

Vibration on Landing

Dean Byers (CA) - Thanks for all the answers and advice I got regarding a low speed vibration on landing roll-out. I wish to share the answers I received as the cause or what to go check out (number of responses for the subject are in parentheses):

Warped Discs (6), Nose Wheel Shimmy (2), Main Wheel Balance (3), Wheel Pant Balance (3), Lower Main Tire Pressure (2), Wrap the Gear (1), Nose Wheel Tire Balance (1), Loose Main Axles (2)

By far the most response favored a warped disc. Well I thought it was the nose wheel shimmy and as I deemed it the easiest to check out, proceeded in that direction. I tightened the castellated nut one hole at a time and then test flew (landed) after each adjustment. After the first adjustment, vibration appeared to lessen, so I thought I might be onto something. But each of the other two adjustments brought less if no return, vibration was still there.

Upon making the logbook entries, I realized the annual condition inspection was due. As part of the annual condition inspection, there are items on my checklist to inspect the brakes and pack the bearings. While that was all apart, I decided to check the main axles for tightness (as two respondents suggested) and guess what, they were loose. In particular the left side.

Man was I surprised and it is now on my checklist. After finishing up the annual condition inspection, I test flew the airplane and no vibration on landing Thanks again to the list for all your support, in particular the two gentlemen who suggested the loose axles, one of whom (if I recall correctly and sorry that I don't remember the other) was Dave Timms.