

To: jeevacation@gmail.com[jeevacation@gmail.com]
From: Lvjet
Sent: Tue 1/28/2014 12:45:27 AM
Subject: GIV vibration update

Jeffrey,

I spoke to Kearney what an amazing knowledgeable person and a great find by you!, he designed the EVM system (Engine Vibration Monitor) on the GIV and informed me of its shortcomings in detecting engine problems. The EVM system was designed due to the FAA implements of the TAY engine for the GIV, and required a monitor system to detect engine early warning vibration that could lead to failure. Kearney recommended isolation mounts, and fan balance, I told him, we are having a challenge isolating this problem to one engine, however, since both engines are similar in overhaul times, both may be cause of our airframe buffet.

Even though our EVM is reading normal, doesn't mean we do not have a fan imbalance or other issue internally, according to Kearney, it is normal for TAY engine that are mid life or closer to overhaul inspections to have vibrations that are within limits according to Rolls Royce specs, this doesn't make it right, -first area Kearney wants me to investigate is Cowling chafing, which would indicate isolation mounts failing, I informed him, we are changing the mounts during this visit, -LP Fan balance or N1 fan chaffing could cause airframe Vibration also, which we need to look at further. -Pylon cowling seals are important also Kearney indicated, but our problems appears to be engine internal, since pulling the engines to idle, creates a smooth ride.

I think it would be to our advantage having him present if we address fan balance or any other internal problems with Rolls Royce, since our Corporate Care program could find this vibration within limits, and not feel it is necessary to remove or exchange the engines.

Kearney just had colon surgery and is recovering now, he is willing to help us out and accompany us on our test flight when we depart Islip, if you would like to do this?

thank you,
Larry