

# Aerospace Medical Association



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Federal Aviation Administration  
Office of the Chief Counsel  
Attn: Rules Docket (ACC-10)  
Docket Number 25910  
800 Independence Avenue, SW  
Washington, DC 20591

To Whom It May Concern:

The Aerospace Medical Association (AsMA) respectfully submits to you our response to Notice of Proposed Rule Making (NPRM) on FAR. Part 61. Our comments are focused in two areas: 1) the issue of medical self-certification of recreational pilots, and 2) the introduction of human factors training requirements for all levels of pilot certification.

## 1. Medical Self-certification

The Aerospace Medical Association strongly opposes the medical self-certification of recreational pilots and strongly supports the existing policy of requiring all pilots to hold at least a Class 3 Medical Certificate. We view the ability to safely perform recreational flying as no different than other forms of general aviation flying. Periodic medical surveillance is a critical element of flying safety for all pilots. Medical "self-certification" exists today in that pilots, in between their required FAA medical examinations, must "ground" themselves if they develop a health problem. The majority of pilots, especially professional pilots, adhere to this requirement. However, the experience of practicing Aviation Medical Examiners is that private or recreational pilots are most often the ones who proceed to fly with existing medical problems. The periodic FAA medical examination provides the flight surgeon/AME the venue in which to inquire about and investigate medical conditions which are not reported by the pilot on the history portion of the FAA 8500-8. This, in many cases, may be just an oversight on the part of the pilot; but it can also indicate an attempt to voluntarily under report medical problems. Eliminating

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the medical examination for recreational pilots will remove even the possibility that latent or under reported medical problems, with an adverse flight safety impact, will be discovered and treated.

The FAA NPRM listed 11 specific questions on which comments were requested. Members of the AsMA Aviation Safety Committee reviewed each question and prepared responses. In the event the FAA proceeds to implement a rule which would allow medical self-certification for recreational pilots, the Aerospace Medical Association submits the following answers to the 11 questions.

#### QUESTIONS:

*1. Should the rule specifically prohibit holders of pilot certificates who do not also hold medical certificates from flying if they know or should know that they have certain conditions?*

Answer: Yes. Given a limited operational scope for the recreational pilot, it may be reasonable to allow aviators to judge their fitness to exercise recreational pilot privileges provided there are standards on which to base their decisions. As such, the proposed rule change should include provisions requiring recreational pilots to certify that they are free of disqualifying medical conditions while exercising these privileges. As a minimum, the following conditions should be disqualifying:

- (1) Distant visual acuity worse than 20/50 in each eye separately, uncorrected.
- (2) Disturbances in equilibrium.
- (3) Established medical history or clinical diagnosis of any of the following:
  - (a) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.
  - (b) A psychosis.
  - (c) Alcoholism, using the definition "a condition in which a person's intake of alcohol is great enough to damage physical health or personal or social functioning, or when alcohol has become a prerequisite to normal functioning".
  - (d) Drug dependence, using the definition, "a condition in which a person is addicted to or dependent on drugs other than alcohol, tobacco, or ordinary caffeine-containing beverages, as evidenced by habitual use or a clear sense of need for the drug"
- (4) Established medical history or clinical diagnosis of either of the following:
  - (a) Epilepsy.
  - (b) Unexplained loss of consciousness.
- (5) Established medical history or clinical diagnosis of:
  - (a) Myocardial infarction;

- (b) Angina pectoris; or
  - (c) Coronary heart disease requiring treatment or, if untreated, that has been symptomatic or clinically significant.
- (6) Established medical history or clinical diagnosis of diabetes mellitus requiring insulin or any other hypoglycemic drug for control.
  - (7) Other organic, functional or structural disease, defect, or limitation that makes the applicant unable to safely exercise the privileges of the recreational airman certificate.
  - (8) Use of medications or other treatment that makes the applicant unable to safely operate machinery or vehicles, including aircraft.

