



# FALCON 50/50EX MAINTENANCE MANUAL

## COPILOT AIR DATA COMPUTER : OPERATIONAL TEST (ATA 34-12-01)

Operation Code: 342292

### Tools

- Tool box.
- Electrical ground power unit.

### Miscellaneous

- Circuit breaker lockout (local procurement), quantity: 2.

### Preliminary steps

REF. FIG. 1 and 2

1. Open door (190G).
2. Connect the electrical ground power unit to ground power receptacle (1P).
3. In the cockpit
  - A. Make sure "ADC 1" (L501FE), "ADC 2" (R501FE), "AHS 1" (L501NP) and "AHS 2" (R501NP) circuit breakers are engaged.
  - B. If the aircraft is jacked up, disengage and secure, with the circuit breaker lockouts, "L/G CONTROL" circuit breaker (1G) and "L/G INDIC" circuit breaker (31G).

**NOTE: Air Data Computer 2 (ADC 2) (R320FE) is tested on the ground, with the landing gear shock absorbers compressed.**

**CAUTION: IN ORDER TO MINIMIZE OVERHEATING OF MASTER WARNING PANEL (32W) DURING TESTS, SET THE "BRIGHT/DIM" SWITCH (32W50) TO "DIM".**

- C. Energization of the aircraft systems
    1. ) A/C  $\leq$  251: set "NORMAL/EXT POWER" switch (28P) to "EXT POWER".
    2. ) A/C  $\geq$  253: press "EXT POWER" switch/light (28P1). The light must illuminate green.
  - D. Check that "LH AV MASTER" switch/light (L502PS) and "RH AV MASTER" switch/light (R502PS) are extinguished and the switches released.
4. Align the Inertial Reference Systems (IRSs) (refer to procedure 34-476).
  5. Transfer ADC 2 (R320FE) to the pilot side by pressing the "ADC - XFR" pushbutton of Reversion Switch Panel 1 (RSP 1) (L362NH).
  6. Open the door of the RH electrical cabinet to access ADC 2 (R320FE).

### Test

REF. FIG. 1 and 2

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1. Press and hold "TEST" pushbutton (1) on the front panel of ADC 2 (**R320FE**).

2. Make sure that:

- on the front panel of ADC 2 (**R320FE**), the test is activated:
  - amber "FAULT" indicator light (2) flashes for approximately 0.5 sec.,
  - green "VALID" indicator light (3) illuminates after amber "FAULT" indicator light (2) extinguishes.

**NOTE: If "FAULT" indicator light (2) remains illuminated, see COLLINS Documentation, TROUBLESHOOTING "ADC TEST PROCEDURE" section.**

- the IAS contact state changes:

- on master warning panel (**32W**), amber "AUTO SLATS" indicator light (**32W11**) immediately illuminates and remains illuminated.

**NOTE: Amber "AUTO SLATS" indicator light (32W11) illuminates simultaneously when "TEST" pushbutton (1) is pressed in.**

3. Release "TEST" pushbutton (1).

4. Make sure that:

- on the front panel of ADC 2 (**R320FE**), green "VALID" indicator light (3) extinguishes. The test is deactivated,
- on master warning panel (**32W**), amber "AUTO SLATS" (**32W11**) indicator light extinguishes,
- the data from ADC 2 (**R320FE**) becomes available again.

5. Maximum operating limit speed/Maximum Operating limit Mach (VMO/MMO) test

A. Press ADC 2 test pushbutton (**R502FE**) located on the pedestal pilot side.

B. Make sure that the rising-pitch modulated warning signal provided by audio warning unit (**52W**) can be heard.

C. Release ADC 2 test pushbutton (**R502FE**) on the pedestal pilot side.

D. Make sure that the rising-pitch modulated warning signal provided by audio warning unit (**52W**) is no longer heard.

## **Final steps**

REF. FIG. **1** and **2**

1. Close the door of the RH electrical cabinet.

2. Cut off the IRSs. (refer to procedure **34-476**).

3. De-energization of the aircraft systems

A. A/C ≤ 251: set "NORMAL/EXT POWER" switch (**28P**) to "NORMAL".

B. A/C ≥ 253: press "EXT POWER" switch/light (**28P1**). The light must extinguish.

4. If relevant, remove the circuit breaker lockouts from "L/G CONTROL" circuit breaker (**1G**) and "L/G INDIC" circuit breaker (**31G**).

