TEMPORARY REVISION NO. 09

To: Eclipse SE™, Total Eclipse Plus™, Eclipse 500 Plus™
POH and
FAA-Approved Airplane Flight Manual

PITOT/AOA PROBE AUXILIARY HEATERS

This Temporary Revision affects the AFM Part Number 06-123844, Revision 01, dated September 18, 2015. Remove this TR when Revision 02 is inserted. Record this TR insertion (or removal) on the Log of Temporary Revisions.

Insert this page behind LOTR-1.

06-123844-TR09

Signature: _____ Date: 8/15/17

For Bruce D. Remick
Manager Flight Test Branch
Federal Aviation Administration

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Pitot/AOA Probe Auxiliary Heaters (If installed)

The installed Pitot/AOA Probe Auxiliary Heater system has been shown to meet the equipment requirements of 14 CFR §91.227.

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Insert facing page 3-31

Smoke or Fumes *(Cont'd)*

1. L GEN Switch ..... OFF
2. SYS BATT Switch ..... OFF

Functions **INOPERATIVE** with SYS BATT Switch OFF. (Display may not indicate actual system state, & "---" indicate other inop systems.)

- L PFD
- R SDU
- Pitch Trim will not have full authority and pitch asymmetry may occur when pitch is trimmed.
- Aileron Trim
- Landing Gear
- Stick Pusher
- Autopilot
- Yaw Damper
- COM 1
- NAV 1
- GPS 1
- GPS 2
- Transponder 1
- ADS-B 1
- ADS-B 2
- ABS
- L Keyboard (if installed)
- L Eng Ignition
- L Eng Fuel Shutoff Valve failed ON
- L Eng Fire Det. & Ext
- L Electric Fuel Pump
- START & SYSTEM BATT Heaters
- L AIR SOURCE failed ON
- CABIN DUMP switch
- Cockpit/Cabin temperature control (degraded)
- L Eng Anti-Ice failed ON
- WING Deice
- Strobe Lights
- L Windshield Heat
- Autothrottle
- Pitot/AOA Auxiliary Heaters

If Smoke Clears:

-- END --

If Smoke Does Not Clear:

1. SYS BATT Switch ..... ON
2. L GEN Switch ..... AUTO
3. BUS TIE Switch ..... AUTO

If Bleed Air Was Not Initially Suspected:

1. Go to "If Smoke Appears to Be Bleed Air Related:" at the beginning of this procedure.

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Insert facing page 3-71

BATTERY POWER ONLY *Cont'd*

NGEM-03-1-A

Flap Position	Final Approach Speed - KEAS ICE PROT - OFF or ENG (ICE PROT - ENG/WING) 6000 lb	5500 lb	5000 lb	4500 lb	4000 lb	*ADD (%) to Landing Distance
T/O	**107** (134)	**103** (128)	**98** (122)	**93** (116)	**87** (109)	**+30%** (+30%)
LDG	**98** (123)	**93** (117)	**89** (112)	**85** (106)	**80** (100)	-- --

*Use landing distance from the appropriate ICE PROT selection table
Speeds may exceed Maximum Tire Speed but may be used in emergencies

5. V_{REF} (OPS Page)..... Enter Final Approach Speed
6. Approach Setup and Brief..... Complete
7. Airspeed in Coordinated Straight Flight ..... 195 to 200 KEAS
8. EMERGENCY GEAR RELEASE Handle..... PULL
   (Pull in one continuous motion until latched)
9. GEAR Indication ..... Verify Three Green
   (Do not retract gear after successful extension)

NOTES

- If gear fails to fully extend, decrease airspeed to 180 KEAS (VO) and apply G force in attempt to extend gear.
- LANDING GEAR FAIL CAS message will be displayed; no action required.

10. EMERGENCY GEAR RELEASE Handle..... PUSH Fully In
11. GEAR Handle ..... DOWN
12. FLAPS..... LDG
13. Airspeed..... V_{REF}

Functions INOPERATIVE when on battery power only: (Display may not indicate actual system state, & "---" indicate other inop systems.)

