

**700-00006-XXX-() PFD & 700-00011-XXX-()  
Magnetometer/OAT Sensor Assembly  
Instructions for Continued Airworthiness-  
Cirrus SR22**

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<b>Document Number</b>	AVPFD-007	<b>Control Category</b>	CC2
<b>Revision</b>	<b>Description</b>	<b>ECO</b>	<b>Date</b>
00	Initial Release	02-282	10/29/02
01	Added Access panel call out(Ref: FAA Memo 11/7/02). Changed source of assistance to Avidyne (Ref FAA memo 11/7/02) Added step 11 to section 7.5.4.1 Corrected procedure in section 7.5.3.2	02-340	12/31/03
02	Modified procedure in section 7.5.4.1.	03-026	1/21/03
03	Modified Magnetometer Calibration procedure	03-047	2/3/03

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## **Table of Contents**

<b>1. Introduction .....</b>	<b>4</b>
1.1 Aircraft Description.....	4
1.2 Scope .....	4
1.3 Applicability.....	4
1.4 Definitions and Abbreviations.....	4
1.5 Precautions.....	4
1.6 Units of Measure.....	4
1.7 Referenced Publications .....	4
1.8 Distribution.....	4
<b>2. Description of Alteration .....</b>	<b>5</b>
<b>3. Control and operation information .....</b>	<b>7</b>
<b>4. Servicing information .....</b>	<b>7</b>
<b>5. Maintenance Instructions .....</b>	<b>8</b>
5.1 Recommended periodic scheduled servicing tasks.....	8
<b>6. Troubleshooting Information .....</b>	<b>9</b>
<b>7. Removal and Replacement Information .....</b>	<b>13</b>
7.1 Primary Flight Display Removal .....	13
7.2 Primary Flight Display Installation.....	13
7.3 Magnetometer/OAT Sensor Assembly Installation.....	15
7.4 Magnetometer/OAT Sensor Assembly Removal.....	15
7.5 System Setup and Checkout.....	16

<b>8. Special Inspection Requirements</b>	<b>26</b>
<b>9. Application of Protective Treatments</b>	<b>26</b>
<b>10. Data</b>	<b>26</b>
<b>11. List of Special Tools</b>	<b>26</b>
<b>12. For Commuter Category Aircraft</b>	<b>26</b>
<b>13. Recommended Overhaul Periods</b>	<b>26</b>
<b>14. Airworthiness Limitation Section</b>	<b>26</b>
<b>15. Revision</b>	<b>26</b>
<b>16. Assistance</b>	<b>26</b>
<b>17. Implementation and Record Keeping</b>	<b>26</b>

## **1. Introduction**

### **1.1 Aircraft Description**

Make: Cirrus Design Corporation

Model: SR22

### **1.2 Scope**

This document identifies the Instructions For Continued Airworthiness (ICA) for the modification of the above aircraft by installation of an Avidyne 700-00006-XXX-() Primary Flight Display (PFD) and 700-00011-XXX-() Magnetometer/OAT Sensor Assembly.

This ICA satisfies the requirements of 14 CFR 23.1529.

### **1.3 Applicability**

Applies to aircraft altered by the installation of an Avidyne 700-00006-XXX-() Primary Flight Display and 700-00011-XXX-() Magnetometer/OAT Sensor Assembly.

### **1.4 Definitions and Abbreviations**

ICA - Instructions for Continued Airworthiness

STC - Supplemental Type Certificate

PFD - Primary Flight Display

AEG - Aircraft Evaluation Group

LSK - Line Select Key

### **1.5 Precautions**

This section not applicable.

### **1.6 Units of Measure**

This section not applicable.

### **1.7 Referenced Publications**

Avidyne 700-00006-XXX-() PFD Installation Manual, P/N 600-00080-000

FlightMax Entegra Series PFD Pilot's Guide, P/N 600-00081-000

FAA Approved Airplane Flight Manual Supplement, P/N 600-00086-000

### **1.8 Distribution**

This Instructions For Continued Airworthiness is to be furnished to the owner of an aircraft modified in accordance with this STC, and is to become part of the permanent aircraft record.

Changes to this ICA shall be provided to Cirrus Design Corporation, who will distribute them to the owners of aircraft modified in accordance with this STC.

A current revision of this ICA shall be available on the Avidyne website at [www.avidyne.com](http://www.avidyne.com) (Technical Publications in the Products section).

## 2. Description of Alteration

The modification of the Cirrus Design Corporation Model SR22 aircraft in accordance with this Supplemental Type Certificate, STO9722BO-A, involves the replacement of the following equipment and installation of an Avidyne 700-00006-XXX-() PFD and 700-00011-XXX-() Magnetometer/OAT Sensor .

- HSI
- Vertical Speed Indicator
- VOR/LOC Indicator
- Altitude Alerter
- OAT/Clock Indicator
- Flux Valve

The Avidyne PFD is a primary flight display with a 10.4-inch LCD as shown in Figure 1. The PFD is capable of receiving data from a pair of GPS Nav/Comm systems, and autopilot.

