Empty wt.	830lbs?	(This airplane needs to be weighted again because the weight and balance sheet is all messed up)
Gross wt.	1500lbs	
Engine	0-290 135 HP	
Top Speed	195mph Ind	(not verified as of yet)
Cruise	160-165	verified over 1300 mi. two way trip
Stall	not sure the tail mounted pitot goes wacko about 65 mph and as the angle of attack increased so does the indicated speed!	
Prop	68 x 66 Great American Propeller	Way too much pitch for the motor. I only get 2100 Static and 2500 max at 50 ft above the Pacific Ocean!

One of the things I have done since I bought it is to install some offset control stick fittings. These can be bought from Ken Brock but they are not in the catalog

(CONT'D)

PG 2 OF HARRY PAINE LETTER

While checking out the airplanes performance I found out a rather startling characteristic! I was doing some engine out practice landings (something all pilots should do every so often) was on final at about 300 ft and 90mph ind with 2 notches 30 degrees of flaps. I pulled what I thot was the 2nd notch and was immediately looking straight at the airport ILS antenna system without having to look down at it! It took about 1/4 second to register in my brain that I had done something seriously wrong and was about to die and go to heaven unless I took corrective action immediately.

I took off the last notch of flap and put in the throttle and landed just about where I had originally intended. Well after a trip to my laundry to have my pants cleaned I remembered something in one of the newsletters about this problem with T-18's that are in the full forward CG position which is where I was at that day. After reading the article in Newsletter #59 by Tom Kerns on this problem I put some duct tape on the gap in the flap well underneath the wing to fuselage fairing and took off. This time I went to 7,000 ft and did all sorts of things to try and get 86A to do the first part of a square outside loop but to no avail! So during the annual I just had Chuck Borden make me a little "floor" out of 032" and it works great. It also got rid of most of a burbling stick oscillation action with flaps that happened at 100 mph or less during decent to landing. Many thanks to Mr. Kerns for his advice!

The annual I pulled revealed some things that should have been previously FIXED but were not.

1. Engine mixture cable not properly fastened allowed entire cable to slip
2. # 10 screw holes in firewall not plugged.
3. AD on Bendix mags to check impulse couplings at 500 hrs not done (engine & airframe have 650 hrs)! It turned out the right mag was bad (THIS AD IS ON ALL BENDIX SL4 SL6 Models
4. Excessive slop in rudder hinge micarta bushing allowing rudder play of approx 3/32"
5. Fuel overflow vent hose worn clear through at junction of forward tunnel over the rudder cables. (A new hose cured my fuel fumes in the cockpit problem!)
6. Tail wheel bolt stop nuts kept coming loose, inspection of the bolt revealed that someone had used a die to cut more threads on the bolt!! THIS SHOULD NEVER BE DONE TO AN BOLTS AS CUTTING THREADS WILL COMPROMISE THE STRENGTH OF THE BOLT

My next project will be to install electric elevator trim. The one I have now works bad. An outfit called M.A.C. 1537 Foothill dr. Vista, Cal 92084 is selling a complete package of servo's with position indicators, switch and wiring for \$89.00 to \$109.00. This unit is very compact and lightweight.

CONTINUED ON PAGE 16



PG. 3 OF HARRY PAINE LETTER

I have been using auto gas (Chevron) for about 4 months and Rich Orabe said he had been using it for 2 years. By the way Rich lived in Las Vegas where it gets to 105 -110 degrees F in the shade! during the summer, with no vapor lock problem. The engine is strickly gravity feed no fuel pump!

AUTO GAS

If you have any Lycoming eng questions there are two Lycoming engine reps more than happy to answer all engine related questions Their names are Bob Omis and Jim Brown at 717-327-7076 or 717-327-7094.

Keep Em Flying
Harry Paine

FOR SALE STANDARD T-18 Airframe, 90% complete, clevaland brakes, all flush riveted with solid rivets, Primered with 2 part epoxy primer. See Photo ! Has most everthing needed to complete. Engine 0290 Lyc 135 HP 660 Hrs since reman. \$11,000 OBO call Harry Paine 805-481-2524.