- R PFD
- ADC 3
- Stick Pusher
- Landing Gear
- Yaw Damper
- COM 2
- NAV 2
- GPS 2/ADS-B 2 OUT
- Transponder 2/ADS-B 2 OUT
- Autopilot
- Autothrottle
- Pitot/AOA Auxiliary Heaters
- Sys Battery Heater
- Start Battery Heater
- Air Cond System
- Windshield Heat
- R Landing Light
- Taxi Lights
- Strobe Lights
- Position Lights
- Beacon Light
- Weather Radar
- ABS

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AUX PROBE HEAT FAIL (Advisory)
AUX PROBE HEAT FAIL
(If Pitot/AOA probe Auxiliary Heaters installed) Pitot/AOA probe Auxiliary Heater system fail.
Potential exists for airspeed errors, continue to monitor airspeed.

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ICE PROTECTION SYSTEM

General

The ice protection system is comprised of the following:

- Heated pitot/Angle of Attack (AOA) probes
- Pitot/AOA probes auxiliary heaters
- Heated pitot/static probe
- Heated static ports
- Heated windshields
- Engine anti-ice
- deice boots on the wing and horizontal stabilizer

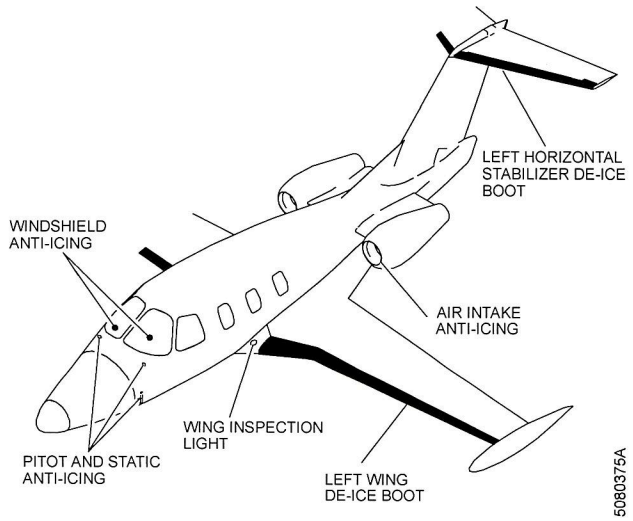

Figure 1-1. Ice Protection System

The pitot/AOA probes, pitot/static probe, pitot/AOA auxiliary heaters, static ports and windshield are electrically heated and automatically turned on. Engine anti-ice uses bleed air. The wing and horizontal stabilizer are de-iced using pneumatic boots. A wing ice inspection light illuminates the left wing leading edge to identify icing at night. The Aircraft Computer System (ACS) controls and monitors both the anti-ice and deice components of the ice protection system after pilot activation.

When flying in icing or anticipated icing conditions select windshield heat, engine anti-ice, and wing and horizontal stabilizer deice ON. When in actual icing conditions the wing and horizontal stabilizer deice boots should be selected ON to remove accumulated ice from leading edges.

Air Data System Probes and Ports

All air data system probes and ports are heated automatically for ground and flight operations by self-regulating heaters. The heater in each probe monitors and regulates the probe temperature within a specified range. The probes receive power from separate ECBs and are monitored by the ACS.

Probe and static port heaters automatically heat when at least one engine generator is on-line or the aircraft is in the air. Probe and static port heaters can be checked while on the ground with a ground power unit providing power and selecting the PITOT/STAT heat (ICE page) to ON (Figure 7-174).

Pitot/AOA probe auxiliary heaters automatically heat when the OAT reaches less than -30°C.

Normal operation of the probe and static port heat is indicated on the ICE protection synoptic by a green display on the airplane graphic. When a probe or static port is unheated (off), it appears black with a white outline.

Probe and/or Static Port Heat Failure

A complete failure of a probe or static port heat causes a L(R) PITOT HEAT FAIL, L(R) STATIC HEAT FAIL or STBY PITOT HEAT FAIL caution message to display. The failure is also indicated on the ICE protection synoptic by the probe or port turning amber. The static ports have two heating elements. If only one of the heating elements fails a L(R) STATIC HEAT FAIL advisory message is displayed indicating the loss of redundancy.

Static Heater Monitor Fault

The ACS monitors the function of the static heaters. If the ACS can not monitor the static heaters a STATIC HTR MON FLT advisory message is displayed with the aircraft on the ground. The heaters should still operate. The heaters must be manually checked for operation before takeoff.

Pitot/AOA Probe Auxiliary Heater Failure

A failure of a Pitot/AOA probe auxiliary heater causes an AUX HEAT FAIL advisory message to display.

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