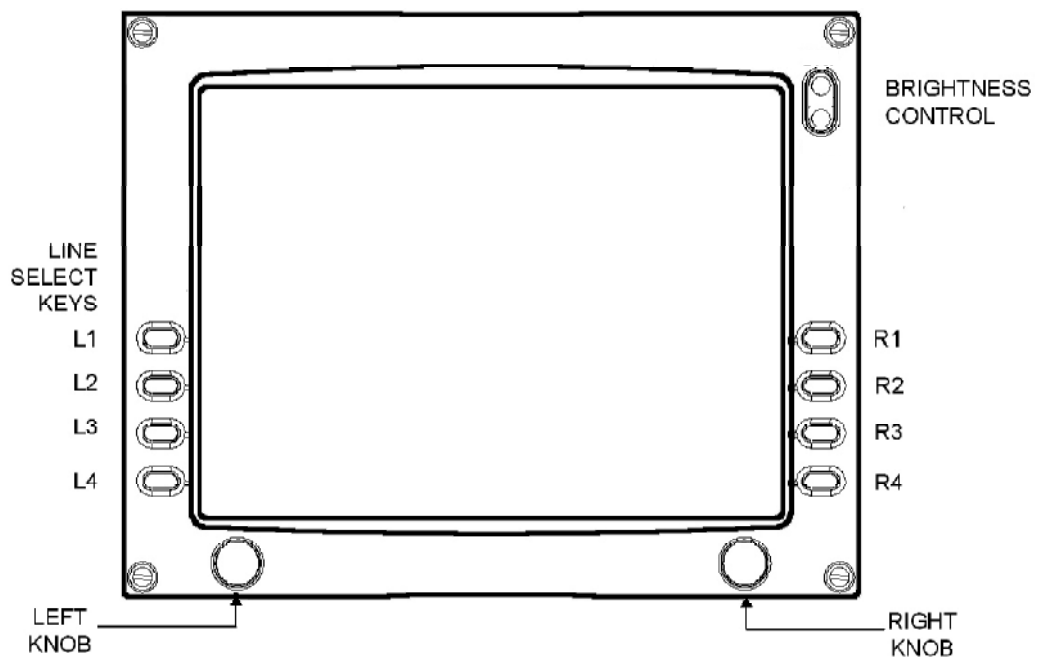
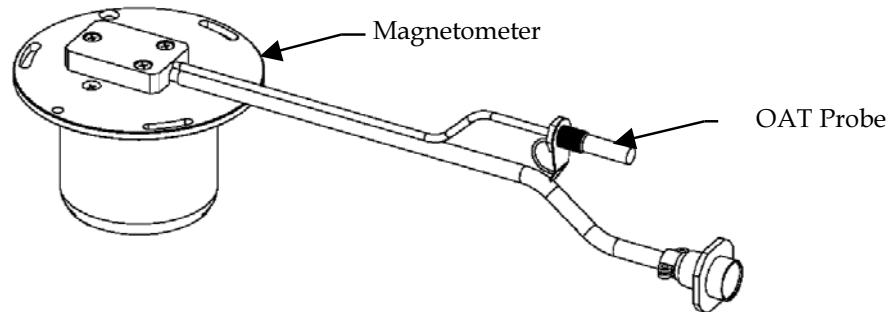


Figure 1 - Avidyne 700-00006-XXX-() PFD

The 700-00011-XXX-() Magnetometer/OAT Sensor Assembly provide magnetic heading and outside air temperature information to the PFD for display(optional) and computations. Figure 2 depicts the sensor assembly.

*Figure 2 - Avidyne 700-00011-XXX-() Magnetometer/OAT Sensor Assembly*



A block diagram of the PFD interfaced in a fully equipped Cirrus SR22 aircraft is presented in Figure 3.

