

SECTION 9

Pilot's Operating Handbook Supplement AS-19

Garmin GMA 340 Audio Panel



This supplement is applicable and must be inserted into Section 9 of the Pilot's Operating Handbook when a Garmin GMA 340 Audio Panel is installed in the AQUILA AT01-100. The information in this supplement adds to or replaces information in the basic Pilot's Operating Handbook.

Revision A.01 of AFM Supplement AS-19 ref. FM-AT01-1010-258 is approved under the authority of DOA ref. EASA.21J.025.

15.10.2013

 Date, Signature Office of Airworthiness

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0.1 RECORD OF REVISIONS

Issue	Reason for Change	Effected Pages	Date of Issue
A.01	Initial Issue	All	15.10.2013

0.2 LIST OF CURRENT PAGES

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1. GENERAL

The aircraft is equipped with a GMA 340 Audio Panel.

For a detailed description and full operating instructions please refer to the current issue of the GARMIN GMA 340 Pilot's Guide, P/N 190-00149-10 (at least Rev. C).

NOTE

The current issue of the GARMIN GMA 340 Pilot's P/N 190-00149-10 (at least Rev. C) must be kept on board the aircraft and be available to the crew at all times.

2. OPERATING LIMITATIONS

The operating limitations of the basic POH apply without any changes or restrictions.

3. EMERGENCY PROCEDURES

Should the audio panel fail, the audio system automatically connects the pilot's head-set to COM 1, ensuring that he can continue to receive and transmit.

If necessary, the audio panel can be shut down by pulling the **AUDIO** circuit breaker.

4. NORMAL PROCEDURES

For a detailed description and full operating instructions, please refer to the current issue of the GARMIN GMA 340 Pilot's Guide, P/N 190-00149-10 (at least Rev. C).

CAUTION

The GMA 340 must be switched off during engine start-up and shut-down with the Avionics Master Switch set OFF.

Non-compliance could destroy the system. All warranty and guarantee claims will become void.

5. PERFORMANCE

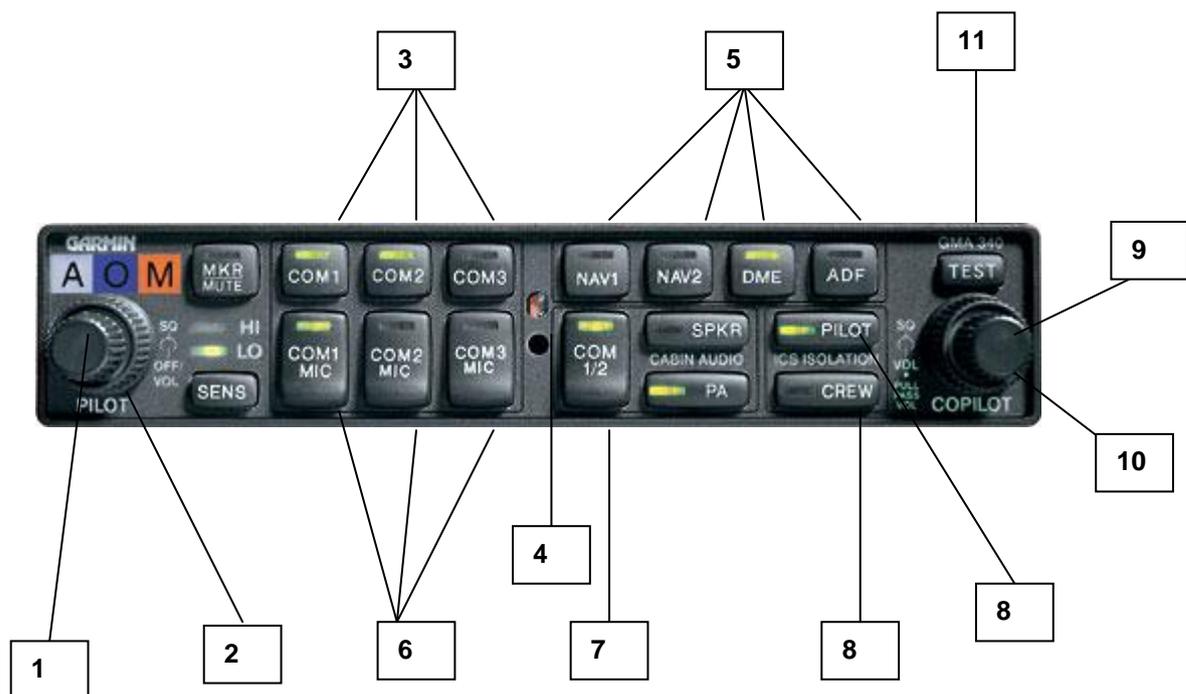
There is no change regarding the information in the basic Pilot's Operating Handbook.

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6. WEIGHT AND BALANCE

There is no change regarding the information in the basic Pilot's Operating Handbook.

