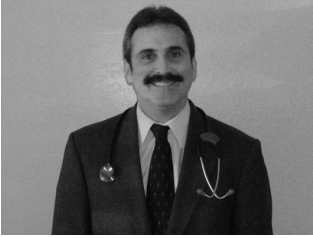


## **I passed my flight physical, I must be healthy!**



**David Bryman, D.O**  
**Senior Aviation Medical Examiner**  
**FAA, Transport Canada, JAA**

I recently had an interesting experience flying my Piper Warrior (PA-28-161) down to Mexico this summer as part of a volunteer medical team.

I left Scottsdale early in the morning and flew the first leg to Guaymas, Mexico an uneventful flight that took a little over 3 hours. The weather was hazy with light headwinds. The next part of the trip was over approximately 85 NM of water to Mulege located in Baja Sur. I climbed to 4,500 feet, turned up the music and was thoroughly enjoying the beautiful scenery and perfectly smooth conditions.

The normal engine hum was suddenly interrupted by an intermittent roughness that I have never experienced before. Unfortunately, at that time I was approximately 40 miles from the nearest land. I tried several things to improve the engine roughness such as leaning the mixture, changing fuel tanks, and a trial of carburetor heat. I soon realized that the engine roughness was not going to improve by these measures.

The situation progressed and the engine began to vibrate roughly. I had difficulty holding altitude as I was unable to get full power. Luckily, the shore was closer now, and I was able to land the airplane on a small dirt strip at the edge of the bay.

I found out later that there were several mechanical problems that lead to this unplanned landing. Apparently, there was a stuck exhaust valve on the number 4 cylinder, a bad magneto and several fouled spark plugs (to name a few).

The surprising part to me was the fact that the airplane had come out of an annual inspection one day prior to my trip. I think I was lulled into a false sense of security by the annual, and very surprised that the mechanical problems were not discovered and prevented. Only later did I find out that items like exhaust valves and such are not routinely checked at a normal annual. I guess I expected the annual inspection would uncover most potential problems with the airplane, not realizing that some problems are not very obvious, and one must look deeper, depending on the symptoms (of which there were none at that time).

I realized that there are similarities when a pilot gets an FAA medical exam from an Aviation medical examiner. The FAA medical is designed to determine if a pilot is fit to

fly an airplane, and that he/she meets the medical standards set forth by the FAA. For example, the standards for distant vision for a first class medical is 20/20 with or without corrective lenses. If the pilot does not meet the standards then he is not issued a medical certificate. The eye exam portion is not designed to uncover other ophthalmologic conditions such as early glaucoma or determine subtle conditions in the optic fundus for example.

There is an important distinction between passing the minimum standards allowable to obtain an FAA medical certification, and determining general health and fitness of a patient. The FAA medical exam is a general exam that reviews medical history (with attention to disqualifying medical conditions), current medications, blood pressure, pulse, visual and hearing tests as well as a urine test that looks for sugar and protein. It is not designed to be a comprehensive physical or a substitution for a good preventive medical evaluation.

The general pilot medical exam does not include lab work for PSA, cholesterol, blood sugar, liver profile and so on. Also, the routine evaluations such as mammography, PAP smear, and colonoscopy are typically not included, (although they should be discussed by the AME and recommended if necessary). I do know many AME's that will offer a prostate exam to the pilots as part of the general evaluation.

The AME will have to be more thorough if physical abnormalities are discovered at the time of the exam. For example, if a pilot is diagnosed with hypertension and given medical treatment, he/she must have lab work including blood sugar, kidney function and cholesterol. The pilot will need to have an EKG and in some cases even a stress test to check if there are any heart problems as a result of the high blood pressure.

Remember passing the standards for the flight physical, does not assure that your general health is good and there are no underlying conditions that need to be addressed. I wonder if there are pilots that might be lulled into a false sense of security about their general health after passing a flight physical, just as I was after my airplane's annual. My advice to pilots is to get your valves checked, so you don't wind up landing somewhere you didn't intend on landing!