As a preface to the above letter, Harry wrote, "You might have another John Walton on your hands for your newsletter material writers. (Boy, can I ever use 'em!) I had to cut down about one-half of what I had in the word processor to get it down to 2 pages! Well. I will write some more if you are happy with this one. (Harry, we ARE happy, so write more. You did a super job on this one. Ed.).

Just got back from the Merced fly-in. Had about 6-8 T-18s there. I am finally getting my new dry cleaning business started, so I won't make OSH in '87. Maybe next year.....Sincerely, Harry Paine

IDEAS ON STORIES FOR YOU TO WRITE

Harry, you've left us a model for a letter to the T-18 Editor. We truly do appreciate it. If I could just impress on the rest of the guys how desparate we are for material...how the newsletter is going to go down the tube if more of you don't get busy and get YOUR story in. If you can't type, spell, etc. just sit down and write the story of your T-18 from the very beginning until now, what kind of performance it gets and other stats (EW, CG, etc). your experiences checking out in it, the trips you've taken in it, what kind of airports you fly out of, the things you love about the T-18, and the things you don't like about it, what kind of insurance you carry and the \$ it costs, what kind of avionics you have in it, and, oh yes, send us a good sharp picture.

As another example of something you can write on is your pitot/static system, a detailed description of your brake system, how YOU installed your canopy, any comments on your tail wheel, how the airplane trims up in flight, what kind of fuel filler cap you have, where you mount your tie downs, how you lock the canopy, how you went about mounting your spinner and what kind is it. What is your normal engine maintenance routine? Servicing your brakes, how do you bleed them? How often do you pull your cowling completely off, wash the engine compartment down, re-check the various bolt torques, REALLY look for oil or exhaust leaks? What about your engine controls? Are they safetied and not wearing on another part? How often do you inspect and service your air cleaner? What type is it? Do you often wipe your exhaust pipe ends with a tissue to check for richness, oil use, mixture? Does your spinner have a front bulkhead in it and is it fastened to the shell? ETC,



(continued from page 16.)

I could go on and on on illuminating subjects for you to write about. How did you check your wheels for toe in or out? (Or did you) What has been your experience with tire wear? What type tires do you use? 4 ply or 6 ply? What air pressure do you use in them? Where did you mount your whiskey compass and how? Where did you mount your heel scuff plates and what size are they? (That's a not insignificant question, either. Flying Dave Eby's T-18 recently I kept getting my heels caught on the rug. I wear a size 12 and with jogging shoes on it can be a problem for me). Do you have trouble with your feet interfering with the tank? Do you have to be cautious about making a tight right tax i turn when the brake pedal hits the tank brace? What kind of seats do you have? What kind of upholstery and how do you attach it? Where did you mount your battery box and what kind is it? What size wire do you run from the battery to the starter? How did you route it? Exactly how did you align and install your wheel pants. How did you rig the up/down motion of your ailerons, Stabilator? Flaps? How many degrees of travel do you get with each? How did you go about fitting the canopy and its frame to match the windshield? Do you have a quick drain installed for the oil? Do you kerosene or varsol flush the crankcase when you change oil? Do you regularly use an oil analysis service? What kind of spark plugs do you use? How often do you sevice and how?....Now that should give you a few subjects to report on, so how about YOU taking the next step right now while it's fresh on your mind?

Dear Dick,

Finally getting settled after a third move since starting to build the T-18 and still trying to relocate parts. In the meantime I have met a lot of wonderful people in the Seattle EAA Chapter and it is really a creative atmosphere. For the first time I really feel inspired and am making progress. Some things get a little ahead of the basic program but I have just completed a set of simulated strobe lights and feel that it warrants sending on to you.

Cecil Hendricks had brognt some scrap ends of Delrin plastic from his machine shop to our Chapter meeting. Something had to be made with them. Cecil also had made a set of lights for his T-18 using projector bulbs, 12 Volts, 100 watt and 150 hours life...and a truck flasher unit for the light pulsing.

