SUPPLEMENT NO. 2 TO PIPER MODEL PA-24-260 FLIGHT MANUAL

THIS DOCUMENT MUST BE ATTACHED TO THE BASIC AIRPLANE FLIGHT MANUAL AND KEPT IN THE AIRPLANE WHEN THE ITEM OF EQUIPMENT DESIGNATED BELOW IS INSTALLED.

Approval Basis CAR 3 and 410
June 30, 1965
Piper Model PA-24-260
Equipped with Piper AutoControl II
Normal Category Only

FAA IDENTIFICATION NO._____

INSTALLATION OF PIPER AUTOCONTROL II (MODEL AK065-E)

Placards:

WITH ZERO HEADING DIRECTIONAL GYRO INSTALLED

On instrument panel in full view of pilot:

1. For instrument identification on face of D.G.:

   "Modified for PiperAutoControl"

2. On the control console:

   Piper AutoControl II

| | INSTRUCTIONS |
|---|---|
| TO ENGAGE: | Push Heading Lock button to"OUT"position Center TURN-TRIM knob. Engage roll. |
| TO TURN: | Move TURN-TRIM knob in desired direction. |
| FOR HEADING LOCK: | Set D.G. at 0°. Uncage. Push "Heading Lock" Button to "IN" position. Use TURN-TRIM knob to obtain exact 0° heading". |
| DISENGAGE: | During take-off and landing. |

WITH COURSE SELECTOR DIRECTIONAL GYRO INSTALLED

*1. For instrument identification on face of D.G.:

"Piper Course Selector"

*Not applicable when Piper 3" face gyros are installed.

WITH COURSE SELECTOR DIRECTIONAL GYRO INSTALLED (CONTINUED)

2. On the control console:

Piper AutoControl II

| | INSTRUCTIONS |
|---|---|
| TO ENGAGE: | Push Heading Lock button to "OUT" position. Center TURN-TRIM knob. Engage roll. |
| TO TURN: | Move TURN-TRIM knob in desired direction. |
| FOR HEADING LOCK: | Set D.G. with magnetic compass. |
| | *Pull knob out, select desired heading. Push Heading Lock button to "IN" position. Use TURN-TRIM knob to obtain exact heading. |
| DISENGAGE: | During take-off and landing. |

*3. "Pull to select heading" at D.G. caging knob.

Normal Operation

1. Be sure airplane is properly trimmed. (Ball Centered).
2. Check vacuum and ascertain that the directional gyro and artificial horizon are functioning properly.
3. Push Heading Lock button to "OUT" position.
4. Center TURN-TRIM knob and engage roll.
5. (Ground Check Only.) Rotate the TURN-TRIM knob full right and full left. Determine that the control wheel describes a corresponding right and left turn, then center knob.

*Not applicable when Piper 3 inch face gyros are installed.

Normal Operation (Continued)

6. If aircraft is equipped with Zero Heading D.G., mechanically cage the directional gyro and move card to zero heading and uncage.

   If aircraft has Course Selector:

   Set the directional gyro with the magnetic compass.

   *Uncage by pulling fully out and engaging with the heading selector card.

   Select the desired heading at the top of the index line.

7. Push Heading Lock button to "IN" position. The AutoControl is now "locked-in" for directional control. The TURN-TRIM knob is now used for vernier trimming and is necessary to obtain exact heading for various conditions of power, load, etc.

8. Turns may be accomplished by either of the following methods:

   a. Push Heading Lock button to "OUT" position.
      Rotate the TURN-TRIM knob in desired direction.

   b. (For Zero Heading D.G. only) Push Heading Lock button to "IN" position. Mechanically cage the directional gyro. Move card number of degrees of turn desired. Uncage.

   c. (For Course Selector D.G. Only) Push Heading Lock button to "IN" position. Select new heading at top of index line, on D.G. Selector Card.

*Not applicable when Piper 3 inch face gyros are installed.

Normal Operation (Continued)

9. For Course Control:

   a. With Zero Heading D.G.: Push Heading Lock Button to "IN" position. Cage and offset (from 0°) the D.G. the number of degrees of turn desired and immediately uncage the D.G..

   b. With Course Selector D.G.: Push Heading Lock button to "IN" position. Rotate Course Selector to desired heading.

10. Maximum angle of bank will depend on type of D.G. installed but should not exceed 30° using both D.G. knob and TURN-TRIM.

11. Disengage AutoControl by pulling the Roll Engage knob out (off).

WITH PIPER RADIO COUPLER INSTALLED

The Auto-Pilot is coupled to the VOR NAV receiver in the modes indicated on the function switch.

In the Heading (HDG) mode, the Auto-Pilot is controlled by the directional gyro.

Emergency Procedures

1. In the event of a malfunction in the AutoControl, pull the ROLL ENGAGE knob out. This completely disengages the AutoControl from the control system.

2. AutoControl may be overpowered manually by exertion of 16 (± 3) pounds force on the control wheel.

3. In cruise configuration AutoControl malfunction with a 3 second recovery delay resulted in a 22 degree bank and no altitude loss.

Emergency Procedures: (Continued)

4. In approach configuration AutoControl malfunction with a 1 second recovery delay resulted in a 5-8 degree bank and no altitude loss.

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Approval Basis CAR 3 and 410
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