

BOX 92
RICHARDSON, TEXAS 75080

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NEWSLETTER

ISSUE 30

* * * SPRING HOUSECLEANING * * *

While you are saving fuel in preparation for the big Fly-In at Newton/Wichita use the time to check the bird for birds! During your preflight be sure to check for nests in the engine house. If you find one pull it out, all of it and close the lid quickly because it seems that a good self-respecting bird can build another one before you can get in and fire up! The trouble is that some straws can get down between jugs and under them, held in by the baffles. You can't see them unless you are intent on what you are doing and not in a hurry. For those of us whose wings are metalised remember that the lightening holes at the inboard end of the aileron and at the adjacent wing rib make neat little bird-houses, almost have addresses over them. Pieces of 200 mph tape over the holes is a good temporary fix. If you see some ticks of straw or sticks hanging out of the aileron corrugations pull them out gently so that they don't break off quite so much. It's amazing how much weight builds up out of feathers, sticks, string, leaves, birds spit and poo! And its all behind the hinge line too. You might even consider removing the aileron so that you can get all the junk out.

Don't fly without a thorough preflight! ! ! !

* * * PROFICIENCY? * * *

We read an excellent article in the March Swift Club Newsletter that should really be passed on to all pilots.

The gist of it was to remind us that now that we are all trying to cut down on the amount of fuel we are using because of availability and cost we must work out a program that will allow us to fly enough so that our proficiency does not fall off to the point where we may become hazardous to our health. The article contends that the FAR requirement for a minimum number of landings and take-offs in a 90 day period is inadequate for any pilot. Therefor it is necessary to plan some sort of drill to be followed when you do fly so that your airwork is done within the boundaries of the patch or pratice area. Cross country flying is 99% boredom and 1% stark terror as we all know. There is not much to be gained by taking long cross country flights because we should have by now a reasonable degree of navigational skill. It is the lack of maneuvering practice that becomes critical. Touch and go's, stalls, basic manuevers should be praticed regularly so that we fly the machine rather than it us.

So, keep the bird flying and treat it right, but keep yourself proficient, treat yourself right as well!

* * * HALF DONE? * * *

C. R. Fowler, Ferguson, Kentucky sez:

I have noticed in many instances beautiful 120's and 140's on the outside, only to look on the inside and be very dissappointed that the interiors don't measure up to the sparkling exteriors.

A great many people spend a lot of time polishing and rubbing on the outside of their little beauties and neglect the inside. I believe this is due to the fact that most people have the misconception that the average person cannot reupholster his plane.

It is true that you may not be able to do the job with quite as much professionalism as the pro's but you can do a job that will impress all but the pros. With a little thought and patience you would be amazed at the results one can achieve, especially with 120's and 140's because the seats in our birds are of relatively simple design.

Since I make my living in the reupholstery business you might say, "well that's easy for you but..." Well, that is exactly why I know it is not that difficult. If you have a wife that can sew you will be able to do a beautiful job with just an ordinary home sewing machine.

If you will look at your seats they are no more than slip covers with the material fastened with hog rings. You can buy the hog rings and pliers at most any hardware store.

One small tip that will be of the greatest value is when removing the cover take notes and maybe even draw a diagram of where everything was fastened and where the splits were cut in the fabric. Then clip the threads in the seams carefully and do not cut the material because when you get it cut apart lay it out on your new material and you have a perfect pattern to cut your new seat covers from, you know it will fit because the old one did didn't it?

When you are putting your new cover on do not cut any splits in the material until you actually get the cover started on. If you cut the splits exactly where they were in the old ones it may cause you problems because if you don't get the new cover on in exactly the same place you could have a split an inch or so off and that is a problem. When cutting the splits do it in very small cuts, then try it and cut a little more. By doing it this way you are assured of not cutting a gash that is going to cause you all kinds of problems.

The carpet is very simple; use the old one to cut your new one. Then take it to an upholsterer and have him bind the edges where necessary, because a home sewing machine will not handle the thickness of the carpet.

The headliner in the 140 is very simple when compared to the 150 or the 172. Do the same thing, use the old one to make the new one. Installation will take a little time but it is not the Bogie Man that most people think it is. Again the 140 has a very simple headliner with no wiked curves to be sewn into it.

The door panels and all the other panels are the same old story--use the old ones to make the new ones. You can buy trim cement to glue the fabric on your panels at any auto supply store.

