38

T-18 NEWSLETTER #38 25 February 1973

Luther D. Sunderland, Editor, 5 Griffin Dr, Apalachin, NY 13732

NUMBER 100 FLIES !!- Dr John Shinn, 835 John Anderson Dr, Ormond Beach, Fla made the first flight of the 100th T-18 to fly, N4784G. On Christmas he towed it to the Daytona Beach Airport but it was January 24 before the FAA inspected it and he could make the first flight. By that time he had ample time for taxi tests for he had 2.5 hours taxi time before the first flight. He is very happy with his ship now that he has cleared up several minor things like a wing walk which came loose making a nice spoiler and low oil pressure caused by the parallel oil cooler and filter arrangement.

As you readers know, John helped edit the Newsletter for many years while he lived in New York state. His T-18 is painted with the same paint scheme as mine and is also blue. His engine is an O-290-D2. More info later.

FUEL TANKS - W. R. Warnack, 189 Bayshore Drive, Baytown, Tex. 77520. I built a fiberglass tank about six months ago. It was filled with Safoam which was purchased from a surplus house. When the tank was completed, I filled it with water, pressure tested it with no leakage indicated, drained the water, removed it from the fuselage, and stored the tank in my attic with all the vents and the filler neck open - so as to allow it to dry out. Then came all the discussions about Safoam, and I decided that it probably was a built-in hazard. I brought the tank down from the attic last week, cut a hole in the top and began removing the Safoam. Could hardly believe it but the Safoam was still thoroughly soaked with water. After six months, this stuff still retained at least one half gallon of water. I could actually squeeze out water readily as the Safoam was removed. Some deterioration was evident with small pieces beginning to crumble off, particularly around ink markings on the foam. I'm convinced this stuff could be very bad news - particularly if water is allowed on it. It is out of my tank now and I say good riddance.

PROJECT FOR SALE - Stu Schureman, 17249 Tennyson Pl, Granada Hills, Ca 91344 says for medical reasons he must sell his nearly completed T-18.

WOODEN PROP- Sensenich was to have shipped the new wooden prop to Dick Walen a week ago so there should be news on performance by next Newsletter. Since the last Newsletter Sensenich decided for non-technical reasons to not offer the 76 EM-8-8. metal propeller for sale. It was mainly due to the added liability exposure for a relatively small potential market in the present consumer protection atmosphere. You might say Nader scores again. They are not concerned about wooden propellers since they have never heard of one failing due to fatigue. Incidentally, Mr. Welch, who wrote a letter to Sport Aviation about my article, when confronted with this admitted that he might have been observing stone damage in the VW prop.

It should be no particular problem since Sensenich isn't selling the 68" long prop for you can still obtain one. Just buy a new 76 EM propeller and have it cut to 68 inches and repitched at a good prop shop. My 70" long old model 76 EM (no K after serial number) works fine with 65" pitch on my O-290-G so 67" pitch should be about right for the 68" length. 74" should be good for the O-320. Bob Dial's 160 hp T-18 would turn up 2800 rpm in level flight with a 70" long 76 EM with 73" pitch. Sensenich doesn't recommend twisting the 76 EM blank to more than 74" pitch, hence the reason for trying the wooden prop for the O-360.

PROJECT FOR SALE - Dr E. L. Lancaster, 305 Azalea, Grapevine, Texas 76051 has plans, metal prop, wheels, parts and part of fuselage for sale for $500. Phone 817 481-2949.

PROPELLER TEST REPORTS - I still have copies of the official report on the Hartzell flight tests. First come, first served. They are $2.00. Don't fly a cut-down metal prop until you read it.

LAYOUT - Jim Blythe, Apalachin, NY 13732. I would like to relate my experience in copying full sized prints and glueing the copy to the material to be cut. It was not a desirable experience as it led to scrapping some fittings. The dimensions were enlarged .100" and hole locations were offset even a greater amount. I now draw my own copies and find it far more satisfactory.
Ed Note:
The hazard in this practice is that any reproduction process can produce copies with dimensional errors and changes in humidity can cause additional dimensional changes. Many copying machines such as Zerox use image projection which can give other than a 1:1 ratio size copy depending on the machines adjustment. If copies happen to come out right, after cementing, it is a way to save layout time. The real problem is in forgetting to check and re-check.

