



**AUDIO
ADVISORY
SYSTEM**

**FOR GENERAL AVIATION
AIRCRAFT**

Model 6601

Revised May 24, 2007

User's Guide

INTRODUCTION

Thank you for the purchase of the 6601 P2 Audio Advisory System! It has been designed to be your full-time “electronic co-pilot” and for years of trouble-free service.

Please read this USER'S GUIDE carefully in order to familiarize yourself with the operation of your Audio Advisory System. Be sure to carry this manual in your aircraft at all times for future reference.

SYSTEM DESCRIPTION

The Audio Advisory System (AAS) consists of an computer (normally mounted behind the instrument panel or on the bottom of the glove box), an annunciator switch on the instrument panel and an optional Hobbs meter.

The AAS is automatically powered up anytime there is normal DC electrical power to the aircraft. No special procedures are required to turn the unit off.

The system functions by sensing the signal sent to the landing gear indicator lights, stall warning horn and by reading the airspeed from the aircraft pitot-static system. It communicates with the pilot visually through the lighted AAS pushbutton switch and aurally through the aircraft audio system.

The computer continuously monitors airspeed, landing gear position and the stall warning system on your aircraft. Once the airspeed has exceeded the preset landing gear threshold value, the airspeed-dependent advisories become armed.

For normal landings, the male voice is the only annunciation that you will hear (“GEAR IS DOWN FOR LANDING”) along with one flash of the annunciator. All abnormal will have a female voice (“OVERSPEED!...” or “CHECK GEAR!...”) as well as continuous flashing of the AAS annunciator.

The pilot has the ability to silence the “CHECK GEAR!...” message at any time by simply pressing the AAS annunciator light. All other messages cannot be cancelled.

If the aircraft speed rises above the threshold, such as in a go-around or missed approach, the advisories are automatically cancelled. The re-arming speed is set 5 kts/mph above the alerting speed to avoid bouncing in and out of alerts while flying close to the threshold in gusty winds.

OPERATING THE SYSTEM

1.) Testing (to be completed before each flight). To test the operation of the system, press and hold the amber AAS pushbutton switch for 2-3 seconds. Release the button once the message push begins. An introductory message will be heard: **“P2 AUDIO ADVISORY SYSTEM, GEAR IS DOWN FOR LANDING, CHECK GEAR!, OVERSPEED!, stall (TONE) SYSTEM TEST COMPLETE”**. The annunciator will flash as each advisory is heard. At the completion of the test loop, the unit returns to standby.



2.) Landing Gear Advisories. On approach to landing and reaching the airspeed threshold, the aural and visual advisories activate. With an abnormal gear advisory, the pilot should then visually confirm the gear configuration before canceling the advisory. To cancel the messages, simply press the AAS annunciator light.

EXAMPLE: Let's say that the approach threshold value is set at 80 mph.

During takeoff and climbout, as the airspeed of the aircraft increases through 80 mph, the system is armed. It will continuously monitor the gear position and airspeed. As the aircraft begins to slow for landing and the airspeed decreases to the airspeed threshold (80 mph), the system simultaneously sends both an aural and visual warning to the pilot.

The amber AAS annunciator light will blink one time and a gear position message will be heard. Under normal circumstances (three gear down and locked), the message **“GEAR IS DOWN FOR LANDING”** will be heard just once. No cancellation is necessary.

Should the gear be in transit or not all gear up or down and locked when the aircraft reaches the airspeed threshold, the system will recognize this irregularity and the pilot is repeatedly advised to **“CHECK GEAR!...”** (female voice) along with a flashing AAS annunciator. The messages will be cancelled by allowing the gear to fully extend or may be cancelled by pressing the annunciator. **It is recommended that the message be heard and understood at least three (3) times before cancelling.**

3.) Overspeed (Vne). Should the airspeed of the aircraft reach or exceed Vne, the system will activate with the AAS annunciator flashing and the audio message **“OVERSPEED!, OVERSPEED!,.....”**. These messages can only be cancelled by decreasing the airspeed below Vne.

4.) Stall Warning. This is a repeater of your aircraft stall warning horn and operates in the same manner. The annunciator will flash and the tone will activate, and cannot be cancelled, as long as the stall condition exists.

5.) Hobbs Activation. The Hobbs output is fully automatic and will activate when the airspeed is above 50 mph (45 kts) and deactivate when it is below this value.

ABNORMAL PROCEDURES

Go-Around. In the event of a go-around, the system will re-arm itself once the airspeed reaches or exceeds the threshold by 5 kts/mph or more. The number of re-arming cycles is endless.

No Flap Landings require higher than normal approach speeds. Be aware that the airspeed threshold value has been set up for a normal flap setting.

Loss of Electrical Power. If electrical power is lost below the preset V_{ref} airspeed threshold, the system will not function until 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 V_{ref} threshold.

MISCELLANEOUS

Airspeed Adjustments. Any adjustments that need to be made should be performed by a qualified avionics technician in accordance to the FAA approved Installation Manual.

Lamp Replacement. Contact your avionics shop or mechanic for lamp replacement. Depending on which brand of annunciator switch has been installed in your aircraft will determine which specific lamp is needed.

VERY IMPORTANT!

THIS SYSTEM IS ONLY ADVISORY IN NATURE AND IS NOT INTENDED TO REPLACE ANY EXISTING EQUIPMENT IN THE AIRCRAFT. IT IS SOLELY THE PILOT'S RESPONSIBILITY TO MAKE THE DETERMINATION AS TO THE PROPER AIRCRAFT CONFIGURATION AND OPERATION.