



Pitot-Static System

Cirrus SR-20 Transition Course

12/23/03

The system information, procedures and guidelines found in this presentation are for Reference Only.

The information & procedures in this presentation have been taken from the FAA Approved Airplane Flight Manual and Pilot's Operating Handbook (POH). The Information & Procedures in this presentation DO NOT SUPERSEDE the Information & Procedures in the POH. In the event of conflict, the POH shall take precedence.



General

- ▶ Provides flight instruments with connections to the appropriate air source for the measurement of dynamic (pitot) and static pressures



Components

▶ Pitot Tube

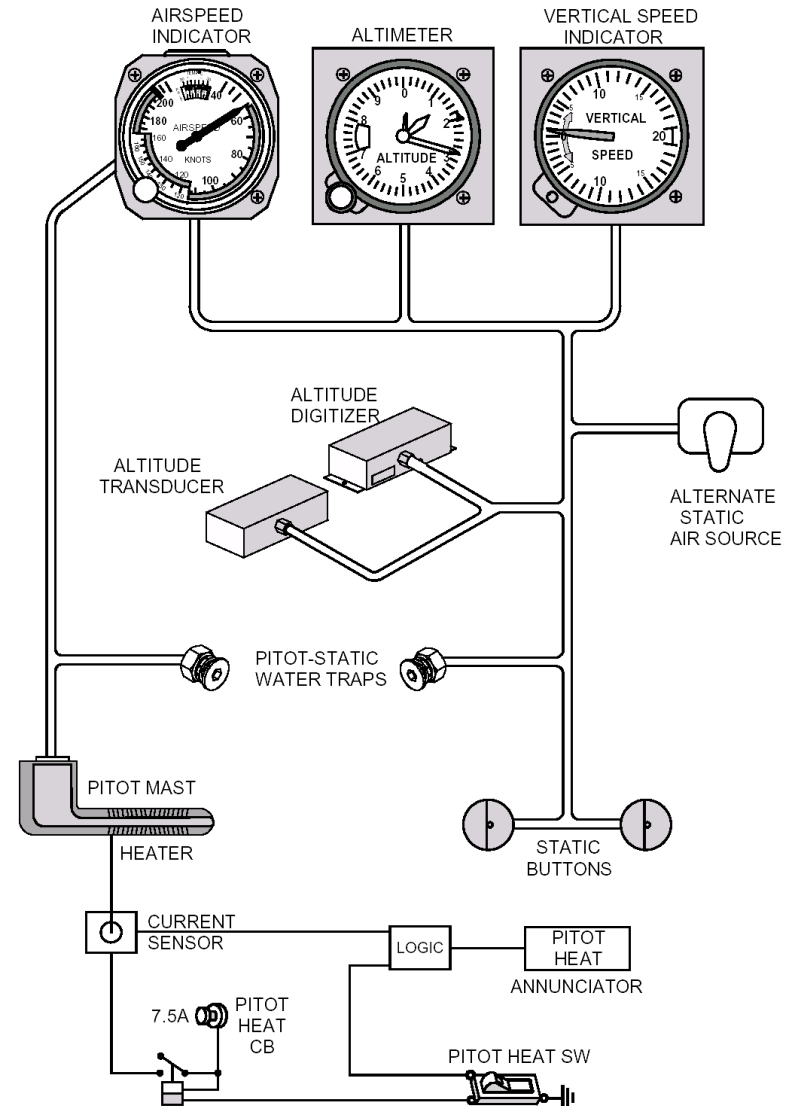
- Located on the outboard section of left wing