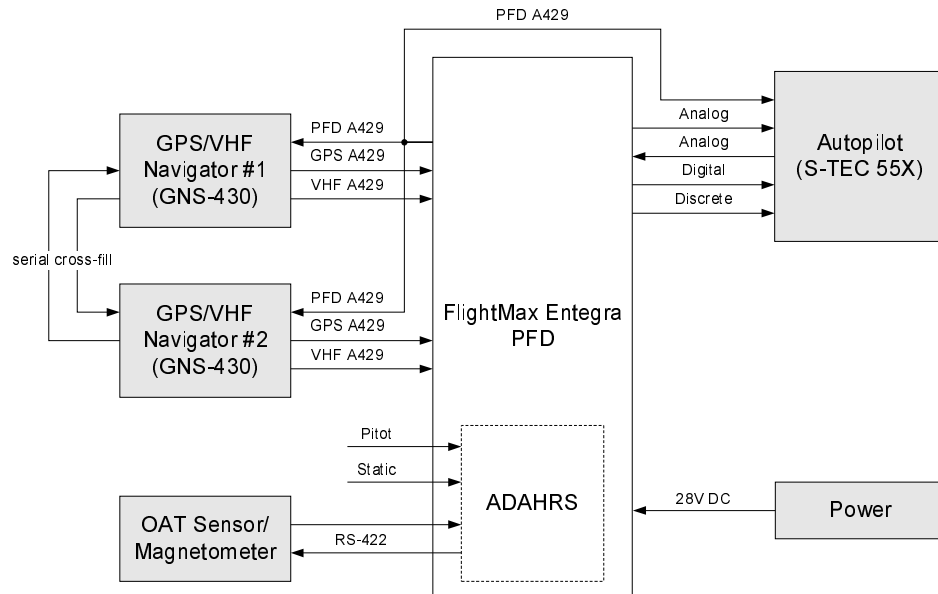


Figure 3 - Avidyne PFD System Block Diagram

### 3. Control and operation information

The PFD operation is controlled through 8 bezel keys, 2 rotary knobs, and a rocker switch. Both the right and left knob's function is defined by the particular page that is currently selected, and is appropriately labeled on the LCD above the knob.

The rocker switch located in the top right corner of the bezel controls the display brightness, which is adjusted manually by pushing the top portion of the switch to increase intensity and pushing the bottom portion of the switch to decrease intensity.

The functionality of the 8 bezel keys is defined by the page that is currently displayed, and are labeled accordingly on the LCD adjacent to the key.

Refer to the FlightMax Entegra PFD Pilot's Guide, P/N 600-00081-000 for more detail on PFD operation.

### 4. Servicing information

This section not applicable.

## **5. Maintenance Instructions**

Other than the periodic servicing task discussed below, maintenance of the Avidyne 700-00006-XXX-() PFD and 700-00011-XXX-() Magnetometer/OAT Sensor Assembly is based on condition only; no other periodic maintenance is required.

### **5.1 Recommended periodic scheduled servicing tasks**

An altimeter accuracy check is required every 24 months.

A compass swing is required to be performed every 24 months. This check will result in a re-calibration of the magnetometer system.



## 6. Troubleshooting Information

<b>Trouble - Attitude Display</b>	<b>Probable Cause</b>	<b>Remedy</b>
Pitch ladder and Horizon removed and replaced with red X	PFD AHRS failure	Replace PFD
<b>Trouble - Altitude, Airspeed, Vertical Velocity Display</b>	<b>Probable Cause</b>	<b>Remedy</b>
Instruments removed and replaced with red X	PFD Air Data Computer failure	Replace PFD
<b>Trouble - Heading</b>	<b>Probable Cause</b>	<b>Remedy</b>
Heading indication removed and replaced with red X	Break in wire between PFD and Magnetometer	Test and repair wiring.
	Magnetometer failed	Replace Magnetometer/OAT Assembly
	PFD RS-422 or Magnetometer output power failure	Replace PFD
Excessive heading error	Magnetometer not properly calibrated	Calibrate Magnetometer
<b>Trouble - OAT (Option)</b>	<b>Probable Cause</b>	<b>Remedy</b>
Display indicates red dashes	OAT probe failed	Replace Magnetometer/OAT Assembly
Excessive temperature error	OAT probe failed	Replace Magnetometer/OAT Assembly
<b>Trouble - True Airspeed</b>	<b>Probable Cause</b>	<b>Remedy</b>
Display indicates red dashes	OAT probe failed	Replace Magnetometer/OAT Assembly
<b>Trouble - VHF/GPS NAV 1</b>	<b>Probable Cause</b>	<b>Remedy</b>
PFD Primary Nav, Bearing, or Auxiliary indication displays	VHF/GPS NAV 1 not configured properly	Configure unit

dashes when GPS 1 or VLOC 1 selected	Break in wire between PFD and VHF/GPS NAV 1	Test and repair wiring
	VHF/GPS NAV 1 ARINC 429 Output failed	Replace VHF/GPS NAV 1
	PFD ARINC 429 input failed	Replace PFD
GPS1 does not slave to PFD course pointer in OBS mode	Break in ARINC 429 wire between PFD and GPS NAV 1	Test and repair wire
	ARINC 429 Receive Input failed	Replace VHF/GPS NAV 1
	ARINC 429 Transmit output failed	Replace PFD
<b>Trouble - VHF/GPS NAV 2</b>	<b>Probable Cause</b>	<b>Remedy</b>
PFD Primary Nav, Bearing, or Auxiliary indication displays dashes when GPS 2 or VLOC 2 selected	VHF/GPS NAV 2 not configured properly	Configure unit
	Break in wire between PFD and VHF/GPS NAV 2	Test and repair wiring
	VHF/GPS NAV 2 ARINC 429 Output failed	Replace VHF/GPS NAV 2
	PFD ARINC 429 input failed	Replace PFD
<b>Trouble - Autopilot Integration</b>	<b>Probable Cause</b>	<b>Remedy</b>
Airspeed, Heading, or Altitude bugs do not "fill" but autopilot modes still engage.	Break in Annunciator wires between PFD and AP Computer	Test and repair wiring
	Autopilot Computer interface failure	Replace unit
	PFD interface failure	Replace unit
Autopilot VS mode does not track PFD Vertical Speed setting, but autopilot mode engages.	Break in VS Command wires between PFD and Autopilot Computer	Test and repair wiring
	Autopilot Computer interface failure	Replace unit
	PFD interface failure	Replace unit
Autopilot HDG mode does not track PFD Heading setting, but autopilot mode engages.	Break in Heading Datum wire between PFD and Autopilot Computer	Test and repair wiring

