



U.S. Department
of Transportation
**Federal Aviation
Administration**

**Transport Airplane Directorate
Aircraft Certification Service**

1601 Lind Avenue Southwest
Renton, Washington 98057-3356

NOV - 6 2013

In Reply
Refer To: 100S-13-31

Mr. Charles W. Newman
Co-Owner
Flight Data Systems
224 7th Street
Petaluma, CA 94952

Dear Mr. Newman:

This letter is in response to your inquiry dated September 26, 2013, which was received by our office on October 17, 2013 (delayed by the government shutdown and associated furlough of employees in this office). We apologize for the length of time that it has taken to respond to your questions.

In your inquiry, you requested a clarification to our earlier letter (Reference No. 100S-GA-10-53) sent to Davtron, Inc. in which the Federal Aviation Administration (FAA) stated the installation of a replacement clock in a non-transport category airplane is considered a minor change. You also requested that we specifically authorize the installation of the Flight Data Systems Model GT-50 as minor.

As stated in our earlier letter, we consider the installation of replacement clocks (including timers and stopwatches) in non-transport category airplanes to be minor changes in accordance with Federal Aviation Regulation (FAR) 21.93(a). This policy is applicable to all makes and models of *simple replacement clocks*. Accordingly, the FAA has concluded the Model GT-50 falls into this category as long as the optional volt meter and outside air temperature functions are not replacing previously installed equipment. The accelerometer function is considered a minor change in this device, since it is incidental to the clock installation and does not interface with other aircraft systems.

Per FAR 21.95 copies of this letter may be given to installing mechanics as evidence that this installation of the GT-50 may be considered minor. Installation as a minor change should be documented using a maintenance log book entry referencing this letter. Installations on general aviation (GA) airplanes where outside air temperature (OAT) and voltage are already present can be done as a minor change as well, if the mechanic deems the Model GT-50 a suitable replacement part according to part 43 guidance and regulations. This determination should also be documented in a maintenance log book entry.

Installations on GA airplanes where OAT/Voltage are present and the GT-50 is not easily determined to be suitable replacements by the mechanic, or where the installation would alter the basic system design, the applicant would need additional approved data via an supplemental type certificate (STC) or coordinated field approval. You also may apply to your local aircraft certification office for a STC for installation approval of the GT-50. The FAA recognizes this type of instrument lends itself to the streamlined process for gaining installation approval on a number of similar installations in different airplane models using an approved model list as part of the STC process, per Advisory Circular AC 23-22. If you have questions regarding any of the above issues, please contact me by phone at (425) 917-6405, or by electronic mail at jeff.morfitt@faa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey A. Morfitt". The signature is fluid and cursive, with the first name "Jeffrey" and last name "Morfitt" clearly distinguishable.

Jeffrey A. Morfitt
Small Airplane Program Manager
Seattle Aircraft Certification Office