Just one more tip on sewing the vinyl. It will be difficult to get the vinyl to slide through your sewing machine because it has a lot of the characteristics of rubber. The deep dark trade secret is to take a little common 3 in 1 oil, put it on a rag, and rub it along the vinyl where you are going to sew. This will not harm the material in any way, in fact all furniture manufacturers use this method. One word of caution--DO NOT USE OIL ON CLOTH--it will ruin it. Use paraffin on the cloth.

Well, there you have it. The basic things you need to know to spruce up your little Bird! Thinking about it is a lot worse than the actual doing. Sooo, get to it and lots of luck!

Thanks C.R. I'm one of those outside polishers you mentioned.

I recently had the opportunity to meet two members of the Cessna 120/140 Association. So what's so unusual about that? I had to travel 3000 miles to Germany to do it!

My job in the technical department of a large adhesive company involves travel to various overseas locations during the year. Because I knew I would get to Germany I wrote to Wolfgang Schule last year. He said he would welcome a visit. When I knew I would be in England at the end of February this year I contacted Wolfgang and we made firm plans.

On March 1, I caught a flight from London to Munich and rented a car for the two hour drive to Leutkirch. On arrival in Munich it was snowing with a forecast of rain the next day. Not very promising for flying. The drive to Leutkirch was uneventful and boring due to the weather. I arrived at my hotel at about 9:00 P.M. where Wolfgang was in the process of leaving a message for me. We had a beer and after watching the TV weather, (rain), we agreed to meet at 10 the next morning.

Surprisingly luck was with us. The morning weather was sunny and clear and we drove out to the airport. Wolfgang works for the local FBO as a mechanic and pilot. At the airport we met Otto Natterer, and I got a guided tour of the C-120 and C-140 in the back of the hangar. Wolfgang's 140 is well equiped and has some interesting mods. I found the addition of more instrument panel space one Nav-Comm wide from the center of the panel down to the cable tunnel between the seats interesting. He also has the circuit breakers in a central panel overhead. The shoulder harness installation is very nice. When I inquired about STC's for these modifications and Wolfgang said that because there are so few 120/140's in Europe no one really knows what they should look like so most anything reasonable gets by!

Otto's 120 is not so fancy but in excellent condition. I found the USAF Thunderbird paint scheme quite unusual. Otto does not have a license at the moment and will restore his bird this summer. He hopes to come to the U.S.A. this fall to get his ticket. It's too expensive in Germany. Otto has a model aircraft store in Leutkirch which is very nice and quite popular in the region.

After some hangar flying we did the real thing. Unfortunately their planes were wedged in behind on Aztec and a Cessna 421, so I didn't get a chance to try them. Instead we went up in a 172 that Wolfgang had annualled to test it out. The 25 minute flight was a real pleasure as we flew south to the edge of the Alps. That's not the kind of scenery I'm used to knocking around over New Jersey. I doubt the airport had more than two dozen operations on that beautiful Saturday, but it has a tower! 720 channels are required and there is a fee for every landing. Gas is about a dollar a gallon more than it is in the U.S.A., and the airspace has more restrictions.

After flying Wolfgang showed me some more of Leutkirch and that evening we were joined by his girlfriend for dinner. In summary, a great weekend. Thanks Wolfgang.

Aufwiedersehen!

* * * BAD NEWS * * *

This SAFETY RECOMMENDATION was forwarded to the FAA by the National Transportation Safety Board, February 5, 1980:

On September 29, 1979, a Cessna Model 120, N72504, crashed near Vicksburg, Mississippi, after the right wing separated in flight.....

Investigation disclosed that the wing separated when the forward wing strut upper rod-end spherical fitting failed. Metallurgical examination disclosed that the fitting was severely pitted and corroded. The fitting apparently had become pitted and corroded over a

long period of time and, at the location of failure, corrosion was found to have penetrated almost the entire thickness of the fitting.

The airplane involved was manufactured in 1946, and was last inspected in February, 1979. Although the external location of the spherical fitting makes it physically and visually accessible, evidence of corrosive deterioration, cracking, or elongation apparently was not detected during the inspection. Paint which covered the lower portion of the fitting in the area of the failure, may have partially obscured the corrosion.

Wing strut fittings similar to the one which failed are also installed on many Cessna Model 140 airplanes. As of December 31, 1978, a total of 3,486 Cessna Model 120/140 aircraft were registered with the Federal Aviation Administration, the newest of which are approaching 30 years in service.

Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Issue an Airworthiness Directive applicable to the Cessna Model 120 and 140 airplanes, requiring an immediate inspection of wing strut upper rod-end spherical fittings for corrosion, cracking, or elongation. If any of these conditions are detected, the fittings should be replaced before further flight. (Class 1--Urgent Action) (A-90-11)

(Ed's note; How many of you have thought about the above when doing chandelles, lazy eights, loops, spins, etc?, or at annual time?)

* * * COMMENTS * * *

I bought my Cessna 140 in April of 1978. I had a grand total of 10 hours logged at that time--far short of my license--and had done all that time in 150's. I found the cost of renting airplanes more than egregious, and decided the only way to continue my instruction was in my own plane. The transition was only fairly difficult and involved some 7 hours of dual instruction. Since then I have gotten my license and logged 400 hours in 90163. I have travelled from here to New York, Miami, and Oregon in separate trips, and have never regretted for a minute that I made that purchase. I estimate that I saved approximately \$600 by learning to fly in my own plane, and I recommend that route to anyone who wants to learn to fly. I must also note that from my limited experience around airports and pilots I have concluded that tail wheel pilots generally exhibit a sensitivity and appreciation for the nuances of flying beyond that of tri-gear pilots.

I wond if you might mention the following: I have found a set of metal wings for my 140 and would like to make the switch. In order for me to be able to afford that, I will have to sell my wings which are in very good order, all chromated and ready to cover, (including tanks). I got a good price on the metal wings, and would sell mine for a very reasonable amount. My phone number is (504) 522-3131 (evenings). Also, I am trying to find a lower cowl for my plane at a reasonable price. (trade?).

In my travels I have come across a few other items that might interest the members. Mr. Farley Vincent, who used to work out of Longview, Texas (he is listed as the STC holder for 7.5 gallon long-range tanks) is now working out of Covington Vincent Airport in Covington, La. Mr Vincent is getting on in years and when I last asked him to do an installation he said he wasn't much interested. It would be too bad to lose this option and I wonder how those tanks might become available from another source. His phone is (504) 892-9866 or 892-6742.

In researching the question of metalizing wings for 120/140's some suggestions have been made that this will slow the plane down some. This may be because of the increased weight, but some people have said that there is increased drag with metal wings. Is there some membership experience on this matter?

(Ed note: The weight penalty is about 16lb, depending on the STC used, and what faoric

and paint system is being replaced. Properly installed the metal wing is more slick, and is easier to maintain in this condition than rag wings. The trade off is negligible.

would like to know also if it is possible to make a new instrument panel cover, the kind that floats on the rubber bits and covers the instrument mounting screws. It's made of very light aluminum and as I would like to change the panel layout, I will need a new one. Any ideas?

(Ed note: Yes. The part you need is a "shock panel" and is in the parts manual. The shock mount fasteners are available at most supply shops. The "shock panel" is covered with a light gauge "shock panel cover". If you are going to use the standard part you will be restricted in instrument placement.

And then, there is an area of special interest to me. I am involved in the area of alcohol fuels, commonly known as "Gasohol." As anyone with any experience with 85 and 90 horsepower engines is aware, one of our main problems is with fuels; those engines just don't like lead at all, and their low compression causes serious lead buildup problem, especially on valve stems. I've been through rebuilds twice already on this account. Unfortunately I've had to use 100 octane a number of times for availability reasons. The principle value of alcohol in mixtures with gasoline, the reason that alcohol is used in racing cars and motorcycles, is that alcohol burns almost 100% and in the process cleans out the combustion chamber and valve train. This last fact has been amply demonstrated here in the U.S.A. and especially in Brazil. There is absolutely no technical reason why gasohol cannot be burned in aircraft engines, in fact all the evidence is that it would do our engines a lot of good. I must say that there is already some surreptitious use of gasohol going on.

What might we do to encourage the use of these fuels in our aircraft? It is clear that since unleaded (80 octane) fuel is the most costly type of fuel to manufacture in terms of the amount of crude oil needed per gallon, the country will be running out of unleaded gas first of all. It would be very valuable for us to be able to stretch the available supply by 10%. (Gasohol is usually mixed in 90% gasoline, 10% alcohol blends.)

All the above from Charles Reddel, New Orleans. He is associated with "The First Inter-American Conference on Renewable Sources of Energy."

(Ed note: Again, The International Cessna 120/140 Association reminds you that any operation of your machine beyond the limits of it's certification is in violation of the FAR's.

* * * MORE ON BUN FUN * * *

C. R. Fowler, Fowler's Custom Upholstering Service, has sent more information on the installation of 150 seats. The info is in the form of a handwritten draft by the regional FAA inspector for the Ferguson, Kentucky area, telling exactly what to do to legally install the seats. The form on which the draft was written is "1975-G.P.G. 1703 M/673-200 175.