Autopilot HDG mode does not track PFD Heading setting, but autopilot mode engages (con.)	Autopilot Computer interface failure	Replace unit
	PFD interface failure	Replace unit
	PFD heading bug out of alignment	Perform PFD heading bug calibration
Autopilot NAV mode does not track PFD Nav Course Pointer setting or CDI.	Break in Course Datum and Cross track wires between PFD and Autopilot Computer	Test and repair wiring
	Autopilot Computer interface failure	Replace unit
	PFD interface failure	Replace unit
	Autopilot out of alignment	Perform autopilot alignment in NAV mode
Autopilot NAV annunciator flashes and FAIL indication appears	Break in CDI Flag wire between PFD and Autopilot Computer	Test and repair wiring
	Autopilot Computer interface failure	Replace unit
	VHF/GPS NAV 1 or 2 Nav data invalid	Refer to VHF/GPS NAV 1 & 2 Troubleshooting procedure
	PFD interface failure	Replace unit
Autopilot APR mode does not track PFD CDI or VDI.	Break in CDI and VDI wires between PFD and Autopilot Computer	Test and repair wiring
	Autopilot Computer interface failure	Replace unit
	PFD interface failure	Replace unit
Autopilot APR mode fails to engage	Break in Glideslope flag or LOC Switch wires between PFD and Autopilot Computer	Test and repair wiring
	Autopilot Computer interface failure	Replace unit
	PFD interface failure	Replace unit

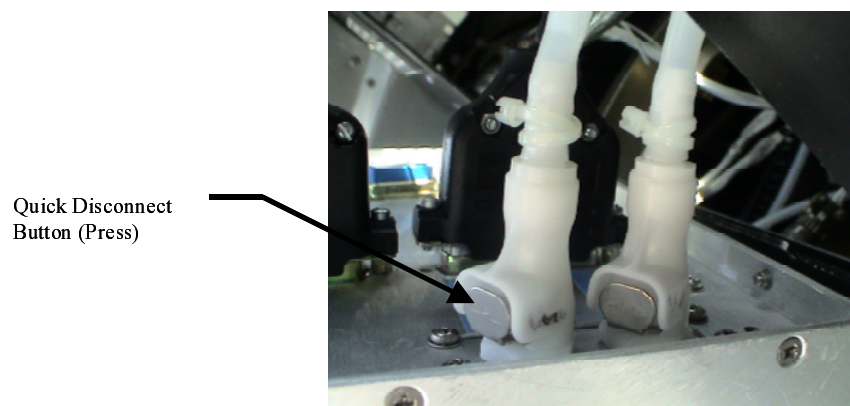
Autopilot Computer display indicates vertical speed value	Break in ALT Select wire between PFD and Autopilot	Test and repair wiring
	Autopilot Computer interface failure	Replace unit
	PFD interface failure	Replace unit
Autopilot GPSS mode fails to engage	Break in PFD ARINC 429 Transmit or Autopilot Relay Control wire	Test and repair wiring
	Autopilot Relay failure	Replace relay
	Autopilot Computer interface failure	Replace unit
	PFD interface failure	Replace unit
Autopilot GPSS only follows GPS 1 source	Break in Autopilot Relay Control wire	Test and repair wire
	Autopilot Relay failure	Replace relay
	Autopilot Computer interface failure	Replace unit
	PFD interface failure	Replace unit

## 7. Removal and Replacement Information

### 7.1 Primary Flight Display Removal

Remove the Avidyne PFD from the instrument panel by turning four corner-mounted flat head screw fasteners counter-clockwise and pulling the unit away from instrument panel. Remove the pitot-static hoses via the quick disconnects by pressing on the quick release button (see Figure 4). Remove Connectors (P730, P732, P733) located on the back of PFD by turning the two jackscrews counter-clockwise.

Figure 4 - PFD Pitot-Static Quick Disconnects



### 7.2 Primary Flight Display Installation

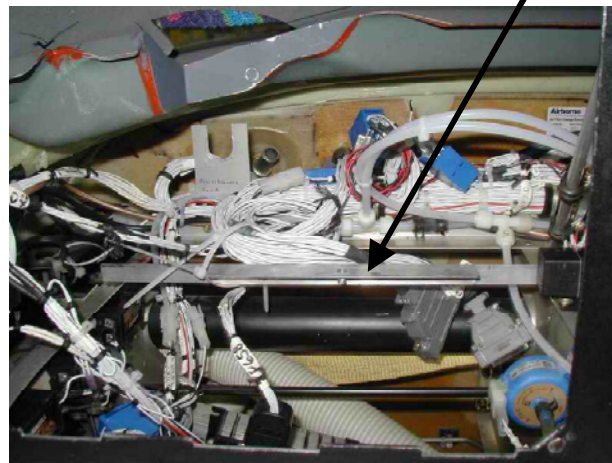
To install the PFD, it is recommended that the MFD be removed to allow easier access to the back of the PFD during installation. Secure the connectors onto the PFD and tighten the jackscrews. Connect the pitot-static connectors. Rest the PFD on the edge of the instrument panel cutout and assure that the service loop of the PFD cables is routed away from any moving parts behind the instrument panel. Hold the PFD as shown in Figure 5 and lift up on the edge of the rear of the PFD, while simultaneously pushing the upper edge of the PFD under the glare shield. Ensure the PFD mating clip slides over the horizontal support bracket approximately 8 inches behind the instrument panel (see Figures 6 and 7) and locate the PFD bezel against the instrument panel. Secure the PFD to the instrument panel by turning four corner-mounted flat head screw fasteners clockwise.

