



BOX 92
RICHARDSON, TEXAS 75080

OCTOBER

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* * * COMFY? * * *

We have had several requests for an STC covering the installation of Cessna 150 seats in your bird. A search through the list failed to bring to light an appropriate STC. Probably one lurks about somewhere but it could not be found in our local GADO office either. We understand that several installations have been made with a Form 337 signed by an AI. In fact we know an AI who did his with a Form 337.

If anyone knows of an STC or has specific instructions for an installation we would sure like to put it in the next issue. Also, we were told that Grumman Yankee seats work equally well, and are somewhat easier to install.

* * * THANKS!!! * * *

We all owe a big "Thanks!" to Tom, Jan, and Jane Norton, Frank Hancock, and Kim and Betty Merwin for their hard and effective work at the Oshkosh Fly-in. As we mentioned last issue, the forum did SRO business. The sign-in list contains 126 names from all over the U.S. and several visitors from other countries. Frank sent us the list of new members resulting from Oshkosh, 47 in all. We welcome them all to the Association.

Incidentally, we have found that it is necessary to make a small adjustment in the dues for our overseas members. The currency exchange rates don't work out too well, and the postage is about double so we are setting overseas dues at \$12.00. We hope we can make membership worth the cost!

* * * SHORTS * * *

We have several members and prospective members who are looking for a 120/140 to buy. In the last Trade-A-Plane, about 20 machines were advertised at prices and conditions varying from \$4,500 to \$8,500! Pilot News has a 1946 140 with a C-90 with 250 SMOH with a lot of goodies and no price. Phone 913 488-3775, that's the Kansas City area.

Ron Westhold, 95104 Aero, Naperville, IL 60540 is looking for some items to complete an original restoration. He needs: Cessna 140A compass holder for top of panel, control cables with original brown knobs. Anyone that can help please drop Ron a note.

Our request for your opinion about changing our name to "International Cessna 120/140 Association" has not met with heavy response -- in fact one. We could sure use your thoughts about names and organization improvements.

Eddie Schuhardt says that the Rough River Fly-In was a week too soon. He suggests that we become a charitable organization by scheduling fly-ins in drought areas!

Ed says: "July 25th marks 20 years of ownership of my 140, N90155. Presently I am in the process of restoring the exterior to as near original as feasible... by removing the 12" numbers from the sides and returning them to their original 4" vertical numbering on the rudder...including the "C". The original trim is being done in 1956 Buick Seminole Red laquer which is very close to the Cessna red. The rest of the airplane will be high polished. Every time I get the ship in this condition, the offers begin to roll in. I hope to make some more fly-ins before selling it...not to win any prizes, but to meet most of you people after living virtually alone for 20 years with this 140. Incidentally, this is my second 140. My first was N76046 purchased in 1954 for (gasp!) \$950.00."

Wayne Braswell, 101 Springdale Road, Statesboro, GA. 30458 wants to know whether wheel pants will fit when gear extenders are used. He also needs info about installing 140 type "D" windows in his 120. Can anybody help? We are sure the pants will work with gear extenders. Why not take the extenders off, then there is no problem. Wag Aero sells fiber glass pants and installation kits.

* * * LOST? * * *

The International Aviation Mechanics Journal says that "Accurate heading information can make an outstanding improvement in one's cross country flying!"

"FAA regulations require that the magnetic compass installation with electrical equipment off and engine running be with 10 degrees, plus or minus, for all headings. A calibration card showing actual magnetic heading vs compass reading at a maximum of 30 degree intervals is required. It must also be within 10 degrees plus or minus with electrical equipment on, unless there is a directional gyro installed. Should the compass have errors greater than 10 degrees with the electrical equipment on there must be a placard stating what equipment causes the error."

"Sources of compass error exist all about the compass making it appear bad. ...steel tubing can create a magnetic field which distorts the field around the compass. ...the engine contains large amounts of steel which can distort the compass field. Some radios use steel mounting trays. If one is mounted close to the compass it may cause a larger error. Any wire carrying current will have a magnetic field surrounding it. The greater the current the stronger the field, the larger compass errors. Try turning on all the electrical equipment. Now turn off the master switch and see how much the compass changes. Do this at a few different headings. Errors can be very large."

"Wires should be kept as far from the compass as possible. One technique for reducing the magnetic field is to use a twisted pair. In this way the fields from each wire cancel one another. This is not very useful because most equipment uses the aircraft frame for ground return. And, shielded wire will not help because the magnetic field can pass through the shield."

"...flashlights with magnetic holders are still found in aircraft. Obviously, magnets have no place in the plane."

"Most aircraft compasses contain two adjustments -- East-West, and North-South. These are located under a metal plate in the front of the compass and can compensate for some of the errors caused by the aircraft. They will not compensate for all errors, such as those caused by a magnetized airframe, or a steel radio chassis located right under the compass. Also, compass calibrations can be done for only one set of electrical load conditions. ..."