"Removed original factory installed Cessna seat. Installed two Cessna 150 seats. Installation consisted of two Cessna P/N 0411545-1 outboard seat rails, two Cessna P/N 0411545-2 inboard seat rails, one Cessna P/N 0400118-65 and one 0400118-66 seat assembly. The seat rails were installed on top of "OAK" wood blocks, 14 3/4" long, 1" high, and 1 1/2" wide, contoured to the existing floor.

"The rails are secured to the floor assembly with AN 3-14 bolts, eight bolts per rail, with AN 970-3 washers and AN 363-1032 nuts, a total of 32 bolts for the floor rail installation.

"Weight and balance revised in Aircraft Log. Make a Form 337 report "

We sure do thank you C. R. for sending this too us.

* * * AD's * * *

A March 4, 1980 letter contained AD 80-05-04 EDN CORPORATION: Amendment 39-3706. Apply to EDN Model E2900 and E8000 Seat Belts and Harnesses. Compliance required with thirty days from the effective date of this AD

"To prevent inadvertent opening and/or false latching of the seat belt/harness assembly, accomplish the following: (a) If installed, remove bullet head shaped latch depicted below in plan view as Figure 1 and replace with square shaped latch of Figure 2 or other FAA approved, serviceable latch.

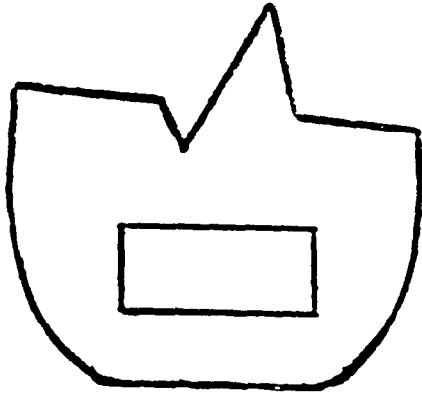


Figure 1

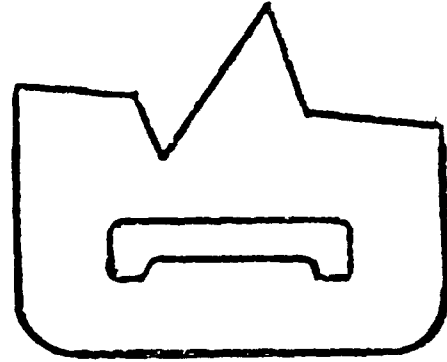


Figure 2

(b) If installed, remove buckle with open-ended cover depicted below in Figure 3 and replace with an E9000 buckle with cover depicted in Figure 4 or other FAA approved, serviceable buckle. NOTE: EDN Corporation Service Bulletin No. 1 dated Jan 22, 1980, refers to this subject.

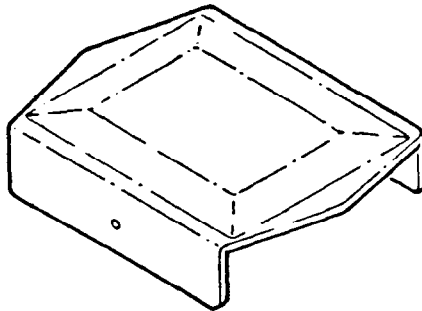


Figure 3

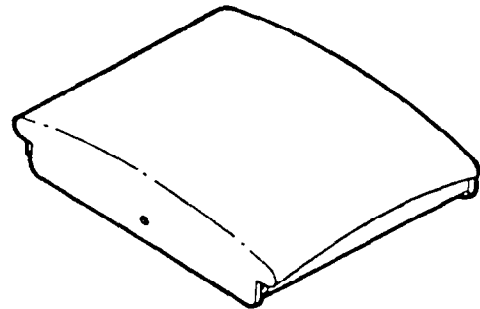


Figure 4

(c) Alternative inspections, modifications or other actions which provide an equivalent level of safety may be used when approved by the Chief, Aircraft Engineering Division, FAA Western Region. "

Of course you all understand what you are to do with your Lithium Sulfur Dioxide Battery powered ELT."The AD was prompted by reports of LiSO2 batteries exploding, venting violently, corroding, burning, and leaking gas." The amended AD is seven, (7), count 'em, pages allowing as how you got to have an ELT. You read the AD and draw your own conclusion. The FAA guy who wrote that AD should take a cold shower or some one should throw a bucket of water on him.