This would be a good time to talk about shop practices. If you have forgotten earlier advice given in the Newsletter, the most difficult task you will encounter in building a T-18 is measuring between two points, marking accurately and cutting or drilling in the right place. It seems so very elementary, yet failure in this operation is the reason for most builders' goofs. To prevent errors in measuring, it is a good idea to measure and mark, then before cutting chips measure again if possible from a different reference or by looking at the scale in a different way. A common mistake is to view the scale up-side-down and count fractional parts in the wrong direction. It is always dangerous to read a scale when it is in the inverted position, but if you do, then turn it around and check the measurement with it right-side-up.

Many builders have problems because they try to get by without proper measuring scales. I feel it essential to have one decimal scale marked with 0.020" minimum divisions. It is hard to believe that these are so difficult to find in lengths greater than 6". Despite appeals through the Newsletter, the only source I've found is the 18" drafting scale available at drafting supply houses. This is what I use and find it quite satisfactory. Anything shorter would be unsuitable. In addition, a 6 foot steel tape (yo yo) is needed. It should be checked carefully with the 18" scale and if not accurate, compensation made.

FLUSH GAS CAP - Aviation Industries, 114 Bryant, Ojai, Calif 93023 makes a flush gas cap with a 2.6" opening which fits the T-18 perfectly. It has a flange made of 6061 aluminum which may be welded, riveted, bolted or molded to the tank. Satisfaction guaranteed or money back. Include $16.95 with order. Looks good.

WOODEN PROPELLER SOURCE - Leslie Trigg, formerly chief engineer with Sensenich operates a shop called Propeller Engineering Duplicating at PO Box 63, Manhattan Beach, Calif. He will copy any propeller with his duplicating machine for around $175.00.

WORLD RECORD ATTEMPT - Don Taylor, Lt. Col. USAF Retired is planning a round the world flight as already announced in Sport Aviation. He is soliciting donations to help finance the trip. It will be a solo flight in T-18 #455.

#719 FLIES - Gayle LeCount, 301 East West ST, Georgetown, Ill 61846. At last (Oct 28, 72) #719 is done. It has been 2 1/2 years, but thanks to people like you a great experience to build it. I can't say enough about how my 82 year old

grandmother has helped me. She has helped with every detail of the plane including bucking more than 90% of the rivets. She is: Mrs. Zoe Brown, 407 Mill St, Georgetown, Illinois 61846. How about that! No wonder he finished it in 2 years.

WING HEAVINESS - John Foy, 3801 127th NE, Bellevue, Wash 98005. I have just reread the newsletter for about the fifth time and get more out of it each time. Although I have finished the T-18 long ago, I still appreciate the newsletter and look forward to each issue. I'm not sure that the newsletters in the past have mentioned this, but I found out that some wing heaviness I had on my T-18 was due to aileron to wing gap. As soon as I covered the gap with cloth tape, the wing heaviness disappeared. The exact cause I'm not sure of but suspect a slight uptilt on the edge of the wing, just ahead of the aileron. Since I've returned to the mainland from Hawaii, I've started on Jim Stewart's S-51D. The all wood version, so that I can round out my building experience. Ed - See, you can't keep a good man down.

RIVETTING AND BRAKE TIPS - Chris Fast (T-18 #260 N4354A) 507 Almar, Pacific Palisades, Calif 90272. 1. Use an inflatable air mattress to lie on while riveting or working inside the fuselage aft of the cockpit in place of using boards or plywood. Advantages: a. Distributes your weight evenly on fuselage structure. b. Protects frame flanges and skin from damage. c. Provides a much more comfortable "pad" for the torso. (Ed. Be sure to use your wife's air mattress.)

2. For an air-bubble free hydraulic brake system, the fluid should be pumped in from the wheel cylinder end. This can be done easily by cleaning out an oil can that has an integral pump and installing a rubber hose over the spout. Slide the other end over the wheel cylinder outlet and pump in the fluid.