"For calibration an accurate heading reference is needed. Many airports have a compass rose painted on the ground with accurate lines and their magnetic headings. The aircraft is taxied onto the rose and accurately aligned with one of the reference marks. If the directional gyro is set to a line it can be used as the standard for checking the compass. (Electric gyro that is). It is advisable to turn the aircraft on the compass rose to check the accuracy of the D.G.. Remember, the D.G. will precess. When the compass is calibrated, the D.G.'s accuracy should be checked again on the rose. If the calibration takes more than a few minutes the D.G. may have to be reset. Some aircraft may produce a low vacuum at low RPM thus a vacuum DG may not operate properly.

"If the airport has no compass rose, find the precise heading of the runway with which to align the DG. (Note: the number on the end of the runway may not be an accurate heading.) Now, the compass can be checked against the DG, or directly with the compass rose. The compass must be adjusted with a non-magnetic screwdriver."

"The aircraft is set to 0 degrees and the N-S adjustment is made so the compass reads zero. The aircraft is then turned to 180 degrees and the reading checked. If it does not show 180, the N-S adjustment can be changed to split the error between the 0 and 180 points. The aircraft is then turned to 90 degrees and the E-W adjustment set so that the compass reads 90. Then turn to 270 and split the error if necessary. The 0-180 points should be rechecked. The compass should then be checked at other points. Every 15 degrees will give a very good picture of the compass accuracy. Errors at other than N, S, E, and W cannot be compensated. A calibration card can be made to show the actual magnetic heading versus the compass reading. If the compass calibration changes significantly with electrical equipment turned on a second card can be made for this condition".

Ed's note: Remember, fence lines are accurate but -- they are true directions and a compass set to them will be off by whatever the variation is in the area!

Many thanks to the "International Aviation Mechanics Journal".

* * * WEST COAST WING * * *

We would like to congratulate the West Coast Cessna 120/140 Club for their excellent news letter. We hope with their permission to copy an article or two in the next issue. Too bad we don't swap information. They are doing a great job. Keep it up!

* * * ONE 120? * * *

Gerrit Titeca, a visitor to Oshkosh from Belgium, claims to have the only 120 in Europe. Gerrit visited our 120/140 tent and told us of his experiences with European flying. The native Belgian inquired about the 120 when he first saw it "rotting away" at a Bonn, Germany airfield. Bonn airmen cooperated in finding the owner and helped Gerrit make the purchase. With temporary patches, he fired up and ferried OO-ACE home to Belgium where he completely restored the bird.

Gerrit has a special fuel tank with a hand pump that fits in the baggage area for long trips. He's been all over Europe, to the Mid-East, and has flown at least 400 miles of Mediterranean coastline. He estimates that it has been necessary for him to spend 2½ hours on governmental red tape for every hour flown when he needs to cross a border!

Fuel is about twice that of U.S. prices!

Gerrit was happy to learn of our Association and to know that we are able on occasion to assist one another locate parts, and with ideas. His worst experience was being charged \$600 for a set of cowl latches! How's that grab ya, folks!

We hope to hear more from our overseas members.

* * * 80 OCTANE? * * *

80 Octane on the way out? Most FBO's tell us the future looks dim for a continuing supply of the stuff.

If your FBO has only 100/130 LL you may wish to try the ALCOR additive, "TCP". We have not done our own testing and do not recommend products, but we'll pass on what we learned from the ALCOR representative at Oshkosh! "TCP" now has FAA approval, can be obtained from most aircraft parts distributors. One gallon treats 1,240 gals of 100/130 LL. The list price is \$14.40 per gallon, \$4.32 per quart of "TCP". Embry-Riddle Aeronautical University of Florida (ERAU), tested TCP's anti-fouling capabilities in a 10,000 hour test using 9 Cessna Skyhawks, (designed for 80 octane), burning 100 LL against 9 Skyhawks with out the anti-fouling additive. ERAU concluded that the plug fouling and sticking valves were improved by 400% in the TCP treated machine. Aviation Consumer Oct. 15, 1977 issue goes into detail about this ERAU test. If you try TCP, please share your findings with the membership.

Ed Note: We understand that Lycoming has approved TCP for use in their engines, whereas Continental has not yet done so.

* * * PARTS PARTS * * *

Gary W. Schultz, 629 3rd Ave. S., So. St. Paul, Minn. 55075 has:

4 reconditioned C-85/O-200 cylinders with new 100 oct valves, guides, seats, 15 oversize bore. Set for \$1,300.

Mc Cauley prop, polished, medium pitch for C-85, \$275.
ADF-12 Motorola, complete for \$125.

Phone (612) 451-2980 9:00 a.m. or 2:00 p.m.