

# *MVP-50P*

## Setup Checklist

0920051

Rev. C: 4/17/09

Aircraft Make: \_\_\_\_\_ Model: \_\_\_\_\_ N#: \_\_\_\_\_

Only perform the steps applicable to your installation. Refer to the MVP-50P Operating Instructions IO 1002051 for details on all of the following steps. The “C” in the left margin indicates settings to be made by the installer for a certified aircraft.

**1. Read the “Warranty / Agreement” and “Important Notice.”**

**2. Set up the Aircraft ID and Gear Warning:**

a) Navigate to the “**Aircraft ID, Gear Warning and TAS Setup**” screen:

- \* Starting on the “Main Engine” screen, push the MENU button.
- \* Select “System Configuration Menu” at the bottom of the screen.
- \* Select “**Aircraft ID, Gear Warning and TAS Setup**” screen.

b) Set the Aircraft ID (OEM and Experimental).

c) Set the Gear Warning (OEM and Experimental) - To activate the Gear Warning, the MVP-50 system must be monitoring Gear Status, Airspeed and Manifold Pressure. The gear warning is provide via a voice warning only.

Note: The Recover Factor will be set at a later time. See the MVP-50P Operating Instructions for more information.

**3. Set up the Parameters on the “Engine Data ...” Screen:**

a) Navigate to the “**Engine Data, Hour Meters and Flight Timers Setup**” screen:

- \* Starting on the “Main Engine” screen, push the MENU button.
- \* Select “System Configuration Menu” at the bottom of the screen.
- \* Select “**Engine Data, Hour Meters and Flight Timers Setup**” screen.

b) Set the Number of Cylinders (OEM and Experimental).

C c) Set the #1 Cylinder Location.

C d) Set the Fuel Weight.

C e) Set the Bar Graph Format.

f) Set EGT for Primary (OEM and Experimental).

g) Set CHT for Primary (OEM and Experimental).

C h) Set Tach Time.

C i) Set Engine Hours.

C j) Set the Flight Timer Start and Stop settings.

**4. Set up the Parameters on the “Serial Port Setup and Warning Light” Screen:**

- a) Navigate to the “**Serial Port Setup and Warning Light Setup**” screen:
  - \* Starting on the “Main Engine” screen, push the MENU button.
  - \* Select “System Configuration Menu” at the bottom of the screen.
  - \* Select “**Serial Port Setup and Warning Light Setup**” screen.
- C b) If the MVP is to receive GPS data and/or transmit fuel data to a GPS, set port 2 to “Auto Detect Enabled.”
- C c) If fuel data is to be transmitted, select the format.
- C d) Select the external caution and warning light configuration.

**5. Set up the EGT/CHT Bar Graph Limits and Colors: (OEM and Experimental)**

- a) Navigate to the “**EGT/CHT Bar Graph Limits and Colors Setup**” screen:
  - \* Starting on the “Main Engine” screen, push the MENU button.
  - \* Select “System Configuration Menu” at the bottom of the screen.
  - \* Select “**EGT/CHT Bar Graph Limits and Colors Setup**” screen.
- b) Set the EGT and CHT limits (OEM and Experimental).

**6. Set up the Weight and Balance:**

- a) Navigate to the “**Weight and Balance Setup**” screen:
  - \* Starting on the “Main Engine” screen, push the MENU button.
  - \* Select “System Configuration Menu” at the bottom of the screen.
  - \* Select “**Weight and Balance Setup**” screen.
- C b) Setup the weigh and balance for the aircraft and the CG limit points for the graph. If the aircraft does not have a middle or back seat, set the arm to the same as the front seat.
- C c) Check that the “Weight and Balance” screen is accurate by performing several calculations with the MVP and comparing the results with the aircraft’s POH.

**7. Calibrate the Fuel Tanks:**

- a) Navigate to the “**Fuel Tank Calibration**” screen:
  - \* Starting on the “Main Engine” screen, push the MENU button.
  - \* Select “System Configuration Menu” at the bottom of the screen.
  - \* Select “**Fuel Tank Calibration**” screen.
- C b) Calibrate each of the Fuel Tanks monitored by the MVP.
- C c) Check the accuracy of the readings for each fuel tank (especially at the 1/8 and empty fuel levels). Inaccurate fuel readings can lead to aircraft damage, personal injury or death. Require the pilot to read the Important Notice and Warranty/Agreement located in the front of the MVP-50P Operating Instructions before releasing the aircraft for flight.

## **8. Calibrate Horsepower:**

- C Note: Horsepower setup should be performed after the pilot has had an opportunity to collect all the necessary data shown on the “Horsepower Calibration” screen.

## **9. Calibrate Pressure Altitude:**

Note: Pressure Altitude is normally calibrated at the same time as the Altimeter and when the aircraft’s pitot static system is tested. This is done with an Air Data Tester.

- a) Navigate to the “**Pressure Altitude Calibration**” screen:
- \* Starting on the “Main Engine” screen, push the MENU button.
  - \* Select “System Configuration Menu” at the bottom of the screen.
  - \* Select “**Pressure Altitude Calibration**” screen.
- C b) Calibrate the Pressure Altitude settings.

## **10. Calibrate Flaps and Trim and any Special Function: (OEM and Experimental)**

- a) Navigate to the “**Flap, Trim and Special Function Calibration**” screen:
- \* Starting on the “Main Engine” screen, push the MENU button.
  - \* Select “System Configuration Menu” at the bottom of the screen.
  - \* Select “**Flap, Trim and Special Function Calibration**” screen.

b) Calibrate any flap, trim or special functions.

## **11. Check that all Redlines, Limits and Color Markings are Accurate:**

- a) Navigate to the “**4. Redlines, Limits and Color Setup**” screen:
- \* Starting on the “Main Engine” screen, push the MENU button.
  - \* Select “System Configuration Menu” at the bottom of the screen.
  - \* Select “**4. Redlines, Limits and Color Setup**” screen.
- C b) Check that all instrument ranges look appropriate and all redlines, limits and color markings match the aircraft’s POH, existing instruments and any requirements set forth in any STCs. Improper redlines, limits or color markings can lead to aircraft and or engine damage, personal injury or death. Require the pilot to read the Important Notice and Warranty/Agreement located in the front of the MVP-50P Operating Instructions before releasing the aircraft for flight.

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**11. Change Password and Backup the Configuration Data:**

- a) Navigate to the “**Change Password**” screen:
  - \* Starting on the “Main Engine” screen, push the MENU button.
  - \* Select “System Configuration Menu” at the bottom of the screen.
  - \* Select “**Change Password**” screen.
  
- C b) Change the level 1 and 2 passwords to protect the calibration data. Write down the password and store it in a safe secure place from unauthorized persons. The initial level 1 and 2 password for an experimental MVP is “00100.” The level 1 maintenance password for a certified MVP is “00200.” The level 2 password for a certified MVP is not available and will not be released.
  
- C c) Navigate to the “**USB Config and Software Program Manager**” screen and back all configuration files to the USB Memory Stick.