2014

GUIDE FOR AVIATION MEDICAL EXAMINERS

Welcome to the Guide for Aviation Medical Examiners. The format of this version of the Guide provides instant access to information regarding regulations, medical history, examination procedures, disposition, and protocols, necessary for completion of the FAA Form 8500-8, Application for Airman Medical Certificate or Airman Medical and Student Pilot Certificate.

To navigate through the Guide PDF by Item number or subject matter, simply click on the "BOOKMARK" tab in the left column to search specific certification decision-making criteria. To expand any "BOOKMARK" files, click on the corresponding + button located in the front of the text. To collapse any of the expanded files, click on the + button again.

The most current version of this guide may be found and downloaded at the following FAA site:

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/

TABLE OF CONTENTS

| TABLE OF CONTENTS | |
|--|-----|
| GENERAL INFORMATION | |
| 1. Legal Responsibilities of Designated Aviation Medical Examiners | |
| 2. Authority of Aviation Medical Examiners | |
| 3. Equipment Requirements | |
| 4. Medical Certification Decision Making | . 8 |
| 5. Authorization for Special Issuance and AME Assisted Special Issuance | |
| (AASI) | |
| 6. Privacy of Medical Information | |
| 7. Release of Information | |
| 8. No "Alternate" Examiners Designated | |
| 9. Who May Be Certified | 14 |
| 10. Classes of Medical Certificates | |
| 11. Operations Not Requiring a Medical Certificate | |
| 12. Medical Certificates – AME Completion | |
| 13. Validity of Medical Certificates | |
| 14. Title 14 CFR § 61.53, Prohibition on Operations During Medical Deficienc | - |
| ······ | |
| 15. Reexamination of an Airman2 | |
| 16. Examination Fees2 | |
| 17. Replacement of Medical Certificates | |
| 18. Disposition of Applications and Medical Examinations | |
| 19. Protection and Destruction of Forms2 | |
| 20. Questions or Requests for Assistance2 | |
| 21. Airman Appeals2 | 22 |
| APPLICATION FOR MEDICAL CERTIFICATION | 26 |
| I. AME Guidance for Positive Identification of Airmen and Application | |
| Procedures | |
| II. Prior to the Examination | |
| ITEMS 1-2. Application for; Class of Medical Certificate Applied For | |
| ITEMS 3-10. Identification | |
| ITEMS 11-12. Occupation; Employer | 31 |
| ITEM 13. Has Your FAA Airman Medical Certificate Ever Been Denied, | |
| Suspended, or Revoked? | 31 |
| ITEMS 14-15. Total Pilot Time | |
| ITEM 16. Date of Last FAA Medical Application | 32 |
| ITEM 17.a. Do You Currently Use Any Medication (Prescription or | |
| NONprescription)? | |
| ITEM 17.b. Do You Ever Use Near Vision Contact Lens(es) While Flying?3 | 33 |
| ITEM 18. Medical History | 33 |
| ITEM 19. Visits to Health Professional Within Last 3 Years | 40 |
| ITEM 20. Applicant's National Driver Register and Certifying Declaration4 | 41 |
| EXAMINATION TECHNIQUES AND CRITERIA FOR QUALIFICATION | |

| ITEMS 21-22. Height and Weight | 43 |
|--|-------|
| ITEMS 23-24. Statement of Demonstrated Ability (SODA); SODA Serial | |
| Number | 45 |
| ITEMS 25-30. Ear, Nose and Throat (ENT) | 46 |
| ITEMS 31-34. Eye | |
| ITEM 35. Lungs and Chest | |
| ITEM 36. Heart | |
| ITEM 37. Vascular System | 85 |
| ITEM 38. Abdomen and Viscera | 88 |
| ITEM 39. Anus | 93 |
| ITEM 40. Skin | 94 |
| ITEM 41. G-U System | 99 |
| ITEMS 42-43. Musculoskeletal | |
| ITEM 44. Identifying Body Marks, Scars, Tattoos | . 120 |
| ITEM 45. Lymphatics | . 121 |
| ITEM 46. Neurologic | . 123 |
| ITEM 47. Psychiatric | . 138 |
| ITEM 48. General Systemic | . 153 |
| ITEM 49. Hearing | . 161 |
| ITEMS 50- 54. Ophthalmologic Disorder | . 164 |
| ITEM 55. Blood Pressure | . 180 |
| ITEM 56. Pulse | |
| ITEM 57. Urine Test | . 182 |
| ITEM 58. ECG | |
| APPLICATION REVIEW | |
| ITEM 59. Other Tests Given | |
| ITEM 60. Comments On History and Findings | |
| ITEM 61. Applicant's Name | |
| ITEM 62. Has Been Issued | |
| ITEM 63. Disqualifying Defects | |
| ITEM 64. Medical Examiner's Declaration | |
| DISEASE PROTOCOLS | |
| PHARMACEUTICALS | |
| SPECIAL ISSUANCES | |
| SUBSTANCES OF DEPENDENCE/ABUSE | |
| SYNOPSIS OF MEDICAL STANDARDS | |
| GLOSSARY | |
| ARCHIVES AND UPDATES | . 305 |

Forms: http://www.faa.gov/library/forms

Federal Aviation Administration Regional and Center Medical Office Addresses:

http://www.faa.gov/licenses_certificates/medical_certification/rfs

Federal Aviation Administration FAA Flight Standards District Offices (FSDO's):

http://www.faa.gov/about/office_org/field_offices/fsdo

Title 14 Code of Federal Regulations Part 67 — Medical Standards and Certification:

http://ecfr.gpoaccess.gov/

Convention on International Civil Aviation International Standards on Personnel Licensing:

The international Standards on Personnel Licensing are contained in Annex 1 – *Personnel Licensing* to the Convention on International Civil Aviation. The FAA maintains an updated, hard copy of all the ICAO Annexes and also an on-line subscription. The FAA makes copies of Annex 1 available at seminars and can provide Examiner's access upon request.

http://www.icao.int/safety/AirNavigation/Pages/peltrgFAQ.aspx

GENERAL INFORMATION

This section provides input to assist an Aviation Medical Examiner (AME), otherwise known as an Examiner, in performing his or her duties in an efficient and effective manner. It also describes Examiner responsibilities as the Federal Aviation Administration's (FAA) representative in medical certification matters and as the link between airmen and the FAA.

1. Legal Responsibilities of Designated Aviation Medical Examiners

Title 49, United States Code (U.S.C.) (Transportation), sections 109(9), 40113(a), 44701-44703, and 44709 (1994) formerly codified in the Federal Aviation Act of 1958, as amended, authorizes the FAA Administrator to delegate to qualified private persons; i.e. designated Examiners, matters related to the examination, testing, and inspection necessary to issue a certificate under the U.S.C. and to issue the certificate. Designated Examiners are delegated the Administrator's authority to examine applicants for airman medical certificates and to issue or deny issuance of certificates.

Approximately 450,000 applications for airman medical certification are received and processed each year. The vast majority of medical examinations conducted in connection with these applications are performed by physicians in private practice who have been designated to represent the FAA for this purpose. An Examiner is a designated representative of the FAA Administrator with important duties and responsibilities. It is essential that Examiners recognize the responsibility associated with their appointment.

At times, an applicant may not have an established treating physician and the Examiner may elect to fulfill this role. You must consider your responsibilities in your capacity as an Examiner as well as the potential conflicts that may arise when performing in this dual capacity.

The consequences of a negligent or wrongful certification, which would permit an unqualified person to take the controls of an aircraft, can be serious for the public, for the Government, and for the Examiner. If the examination is cursory and the Examiner fails to find a disqualifying defect that should have been discovered in the course of a thorough and careful examination, a safety hazard may be created and the Examiner may bear the responsibility for the results of such action.

Of equal concern is the situation in which an Examiner deliberately fails to report a disqualifying condition either observed in the course of the examination or otherwise known to exist. In this situation, both the applicant and the Examiner in completing the application and medical report form may be found to have committed a violation of Federal criminal law which provides that:

"Whoever in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or who makes any false, fictitious or fraudulent statements or representations, or entry, may be fined up to \$250,000 or imprisoned not more than 5 years, or both" (Title 18 U.S. Code. Secs. 1001; 3571).

Cases of falsification may be subject to criminal prosecution by the Department of Justice. This is true whether the false statement is made by the applicant, the Examiner, or both. In view of the pressures sometimes placed on Examiners by their regular patients to ignore a disqualifying physical defect that the physician knows to exist, it is important that all Examiners be aware of possible consequences of such conduct.

In addition, when an airman has been issued a medical certificate that should not have been issued, it is frequently necessary for the FAA to begin a legal revocation or suspension action to recover the certificate. This procedure is time consuming and costly. Furthermore, until the legal process is completed, the airman may continue to exercise the privileges of the certificate, thereby compromising aviation safety.

2. Authority of Aviation Medical Examiners

The Examiner is delegated authority to:

- Examine applicants for, and holders of, airman medical certificates to determine whether or not they meet the medical standards for the issuance of an airman medical certificate.
- Issue or deny airman medical certificates to applicants or holders of such certificates based upon whether or not they meet the applicable medical standards. The medical standards are found in Title 14 of the Code of Federal Regulations, part 67.

A medical certificate issued by an Examiner is considered to be affirmed as issued unless, within 60 days after date of issuance (date of examination), it is reversed by the Federal Air Surgeon, a RFS, or the Manager, AMCD. However, if the FAA requests additional information from the applicant within 60 days after the issuance, the above-named officials have 60 days after receipt of the additional information to reverse the issuance.

3. Equipment Requirements

For the conduct of the medical examination, Examiners shall have adequate facilities for performing the required examinations and possess the following equipment prior to conducting any FAA examinations. History or current findings may indicate a need for special evaluations. Examiners shall certify at the time of designation, re-designation, or upon request that they possess (and maintain as necessary) the equipment specified.

1. <u>Standard Snellen Test</u>. Types for visual acuity (both near and distant) and appropriate eye lane. FAA Form 8500-1, Near Vision Acuity Test Card may be used for near and intermediate vision testing. Metal, opaque plastic, or cardboard occluder.

2. <u>Eve Muscle Test-Light</u>. May be a spot of light 0.5cm in diameter, a regular muscle-test light, or an ophthalmoscope.

3. <u>Maddox Rod</u>. May be hand-type.

4. <u>Horizontal Prism Bar</u>. Risley or hand prism are acceptable alternatives.

5. <u>Other vision test equipment</u> that is acceptable as a replacement for 1 through 4 above include any commercially available visual acuities and heterophoria testing devices.

6. <u>Color Vision Test Apparatus</u>. Pseudoisochromatic plates, (American Optical Company (AOC), I965 edition; AOC-HRR, 2nd edition); Dvorine, 2nd edition; Ishihara, Concise 14 -, 24 -, or 38-plate editions; or Richmond (I983 edition, 15-plates). Acceptable substitutes are: Farnsworth Lantern; OPTEC 900 Color Vision Test; Keystone Orthoscope; Keystone Telebinocular; OPTEC 2000 Vision Tester (Models 2000 PM, 2000 PAME, 2000 PI); OPTEC 2500; Titmus Vision Tester; Titmus 2 Vision Tester (Models T2A and T2S); Titmus i400.

7. <u>A Wall Target</u> consisting of a 50-inch square surface with a matte finish (may be black felt or dull finish paper) and a 2-mm white test object (may be a pin) in a suitable handle of the same color as the background. Note: this is not necessary if an AME chooses the acceptable option of performing field of vision testing by direct confrontation.

8. <u>Standard physician diagnostic instruments and aids</u> including those necessary to perform urine testing for albumin and glucose and those to measure height and weight.

9. <u>Electrocardiographic equipment</u>. Senior Examiners must have access to digital electrocardiographic equipment with electronic transmission capability.

10. <u>Audiometric equipment</u>. All Examiners must have access to audiometric equipment or a capability of referring applicants to other medical facilities for audiometric testing.

4. Medical Certification Decision Making

The format of the Guide establishes aerospace medical dispositions, protocols, and AME Assisted Special Issuances (AASI) identified in Items 21–58 of the FAA Form 8500. This guidance references specific medical tests or procedure(s) the results of which are needed by the FAA to determine the eligibility of the applicant to be medically certificated. The request for this medical information must not be misconstrued as the FAA ordering or mandating that the applicant undergo testing, where clinically inappropriate or contraindicated. The risk of the study based upon the disease state and test conditions must be balanced by the applicant's desire for certification and determined by the applicant and their healthcare provider(s).

After reviewing the medical history and completing the examination, Examiners must:

- Issue a medical certificate,
- Deny the application, or
- Defer the action to the Manager, AMCD, AAM-300, or the appropriate RFS

Examiners **may issue** a medical certificate *only* if the applicant meets all medical standards, including those pertaining to medical history unless otherwise authorized by the FAA.

Examiners **may not issue** a medical certificate if the applicant fails to meet specified minimum standards or demonstrates any of the findings or diagnoses described in this Guide as "disqualifying" unless the condition is unchanged or improved and the applicant presents written documentation that the FAA has evaluated the condition, found the applicant eligible for certification, and authorized Examiners to issue certificates. The following medical conditions are specifically disqualifying under 14 CFR part 67. However, the FAA may exercise discretionary authority under the provisions of Authorization of Special Issuance, to issue an airman medical certificate. See **Special Issuances** section for additional guidance where applicable.

- Angina pectoris;
- Bipolar disorder;
- Cardiac valve replacement;
- Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;
- Diabetes mellitus requiring insulin or other hypoglycemic medication;
- Disturbance of consciousness without satisfactory medical explanation of the cause;
- Epilepsy;
- Heart replacement;
- Myocardial infarction;
- Permanent cardiac pacemaker;
- Personality disorder that is severe enough to have repeatedly manifested itself by overt acts;

- Psychosis;
- Substance abuse and dependence;
- Transient loss of control of nervous system function(s) without satisfactory medical explanation of cause.

An airman who is medically disqualified for any reason may be considered by the FAA for an Authorization for Special Issuance of a Medical Certificate (Authorization). For medical defects, which are static or nonprogressive in nature, a Statement of Demonstrated Ability (SODA) may be granted in lieu of an Authorization.

The Examiner **always may defer** the application to the FAA for action. In the interests of the applicant and of a responsive certification system, however, deferral is appropriate only if the standards are not met; if there is an unresolved question about the history, the findings, the standards, or agency policy; if the examination is incomplete; if further evaluation is necessary; or if directed by the FAA.

The Examiner may deny certification *only* when the applicant clearly does not meet the standards.

5. Authorization for Special Issuance and AME Assisted Special Issuance (AASI)

A. Authorization for Special Issuance of a Medical Certificate (Authorization).

At the discretion of the Federal Air Surgeon, an Authorization for Special Issuance of a Medical Certificate (Authorization), valid for a specified period, may be granted to a person who does not meet the established medical standards if the person shows to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety during the period in which the Authorization would be in force. The Federal Air Surgeon may authorize a special medical flight test, practical test, or medical evaluation for this purpose. A medical certificate of the appropriate class may be issued to a person who fails to meet one or more of the established medical standards if that person possesses a valid agency issued Authorization and is otherwise eligible. An airman medical certificate issued in accordance with the special issuance section of part 67 (14 CFR § 67.401), shall expire no later than the end of the validity period or upon the withdrawal of the Authorization upon which it is based. An airman must again show to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety in order to obtain a new medical certificate and/or a Re-Authorization.

In granting an Authorization, the Federal Air Surgeon may consider the person's operational experience and any medical facts that may affect the ability of the person to perform airman duties including:

- The factors leading to and surrounding the episode
- The combined effect on the person of failing to meet one or more than one requirement of part 67; and
- The prognosis derived from professional consideration of all available information regarding the person

In granting an Authorization, the Federal Air Surgeon specifies the class of medical certificate authorized to be issued and may do any or all of the following:

- Limit the duration of an Authorization;
- Condition the granting of a new Authorization on the results of subsequent medical tests, examinations, or evaluations;
- State on the Authorization, and any medical certificate based upon it, any operational limitation needed for safety; or
- Condition the continued effect of an Authorization, and any second- or third-class medical certificate based upon it, on compliance with a statement of functional limitations issued to the person in coordination with the Director of Flight Standards or the Director's designee
- In determining whether an Authorization should be granted to an applicant for a third-class medical certificate, the Federal Air Surgeon considers the freedom of an airman, exercising the privileges of a private pilot certificate, to accept reasonable risks to his or her person and property that are not acceptable in the exercise of commercial or airline transport pilot privileges, and, at the same time, considers the need to protect the safety of persons and property in other aircraft and on the ground

An Authorization granted to a person who does not meet the applicable medical standards of part 67 may be withdrawn, at the discretion of the Federal Air Surgeon, at any time if:

- There is adverse change in the holder's medical condition;
- The holder fails to comply with a statement of functional limitations or operational limitations issued as a condition of certification under the special issuance section of part 67 (14 CFR 67.401);

- Public safety would be endangered by the holder's exercise of airman privileges;
- The holder fails to provide medical information reasonably needed by the Federal Air Surgeon for certification under the special issuance section of part 67 (14 CFR 67.401); or
- The holder makes or causes to be made a statement or entry that is the basis for withdrawal of an Authorization under the falsification section of part 67 (14 CFR 67.403)

A person who has been granted an Authorization under the special issuance section of part 67 (14 CFR 67.401), based on a special medical flight or practical test, need not take the test again during later medical examinations unless the Federal Air Surgeon determines or has reason to believe that the physical deficiency has or may have degraded to a degree to require another special medical flight test or practical test.

The authority of the Federal Air Surgeon under the special issuance section of part 67 (14 CFR 67.401) is also exercised by the Manager, AMCD, and each RFS.

If an Authorization is withdrawn at any time, the following procedures apply:

- The holder of the Authorization will be served a letter of withdrawal, stating the reason for the action;
- By not later than 60 days after the service of the letter of withdrawal, the holder of the Authorization may request, in writing, that the Federal Air Surgeon provide for review of the decision to withdraw. The request for review may be accompanied by supporting medical evidence;
- Within 60 days of receipt of a request for review, a written final decision either affirming or reversing the decision to withdraw will be issued; and
- A medical certificate rendered invalid pursuant to a withdrawal, in accordance with the special issuance section of part 67 (14 CFR 67.401) shall be surrendered to the Administrator upon request
- B. AME Assisted Special Issuance (AASI).

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization to an applicant who has a medical condition that is disqualifying under 14 CFR part 67. An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the requisite medical information

required for determination. Examiners may not issue initial Authorizations. An Examiner's decision or determination is subject to review by the FAA.

6. Privacy of Medical Information

A. Within the FAA, access to an individual's medical information is strictly on a "need-to-know" basis. The safeguards of the Privacy Act apply to the application for airman medical certification and to other medical files in the FAA's possession. The FAA does not release medical information without an order from a court of competent jurisdiction, written permission from the individual to whom it applies, or, with the individual's knowledge, during litigation of matters related to certification. The FAA does, however, on request, disclose the fact that an individual holds an airman medical certificate and its class, and it may provide medical information regarding a pilot involved in an accident to the National Transportation Safety Board (NTSB) (or to a physician of the appropriate medical discipline who is retained by the NTSB for use in aircraft accident investigation.)

The Examiner, as a representative of the FAA, should treat the applicant's medical certification information in accordance with the requirements of the Privacy Act. Therefore, information should not be released without the written consent of the applicant or an order from a court of competent jurisdiction. In order to ensure that release of information is proper, whenever a court order or subpoena is received by the Examiner, the appropriate RFS, or the AMCD, should be contacted. Similarly, unless the applicant's written consent for release is of a routine nature; e.g., accompanying a standard insurance company request, advice should be sought from the FAA before releasing any information. In all cases, copies of all released information should be retained.

B. Health Insurance Portability and Accountability Act of 1996 (HIPAA) and Examiner's activities for the FAA. This Act provides specific patient protections and depending upon an Examiner's activation and practice patterns, you may have to comply with additional requirements.

C. Examiners shall certify at the time of designation, re-designation, or upon request that they shall protect the privacy of medical information.

7. Release of Information

Except in compliance with an order of a court of competent jurisdiction, or upon an applicant's written request, Examiners will not divulge or release copies of any reports prepared in connection with the examination to anyone other than the applicant or the FAA. A copy of the examination may be released to the applicant upon request. Upon receipt of a court subpoena or order, the Examiner shall notify the appropriate RFS. Other requests for information will be referred to:

MANAGER AEROSPACE MEDICAL CERTIFICATION DIVISION, AAM-331 CIVIL AEROMEDICAL INSTITUTE FEDERAL AVIATION ADMINISTRATION POST OFFICE BOX 26200 OKLAHOMA CITY, OK 73125-0080

8. No "Alternate" Examiners Designated

The Examiner is to conduct all medical examinations at their designated address only. An Examiner *is not permitted* to conduct examinations at a temporary address and is not permitted to name an alternate Examiner. During an Examiner's absence from the permanent office, applicants for airman medical certification shall be referred to another Examiner in the area.

9. Who May Be Certified

a. Age Requirements

There is no age restriction or aviation experience requirement for medical certification. Any applicant who qualifies medically may be issued a Medical Certificate, FAA Form 8500-9 (white), regardless of age. Examiners also have been delegated authority to issue the combined Medical Certificate and Student Pilot Certificate, FAA Form 8420-2 (yellow), which is age restricted because it is an airman medical and student pilot certificate (student license and medical certificate). For issuance of the combined certificate, the applicant must have reached his or her 16th birthday.

Minimum age requirements for the various airman certificates (i.e., pilot license certificates) are defined in 14 CFR part 61, Certification: Pilots and Flight Instructors, and Ground Inspectors as follows:

- (1) Airline transport pilot (ATP) certificate: 23 years
- (2) Commercial pilot certificate: 18 years
- (3) Private pilot certificate: powered aircraft 17 years;

gliders and balloons - 16 years

(4) Student pilot certificate: powered aircraft - 16 years;

gliders and balloons - 14 years

b. Language Requirements

Effective March 5, 2008, the International Civil Aviation Organization (ICAO) (Annex 1 Personnel Licensing) standards require that all Private, Commercial, or Airline Transport pilots as well as Flight Engineers and Flight Navigators operating internationally as

required crewmembers of an airplane or helicopter have an airman certificate with an endorsement of language proficiency. In the case of persons holding a U.S. airman certificate, the language proficiency endorsement will state "English Proficient." An applicant for an "<u>Airman Medical and Student Pilot Certificate</u>" must meet the ICAO definition of "English Proficient," which is equivalent to the FAA's long-standing basic English standard.

At each exam, the Examiner must observe the applicant's ability to understand and communicate in English. This may be accomplished by observing the applicant reading instructions, answering questions, and conversing with the AME.

If there is any doubt regarding the applicant's English proficiency:

- Providing Part 67 Medical Qualification Standard is met, applicants for "<u>Airman</u> <u>Medical and Student Pilot Certificate</u>" may be issued the Airman Medical Certificate. The AME must NOT issue the Student <u>Pilot</u> Certificate.
- Providing Part 67 Medical Qualification Standard is met, applicants for an Airman Medical Certificate may be issued the Airman Medical Certificate.
- In all cases:
 - The AME must notify the applicant of their concern, *document the notification in block 60,* and advise the applicant to report to the local FSDO for further testing.
 - The AME must also notify the FSDO and or the RFS and *document this in block 60.* If the AME notifies only the RFS, then the RFS must notify the FSDO closest to the examining AME's office. The AME must also *document in block 60 the name of the person contacted.*

The ICAO standard rates individuals from Level 1 (pre-elementary) to Level 6 (expert). Operational Level 4 is considered the minimum for proficiency. The following is provided as information only:

1. PRONUNCIATION

Assumes that English is not the applicant's first language and that the applicant has a dialect or accent that is intelligible to the aeronautical community. Pronunciation, stress, rhythm, and intonation are influenced by the applicant's first language, but only sometimes interfere with ease of understanding.

2. STRUCTURE

Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the *task.* Basic grammatical structures and sentence patterns are used creatively and are usually well controlled by the applicant. Errors may occur, particularly in unusual or unexpected circumstances, but rarely interfere with meaning.

3. VOCABULARY

The applicant's vocabulary range and accuracy are usually sufficient to communicate effectively on common, concrete, and work-related topics. The applicant can often paraphrase successfully when lacking vocabulary in unusual or unexpected circumstances.