▶ Static Ports

- Located on left and right side of empennage

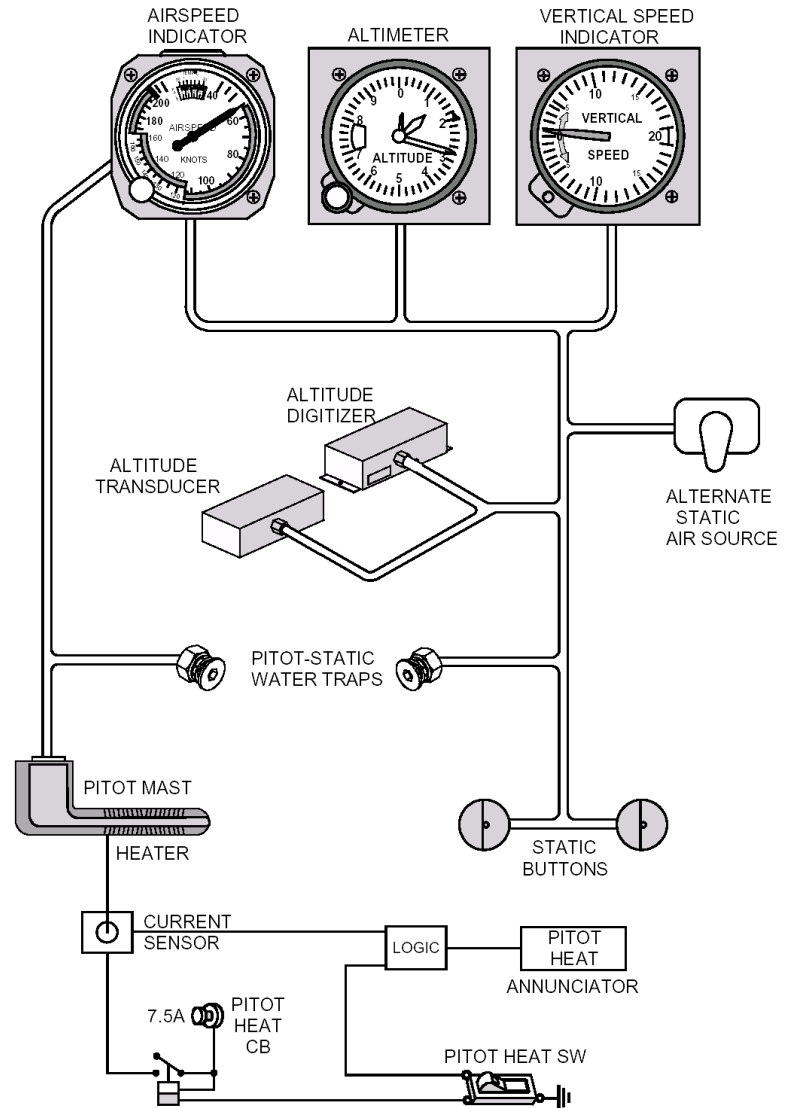
▶ Alternate Static Source

- Control and source located to the right side of the pilots foot well



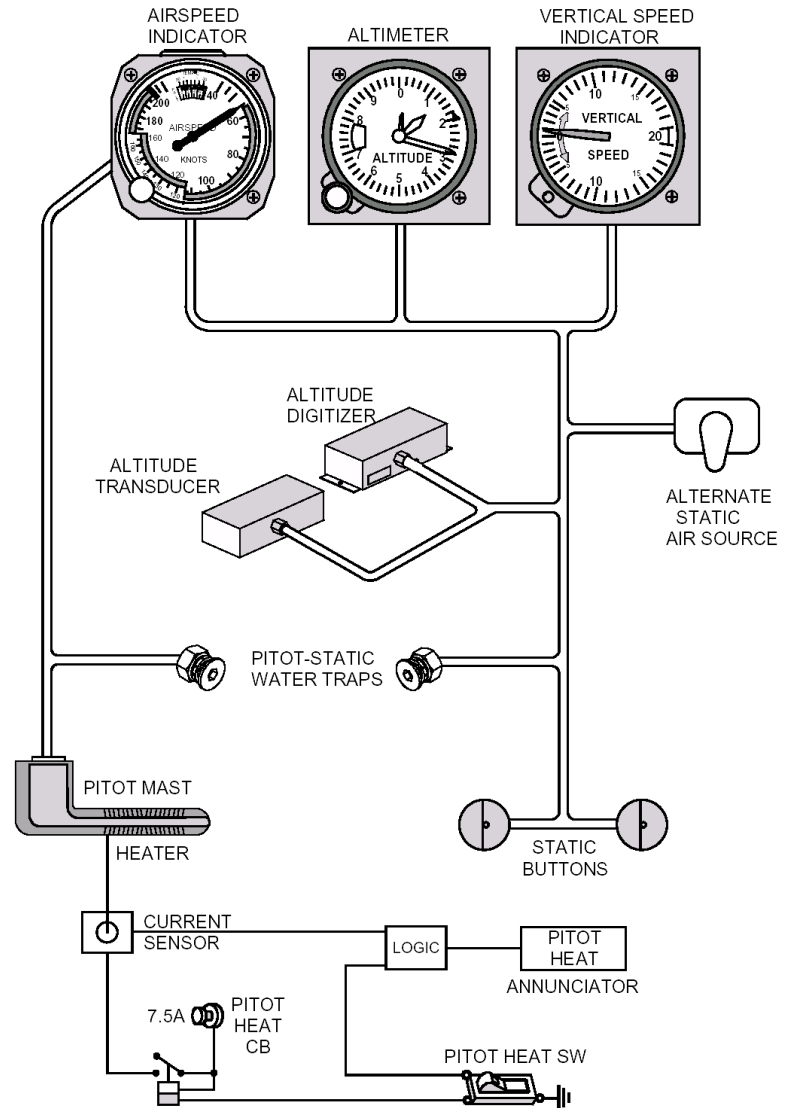
Components

- ▶ **Pitot Heat**
 - Heater element located in pitot tube
 - Should be used anytime the aircraft is operated in visible moisture (cloud, rain)
- ▶ **Pitot Heat Annunciator**
 - Indicates failure of the pitot heat element
- ▶ **Altitude Digitizer**
- ▶ **Altitude Transducer**



Components

- ▶ **Altitude Digitizer**
 - Provides pressure altitude data to transponder
- ▶ **Altitude Transducer**
 - Provides pressure altitude data to the autopilot installation (if equipped)



Components

▶ Stall Warning

- Provides audible warning of an approaching stall (5 knots above stall speed)
- Port located on right wing adjacent to stall strip
- Negative pressure causes a vacuum within the port which causes a switch to close causing the stall warning horn to sound