Upon reinstallation, a functional check should be performed in accordance with the System Setup and Checkout procedures detailed in Section 7.3.

Figure 5 – PFD Handling When Installing

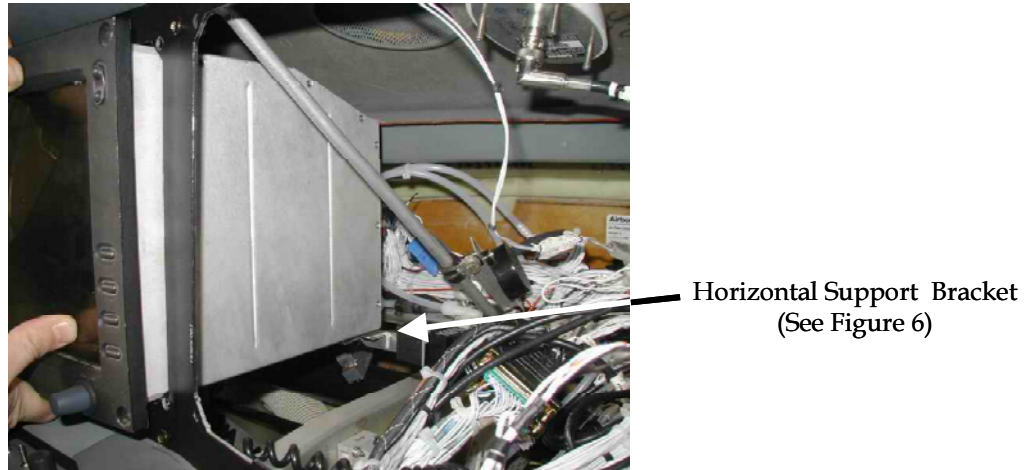


Figure 6 – PFD Horizontal Support Bracket



Horizontal Support Bracket

Figure 7 – PFD Sliding Over Horizontal Support Bracket



### 7.3 Magnetometer/OAT Sensor Assembly Installation

**CAUTION:** Ensure Magnetometer is installed with arrow and letters FWD pointing forward.

1. Unfasten Access plate RW 14 located outboard under the right wing.
2. Position Magnetometer to standoffs and attach with washers and screws.
3. Connect connector assembly.
4. Secure connector assembly to tie down with cable tie.
5. Insert OAT probe through RW 14 access plate and secure with washers and nut.
6. Secure RW 14 access plate to aircraft
7. Perform Magnetometer Calibration procedure defined in section 7.5.4.2.

### 7.4 Magnetometer/OAT Sensor Assembly Removal

1. Ensure BAT 1, BAT 2, and AVIONICS master switches are in off position.
2. Pull PFD circuit breakers
3. Remove OAT probe nut.
4. Remove wing access panel.
5. Remove screws and washers securing the Magnetometer to standoffs.

6. Cut cable tie securing Magnetometer connector assembly to tie down and remove Magnetometer/OAT Sensor Assembly from airplane.

## 7.5 System Setup and Checkout

Any time the Avidyne PFD or Magnetometer/OAT Sensor Assembly is replaced with another unit, these system setup procedures should be performed to assure that the unit is properly configured for the installation.

Turn on the PFD by applying power to the aircraft. Allow the PFD to initialize. This will take approximately 3 minutes.

### 7.5.1 System Setup Page Access

Apply power to all the sensors that interface with the PFD, including: the GPS and the autopilot. System Setup Page will allow you to configure the PFD. The System Setup Page can only be accessed by pressing the line select keys in a specific manner.

The System Setup Page is accessible as follows:

1. Turn on the PFD by applying power to the aircraft via the battery switches.
2. The system will begin its normal start up sequence.
3. Simultaneously press and hold the top left (L1), and 3rd down from the top left (L3) Line Select keys for until the count down timer in the lower left corner of the display indicates zero seconds.
4. At the end of a displayed countdown clock adjacent to the L4 line select key, the System Setup Page will appear (See Figure 8).

