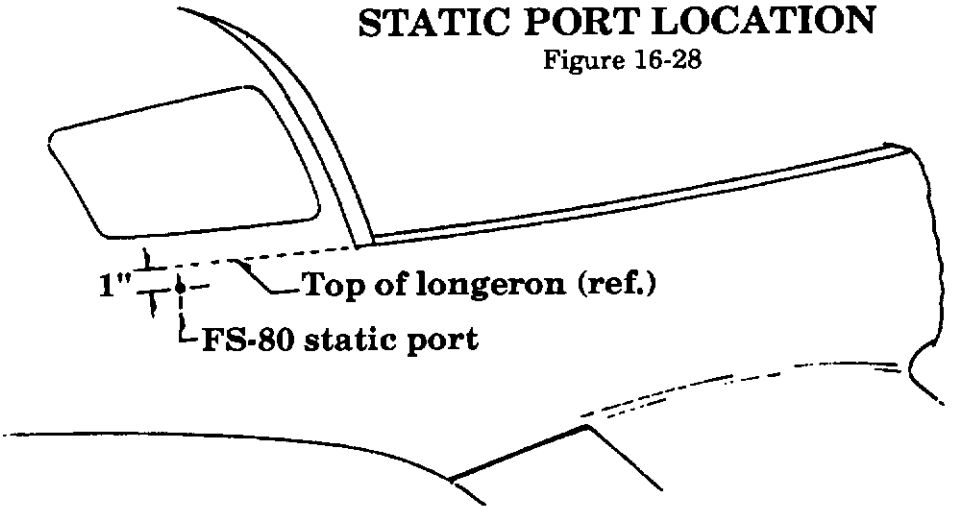
N. Static port installation

1. This static port is the most susceptible to instrument reading errors since it is not easy to accurately locate a position on the side of the fslg that is indeed *static*. Since the Lancair is not a "slab sided" airplane like so many other types, pressures are constantly changing as they move along the fslg. We have located a position that is accurate, but it has a relatively small "window of acceptability", i.e., a little bit off one way or another can produce a sizable change in pressures.

   One way around the potential problem is to use a "Shark Fin" type of pitot / static unit like the Kollsman Pitot Static Tube. This will have the static line pick up in it and must be installed on the outbd leading edge of the wing. A bracket (made of fiberglass) would be made similar to that described for the heated pitot.

2. For the side mounted static source, locate the position (FS-80) per figure 16-28 and drill a small hole (#40 bit size) all the way through the fslg. We've always installed them on the right side. If you want to eliminate side slipping errors, then install one on each side and "T" them together.

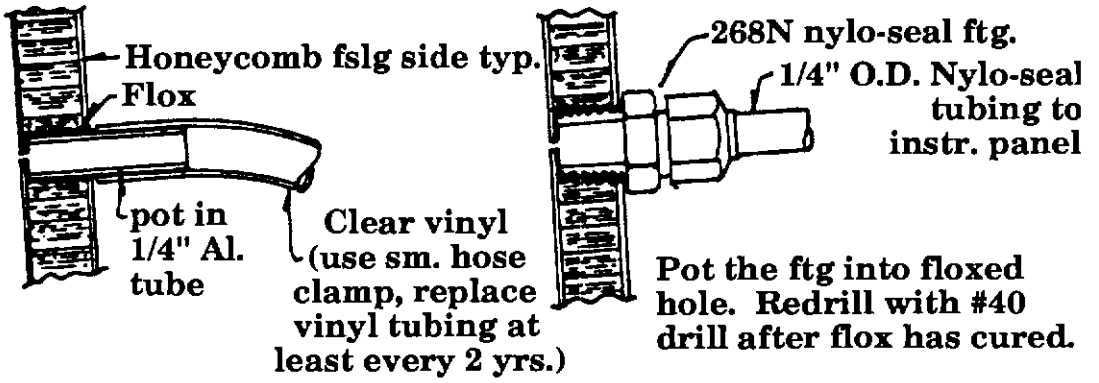
STATIC PORT LOCATION
Figure 16-28



3. Two acceptable methods of implanting a pick up are shown in figure 16-29. Either will work well. Pot the tube section or Nylo-Seal fitting into the fslg side having first cut back the honeycomb and filled the area in with micro. Allow to cure. While it is curing, slip the drill bit back into the hole and push it through so as to open the hole that probably got plugged with micro. If you wax the drill bit you can simply leave it in the hole and that's it. Or, you can simply come back later and drill through once again.

STATIC PORT INSTALLATION

Figure 16-29



WARNING: The static port line, as it leaves the fuselage side, should angle upward first before heading down for the console where it will route to the panel. This is to prevent excess amounts of water from entering the line. (Water is not likely to run up hill.) A water trap could also be installed.

NOTE: It is a good idea to install a water trap into the static tube system at the first low point (nearest to the fslg origin). This is commonly a plastic bubble that allows water to be collected there and not continue on up into the instrument or plug the line which would make for very inaccurate airspeed, altimeter and VSI readings. It can be checked regularly and emptied as required. Many planes found at Oshkosh will not have this provision but it certainly must be recommended.

We've found that the company Lancairs do not tend to get water in the static line unless they're sitting in a windy raining condition where the wind blows on the appropriate side of the fuselage. If that happens, the static line could quickly fill up. Thus a collector is recommended. A collector bulb could be located just behind the seat, before the line routes up into the center console.

THIS CONCLUDES CHAPTER 16.