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SERVICE ADVISORY

SB012-0046

Subject: Instructions for Adjusting the Fuel Flow in the G900x System Date: October 29, 2015

Abstract

The setting for fuel flow calculation is adjustable in the setup mode of the G900x system. Lancair Avionics sets the value to .093 at initial set-up. This value works for most aircraft. Re-setting the value may be required if your hand calculated values of fuel used do not match those shown in the Garmin system. Below you will find the step by step procedure for accomplishing the task.

Procedure

A:

- 1) Determine the exact quantity of fuel used by filling tank, fly Evolution and then refill tank. Take care to fill to exactly the same level as the first fill. Record the number of gallons required for the second fill.
- 2) Record the G900x indicated fuel used.
- 3) Use the following calculations to determine the corrected fuel scale setting.

Formula:

(G900x indicated fuel used) X (default K factor 6800) / (actual fuel used) = (corrected K factor)

(corrected K factor) / (default K factor) = (corrected fuel scale setting)

Example:

(50 gal. {indicated fuel used}) X (6800) = 340000

340000 / (48 gal. {actual fuel used}) = 7083.333

7083.333 / 6800 = 1.0417 {corrected fuel scale setting}

4) Record the corrected fuel scale setting for later use in re-setting the "ENG 1 SCALE" value in section B.

B:

- 1) Pull the circuit breakers for the PFD and MFD.
- 2) Apply power to the aircraft.
- 3) Press the "ENT" key on MFD, and close the MFD circuit breaker. Keep pressure on the "ENT" key until the screen displays "INITIALIZING SYSTEM".
- 4) Repeat procedure for the PFD.
- 5) When in setup mode, both screens should now display "SYSTEM STATUS". If they boot normally, repeat steps 1-4.
- 6) On the PFD, rotate the large FMS (inner) knob (lower right) to bring up the drop down menu.
- 7) Continue to rotate the large knob to the "CAL" menu.
- 8) Locate the fuel flow window in the upper left area of the screen, and note the value for the "ENG 1 SCALE".
- 9) To change this value, first unlock the page. Note, there are 12 soft keys, numbered 1-12, along the bottom of the screen.
- 10) Unlock the page by pressing keys 12, 11, 10, 9 in sequence.
- 11) Push the small FMS knob and note the cursor flashing on the "ENG 1 SCALE".
- 12) Rotate the small FMS knob to the number and the large FMS knob to advance the cursor to the next value.
- 13) Enter the value from Section A, Step 4.
- 14) After adjustment is complete enter the corrected fuel scale setting and push the small FMS knob to clear the cursor. This saves the value entered.
- 15) Power down the aircraft.
- 16) Flight testing will be required to verify fuel flow, re-adjustment may be required.