Figure 8 – System Setup Page (Example)





## *7.5.2 GNS-430 Nav/Com Setup*

### *7.5.2.1 PFD Unit*

The ARINC 429 ports on the PFD come hard-wired and pre-assigned. GNS-430 Unit #1 (top unit in radio rack) must be connected to ARINC port 1 (GPS output line) and port 2 (VLOC output line). GNS-430 Unit #2 (if installed) must be connected to ARINC port 3 (GPS output line) and port 4 (VLOC output line). Use the line select keys R1, R2 to configure the PFD in the following manner:

- Line Select Key (**LSK**) R1: GPS1 Port: ARINC 1;
- LSK R1: GPS1 Port: NONE, if GNS-430 No.1 not installed;
- LSK R2: GPS2 Port: ARINC 3, if GNS-430 No.2 installed;
- LSK R2: GPS2 Port: NONE, if GNS-430 No. 2 not installed.

Once complete, verify the displayed configuration in the sensor suite section of the System Setup page accurately reflects actual configuration.

### *7.5.2.2 GNS-430 Unit(s)*

NOTE: Refer to the GNS 430 users guide for GNS 430 detailed operations.

Place the GNS 430 unit(s) into Maintenance Mode via the following steps:

1. Ensure GNS 430 unit(s) off
2. Depress the "ENT" button as the power to the GNS 430 unit(s) is applied. Continue to depress the ENTR button until the GNS 430 self -test is completed.
3. Depress the ENT button twice to display the "MAIN ARINC 429 CONFIG" page. Configure the GNS 430 unit(s) to have the following mandatory settings:

**Main ARINC 429 Configuration Page**

Field	Garmin 1	Garmin 2 (if installed)
IN 1	Low, Sandel EHSI	Low, Sandel EHSI
IN 2	Low, OFF	Low, OFF
Out	Low, GAMA 429 Graphics	Low, GAMA 429 Graphics
SDI	LNAV1	LNAV2

4. Turn the right inner knob until the “MAIN RS232 CONFIG” page is displayed.
5. Configure the GNS 430 unit(s) to have the following mandatory settings:

**Main RS232 Configuration Page**

Field	GNS-430 No. 1		GNS-430 No. 2 (if installed)	
	Input	Output	Input	Output
CHNL 1	Off <sup>(1)</sup>	Aviation	Off <sup>(1)</sup>	Aviation
CHNL 2	Off <sup>(1)</sup>	Off <sup>(1)</sup>	Off <sup>(1)</sup>	Off <sup>(1)</sup>
CHNL 3	Crossfill	Crossfill	Off <sup>(1)</sup>	Off <sup>(1)</sup>
CHNL 4	Off <sup>(1)</sup>	Off <sup>(1)</sup>	Off <sup>(1)</sup>	Off <sup>(1)</sup>

(1) Unless other equipment installed (i.e., Stormscope)

6. Turn the right inner knob until the “MAIN INPUTS 2” page is displayed. Verify CDI = “GPS”
7. Turn the right inner knob until the “MAIN DISCRETE OUTPUTS” page is displayed. Verify Discrete Toggle = “APR”
8. Turn the right inner knob until the “VOR/LOC/GS ARINC 429 CONFIG” page is displayed

Configure the GNS 430 unit(s) to have the following mandatory settings:

### VOR/LOC/GS ARINC 429 Configuration Page

Field	GNS-430 No. 1	GNS-430 No. 2 (if
Speed	Low - Low	Low - Low
IN 2	VOR/ILS1	VOR/ILS2
DME Mode	Directed Freq. 1	Directed Freq. 2

#### 7.5.3 Autopilot Setup

##### 7.5.3.1 PFD Unit

The following steps shall be performed when replacing a PFD.

1. Enter the System Setup Page (see section 7.5.1) and press the line select key R3, labeled "Perform A/P Cal" and depress line select key R1 " A/P Type" to select the appropriate autopilot.
2. Select line select key L4 labeled "Back to PFD" and reenter the System Setup Page. Verify the displayed autopilot configuration in the sensor suite section of the System Setup page accurately reflects actual configuration.

##### 7.5.3.2 Autopilot Unit

The following steps shall be performed when replacing the PFD or Autopilot unit.

If the autopilot installed in the aircraft is an S-Tec System 55x, ensure it is configured as a KCS-55 compatible unit. Refer to the S-Tec System 55x Installation Manual for details.

Note: The following steps are to be performed in-flight in smooth air

1. While NAV (without GPSS) mode is engaged on the System 55x, using a GNS-430 GPS source, insert an appropriately sized screwdriver into the slotted hole to perform the alignment procedures in accordance with the System 55x Installation Manual.
2. Engage the 55x in HDG mode and allow aircraft to "settle on heading bug" (If heading bug agrees with aircraft heading stop procedure here, other wise continue calibration steps below).
3. Turn both GNS-430 units off.
4. Enter the PFD System Setup Page (See section 7.5.1).
5. Turn both GNS-430's units back on.
6. Select "Perform A/P Cal".
7. Select "Sync HDG". Autopilot should immediately command the aircraft to turn toward the heading bug.
8. Select "Back to PFD".

9. Verify HDG mode accurately tracks heading bug.
10. Engage NAV (without GPSS) mode on the autopilot.
11. Verify NAV mode accurately tracks flight plan (Flight plan or waypoint will need to be entered).
12. A/P calibration is complete.

Note: If autopilot does not track the heading bug or NAV mode correctly repeat steps in this procedure.