I have enclosed a drawing of the unit I have made so that the lenses can be positioned more accurately out of the wing tip. Nut plates allow the unit to be completely removed. The "O" Ring allows the bulb to be removed by pulling the outer shell from the outside. We worked together at Cecil's machine lathe to develop the final hole sizes and placement of the "O" Ring.

It is necessary to preform the male connectors over a wire so they can be gently slipped over the bulb stems and soldered. These, then, are secured into the plastic plug... (A) The female (B) receptacle is made up and 'press fitted' from the back of the Delrin fitting. The bulb I located is the same as Cecil's but it has a 2000 hr. life. If it last only a half life it will be considerable. To replace the bulb new male contacts have to be soldered on the new bulb.

I would like next year to fly my T-18 to Oshkosh. This year we plan to fly there in our AA5-A Cheetah in a circular type formation around Cecil in his Storey. Hope to see you there.

Frank
Frank Suedeker (Speed)

P.S. Now that I can be more active I shall send you more information for the Newsletter...in a form you won't have to redo.

ALSO, ABOUT CECIL AND HIS STOREY FLIGHT TO OSHKOSH - THAT'S ANOTHER STORY THAT ONLY YOU COULD TELL, DICK.

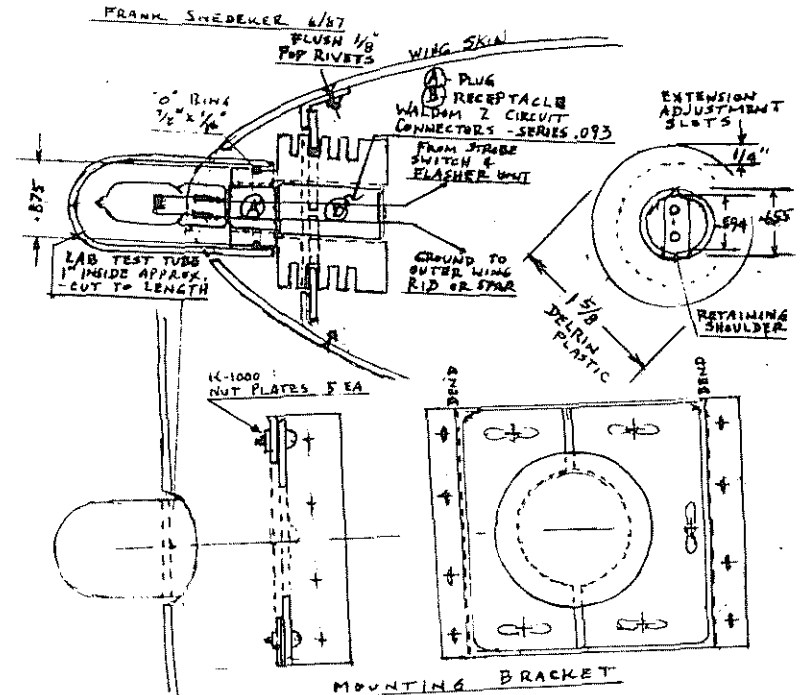
Frank

SEE HIS SKETCH ON WING TIP FLASHERS ON PAGE 18.

Frank Suedeker
5528 231 Ave. S.E.
Issaquah, WA., 98027



SIMULATED STROBES (CONT'D)



- ① WALDMAN - 2 CIRCUIT CONNECTORS
3 SETS PER PACKAGE,
A) PREFORM MALE TERM AND
SOLDER TO HALOGEN STEMS.
B) NEVER TOUCH HALOGEN LENS
WITH BARE FINGERS.
C) USE AIRCRAFT WIRE WHEN
MAKING FEMALE RECEPTACLES
PIC TAILS,
- ② USE "OSRAM" HALO STAR
PROJECTION LENS 6458
12V / 100 W - 2000 HRS.
- ③ USE HEAVY DUTY - 3 PRONG
FLASHER # 550 12 VOLT,
AUTO PARTS STORE,
- ④ 13 TO 15 AMP CIRCUIT BREAKER
OR FUSE

This is a good example of a simple sketch that we can easily use in the NL. We simply scissor it down to size and scotch tape it our blank piece of paper and the printer does the rest.

