



P.O. Box 26 Mound, MN 55364-9562 USA

FAA Approved Aircraft Flight Manual Supplement Audio Advisory System per STC SA01114CH

AIRPLANE MAKE: _____

AIRPLANE MODEL: _____

AIRPLANE SERIAL NO.: _____

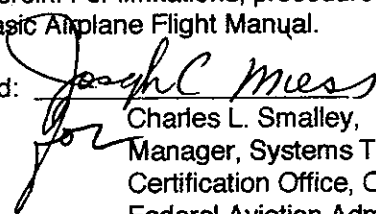
REGISTRATION NO.: _____

This document must be carried in the airplane at all times. It describes the operating procedures for the P2, Inc., Audio Advisory System when it has been installed in accordance with Supplemental Type Certificate No. SA01114CH.

For airplanes with an FAA Approved Airplane Flight Manual, this document serves as the FAA Approved P2, Inc., Audio Advisory System Flight Manual Supplement. For airplanes that do not have an approved flight manual, this document serves as the FAA Approved P2, Inc., Audio Advisory System Flight Manual Supplement.

The information contained herein supplements or supersedes the basic Airplane Flight Manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this document, consult the basic Airplane Flight Manual.

FAA Approved:



Charles L. Smalley,
Manager, Systems Test Branch
Certification Office, CHI-ACO
Federal Aviation Administration

FAA Approved
Date: NOV 20 2002



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REVISION LEVEL	PAGES AFFECTED	DESCRIPTION	FAA APPROVAL	DATE
A	3, 4	<p>Text revised to reflect feature changes:</p> <ul style="list-style-type: none">Section 2.1, added reference to stall warning system and added "Vne".Section 4.3, added reference to stall (TONE).Deleted 4.4 "End".Added numbers 4.4 thru 4.8.Section 4.6 and 4.7 added the word "Advisories" to Landing Gear and Overspeed.Section 4.6.a thru 4.6.b, Added text to reflect operation of current software.Section 4.7, changed airspeed value below Vne.Section 4.8, is new text.	<i>J. Miss</i>	NOV 20 2002

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SECTION 1 - GENERAL

The Audio Advisory System provides the pilot with a landing gear position, stall and overspeed advisories and, if equipped, an airspeed-activated flight time hour meter.

SECTION 2 - LIMITATIONS

1. The system is advisory in nature and shall not replace the certificated gear warning horn, stall warning system or a visual check of the landing gear position. It does not authorize airspeed operation above the red line (V_{ne}).
2. Per STC SA 01114CH, AML issued October 18, 1999 or later revision.

SECTION 3 - EMERGENCY AND MALFUNCTION PROCEDURES

IN THE EVENT OF THE LOSS OF ELECTRICAL POWER BELOW THE PRESET V_{ref} AIRSPEED THRESHOLD, THE SYSTEM WILL NOT FUNCTION UNTIL THE ELECTRICAL POWER IS RESTORED AND THE AIRSPEED EXCEEDS THE THRESHOLD BY 5 KTS OR MORE (TO RE-ARM ITSELF). The system will function normally if power is lost and regained above the threshold.

Should the system malfunction and/or should you not be able to normally silence the aural or visual annunciation, pulling the circuit breaker labeled "AAS" will disable the system.

SECTION 4 - NORMAL PROCEDURES

PREFLIGHT:

- 1.) After approximately 30 seconds of continuous electrical power, the pilot's annunciator light will flash once signifying that the AAS unit has powered up.
- 2.) To test the system, press and hold the pilot's amber annunciator light for 3-4 seconds and release. This test should be performed before each takeoff.
- 3.) Check to see that the amber annunciator begins to flash and the aural announcement "P2 AUDIO ADVISORY SYSTEM. GEAR IS DOWN FOR LANDING. CHECK GEAR! OVERSPEED!, stall (TONE), SYSTEM TEST COMPLETE" is heard one time. At the completion of the test, the annunciator stops illuminating.

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SECTION 4 - NORMAL PROCEDURES (cont.)

4.) FLIGHT. The system is automatically powered-up upon receiving normal electrical power and the gear and overspeed warnings are armed once the airspeed reaches the predetermined airspeed threshold.

5.) FLIGHT TIME (Hobbs) ACTIVATION. Hobbs meter activation occurs once the aircraft reaches an airspeed of approximately 45 kts/50 mph and will remain on until the airspeed decreases below this airspeed threshold.

6.) LANDING GEAR ADVISORIES. Upon slowing to the set airspeed threshold ($V_{ref} + 10-15$ kts/mph), the annunciation system will activate providing the appropriate aural (through the speaker or headset) and visual (annunciator light) advisory.

a. NORMAL GEAR INDICATION. If all landing gear are down and locked, the normal advisory ("GEAR IS DOWN FOR LANDING") will be heard and the annunciator will illuminate one time only. No cancellation is necessary.

b. ABNORMAL GEAR INDICATION. This gear advisory ("CHECK GEAR!...CHECK GEAR!...") will repeat itself until the pilot presses the amber annunciator light, thus canceling it. **The pilot should hear and understand the aural message 2-3 times (or more if necessary) and confirm the landing gear position before cancelling the advisory.**

c. In the event of a go-around, the system is automatically rearmed once the airspeed exceeds the airspeed threshold by 5 kts or greater for a period of 3 or more seconds.

7.) OVERSPEED ADVISORY. Approximately 0-4 kts/mph below V_{ne} , the system will activate providing both an aural (through the speaker or headset) and visual (annunciator light) advisory. These advisories will repeat once every 2 seconds until the pilot slows the aircraft to a speed below the overspeed threshold, thus canceling the advisory. The overspeed annunciations cannot be stopped by pressing the annunciator light. **Only slowing the aircraft will cancel this advisory.**

8.) STALL ADVISORY. Upon slowing to an airspeed at which the aircraft's certificated stall warning horn activates, the system will activate providing both an aural (through the speaker or headset) and visual (annunciator light) advisory. This tone will repeat continuously until the pilot accelerates the aircraft to a speed above the stall warning horn activation, thus canceling the advisory. The stall annunciations cannot be stopped by pressing the annunciator light. **Only increasing the speed of the aircraft will cancel this advisory.**

Note: The stall advisory has priority over all gear advisories. Gear advisories will be heard after the stall condition no longer exists.

SECTION 5 - PERFORMANCE DATA

No changes.

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