My little "Fast-Craft" T-18 has 320 hours on it now and has been about as trouble-free as you can get. Broke a couple of outboard wheel pant brackets but that's about it for repairs. My 74 prop cut to 68" with 69" pitch trues out at 185mph at 3000 rpm. But since John limits me to 2500 cruise rpm as a result of the vibration test, I can't pull 75% power and it burns slightly less than 6 gals/hour. My engine is a Thorp built G PU with 7:1 pistons and has the crankshaft flange beef-up. I purchased a new 76 EM propeller and am having it cut to 68" and pitched to 71". This should let me pull 75% power at 2500 rpm and cruise 160 or 165 mph.

ENGINE BALANCING - by John Austin. While reading the back Newsletters, I ran across engine balancing. Leon Davis, designer of the DA-2, said he balances them with a simple balance made of three pieces of safety wire and a strip of flat stock .063 or so. Carefully lay out the center of the beam and hang rod assemblies until you get the lightest one. Grind the others until they all balance the same. Use the same on the pistons. Very crude but simple. Note: Anytime you are balancing anything, always reverse ends to eliminate effects of errors due to the measuring device.

AIR GUNS - Carlyle W. Dean Sr, #621, 2900 Perdue Ave, Chester, Va 2381. I can answer the question with a definite "yes" asked in a past Newsletter, "Will an air gun available at automotive stores (for chiseling off mufflers, etc.) work as a rivet gun?" My air gun is a Sears Craftsman costing about 50 dollars. I bought the necessary rivet sets with the standard .401 shank, plugged them in and went to work. Although my fuselage, tail, ailerons, etc, are not perfect riveting jobs, I don't feel that the gun is at fault. I would point out, however, that with the money required to purchase a new automotive store type air gun, the builder could probably buy a rebuilt surplus gun. A gun manufactured for the purpose of driving aircraft rivets hits at a slower rate, also, the trigger allows more control over the hitting rate which is very desirable.

SPORT AERO - I haven't heard first hand, but I understand that Sport Aero is closing out as a material supplier. If you know of any good material sources which haven't been mentioned in the Newsletter, just let me know.

SPTED INFO - B. C. ROEMER, Manitowish Waters, Wis 54545. We flew without pants at 3500 feet wide open down a road, noted RPM and air speed, landed, put on pants and re-flew the same area. We gained about 4 mph and around 25 to 35 rpm. Tested the same as above with and without gear fairings and gained 10 mph and around 100rpm. Very surprising.

At Oskosh, I took Al Neunteuffel's T-18 with constant speed prop and 180 hp engine with no contest. In fact, before we flew hed to head, Al flew our ship and passed 19 airplanes on one fly by which caused the FAA to send out a messenger when he landed and imposed a speed limit on fly-bys for our airplane. We turn 2700 rpm and cruise over 200 (75% at 7500'). Ed. Can't remember which engine BC has.

WISCONSIN MATERIAL SOURCE - Smith Supply Company, Aluminum & Aircraft Supplies, Route 4, Brown Deer Lane, Janesville, Wisc 53545, Phone 608 754-9508. Simon Smith informed me that he will supply T-18 sheet metal kits for $300 for one, $280 each for two, $240 each for 3 to 5 and $ 230 each for 6 or more. Add a $10. crating charge per kit. Kits will be shipped by truck collect. Wisconsin residents add 4% sales tax. He will also supply aluminum tubing. Sounds like you should talk a half dozen friends into building a T-18 with you.

PERFORMANCE QUESTIONNAIRES - Many of you 900 and some builders have been more than generous with your compliments on the T-18 Newsletters and how helpful they were to you while you were building your ships. For some strange reason, once you get yours flying, however, you forget all about helping anyone else. There have now been exactly 100 T-18's which have been completed and made first flights, but I have just 19 completed data sheets in my file. We'll make another try and include a data sheet with this issue, so please don't fail to fill it out. Maybe some of you have been reluctant to send information because your data didn't look as good as some of the others. Send it anyway. Maybe you will win the prize for honesty.

