
From: jeffrey E. <jeevacation@gmail.com>
Sent: Sunday, August 16, 2015 3:26 AM
To: Larry Visoski
Subject: Re:

im looking for something that dumps overboard

On Sat, Aug 15, 2015=at 9:54 PM, Larry Visoski <████████<mailto:████████>> wrote:

Jeffrey

Great email de=cription of coffin corner,. weight and altitude vs performance.,

Below Are comments from Cyrus supervisor at PBI Gulfstream:/div>

-Both left and right (cockpit and cabin) packs ca= feed the cabin silencer through some interconnect valves.

-If you turn the right pack or right bleed air off in flight ther= is a cross-over duct and check valve that will open and allow the left ai=/pack to supply air to both cockpit and cabin.

The ADC does allo= the turbine bypass valve on both ACM's to open but that's at 42k =eet

-The left and right pack inlet valves go into high flow mode=from 25 pounds per min to 26.5 PPM at 13k feet

-They jump again =o 28 PPM to the packs at 23k feet

-So the ACM turbine bypass val=es and the pack inlet valves are both altitude controlled but only the tur=ine bypass valve gets its altitude position from the ADC. The other has a b=ilt in aneroid on the side of the valve and senses the atmospheric pressure= in the boiler room in flight.

=img src="cid:05231317-E169-4A8F-8074-E3D9DF993E14" alt="image3.jpeg"><=div>

-Larry,

Honestly I doubt the bleed=is your problem but only way to tell that I can think of is to turn them o=f one at a time in flight. And see if the problem changes,,

Best=is to turn both off at altitude but that is not a flight I'm going on!=C2◆?

Cyrus

Sent from my=iPhone

On Aug 15, 2015, at 9:30 PM, jeffrey E= <jeevacatio=@gmail.com <mailto:jeevacation@gmail.com>> wrote:

Up to about 28,000 feet the aircraft is limited by indicated air speed (Vne), so say you can do 350 kias at ground level, you can do that all the way up to 28,000 too. Above that the limit is by Mach number (Mmo), as you continue to climb your indicated air speed and your ground speed now decline as your Mach number remains constant.

However, even though you are slowing down your engines are burning less and less fuel, part of this is from the decreased IAS, but part is from the cold air. Colder air gives greater charge weight, it can be compressed more and the engines get greater thermodynamic efficiency.

Eventually you reach the lowest clean IAS for your current weight, and that's as high as you are going. It doesn't make any difference how much power you could add, you still can't climb because to do so you would need to slow down or break up, and to slow down you'd have to start deploying high lift devices which increase drag and reduce efficiency. This is what's called the coffin corner, your engines are probably running near max power, you are near or at max speed and you are just above the stall.

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JEE

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=C2♦ please note

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