#### 7.5.4 PFD System Calibrations

The PFD and Magnetometer require calibrations upon initial installation, when replaced, or bi-annual periodic inspection. The following two aircraft level calibration procedures are listed below:

Calibration	When Performed	Notes	Periodic Calibration
IRU	Initial installation and replacement	Must be performed first upon initial installation with Magnetometer	None
Magnetometer	Initial installation, replacement, PFD replacement, or bi-annual inspection	Must be performed after IRU calibration upon initial installation or PFD replacement	Every 24 months

Note: The IRU calibration must be completed prior to the Magnetometer calibration

##### 7.5.4.1 IRU Calibration Procedure

Approximate duration: Approximately 15 Minutes.

Required Equipment: Digital Level, Resolution: 0.25 °, Accuracy: +/- 0.25 °.

Recommended Personnel: One avionics technician.

Procedure:

1. Avionics power applied.
2. Allow the PFD to align (approximately 3 minutes) until the ADAHRS countdown timer expires and the Gyro Warm-up box is removed.
3. Wait in the aligned state for an additional 10 minutes.

4. Enter System Setup mode on the PFD by following steps 1 through 4 in section 7.5.1. See Figure 8.

5. Press the IRU Install line select key (L2).

Note that IRU Installation page is displayed (see Figure 9).

6. Place a level 2X4-like piece of wood between the two door jams, or place an inclinometer on top of the engine block, aligned to display roll angle.

7. Place a digital level on the door jam of the airplane.

8. Follow the directions on the IRU installation page.

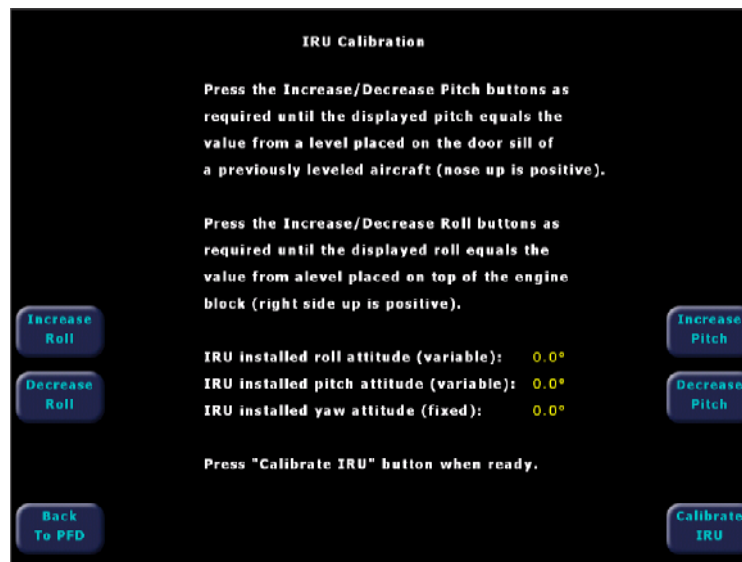
Note: The only two axis that are changed via installation calibration input is the pitch axis and roll axis.

Note: The pitch attitude as determined by the digital level should have a resolution of at least 1/4 degree. This applies to the roll axis also.

9. Press the Install IRU line select key (R4) when proper pitch and roll is displayed.

10. After the display indicates the IRU calibration is done, cycle power on the PFD in order for the IRU calibration to take effect.

Figure 9. IRU Installation Page.



#### 7.5.4.2 Magnetometer Calibration Procedure

Approximate duration: 20 minutes (assuming airplane is free to rotate 360 degrees without magnetic disturbances).

Required equipment: Installed PFD.  
Installed magnetometer.  
Compass: Resolution: 1 ° , Accuracy: +/- 1 ° .

Recommended personnel: 2 avionics technicians (one in the cockpit to push required bezel buttons, one on the wing to push the aircraft to new headings).

Procedure:

Note: Ensure the IRU install calibration procedure has been completed.

1. Airplane doors closed.
2. Flaps in retracted position.
3. Engine off.
4. Airplane in level flight attitude.
5. Install the compass onto the top surface of the left tail surface.
6. Position lubber line to be parallel with longitudinal axis of the airplane.
7. Position marine compass to be approximately ½ chord length back from leading edge of tail and 43 inches outboard from fuselage.
8. Battery 1, 2 master switch in ON position. (Consider attaching an external power cart until ready for step 11.) PFD may already be on and aligned from IRU install. If so, skip to step 11. All other aircraft equipment shall be operating.
9. Allow the PFD to align (approximately 3 minutes) until the ADAHRS countdown timer expires and is removed from the HSI.
10. Wait in the aligned state for an additional 10 minutes.
11. Enter System Setup mode on the PFD by following steps 1 through 4 in section 7.3.1. See Figure 8.
12. Press the Perform Mag Cal line select key (L1).

Note that the Magnetometer Calibration page is displayed (see Figure 10).