AIRSPEED CALIBRATION - It is hard to explain why, but most of us are just too lazy to check our airspeed system calibration. It is really quite easy to calibrate your system, expecially if you own an automobile. Just check your odometer accurately by the markers along a highway, then find a stretch of straight highway 5 or 10 miles long and measure off a course between two prominent landmarks like overpasses. Then wait for a calm day , preferably early in the morning around 6:00 AM before the wind has started to move, and go fly over this course back and forth many times. Use a stop watch if available for a second or two can make quite a difference. Stabilize your speed well in advance and start the watch as the landmark passes underneath the leading edge of the wing. It is best to let altitude vary a little in order to control airspeed accurately. Be sure to record outside air temperature and altitude. Make three or four 2-way passes at each airspeed tested, throw out any readings which look too far out and average the others. Make runs at 5mph increments in the vacinity of your cruise speed. If you can't get sea level use 2,000

If the system reads low, there may be leaks in the pitot line. To check for leaks, slip a piece of rubber hose over the pitot tube, pinch off the end and squeeze the tube until the airspeed indicator reads about 100 mph. Now hold it and see if the needle stays fixed or slowly moves toward zero. If there are leaks, seal them. If not, the airspeed readings can be adjusted with a little spoiler in front of the holes in the static tube. Just cut a 1/16" wide ring from rubber tubing and slip it over the static tube. By trial and error find a location which will make the airspee read correctly. The poorest procedure is to check against another aircraft.

SOME THOUGHTS ON PAINTING - B. John Shinn, 835 John Anderson Dr., Ormond Beach, Fla. By the time most of us get around to the painting stage on our projects, we are pretty impatient and want to get it flying. But, a good paint job is really needed to make a success of any homebuilt project. Not only must a color scheme and layout be selected which complements the particular airplane's lines, but, also the paint design should help de-emphasize any less attractive lines and contours. I think Lu Sunderland was very successful in his paint design on his T-18, N4782G. Take a look at the picture of his plane in the Thorp ad in Sport Aviation. The sets of stripes emphasize the beautiful nose and tail lines while hiding the rather thick afterbody of the fuselage. This thick section is hidden by the light blue bottom with dark blue pinstripe which runs parallel to the upper stripes. It really accentuates the length of the airplane by slicing the thick section into several thin layers. It is also interesting to note the extensive use of white, especially on the turtledeck, wings and tail. White paint has so much light reflected from the pigment that surface details are hard to discern. The ridges on the "hip roof" tail cone and any slight surface variations around rivets and even surface scratches are obscured by white paint. Perhaps most important of all is the fact that white makes for good visibility against all terrains except for snow.

One consideration often overlooked is the appearance of the paint scheme as viewed from distance. It should still retain its graceful, appealing lines. Too many homebuilders put on a few timid narrow stripes and designs which disappear when viewed from a distance leaving a plain looking plane. So, don't have a plain plane. Be bold in your design.

PAINT SELECTION -

The next problem after a paint design selection is to decide on the kind of paint you are going to use. As with all things, the better paints are going to cost more.

Laquer - ($14.00/gal) Laquer has the desirable characteristic that it dries rather quickly and can be touched up without painting an entire panel. After dry, the overspray can be rubbed out with wet-or-dry paper and rubbing compound. The inexperienced painter may have trouble because of the rate of drying, because it is difficult to keep from getting overspray from one pass to the next. Few people use lacuer on aircraft although a body shop operator in our chapter used it on his Stinson. But that was before the new Acrylic Enamels.

Acrylic Enamel - Various brands of acrylic enamels are available. They are more durable than lacquers but possess the same quick-drying characteristic. Also, they can be spotted like laquer and rubbed out without re-painting an entire panel. In 2hr Dupont's Centari acrylic enamel can be given a second coat or masked for trim. No warning is given regarding a sensitive period between 24 and 72 hours when it cannot be recoated but some brands at least used to have this sensitive period when the old coat would raise up in tiny bubbles if coated with a fresh coat. As with regular enamel, it is recommended that different thinners be used for different ambient temperatures. Price is about $13.00 per gallon.

Amer-Flint - ($13.00/gal) This is a two part mix paint related to alkyds and urethanes by the American Lacquer Solvents Company, P. O. Box 11515, Tampa, Fla 33610. It is used by Embry-Riddle Aeronautical University on their quality paint jobs on their fleet of Cessnas. It is also used by Volusia Aviation at Daytona Florida who specialize in custom paint jobs. It has good resistance to sun fading and chalking. It has very good adhesion. Because it is a two part mix it has a finite pot life, but it is much longer (24 to 48 hours) than some of the more expensive urethanes (6 to 8 hours). One disadvantage is that you can't add any "fish eye" killer to the paint as you can regular enamel. This means your surfaces must be really free of grease. Wash your hands before handling parts to be painted. In addition to solid colors, Amer -Flint is available in metallic tints.

