From: Larry Visoski [redacted]
Sent: Sunday, August 16, 2015 1:54 AM
To: jeffrey E.
Cc: Lawrence Visoski
Subject: Re:

Jeffrey
Great email descr=ption of coffin corner,. weight and altitude vs performance.,

Below Are comments from Cyrus supervisor at PBI Gulfstream:

-Both left and right (cockpit and cabin) packs can feed=the cabin silencer through some interconnect valves.
-Air d=ta computer will only have effect on auto-throttles, aileron trim and eleva=or trim (if autopilot is engaged). Enough autopilot input from drastic cour=e change may lift a little flight spoiler but the plane would be banking ra=her aggressively from that input. So no direct spoiler control.
-=f you turn the right pack or right bleed air off in flight there is a cross=over duct and check valve that will open and allow the left air/pack to sup=ly air to both cockpit and cabin.
The ADC does allow the turbine b=pass valve on both ACM's to open but that's at 42k feet -The left=and right pack inlet valves go into high flow mode from 25 pounds per min t= 26.5 PPM at 13k feet -They jump again to 28 PPM to the packs at 2=k feet -So the ACM turbine bypass valves and the pack inlet valve= are both altitude controlled but only the turbine bypass valve gets it alt=tude position from the ADC. The other has a built in aniroid on the side of=the valve and senses the atmospheric pressure in the boiler room in flight.=/div>
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-Larry,
Honestl= I doubt the bleed is your problem but only way to tell that I can think of=is to turn them off 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!
Cyrus

S=nt from my iPhone

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

However, even though you are slowing down you 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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please n=te

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