

Standby Vacuum System 349°5

NTRODUC 'G the new Precise Flight STANDBY VACUUM SYSTEM, SVS III. A r approach to the old precise inflight vacuum pump failures.

As you may know...our company developed and sells in-wing speedbrakes for Cessna, Beech and Piper airplanes. As an integral part of our early Speedbrake system, we used engine manifold vacuum to deploy the speedbrakes. We found with the addition of a simple valve, we could safely direct that vacuum to flight instruments in case of a vacuum pump failure. And that's really all there is to it.

The System operates on a differential between manifold pressure and ambient atmospheric pressure and is directed through a shuttle valve system to drive your flight instruments.

The operation of the Precise Standby Vacuum System (SVS) is very simple. When the vacuum pump fails, simply turn the SVS system on and adjust engine power setting while observing the instrument suction gauge. (Cable control: pull/on, push/off.)

At altitude, should the vacuum pump fail during cruise power setting (at or near ambient atmospheric), it will be necessary to turn the SVS on and reduce the throttle setting until the suction gauge shows adequate differential to operate the instruments.

Example: If you are cruising at full throttle at 8000 ft., MSL, you will have a manifold pressure of approximately 22 inches Hg. As you can see from the atmospheric pressure chart, it will be necessary to reduce power to approximately 18 inches Hg to have a 4 inch differential available to operate the aircraft instruments after a vacuum pump failure. In aircraft with a fixed pitch propeller, simply observe the suction gauge while reducing power to a setting that will give a 4 inch Hg reading. If you are in cruise at 21 inches manifold pressure at 4000 feet, you already have a differential of nearly 5 inches Hg. If the vacuum pump fails in this condition, simply turn the SVS on and you would continue as if nothing had happened. Inflight vacuum pump failure becomes only a minor inconvenience not a potential disaster. At only \$349.95, can you afford to be without it?

FEET	TEMPERATURE		PRESSURE
	DEG. C	DEG. P	IN. OF HG.
0	15.000	59.000	29.92
1000	13.019	55.434	28.86
2000	11.038	51.868	27.82
3000	9.056	48.301	26.81
4000	7.075	44.735	25.84
5000	5.094	41.169	24.89
6000	3.113	37.603	23.98
7000	1.132	34.037	23.09
8000	-0.850	30.471	22.22
9000	-2.831	26.904	21.38
10000	-4.812	23.338	20.58
11000	-6.793	19.772	19.79
12000	-8.774	16.206	19.03
13000	-10.756	12.640	18.29
14000	-12.737	9.074	17.57
15000	-14.718	5.507	16.88
16000	-16.699	1.941	16.21
17000	-18.680	-1.625	15.56
18000	-20.662	-5.191	14.94
19000	-22.643	-8.757	14.33
20000	-24.624	-12.323	13.75
21000	-26.605	-15.890	13.18
22000	-28.586	-19.456	12.63
23000	-30.568	-23.022	12.10
24000	-32.549	-26.588	11.59
25000	-34.530	-30.154	11.10

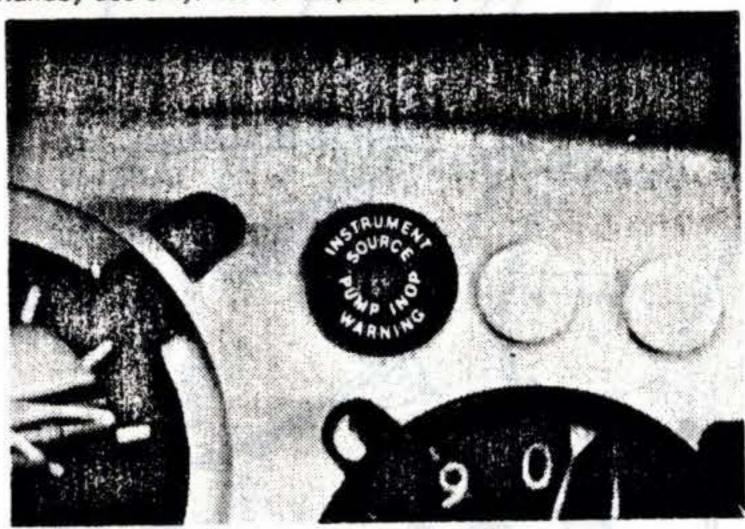
Please shipSVS III STANDBY VACUUM SYSTEM(S) at of \$ Make, Model, Year Aircraft	
I enclose mycheck money order Charge myAm.ExMasterVISA • Card No Please send information Signature	
	: Mail to:
NameAddress	63120 Powell Butte Road
City	Bend, Oregon 97701
State/Zip © 1984, PRECISE FLIGHT, INC.	Phone Orders Accepted. In Oregon (503) 382-8684. All Other Toll Free (800) 547-2558.

the high failure rate of vacuum pumps. I his in mind the FAA has requested that Precise Flight include our famous INSTRUMENT PUMP WARNING INDICATOR (IPWI) with each PRECISE STANDBY VACUUM SYSTEM.

IT IS VERY IMPORTANT to realize that most autopilots are dependent on the vacuum system for proper operation. It is Extremely Important that the pilot receive IMMEDIATE WARNING of a vacuum pump failure.

The IPWI is small enough to be located within the gyro instument cluster — Exactly where the pilot is scanning.

The FAA requires that the PFI SVS III be used for emergency or standby use only, not for dispatch purposes.



HE PRECISE FLIGHT INC., SVS III STANDBY VACUUM SYSTEM

- Low cost only \$349.95
- FAA approved, STC'd & PMA'd for ALL Lycoming and Continental aircraft engines
- Pump failure warning light included
- Weighs only 24 oz. (forward of firewall)
- Only 2 moving parts
- Vacuum not affected by electrical system failure.
- Maintenance free
- 1 year warranty

New Item!...See and be seen. Pulselite©, Visual Contact Light System (VCLS). The VCLS pulses your existing landing, taxi or recogniton lights. Increases lamp life over 20 times normal duty.

Only......\$295°°