

Test Your CQ* With Three New Cases

THERE WILL BE SITUATIONS where you will need to provide a white medical certificate to an airman without performing an examination, as when renewing an AME-Assisted Special Issuance for an airman who is not due an examination. As you know, the backs of the old replacement white certificates (FAA Form 8500-9) are no longer accurate.

We do not plan to print new certificates because the AMCS and DIWS will be soon modified to permit direct printing of certificates, regardless of whether or not an examination is being entered into the system. In the interim, you can either use a white certificate from an unused FAA Form 8500-8 and write “void” across the remaining form, or utilize the unused white certificates

Here are some examples of cases that I have reviewed over the past weeks.

1. A 65 y/o airman, who hasn't had an FAA medical examination for 15 years, goes to you for a third-class physical. He reports angina pectoris and subsequent cardiac catheterization, percutaneous transluminal angioplasty, and insertion of a stent in his left anterior descending artery. These events took place 9 months ago, and the workup material he provided took place 7 months after the events. He provides you with a favorable status report that lists aspirin, Toprol XL, Plavix, and Lipitor as his current medications. He exercised for 9 minutes on a maximal nuclear stress test. He achieved a maximal heart rate of 139 beats per minute (89% of his maximal rate). There were no scars or reversible ischemia seen on the scan, and the ejection fraction was 64%. As you were reviewing his history and physical from the angioplasty event, you noted that 5 years ago, he was diagnosed with bipolar disorder. Should we issue him an authorization?

Answer: No. Although it appears that he could receive a special issuance for his cardiac problems, he is not eligible for

*Certification Quotient



Certification Update

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that remain after you have issued an individual a yellow student certificate.

We need the voided forms for accounting purposes, so you can batch mail them to us on a monthly basis, along with handwritten airman histories. Unfortunately, these certificates will need to be typewritten until we modify AMCS and DIWS. We recommend that you keep a photocopy of

a waiver because his bipolar disorder is one of the 15 specifically disqualifying medical conditions.

2. An 84-y/o airman requests a third-class recertification with a history of diabetes mellitus on the oral medication Metformin (Glucophage™) and a 7-year history of myocardial infarction, coronary artery disease, with percutaneous transluminal angioplasty and stents in the first obtuse marginal and left anterior descending arteries. Last year, he provided a plain Bruce stress test to 6 minutes at 163 maximal heart rate, which was 122% of his predicted maximal rate. The test was negative for ischemia. His treating physician provided a letter that appeared to be favorable. This year, he exercised for 3 minutes and 34 seconds and provided a nuclear stress test with a maximal rate of 140 BPM and peak systolic BP of 209/90. The study was positive for scarring in the posterolateral wall. Should he get a new authorization?

Answer: No. When we send an airman an authorization letter for these conditions, we also send a *specification sheet*. The sheet lists the required tests

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these issued certificates for your records. NOTE: Replacement yellow student certificates (FAA Form 8420-2) are unchanged and available.

On another topic, the ONLY individuals who can grant certification for the following cases are the Federal Air Surgeon, Aerospace Medical Certification Division physicians, or Regional Flight Surgeons. An aviation medical examiner may not issue a medical certificate to an airman with a disqualifying medical condition without verbal or written permission from one of the above-mentioned individuals.

We encourage you to learn the FAA's requirements for disqualifying medical conditions, so you can advise your airmen what they need to provide us to be considered for an Authorization for Special Issuance. You can find such information in the online *Guide for Aviation Medical Examiners*, in previous editions of this *Bulletin*, or by calling one of us!

and how we want them performed. In prior columns, I explained that we have *cut points* or limits based on risk. We generally require an airman to exercise for 9 minutes, to achieve a maximal heart rate response of 100%, based on age (equivalent to 7 to 10 METS),¹ and to achieve a double product of 25,000. It has been shown that cardiac patients who reach these end points have a 99 percent chance of surviving for one year and a 94 percent chance of surviving four years. If an airman is 70 or older, we allow a minimal exercise time of 6 minutes based on the functional aerobic capacity of people over the age of 70. So, this airman will be denied for inadequate exercise capacity because he could not exercise for 6 minutes.