4. FLUENCY

The applicant produces stretches of language at an appropriate tempo. There may be occasional loss of fluency on transition from rehearsed or formulaic speech to spontaneous interaction, but this does not prevent effective communication. The applicant can make limited use of discourse markers or connectors. Fillers are not distracting.

5. COMPREHENSION

Comprehension by the applicant is mostly accurate on common, concrete, and work-related topics when the dialect, accent or variety used is sufficiently intelligible. When the applicant is confronted with a linguistic or situational complication or an unexpected turn of events, comprehension may be slower or require clarification strategies.

6. INTERACTIONS

Responses by the applicant are usually immediate, appropriate, and informative. The applicant initiates and maintains exchanges even when dealing with an unexpected turn of events. The applicant deals adequately with apparent misunderstandings by checking, confirming, or clarifying.

10. Classes of Medical Certificates

An applicant may apply and be granted any class of airman medical certificate as long as the applicant meets the required medical standards for that class of medical certificate. However, an applicant must have the appropriate class of medical certificate for the flying duties the airman intends to exercise. For example, an applicant who exercises the privileges of an airline transport pilot (ATP) certificate must hold a first-class medical certificate. That same pilot when holding only a third-class medical certificate may only exercise privileges of a private pilot certificate. Finally, an applicant need not hold an ATP airman certificate to be eligible for a first-class medical certificate.

Listed below are the three classes of airman medical certificates, identifying the categories of airmen (i.e., pilot) certificates applicable to each class.

First-Class - Airline Transport Pilot

Second-Class - Commercial Pilot; Flight Engineer; Flight Navigator; or Air Traffic Control Tower Operator. (Note: This category of air traffic controller does not include FAA employee air traffic control specialists)

Third-Class - Private Pilot, Recreational Pilot, or Student Pilot

An airman medical certificate is valid only with the original signature of the AME who performed the examination or with the original signature of an authorized FAA physician (e.g., Regional Flight Surgeon, manager of the Aerospace Medical Certification Division, Federal Air Surgeon).

- Copies are NOT valid.
- An AME may only issue ONE originally signed certificate to an airman. A replacement for a lost or destroyed certificate must be issued by the FAA.

11. Operations Not Requiring a Medical Certificate

Glider and Free Balloon Pilots are not required to hold a medical certificate of any class. To be issued Glider or Free Balloon Airman Certificates, applicants must certify that they do not know, or have reason to know, of any medical condition that would make them unable to operate a glider or free balloon in a safe manner. This certification is made at the local FAA FSDO.

"Sport" pilots are required to hold either a valid airman medical certificate or a current and valid U.S. driver's license. When using a current and valid U.S. driver's license to qualify, sport pilots must comply with each restriction and limitation on their U.S. driver's license and any judicial or administrative order applying to the operation of a motor vehicle.

To exercise sport pilot privileges using a current and valid U.S. driver's license as evidence of qualification sport pilots must:

- Not have been denied the issuance of at least a third-class airman medical certificate (if they have applied for an airman medical certificate)
- Not have had their most recent airman medical certificate revoked or suspended (if they have held an airman medical certificate); and
- Not have had an Authorization withdrawn (if they have ever been granted an Authorization)

Sport pilots may not use a current and valid U.S. driver's license in lieu of a valid airman medical certificate if they know or have reason to know of any medical condition that would make them unable to operate a light-sport aircraft in a safe manner.

Sport pilot medical provisions are found under 14 CFR §§ 61.3, 61.23, 61.53, and 61.303).

For more information about the sport pilot final rule, see the <u>Certification of Aircraft and</u> <u>Airmen for the Operation of Light-Sport Aircraft; Final Rule</u>.

12. Medical Certificates – AME Completion

- Each medical certificate must bear the same date as the date of medical examination regardless of the date the certificate is actually issued.
- Each medical certificate must be type-written either by typewriter or computer printout. Handwritten or obviously corrected certificates are not acceptable.
- Only use standard limitations as contained within this document or on the Aerospace Medical Certification System (AMCS).
- Each medical certificate must be fully completed prior to being signed.
 - Both the AME and applicant must sign the medical certificate in ink.
 - The applicant must sign before leaving the AME's office.

AMEs are required to use the electronic transmission capability of AMCS and must forward the FAA/Original Copy to the FAA in Oklahoma (see address below). The AME Work Copy must be retained as the file copy.

FAA AEROSPACE MEDICAL CERTIFICATION DIVISION AAM-300 P.O. Box 26080 OKLAHOMA CITY, OK 73125

13. Validity of Medical Certificates

An airman medical certificate is valid only with the original signature of the AME who performed the examination or with the original signature of an authorized FAA physician (e.g., Regional Flight Surgeon, manager of the Aerospace Medical Certification Division, Federal Air Surgeon).

- Copies are NOT valid.
- An AME may only issue ONE originally signed certificate to an airman. A replacement for a lost or destroyed certificate must be issued by the FAA.

A. First-Class Medical Certificate: A first-class medical certificate is valid for the remainder of the month of issue; plus

6-calendar months for operations requiring a first-class medical certificate if the airman is age 40 or over on or before the date of the examination, or plus

12-calendar months for operations requiring a first-class medical certificate if the airman has not reached age 40 on or before the date of examination

12-calendar months for operations requiring a second-class medical certificate, or plus

24-calendar months for operations requiring a third-class medical certificate, or plus

60-calendar months for operations requiring a third-class medical certificate if the airman has not reached age 40 on or before the date of examination.

B. Second-Class Medical Certificate: A second-class medical certificate is valid for the remainder of the month of issue; plus

12-calendar months for operations requiring a second-class medical certificate, or plus

24-calendar months for operations requiring a third-class medical certificate, or plus

60-calendar months for operations requiring a third-class medical certificate if the airman has not reached age 40 on or before the date of examination.

C. Third-Class Medical Certificate: A third-class medical *c*ertificate is valid for the remainder of the month of issue; plus

24-calendar months for operations requiring a third-class medical certificate, or plus

60-calendar months for operations requiring a third-class medical certificate if the airman has not reached age 40 on or before the date of examination.

Note: Each medical certificate must bear the same date as the date of medical examination regardless of the date the certificate is actually issued. Each medical certificate must be type-written, either by typewriter or computer print-out.

14. Title 14 CFR § 61.53, Prohibition on Operations During Medical Deficiency

NOTE: 14 CFR § 61.53 was revised on July 27, 2004 by adding subparagraph (c)

- (a) Operations that require a medical certificate. Except as provided in paragraph (b) of this section, a person who holds a current medical certificate issued under part 67 of this chapter shall not act as pilot in command, or in any other capacity as a required pilot flight crewmember, while that person:
 - (1) Knows or has reason to know of any medical condition that would make the person unable to meet the requirements for the medical certificate necessary for the pilot operation; or
 - (2) Is taking medication or receiving other treatment for a medical condition that results in the person being unable to meet the requirements for the medical certificate necessary for the pilot operation
- (b) Operations that do not require a medical certificate. For operations provided for in § 61.23(b) of this part, a person shall not act as pilot in command, or in any other capacity as a required pilot flight crewmember, while that person knows or has reason to know of any medical condition that would make the person unable to operate the aircraft in a safe manner.
- (c) Operations requiring a medical certificate or a U.S. driver's license. For operations provided for in Sec. 61.23(c), a person must meet the provisions of—
 - (1) Paragraph (a) of this section if that person holds a valid medical certificate issued under part 67 of this chapter and does not hold a current and valid U.S. driver's license
 - (2) Paragraph (b) of this section if that person holds a current and valid U.S. driver's license

15. Reexamination of an Airman

A medical certificate holder may be required to undergo a reexamination at any time if, in the opinion of the Federal Air Surgeon or authorized representative within the FAA, there is a reasonable basis to question the airman's ability to meet the medical standards. An Examiner may **NOT** order such reexamination.

16. Examination Fees

The FAA does not establish fees to be charged by Examiners for the medical examination of persons applying for airman medical certification. It is recommended that the fee be the usual and customary fee established by other physicians in the same general locality for similar services.

17. Replacement of Medical Certificates

Medical certificates that are lost or accidentally destroyed may be replaced upon proper application provided such certificates have not expired. The request should be sent to:

FOIA DESK AEROSPACE MEDICAL CERTIFICATION DIVISION, AAM-331 FEDERAL AVIATION ADMINISTRATION CIVIL AEROSPACE MEDICAL INSTITUTE POST OFFICE BOX 26200 OKLAHOMA CITY, OK 73125-0080

The airman's request for replacement must be accompanied by a remittance of two dollars (\$2) (check or money order) made payable to the FAA. This request must include:

- Airman's full name and date of birth;
- Class of certificate;
- Place and date of examination;
- Name of the Examiner; and
- Circumstances of the loss or destruction of the original certificate.

The replacement certificate will be prepared in the same manner as the missing certificate and will bear the same date of examination regardless of when it is issued.

In an emergency, contact your RFS or the Manager, AMCD, AAM-300, at above address or by facsimile at 405-954-4300 for certification verification only.

18. Disposition of Applications and Medical Examinations

All completed applications and medical examinations, except those for student pilots, unless otherwise directed by the FAA, must be transmitted electronically via AMCS within 14 days after completion to the AMCD. **Student pilot examinations must be submitted within 7 days**. These requirements also apply to submissions by International AMEs.

A record of the examination is stored in AMCS, however, Examiners are encouraged to print a copy for their own files. While not required, the Examiner may also print a summary sheet for the applicant.

19. Protection and Destruction of Forms

Forms are available electronically in AMCS. Examiners are accountable for all blank FAA forms they may have printed and are cautioned to provide adequate security for such forms or certificates to ensure that they do not become available for illegal use. Examiners are responsible for destroying any existing paper forms they may still have.

NOTE: Forms should not be shared with other Examiners.

20. Questions or Requests for Assistance

When an Examiner has a question or needs assistance in carrying out responsibilities, the Examiner should contact one of the following individuals:

A. Regional Flight Surgeon (RFS)

- Questions pertaining to problem medical certification cases in which the RFS has initiated action
- Telephone interpretation of medical standards or policies involving an individual airman whom the Examiner is examining
- Matters regarding designation and redesignation of Examiners and the Aviation Medical Examiner Program
- Attendance at Aviation Medical Examiner Seminars

B. Manager, AMCD, AAM-300

- Inquiries concerning guidance on problem medical certification cases
- Information concerning the overall airman medical certification program
- Matters involving FAA medical certification of military personnel
- Information concerning medical certification of applicants in foreign countries

These inquiries should be made to:

MANAGER AEROSPACE MEDICAL CERTIFICATION DIVISION, AAM-300 CIVIL AEROSPACE MEDICAL INSTITUTE FEDERAL AVIATION ADMINISTRATION POST OFFICE BOX 26080 OKLAHOMA CITY, OK 73125

C. Manager, Aeromedical Education Division, AAM-400

- Matters regarding designation and redesignation of Examiners
- Requests for medical forms and stationery
- Requests for airman medical educational material

These inquiries should be made to:

MANAGER AEROSPACE MEDICAL EDUCATION DIVISION, AAM-400 CIVIL AEROSPACE MEDICAL INSTITUTE FEDERAL AVIATION ADMINISTRATION POST OFFICE BOX 26080 OKLAHOMA CITY, OK 73125

21. Airman Appeals

A. Request for Reconsideration

An Examiner's denial of a medical certificate is not a final FAA denial. An applicant may ask for reconsideration of an Examiner's denial by submitting a request in writing to:

FEDERAL AIR SURGEON ATTN: MANAGER, AEROSPACE MEDICAL CERTIFICATION DIVISION, AAM-331

LAST UPDATE: July 25, 2014

CIVIL AEROSPACE MEDICAL INSTITUTE FEDERAL AVIATION ADMINISTRATION POST OFFICE BOX 26200 OKLAHOMA CITY, OK 73125-0080

The AMCD will provide initial reconsideration. Some cases may be referred to the appropriate RFS for action. If the AMCD or a RFS finds that the applicant is not qualified, the applicant is denied and advised of further reconsideration and appeal procedures. These may include reconsideration by the Federal Air Surgeon and/or petition for NTSB review.

B. Statement of Demonstrated Ability (SODA)

At the discretion of the Federal Air Surgeon, a Statement of Demonstrated Ability (SODA) may be granted, instead of an Authorization, to a person whose disqualifying condition is static or non-progressive and who has been found capable of performing airman duties without endangering public safety. A SODA does not expire and authorizes a designated Examiner to issue a medical certificate of a specified class if the Examiner finds that the condition described on the SODA has not adversely changed.

In granting a SODA, the Federal Air Surgeon may consider the person's operational experience and any medical facts that may affect the ability of the person to perform airman duties including:

- The combined effect on the person of failure to meet more than one requirement of part 67; and
- The prognosis derived from professional consideration of all available information regarding the person.

In granting a SODA under the special issuance section of part 67 (14 CFR 67.401), the Federal Air Surgeon specifies the class of medical certificate authorized to be issued and may do any of the following:

- State on the SODA, and on any medical certificate based upon it, any operational limitation needed for safety; or
- Condition the continued effect of a SODA, and any second- or third-class medical certificate based upon it, on compliance with a statement of functional limitations issued to the person in coordination with the Director of Flight Standards or the Director's designee
- In determining whether a SODA should be granted to an applicant for a third-class medical certificate, the Federal Air Surgeon considers the freedom of an airman, exercising the privileges of a private pilot certificate, to accept reasonable risks to his or her person and property that are not acceptable in the exercise of

commercial or airline transport pilot privileges, and, at the same time, considers the need to protect the safety of persons and property in other aircraft and on the ground

A SODA granted to a person who does not meet the applicable standards of part 67 may be withdrawn, at the discretion of the Federal Air Surgeon, at any time if:

- There is adverse change in the holder's medical condition;
- The holder fails to comply with a statement of functional limitations or operational limitations issued under the special issuance section of part 67 (14 CFR 67.401);
- Public safety would be endangered by the holder's exercise of airman privileges;
- The holder fails to provide medical information reasonably needed by the Federal Air Surgeon for certification under the special issuance section of part 67 (14 CFR 67.401)
- The holder makes or causes to be made a statement or entry that is the basis for withdrawal of a SODA under the falsification section of part 67 (14 CFR 67.403); or
- A person who has been granted a SODA under the special issuance section of part 67 (14 CFR 67.401), based on a special medical flight or practical test need not take the test again during later medical examinations unless the Federal Air Surgeon determines or has reason to believe that the physical deficiency has or may have degraded to a degree to require another special medical flight test or practical test

The authority of the Federal Air Surgeon under the special issuance section of part 67 (14 CFR 67.401) is also exercised by the Manager, AMCD, and each RFS.

If a SODA is withdrawn at any time, the following procedures apply:

- The holder of the SODA will be served a letter of withdrawal stating the reason for the action;
- By not later than 60 days after the service of the letter of withdrawal, the holder of the SODA may request, in writing, that the Federal Air Surgeon provide for review of the decision to withdraw. The request for review may be accompanied by supporting medical evidence;
- Within 60 days of receipt of a request for review, a written final decision either affirming or reversing the decision to withdraw will be issued; and

 A medical certificate rendered invalid pursuant to a withdrawal, in accordance with the special issuance section of part 67 (14 CFR 67.401 (a)) shall be surrendered to the Administrator upon request

C. National Transportation Safety Board (NTSB)

Within 60 days after a final FAA denial of an unrestricted airman medical certificate, an airman may petition the NTSB for a review of that denial. The NTSB does not have jurisdiction to review the denial of a SODA or special issuance airman medical certificate.

A petition for NTSB review must be submitted in writing to:

NATIONAL TRANSPORTATION SAFETY BOARD 490 L'ENFANT PLAZA, EAST SW WASHINGTON, DC 20594-0001

The NTSB is an independent agency of the Federal Government that has the authority to review on appeal the suspension, amendment, modification, revocation, or denial of any certificate or license issued by the FAA Administrator.

An Administrative Law Judge for the NTSB may hold a formal hearing at which the FAA will present documentary evidence and testimony by medical specialists supporting the denial decision. The petitioner will also be given an opportunity to present evidence and testimony at the hearing. The Administrative Law Judge's decision is subject to review by the full NTSB.

APPLICATION FOR MEDICAL CERTIFICATION

Items 1-20 of FAA Form 8500-8

ITEMS 1- 20 of FAA Form 8500-8

This section contains guidance for items on the Medical History and General Information page of FAA Form 8500-8, Application for Airman Medical Certificate or Airman Medical and Student Pilot Certificate.

I. AME Guidance for Positive Identification of Airmen and Application Procedures

All applicants must show proof of age and identity under 14 CFR §67.4. On occasion, individuals have attempted to be examined under a false name. If the applicant is unknown to the Examiner, the Examiner should request evidence of positive identification. A Government-issued photo identification (e.g., driver's license, identification card issued by a driver's license authority, military identification, or passport) provides age and identity and is preferred. Applicants may use other government-issued identification for age (e.g., certified copy of a birth certificate); however, the Examiner must request separate photo identification for identity (such as a work badge). Verify that the address provided is the same as that given under Item 5. Record the type of identification(s) provided and identifying number(s) under Item 60. Make a copy of the identification and keep it on file for 3 years with the AME work copy.

An applicant who does not have government-issued photo identification may use nonphoto government-issued identification (e.g. pilot certificate, birth certificate, voter registration card) in conjunction with a photo identification (e.g. work identification card, student identification card).

If an airman fails to provide identification, the Examiner must report this immediately to the AMCD, or the appropriate RFS for guidance.

II. Prior to the Examination

- Once the applicant successfully completes Items 1-20 of FAA Form 8500-8 through the FAA MedXPress (MedX) system, he/she will receive a confirmation number and instructions to print a summary sheet. This data entered through the MedXPress system will remain valid for 60 days.
- Applicants must bring their MedX confirmation number, valid photo identification, and the summary sheet to the Exam. If the applicant does not bring their confirmation number to the exam, the applicant can retrieve it from MedX or their email account. Examiners should call AMCS Support if the confirmation number cannot be retrieved.
- Examiners **must not** begin the exam until they have imported the MedX application into AMCS and have verified the identity of the applicant.

III. After the Applicant Completes the Medical History of the FAA Form 8500-8

The Examiner must review all Items 1 through 20 for accuracy. The applicant must answer all questions. The date for <u>Item 16</u> may be estimated if the applicant does not recall the actual date of the last examination. However, for the sake of electronic transmission, it must be placed in the mm/dd/yyyy format.

Verify that the name on the applicant's identification media matches the name on the FAA Form 8500-8. If it does not, question the applicant for an explanation. If the explanation is not reasonable (legal name change, subsequent marriage, etc.), do not continue the medical examination or issue a medical certificate. Contact your RFS for guidance.

The applicant's Social Security Number (SSN) is not mandatory. Failure to provide is not grounds for refusal to issue a medical certificate. (See **Item 4**). All other items on the form must be completed.

Applicants must provide their home address on the FAA Form 8500-8. Applicants may use a private mailing address (e.g., a P.O. Box number or a mail drop) if that is their preferred mailing address; however, under Item 18 (in the "Explanations" box) of the FAA Form 8500-8, they must provide their home address.

An applicant cannot make updates to their application once they have certified and submitted it. If the examiner discovers the need for corrections to the application during the review, the Examiner is required to discuss these changes with the applicant and obtain their approval. The examiner must make any changes to the application in AMCS.

Strict compliance with this procedure is essential in case it becomes necessary for the FAA to take legal action for falsification of the application.

ITEMS 1-2. Application for; Class of Medical Certificate Applied For

The applicant indicates whether the application is for an Airman Medical Certificate (white) or an Airman Medical and Student Pilot Certificate (yellow), and the class of medical certificate desired.

The class of medical certificate sought by the applicant is needed so that the appropriate medical standards may be applied. The class of certificate issued must correspond with that for which the applicant has applied.

The applicant may ask for a medical certificate of a higher class than needed for the type of flying or duties currently performed. For example, a student pilot may ask for a first-class medical certificate to see if he or she qualifies medically before entry into an aviation career.

The Examiner applies the standards appropriate to the class sought, not to the airman's duties - either performed or anticipated. The Examiner should never issue more than one certificate based on the same examination.

ITEMS 3-10. Identification

Items 3-10 on the FAA Form 8500-8 must be entered as identification. While most of the items are self-explanatory (as indicated in the MedXPress drop-down menu next to individual items) specific instructions include:

• Item 3. Last Name; First Name; Middle Name

The applicant's legal last, first, and middle name* (or initial if appropriate) must be provided.

*If an applicant has no middle name, leave the middle name box blank. Do **not** use nomenclature which indicates no middle name (i.e. NMN, NMI, etc.). If the applicant has used such a nomenclature on their MedXPress application, delete it and leave the middle name box blank.

Note: If the applicant's name changed for any reason, the current name is listed on the application and any former name(s) in the EXPLANATIONS box of Item 18 on the application.

Item 4. Social Security Number (SSN)
 The applicant must provide their SSN. If they decline to provide one or are an
 international applicant, they must check the appropriate box and a number will be

generated for them. The FAA requests a SSN for identification purposes, record control, and to prevent mistakes in identification.

• Item 6. Date of Birth

The applicant **must** enter the numbers for the month, day, and year of birth in order. Name, date of birth, and SSN are the basic identifiers of airmen. When an Examiner communicates with the FAA concerning an applicant, the Examiner must give the applicant's full name, date of birth, and SSN if at all possible. The applicant should indicate citizenship; e.g., U.S.A.

If the applicant is seeking an Airman Medical and Student Pilot Certificate (FAA Form 8420-2), the Examiner should check the date of birth to ensure that the applicant is at least 16 years old. Unless the applicant is at least 16 years old, a combined Airman Medical and Student Pilot Certificate may not be issued, even if the applicant will become 16 years old before the certificate expires (except as noted below).

The FAA will not confirm a certificate issued by an Examiner to a person who is less than 16 years old. The applicant must be at least 16 years old at the time of application to be eligible for a student pilot certificate for flight of powered aircraft. This minimum age requirement applies only to the issuance of the yellow FAA Form 8420-2, and never to the issuance of the white medical certificate (FAA Form 8500-9).

If the applicant is not yet 16 years old and wishes to solo on or after his or her 16th birthday, the Examiner should issue a white FAA Form 8500-9 (if the applicant is fully qualified medically). On or after his or her 16th birthday, the applicant may obtain a student pilot certificate for the flight from a FAA Flight Standards District Office (FSDO) or designated Flight Examiner upon presentation of the FAA Form 8500-9 (white medical certificate).

An alternative procedure for this situation is for the Examiner to issue the Airman Medical and Student Pilot Certificate, FAA Form 8420-2 (yellow), with the following statement in the limitations block of the student pilot certificate:

NOT VALID UNTIL (MONTH, DAY, AND YEAR OF 16TH BIRTHDAY)

This procedure should not be used if the applicant's 16th birthday will occur more than 30 days from the date of application.

Although nonmedical regulations allow an airman to solo a glider or balloon at age 14, a medical certificate is not required for glider or balloon operations. These airmen are required to certify to the FAA that they have no known physical defects that make them unable to pilot a glider or balloon. This certification is made at the FAA FSDO's.

There is a maximum age requirement for certain air carrier pilots. Because this is not a medical requirement but an operational one, the Examiner may issue medical certificates without regard to age to any applicant who meets the medical standards.

ITEMS 11-12. Occupation; Employer

Occupational data are principally used for statistical purposes. This information, along with information obtained from **Items 10, 14** and **15** may be important in determining whether a SODA may be issued, if applicable.

11. Occupation

This should reflect the applicant's major employment. "Pilot" should only be reported when the applicant earns a livelihood from flying.

12. Employer

The employer's name should be entered by the applicant.

ITEM 13. Has Your FAA Airman Medical Certificate Ever Been Denied, Suspended, or Revoked?

The applicant shall check "yes" or "no." If "yes" is checked, the applicant should enter the date of action and should report details in the EXPLANATIONS box of **Item 18**.

The Examiner may not issue a medical certificate to an applicant who has checked "yes." The only exceptions to this prohibition are:

- The applicant presents written evidence from the FAA that he or she was subsequently medically certificated and that an Examiner is authorized to issue a renewal medical certificate to the person if medically qualified; or
- The Examiner obtains oral or written authorization to issue a medical certificate from an FAA medical office

ITEMS 14-15. Total Pilot Time

14. Total Pilot Time to Date

The applicant should indicate the total number of *civilian* flight hours and whether those hours are logged (LOG) or estimated (EST).