If you send in material it would help if you use a letter size sheet 8 1/2 x 11", leaving about a 1 to 1 1/2" margin on the left side. (This is so that the pages can be three-hole punched for keep in a 3 ring notebook.

Anyway, Frank, we DO appreciate your efforts. We have had a lot of good comment on your method to hinge the instrument panel in a prev. NL. (Black ink in sketches is best, but if you don't have I can traceover.



IDEAS FOR N.L. ARTICLES

SIMULATED STROBE LIGHTS

Dear Dick,

Since I received the dreaded red check mark in my last newsletter, I must be behind in my dues. Enclosed is \$30.00 for my delinquent dues plus this year's. If that's too much consider the rest a donation. When I talked to you at OSH this year you said that even more than the dues, you needed material for the newsletter. I indicated that I would write a note on canopy installation for the wide body, however that job is not complete yet due to my moving. By the way my new address is:

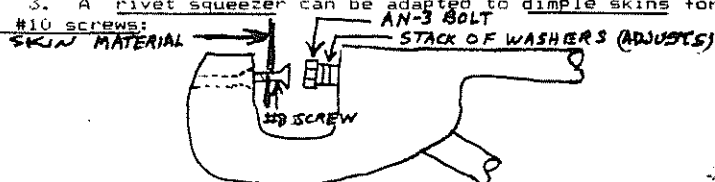
Harvey P. Mickelsen
1007 Persimmon Ave.
Sunnyvale, Ca.
94087

I do have some small items I have been guilty of squirreling away:

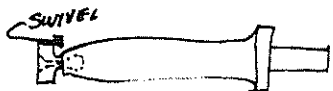
1. "Sandbox" sponge sanders are great for finishing off the edges of sheetmetal. File first, then use the Sandbox. (Don't step on the cat!)

2. My son just gave me an air nibbler for my birthday. (\$50.00 at the local Pay and Pack hardware store distributed by Trade Associates, Kent, Wa. 98031, Model #AF100B). It cuts aluminum like butter. Unless you want to develop your right forearm for tennis it's worth it. I wish I had one when I was cutting my fuselage skins.

3. A rivet squeezer can be adapted to dimple skins for #8 and #10 screws:



4. A rivet gun can be used to dimple by getting a rivet set with a swiveling female dimpling die on the end:



One could probably fabricate a non-swiveling one and be careful to keep it vertical. The procedure is to lay a long flat

HARVEY'S LETTER CONTINUED ON PAGE 20

steel plate on the floor, insert stainless steel rivets in the holes of your piece, securing them with masking tape over the heads. Then lay your piece on the steel and back rivet your line of rivets. Quick, and nice dimples.

5. Tap Plastics skylight material (0.040 acrylic plastic stock # 088619) is better than cardboard for making fairing patterns. It is flexible and cuts easily with tin snips.

6. Use high-tech optical alignment techniques for your wheel fairings and gear leg fairings. Prop up the tail till WL 0.0 is level, then grab your binoculars and walk across the street to your neighbors front yard. Line up the vertical fin and the roll bar brace and mark your position (a penny?). Move left and right the proper distance while you have a helper twist the leg fairings and wheel pants. (I'll bet that most of you do not know that your gear leg fairings are flying at a negative angle of attack.)

7. To position nut plates cut the head off of the bolt and screw it into the nut plate. Insert it into the hole and drill the rivet holes through the nut plate holes. Use lots of nut plates.

An article on the wide body canopy installation is coming I promise, Dick, meanwhile the two articles in the N.L. #64 are very good.