7. SYSTEMS DESCRIPTION



1. Pilot intercom squelch (outer knob)
2. Power / Intercom volume (inner knob)
3. Transceiver audio select buttons/LEDs
4. Photocell
5. Receiver audio select buttons/LEDs
6. Transceiver audio/ transmit selector buttons/LEDs
7. Split COM button/LED
8. Intercom isolation buttons (pilot, crew)
9. Copilot intercom squelch (outer knob)
10. Copilot / Intercom volume (inner knob)
11. Indicator test button

Figure 1-Audio Control Panel

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Power On and Fail-safe Operation

- ON /OFF** The audio control panel is switched off when the left inner knob (pilot) is at the full CCW (counter-clockwise) position. Rotating the knob CW (clockwise) activates the unit.
- ICS** CW rotation beyond the ON detent increases pilot ICS (intercom system) volume.
- Fail-safe operation** A fail-safe circuit connects the pilot's headset directly with COM1 receiver in the event of a power failure to the audio control panel or the panel is switched off.
- Test** Pressing the TEST button illuminates all panel LEDs.
During normal operation a photocell mounted at the approximate center of the control panel senses ambient light to allow automatic LED and annunciator intensity adjustment.

Audio/Transceiver Selection

Audio selection is performed through the eight selector push buttons in the center of the audio control panel. All audio selector push buttons are push-on, push-off types.

Selecting an audio source supplies audio to the headphones. Selected audio sources are indicated by illumination of the push-button switch.

Transceiver audio is selected by depressing COM1 or COM2 (if installed). When the audio source is selected using the COM1 and COM2 buttons, the audio source will remain active regardless of which transceiver is selected as the active mic source.

Both transceiver audio and mic (microphone) can be selected by depressing COM1 MIC or COM2 MIC (if installed). Both pilot and copilot are connected to the selected transceiver and both have transmit and receive capabilities. Pilot and copilot must use their respective Push-To-Talk (PTT) switch to transmit. The intercom will function normally. During transmissions the active transmitter's COM MIC button LED blinks at a 1 Hz rate indicating active transmission.

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Split COM

Pressing the COM half-button activates the split COM function. When split com is active, COM1 is the pilot's mic/audio source and COM2 is the copilot's mic/audio source. The pilot has transmit and receive capabilities on COM1 and the copilot has transmit and receive capabilities on COM2 (alternately). The pilot and the copilot can still listen to COM3, NAV1, NAV2, DME, ADF and MKR. Pressing the COM half-button a second time will deactivate the split com function.

COM swap function

COM swap mode is not available in this installation

Navigation Receiver Selection

Navigation receiver audio is selected by depressing NAV1, NAV2 (if installed), MKR, DME (if installed), or ADF (if installed) and will select that radio or device as the audio source. Audio level of navigation receivers is controlled through the selected radio volume control.

Speaker output

Not available in this installation

PA function

Not available in this installation

Auxiliary entertainment inputs

Not available in this installation

Intercom System (ICS)

Intercom controls are located on the left of the audio control panel. The controls consist of a volume control for the pilot and copilot, a squelch control and an intercom mode selector switch.

Knob control is as follows:

Left inner knob

ON/OFF power control and pilot ICS volume. Full CCW is the OFF position (click) .

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Left outer knob	Pilot ICS mic VOX level. CW rotation increases the amount of mic (VOX level) required to break squelch. Full CCW is the “hot mic” position.
Right inner knob	When pushed in, rotation controls copilot ICS volume, when out, rotation controls passenger ICS volume (not installed).
Right outer knob	Copilot and passenger mic VOX level. CW rotation increases the amount of mic audio (VOX level) required to break squelch. Full CCW is the „hot mic“ position.
Intercom modes	The GMA 340 audio panel can be operated in three different Intercom modes: PILOT, CREW, ALL, which can be activated by the buttons PILOT or CREW (CREW=ALL in this installation)
Mono/Stereo headset	If monaural headsets are plugged into stereo jacks that do not have a switch installed, the unit will not be damaged.

NOTE

Units without Mod Level 4: If the pilot uses a monaural headset in a stereo jack, no audio will be heard during failsafe operation. When using a monaural headset, the pilot’s jack must be equipped with a stereo/mono switch and it must be set to the “mono” position for proper fail-safe operation. Mod Level can be verified at the units identification plate.

Marker Beacon Receiver

Function for VFR-operation normally not in use, for details see Pilot’s Guide.

Electrical protection for the GMA 340 Audio Panel

The GMA 340 is attached to the avionics bus and can be shut down by pulling the circuit breaker **AUDIO**.

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Functions and Operation

The GMA 340 Audio Panel offers the classical selection functions for microphone and receiver. In addition, it includes an intercom system (ICS), a marker beacon receiver and a COM recorder.

For a detailed description and full operating instructions, please refer to the current issue of the GARMIN GMA 340 Pilot's Guide, P/N 190-00149-10 (at least Rev. C).

8. HANDLING, SERVICE AND MAINTENANCE

There is no change regarding the information in the basic Pilot's Operating Handbook.

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