15. Total Pilot Time Past 6 Months

The applicant should provide the number of *civilian* flight hours in the 6-month period immediately preceding the date of this application. The applicant should indicate whether those hours are logged (LOG) or estimated (EST).

ITEM 16. Date of Last FAA Medical Application

If a prior application was made, the applicant should indicate the date of the last application, even if it is only an estimate of the year. This item should be completed even if the application was made many years ago or the previous application <u>did not</u> <u>result in the issuance</u> of a medical certificate. If no prior application was made, the applicant should check the appropriate block in Item 16.

ITEM 17.a. Do You Currently Use Any Medication (Prescription or NONprescription)?

If the applicant checks yes, give name of medication(s) and indicate if the medication was listed in a previous FAA medical examination.

This includes both prescription and nonprescription medication. (Additional guidelines for the certification of airmen who use medication may be found in throughout the Guide).

For example, any airman who is undergoing continuous treatment with anticoagulants, antiviral agents, anxiolytics, barbiturates, chemotherapeutic agents, experimental hypoglycemic, investigational, mood-ameliorating, motion sickness, narcotic, sedating antihistaminic, sedative, steroid drugs, or tranquilizers must be deferred certification *unless* the treatment has previously been cleared by FAA medical authority. In such an instance, the applicant should provide the Examiner with a copy of any FAA correspondence that supports the clearance.

During periods in which the foregoing medications are being used for treatment of acute illnesses, the airman is under obligation to refrain from exercising the privileges of his/her airman medical certificate unless cleared by the FAA.

Further information concerning an applicant's use of medication may be found under the items pertaining to specific medical condition(s) for which the medication is used, or you may contact your RFS.

ITEM 17.b. Do You Ever Use Near Vision Contact Lens(es) While Flying?

The applicant should indicate whether near vision contact lens(es) is/are used while flying. If the applicant answers "yes," the Examiner must counsel the applicant that **use of contact lens(es) for monovision correction is not allowed.** The Examiner must note in Item 60 that this counseling has been given. **Examples of unacceptable use include:**

- The use of a contact lens in one eye for near vision and in the other eye for distant vision (for example: pilots with myopia plus presbyopia).
- The use of a contact lens in one eye for near vision and the use of no contact lens in the other eye (for example: pilots with presbyopia but no myopia).

If the applicant checks "yes" and no further comment is noted on FAA Form 8500-8 by either the applicant or the Examiner, a letter will automatically be sent to the applicant informing him or her that such use is/are inappropriate for flying.

Please note: the use of **binocular** contact lenses for distance-correction-only is acceptable. In this instance, no special evaluation or SODA is routinely required for a distance-vision-only contact lens wearer who meets the standard and has no complications. **Binocular** bifocal or binocular multifocal contact lenses are also acceptable under the <u>Protocol for Binocular Multifocal and Accommodating Devices</u>. If the applicant checks "yes" in Item 17.b but actually is using **binocular** bifocal or binocular multifocal contact lenses then the Examiner should note this in **Item 60**.

ITEM 18. Medical History

Each item under this heading must be checked either "yes" or "no." For all items checked "yes," a description and approximate date of every condition the applicant has ever been diagnosed with, had, or presently has, must be given in the EXPLANATIONS box. If information has been reported on a previous application for airman medical certification and there has been no change in the condition, the applicant may note "PREVIOUSLY REPORTED, NO CHANGE" in the EXPLANATIONS box, but the applicant must still check "yes" to the condition.

Of particular importance are conditions that have developed since the last FAA medical examination. The Examiner must take the time to review the applicant's responses on FAA Form 8500-8 before starting the applicant's medical examination.

The Examiner should ensure that the applicant has checked all of the boxes in Item 18 as either "yes" or "no." The Examiner should use information obtained from this review in asking the applicant pertinent questions during the course of the examination.

Certain aspects of the individual's history may need to be elaborated upon. The Examiner should provide in Item 60 an explanation of the nature of items checked "yes" in items 18.a. through 18.y. Please be aware there is a character count limit in Item 60. If all comments cannot fit in Item 60, the Examiner may submit additional information on a plain sheet of paper and include the applicant's full name, date of birth, signature, any appropriate identifying numbers (PI, MID or SSN), and the date of the exam.

Supplementary reports from the applicant's physician(s) should be obtained and forwarded to the AMCD, when necessary, to clarify the significance of an item of history. The responsibility for providing such supplementary reports rests with the applicant. A discussion with the Examiner's RFS may clarify and expedite the certification process at that time.

Affirmative answers alone in Item 18 do not constitute a basis for denial of a medical certificate. A decision concerning issuance or denial should be made by applying the medical standards pertinent to the conditions uncovered by the history.

Experience has shown that, when asked direct questions by a physician, applicants are likely to be candid and willing to discuss medical problems.

The Examiner should attempt to establish rapport with the applicant and to develop a complete medical history. Further, the Examiner should be familiar with the FAA certification policies and procedures in order to provide the applicant with sound advice.

18.a. Frequent or severe headaches. The applicant should report frequency, duration, characteristics, severity of symptoms, neurologic manifestations, and whether they have been incapacitating, treatment and side effects, if any. (See **Item 46**)

18.b. Dizziness or fainting spells. The applicant should describe characteristics of the episode; e.g., spinning or lightheadedness, frequency, factors leading up to and surrounding the episode, associated neurologic symptoms; e.g., headache, nausea, LOC, or paresthesias. Include diagnostic workup and treatment if any. (See **Items 25-30** and **Item 46**)

18.c. Unconsciousness for any reason. The applicant should describe the event(s) to determine the primary organ system responsible for the episode, witness statements, initial treatment, and evidence of recurrence or prior episode. Although the regulation states, "an unexplained disturbance of consciousness is disqualifying," it does not mean to imply that the applicant can be certificated if the etiology is identified, because the etiology may also be disqualifying in and of itself. (See **Item 46**).

18.d. Eye or vision trouble except glasses. The Examiner should personally explore the applicant's history by asking questions, concerning any changes in vision, unusual visual experiences (halos, scintillations, etc.), sensitivity to light, injuries, surgery, or current use of medication. Does the applicant report inordinate difficulties with eye fatigue or strain? Is there a history of serious eye disease such as glaucoma or other disease commonly associated with secondary eye changes, such as diabetes? For glaucoma or ocular hypertension, obtain a FAA Form 8500-14, Report of Eye Evaluation for Glaucoma. For any other medical condition, obtain a FAA Form 8500-7, Report of Eye Evaluation. Under all circumstances, please advise the examining eye specialist to explain why the airman is unable to correct to Snellen visual acuity of 20/20. (See **Items 31-34, Item 53,** and **Item 54**)

18.e. Hay fever or allergy. The applicant should report frequency and duration of symptoms, any incapacitation by the condition, treatment, and side effects. The Examiner should inquire whether the applicant has ever experienced any barotitis ("ear block"), barosinusitis, alternobaric vertigo, or any other symptoms that could interfere with aviation safety. (See **Item 26**)

18.f. Asthma or lung disease. The applicant should provide frequency and severity of asthma attacks, medications, and number of visits to the hospital and/or emergency room. For other lung conditions, a detailed description of symptoms/diagnosis, surgical intervention, and medications should be provided. (See Item 35)

18.g. Heart or vascular trouble. The applicant should describe the condition to include, dates, symptoms, and treatment, and provide medical reports to assist in the certification decision-making process. These reports should include: operative reports of coronary intervention to include the original cardiac catheterization report, stress tests, worksheets, and original tracings (or a legible copy). When stress tests are provided, forward the reports, worksheets and original tracings (or a legible copy) to the FAA. Part 67 provides that, for all classes of medical certificates, an established medical history or clinical diagnosis of myocardial infarction, angina pectoris, cardiac valve replacement, permanent cardiac pacemaker implantation, heart replacement, or coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant, is cause for denial. (See **Item 36**)

18.h. High or low blood pressure. The applicant should provide history and treatment. Issuance of a medical certificate to an applicant with high blood pressure may depend on the current blood pressure levels and whether the applicant is taking anti-hypertensive medication. The Examiner should also determine if the applicant has a history of complications, adverse reactions to therapy, hospitalization, etc. (Details are given in **Item 36** and **Item 55**).

18.i. Stomach, liver, or intestinal trouble. The applicant should provide history and treatment, pertinent medical records, current status report, and medication. If a surgical procedure was done, the applicant must provide operative and pathology reports. (See **Item 38**).

18.j. Kidney stone or blood in urine. The applicant should provide history and treatment, pertinent medical records, current status report and medication. If a procedure was done, the applicant must provide the report and pathology reports. (See **Item 41**).

18.k. Diabetes. The applicant should describe the condition to include, symptoms and treatment. Comment on the presence or absence of hyperglycemic and/or hypoglycemic episodes. A medical history or clinical diagnosis of diabetes mellitus requiring insulin or other hypoglycemic drugs for control are disqualifying. The Examiner can help expedite the FAA review by assisting the applicant in gathering medical records and submitting a current specialty report. (See **Item 48**)

18.I. Neurological disorders; epilepsy, seizures, stroke, paralysis, etc. The applicant should provide history and treatment, pertinent medical records, current status report and medication. The Examiner should obtain details about such a history and report the results. An established diagnosis of epilepsy, a transient loss of control of nervous system function(s), or a disturbance of consciousness is a basis for denial no matter how remote the history. Like all other conditions of aeromedical concern, the history surrounding the event is crucial. Certification is possible if a satisfactory explanation can be established. (See **Item 46**)

18.m. Mental disorders of any sort; depression, anxiety, etc. An affirmative answer to Item 18.m. requires investigation through supplemental history taking. Dispositions will vary according to the details obtained. An applicant with an established history of a personality disorder that is severe enough to have repeatedly manifested itself by overt acts, a psychosis disorder, or a bipolar disorder must be denied or deferred by the Examiner. (See **Item 47**)

18.n. Substance dependence; or failed a drug test ever; or substance abuse or use of illegal substance in the last 2 years. "Substance" includes alcohol and other drugs (e.g., PCP, sedatives and hypnotics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). For a "yes" answer to Item 18.n., the Examiner should obtain a detailed description of the history. A history of substance dependence or abuse is disqualifying. The Examiner must defer issuance of a certificate if there is doubt concerning an applicant's substance use. (See Item 47)

18.o. Alcohol dependence or abuse. (See Item 18.n.)

18.p. Suicide attempt. A history of suicidal attempts or suicidal gestures requires further evaluation. The ultimate decision of whether an applicant with such a history is eligible for medical certification rests with the FAA. The Examiner should take a supplemental history as indicated, assist in the gathering of medical records related to the incident(s), and, if the applicant agrees, assist in obtaining psychiatric and/or psychological examinations. (See Item 47)

18.q. Motion sickness requiring medication. A careful history concerning the nature of the sickness, frequency and need for medication is indicated when the applicant responds affirmatively to this item. Because motion sickness varies with the nature of the stimulus, it is most helpful to know if the problem has occurred in flight or under similar circumstances. (See **Item 29**)

18.r. Military medical discharge. If the person has received a military medical discharge, the Examiner should take additional history and record it in **Item 60**. It is helpful to know the circumstances surrounding the discharge, including dates, and whether the individual is receiving disability compensation. If the applicant is receiving veteran's disability benefits, the claim number and service number are helpful in obtaining copies of pertinent medical records. The fact that the applicant is receiving disability benefits does not necessarily mean that the application should be denied.

18.s. Medical rejection by military service. The Examiner should inquire about the place, cause, and date of rejection and enter the information in **Item 60**. It is helpful if the Examiner can assist the applicant with obtaining relevant military documents. If a delay of more than 14-calendar days is expected, the Examiner should transmit FAA Form 8500-8 to the FAA with a note specifying what documents will be forwarded later.

Disposition will depend upon whether the medical condition still exists or whether a history of such a condition requires denial or deferral under the FAA medical standards.

18.t. Rejection for life or health insurance. The Examiner should inquire regarding the circumstances of rejection. The supplemental history should be recorded in **Item 60**. Disposition will depend upon whether the medical condition still exists or whether a history of such a condition requires denial or deferral under the FAA medical standards.

18.u. Admission to hospital. For each admission, the applicant should list the dates, diagnoses, duration, treatment, name of the attending physician, and complete address of the hospital or clinic. If previously reported, the applicant may enter "PREVIOUSLY REPORTED, NO CHANGE." A history of hospitalization does not disqualify an applicant, although the medical condition that resulted in hospitalization may.

18.v. History of Arrest(s), Conviction(s), and/or Administrative Action(s).

Arrest(s), conviction(s) and/or administrative action(s) affecting driving privileges may raise questions about the applicant's fitness for certification and may be cause for disqualification. (See Items <u>18.n.</u> and <u>47</u>). A single driving while intoxicated (DWI) arrest, conviction and/or administrative action usually is not cause for denial provided there are no other instances or indications of substance dependence or abuse.

The events to be reported are specifically identified in Item 18.v. of FAA Form 8500-8. If **yes** is checked, the applicant must describe the arrest(s), conviction(s), and/or administrative action(s) in the EXPLANATIONS box. The description must include:

- The alcohol or drug offense for which the applicant was arrested, convicted, or the type of administrative action involved (e.g., attendance at an educational or rehabilitation program in lieu of conviction; license denial, suspension, cancellation, or revocation for refusal to be tested; educational safe driving program for multiple speeding convictions; etc.);
- The name of the state or other jurisdiction involved; and
- The date of the arrest, conviction, and/or administrative action

Note: If the applicant documented ALL of the above information on previous exams AND there are no new arrest(s), conviction(s), and/or administrative action(s) since the last application, the applicant may enter **PREVIOUSLY REPORTED, NO CHANGE**.

For all first-time reports of arrest(s), conviction(s), and/or administrative action(s) the Examiner must do the following prior to issuing an airman medical certificate:

- Obtain a detailed history of the applicant's alcohol use, the circumstances surrounding **all** alcohol-related incidents (include those reported in 18v and any others that may have occurred)
- Obtain copies of all court records and arrest reports related to the event(s) if the incident(s) occurred within the 5 years prior to the exam. This includes copies of relevant military records if the incidents occurred while the applicant was a member of the U.S. armed forces (includes military court records, records of non-judicial punishment, and military substance abuse records)
- Document those findings in <u>Item 60</u>. (See <u>Item 47</u>)
- Forward the court records, arrest reports, and any military records to AMCD
- Advise the applicant that the reporting of alcohol or drug offenses (i.e., motor vehicle violation) on the history part of the medical application does not relieve the airman of responsibility to report each motor vehicle action to the FAA within 60 days of the occurrence to the:

Security and Investigations Division AMC-700 P.O. Box 25810 Oklahoma City, OK 73125-0810

Deferral Criteria: The Examiner must defer certification for any of the following:

- Inability to obtain and review the court and arrest records within 14 days of the date of the exam
- For the alcohol- or drug-related driving incidents:
 - Any arrest, conviction, and/or administrative action for which the applicant registers a blood alcohol level 0.15 or higher
 - Any arrest, conviction, and/or administrative action for which the applicant refused blood alcohol testing

- Any arrest, conviction, and/or administrative action within the preceding 2 years AND THERE HAS BEEN ANOTHER arrest, conviction and/or administrative action AT ANY OTHER TIME
- Total of 3 arrest(s), conviction(s), and/or administrative action(s) within a lifetime
- Total of 2 arrest(s), conviction(s), and/or administrative action(s) within the preceding 10 years

If the applicant is deferred, the FAA will require the applicant to:

Provide:

- A detailed personal statement regarding his/her past and present patterns of alcohol or drug use
- A complete copy of his/her current driving record in any state that he/she has held a driver's license in the last 10 years
- Copies of any court records and arrest reports related to the event(s) that have not already been provided to the AME. This includes copies of relevant military records if any event(s) occurred while the applicant was a member of the U.S. armed forces. "Relevant military records" means military court records, records of non-judicial punishment, and military substance abuse records

Obtain:

• A substance abuse evaluation from an addictionologist or addiction psychologist/psychiatrist familiar with aviation standards

Issue Criteria: The Examiner may issue if:

- NONE of the Deferral Criteria above are met
- For reported incident(s) when the most recent incident occurred more than 5 years prior to the exam, based on the exam and a detailed interview, the Examiner determines the applicant's history does not indicate a possible substance abuse or dependence problem
- For reported incident(s) when the most recent incident occurred within the preceding 5 years of the exam, based on the exam, detailed interview AND review of the court record(s) and arrest report(s), the Examiner determines the applicant's history does not indicate a possible substance abuse or dependence problem

For guidance on indicators of substance abuse or dependence see:

- o <u>Aerospace Medical Dispositions, Item 47 Substance Abuse</u>
- o Aerospace Medical Dispositions, Item 47 Substance Dependence

18.w. History of nontraffic convictions. The applicant must report any other (nontraffic) convictions (e.g., assault, battery, public intoxication, robbery, etc.). The applicant must name the charge for which convicted and the date of the conviction(s), and copies of court documents (if available). (See **Item 47**)

18.x. Other illness, disability, or surgery. The applicant should describe the nature of these illnesses in the EXPLANATIONS box. If additional records, tests, or specialty reports are necessary in order to make a certification decision, the applicant should so be advised. If the applicant does not wish to provide the information requested by the Examiner, the Examiner should defer issuance.

If the applicant wishes to have the FAA review the application and decide what ancillary documentation is needed, the Examiner should defer issuance of the medical certificate and forward the completed FAA Form 8500-8 to the AMCD. If the Examiner proceeds to obtain documentation, but all data will not be received with the 2 weeks, FAA Form 8500-8 should be transmitted immediately to the AMCD with a note that additional documents will be forwarded later under separate cover.

18. y. Medical Disability Benefits. The applicant must report any disability benefits received, regardless of source or amount. If the applicant checks "yes" on this item, the FAA may verify with other Federal Agencies (ie. Social Security Administration, Veteran's Affairs) whether the applicant is receiving a disability benefit that may present a conflict in issuing an FAA medical certificate. The Examiner must document the specifics and nature of the disability in findings in **Item 60**.

ITEM 19. Visits to Health Professional Within Last 3 Years

The applicant should list all visits in the last 3 years to a physician, physician assistant, nurse practitioner, psychologist, clinical social worker, or substance abuse specialist for treatment, examination, or medical/mental evaluation. The applicant should list visits for counseling only if related to a personal substance abuse or psychiatric condition. The applicant should give the name, date, address, and type of health professional consulted and briefly state the reason for the consultation. Multiple visits to one health professional for the same condition may be aggregated on one line.

Routine dental, eye, and FAA periodic medical examinations and consultations with an employer-sponsored employee assistance program (EAP) may be excluded unless the consultations were for the applicant's substance abuse or unless the consultations resulted in referral for psychiatric evaluation or treatment.

When an applicant does provide history in Item 19, the Examiner should review the matter with the applicant. The Examiner will record in **Item 60** only that information needed to document the review and provide the basis for a certification decision. If the Examiner finds the information to be of a personal or sensitive nature with no relevancy to flying safety, it should be recorded in **Item 60** as follows:

"Item 19. Reviewed with applicant. History not significant or relevant to application."

If the applicant is otherwise qualified, a medical certificate may be issued by the Examiner.

FAA medical authorities, upon review of the application, will ask for further information regarding visits to health care providers only where the physical findings, report of examination, applicant disclosure, or other evidence suggests the possible presence of a disqualifying medical history or condition.

If an explanation has been given on a previous report(s) and there has been no change in the condition, the applicant may enter "PREVIOUSLY REPORTED, NO CHANGE."

Of particular importance is the reporting of conditions that have developed since the applicant's last FAA medical examination. The Examiner is asked to comment on all entries, including those "PREVIOUSLY REPORTED, NO CHANGE." These comments may be entered under **Item 60**.

ITEM 20. Applicant's National Driver Register and Certifying Declaration

In addition to making a declaration of the completeness and truthfulness of the applicant's responses on the medical application, the applicant's declaration authorizes the National Driver Register to release the applicant's adverse driving history information, if any, to the FAA. The FAA uses such information to verify information provided in the application. Applicant must certify the declaration outlined in Item 20. If the applicant does not certify the declaration for any reason, Examiner shall not issue a medical certificate but forward the incomplete application to the AMCD.

EXAMINATION TECHNIQUES AND CRITERIA FOR QUALIFICATION

Items 21-58 of FAA Form 8500-8

ITEMS 21- 58 of FAA Form 8500-8

The Examiner must personally conduct the physical examination. This section provides guidance for completion of Items 21-58 of the Application for Airman Medical Certificate or Airman Medical and Student Pilot Certificate, FAA Form 8500-8.

The Examiner must carefully read the applicant's history page of FAA Form 8500-8 (Items 1-20) *before* conducting the physical examination and completing the Report of Medical Examination. This alerts the Examiner to possible pathological findings.

The Examiner must note in **Item 60** of the FAA Form 8500-8 any condition found in the course of the examination. The Examiner must list the facts, such as dates, frequency, and severity of occurrence.

When a question arises, the Federal Air Surgeon encourages Examiners first to check this Guide for Aviation Medical Examiners and other FAA informational documents. If the question remains unresolved, the Examiner should seek advice from a RFS or the Manager of the AMCD.

ITEMS 21-22. Height and Weight

| 21 Haight (inches) | 22 Weight (nounds) |
|---------------------|---------------------|
| 21. Height (inches) | 22. Weight (pounds) |
| o () | |

ITEM 21. Height

Measure and record the applicant's height in inches. Although there are no medical standards for height, exceptionally short individuals may not be able to effectively reach all flight controls and must fly specially modified aircraft. If required, the FAA will place operational limitations on the pilot certificate.

ITEM 22. Weight

Measure and record the applicant's weight in pounds.