I selected this paint to use and so far it is working out very well. A good feature of this paint is that any overspray can be glazed into a glossy surface by spraying the area with Imron-Flow thinner and it really works! (John says there is no guarantee that it won't run, however. Ed.)

Imron Polyurethane - ($25.00/gal) Imron is a two part mix polyurethane put out by DuPont. It only has a pot life of 6 to 8 hours but has an excellent resistance to sun as proved by a year long test exposed to Florida sun. It's tough and chip resistant and you can really spray it on heavy without runs. This is the paint recommended by Lamar Garrett of Superior Aircraft Painting in Sanford Fla. He has planes come there from all over the country to get his paint jobs. Even had a picture of a Rivuera Amphibian with his paint job in Playboy magazine with a couple of females draped over the wings. He also painted my Luscombe Sedan which subsequently won the over 165 hp Classic award at Oshkosh in 1971. (more painting tips from Lamar Garrett later.)

Alumigrip - ($45.00/gal) This is perhaps the top of the line as far as aircraft finishes are concerned. It is a tough, durable polyurethane which resists that pesky hair line corrosion that can cause paint to come off rivets in hot climates. Ted Smith's Aero Star, Learjets and other big name aircraft are painted with it. It was developed especially for painting Aluminum airplanes.

SURFACE PREPARATION -
Washing - Sheet aluminum as received from the factory has an oily substance on the surface and by the time you are done cutting, forming, and rivetting it you'll have a lot of oily fingerprints all over it. Paint just won't stick to it unless you clean it well before painting. This is especially true of the interior faying (mating) surfaces that we just tend to dab in a hurry with zinc chromate primer. To my dismay, I found that some of my primer just washed off with soap and water. Wiping the surface off with thinner is not the right way to clean grease! It only spreads the grease around in a very thin film and you'll be sorry later when the paint peels off. I found out the hard way. A good wash down with a detergent and water is best. Don't let it dry or it will be too hard to rinse off.

Any markings put on the metal or fiberglas during construction with a felt pen must be removed with plenty of thinner or you'll cry later when it bleeds through primer and paint. (This is so important it should be put on a sign in your shop.Ed)

Scrub with a brush or tough synthetic sponge making sure to clean around rivets etc. Rinse with clean water and rub the entire surface to make sure you dislodge all traces of emulsified grease and detergent.

Etch - If you want a first class job, according to Lamar Garrett, you should now etch the surface. DuPont makes a good etch, 5717,S'. Rub it on with a synthetic sponge or scrub brush and wash it off after 3 to 5 minutes with lots of clean water. You must be careful not to get any etch inside the wings or fuselage where you can't flush it out with lots of water or you can cause corrosion. I had a little trouble with it getting in around my retractable landing light on my wing and had a dickens of a time cleaning it off my spar later.

Many old pros don't etch but instead use zinc chromate primer with an etch. I visited Piper Aircraft at Vero Beach, Florida and they do not use an etch. They do sand the surface lightly all over the plane which is always a good idea for good paint adhesion. Use #400 wet-or-dry and use it with water. This gives the primer something to hang onto just as does the etching process. Even if you use an etch, it is good to sand first.

Alodine - If you really want a first class job, use the Alodine process. The kit

contains a cleaner which is applied and allowed to stand several minutes before being rinsed off. Then the alodine is brushed on and allowed to stand a few minutes. After is is rinsed off with water, the surface of the aluminum has a good tinted appearance. Alodine applies a mild etch. It is the standard military specification process treatment for anything the government buys. Zinc chromate is applied over alodine after the surface has dried after rinsing.