Does anyone have information on a Hartzel C/S prop for a Lycoming AE10360B1G6 at less than an arm and a leg? Harvey

Okay, amigos, that's it for this NL. I'm all out of material, so if we have a #68 NL is up to you. It's a well known fact that if we wait for good ole George to do it, we wait...and we wait...and we wait, etc. In the previous NL I begged...yes, begged...for material. I got 1000 long letters on every conceivable T-18 subject, a veritable snowstorm of mail. (Signed, Joe Isuzu) ..and you have my word on it!

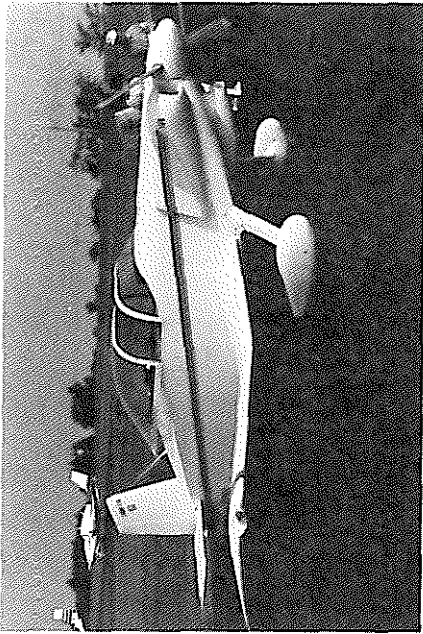
In the meantime, feast your eyes on the next two pages of T-18 pictures.

In closing, if any of you want the bound volume of Newsletters 1-44 that Lu did, we're down to about 50 and we couldn't have them re-printed unless we ordered a minimum of 100. To do that we'd have to have firm orders for at least 35 to 50 and I'm sure there would be quite a delay. They are a bargain at \$25 ea. ppd. *Proceeds go to Mrs. Sunderland. Between it and Tony Bingelis' 3 books you can build a metal airplane and do it well.

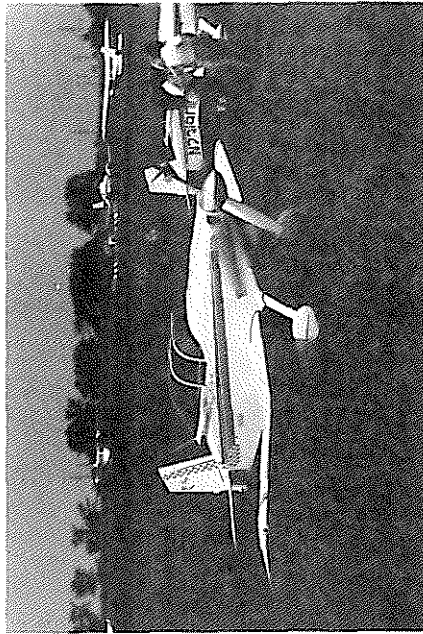
Hope to see you at Texhoma Oct 31 - Nov 1.
Dick

*ORDER FROM ME OR MRS. SUNDERLAND.