BMI CHART AND FORMULA TABLE

| Measurement Units | BMI Formula and Calculation |
|---------------------------------------|--|
| Pounds and inches | Formula: weight (lb) / [height (in)] ² x 703 Calculate BMI by dividing weight in pounds (lbs) by height in inches (in) squared and multiplying by a conversion factor of 703. Example: Weight = 150 lbs, Height = 5'5" (65") Calculation: $[150 \div (65)^2] \times 703 = 24.96$ |
| Kilograms and meters (or centimeters) | Formula: weight (kg) / [height (m)]2 With the metric system, the formula for BMI is weight in kilograms divided by height in meters squared. Since height is commonly measured in centimeters, divide height in centimeters by 100 to obtain height in meters. Example: Weight = 68 kg, Height = 165 cm (1.65 m) Calculation: 68 ÷ (1.65)2 = 24.98 |

| | FAT | N | | | | | | | Carles I | | ľ | LY. | | | Body | y M | ass | Ind | ex 1 | [abl | e 6 | 1 | SA | 2 | R | SKIM | | Me M | 1/2 | and | | 2 | | ENTR LENTR | N N N | |
|--------------------|-----|-----|-----|------|-----|-----|-----|-----|----------|-------|-----|-----|-----|------|------|------|-------|--------|------|------|--------|-----|-----|-----|------|------|-----|------|-----|---|-----|-----|-----|---------------|-------|-----|
| | | | No | rmal | | | | Ov | erwe | eight | | | | Obes | e | | | | | | | | | | Extr | eme | Obe | sity | | | | | | | | |
| BMI | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 |
| Height (inches) |) | | | | | | | | | | | | | | | Body | y Wei | ght (p | ound | is) | | | | | | | | | | | | | | | | |
| 58 | 91 | 96 | 100 | 105 | 110 | 115 | 119 | 124 | 129 | 134 | 138 | 143 | 148 | 153 | 158 | 162 | 167 | 172 | 177 | 181 | 186 | 191 | 196 | 201 | 205 | 210 | 215 | 220 | 224 | 229 | 234 | 239 | 244 | 248 | 253 | 258 |
| 59 | 94 | 99 | 104 | 109 | 114 | 119 | 124 | 128 | 133 | 138 | 143 | 148 | 153 | 158 | 163 | 168 | 173 | 178 | 183 | 188 | 193 | 198 | 203 | 208 | 212 | 217 | 222 | 227 | 232 | 237 | 242 | 247 | 252 | 257 | 262 | 267 |
| 60 | 97 | 102 | 107 | 112 | 118 | 123 | 128 | 133 | 138 | 143 | 148 | 153 | 158 | 163 | 168 | 174 | 179 | 184 | 189 | 194 | 199 | 204 | 209 | 215 | 220 | 225 | 230 | 235 | 240 | 245 | 250 | 255 | 261 | 266 | 271 | 276 |
| 61 | 100 | 106 | 111 | 116 | 122 | 127 | 132 | 137 | 143 | 148 | 153 | 158 | 164 | 169 | 174 | 180 | 185 | 190 | 195 | 201 | 206 | 211 | 217 | 222 | 227 | 232 | 238 | 243 | 248 | 254 | 259 | 264 | 269 | 275 | 280 | 285 |
| 62 | 104 | 109 | 115 | 120 | 126 | 131 | 136 | 142 | 147 | 153 | 158 | 164 | 169 | 175 | 180 | 186 | 191 | 196 | 202 | 207 | 213 | 218 | 224 | 229 | 235 | 240 | 246 | 251 | 256 | 262 | 267 | 273 | 278 | 284 | 289 | 295 |
| 63 | 107 | 113 | 118 | 124 | 130 | 135 | 141 | 146 | 152 | 158 | 163 | 169 | 175 | 180 | 186 | 191 | 197 | 203 | 208 | 214 | 220 | 225 | 231 | 237 | 242 | 248 | 254 | 259 | 265 | 270 | 278 | 282 | 287 | 293 | 299 | 304 |
| 64 | 110 | 116 | 122 | 128 | 134 | 140 | 145 | 151 | 157 | 163 | 169 | 174 | 180 | 186 | 192 | 197 | 204 | 209 | 215 | 221 | 227 | 232 | 238 | 244 | 250 | 256 | 262 | 267 | 273 | 279 | 285 | 291 | 296 | 302 | 308 | 314 |
| 65 | 114 | 120 | 126 | 132 | 138 | 144 | 150 | 156 | 162 | 168 | 174 | 180 | 186 | 192 | 198 | 204 | 210 | 216 | 222 | 228 | 234 | 240 | 246 | 252 | 258 | 264 | 270 | 276 | 282 | 288 | 294 | 300 | 306 | 312 | 318 | 324 |
| 66 | 118 | 124 | 130 | 136 | 142 | 148 | 155 | 161 | 167 | 173 | 179 | 186 | 192 | 198 | 204 | 210 | 216 | 223 | 229 | 235 | 241 | 247 | 253 | 260 | 266 | 272 | 278 | 284 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 334 |
| 67 | 121 | 127 | 134 | 140 | 146 | 153 | 159 | 166 | 172 | 178 | 185 | 191 | 198 | 204 | 211 | 217 | 223 | 230 | 236 | 242 | 249 | 255 | 261 | 268 | 274 | 280 | 287 | 293 | 299 | 306 | 312 | 319 | 325 | 331 | 338 | 344 |
| 68 | 125 | 131 | 138 | 144 | 151 | 158 | 164 | 171 | 177 | 184 | 190 | 197 | 203 | 210 | 216 | 223 | 230 | 236 | 243 | 249 | 256 | 262 | 269 | 276 | 282 | 289 | 295 | 302 | 308 | 315 | 322 | 328 | 335 | 341 | 348 | 354 |
| 69 | 128 | 135 | 142 | 149 | 155 | 162 | 169 | 176 | 182 | 189 | 196 | 203 | 209 | 216 | 223 | 230 | 236 | 243 | 250 | 257 | 263 | 270 | 277 | 284 | 291 | 297 | 304 | 311 | 318 | 324 | 331 | 338 | 345 | 351 | 358 | 365 |
| 70 | 132 | 139 | 146 | 153 | 160 | 167 | 174 | 181 | 188 | 195 | 202 | 209 | 216 | 222 | 229 | 236 | 243 | 250 | 257 | 264 | 271 | 278 | 285 | 292 | 299 | 306 | 313 | 320 | 327 | 334 | 341 | 348 | 355 | 362 | 369 | 376 |
| 71 | 136 | 143 | 150 | 157 | 165 | 172 | 179 | 186 | 193 | 200 | 208 | 215 | 222 | 229 | 236 | 243 | 250 | 257 | 265 | 272 | 279 | 286 | 293 | 301 | 308 | 315 | 322 | 329 | 338 | 343 | 351 | 358 | 365 | 372 | 379 | 386 |
| 72 | 140 | 147 | 154 | 162 | 169 | 177 | 184 | 191 | 199 | 206 | 213 | 221 | 228 | 235 | 242 | 250 | 258 | 265 | 272 | 279 | 287 | 294 | 302 | 309 | 316 | 324 | 331 | 338 | 346 | 353 | 361 | 368 | 375 | 383 | 390 | 397 |
| 73 | 144 | 151 | 159 | 166 | 174 | 182 | 189 | 197 | 204 | 212 | 219 | 227 | 235 | 242 | 250 | 257 | 265 | 272 | 280 | 288 | 295 | 302 | 310 | 318 | 325 | 333 | 340 | 348 | 355 | 363 | 371 | 378 | 386 | 393 | 401 | 408 |
| 74 | 148 | 155 | 163 | 171 | 179 | 186 | 194 | 202 | 210 | 218 | 225 | 233 | 241 | 249 | 256 | 264 | 272 | 280 | 287 | 295 | 303 | 311 | 319 | 326 | 334 | 342 | 350 | 358 | 365 | 373 | 381 | 389 | 396 | 404 | 412 | 420 |
| 75 | 152 | 160 | 168 | 176 | 184 | 192 | 200 | 208 | 216 | 224 | 232 | 240 | 248 | 256 | 264 | 272 | 279 | 287 | 295 | 303 | 311 | 319 | 327 | 335 | 343 | 351 | 359 | 367 | 375 | 383 | 391 | 399 | 407 | 415 | 423 | 431 |
| 76 | 156 | 164 | 172 | 180 | 189 | 197 | 205 | 213 | 221 | 230 | 238 | 246 | 254 | 263 | 271 | 279 | 287 | 295 | 304 | 312 | 320 | 328 | 336 | 344 | 353 | 361 | 369 | 377 | 385 | 394 | 402 | 410 | 418 | 426 | 435 | 443 |

Source: Adapted from Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report.

ITEMS 23-24. Statement of Demonstrated Ability (SODA); SODA Serial Number

| 23. Sta | tement of | Demons | trated a | bility (SODA) | |
|---------|-----------|--------|----------|---------------|--|
| | Yes | | No | Defect Noted: | |

ITEM 23. Has a SODA ever been issued?

Ask the applicant if a SODA has ever been issued. If the answer is "yes," ask the applicant to show you the document. Then check the "yes" block and record the nature and degree of the defect.

SODA's are valid for an indefinite period or until an adverse change occurs that results in a level of defect worse than that stated on the face of the document.

The FAA issues SODA's for certain static defects, but not for disqualifying condition or conditions that may be progressive. The extent of the functional loss that has been cleared by the FAA is stated on the face of the SODA. If the Examiner finds the condition has become worse, a medical certificate should not be issued even if the applicant is otherwise qualified. The Examiner should also defer issuance if it is unclear whether the applicant's present status represents an adverse change.

The Examiner must take special care not to issue a medical certificate of a higher class than that specified on the face of the SODA even if the applicant appears to be otherwise medically qualified. The Examiner may note in **Item 60** the applicant's desire for a higher class.

ITEM 24. SODA Serial Number

24. SODA Serial Number

Enter the assigned serial number in the space provided.

ITEMS 25-30. Ear, Nose and Throat (ENT)

| CHECK EACH ITEM IN APPROPRIATE COLUMN | Normal | Abnormal |
|--|--------|----------|
| 25. Head, face, neck, and scalp | | |
| 26. Nose | | |
| 27. Sinuses | | |
| 28. Mouth and Throat | | |
| 29. Ears, general (internal and external canals: Hearing under Item 49) | | |
| 30. Ear Drums (Perforation) | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.105(b)(c), 67.205(b)(c), and 67.305(b)(c)

- (b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that -
 - (1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or
 - (2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.
- (c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

II. Examination Techniques

1. The *head and neck* should be examined to determine the presence of any significant defects such as:

- a. Bony defects of the skull
- b. Gross deformities
- c. Fistulas
- d. Evidence of recent blows or trauma to the head
- e. Limited motion of the head and neck
- f. Surgical scars

2. The **external ear** is seldom a major problem in the medical certification of applicants. Otitis externa or a furuncle may call for temporary disqualification. Obstruction of the canal by impacted cerumen or cellular debris may indicate a need for referral to an ENT specialist for examination. The tympanic membranes should be examined for scars or perforations. Discharge or granulation tissue may be the only observable indication of perforation. Middle ear disease may be revealed by retraction, fluid levels, or discoloration. The normal tympanic membrane is movable and pearly gray in color. Mobility should be demonstrated by watching the drum through the otoscope during a valsalva maneuver.

3. Pathology of the *middle ear* may be demonstrated by changes in the appearance and mobility of the tympanic membrane. The applicant may only complain of stuffiness of the ears and/or loss of hearing. An upper respiratory infection greatly increases the risk of aerotitis media with pain, deafness, tinnitus, and vertigo due to lessened aeration of the middle ear from eustachian tube dysfunction. When the applicant is taking medication for an ENT condition, it is important that the Examiner become fully aware of the underlying pathology, present status, and the length of time the medication has been used. If the condition is not a threat to aviation safety, the treatment consists solely of antibiotics, and the antibiotics have been taken over a sufficient period to rule out the likelihood of adverse side effects, the Examiner may make the certification decision.

The same approach should be taken when considering the significance of prior surgery such as myringotomy, mastoidectomy, or tympanoplasty. Simple perforation without associated symptoms or pathology is not disqualifying. When in doubt, the Examiner should not hesitate to defer issuance and refer the matter to the AMCD. The services of consultant ENT specialists are available to the FAA to help in determining the safety implications of complicated conditions.

4. **Unilateral Deafness.** An applicant with unilateral cogenital or acquired deafness should not be denied medical certification if able to pass any of the tests of hearing acuity.

5. **Bilateral Deafness.** It is possible for a totally deaf person to qualify for a private pilot certificate. When such an applicant initially applies for medical certification, if otherwise qualified, the AMCD may issue a combination medical/student pilot certificate with the limitation "Valid for Student Pilot Purposes Only." This will allow the student to practice with an instructor before undergoing a pilot check ride for the private pilot's license. When the applicant is ready to take the check ride, he/she must contact AMCD or the RFS for authorization to take a medical flight test (MFT). Upon successful completion of the MFT, the applicant will be issued a SODA, and an operational restriction will be placed on his/her pilot's license that restricts the pilot from flying into airspace requiring radio communication.

6. **Hearing Aids.** Under some circumstances, the use of hearing aids may be acceptable. If the applicant is unable to pass any of the above tests without the use of hearing aids, he or she may be tested using hearing aids.

7. The *nose* should be examined for the presence of polyps, blood, or signs of infection, allergy, or substance abuse. The Examiner should determine if there is a

history of epistaxis with exposure to high altitudes and if there is any indication of loss of sense of smell (anosmia). Polyps may cause airway obstruction or sinus blockage. Infection or allergy may be cause for obtaining additional history. Anosmia is at least noteworthy in that the airman should be made fully aware of the significance of the handicap in flying (inability to receive early warning of gas spills, oil leaks, or smoke). Further evaluation may be warranted.

8. Evidence of *sinus* disease must be carefully evaluated by a specialist because of the risk of sudden and severe incapacitation from barotrauma.

9. The *mouth and throat* should be examined to determine the presence of active disease that is progressive or may interfere with voice communications. Gross abnormalities that could interfere with the use of personal equipment such as oxygen equipment should be identified.

10. The *larynx* should be visualized if the applicant's voice is rough or husky. Acute laryngitis is temporarily disqualifying. Chronic laryngitis requires further diagnostic workup. Any applicant seeking certification for the first time with a functioning tracheostomy, following laryngectomy, or who uses an artificial voice-producing device should be denied or deferred and carefully assessed.

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table.

Conditions AMEs Can Issue (CACI) Certification Worksheets are also found within the Dispositions tables. These are a series of conditions which allow AMEs to regular issue if the applicant meets the parameters of the CACI Condition Worksheets. The worksheets provide detailed instructions to the examiner and outline condition-specific requirements for the applicant. If the requirements are met, and the applicant is otherwise qualified, the AME may issue without contacting AMCD first. If the requirements are not met, the AME must defer the exam and send the supporting documents to the FAA.

Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | | | | |
|---|-----------------------|---|--|--|--|--|--|--|
| Head, Face, Neck, and Scalp | | | | | | | | |
| Active fistula of neck, either congenital or acquired, including tracheostomy | All | Submit all pertinent medical information and current status report | Requires FAA Decision | | | | | |
| Loss of bony substance involving the two tables of the cranial vault | All | Submit all pertinent medical information and current status report | Requires FAA Decision | | | | | |
| Deformities of the face or head that would interfere with the proper fitting and | 1 st & 2nd | Submit all pertinent medical information and current status report | Requires FAA Decision | | | | | |
| wearing of an oxygen mask | 3rd | Submit all pertinent medical information | If deformity does not interfere with administration of supplemental O ² - Issue | | | | | |

ITEM 25. Head, Face, Neck, and Scalp

ITEM 26. Nose

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|---|-----------------------|
| | | Nose | |
| Evidence of severe allergic rhinitis ¹ | All | Submit all pertinent medical information and current status report | Requires FAA Decision |

¹ Hay fever controlled solely by desensitization without requiring antihistamines or other medications is not disqualifying. Applicants with seasonal allergies requiring antihistamines may be certified by the Examiner with the stipulation that they not exercise privileges of airman certification within 24 hours of experiencing symptoms requiring treatment or within 24 hours after taking an antihistamine. The Examiner should document this in Item 60. However, non-sedating antihistamines loratadine or fexofenadine may be used while flying, after adequate individual experience has determined that the medication is well tolerated without significant side effects.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|--|-----------------------|
| | | Nose | |
| Obstruction of sinus ostia, including polyps, that would be likely to result in complete obstruction | All | Submit all pertinent medical information and current status report | Requires FAA Decision |

ITEM 27. Sinuses

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | | | | | |
|--|-------|--|---|--|--|--|--|--|--|
| Sinuses - Acute or Chronic | | | | | | | | | |
| Sinusitis, intermittent use of topical or non- sedating medication | All | Document medication, dose and absence of side effects | Responds to treatment without any side effects - Issue | | | | | | |
| Severe-requiring continuous use of medication or effected by barometric changes | All | Submit all pertinent medical information and current status report | Requires FAA Decision | | | | | | |
| | | Sinus Tumor | | | | | | | |
| Benign - Cysts/Polyps | All | If no physiologic effects, submit documentation | Asymptomatic, no observable growth over a 12-month period, no potential for sinus block - Issue | | | | | | |
| Malignant | All | Submit all pertinent medical information and current status report | Requires FAA Decision | | | | | | |

ITEM 28. Mouth and Throat

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | | | | |
|--|-------|--|-----------------------|--|--|--|--|--|
| Mouth and Throat | | | | | | | | |
| Any malformation or condition, including stuttering, that would impair voice communication | All | Submit all pertinent medical information and current status report | Requires FAA Decision | | | | | |
| Palate: Extensive adhesion of the soft palate to the pharynx | All | Submit all pertinent medical information and current status report | Requires FAA Decision | | | | | |

ITEM 29. Ears, General

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|---|-------|--|--|
| | | Inner Ear | |
| Acoustic Neuroma | All | Submit all pertinent medical information and current status report | Requires FAA Decision |
| Acute or chronic disease without disturbance of equilibrium and successful miringotomy, if applicable | All | Submit all pertinent medical information | If no physiologic effects - Issue |
| Acute or chronic disease that may disturb equilibrium | All | Submit all pertinent medical information and current status report | Requires FAA Decision |
| Motion Sickness | All | Submit all pertinent medical information and current status report | If occurred during flight training and resolved - Issue |
| | | | If condition requires medication - Requires FAA Decision |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|--|---|
| | | Mastoids | |
| Mastoid fistula | All | Submit all pertinent medical information and current status report | Requires FAA Decision |
| Mastoiditis, acute or chronic | All | Submit all pertinent medical information and current status report | Requires FAA Decision |
| | | Middle Ear | |
| Impaired Aeration | All | Submit all pertinent medical information and current status report | Requires FAA Decision |
| Otitis Media | All | Submit all pertinent medical information and current status report | If acute and resolved – Issue If active or chronic - Requires FAA Decision |
| | | Outer Ear | |
| Impacted Cerumen | All | Submit all pertinent medical information and current status report | If asymptomatic and hearing is unaffected - Issue Otherwise - Requires FAA Decision |
| Otitis Externa that may progress to impaired hearing or become incapacitating | All | Submit all pertinent medical information and current status report | Requires FAA Decision |

ITEM 30. Ear Drums

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|--|--------------------------------------|
| | | Ear Drums | |
| Perforation that has associated pathology | All | Establish etiology, treatment, and submit all pertinent medical information | Requires FAA Decision |
| Perforation which has resolved without any other clinical symptoms | All | Submit all pertinent medical information | If no physiologic effects - Issue |

Otologic Surgery. A history of otologic surgery is not necessarily disqualifying for medical certification. The FAA evaluates each case on an individual basis following review of the otologist's report of surgery. The type of prosthesis used, the person's adaptability and progress following surgery, and the extent of hearing acuity attained are all major factors to be considered. Examiners should defer issuance to an applicant presenting a history of otologic surgery for the first time, sending the completed report of medical examination, with all available supplementary information, to the AMCD. Some conditions may have several possible causes or exhibit multiple symptomatology. Episodic disorders of dizziness or disequilibrium require careful evaluation and consideration by the FAA. Transient processes, such as those associated with acute labyrinthitis or benign positional vertigo may not disqualify an applicant when fully recovered. (Also see **Item 46., Neurologic** for a discussion of syncope and vertigo).

ITEMS 31-34. Eye

| CHECK EACH ITEM IN APPROPRIATE COLUMN | Normal | Abnormal |
|--|--------|----------|
| 31. Eyes, general (vision under Items 50 to 54) | | |
| 32. Ophthalmoscopic | | |
| 33. Pupils (Equity and reaction) | | |
| 34. Ocular motility (Associated parallel movement nystagmus) | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.103(e), 67.203(e), and 67.303(d)

(e) No acute or chronic pathological condition of either the eye or adnexa that interferes with the proper function of the eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

II. Examination Techniques

For guidance regarding the conduction of visual acuity, field of vision, heterophoria, and color vision tests, please see **Items 50-54**.

The examination of the eyes should be directed toward the discovery of diseases or defects that may cause a failure in visual function while flying or discomfort sufficient to interfere with safely performing airman duties.

The Examiner should personally explore the applicant's history by asking questions concerning any changes in vision, unusual visual experiences (halos, scintillations, etc.), sensitivity to light, injuries, surgery, or current use of medication. Does the applicant report inordinate difficulties with eye fatigue or strain? Is there a history of serious eye disease such as glaucoma or other disease commonly associated with secondary eye changes, such as diabetes? (See Item 53., Field of Vision and Item 54., Heterophoria)

- 1. It is recommended that the Examiner consider the following signs during the course of the eye examination:
 - 1. *Color* redness or suffusion of allergy, drug use, glaucoma, infection, trauma, jaundice, ciliary flush of Iritis, and the green or brown Kayser-Fleischer Ring of Wilson's disease.
 - 2. Swelling abscess, allergy, cyst, exophthalmos, myxedema, or tumor.
 - 3. *Other* clarity, discharge, dryness, ptosis, protosis, spasm (tic), tropion, or ulcer.
- 2. Ophthalmoscopic examination. It is suggested that a routine be established for ophthalmoscopic examinations to aid in the conduct of a comprehensive eye assessment. Routine use of a mydriatic is not recommended.
 - a. Cornea observe for abrasions, calcium deposits, contact lenses, dystrophy, keratoconus, pterygium, scars, or ulceration. Contact lenses should be removed several hours before examination of the eye. (See Item 50, Distant Vision)
 - b. *Pupils and Iris* check for the presence of synechiae and uveitis. Size, shape, and reaction to light should be evaluated during the ophthalmoscopic examination. Observe for coloboma, reaction to light, or disparity in size.
 - c. Aqueous hyphema or iridocyclitis.

- d. *Lens* observe for aphakia, discoloration, dislocation, cataract, or an implanted lens.
- e. Vitreous note discoloration, hyaloid artery, floaters, or strands.
- f. Optic nerve observe for atrophy, hemorrhage, cupping, or papilledema.
- g. *Retina and choroid* examine for evidence of coloboma, choroiditis, detachment of the retina, diabetic retinopathy, retinitis, retinitis pigmentosa, retinal tumor, macular or other degeneration, toxoplasmosis, etc.
- 3. Ocular Motility. Motility may be assessed by having the applicant follow a point light source with both eyes, the Examiner moving the light into right and left upper and lower quadrants while observing the individual and the conjugate motions of each eye. The Examiner then brings the light to center front and advances it toward the nose observing for convergence. End point nystagmus is a physiologic nystagmus and is not considered to be significant. It need not be reported. (For further consideration of nystagmus, see Item 50., Distant Vision.)
- 4. Monocular Vision. An applicant will be considered monocular when there is only one eye or when the best corrected distant visual acuity in the poorer eye is no better than 20/200. An individual with one eye, or effective visual acuity equivalent to monocular, may be considered for medical certification, any class, through the special issuance section of part 67 (14 CFR 67.401).

In amblyopia ex anopsia, the visual acuity loss is simply recorded in Item 50 of FAA Form 8500-8, and visual standards are applied as usual. If the standards are not met, a Report of Eye Evaluation, FAA Form 8500-7, should be submitted for consideration.

Although it has been repeatedly demonstrated that binocular vision is not a prerequisite for flying, some aspects of depth perception, either by stereopsis or by monocular cues, are necessary. It takes time for the monocular airman to develop the techniques to interpret the monocular cues that substitute for stereopsis; such as, the interposition of objects, convergence, geometrical perspective, distribution of light and shade, size of known objects, aerial perspective, and motion parallax.

In addition, it takes time for the monocular airman to compensate for his or her decrease in effective visual field. A monocular airman's effective visual field is reduced by as much as 30% by monocularity. This is especially important because of speed smear; i.e., the effect of speed diminishes the effective visual field such that normal visual field is decreased from 180 degrees to as narrow as 42 degrees or less as speed increases. A monocular airman's reduced effective visual field would be reduced even further than 42 degrees by speed smear.

For the above reasons, a waiting period of 6 months is recommended to permit an adequate adjustment period for learning techniques to interpret monocular cues and accommodation to the reduction in the effective visual field.

Applicants who have had monovision secondary to refractive surgery may be certificated, providing they have corrective vision available that would provide binocular vision in accordance with the vision standards, while exercising the privileges of the certificate. The certificate issued must have the appropriate vision limitations statement.

- 5. Contact Lenses. The use of contact lens(es) for monovision correction is not allowed:
 - The use of a contact lens in one eye for near vision and in the other eye for distant vision is not acceptable (for example: pilots with myopia plus presbyopia).
 - The use of a contact lens in one eye for near vision and the use of no contact lens in the other eye is not acceptable (for example: pilots with presbyopia but no myopia).

Additionally, designer contact lenses that introduce color (tinted lenses), restrict the field of vision, or significantly diminish transmitted light are not allowed.

Please note: the use of binocular contact lenses for distance-correction-only is acceptable. In this instance, no special evaluation or SODA is routinely required for a distance-vision-only contact lens wearer who meets the standard and has no complications. Binocular bifocal or binocular multifocal contact lenses are acceptable under the Protocol for Binocular Multifocal and Accommodating Devices.

- 6. Intraocular Devices. Binocular airman using multifocal or accommodating ophthalmic devices may be issued an airman medical certificate in accordance with the Protocol for Binocular Multifocal and Accommodating Devices.
- 7. Orthokeratology (Ortho-K) is the use of rigid gas-permeable contact lenses, normally worn only during sleep, to improve vision through reshaping of the cornea. It is used as an alternative to eyeglasses, refractive surgery, or for those who prefer not to wear contact lenses while awake. The correction is not permanent and visual acuity can regress while not wearing the Ortho-K lenses. There is no reasonable or reliable way to determine standards for the entire period the lenses are removed. Therefore, to be found qualified, applicants who use Ortho-K lenses must meet the applicable vision standard while wearing the Ortho-K lenses AND must wear the Ortho-K lenses while piloting aircraft. The limitation "must use Ortho-K lenses while performing pilot duties" must be placed on the medical certificate.

8. Glaucoma. The Examiner should deny or defer issuance of a medical certificate to an applicant if there is a loss of visual fields, a significant change in visual acuity, or newly diagnosed intraocular hypertension.