Engage those circuit breakers.

5. Disconnect the electrical ground power unit from ground power receptacle (**1P**).

6. Close door (**190G**).

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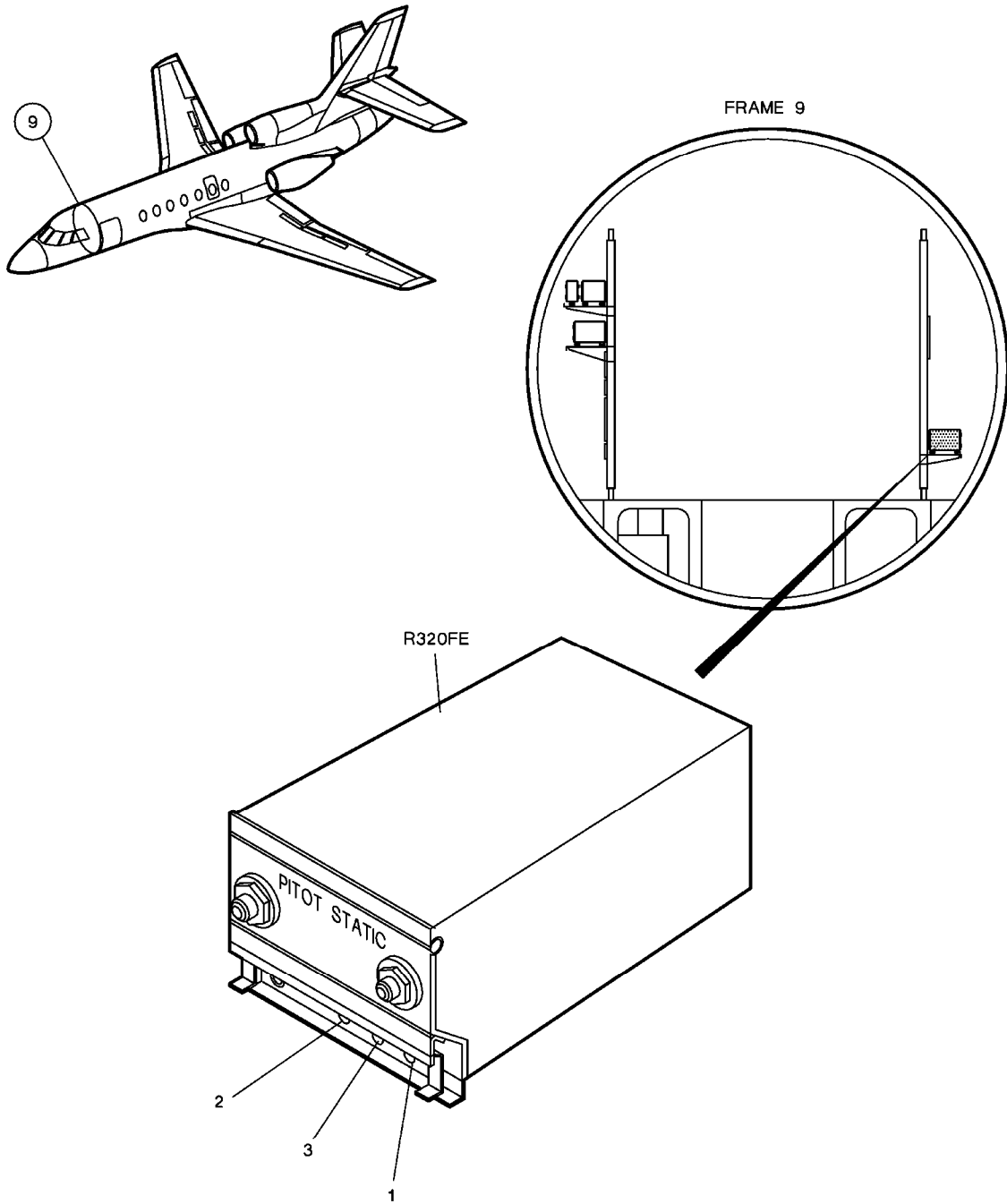


Figure 1 Location of Air Data Computer.