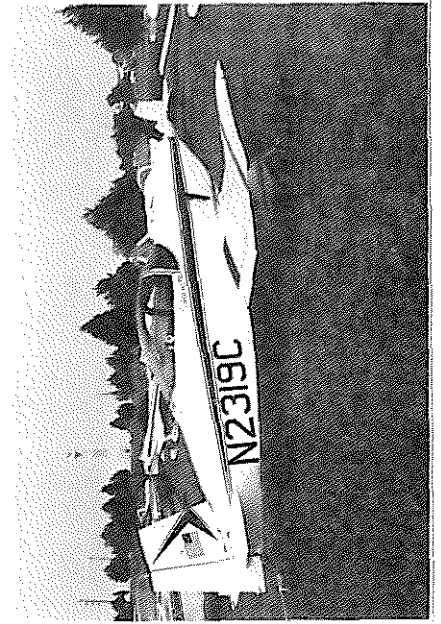
TEXHOMA ATTENDEES



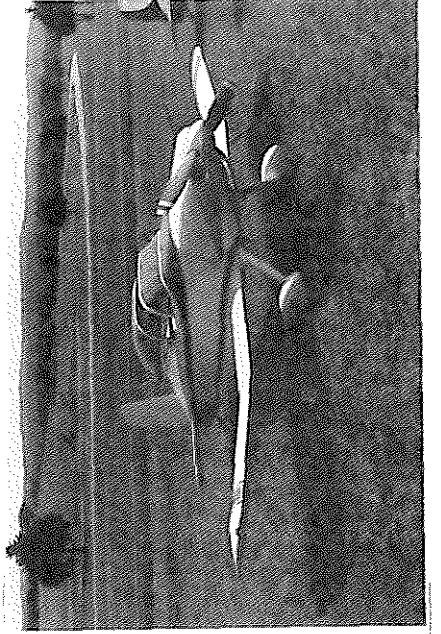
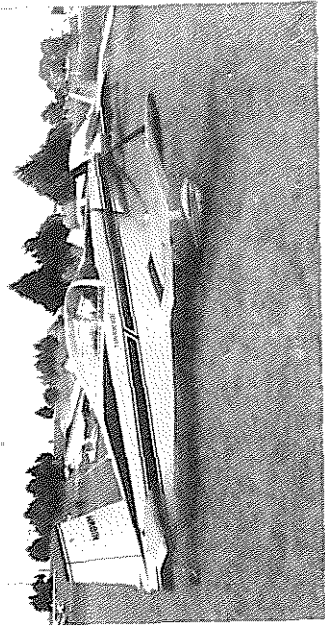
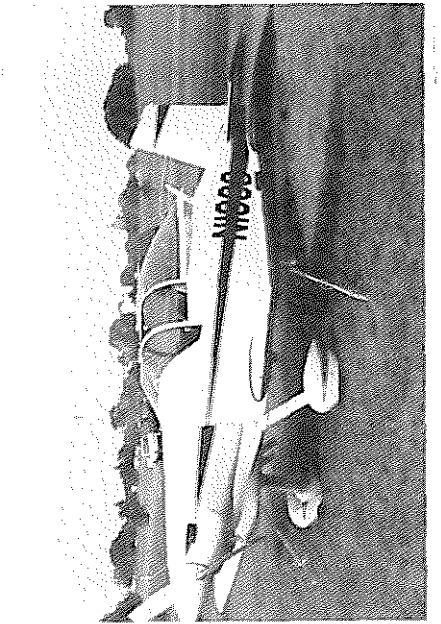
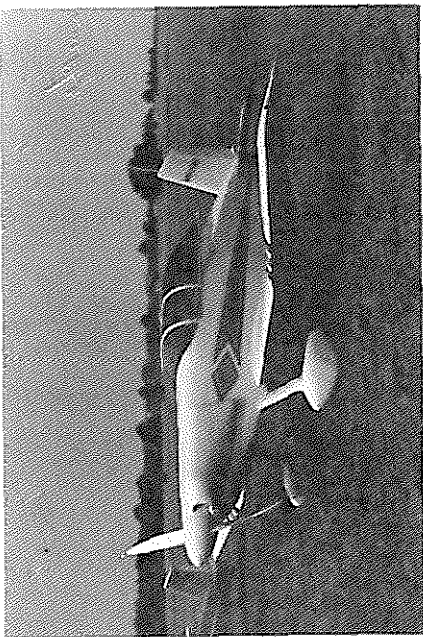
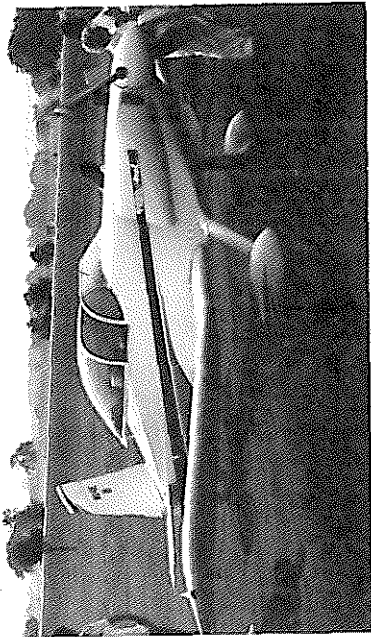
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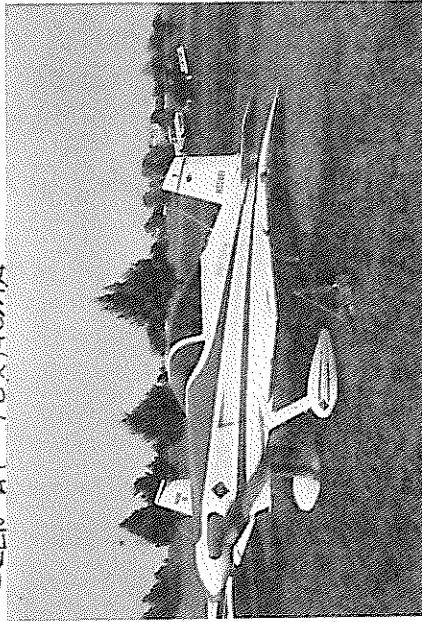
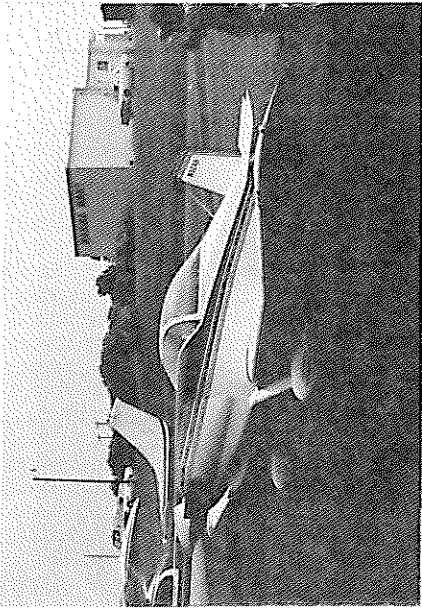
Left to Right this row: STEVE HAWLEY, BRYANT HOWLAND, KARI UFFSCOMB