The FAA may grant an Authorization under the special issuance section of Part 67 (14 CFR 67.401) on an individual basis. The Examiner must obtain a report of Ophthalmological Evaluation for Glaucoma (FAA Form 8500-14) from an ophthmologist. See Glaucoma Worksheet. Because secondary glaucoma is caused by known pathology such as; uveitis or trauma, eligibility must largely depend upon that pathology. Secondary glaucoma is often unilateral, and if the cause or disease process is no longer active and the other eye remains normal certification is likely.

Applicants with primary or secondary narrow angle glaucoma are usually denied because of the risk of an attack of angle closure, because of incapacitating symptoms of severe pain, nausea, transitory loss of accommodative power, blurred vision, halos, epiphora, or iridoparesis. Central venous occlusion can occur with catastrophic loss of vision. However, when surgery such as iridectomy or iridencleisis has been performed satisfactorily more than 3 months before the application, the likelihood of difficulties is considerably more remote, and applicants in that situation may be favorably considered.

An applicant with unilateral or bilateral open angle glaucoma may be certified by the FAA (with follow-up required) when a current ophthalmological report substantiates that pressures are under adequate control, there is little or no visual field loss or other complications, and the person tolerates small to moderate doses of allowable medications. Individuals who have had filter surgery for their glaucoma, or combined glaucoma/cataract surgery, can be considered when stable and without complications. A few applicants have been certified following their demonstration of adequate control with oral medication. Neither miotics nor mydriatics are necessarily medically disqualifying.

However, miotics such as pilocarpine cause pupillary constriction and could conceivably interfere with night vision. Although the FAA no longer routinely prohibits pilots who use such medications from flying at night, it may be worthwhile for the Examiner to discuss this aspect of the use of miotics with applicants. If considerable disturbance in night vision is documented, the FAA may limit the medical certificate: NOT VALID FOR NIGHT FLYING

9. Sunglasses. Sunglasses are not acceptable as the only means of correction to meet visual standards, but may be used for backup purposes if they provide the necessary correction. Airmen should be encouraged to use sunglasses in bright daylight but must be cautioned that, under conditions of low illumination, they may compromise vision. Mention should be made that sunglasses do not protect the eyes from the effects of ultra violet radiation without special glass or coatings and that photosensitive lenses are unsuitable for aviation purposes because they respond to changes in light intensity too slowly. The so-called "blue blockers" may not be suitable since they block the blue light used in many current panel displays. Polarized sunglasses are unacceptable if the windscreen is also polarized.

- 10. Refractive Procedures. The FAA accepts the following Food and Drug Administration approved refractive procedures for visual acuity correction:
 - Radial Keratotomy (RK)
 - Epikeratophakia
 - Laser-Assisted In Situ Keratomileusis (LASIK), including Wavefrontguided LASIK
 - Photorefractive Keratectomy (PRK)
 - Conductive Keratoplasty (CK)

Please be advised that these procedures have potential adverse effects that could be incompatible with flying duties, including: corneal scarring or opacities; worsening or variability of vision; and night-glare.

The FAA expects that airmen will not resume airman duties until their treating health care professional determines that their post-operative vision has stabilized, there are no significant adverse effects or complications (such as halos, rings, haze, impaired night vision and glare), the appropriate vision standards are met, and reviewed by an Examiner or AMCD. When this determination is made, the airman should have the treating health care professional document this in the health care record, a copy of which should be forwarded to the AMCD before resumption of airman duties. If the health care professional's determination is favorable, the applicant may resume airman duties, after consultation and review by an Examiner, unless informed otherwise by the FAA.

An applicant treated with a refractive procedure may be issued a medical certificate by the Examiner if the applicant meets the visual acuity standards and the Report of Eye Evaluation (FAA Form 8500-7) indicates that healing is complete; visual acuity remains stable; and the applicant does not suffer sequela such as; glare intolerance, halos, rings, impaired night vision, or any other complications. There should be no other pathology of the affected eye(s).

If the procedure was done 2 years ago or longer, the FAA may accept the Examiner's eye evaluation and an airman statement regarding the absence of adverse sequela.

If the procedure was performed within the last 2 years, the airman must provide a report to the AMCD from the treating health care professional to document the date of procedure, any adverse effects or complications, and when the airman returned to flying duties. If the report is favorable and the airman meets the

appropriate vision standards, the applicant may resume airman duties, unless informed otherwise by the FAA.

A. Conductive Keratoplasty (CK): CK is used for correction of farsightedness. As this procedure is not considered permanent and there is expected regression of visual acuity in time, the FAA may grant an Authorization for special issuance of a medical certificate under 14 CFR 67.401 to an applicant who has had CK.

The FAA evaluates CK procedures on an individual basis following a waiting period of 6 months. The waiting period is required to permit adequate adjustment period for fluctuating visual acuity. The Examiner can facilitate FAA review by obtaining all preand post-operative medical records, a Report of Eye Evaluation (FAA Form 8500-7) from a treating or evaluating eye specialist with comment regarding any adverse effects or complications related to the procedure.

III. Aerospace Medical Disposition

Applicants with many visual conditions may be found qualified for FAA certification following the receipt and review of specialty evaluations and pertinent medical records. Examples include retinal detachment with surgical correction, open angle glaucoma under adequate control with medication, and narrow angle glaucoma following surgical correction.

The Examiner may not issue a certificate under such circumstances for the initial application, except in the case of applicants following cataract surgery. The Examiner may issue a certificate after cataract surgery for applicants who have undergone cataract surgery with or without lens(es) implant. If pertinent medical records and a current ophthalmologic evaluation (using FAA Form 8500-7 or FAA Form 8500-14) indicate that the applicant meets the standards, the FAA may delegate authority to the Examiner to issue subsequent certificates.

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

ITEM 31. Eyes, General

| DISEASE/CONDITION | CLASS | EVALUTION DATA | DISPOSITION | |
|--|-------|---|---|--|
| Eyes, General | | | | |
| Amblyopia ¹ Initial certification | All | Provide completed FAA Form 8500-7 Note: applicant should be at best corrected visual acuity before evaluation | If applicant does not correct to standards, add the following limitation to the medical certificate: "Valid for Student Pilot Purposes Only" and request a medical flight test | |
| Congenital or acquired conditions (whether acute or chronic) of either eye or adnexa, that may interfere with visual functions, may progress to that degree, or may be aggravated by flying (tumors and ptosis obscuring the pupil, acute inflammatory disease of the eyes and lids, cataracts, or keratoconus.) | All | Provide completed FAA Form 8500-7 Submit all pertinent medical information and current status report For keratoconus, include if available results of imaging studies such as kertatometry, videokeratography, etc., with clinical correlation Note: applicant should be at best corrected visual acuity before evaluation | Requires FAA Decision | |
| Any ophthalmic pathology reflecting a serious systemic disease (e.g., diabetic and hypertensive retinopathy) | All | Submit all pertinent medical information and current status report. (If applicable, see Diabetes and Hypertensive Protocols) | Requires FAA Decision | |
| Diplopia | All | If applicant provides written evidence that the FAA has previously considered and determined that this condition is not adverse to flight safety. A MFT may be requested. | Contact RFS for approval to Issue Otherwise - Requires FAA Decision | |

¹ In amblyopia ex anopsia, the visual acuity of one eye is decreased without presence of organic eye disease, usually because of strabismus or anisometropia in childhood.

| Pterygium DISEASE/CONDITION | | Document findings in Item 60 EVALUATION DATA | If less than 50% of the cornea and not affecting central vision - Issue Otherwise - Requires FAA Decision DISPOSITION |
|--|-----|---|--|
| | | | |
| | E | yes - Procedures | |
| Aphakia/Lens Implants | All | Submit all pertinent medical information and current status report (See additional disease dependent requirements) | If visual acuity meets standards - Issue Otherwise - Requires FAA Decision |
| Conductive Keratoplasty - Farsightedness | All | See Protocol for Conductive Keratoplasty | See Protocol for Conductive Keratoplasty |
| Intraocular Devices | All | See Protocol for Binocular Multifocal and Accommodating Devices | See Protocol for Binocular Multifocal and Accommodating Devices |
| Refractive Procedures other than CK | All | Provide completed FAA Form 8500-7, type and date of procedure, statement as to any adverse effects or complications (halo, glare, haze, rings, etc.) | If visual acuity meets standards, is stable, and no complications exist - Issue Otherwise - Requires FAA Decision |

ITEM 32. Ophthalmoscopic

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|--|-------|---|--|--|
| Ophthalmoscopic | | | | |
| Chorioretinitis; Coloboma; Corneal Ulcer or Dystrophy; Optic Atrophy or Neuritis; Retinal Degeneration or Detachment; Retinitis Pigmentosa; Papilledema; or Uveitis | All | Submit all pertinent medical information and current status report | Requires FAA Decision | |
| Glaucoma (treated or untreated) | All | Review all pertinent medical information and current status report, including Form 8500-14 | See Glaucoma Worksheet below. If airman meets all certification criteria – Issue. All others require FAA decision. Submit all evaluation data. Initial Special Issuance - Requires FAA Decision Followup Special Issuances - See AASI Protocol | |
| Macular Degeneration; Macular Detachment | All | Submit all pertinent medical information and current status report | Requires FAA Decision | |
| Tumors | All | Submit all pertinent medical information and current status report | Requires FAA Decision | |
| Vascular Occlusion; Retinopathy | All | Submit all pertinent medical information and current status report | Requires FAA Decision | |

Glaucoma Worksheet

The Examiner must review a current status report by the treating physician and any supporting documents to determine the applicant's eligibility for certification. If the applicant **meets ALL the acceptable certification criteria** listed below, the Examiner can issue. Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam.

| AME MUST REVIEW | ACCEPTABLE CERTIFICATION CRITERIA |
|--|--|
| Treating ophthalmologist finds the condition stable on current regimen and no changes recommended. | [] Yes |
| Age at diagnosis | [] 40 or older |
| FAA Form 8500-14 or equivalent treating physician report that documents the considerations below: | []Yes |
| Acceptable types of glaucoma | [] Open Angle being monitored and stable, Ocular Hypertension or Glaucoma Suspect being monitored and stable, or previous history of Narrow Angle/Angle Closure Glaucoma which has been treated with iridectomy /iridotomy (surgical or laser) and is currently stable. |
| | NOT acceptable: Normal Tension Glaucoma, secondary glaucoma due to inflammation, trauma, or the presence of any other significant eye pathology (e.g. neovascular glaucoma due to proliferative diabetic retinopathy or an ischemic central vein occlusion or uveitic glaucoma) |
| Documented nerve damage or trabeculectomy (filtration surgery) | [] No |
| Medications | [] None or Prostaglandin analogs (Xalatan, Lumigan, Travatan or Travatan Z), Carbonic anhydrase inhibitor (Trusopt and Azopt), Beta blockers (Timoptic, etc), or Alpha agonist (Alphagan). Combination eye drops are acceptable |
| | NOT acceptable : Pilocarpine or other miotics, cycloplegics (Atropine), or oral medications |
| Medication side effects | [] None |
| Intraocular pressure | [] 23 mm Hg or less in both eyes |
| ANY evidence of defect or reported Unreliable Visual Fields | [] No |
| Acceptable visual field tests: Humphrey 24-2 or 30-2 (either SITA or full threshold), Octopus (either TOP or full threshold). Other formal visual field testing may be acceptable but you must call for approval. Confrontation or screening visual field testing is not acceptable. | |

AME MUST NOTE in Block 60 one of the following:

[] Airman meets certification criteria for glaucoma.

[] Airman had a previous Special Issuance for this condition and now meets the regular issuance certification criteria for glaucoma.

[] Airman does NOT meet certification criteria for glaucoma. I have deferred this exam. (Mail the supporting documents to FAA identifying which criteria were not met.)

ITEM 33. Pupils

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | |
|--|--------|--|-----------------------|--|--|
| | Pupils | | | | |
| Disparity in size or reaction to light (afferent pupillary defect) requires clarification and/or further evaluation | All | Submit all pertinent medical information and current status report | Requires FAA Decision | | |
| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | |
| | | Pupils | | | |
| Nonreaction to light in either eye acute or chronic | All | Submit all pertinent medical information and current status report | Requires FAA Decision | | |
| Nystagmus ¹ | All | Submit all pertinent medical information and current status report | Requires FAA Decision | | |
| Synechiae, anterior or posterior | All | Submit all pertinent medical information and current status report | Requires FAA Decision | | |

ITEM 34. Ocular Motility

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|--|-----------------------|
| | | Ocular Motility | |
| Absence of conjugate alignment in any quadrant | All | Submit all pertinent medical information and current status report | Requires FAA Decision |
| Inability to converge on a near object | All | Submit all pertinent medical information and current status report | Requires FAA Decision |

¹ Nystagmus of recent onset is cause to deny or defer certificate issuance. Any recent neurological or other evaluations available to the Examiner should be submitted to the AMCD. If nystagmus has been present for a number of years and has not recently worsened, it is usually necessary to consider only the impact that the nystagmus has upon visual acuity. The Examiner should be aware of how nystagmus may be aggravated by the forces of acceleration commonly encountered in aviation and by poor illumination.

| Paralysis with loss of | All | Submit all pertinent | Requires FAA Decision |
|------------------------|-----|-------------------------|-----------------------|
| ocular motion in any | | medical information and | |
| direction | | current status report | |

ITEM 35. Lungs and Chest

| CHECK EACH ITEM IN APPROPRIATE COLUMN | Normal | Abnormal |
|---|--------|----------|
| 35. Lungs and chest (Not including breasts examination) | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges;
- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

Breast examination: The breast examination is performed only at the applicant's option or if indicated by specific history or physical findings. If a breast examination is performed, the results are to be recorded in Item 60 of FAA Form 8500-8. The applicant should be advised of any abnormality that is detected, then deferred for further evaluation.

III. Aerospace Medical Dispositions

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | |
|--|-----------|---|---|--|--|
| | Allergies | | | | |
| Allergies, severe | All | Submit all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects | Requires FAA Decision | | |
| Hay fever controlled solely by desensitization without antihistamines or other medications ^{1 2 3} | All | Submit all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects | If responds to treatment and without side effects - Issue Otherwise - Requires FAA Decision | | |

¹ Applicants with seasonal allergies requiring antihistamines may be certified by the Examiner with the stipulation that they not exercise privileges of airman certification within 24 hours of experiencing symptoms requiring treatment or within 24 hours after taking an antihistamine. The Examiner should document this in Item 60.

² Individuals who have hay fever that requires only occasional seasonal therapy may be certified by the Examiner with the stipulation that they not fly during the time when symptoms occur and treatment is required.

³ Nonsedating antihistamines including loratadine, or fexofenadine may be used while flying, after adequate individual experience has determined that the medication is well tolerated without significant side effects.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|--|---|
| Asthma | | | |
| Mild or seasonal asthmatic symptoms | All | Review all pertinent medical information and current status report, include PFT's, duration of symptoms, name and dosage of drugs and side effects for special issuance consideration | See Asthma Worksheet below. If airman meets all certification criteria – Issue. All others require FAA Decision. Submit all evaluation data. Initial Special Issuance - Requires FAA Decision Followup Special Issuances - See AASI Protocol |
| Frequent severe asthmatic symptoms | All | Submit all pertinent medical information and current status report, include PFT's, duration of symptoms, name and dosage of drugs and side effects for special issuance consideration. | Initial Special Issuance - Requires FAA Decision Followup Special Issuances - See AASI Protocol |

Asthma Worksheet

The Examiner must review a current status report by the treating physician and any supporting documents to determine the applicant's eligibility for certification. If the applicant **meets ALL the acceptable certification criteria** listed below, the Examiner can issue. Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam.

| AME MUST REVIEW | ACCEPTABLE CERTIFICATION CRITERIA |
|---|--|
| Treating physician finds the condition stable on current regimen and no changes recommended | [] Yes |
| Symptoms: Stable and well- controlled (either on or off medication) | [] Yes for all of the following: Frequency of symptoms - no more than 2 days per week Use of inhaled short-acting beta agonist (rescue inhaler) - no more than 2 times per week Use of oral corticosteroids for exacerbations - no more than 2 times per year In the last year: No in-patient hospitalizations No more than 2 outpatient clinic/urgent care visits for exacerbations (with symptoms fully resolved). |
| Acceptable Medications | [] One or more of the following Inhaled long- acting beta agonist Inhaled short-acting beta agonist (e.g., albuterol) Inhaled corticosteroid leukotriene receptor antagonist, (e.g. montelukast [Singulair]) Note: A short course of oral or IM steroids during an exacerbation is acceptable. Examiner must caution airman not to fly until course of oral steroids is completed and airman is symptom free. |
| Pulmonary Function Tests * *PFT is not required if the only treatment is PRN use on one or two days a week of a short-acting beta agonist (e.g. albuterol). | [] Current within last 90 days [] FEV1, FVC, and FEV1/FVC are all equal to or greater than 80% predicted before bronchodilators. |

AME MUST NOTE in Block 60 one of the following:

[] Airman meets certification criteria for asthma.

[] Airman had a previous Special Issuance for this condition and now meets the regular issuance certification criteria for asthma.

[] Airman does NOT meet certification criteria for asthma. I have deferred the exam. (Mail the supporting documents to FAA identifying which criteria were not met.)

DISEASE/CONDITION CLASS EVALUATION DATA DISPOSITION

Chronic Obstructive Pulmonary Disease (COPD)

| | | 1 | |
|---------------------|-----|----------------------|--------------------------|
| Chronic bronchitis, | All | Submit all pertinent | Initial Special Issuance |
| emphysema, or | | medical information | - Requires FAA Decision |
| COPD ⁵ | | and current status | |
| | | report. Include an | Followup |
| | | FVC/FEV1 | Special Issuance's - |
| | | | See AASI Protocol |

Disease of the Lungs, Pleura, or Mediastinum

| Abscesses Active Mycotic disease Active Tuberculosis | All | Submit all pertinent medical information and current status report | Requires FAA Decision |
|--|-----|--|--|
| Fistula, Bronchopleural, to include Thoracostomy | All | Submit all pertinent medical information and current status report | Requires FAA Decision |
| Lobectomy | All | Submit all pertinent medical information and current status report | Requires FAA Decision |
| Pulmonary Embolism | All | See Thromboembolic Disease Protocol | See Thromboembolic Disease Protocol |
| Pulmonary Fibrosis | All | Submit all pertinent medical information, current status report, PFT's with diffusion capacity | If >75% predicted and no impairment - Issue Otherwise - Requires |
| | | | FAA Decision |

⁵ Certification may be granted, by the FAA, when the condition is mild without significant impairment of pulmonary functions. If the applicant has frequent exacerbations or any degree of exertional dyspnea, certification should be deferred.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|---|-------|--|--------------------------------------|--|
| Pleura and Pleural Cavity | | | | |
| Acute fibrinous pleurisy; Empyema; Pleurisy with effusion; or Pneumonectomy | All | Submit all pertinent medical information and current status report, and PFT's | Requires FAA Decision | |
| Malignant tumors or cysts of the lung, pleura or mediastinum | All | Submit all pertinent medical information and current status report | Requires FAA Decision | |
| Other diseases or defects of the lungs or chest wall that require use of medication or that could adversely affect flying or endanger the applicant's well-being if permitted to fly | All | Submit all pertinent medical information and current status report | Requires FAA Decision | |
| Pneumothorax - Traumatic | All | Submit all pertinent medical information and current status report | If 3 months after resolution - Issue | |
| Sarcoid, if more than minimal involvement or if symptomatic | All | Submit all pertinent medical information and current status report | Requires FAA Decision | |
| Spontaneous pneumothorax ⁶ | All | Submit all pertinent medical information and current status report | Requires FAA Decision | |

⁶ A history of a single episode of spontaneous pneumothorax is considered disqualifying for airman medical certification until there is x-ray evidence of resolution and until it can be determined that no condition that would be likely to cause recurrence is present (i.e., residual blebs). On the other hand, an individual who has sustained a repeat pneumothorax normally is not eligible for certification until surgical interventions are carried out to correct the underlying problem. A person who has such a history is usually able to resume airmen duties 3 months after the surgery. No special limitations on flying at altitude are applied.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|---------------------------------|-------|---|--|
| Pulmonary | | | |
| Bronchiectasis | All | Submit all pertinent medical information and current status report | If moderate to severe - Requires FAA Decision |
| Sleep Apnea | | | |
| Obstructive Sleep Apnea | All | Submit all pertinent medical information and current status report. Include sleep study with a polysomnogram, use of medications and titration study results | Initial Special Issuance - Requires FAA Decision Followup Special Issuance's - See AASI Protocol |
| Periodic Limb Movement, etc. | All | Submit all pertinent medical information and current status report. Include sleep study with a polysomnogram, use of medications and titration study results, along with a statement regarding Restless Leg Syndrome | Requires FAA Decision |

ITEM 36. Heart

| CHECK EACH ITEM IN APPROPRIATE COLUMN | Normal | Abnormal |
|--|--------|----------|
| 36. Heart (Precordial activity, rhythm, sounds, and murmurs) | | |

I. Code of Federal Regulations:

First-Class: 14 CFR 67.111(a)(b)(c)

Cardiovascular standards for first-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of any of the following:
 - (1) Myocardial infarction
 - (2) Angina pectoris
 - (3) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant
 - (4) Cardiac valve replacement
 - (5) Permanent cardiac pacemaker implantation; or
 - (6) Heart replacement
- (b) A person applying for first-class airman medical certification must demonstrate an absence of myocardial infarction and other clinically significant abnormality on electrocardiographic examination:
 - (1) At the first application after reaching the 35th birthday; and
 - (2) On an annual basis after reaching the 40th birthday
 - (c) An electrocardiogram will satisfy a requirement of paragraph (b) of this section if it is dated no earlier than 60 days before the date of the application it is to accompany and was performed and transmitted according to acceptable standards and techniques.

Second- and Third-Class: 14 CFR 67.211(a)(b)(c)(d)(e)(f) and 67.311(a)(b)(c)(d)(e)(f)

Cardiovascular standards for a second- and third-class airman medical certificate are no established medical history or clinical diagnosis of any of the following:

- (a) Myocardial infarction
- (b) Angina pectoris
- (c) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant
- (d) Cardiac valve replacement
- (e) Permanent cardiac pacemaker implantation; or
- (f) Heart replacement

II. Examination Techniques

A. General Physical Examination.

- A brief description of any comment-worthy personal characteristics as well as height, weight, representative blood pressure readings in both arms, funduscopic examination, condition of peripheral arteries, carotid artery auscultation, heart size, heart rate, heart rhythm, description of murmurs (location, intensity, timing, and opinion as to significance), and other findings of consequence must be provided.
- The Examiner should keep in mind some of the special cardiopulmonary demands of flight, such as changes in heart rates at takeoff and landing. High G-forces of aerobatics or agricultural flying may stress both systems considerably. Degenerative changes are often insidious and may produce subtle performance decrements that may require special investigative techniques.
 - a. Inspection. Observe and report any thoracic deformity (e.g., pectus excavatum), signs of surgery or other trauma, and clues to ventricular hypertrophy. Check the hematopoietic and vascular system by observing for pallor, edema, varicosities, stasis ulcers, and venous distention. Check the nail beds for capillary pulsation and color.
 - b. Palpation. Check for thrills and the vascular system for arteriosclerotic changes, shunts, or AV anastomoses. The pulses should be examined to determine their character, to note if they are diminished or absent, and to

observe for synchronicity. The medical standards do not specify pulse rates that, per se, are disqualifying for medical certification. These tests are used, however, to determine the status and responsiveness of the cardiovascular system. Abnormal pulse rates may be reason to conduct additional cardiovascular system evaluations.

- i. Bradycardia of less than 50 beats per minute, any episode of tachycardia during the course of the examination, and any other irregularities of pulse other than an occasional ectopic beat or sinus arrhythmia must be noted and reported. If there is bradycardia, tachycardia, or arrhythmia further evaluation may be warranted and deferral may be indicated.
- ii. A cardiac evaluation may be needed to determine the applicant's qualifications. Temporary stresses or fever may, at times, result in abnormal results from these tests. If the Examiner believes this to be the case, the applicant should be given a few days to recover and then be retested. If this is not possible, the Examiner should defer issuance, pending further evaluation.
- c. Percussion. Determine heart size, diaphragmatic elevation/excursion, abnormal densities in the pulmonary fields, and mediastinal shift.
- d. Auscultation. Check for resonance, asthmatic wheezing, ronchi, rales, cavernous breathing of emphysema, pulmonary or pericardial friction rubs, quality of the heart sounds, murmurs, heart rate, and rhythm. If a murmur is discovered during the course of conducting a routine FAA examination, report its character, loudness, timing, transmission, and change with respiration. It should be noted whether it is functional or organic and if a special examination is needed. If the latter is indicated, the Examiner should defer issuance of the medical certificate and transmit the completed FAA Form 8500-8 to the FAA for further consideration. Examiner must defer to the AMCD or Region if the treating physician or Examiner reports the murmur is moderate to severe (Grade III or IV). Listen to the neck for bruits.