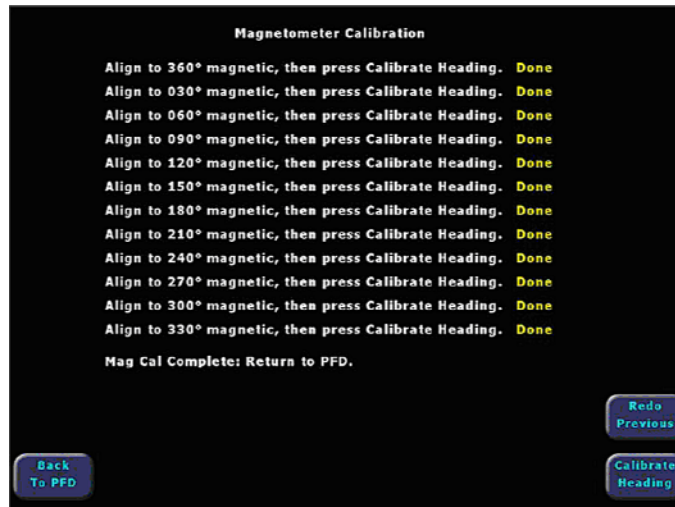
13. Align centerline of airplane on magnetic north heading as indicated by tail mounted compass by pushing the aircraft as required. Ensure this is being done clear of magnetic disturbances in the pavement or immediate vicinity.

14. Follow the directions on the Magnetometer Calibration page (press the Calibrate Heading button and wait until "Done" is displayed).
15. Align centerline to airplane on consecutive 30° headings as indicated by the tail-mounted compass by pushing the aircraft as required and continue following the directions of the Magnetometer Calibration page until complete (See Figures 10 and 11).

*Figure 10. Initial Magnetometer Calibration Page.*



*Figure 11. Final Magnetometer Calibration Page.*



Note: Pressing (R3) "Redo Previous" provides an "undo" capability.

Note: Aborting the calibration process (i.e., by exiting the Magnetometer Calibration Page or shutting off power to the PFD) prior to completion will result in the loss of stored calibration parameters. Restarting the calibration process over from the beginning will be required.

16. Press the "Back to PFD" line select key (L4) when complete.
17. Align the centerline of the airplane with consecutive 90° headings as indicated on the tail-mounted magnetic compass and verify the accuracy of the PFD heading display is within +/- 4° of the tail mounted magnetic compass.
18. Calibration complete.

### 7.5.5 Post Installation Check

#### 7.5.5.1 Lighting Check

Rotate the "INST" instrument lighting control rheostat through its full range of motion. Ensure the PFD LED lights around all bezel keys and knobs come on and match the MFD LED lighting.

#### 7.5.5.2 GPS NAV-COMM Check

Note: This procedure assumes both GNS-430's are installed.

1. PFD Nav Button- Ensure GPS1 displayed. Observe that the GNS-430 No. 1 CDI button label displays GPS.
2. GNS-430 No. 1 CDI button- Press once and observe CDI button displays VLOC label. Observe the PFD Nav button changes to VLOC1.



3. GNS-430 No.1 CDI button- Press once and observe the CDI button label displays GPS. Note that the PFD Nav button changes to GPS1.
4. PFD Nav button- Press once and observe VLOC1 is displayed. Observe the GNS-430 No. 1 CDI button changes to VLOC.
5. PFD Nav button- Press once and note GPS2 is displayed. Observe the GNS-430 no. 2 CDI button displays GPS.
6. GNS-430 No. 2 CDI button- Press once and observe the CDI button label displays VLOC. Observe the PFD Nav button changes to VLOC2.
7. GNS-430 No. 2 CDI button- Press once and observe the CDI button label displays GPS. Observe the PFD Nav button changes to GPS2.
8. PFD Nav button- Press once and observe VLOC2 is displayed. Observe the GNS-430 No. 2 CDI button changes to VLOC.

Note: Two-way communication between the PFD and both GNS-430 units has just been demonstrated.

#### *7.5.5.3 Pitot-Static Leak Check*

The pitot-static leak check shall be performed anytime time the pitot-static ports are disconnected from the PFD. The pitot-static leak check shall be performed in accordance with section 34.10 of the SR-22 Aircraft Maintenance Manual.

## **8. Special Inspection Requirements**

This section not applicable.

## **9. Application of Protective Treatments**

This section not applicable.

## **10. Data**

This section not applicable.

## **11. List of Special Tools**

1. Marine compass, Resolution: 1 °, Accuracy: +/- 1 °
2. Digital level, Resolution: 0.25 °, Accuracy: +/- 0.25 °.

## **12. For Commuter Category Aircraft**

This section not applicable.

## **13. Recommended Overhaul Periods**

This section not applicable.

## **14. Airworthiness Limitation Section**

The Airworthiness Limitations section is FAA approved and specifies maintenance required under §43.16 and §91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

There are no additional airworthiness limitations as a result of this modification.

## **15. Revision**

Revisions to this document shall be coordinated through the Boston Aircraft Certification Office, the Kansas City AEG, and the STC holder.

## **16. Assistance**

For questions or assistance regarding this ICA, contact Avidyne Corporation.

## **17. Implementation and Record Keeping**

This ICA is to be made part of the applicable section 91.409 or 135.419 aircraft inspection program for this aircraft.