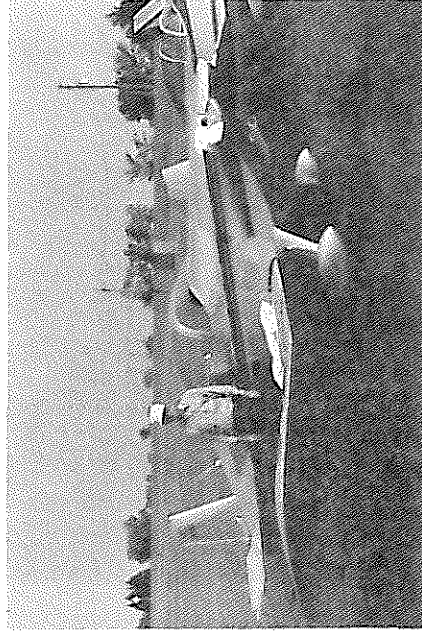
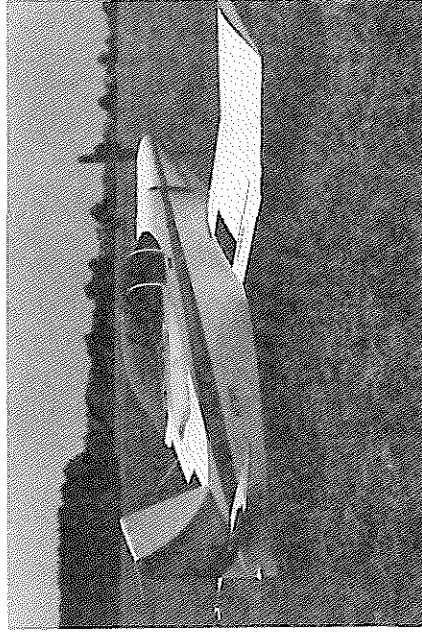
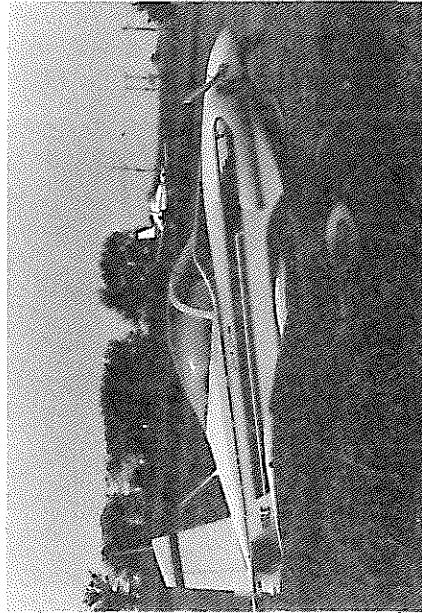
Left to Right this row: NICKY BUCHANAN, JIM FRENCH, BOB HIGGLEY