3. The final case is a 65-y/o airman who, 20 years ago, had an authorization for special issuance for percutaneous transluminal angioplasty (PTCA) and stents in first and second obtuse marginal and PTCA with stent in the right coronary artery. He now desires a third-class medical and presents with new material. The letters from his treating physicians mention angina and ischemia. He provided the results of a maximal nuclear stress test on which he

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as well as his phobia, responded well to the therapeutic interventions and did not require medication.

Outcome. Based on the guidance found in 14 CFR 67.401, the Aerospace Medical Certification Division (AMCD) may grant special issuances to airmen who do not meet flying class medical requirements. The decision to grant such an issuance is based on the individual considerations of each case. Medical certification of an airman diagnosed with *specific phobia—flying an aircraft* depends upon the successful resolution of symptoms and maintenance of symptom remission.

In this case, the airman demonstrated good insight and judgment in concluding he could not safely fly with the symptoms he experienced. He also actively participated in his treatment and demonstrated excellent insight, judgment, and motivation throughout the treatment process. Because the airman was able to normalize his distorted thought processes, he was able to overcome his anxiety associated with flying. He was no longer obsessed with concerns about the weather or flying conditions, and he regained confidence in his flying ability. Given that his mental and physical symptoms resolved successfully, the AMCD concluded it was unlikely

that his symptoms would relapse during flight, and there was no significant risk for incapacitation during flight, even when he encountered turbulence. Therefore, the AMCD exercised the guidance found in 14 CFR 67.401 and granted the airman a 1st-class, 6-month special issuance.

Additionally, the AMCD warned the airman that he must report any adverse changes in anxiety symptoms. Failure to report a change in status would result in removal of his medical authorization to fly. To renew the special issuance at the end of the 6-month period, the AMCD required the airman to provide a current status consultation report from his therapist noting the airman's mental health status. Further issuances were dependent upon the continued remission of the airman's anxiety symptoms.

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exercised for 6 minutes and 30 seconds, attained a maximal heart rate of 138 (91% of his maximal rate), and a peak BP of 180/90. The test demonstrated reversible ischemia in the mid anterior, basal to mid inferior and basal infero-septal areas. The ejection fraction was 58%. A cardiac catheterization was done in May 2007 that showed:

- Left main: normal
- Left Anterior Descending: 30 to 50% stenosis
- Circumflex (CCX): proximal stent patent
- OM1: 95% ostial stenosis
- 80% narrowing of the CCX after the OM2
- Right coronary (dominant): 30% mid stent stenosis

- Posterior descending artery: 20% stenosis and 50% mid stenosis
- Patent intermediate artery

The airman was taking Ranexa (ranolazine) for chronic angina, but the mechanism of action for its effects is unknown. It causes prolongation of the QT interval. It was also noted that the airman had three DUI offenses from 1985 to 1989. He did not provide any history of these events, other than to say that he had not imbibed since 2005.

Should he be granted an authorization for special issuance?

Answer: No. This airman was denied for ischemia on stress testing, ongoing coronary disease, use of the unacceptable medication (Ranexa), and a history of three DUIs.

NOTES: Three DUIs in a lifetime are considered *alcoholism* until proven otherwise. An airman with this history alone would be denied and required to provide us with the court documents, a typewritten letter explaining the details of all of the DUI events, a typewritten accounting of the history of their alcohol consumption, and a substance abuse psychiatric and psychological evaluation.

Ranexa is used for chronic angina. Its main side effects are QT prolongation and dizziness. Therefore, it is unacceptable for aeromedical certification.



¹Ramamurthy G, Kerr JE, Harsha B, Tavel, ME. The treadmill test—Where to stop and what does it mean? *Chest* April 1999; 5:1166-9.