Abnormal Operations

▶ Alternate Static Source

- Should be used any time when an abnormality is detected or suspected
- Will effect instrument indications

Altitude 1000 FT		CORRECTION TO BE ADDED - FEET									
		Alternate Static Source - KIAS									
		60	70	80	90	100	120	140	160	180	200
Flaps 0 %	S.L.	--	1	0	-1	-1	-3	-3	-1	4	13
	5	--	2	0	-1	-2	-3	-3	-1	5	15
	10	--	2	1	-1	-2	-4	-4	-1	6	18
	15	--	2	1	-1	-2	-4	-4	-1	7	21
Flaps 50 %	S.L.	--	-7	-6	-5	-5	-9	--	--	--	--
	5	--	-8	-7	-6	-6	-10	--	--	--	--
	10	--	-9	-8	-7	-7	-12	--	--	--	--
Flaps 100 %	S.L.	-14	-17	-18	-16	-10	--	--	--	--	--
	5	-16	-20	-21	-19	-12	--	--	--	--	--
	10	-18	-23	-25	-22	-14	--	--	--	--	--

KIAS	KCAS		
	Flaps 0%	Flaps 50%	Flaps 100%
60	--	--	62
70	--	71	73
80	80	81	82
90	90	91	92
100	100	101	101
110	110	111	--
120	120	121	--
130	130	--	--
140	140	--	--
150	150	--	--
160	160	--	--
170	170	--	--
180	180	--	--
190	190	--	--
200	199	--	--

