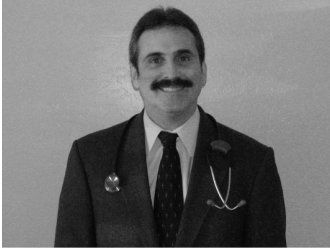


## Cardiovascular considerations for Aviators Part 2

*How to navigate through the FAA avoiding turbulence and delays with your medical certificate.*



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In Part 1 we discussed some common cardiovascular conditions, cardiac risk and medical assessment. This month's article will discuss some specific cardiac conditions and how they relate to pilots and their medical certification.

The common cardiovascular conditions that I would like to discuss are as follows: myocardial infarction (heart attack), angina (chest pain from blocked arteries), coronary artery stenting, coronary artery bypass, atrial fibrillation, pacemakers and valvular heart disease.

Rather than discuss treatment options for a specific illness, I will assume that the correct treatment already occurred and the pilot is considering applying for special issuance to reinstate a medical certificate.

When considering a pilot for medical reinstatement after a cardiac condition or event there are a few key items that must be answered. For example, what damage has the event caused to the function of the heart? (if a pilot had a heart attack, its important to know whether the heart attack damaged the heart function or not). Also, certain heart attacks can cause rhythm disturbances, leaky valves, and heart failure (to name a few).

The pilot must wait 6 months after a cardiac event (angina, infarction, bypass, stenting, angioplasty) before the application can be considered by the FAA. This assures that the condition is improved and stable. Hospital reports of history and physical, discharge summary, cardiac catheterization report and surgical reports must be obtained.

All cardiac events and conditions need to have a ***current*** cardiac assessment that includes: an assessment of personal and family medical history, a clinical cardiac and general medical exam, list of medication and any side effects that the patient might be

experiencing, an assessment of functional capacity, cardiac risk factors, lab results, and prognosis that includes any risk of sudden incapacitation.

A maximum stress test must be included with the evaluation. The stress test needs to be done after the mandatory 6 month waiting time. It must be to maximum heart rate which means that some medication may need to be discontinued for the test, if the medicine affects the heart rate (with permission of the cardiologist of course). All original tracings from the monitor during the stress test must be included with the packet to the FAA. Occasionally, a SPECT myocardial perfusion scan will be required if clinically indicated.

**Please read the following paragraph carefully:**

**If a pilot is requiring a first class or unlimited second class medical**, and the pilot has a history of a cardiac event (angina, infarction, bypass, stenting, or angioplasty), then **a post event cardiac catheterization and a thallium stress test will be required for certification**. The tests must be done after the 6 month waiting period. (The FAA will accept an application without the angiogram, but the chance of certification is unlikely).

If a pilot has a history of atrial fibrillation, or valvular heart disease then the cardiac cath is usually not required unless recommended by the patients own cardiologist. The pilot will need the above information including the stress test as well as a holter monitor report and tracings and a 2D echocardiogram. If there was a pacemaker implanted then a 2 month recovery period is usually required. For atrial fibrillation treated with medication (coumadin), the FAA will require copies of lab work to be sure that the anticoagulation dose is therapeutic.

The FAA will certify valve replacement surgery and as of recently will *consider* heart transplant surgery in very rare cases if strict criteria is met.

As with all special issuances, the FAA will require follow up information usually on a yearly basis (may be more frequent). This information may include stress EKG and lab work, as well as a current status letter from the treating physician.

It is the responsibility of the **applicant pilot**, *not the AME, the treating physician, the FAA or anyone else* to provide the requested information. The information should be sent to the FAA in one mailing. The case will not be looked at or worked by the FAA unless all the required information is available. Any qualified, experienced AME can assist the pilot with this process. I have seen cases turned around by the FAA in as little as 6 weeks when all the information has been provided. The delays are almost always a result of the pilot not providing the needed items.

Think of navigation through the special issuance process with the FAA as you would traveling in your airplane. Firstly, is the flight possible? In other words, discuss your situation with your AME to be sure your particular medical problem will *fly* with them. (Your cardiac status may be fine, but the meds your taking for depression may disqualify you). Secondly, *think ahead, plan and prepare* just as you would in flying. Gather the

information and bring it to your AME for review before you mail it to the FAA. Thirdly, *be patient*. These are usually complicated medical cases that need a thoughtful experienced physician's review to give a fair assessment. The reviewer is trained in Aerospace medicine and is highly qualified to render an opinion. Sometimes a committee of cardiology specialist will convene to discuss the more complicated cases. The FAA issues ***way more*** special issuances than they deny. In my experience the denials are usually justified and are pilots that simply should not be flying.

Please feel free to visit my web site at [www.drBryman.com](http://www.drBryman.com) to download the required information for special issuance. Of course, the required forms are also available at the FAA web site [www.faa.gov](http://www.faa.gov).

*The views and opinions in this article are of the author only. They do not represent the opinions of the FAA. All cases are determined by the FAA on an individual basis.*