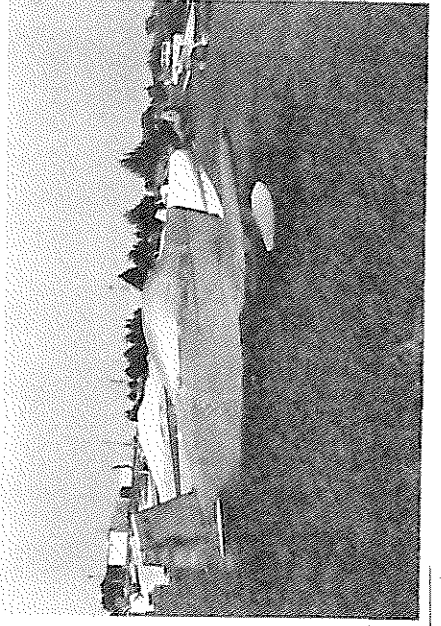
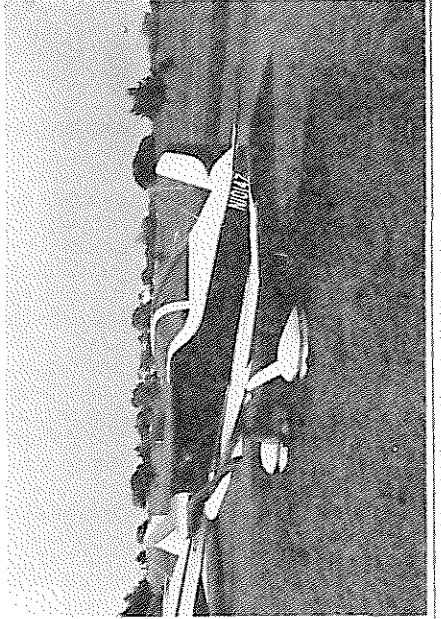
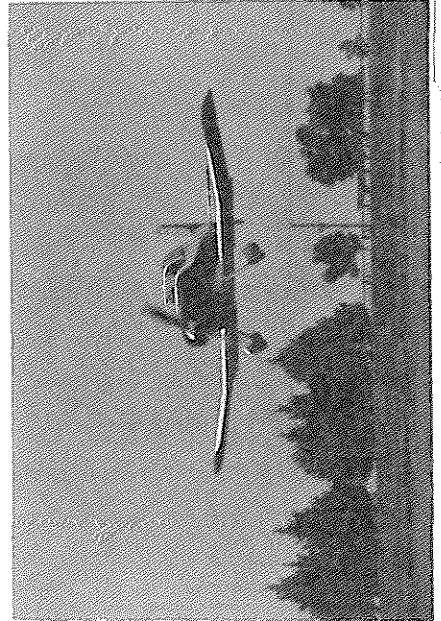
SEEN AT TEXHOMA



Left to right this row: DICK AMSDEN, RANDEL WOOLAWAY, JIM PAINE



Left to right this row: LEE REILLY, DAVE EBY, DEAN COCHRAN



Left to right this row: GARY HOLT (on final), GARY HOLT, LEROY HOLT