It is recommended that the Examiner conduct the auscultation of the heart with the applicant both in a sitting and in a recumbent position.

Aside from murmur, irregular rhythm, and enlargement, the Examiner should be careful to observe for specific signs that are pathognomonic for specific disease entities or for serious generalized heart disease. Examples of such evidence are: (1) the opening snap at the apex or fourth left intercostal space signifying mitral stenosis; (2) gallop rhythm indicating serious impairment of cardiac function; and (3) the middiastolic rumble of mitral stenosis. B. When General Examinations Reveal Heart Problems.

These specifications have been developed by the FAA to determine an applicant's eligibility for airman medical certification. Standardization of examination methods and reporting is essential to provide sufficient basis for making determinations and the prompt processing of applications.

1. This cardiovascular evaluation (CVE), therefore, must be reported in sufficient detail to permit a clear and objective evaluation of the cardiovascular disorder(s) with emphasis on the degree of functional recovery and prognosis. It should be forwarded to the FAA immediately upon completion. Inadequate evaluation, reporting, or failure to promptly submit the report to the FAA may delay the certification decision.

a. Medical History. Particular reference should be given to cardiovascular abnormalities-cerebral, visceral, and/or peripheral. A statement must be included as to whether medications are currently or have been recently used, and if so, the type, purpose, dosage, duration of use, and other pertinent details must be provided. A specific history of any anticoagulant drug therapy is required. In addition, any history of hypertension must be fully developed to also include all medications used, dosages, and comments on side effects.

b. Family, Personal, and Social History. A statement of the ages and health status of parents and siblings is required; if deceased, cause and age at death should be included. Also, any indication of whether any near blood relative has had a "heart attack," hypertension, diabetes, or known disorder of lipid metabolism must be provided. Smoking, drinking, and recreational habits of the applicant are pertinent as well as whether a program of physical fitness is being maintained. Comments on the level of physical activities, functional limitations, occupational, and avocational pursuits are essential.

c. Records of Previous Medical Care. If not previously furnished to the FAA, a copy of pertinent hospital records as well as out-patient treatment records with clinical data, x-ray, laboratory observations, and originals or copies of all electrocardiographic (ECG) tracings should be provided. Detailed reports of surgical procedures as well as cerebral and coronary arteriography and other major diagnostic studies are of prime importance.

d. Surgery. The presence of an aneurysm or obstruction of a major vessel of the body is disqualifying for medical certification of any class. Following successful surgical intervention and correction, the applicant may ask for FAA consideration. The FAA recommends that the applicant recover for at least 3 months for ATCS's and 6 months for airmen.

A history of coronary artery bypass surgery is disqualifying for certification. Such surgery does not negate a past history of coronary heart disease. The presence of permanent cardiac pacemakers and artificial heart valves is also disqualifying for certification.

The FAA will consider an Authorization for a Special Issuance of a Medical Certificate (Authorization) for most cardiac conditions. Applicants seeking further FAA consideration should be prepared to submit all past records and a report of a complete current cardiovascular evaluation (CVE) in accordance with FAA specifications.

C. Medication.

- Medications acceptable to the FAA for treatment of hypertension in airmen include all Food and Drug Administration (FDA) approved diuretics, alphaadrenergic blocking agents, beta-adrenergic blocking agents, calcium channel blocking agents, angiotension converting enzyme (ACE inhibitors) agents, and direct vasodilators.
- The following are **NOT ACCEPTABLE** to the FAA:
 - Centrally acting agents (such as reserpine, guanethidine, guanadrel, guanabenz, and methyldopa).
 - A combination of beta-adrenergic blocking agents used with <u>insulin,</u> <u>meglitinides, or sulfonylureas</u>.
 - The use of flecainide when there is evidence of left ventricular dysfunction or recent myocardial infarction.
 - The use of nitrates for the treatment of coronary artery disease or to modify hemodynamics.
- The Examiner must defer issuance of a medical certificate to any applicant whose hypertension has not been evaluated, who uses unacceptable medications, whose medical status is unclear, whose hypertension is uncontrolled, who manifests significant adverse effects of medication, or whose certification has previously been specifically reserved to the FAA.

III. Aerospace Medical Disposition

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|--|-------------|--|--|--|
| | Arrhythmias | | | |
| Bradycardia (<50 bpm) | All | Document history and findings, CVE Protocol, and submit any tests deemed appropriate | If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision | |
| Bundle Branch Block (Left and Right) | All | See CVE and <u>GXT</u> Protocols | If no evidence of structural, functional or coronary heart disease - Issue | |
| History of Implanted Pacemakers | All | See GXT Additional BBB Requirements See Implanted Pacemaker Protocol | Otherwise - Requires FAA Decision Requires FAA Decision | |
| PAC (2 or more on ECG) | All | Requires evaluation, e.g., check for MVP, caffeine, pulmonary disease, thyroid, etc. | If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision | |
| PVC's (2 or more on standard ECG) | All | Max GXT – to include a baseline ECG | If no evidence of structural, functional or coronary heart disease and PVC's resolve with exercise - Issue Otherwise - Requires FAA Decision | |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|---|-------------|--|---|--|
| | Arrhythmias | | | |
| 1 st Degree AV Block | All | Document history and findings, CVE Protocol, and submit any tests deemed appropriate | If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision | |
| 2 nd Degree AV Block Mobitz I | All | Document history and findings, CVE Protocol, and submit any tests deemed appropriate | If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision | |
| 2 nd Degree AV Block Mobitz II | All | CVE Protocol in accordance w/ Hypertensive Evaluation Specifications and 24-hour Holter | Requires FAA Decision | |
| 3 rd Degree AV Block | All | CVE Protocol in accordance w/ Hypertensive Evaluation Specifications and 24-hour Holter | Requires FAA Decision | |
| Preexcitation | All | CVE Protocol, <u>GXT</u> , and 24-hour Holter | Requires FAA Decision | |
| Radio Frequency Ablation | All | 3-month wait, then 24-hour Holter | If Holter negative for arrhythmia and no recurrence – Issue Otherwise - Requires FAA Decision | |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|---|-----------------------------------|--|---|
| | | Arrhythmias | |
| Supraventricular Tachycardia | All | CHD Protocol with ECHO and 24-hour Holter | Initial Special Issuance - Requires FAA Decision |
| | | | Followup Special Issuance's - See AASI Protocol |
| | At | rial Fibrillation | |
| Atrial Fibrillation: Chronic Paroxysmal/Lone | All | CVE Protocol with EST, ECHO and 24-hour Holter. | Initial Special Issuance - Requires FAA Decision |
| | | | Followup Special Issuance's - See AASI Protocol |
| History of Resolved Atrial Fibrillation >5 years ago | All | Document previous workup for CAD and structural heart disease | If no ischemia, history of emboli, or structural or functional heart disease - Issue |
| | | | Otherwise - Requires FAA Decision |
| | Coron | ary Heart Disease | |
| Coronary Heart Disease: Angina Pectoris Atherectomy; | 1 st & 2 nd | See CHD Protocol | Requires FAA Decision |
| Coronary Bypass Grafting; Myocardial Infarction; PTCA; | 3 rd | See CHD Protocol | Initial Special Issuance - Requires FAA Decision |
| Rotoblation; and Stent Insertion | | | Followup Special Issuance's - See AASI Protocol |

| Hypertension | | | |
|--------------------------------------|-----|--|---|
| Hypertension requiring medication | All | Review all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects | See Hypertension Worksheet below. If airman meets all certification criteria – Issue. All others require FAA decision. Submit all evaluation data. Initial Special Issuance - Requires FAA Decision |

Hypertension Worksheet

The Examiner should review a current status report by the treating physician and any supporting documents to determine the applicant's eligibility for certification. HOWEVER, the AME is not required to review a current status report from the treating physician IF the AME can otherwise determine that the applicant has had stable clinical blood pressure control on the current antihypertensive medication for at least 2 weeks, without symptoms from the hypertension or adverse medication side-effects, and no treatment changes are recommended. If the applicant **meets ALL the acceptable certification criteria** listed below, the Examiner can issue. Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam.

| AME MUST REVIEW | ACCEPTABLE CERTIFICATION CRITERIA |
|---|---|
| Treating physician or the AME finds the condition stable on current regimen for at least 2 weeks and no changes recommended | []Yes |
| Symptoms | [] None |
| Blood pressure in office | [] Less than or equal to 155 systolic and 95 diastolic (Although 155/95 is acceptable for certification, the airman should be referred to their primary provider for further management, if the blood pressure is above clinical practice standards) |
| Acceptable medication(s) | [] Combinations of up to 3 of the following: Alpha blockers, Beta- blockers, ACE inhibitors, calcium channel blockers, angiotensin II receptor antagonists, and/or diuretics are allowed NOT acceptable: Centrally acting antihypertensives |
| Side effects from medications | [] No |

AME MUST NOTE in Block 60 one of the following:

[] Airman meets certification criteria for hypertension.

[] Airman had a previous Special Issuance for this condition and now meets the regular issuance certification criteria for hypertension.

[] Airman does NOT meet certification criteria for hypertension. I have deferred this exam. (Mail the supporting documents to FAA identifying which criteria were not met.)

| | | Syncope | |
|---|--|--|---|
| Syncope | All | CHD Protocol with ECHO and 24- hour Holter; bilateral carotid Ultrasound | Requires FAA Decision Syncope, recurrent or not satisfactorily explained, requires deferral (even though the syncope episode may be medically explained, an aeromedical certification decision may still be precluded). Syncope may involve cardiovascular, neurological, and psychiatric factors. |
| | Va | Ivular Disease | |
| All Other Valvular Disease | All | CHD Protocol with ECHO | Requires FAA Decision |
| Aortic and Mitral Insufficiency | | CHD Protocol with ECHO | Initial Special Issuance - Requires FAA Decision Followup Special Issuance's - |
| | est a ond | | See AASI Protocol |
| Single Valve Replacement (Tissue, Mechanical or Valvuloplasty) | 1 st & 2 nd 3 rd | See Cardiac <u>Valve</u> <u>Replacement</u> | Requires FAA DecisionInitial SpecialIssuance - RequiresFAA DecisionFollowupSpecial Issuance's -See AASI Protocol |
| Multiple Valve Replacement | All | Document history and findings, CVE Protocol, and submit appropriate tests. | Requires FAA Decision |

Other Cardiac Conditions

The following conditions must be deferred:

- 1. Cardiac Transplant see Disease Protocols.
- 2. Cardiac decompensation.
- 3. Congenital heart disease accompanied by cardiac enlargement, ECG abnormality, or evidence of inadequate oxygenation.

- 4. Hypertrophy or dilatation of the heart as evidenced by clinical examination and supported by diagnostic studies.
- 5. Pericarditis, endocarditis, or myocarditis.
- 6. When cardiac enlargement or other evidence of cardiovascular abnormality is found, the decision is deferred to AMCD or RFS. If the applicant wishes further consideration, a consultation will be required "preferably" from the applicant's treating physician. It must include a narrative report of evaluation and be accompanied by an ECG with report and appropriate laboratory test results which may include, as appropriate, 24-hour Holter monitoring, thyroid function studies, ECHO, and an assessment of coronary artery status. The report and accompanying materials should be forwarded to the AMCD or RFS.
- 7. Anti-tachycardia devices or implantable defibrillators.
- 8. With the possible exceptions of aspirin and dipyridamole taken for their effect on blood platelets, the use of anticoagulants or other drugs for treatment or prophylaxis of fibrillation may preclude medical certification.
- A history of cardioversion or drug treatment, *per se,* does not rule out certification. A current, complete cardiovascular evaluation (CVE) will be required. A 3-month observation period must elapse after the procedure before consideration for certification.
- 10. Any other cardiac disorder not otherwise covered in this section.
- 11. For all classes, certification decisions will be based on the applicant's medical history and current clinical findings. Certification is unlikely unless the information is highly favorable to the applicant. Evidence of extensive multivessel disease, impaired cardiac functioning, precarious coronary circulation, etc., will preclude certification. Before an applicant undergoes coronary angiography, it is recommended that all records and the report of a current cardiovascular evaluation (CVE), including a maximal electrocardiographic exercise stress test, be submitted to the FAA for preliminary review. Based upon this information, it may be possible to advise an applicant of the likelihood of favorable consideration.
- 12. A history of low blood pressure requires elaboration. If the Examiner is in doubt, it is usually better to defer issuance rather than to deny certification for such a history.

ITEM 37. Vascular System

| CHECK EACH ITEM IN APPROPRIATE COLUMN | Normal | Abnormal |
|---------------------------------------|--------|----------|
| 37. Vascular System | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds –
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges;
- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

- 1. Inspection. Observe and report any thoracic deformity (e.g., pectus excavatum), signs of surgery or other trauma, and clues to ventricular hypertrophy. Check the hematopoietic and vascular system by observing for pallor, edema, varicosities, stasis ulcers, venous distention, nail beds for capillary pulsation, and color.
- 2. Palpation. Check for thrills and the vascular system for arteriosclerotic changes, shunts or AV anastomoses. The pulses should be examined to determine their character, to note if they are diminished or absent, and to observe for synchronicity.
- 3. Percussion. N/A.

4. Auscultation. Check for bruits and thrills.

III. Aerospace Medical Disposition

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|---|---------------------|--|--|--|
| | Vascular Conditions | | | |
| Aneurysm (Abdominal or Thoracic) | All | Submit all available medical documentation | Requires FAA Decision | |
| Aneurysm (Status Post Repair) | All | Submit all documentation in accordance with CVE Protocol, and include a GXT | Requires FAA Decision | |
| Arteriosclerotic Vascular disease with evidence of circulatory obstruction | All | Submit all documentation in accordance with CVE Protocol, and include a GXT, and CAD ultra sound if applicable | Requires FAA Decision | |
| Buerger's Disease | All | Document history and findings | If no impairment and no symptoms in flight - Issue Otherwise - Requires FAA Decision | |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|---|-----------------------|---|---|
| | Vaso | ular Conditions | |
| Peripheral Edema | All | The underlying medical condition must not be disqualifying | If findings can be explained by normal physiologic response or secondary to medication(s) - Issue Otherwise - |
| Raynaud's Disease | All | Document history and | Requires FAA Decision |
| Raynauu s Disease | | findings | - Issue |
| | | | Otherwise - Requires FAA Decision |
| Phlebothrombosis or Thrombophlebitis | 1 st & 2nd | See Thrombophlebitis Protocol | Requires FAA Decision |
| | 3rd | Document history and findings | A single episode resolved, not currently treated with anticoagulants, and a negative evaluation - Issue |
| | | See Thrombophlebitis Protocol | If history of multiple episodes - Requires FAA Decision |

ITEM 38. Abdomen and Viscera

| CHECK EACH ITEM IN APPROPRIATE COLUMN | Normal | Abnormal |
|--|--------|----------|
| 38. Abdomen and viscera (including hernia) | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds-
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

1. Observation: The Examiner should note any unusual shape or contour, skin color, moisture, temperature, and presence of scars. Hernias, hemorrhoids, and fissure should be noted and recorded.

A history of acute gastrointestinal disorders is usually not disqualifying once recovery is achieved, e.g., acute appendicitis.

Many chronic gastrointestinal diseases may preclude issuance of a medical certificate (e.g., cirrhosis, chronic hepatitis, malignancy, ulcerative colitis). Colostomy following surgery for cancer may be allowed by the FAA with special followup reports.

The Examiner should not issue a medical certificate if the applicant has a recent history of bleeding ulcers or hemorrhagic colitis. Otherwise, ulcers must not have been active within the past 3 months.

In the case of a history of bowel obstruction, a report on the cause and present status of the condition must be obtained from the treating physician.

2. Palpation: The Examiner should check for and note enlargement of organs, unexplained masses, tenderness, guarding, and rigidity.

III. Aerospace Medical Disposition

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|--|---|---|---|--|
| Abdo | Abdomen and Viscera and Anus Conditions | | | |
| Cholelithiasis | All | Document history and findings | If asymptomatic - Issue Otherwise - Requires FAA Decision | |
| Cirrhosis (Alcoholic) | All | See Substance Abuse/Dependence Disposition in Item 47. | Requires FAA Decision | |
| Cirrhosis (Non-Alcoholic) | All | Submit all pertinent medical records, current status report, to include history of encephalopathy; PT/PTT; albumin; liver enzymes; bilirubin; CBC; and other testing deemed necessary | Requires FAA Decision | |
| Colitis (Ulcerative, Regional Enteritis or Crohn's disease) or Irritable Bowel Syndrome | All | Submit all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects | See Colitis Worksheet below. If Airman meets all certification criteria – issue Initial Special Issuance - Requires FAA Decision Followup Special Issuance - See AASI Protocol | |

Colitis

The Examiner must review a current status report by the treating physician and any supporting documents to determine the applicant's eligibility for certification. If the applicant **meets ALL the acceptable certification criteria** listed below, the Examiner can issue. Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam.

| AME MUST REVIEW | ACCEPTABLE CERTIFICATION CRITERIA |
|---|--|
| The general health status of the applicant due to this condition, as documented in a current status report by the treating physician | [] Favorable |
| Symptoms | [] None or mild diarrhea with or without mild abdominal pain/cramping Fatigue which limits activity or severe abdominal symptoms are not acceptable for certification. |
| Cause of Colitis | [] Crohn's Disease, Ulcerative colitis, or Irritable Bowel Syndrome Any other causes require FAA decision. |
| Surgery for condition in last 6 weeks | [] No |
| Medications for condition | [] One or more of the following: Oral steroid which does not exceed equivalent of prednisone 20 mg/day (see steroid conversion calculator) Imuran or Sulfasalazine Mesalamine (5-aminosalicylic acid such as Asacol, Pentasa, Lialda, etc.) Steroid foams or enemas/ budesonide enema Loperamide less than or equal to 16 mg a day and no side effects Hyoscyamine - use 1-2 times a week with no side effects and no-fly 48 hours after use |
| | Use of infliximab, use of hyoscyamine greater than 2 times per week, Prednisone greater than 20 mg/day, or Loperamide greater than 16 mg per day is NOT acceptable |

AME MUST NOTE in Block 60 one of the following:

[] Airman meets certification criteria for colitis.

[] Airman had a previous Special Issuance for this condition and now meets the regular issuance certification criteria for colitis.

[] Airman does NOT meet certification criteria for colitis. I have deferred this exam. (Mail the supporting documents to FAA identifying which criteria were not met.)

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|---|-------|---|--|--|
| Abdomen and Viscera and Anus Conditions | | | | |
| Hepatitis | All | Submit all pertinent medical records, current status report to include any other testing deemed necessary | If disease is resolved without sequela - Issue Otherwise - Requires FAA Decision | |
| Hepatitis C | All | Review all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects | If disease is resolved without sequela and need for medications- Issue If applicant has chronic Hepatitis C, see <u>Hepatitis</u> <u>C - Chronic Worksheet</u> (PDF). If Airman meets all certification criteria - Issue. All others require FAA decision. Submit all evaluation data. Initial Special Issuance - Requires FAA Decision Followup Special Issuances - See <u>AASI</u> Protocol | |
| Inguinal, Ventral or Hiatal Hernia | All | Document history and findings | If symptomatic; likely to cause any degree of obstruction - Requires FAA Decision Otherwise - Issue | |
| Liver Transplant | All | Submit all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects | Requires FAA Decision | |
| Peptic Ulcer | All | See Peptic Ulcer Protocol | Requires FAA Decision | |
| Splenomegaly | All | Provide hematologic workup | Requires FAA Decision | |

Hepatitis C - Chronic Worksheet

The Examiner must review a current status report by the treating physician and any supporting documents to determine the applicant's eligibility for certification. If the applicant **meets ALL the acceptable certification criteria** listed below, the Examiner can issue. Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam.

| AME MUST REVIEW | ACCEPTABLE CERTIFICATION CRITERIA |
|--|--|
| Treating physician finds the condition stable on current regimen and no changes recommended | [] Yes |
| Complications or symptoms from Chronic Hepatitis C | [] None |
| Medications for condition | [] None |
| Current Labs | [] Within last 90 days [] AST (SGOT), ALT (SGPT), Albumin, and PT all within 10% of normal lab scale. |

AME MUST NOTE in Block 60 one of the following:

[] Airman meets certification criteria for Hepatitis C - Chronic.

[] Airman had a previous Special Issuance for this condition and now meets the regular issuance certification criteria for Hepatitis C - Chronic.

[] Airman does NOT meet certification criteria for Hepatitis C - Chronic. I have deferred this exam. (Mail the supporting documents to FAA identifying which criteria were not met.)

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | |
|---------------------|--------------|---|---|--|--|
| | Malignancies | | | | |
| Colon/Rectal Cancer | All | Submit all pertinent medical records, operative/ pathology reports, current oncological status report; and current CEA and CBC | Initial Special Issuance - Requires FAA Decision Followup Special Issuance's - See AASI Protocol | | |
| Other Malignancies | All | Submit all pertinent medical records, operative/ pathology reports, current oncological status report, including tumor markers, and any other testing deemed necessary | Requires FAA Decision | | |

An applicant with an ileostomy or colostomy may also receive FAA consideration. A report is necessary to confirm that the applicant has fully recovered from the surgery and is completely asymptomatic.

In the case of a history of bowel obstruction, a report on the cause and present status of the condition must be obtained from the treating physician.

ITEM 39. Anus

| CHECK EACH ITEM IN APPROPRIATE COLUMN | Normal | Abnormal |
|---|--------|----------|
| 39 Anus (Not including digital examination) | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(a), 67.213(b)(c), and 67.313(b)(c)

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds

- (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
- (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

- 1. Digital Rectal Examination: This examination is performed only at the applicant's option unless indicated by specific history or physical findings. When performed, the following should be noted and recorded in Item 59 of FAA Form 8500-8.
- 2. If the digital rectal examination is not performed, the response to Item 39 may be based on direct observation or history.

ITEM 40. Skin

| CHECK EACH ITEM IN APPROPRIATE COLUMN | NORMAL | ABNORMAL |
|---------------------------------------|--------|----------|
| 40. Skin | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

A careful examination of the skin may reveal underlying systemic disorders of clinical importance. For example, thyroid disease may produce changes in the skin and fingernails. Cushing's disease may produce abdominal striae, and abnormal pigmentation of the skin occurs with Addison's disease.

Needle marks that suggest drug abuse should be noted and body marks and scars should be described and correlated with known history. Further history should be obtained as needed to explain findings.

The use of isotretinoin (Accutane) can be associated with vision and psychiatric side effects of aeromedical concern – specifically decreased night vision/night blindness and depression. These side-effects can occur even after the cessation of isotretinoin. See Aeromedical Decision Considerations.