Rationale: The FAA's system of medical evaluation has always been based on self-disclosure by the aviator. Only the vision standards are exclusively objective - all others are partially or completely based on the aviator's self-reported medical history. Once a medical certificate is issued, aviators become the only evaluator of their fitness to safely fly on any given day during the period the certificate is in effect.

2. *Should the rule state that pilots who have failed a medical examination by the FAA be prohibited from claiming that they have no known medical deficiencies?*

Answer: It would be better to deal with the issues of self-certification of no known defects and prior medical denials as separate questions. The Aviation Safety Committee believes that those individuals having previously failed an FAA medical examination should be required to note the FAA denial on their application in a separate question. The individual should be required to indicate which class of medical certificate was denied along with the reason and date, e.g., 1st class medical, Coronary heart disease, 29 Nov 95.

Rationale: Applicants are denied FAA medical certificates for many reasons. An individual denied a 1st Class medical certificate could well meet the requirements of a 2nd or 3rd Class certificate. Separating the questions will allow application processors to identify those individuals requiring further FAA medical examination.

3. *Should the rule state that pilots who have had their medical certificate revoked or suspended be prohibited from claiming that they have no known medical deficiencies?*

Answer: Yes, it should be addressed in an additional question.

Rationale: For the same reasons listed in question #2.

4. *Should the rule state that pilots who hold or have held a medical special issuance be prohibited from claiming that they have no known medical deficiencies?*

Answer: Yes, it should be addressed in an additional question.

Rationale: For the same reasons listed in question #2.

5. What, if any, documentation should the FAA require persons without an airman medical certificate to execute in order to identify that they have evaluated their medical fitness to fly and that, to the best of their knowledge and belief, they are medically qualified to pilot an aircraft? How often (before each flight, annually)? What kind of documentation?

Answer: The application should contain a clause stipulating the applicant's understanding of the responsibility they assume when they elect to exercise the recreational pilot privileges without a medical certificate. They should also be required to stipulate that they understand that they should not pilot an aircraft, without first consulting an AME, should their medical condition change.

In discussing the issues of recurring documentation, the committee felt that requiring individuals to periodically certify that they are medically fit runs counter to the stated objective of the proposed rule change, i.e. to delete unnecessary, burdensome regulations.

Rationale: Requiring pilots to stipulate they have none of the disqualifying medical conditions listed in answer # 1 is an additional safeguard, but one that does not create an unnecessary burden on the applicant.

6. *How, if at all, should the FAA require pilots without a medical certificate to disclose to passengers that they have not been medically certified by the FAA?*

Answer: The committee was unable to solve this question, believing mandatory disclosure rules would be impossible to enforce.

Rationale: This question deals with legal and enforcement issues that are beyond the usual scope of the activities of most members of the Aerospace Medical Association.

7. *How should the FAA enforce and monitor compliance with 61.53 (b)?*

Answer. The committee was unable to solve this question.

Rationale: This question deals with legal and enforcement issues that are beyond the usual scope of the activities of most members of the Aerospace Medical Association.

8. *Should pilots who do not hold medical certificates be obligated to provide the FAA with their medical history / records upon request, either as part of a specific investigation or randomly as part of a compliance program?*

Answer: Yes. The committee strongly felt that as a condition of exercising recreational pilot privileges, a clause granting access to the medical records of those pilots involved in either violations of the FARs or aircraft accidents should be required.

Rationale: Aerospace Medicine has a lengthy history of monitoring the health of the aviation community. Many would argue that the reason medical factors are rarely listed as contributing causes in aviation accidents is due to the effectiveness of periodic medically screening of aviators. These proposed changes mark a significant departure from long-standing FAA policy. The full implications of this change, while open to discussion, cannot be known until implemented. Therefore, a provision granting access to the medical records of pilots involved in mishaps or violations would be an important component in future evaluations of the impact of this policy change.