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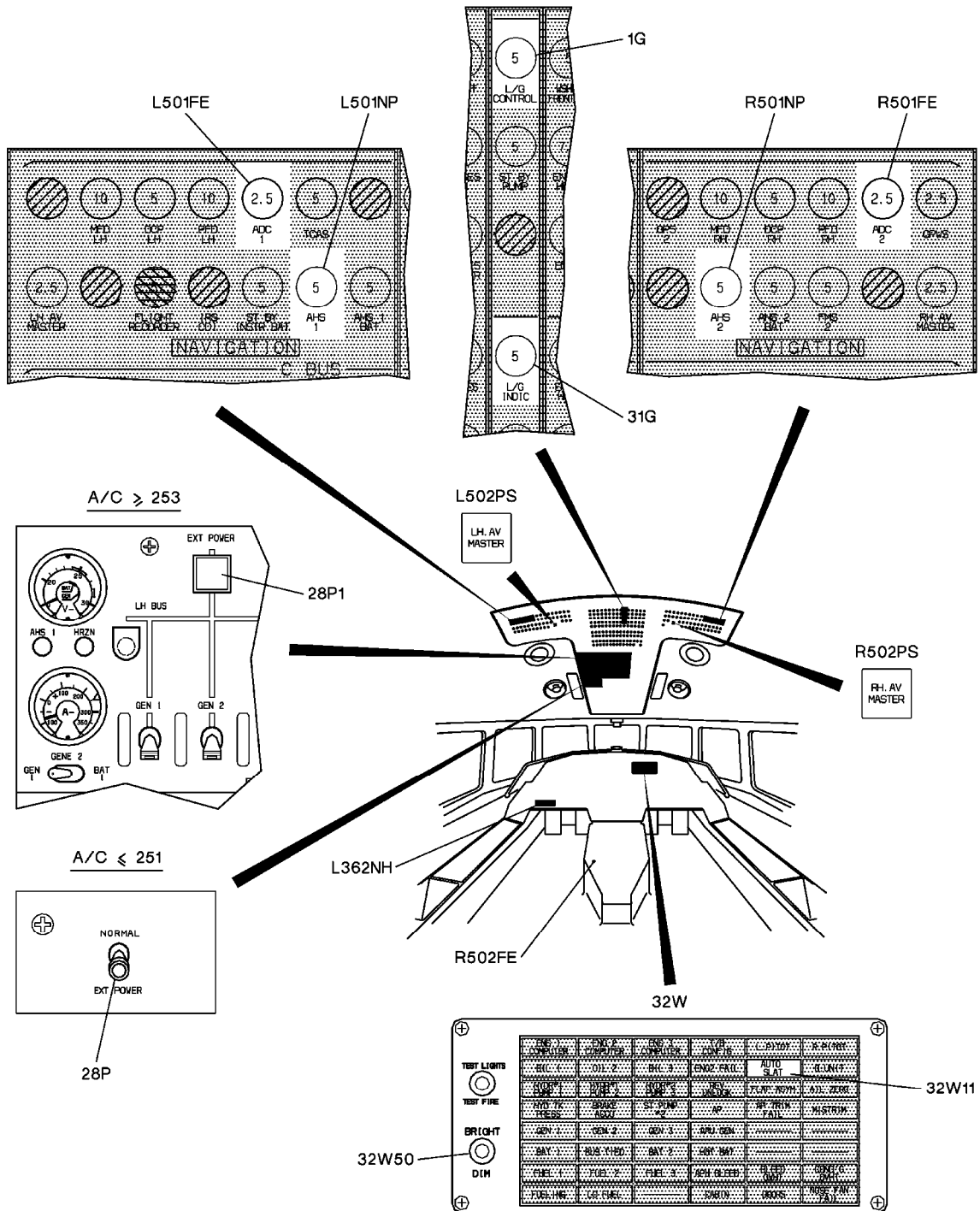


Figure 2 Location of Cockpit Controls and Indications.