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**From:** jeffrey E. <jeevacation@gmail.com>  
**Sent:** Sunday, April 10, 2016 11:47 AM  
**To:** Larry Visoski; ██████████  
**Subject:** Re: GIV update

understood, , question , does the =oltage max out at 9, ? if not then the valve works at 9,= altitude seems to effect it. so your =nswer seems possible, , the voltage is applied as = result of resistance and computer. the right engine tgt is hi=hter does that mean that the fan valve is more closed than it should=be? maybe a result of a bad resistor ? . is it a big de=l to change fan valve? , could it have been damaged by t=e bent tube you found? the other mystery is why a =ulse in the reading. ? valve? resistor , computer. , electrica= bus?

O= Sun, Apr 10, 2016 at 7:17 AM, Larry Visoski <████████> wr=te:

Jeffrey  
=div>Message from Pete,.below:

Dave and I ar= at airport now in case you decide to depart earlier than 10am,,

From Pete:  
=p style="margin-top:0px;margin-bottom:0px">Hello Jeffrey,

Larry knows that I am long winded with=my responses,

Here is my brief-</=>

Feel free =o read all at your leisure-

They are mos=ly my thoughts so far-

I suspect that the right precooler (fan air) modulati=g valve is bad.

They are both original.<=span>

Fr=m the last video and Photo's;

</=pan>

The readings show that the left side is being given a voltage to the Torque motor sending a pressure to command the valve to be partially closed.

Zero volts, zero pressure is for full open, ie: cold air into the precooler and lowering the temperature into the supply system.

The signals show a steady state condition; 3 Volts, 3 PSI.

The valve has been sent signals, and has responded correctly, and therefore is in the proper position to maintain 400 degrees in the supply system.

This is being monitored, and controlled by the controller, and the sensor inputs.<=p>

There is no signal from the valve, the temperature monitoring circuit controls the changes required.

The right side shows that it is being commanded to close due to the high voltage, and pressures.

( 9 volts, 9 PSI)

It seems that the signals are not being followed, or that the valve cannot respond to them.

Since the control system does not see the temperature change from the sensors, it continues to increase the pressure to the valve.

=br>

As for the full version-

This was done as a draft, please excuse any duplication for items noted in the brief, these were my original thoughts.

I agree with all that you stated-

The guidelines are for what the electrical system does.

We have found a bad controller- the sweeping voltage and pressures, and replaced it-

There was also a bad sensor that was replaced-

We have swapped the pressure regulator/torque motors.

Latest swap was the Anticipators.

The= seem to be multiple issues, and we are narrowing them down.

I believe that the electrical and control systems are=now operating normally.

Now on to the ai= side of it.

From the last video, and photo's-

I believe that the left side is operating properly.

The Temp is being controlled by sending a regulated pressure to the valve, and it responding.

Th= pressure supplied is closing the valve, and maintaining the 400 Degrees requested.

No voltage equals no pressure, =alve open, lowering the Temperature.

The right side shows giving a close signal to the precooler (fan air) valve.

Hig= Voltage, and pressure supplied to the Valve on that side to close, and in=crease the temperature.

That side doesn't seem to respond.

The valve has a 4 inch input/output side.

The control line is about 1/4 inch.

<span style="background-color:rgba(255,255,255,0)">That is one of the line= that we found collapsed, and started us on this direction.

Is it possible that the supply air is not being able to overcome the pressure at the valve?</span>

The pressure read at the panel is a control pressure, also known as "Muscle air".

Maybe the input air at the 4 inch diameter inlet, can overcome the control air.

I again suspect an issue with the LP valve-

=span style="background-color:rgba(255,255,255,0)">

There is no valve position, or feedback signal from the valve-

Just a quick check-<span>

Th= ground checks for the precooler system are limited,

My training manual shows that the valve should start to open at about 74%HP on the ground,

=span style="background-color:rgba(255,255,255,0)">Wing heat on, there sh=uld be airflow.

Regards,

<=iv>Pete

<=r>Sent from my iPhone

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=A0 please note

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