*9. Should the FAA be able to require pilots who do not hold medical certificates to undergo medical testing when any uncertainty exists as to whether or not they have any medical problems?*

Answer: Yes. The FAA should have the power to require a medical certification examination in those cases in which information is discovered that a pilot may have a disqualifying condition, despite statements to the contrary by the aviator.

Rationale: AsMA believes that the majority of airmen choosing to exercise recreational pilot privileges without a current medical certificate will do so responsibly and safely. In those cases where uncertainty exists due to conflicting information, the FAA should have the power to require medical certification examinations to protect the safety of the general public.

*10. Should pilots who have known medical deficiencies be required to surrender their airman certificates?*

*and*

*11. If pilots are allowed to keep their airman certificate when they have a known medical deficiency, should the FAA require the airman certificates be stamped "NOT VALID UNLESS ACCOMPANIED BY A CURRENT MEDICAL CERTIFICATE?"*

Answer: Yes to both questions.

Rationale: AsMA believes that in the interest of aviation safety, those individuals with known disqualifying conditions should surrender their airman certificates, pending medical evaluation and certification by the FAA. Individuals with a deficiency that requires periodic re-evaluation, but is not permanently disqualifying, should have a statement on the airman certificate similar to the one listed in question 11.

In summary, concerning medical self-certification of recreational pilots:

The Aerospace Medical Association does not support the proposed change to the Federal Aviation Regulations to allow individuals exercising the privileges of recreational pilot to do so without requiring them to hold a medical certificate, including pilots with higher pilot certificates. AsMA strongly supports the continued need for medical standards for all individuals exercising privileges related to the operation of aircraft, even recreational pilots. AsMA reaffirms the position that certain medical conditions are incompatible with aviation activities due to the increased risk of the individual suffering an unpredictable, suddenly incapacitating event. Accordingly, the FAA should factor such disqualifying medical conditions into new rules governing recreational pilot certificates.

## **2. Human Factors Training**

The Aerospace Medical Association applauds the recent FAA proposal to introduce human factors training requirements for all levels of pilot certification. We firmly believe that the introduction of human factors training as an integral part of the pilot training regimen is both well-founded and necessary, and we strongly support the FAA's efforts in this regard.

While human factors training should be incorporated at all levels of flight training, we recommend that a primary emphasis be placed on initial pilot training to ensure that proper attitudes and behaviors are developed early in the life of a pilot. In addition, we strongly urge that the FAA adopt a broader view with respect to human factors training. The training should include all aspects of the human factors that influence pilot performance in flight. An example of the broad array of issues generally addressed under aviation human factors can be gleaned from existing texts and training programs. These topic areas cut across psychology, physiology, and medicine, and are summarized below.

- a) Basic physiology and the effects of flight on eyes and ears, disorientation, visual illusions, diet, hydration, and health.**
- b) Cognitive processes including human information processing, cognition, pilot judgment, decision making, memory, attention, and problem solving.**
- c) Performance factors such as heat and cold, altitude and hypoxia, flying after diving (decompression sickness), stress and stress management, sleep and fatigue, aircrew fatigue and circadian rhythms, workload, and time sharing.**

d) **Interpersonal interactions and communications** including individual differences, social psychology, flight deck management, group interaction, , flight crew performance, and crew resource management.

e) **Design of flight decks, documentation, and procedures** including aviation controls and displays, cockpit automation, software interfaces for aviation systems, cockpit-crew systems integration and design, and cockpit design.

f) **System safety** emphasizing the system perspective, human error in aviation operations, and why accidents happen.

g) **Selection and training** with emphasis on flight training and simulation. transfer of training, and learning to fly.

We recommend that instructor pilots be required to attend specially developed human factors training seminars that will provide the necessary background information and training to ensure that they have the knowledge, skills, and abilities to provide effective human factors training to pilots.

As this training is implemented, we recommend that the FAA undertake a program to evaluate the training efforts and to identify the utility of various aspects of the training.

Thank you for the opportunity to comment on this NPRM.

Sincerely,



James M. Vanderploeg, M.D.  
President