Wash Primer - Although many people do not bother to use it, wash primer is good for use over bare aluminum, old paint or fiberglas. It is a good idea to use it over filler primer too for extra good adhesion so paint won't peel in moist weather. It is a two-part mix with a very short pot life but is very easy to apply. Just mix the catlyst with the yellow wash primer, wait 15 minutes for aging and then spray it on in a full wet coat. After it sets on the surface a few minutes, it turns a little brown and a little transparent. Wait 45 minutes and rub the surface very lightly with a fine ( or well worn out) piece of sandpaper to knock off any dirt particles which have become dried in. You are now ready for putting on the zinc chromate primer.

Zinc Chromate Primer - Probably the most important thing to remember about this step is the fact that the zinc chromate primer is the undercoat for the final finish. If it comes out rough, you'll not get a smooth top coat. Zinz chromate should be put on in a thin but wet layer to minimize overspray roughness. If it is not freshly opened, the primer should be strained before you put it in your gun. If you haven't learned by now, everything but thinner should be strained before it goes into your spray gun. An old nylon stocking does a good job. Be sure to thin down the primer adequately or it will give an orange peel surface.

Many people cut the gun down at first to apply a thin mist coat and then when they go over it again with a regular full coat there is less likelyhood of getting a run. Zinc chromate should be put on in a thin coat for best adhesion. It is supposed to be transparent after applied so don't expect to cover with it like other primers. In order for the chromate ions to do their job in stopping corrosion, they need to be only one molecule thick - which is mighty thin. Sand with #400 after 2 hours.

Tack Rag - An important item in any paint shop is a tack rag. It costs but $.39 and is a must for wiping off dust particles from the surface before applying primer or finish coats. Carefully wipe the whole area to be painted before spraying and then keep the tack rag in one hand to wipe off loose dried overspray and other dirt particles ahead of where you are going to spray. Don't think you can get by using an ordinary cloth for wiping off dust because it will leave tiny fibers and lint.

Filler or Sanding Primer - You may find this quite useful in filling pin holes and imperfections in fiberglas and also filled areas when epoxy putty is used for filling rivets. I have seen it laid on thick over flush rivets for a smoother finish but advise against this as the metal might flex too much and cracks appear. I saw two absolutely beautifully finished planes develop this problem. The primer should be thinned to normal spraying consistency with lacquer thinner. When sprayed on, it drys fast and buildup in desired areas is easy to accomplish. Just spray it on heavy, let it dry a little and spray on another coat. For best results on fiberglas pin holes spray on a light coat, let it dry a few seconds and smear it over and into the pin holes with your finger. Otherwise, you have to build up an awfully thick layer before the holes finally cover over. After a successful smear, apply the normal coat.

Sanding should be done with #200 wet-or-dry to smooth out the larger bumps and finish up with a finer paper (#320 or 400). Cut the paper into quarters and wrap the paper around a block of wood about 2 1/2 " wide which acts to put pressure on the high spot

After sanding wash down with water and then wipe with enamel thinner, not laquer thinner. This should be followed by a coat of wash primer, if used, in a manner described earlier to provide a good seal.

Finish Coat - In watching many old pro's paint airplanes, I discovered an interesting thing. They usually paint the trim stripes and lettering on first. That's right, first. They paint the area of the trim and lettering with the proper color, being careful to get a smooth, non-orange peel surface. They tend to put on a light mist coat first, followed by a full wet finish coat. You will soon learn how important the thin mist coat is for it is the only way to prevent runs - the plague of any painter. Force yourself to let the first thin coat get tacky to the touch before spraying the full wet coat or you will get runs. The thin first coat when partly dry soaks up the full coat and holds it from running. When you get your first run, you will remember this and wish you had made a sign and hung it in your shop as a reminder. The full wet coat should be sprayed with long even passes with the gun held at a constant distance from the surface. Release the trigger at the end of each pass to avoid depositing a large quantity of paint during the turn-around motion. The proper distance to hold the gun from the surface can be easily determined by trial and error on a sample. If you get too close, it will cause too much build-up and a run while holding it too far away causes the paint to partially dry before it strikes the surface and an orange peel will result. Use what is called a cross-coat to insure even coverage, that is, first make passes in one direction and then immediately make passes 90° to this.