III. Aerospace Medical Disposition

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|--|-----------------------|
| | | Cutaneous | |
| Dermatomyositis; Deep Mycotic Infections; Eruptive Xanthomas; Hansen's Disease; Lupus Erythematosus; Raynaud's Phenomenon; Sarcoid; or Scleroderma | All | Submit all pertinent medical information and current status report | Requires FAA Decision |
| Kaposi's Sarcoma | All | Submit all pertinent medical information and current status report. See HIV Protocol | Requires FAA Decision |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | |
|-----------------------------------|-------|--|---|--|--|
| Cutaneous | | | | | |
| Use of isotretinoin (Accutane) | All | For applicants using isotretinoin, there is a mandatory 2-week waiting period after starting isotretinoin prior to consideration. This medication can be associated with vision and psychiatric side effects of aeromedical concern - specifically decreased night vision/night blindness and depression. These side-effects can occur even after cessation of isotretinoin. A report must be provided with detailed, specific comment on presence or absence of psychiatric and vision side-effects. The AME must document these findings in Item 60., Comments on History and Findings. | Any history of psychiatric side-effect requires FAA Decision. If there are no vision, psychiatric, or other aeromedically unacceptable side- effects – Issue with restriction: "NOT VALID FOR NIGHT FLYING." To remove restriction: *See Note | | |

*Note:

- Use of isotretinoin must be permanently discontinued for at least 2 weeks prior to consideration date (confirmed by the prescribing physician)
- An eye evaluation in accordance with specifications in 8500-7
- Airman must provide a statement of discontinuation
 - Confirming the absence of any visual disturbances and psychiatric symptoms, and
 - Acknowledging requirement to notify the FAA and obtain clearance prior to performing any aviation safety-related duties if use of isotretinoin is resumed

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | |
|---|----------------------|--|---|--|--|
| Malignant Melanoma | | | | | |
| Melanoma Level >.75 mm with/ without any metastasis | All | Submit all pertinent medical records, operative/ pathology reports, and current oncological status report, and current MRI of the brain | Initial Special Issuance - Requires FAA Decision Followup Special Issuance's - See AASI Protocol | | |
| Melanoma of Unknown Primary Origin | All | Submit all pertinent medical records, operative/ pathology reports, and current oncological status report, current MRI of the brain; PET scan if no primary | Requires FAA Decision | | |
| | Urticarial Eruptions | | | | |
| Angioneurotic Edema | All | Submit all pertinent medical records and a current status report to include treatment | Requires FAA Decision | | |
| Chronic Urticaria | All | Submit all records and a current status report to include treatment | Requires FAA Decision | | |

ITEM 41. G-U System

| CHECK EACH ITEM IN APPROPRIATE COLUMN | NORMAL | ABNORMAL |
|---|--------|----------|
| 41. G-U system (Not including pelvic examination) | | |

NOTE: The pelvic examination is performed only at the applicant's option or if indicated by specific history or physical findings. If a pelvic examination is performed, the results are to be recorded in Item 60 of FAA Form 8500-8.

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

The Examiner should observe for discharge, inflammation, skin lesions, scars, strictures, tumors, and secondary sexual characteristics. Palpation for masses and areas of tenderness should be performed. The pelvic examination is performed only at the applicant's option or if indicated by specific history or physical findings. If a pelvic examination is performed, the results are to be recorded in Item 60 of FAA Form 8500-8. Disorders such as sterility and menstrual irregularity are not usually of importance in qualification for medical certification.

Specialty evaluations may be indicated by history or by physical findings on the routine examination. A personal history of urinary symptoms is important; such as:

- 1. Pain or burning upon urination
- 2. Dribbling or Incontinence
- 3. Polyuria, frequency, or nocturia
- 4. Hematuria, pyuria, or glycosuria

Special procedures for evaluation of the G-U system should best be left to the discretion of an urologist, nephrologist, or gynecologist.

III. Aerospace Medical Disposition

(See **Item 48.,General Systemic**, for details concerning diabetes and **Item 57., Urine Test**, for other information related to the examination of urine).

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | |
|----------------------------------|-------|--|--|--|--|
| General Disorders | | | | | |
| Congenital lesions of the kidney | All | Submit all pertinent medical information and status report | If the applicant has an ectopic, horseshoe kidney, unilateral agenesis, hypoplastic, or dysplastic and is asymptomatic – Issue | | |
| | | | Otherwise – Requires FAA Decision | | |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|--------------------------------------|----------|---|---|--|
| General Disorders | | | | |
| Cystostomy and Neurogenic bladder | All | Requires evaluation, report must include etiology, clinical manifestation and treatment plan | Requires FAA Decision | |
| Renal Dialysis | All | Submit a current status report, all pertinent medical reports to include etiology, clinical manifestation, BUN, Ca, PO ⁴ , Creatinine, electrolytes, and treatment plan | Requires FAA Decision | |
| Renal Transplant | All | See Renal Transplant Protocol | Requires FAA Decision | |
| | Inflamma | atory Conditions | | |
| Acute (Nephritis) | All | Submit all pertinent medical information and status report | If > 3 mos. ago, resolved, no sequela, or indication of reoccurrence - Issu e Otherwise - Requires FAA Decision | |
| Chronic (Nephritis) | All | Submit all pertinent medical information and status report | Requires FAA Decision | |
| Nephrosis | All | Submit all pertinent medical information and status report | Requires FAA Decision | |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|---|---|
| Neoplastic Disorders | | | |
| All G-U Cancers when treatment was completed more than 5 years ago and there is no history of metastatic disease. (If less than 5 years, see below.) | All | Interview airman | Currently cancer-free and released from oncology care – Issue and warn for recurrence All others – see below |
| All G-U cancers when treatment was completed less than 5 years ago or for which there is a history of metastatic disease | All | See specific cancers below for the requirements | See specific cancers below for the disposition |
| Bladder | All | Submit all pertinent medical records, operative/ pathology reports, current oncological status report, including tumor markers, and any other testing deemed necessary report, include duration of symptoms, name and dosage of drugs and side effects | Initial Special Issuance - Requires FAA Decision Followup Special Issuance's - See AASI Protocol |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|-------------------|----------------------|--|--|--|
| | Neoplastic Disorders | | | |
| Prostatic Cancer | All | Review a current status report, all pertinent medical reports to include staging, PSA, metastatic workup, and operative report, if applicable, and treatment | For prostate cancer without evidence of extra-capsular disease - Issue and warn for adverse change in disease and extra- capsular spread/metastases. All others require FAA Decision. Submit all evaluation data. Initial Special Issuance - Requires FAA Decision Followup Special Issuances - See <u>AASI</u> Protocol | |
| Renal Carcinoma | All | Review all pertinent medical records, operative/pathology reports, current oncological status report, including tumor markers, and any other testing deemed necessary report, include duration of symptoms, name and dosage of drugs and side effects | See Renal Cancer Worksheet below. If airman meets all certification criteria – Issue. All others require FAA decision. Submit all evaluation Data. Initial Special Issuance - Requires FAA Decision Followup Special Issuances - See AASI Protocol | |

| Testicular Carcinoma | All | Review all pertinent medical records, operative/pathology reports, current oncological status report, and any other testing deemed necessary report, include duration of symptoms, name and dosage of drugs and side effects | If treatment is complete without sequela and airman is back to full activities of daily living – Issue . All others require FAA Decision. Submit all evaluation data. Initial Special Issuance - Requires FAA Decision Followup Special |
|----------------------|-----|---|---|
| | | | Followup Special |
| | | | Issuances - See <u>AASI</u> Protocol |

Renal Cancer Worksheet

The Examiner must review a current status report by the treating physician and any supporting documents to determine the applicant's eligibility for certification. If the applicant **meets ALL the acceptable certification criteria** listed below, the Examiner can issue. Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam.

| AME MUST REVIEW | ACCEPTABLE CERTIFICATION CRITERIA |
|--|-----------------------------------|
| Treating physician finds the condition stable on current regimen and no changes recommended | [] Yes |
| Metastatic disease, extracapsular extension, or paraneoplastic syndrome | [] No |
| Treatment completed and back to full, unrestricted activities (ECOG performance status or equivalent is 0) | []Yes |

AME MUST NOTE in Block 60 one of the following:

[] Airman meets certification criteria for renal cancer.

[] Airman had a previous Special Issuance for this condition and now meets the regular issuance certification criteria for renal cancer.

[] Airman does NOT meet certification criteria for renal cancer. I have deferred this exam. (Mail the supporting documents to FAA identifying which criteria were not met.)

| Nonhritio | | | |
|---|-----|--|--|
| Nephritis | | | |
| Polycystic Kidney Disease | All | Submit all pertinent medical information and status report | If renal function is normal and no hypertension - Issue |
| | | | Otherwise - Requires FAA Decision |
| Pyelitis or Pyelonephritis | All | Submit all pertinent medical information and status report | If asymptomatic - Issue Otherwise - Requires FAA Decision |
| Pyonephrosis | All | Submit all pertinent medical information and status report | Requires FAA Decision |
| Urinary System | | | |
| Hydronephrosis with impaired renal function | All | Submit all pertinent medical information and status report | Requires FAA Decision |
| Nephrectomy (non-neoplastic) | All | Submit all pertinent medical information and status report | If the remaining kidney function and anatomy is normal, without other systemic disease, hypertension, uremia, infection of the remaining kidney – Issue Otherwise - Requires FAA Decision |
| Nephrocalcinosis | All | Submit all pertinent medical information and status report | If calculus is not in collecting system or renal pelvis - Issue Otherwise - Requires FAA Decision |
| Calculus ¹ Renal - Single episode | All | Submit current metabolic evaluation and status report | If there is no residual calculi and the metabolic workup is negative - Issue Otherwise - Requires FAA Decision |

¹ Complete studies to determine the possible etiology and prognosis are essential to favorable FAA consideration. Determining factors include site and location of the stones, complications such as compromise in renal function, repeated bouts of kidney infection, and need for therapy. Any underlying disease will be considered. The likelihood of sudden incapacitating symptoms is of primary concern. Report of imaging studies (KUB, IVP, or spiral CT) must be submitted in order to conclude that there are no residual or retained calculi.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|--|-------|---|---|--|
| Urinary System | | | | |
| Renal – Multiple episodes or Retained Stones | All | Submit current metabolic evaluation and status report | Initial Special Issuance - Requires FAA Decision Followup Special Issuance's - See AASI Protocol | |
| Ureteral or Vesical | All | Single episode and no retained calculi, submit current metabolic evaluation and status report (Ureteral stent is acceptable if functioning without sequela) | If metabolic workup is negative and there is no sequela or retained calculi - Issue Otherwise - Requires FAA Decision | |

A history of recent or significant hematuria requires further evaluation.

PREGNANCY

Pregnancy under normal circumstances is not disqualifying. It is recommended that the applicant's obstetrician be made aware of all aviation activities so that the obstetrician can properly advise the applicant. The Examiner may wish to counsel applicants concerning piloting aircraft during the third trimester. The proper use of lap belt and shoulder harness warrants discussion.

GENDER IDENTITY DISORDER

Gender Identity Disorder (GID) and gender reassignment require a complete review of the individual's relevant medical history and records. For initial consideration the Examiner must defer and submit the following to AMCD or RFS:

- A current status report to include:
 - o All current medications, dosages, and side-effects; and
 - Copies of all pertinent inpatient and outpatient medical records pertaining to the individual's GID diagnosis, work-up, and treatment.
- Psychiatric and/or psychological evaluations by a board certified psychiatrist and/or a licensed psychologist experienced in transgender issues that includes an assessment of any substance abuse or misuse. Neurocognitive testing is not required unless clinically indicated.
- Hospital and post-operative report from the surgeon if individual has had surgery.

NOTE: If the individual refrains from surgery, no surgical report is required. However, if surgery is elected at a later date, follow-up reports from a psychiatrist and/or psychologist and the surgeon will be required.

ITEMS 42-43. Musculoskeletal

| CHECK EACH ITEM IN APPROPRIATE COLUMN | NORMAL | ABNORMAL |
|--|--------|----------|
| 42. Upper and lower extremities (Strength and range of motion) | | |
| 43. Spine, other musculoskeletal | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113 (b)(c), 67.213 (b)(c), and 67.313 (b)(c)

- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

Standard examination procedures should be used to make a gross evaluation of the integrity of the applicant's musculoskeletal system. The Examiner should note:

- 1. Pain neuralgia, myalgia, paresthesia, and related circulatory and neurological findings
- 2. Weakness local or generalized; degree and amount of functional loss
- 3. Paralysis atrophy, contractures, and related dysfunctions

- 4. Motion coordination, tremors, loss or restriction of joint motions, and performance degradation
- 5. Deformity extent and cause
- 6. Amputation level, stump healing, and phantom pain
- 7. Prostheses comfort and ability to use effectively

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|---|-----------------------------|---|---|--|
| | Upper and Lower Extremities | | | |
| Amputations | All | Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all | If applicant has a SODA issued on the basis of the amputation - Issue Otherwise - Requires FAA Decision After review of all medical data, the | |
| | | pertinent medical reports | FAA may authorize a special medical flight test | |
| Atrophy of any muscles that is progressive, Deformities, either congenital or acquired, or Limitation of motion of a major joint, that are sufficient to interfere with the performance of airman duties | All | Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medication with side effects, and all pertinent medical reports | Requires FAA Decision | |

ITEM 42. Upper and Lower Extremities

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|--|-------|---|-----------------------|--|
| Upper and Lower Extremities | | | | |
| Neuralgia or Neuropathy, chronic or acute, particularly sciatica, if sufficient to interfere with function or is likely to become incapacitating | All | Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports | Requires FAA Decision | |
| Osteomyelitis, acute or chronic, with or without draining fistula(e) | All | Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports | Requires FAA Decision | |
| Tremors, if sufficient to interfere with the performance of airman duties ¹ | All | Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports | Requires FAA Decision | |

¹ Essential tremor is not disqualifying unless it is disabling.

For all the above conditions: If the applicant is otherwise qualified, the FAA may issue a limited certificate. This certificate will permit the applicant to proceed with flight training until ready for a MFT. At that time, at the applicant's request, the FAA (usually the AMCD) will authorize the student pilot to take a MFT in conjunction with the regular flight test. The MFT and regular private pilot flight test are conducted by an FAA inspector. This affords the student an opportunity to demonstrate the ability to control the aircraft despite the handicap. The FAA inspector prepares a written report and indicates whether there is a safety problem. A medical certificate and SODA, without the student limitation, may be provided to the inspector for issuance to the applicant, or the inspector may be required to send the report to the FAA medical officer who authorized the test.

When prostheses are used or additional control devices are installed in an aircraft to assist the amputee, those found qualified by special certification procedures will have their certificates limited to require that the devices (and, if necessary, even the specific aircraft) must always be used when exercising the privileges of the airman certificate.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|--|--|
| | | Arthritis | |
| Osteoarthritis and variants on PRN NSAIDS only | All | Symptoms are well controlled with no persistent daily symptoms and no functional limitations | Issue – warn for changes in condition or additional medications use |
| Osteoarthritis, Rheumatoid Arthritis, and variants on medications other than NSAIDS | All | Review a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports | See Arthritis Worksheet below. If airman meets all certification criteria – Issue. All others require FAA Decision. Submit all evaluation data. Initial Special Issuance - Requires FAA Decision Followup Special Issuances - See AASI Protocol |

Item 43. Spine, Other Musculoskeletal

Arthritis Worksheet

The Examiner must review a current status report by the treating physician and any supporting documents to determine the applicant's eligibility for certification. If the applicant **meets ALL the acceptable certification criteria** listed below, the Examiner can issue. Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam.

| AME MUST REVIEW | ACCEPTABLE CERTIFICATION CRITERIA |
|--|---|
| Treating physician finds the condition stable on current regimen and no changes recommended | []Yes |
| Symptoms | [] None or mild to moderate symptoms with no significant limitations to range of motion, lifestyle, or activities |
| Cause of Arthritis | Acceptable causes are limited to: |
| | [] Rheumatoid (limited to joint), psoriatic, or osteoarthritis |
| Acceptable Medications | [] One or more of the following: |
| | Oral steroid which does not exceed equivalent of prednisone 20 mg/day (see <u>steroid conversion calculator</u>), Methotrexate, hydroxychloroquine (Plaquenil - see mandatory eye evaluation requirement below), NSAIDS. |
| Complete blood count (CBC) and | [] Within 90 days |
| complete metabolic panel | [] Normal CBC, Liver Function Test, and Creatinine |
| FAA Report of Eye Evaluation | [] 8500-7 Favorable and no concerns |
| Form 8500-7 is required if hydroxychloroquine (Plaquenil) is used. | [] N/A |

AME MUST NOTE in Block 60 one of the following:

[] Airman meets certification criteria for arthritis.

[] Airman had a previous Special Issuance for this condition and now meets the regular issuance certification criteria for arthritis.

[] Airman does NOT meet certification criteria for arthritis. I have deferred this exam. (Mail the supporting documents to FAA identifying which criteria were not met.)

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | |
|--|------------------------------|---|-----------------------|--|--|
| Collagen Disease | | | | | |
| Acute Polymyositis; Dermatomyositis; Lupus Erythematosus; or Periarteritis Nodosa | All | Submit a current status report to include functional status, frequency and severity of episodes, organ systems effected, medications with side effects and all pertinent medical reports | Requires FAA Decision | | |
| | Spine, other musculoskeletal | | | | |
| Active disease of bones and joints | All | Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports | Requires FAA Decision | | |
| Ankylosis, curvature, or other marked deformity of the spinal column sufficient to interfere with the performance of airman duties | All | | Requires FAA Decision | | |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|---|-----------------------|
| Spine, other musculoskeletal | | | |
| Intervertebral Disc Surgery | All | See Footnote | See Footnote |
| Musculoskeletal effects of: Cerebral Palsy, Muscular Dystrophy Myasthenia Gravis, or Myopathies | All | Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports | Requires FAA Decision |
| Other disturbances of musculoskeletal function, acquired or congenital, sufficient to interfere with the performance of airman duties or likely to progress to that degree | All | Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports | Requires FAA Decision |

A history of intervertebral disc surgery is not disqualifying. If the applicant is asymptomatic, has completely recovered from surgery, is taking no medication, and has suffered no neurological deficit, the Examiner should confirm these facts in a brief statement in Item 60. The Examiner may then issue any class of medical certificate, providing that the individual meets all the medical standards for that class.

The paraplegic whose paralysis is not the result of a progressive disease process is considered in much the same manner as an amputee. The Examiner should defer issuance and may advise the applicant to request further FAA consideration. The applicant may be authorized to take a MFT along with the private pilot certificate flight test. If successful, the limitation VALID FOR STUDENT PILOT PURPOSES ONLY is removed from the medical certificate, but operational limitations may be added. A statement of demonstrated ability is issued.

Other neuromuscular conditions are covered in more detail in Item 46.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|----------|---|-----------------------|
| | Spine, o | ther musculoskeletal | |
| Symptomatic herniation of intervertebral disc | All | Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports | Requires FAA Decision |

ITEM 44. Identifying Body Marks, Scars, Tattoos

| CHECK EACH ITEM IN APPROPRIATE COLUMN | NORMAL | ABNORMAL |
|--|--------|----------|
| 44. Identifying body marks, scars, tattoos (Size and location) | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b), 67.213(b), and 67.313(b)

- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition finds-
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges

II. Examination Techniques

A careful examination for surgical and other scars should be made, and those that are significant (the result of surgery or that could be useful as identifying marks) should be described. Tattoos should be recorded because they may be useful for identification.

III. Aerospace Medical Disposition

The Examiner should question the applicant about any surgical scars that have not been previously addressed, and document the findings in Item 60 of FAA Form 8500-8. Medical certificates must not be issued to applicants with medical conditions that require deferral without consulting the AMCD or RFS. Medical documentation must be submitted for any condition in order to support an issuance of a medical certificate.

Disqualifying Condition: Scar tissue that involves the loss of function, which may interfere with the safe performance of airman duties.

ITEM 45. Lymphatics

| CHECK EACH ITEM IN APPROPRIATE COLUMN | NORMAL | ABNORMAL |
|---------------------------------------|--------|----------|
| 45. Lymphatics | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

A careful examination of the lymphatic system may reveal underlying systemic disorders of clinical importance. Further history should be obtained as needed to explain findings.

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|--|-----------------------------|---|---|--|
| Lymphoma and Hodgkin's Disease | | | | |
| Lymphoma and Hodgkin's Disease | All | Submit a current status report and all pertinent medical reports. Include past and present treatment(s). | Initial Special Issuance - Requires FAA Decision Followup Special Issuance's - See AASI Protocol | |
| | Leukemia, Acute and Chronic | | | |
| Leukemia, Acute and Chronic – All Types | All | Submit a current status report and all pertinent medical reports | Requires FAA Decision | |
| Chronic Lymphocytic Leukemia | All | Submit a current status report and all pertinent medical reports | Initial Special Issuance - Requires FAA Decision Followup Special Issuance's - See AASI Protocol | |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|--|-------|---|-----------------------|--|
| Lymphatics | | | | |
| Adenopathy secondary to Systemic Disease or Metastasis | All | Submit a current status report and all pertinent medical reports | Requires FAA Decision | |
| Lymphedema | All | Submit a current status report and all pertinent medical reports. Note if there are any motion restrictions of the involved extremity | Requires FAA Decision | |
| Lymphosarcoma | All | Submit a current status report and all pertinent medical reports. Include past and present treatment(s). | Requires FAA Decision | |

ITEM 46. Neurologic

| CHECK EACH ITEM IN APPROPRIATE COLUMN | NORMAL | ABNORMAL |
|---------------------------------------|--------|----------|
| 46. NEUROLOGIC | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.109 (a)(b), 67.209 (a)(b), and 67.309 (a)(b)

- (a) No established medical history or clinical diagnosis of any of the following:
 - (1) Epilepsy
 - (2) A disturbance of consciousness without satisfactory medical explanation of the cause; or
 - (3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause;
- (b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds-

- (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
- (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

A neurologic evaluation should consist of a thorough review of the applicant's history prior to the neurological examination. The Examiner should specifically inquire concerning a history of weakness or paralysis, disturbance of sensation, loss of coordination, or loss of bowel or bladder control. Certain laboratory studies, such as scans and imaging procedures of the head or spine, electroencephalograms, or spinal paracentesis may suggest significant medical history. The Examiner should note conditions identified in Item 60 on the application with facts, such as dates, frequency, and severity of occurrence.

A history of simple headaches without sequela is not disqualifying. Some require only temporary disqualification during periods when the headaches are likely to occur or require treatment. Other types of headaches may preclude certification by the Examiner and require special evaluation and consideration (e.g., migraine and cluster headaches).

One or two episodes of dizziness or even fainting may not be disqualifying. For example, dizziness upon suddenly arising when ill is not a true dysfunction. Likewise, the orthostatic faint associated with moderate anemia is no threat to aviation safety as long as the individual is temporarily disqualified until the anemia is corrected.

An unexplained disturbance of consciousness is disqualifying under the medical standards. Because a disturbance of consciousness may be expected to be totally incapacitating, individuals with such histories pose a high risk to safety and must be denied or deferred by the Examiner. If the cause of the disturbance is explained and a loss of consciousness is not likely to recur, then medical certification may be possible.

The basic neurological examination consists of an examination of the 12 cranial nerves, motor strength, superficial reflexes, deep tendon reflexes, sensation, coordination, mental status, and includes the Babinski reflex and Romberg sign. The Examiner should be aware of any asymmetry in responses because this may be evidence of mild or early abnormalities. The Examiner should evaluate the visual field by direct confrontation or, preferably, by one of the perimetry procedures, especially if there is a suggestion of neurological deficiency.

III. Aerospace Medical Disposition

A history or the presence of any neurological condition or disease that potentially may incapacitate an individual should be regarded as initially disqualifying. Issuance of a medical certificate to an applicant in such cases should be denied or defer, pending further evaluation. A convalescence period following illness or injury may be advisable to permit adequate stabilization of an individual's condition and to reduce the risk of an adverse event. Applications from individuals with potentially disqualifying conditions should be forwarded to the AMCD. Processing such applications can be expedited by including hospital records, consultation reports, and appropriate laboratory and imaging studies, if available. Symptoms or disturbances that are secondary to the underlying condition and that may be acutely incapacitating include pain, weakness, vertigo or in coordination, seizures or a disturbance of consciousness, visual disturbance, or mental confusion. Chronic conditions may be incompatible with safety in aircraft operation because of long-term unpredictability, severe neurologic deficit, or psychological impairment.

