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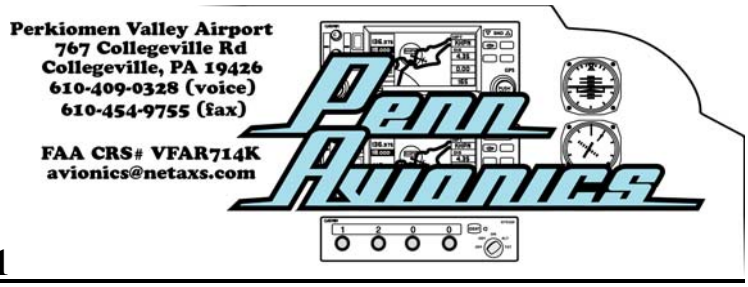

Field Approvals 101

(Or why is the aircraft listed on the STC not the same as my aircraft?)

I get many inquires on how the field approval process works, and why the aircraft listed on the STC is not the same make as the customers aircraft.

When a manufacture builds a product to be installed in an aircraft they must go through some type of approval process to allow that item to be installed in a certified aircraft. The STC process is a popular choice and is used for most avionics equipment. An STC is the FAA blessing that the avionics (or other part) is approved to be installed in a certified aircraft.

When a manufacture applies for an STC they can list many different airframes (such as the CNX-80), or the STC can be for only one airframe (such as the Garmin GNS-430/530/330, etc). It is easier for the manufacture to only list one aircraft since they only need to show test data for one airframe. If the STC is for only one airframe, then any shop installing the device in a different airframe will have to go through the field approval process. For example, the Garmin GNS-430 STC is only for a Piper PA-32 aircraft. If an avionics shop is installing the GNS-430 in a Piper PA-32 then the shop simply fills out an FAA 337 form and sends it to the FAA to have it filed in Okalahoma City. The installation is already approved for a Piper PA-32 so there is nothing else for the FAA to approve or dis-approve. If, however, the shop is installing the GNS-430 in a Mooney the shop will have to go through the field approval process since the aircraft on the STC disagrees with the aircraft the work is being done to.

The relative agony level of the field approval varies by FSDO and shop. When an avionics shop and their FAA FSDO have a good working relationship the field approval is a simple matter of sending up a 337 form with a copy of the STC and having it approved. Using our previous example; the 337 that is sent to the FAA will state that the GNS-430 is approved in a piper PA-32 (we will include the piper STC), and we will say that the installation in the Mooney is similar enough to the piper that we are requesting a one-time approval for the Mooney installation based on the approval in the Piper. The FAA will then sign block 3 on the 337 and mail it back to the avionics shop. The Avionics shop will then perform the work, sign and date the 337 form and send it back to the FAA to be filed with Okalahoma city.

If the customer wants to make sure the process has been completed correctly, just check “block 3” on the front side of the 337. If it has a sign off by the FAA then that states that the FAA is happy with the work that is being done on the backside of the 337. The FAA position is that they will not make an "engineering" approval on some un-approved device, but as long as you have some pre-approved path (such as a STC for a different aircraft), they will grant approvals based on that "approved" paperwork.

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