After the first full coat has dried well, check the surface to see if it needs an additional coat. If it has too much orange peel, dirt particles or runs, it can be sanded lightly and another coat added. When satisfied with the finish, put on masking tape to cover up the paint in the shape of your trim and lettering. The main color is then sprayed over this first trim coat. By using this seemingly reverse procedure, you minimize the amount of masking required.

Masking - When ordinary masking tape is used to mask the edges of trim, the little crinkles in the tape allow paint to run back under the tape in little hairlike fingers making a sloppy looking job. This can be reduced somewhat if the edge of the tape is rubbed down well with the fingernail before painting. Especially make sure the tape is rubbed down well where it crosses or joins another strip of tape. You might want to make a sign about this one too for the sharpness of trim stripes is one thing that makes the difference between a sharp paint job and just a medocre one. If you use smooth plastic Electroplating Tape, 3M #470 you get better results.

Cleanliness is the order in everything you do when painting if you hope to be successful. All of this may have sounded like a lot of bother but doing the job right can save a lot of grief and embarassment later. Remember, it's a lot harder to remove the paint from a surface than to do the job right the first time. I ran into some grief with the wrong paint on painting a Luscombe 8F which I owned once. I painted on some gold trim and put the masking tape over it for the stripes and then the white main coat. When I pulled the masking tape off the white also peeled off where ever there was gold beneath. In the messy job of removing the paint right down to the bare metal again some thinner got under the masking paper covering the plex iglas window and it crazed. Plexiglas is very sensitive to such vapors and will craze much later after exposure when exposed to heat and sunlight. Good luck on your paint job. (And don't be too surprised if you have to rub out some runs and do it over. It happens to the best of us. Ed.)

WIRING PANELS - by Bob Dial. Assemble and prewire all fuses, switches, controls etc to an extrusion or separate bent up strip made to fit below the instrument panel. Use quick-disconnects and all wiring and controls can be removed in minutes.

PS ON PAINTING - John called the other day with some additional items which should be added to the foregoing article on painting.

1. Get a pair of pointed tweezers for removing lint that drops on fresh paint. They are also good for picking out bugs which love fresh paint.
2. Remove the masking tape when the paint is still slightly tacky. Don't wait until the paint is dry or the paint will be so tough that it will not separate at the tape line and may chip off.
3. If blushing occurs, hold a heat lamp over the affected area and it will remove it if paint is still wet.
4. Resist the temptation to wipe off a run. Just let it dry well and sand out using a back-up block.

BAD LUCK - During a freak storm at Whitman air Park, hangars were blown down and one T-18 destroyed and a second (John Thorp's) damaged when a door blew in. John had to re-skin his center wing so he is putting on .032 for he says the .025 skin on his gets some whinkles at high speed. He now recommends .032 for the center wing skin for all high powered models. He also added an extra row of rivets in the inner bay only on the main spar. They are spaced between the existing rivets and on a line 1/2" behind the existing rows. Some people had trouble with loose rivets in the inner foot near the fuselage, along the top of the main spar.

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Tear Off and Return to L. Sunderland if you are flying.

Plans SN _____Registration No. N_____ Date _____ 1st Flt Date_____

Name_____Street_____

City_____State_____Zip_____ Phone___ - _____

Engine Make_____Model_____HP_____Constr Cost_____Time_____

Propeller Model_____Length____Pitch____Fixed pitch___ConstSpeed_____

Max Static RPM_____OAT____ALT_____Max Rate of Climb, 2 Persons _____

Max Level Flt RPM at 2,000'_____TAS____OAT____MP_____Weight_____

Was Airspeed Calibrated?____How?_____

CG Most Fwd Sta____Most Aft_____Empty CG_____Empty Wt_____Fuel Cap___gals.

Modifications -

Wheel Pants?____Gear Cuffs?___

Flush Rivets?____

Comments -

Will you have your T-18 at Oshkosh 73?___Will you help at T-18 Demonstrations?____
Have you sent EAA nice clear 5x7 or larger photos and a story?___Then why not?

T-18 NEWSLETTER
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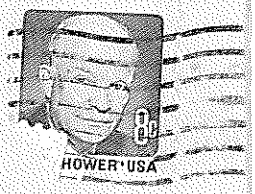
Apalachin, N. Y. 13732

BINGHAMTON
P M
MAR 27
1973
N Y.

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