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|---|-------|---|--------------------------|--|
| Cerebrovascular Disease (including the brain stem) ¹ | | | | |
| Transient Ischemic Attack (TIA): | All | All pertinent inpatient and outpatient medical records, including work up for any correctable underlying cause(s) Current neurologic evaluation by a neurologist with a detailed written report addressing motor, sensory, language, and intellectual/cognitive function; all medications (dosage and side effects) MRA or CTA of the head and neck Current FBS and lipids | Requires FAA Decision | |

¹ Complete neurological evaluations supplemented with appropriate laboratory and imaging studies are required of applicants with these conditions.

| Completed Stroke (ischemic or hemorrhagic); | AII | Carotid artery ultrasound studies Cardiovascular Evaluation (CVE) with EST, a 24- hour Holter monitor and M-mode / 2-D echocardiogram (usually TTE but TEE optional if clinically indicated) Neurocognitive testing: may be required as clinically indicated All pertinent inpatient and outpatient medical records, including work up for any correctable underlying cause(s) Current neurologic evaluation by a neurologist with a detailed written report addressing motor, sensory, language, and intellectual/ cognitive function; all medications (dosage and side effects) MRA or CTA of the head and neck Current FBS and lipids Carotid artery ultrasound studies: required for ischemic strokes; otherwise only if clinically indicated Cardiovascular Evaluation (CVE) with EST, a 24- hour Holter monitor and M-mode / 2-D echocardiogram (usually TTE but TEE optional if clinically indicated) <u>NOTE</u>: required for ischemic stroke; for hemorrhagic stroke is required if clinically indicated (for example in a |
|--|-----|---|
| | | required if clinically |

| Subdural, Epidural or Subarachnoid Hemorrhage | All | Neurocognitive testing to "SPECIFICATIONS FOR NEUROPSYCHO- LOGICAL EVALUATIONS FOR POTENTIAL NEUROCOGNITIVE IMPAIRMENT" required for <u>all</u> strokes **** For hemorrhagic strokes, the bleeding must be resolved as documented by CT or MRI All pertinent inpatient and outpatient medical records, including work up for any correctable underlying cause(s) Current neurologic evaluation by a neurologist with a detailed written report addressing motor, sensory, language, and intellectual/ cognitive function; all medications (dosage and side effects) CT or MRI of the head Additional testing such as EEG, paurocognitive testing | Requires FAA Decison | | |
|---|-------------------------|---|--------------------------|--|--|
| | | as EEG, neurocognitive testing, etc., may be required as clinically indicated | DISDOSITION | | |
| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | |
| | Cerebrovascular Disease | | | | |
| Intracranial Aneurysm or Arteriovenous Malformation | All | Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects | Requires FAA Decision | | |
| Intracranial Tumor ² | All | Submit all pertinent | Requires FAA | | |

² A variety of intracranial tumors, both malignant and benign, are capable of causing incapacitation directly by neurologic deficit or indirectly through recurrent symptomatology. Potential neurologic deficits include weakness, loss of sensation, ataxia, visual deficit, or mental impairment. Recurrent symptomatology may interfere with flight performance through mechanisms such as seizure, headaches, vertigo, visual disturbances, or confusion. A history or diagnosis of an intracranial tumor necessitates a

| | | medical records, current neurologic report, name and dosage of medication(s) and side effects | Decision |
|--|-----|---|--------------------------|
| Pseudotumor Cerebri (benign intracranial hypertension) | All | Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects | Requires FAA Decision |

complete neurological evaluation with appropriate laboratory and imaging studies before a determination of eligibility for medical certification can be established. An applicant with a history of benign supratentorial tumors may be considered favorably for medical certification by the FAA and returned to flying status after a minimum satisfactory convalescence of 1 year.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|--|-------|--|-----------------------|--|
| Demyelinating Disease ³ | | | | |
| Acute Optic Neuritis; Allergic Encephalomyelitis; Landry-Guillain-Barre Syndrome; Myasthenia Gravis; or Multiple Sclerosis | All | Submit all pertinent medical records, current neurologic report, to comment on involvement and persisting deficit, period of stability without symptoms, name and dosage of medication(s) and side effects | Requires FAA Decision | |

³ Factors used in determining eligibility will include the medical history, neurological involvement and persisting deficit, period of stability without symptoms, type and dosage of medications used, and general health. A neurological and/or general medical consultation will be necessary in most instances.

DISEASE/CONDITION CLASS EVALUATION DATA DISPOSITION

Extrapyramidal, Hereditary, and Degenerative Diseases of the Nervous System⁴

| Dystonia – primary or | All | Obtain medical | Requires FAA Decision |
|-------------------------|-----|-------------------------------|-----------------------|
| secondary; | | records and current | |
| Huntington's Disease; | | neurological status, | |
| Parkinson's Disease; | | complete | |
| Wilson's Disease; or | | neurological | |
| Gilles de la Tourette | | evaluation with | |
| Syndrome; | | appropriate | |
| Alzheimer's Disease; | | laboratory and | |
| Dementia (unspecified); | | imaging studies, as indicated | |
| or | | | |
| Slow viral diseases | | May consider Neuro- | |
| i.e., Creutzfeldt | | psychological testing | |
| -Jakob's Disease | | | |
| | | | |

⁴ Extrapyramidal, Hereditary, and Degenerative Diseases of the Nervous System: Considerable variability exists in the severity of involvement, rate of progression, and treatment of the above conditions. A complete neurological evaluation with appropriate laboratory and imaging studies, including information regarding the specific neurological condition, will be necessary for determination of eligibility for medical certification.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|-----------------------------------|-------|--|-----------------------|--|
| Headaches ⁵ | | | | |
| Atypical Facial Pain | All | Submit all pertinent medical records, current neurologic report, to include name and dosage of medication(s) and side effects | Requires FAA Decision | |
| Ocular or complicated migraine | All | Submit all pertinent medical records, current neurologic report, to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects | Requires FAA Decision | |

⁵ Pain, in some conditions, may be acutely incapacitating. Chronic recurring headaches or pain syndromes often require medication for relief or prophylaxis, and, in most instances, the use of such medications are disqualifying because they may interfere with a pilot's alertness and functioning. The Examiner may issue a medical certificate to an applicant with a long-standing history of headaches if mild, seldom requiring more than simple analgesics, occur infrequently, are not incapacitating, and are not associated with neurological stigmata.

| | | 1 | |
|---|-----|--|--|
| Migraines, Chronic Tension or Cluster Headaches | All | Review all pertinent medical records, current neurologic report, to include characteristics, frequency, severity, associated with neurologic phenomena, and name and dosage of medication(s) and side effects | See Migraine and Chronic Headache Worksheet below. If airman meets all certification criteria – Issue. All others require FAA decision. Submit all evaluation data. Initial Special Issuance - Requires FAA Decision Followup Special Issuances - See <u>AASI</u> Protocol |
| Post-traumatic Headache | All | Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects | Requires FAA Decision |

Migraine and Chronic Headache Worksheet

The Examiner must review a current status report by the treating physician and any supporting documents to determine the applicant's eligibility for certification. If the applicant **meets ALL the acceptable certification criteria** listed below, the Examiner can issue. Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam.

| AME MUST REVIEW | ACCEPTABLE CERTIFICATION CRITERIA |
|--|---|
| Treating physician finds the condition stable on current regimen and no changes recommended | [] Yes |
| Acceptable Types of Migraine or Headache | [] Classic/Common Migraine, Chronic Tension headache, Cluster headache |
| | NOT acceptable: Ocular migraine, complicated migraine |
| Frequency | [] No more than one episode per month |
| Symptoms | [] Only mild symptoms controlled with medication(s) listed below. [] In the last year: no in-patient hospitalizations no more than 2 outpatient clinic/urgent care visits for exacerbations (with symptoms fully resolved) NOT acceptable: neurological or TIA-type symptoms; vertigo; syncope; and/or mental status change |
| Medications - Preventive | [] None; or daily calcium channel blockers or beta blockers only for prophylaxis without side effects |
| Medications - Abortive | OTC headache medications; warn airman: A hour no-fly - Triptans hour no-fly - Metoclopramide (Reglan); hour no-fly - promethazine (Phenergan) NOT acceptable: Injectable medications and narcotics |

AME MUST NOTE in Block 60 one of the following:

[] Airman meets certification criteria for migraine and chronic headaches.

[] Airman had a previous Special Issuance for this condition and now meets the regular issuance certification criteria for migraine and chronic headache.

[] Airman does NOT meet certification criteria for migraine and chronic headaches. I have deferred this exam. (Mail the supporting documents to FAA identifying which criteria were not met.)

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|---|-------------|---|-----------------------|--|
| Hydrocephalus and Shunts | | | | |
| Hydrocephalus, secondary to a known injury or disease process; or normal pressure | All | Submit all pertinent medical records, current neurologic report, to include name and dosage of medication(s) and side effects | Requires FAA Decision | |
| | nfections o | of the Nervous System | | |
| Brain Abscess; Encephalitis; Meningitis; and Neurosyphilis | All | Complete neurological evaluation with appropriate laboratory and imaging studies | Requires FAA Decision | |
| | Neuro | logic Conditions | | |
| A disturbance of consciousness without satisfactory medical explanation of the cause | All | Submit all pertinent medical records, current neurologic report, to include name and dosage of medication(s) and side effects | Requires FAA Decision | |
| Epilepsy ⁶ Rolandic Seizure *See below | All | Submit all pertinent medical records, current status report, to include name and dosage of medication(s) and side effects | Requires FAA Decision | |

⁶ Unexplained syncope, single seizure. An applicant who has a history of epilepsy, a disturbance of consciousness without satisfactory medical explanation of the cause, or a transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause must be denied or deferred by the Examiner. Rolandic seizures may be eligible for certification if the applicant is seizure free for 4 years and has a normal EEG. Consultation with the FAA required.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|---|-------|---|---|
| Febrile Seizure ⁷ (Single episode) | All | Submit all pertinent medical records and a current status report | If occurred prior to age 5, without recurrence and off medications for 3 years - Issue Otherwise – Requires FAA Decision |
| Transient loss of nervous system function(s) without satisfactory medical explanation of the cause; e.g., transient global amnesia | All | Submit all pertinent medical records, current status report, to include name and dosage of medication(s) and side effects | Requires FAA Decision |
| | Othe | er Conditions | |
| Neurofibromatosis with Central Nervous System Involvement | All | Submit all pertinent medical information and current status medical report | Requires FAA Decision |
| Trigeminal Neuralgia | All | Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects | Requires FAA Decision |

⁷ Infrequently, the FAA has granted an Authorization under the special issuance section of part 67 (14 CFR 67.401) when a seizure disorder was present in childhood but the individual has been seizurefree for a number of years. Factors that would be considered in determining eligibility in such cases would be age at onset, nature and frequency of seizures, precipitating causes, and duration of stability without medication. Followup evaluations are usually necessary to confirm continued stability of an individual's condition if an Authorization is granted under the special issuance section of part 67 (14 CFR 67.401).

DISEASE/CONDITION CLASS EVALUATION DATA DISPOSITION

| that por Head Trauma associated | | Submit all pertinent | Requires FAA Decision | | |
|--|--|--|-----------------------|--|--|
| with: | | medical records, current status report, | ···· | | |
| Epidural or Subdural Hematoma; | | to include pre- hospital and emergency | | | |
| Focal Neurologic Deficit; | | department records, operative reports, | | | |
| Depressed Skull | | neurosurgical | | | |
| Fracture; | | evaluation, name and dosage of | | | |
| or | | medication(s) and side effects | | | |
| Any loss of | | | | | |
| consciousness, alteration | | | | | |
| of consciousness, or amnesia, regardless of duration | | | | | |
| | | | | | |
| Spasticity, Weakness, or Paralysis of the Extremities | | | | | |

| Conditions that are stable and non- progressive may be considered for medical certification | All | Submit all pertinent medical records, current neurologic report, to include etiology, degree of involvement, period of stability, appropriate laboratory and imaging studies | Requires FAA Decision |
|---|-----|---|-----------------------|
| | | | |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | | | | | |
|--|-------|--|-----------------------|--|--|--|--|--|
| Vertigo or Disequilibrium ⁸ | | | | | | | | |
| Alternobaric Vertigo; | All | Submit all pertinent medical records, | Requires FAA Decision | | | | | |
| Hyperventilation | | current neurologic | | | | | | |
| Syndrome; | | report, name and | | | | | | |
| Meniere's Disease and Acute Peripheral Vestibulopathy; | | dosage of medication(s) and side effects | | | | | | |
| Nonfunctioning Labyrinths; or | | | | | | | | |
| Orthostatic Hypotension | | | | | | | | |

⁸ Numerous conditions may affect equilibrium, resulting in acute incapacitation or varying degrees of chronic recurring spatial disorientation. Prophylactic use of medications also may cause recurring spatial disorientation and affect pilot performance. In most instances, further neurological evaluation will be required to determine eligibility for medical certification.

ITEM 47. Psychiatric

| CHECK EACH ITEM IN APPROPRIATE COLUMN | NORMAL | ABNORMAL |
|---|--------|----------|
| 47. Psychiatric (Appearance, behavior, mood, communication, and memory) | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.107(a)(b)(c), 67.207(a)(b)(c), and 67.307(a)(b)(c)

- (a) No established medical history or clinical diagnosis of any of the following:
 - (1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.
 - (2) A psychosis. As used in this section, "psychosis" refers to a mental disorder in which:
 - (i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or
 - (ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.
 - (3) A bipolar disorder.
 - (4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. As used in this section -
 - (i) "Substance" includes: alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and
 - (ii) "Substance dependence" means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthinecontaining (e.g., caffeine) beverages, as evidenced by-
 - (A) Increased tolerance
 - (B) Manifestation of withdrawal symptoms;
 - (C) Impaired control of use; or
 - (D) Continued use despite damage to physical health or impairment of

social, personal, or occupational functioning.

- (b) No substance abuse within the preceding 2 years defined as:
 - (1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;
 - (2) A verified positive drug test result, an alcohol test result of 0.04 or greater alcohol concentration, or a refusal to submit to a drug or alcohol test required by the U.S. Department of Transportation or an agency of the U.S. Department of Transportation; or
 - (3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds-
 - (i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds-
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(Also see Items 18.m., 18.n., and 18.p.)

II. Examination Techniques

The FAA does not expect the Examiner to perform a formal psychiatric examination. However, the Examiner should form a general impression of the emotional stability and mental state of the applicant. There is a need for discretion in the Examiner/applicant relationship consonant with the FAA's aviation safety mission and the concerns of all applicants regarding disclosure to a public agency of sensitive information that may not be pertinent to aviation safety. Examiners must be sensitive to this need while, at the same time, collect what is necessary for a certification decision. When a question arises, the Federal Air Surgeon encourages Examiners first to check this Guide for Aviation Medical Examiners and other FAA informational documents. If the question remains unresolved, the Examiner should seek advice from a RFS or the Manager of the AMCD.

Review of the applicant's history as provided on the application form may alert the Examiner to gather further important factual information. Information about the applicant may be found in items related to age, pilot time, and class of certificate for which applied. Information about the present occupation and employer also may be helpful. If any psychotropic drugs are or have been used, followup questions are appropriate. Previous medical denials or aircraft accidents may be related to psychiatric problems.

Psychiatric information can be derived from the individual items in medical history (**Item 18**). Any affirmative answers to Item 18.m., "Mental disorders of any sort; depression, anxiety, etc.," or Item 18.p., "Suicide attempt," are significant. Any disclosure of current or previous alcohol or drug problems requires further clarification. A record of traffic violations may reflect certain personality problems or indicate an alcohol problem. Affirmative answers related to rejection by military service or a military medical discharge require elaboration. Reporting symptoms such as headaches or dizziness, or even heart or stomach trouble, may reflect a history of anxiety rather than a primary medical problem in these areas. Sometimes, the information applicants give about their previous diagnoses is incorrect, either because the applicant is unsure of the correct information or because the applicant chooses to minimize past difficulties. If there was a hospital admission for any emotionally related problem, it will be necessary to obtain the entire record.

Valuable information can be derived from the casual conversation that occurs during the physical examination. Some of this conversation will reveal information about the family, the job, and special interests. Even some personal troubles may be revealed at this time. The Examiner's questions should not be stilted or follow a regular pattern; instead, they should be a natural extension of the Examiner's curiosity about the person being examined. Information about the motivation for medical certification and interest in flying may be revealing. A formal Mental Status Examination is unnecessary. For example, it is not necessary to ask about time, place, or person to discover whether the applicant is oriented. Information about the flow of associations, mood, and memory, is generally available from the usual interactions during the examination. Indication of cognitive problems may become apparent during the examination. Such problems with concentration, attention, or confusion during the examination or slower, vague responses should be noted and may be cause for deferral.

The Examiner should make observations about the following specific elements and should note on the form any gross or notable deviations from normal:

- 1. Appearance (abnormal if dirty, disheveled, odoriferous, or unkempt);
- 2. Behavior (abnormal if uncooperative, bizarre, or inexplicable);

- 3. Mood (abnormal if excessively angry, sad, euphoric, or labile);
- Communication (abnormal if incomprehensible, does not answer questions directly);
- 5. Memory (abnormal if unable to recall recent events); and
- 6. Cognition (abnormal if unable to engage in abstract thought, or if delusional or hallucinating).

Significant observations during this part of the medical examination should be recorded in Item 60, of the application form. The Examiner, upon identifying any significant problems, should defer issuance of the medical certificate and report findings to the FAA. This could be accomplished by contacting a RFS or the Manager of the AMCD.

III. Aerospace Medical Disposition

A. General Considerations. It must be pointed out that considerations for safety, which in the "mental" area are related to a compromise of judgment and emotional control or to diminished mental capacity with loss of behavioral control, are not the same as concerns for emotional health in everyday life. Some problems may have only a slight impact on an individual's overall capacities and the quality of life but may nevertheless have a great impact on safety. Conversely, many emotional problems that are of therapeutic and clinical concern have no impact on safety.

B. Denials. The FAA has concluded that certain psychiatric conditions are such that their presence or a past history of their presence is sufficient to suggest a significant potential threat to aviation safety. It is, therefore, incumbent upon the Examiner to be aware of any indications of these conditions currently or in the past, and to deny or defer issuance of the medical certificate to an applicant who has a history of these conditions. An applicant who has a current diagnosis or history of these conditions may request the FAA to grant an Authorization under the special issuance section of part 67 (<u>14 CFR 67.401</u>) and, based upon individual considerations, the FAA may grant such an issuance.

All applicants with any of the following conditions must be denied or deferred: Attention deficit/hyperactivity, bipolar disorder, personality disorder, psychosis, substance abuse, substance ddependence, suicide attempt.

In some instances, the following conditions may also warrant denial or deferral: Adjustment disorder; bereavement; dysthymic; or minor depression; use of psychotropic medications for smoking cessation

For evaluation guidance, see specification sheets in Disease Protocols.

NOTE: The use of a psychotropic drug is disqualifying for aeromedical certification purposes. This includes all sedatives, tranquilizers, antipsychotic drugs, antidepressant drugs (including SSRI's -see exceptions below), analeptics, anxiolytics, and hallucinogens. The Examiner should defer issuance and forward the medical records to the AMCD.

C. Use of Antidepressant Medications. The FAA has determined that airmen requesting first, second, or third class medical certificates while being treated with one of four specific selective serotonin reuptake inhibitors (SSRIs) may be considered. The Authorization decision is made on a case by case basis. **The Examiner may not issue.**

If the applicant opts to discontinue use of the SSRI, the Examiner must notate in Block 60, Comments on History and Findings, on FAA Form 8500-8 and defer issuance. To reapply for regular issuance, the applicant must be off the SSRI for a minimum of 60 days with a favorable report from the treating physician indicating stable mood and no aeromedically significant side effects. See <u>SSRI Decision Path I</u>

An applicant may be considered for an FAA Authorization of a Special Issuance (SI) of a Medical Certificate (<u>Authorization</u>) if:

1.) The applicant has one of the following diagnoses:

- Major depressive disorder (mild to moderate) either single episode or recurrent episode
- Dysthymic disorder
- Adjustment disorder with depressed mood
- Any non-depression related condition for which the SSRI is used

2.) For a minimum of 6 continuous months prior, the applicant has been clinically stable as well as on a stable dose of medication without any aeromedically significant side effects and/or an increase in symptoms. If the applicant has been on the medication under 6 months, the Examiner must advise that 6 months of continuous use is required before SI consideration.

3.) The SSRI used is one the following (single use only):

- Fluoxetine (Prozac)
- Sertraline (Zoloft)
- Citalopram (Celexa)
- Escialopram (Lexapro)

If the applicant is on a SSRI that is not listed above, the Examiner must advise that the medication is not acceptable for SI consideration.

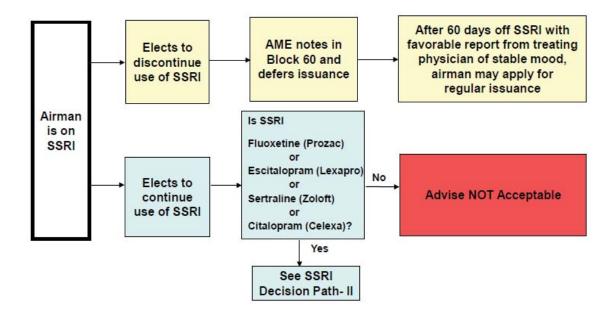
4.) The applicant DOES NOT have symptoms or history of:

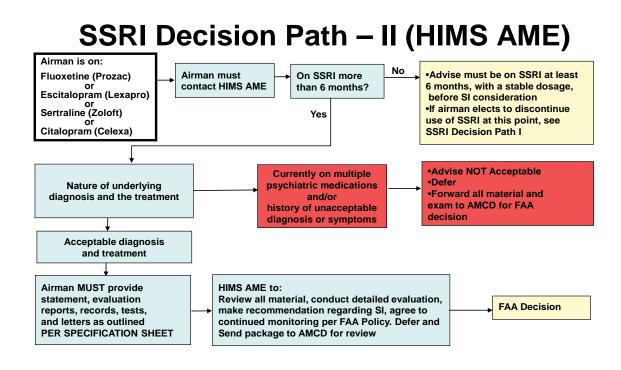
- Psychosis
- Suicidal ideation

- Electro convulsive therapy
- Treatment with multiple SSRIs concurrently
- Multi-agent drug protocol use (prior use of other psychiatric drugs in conjunction with SSRIs.)

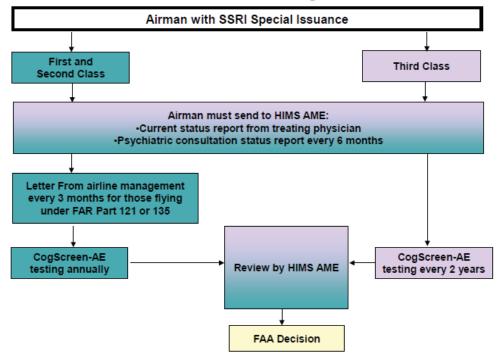
If applicant meets the all of the above criteria and wishes to continue use of the SSRI, advise the applicant that he/she must be further evaluated by a Human Intervention Motivation Study (HIMS) AME. See <u>SSRI Decision Path II (HIMS AME)</u>. The HIMS AME will also conduct the follow up evaluation after initial issuance. See <u>SSRI Follow</u> <u>Up Path</u>, <u>SSRI Specification Sheet</u>, and <u>Disease Protocols</u>, <u>Depression Treated with</u> <u>SSRI Medications</u>.

SSRI Decision Path - I





SSRI Follow Up Path



"Note: HIMS AME may issue if subsequent certification exam does not coincide with required neurocognitive testing and if all follow-up material is acceptable. When CogScreen is due, send records to Medical Appeals, AAM-240, Washington, DC.

SPECIFICATIONS SSRI

The following items must be submitted:

- 1. A written statement from you and in your own words describing your history of antidepressant usage and mental health status.
- 2. Medical/treatment records related to your history of antidepressant usage from the date you began treatment to the present.
- 3. A current detailed evaluation report from your treating/prescribing physician attesting to and describing your diagnoses, the length and course of treatment, the dosage of the antidepressant medication taken, and the presence of any side effects experienced from the antidepressant you currently take and/or that you have taken in the past.
- 4. If your treating physician is not a board certified psychiatrist, a current detailed evaluation by a board certified psychiatrist regarding your psychiatric and behavioral status is required. The psychiatrist must document that he/she has reviewed your personal written statement, all of your treatment/medical records, and the current evaluation by your treating/prescribing physician.
- 5. A neuropsychologist's report (following FAA's Specifications Neuropsychological Evaluations for Treatment with SSRI Medications) with the report of the results of a CogScreen Aeromedical Edition (AE) neurocognitive psychological test, including a copy of the test computer score reports. For more information on the specifications, see Disease Protocols, Depression Treated with SSRI Medications at:

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/dec_cons/disease_prot/

- 6. If you have held a first- or second-class airman medical certificate and have flown for a commercial carrier within the last 2 years, obtain a letter from airline management (Chief Pilot or designee) attesting to your competence, crew interaction and mood (if available).
- 7. A detailed evaluation by your HIMS AME. The evaluation must address the following:
 - A statement verifying he/she has reviewed the above documents.
 - A current psychiatric status of the applicant.
 - A comment regarding a recommendation for a Special Issuance medical certificate.
 - <u>The HIMS AME must include a statement agreeing to serve as your</u> independent medical sponsor.

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

NOTE – See <u>Disease Protocols</u> for specifications for <u>Neurocognitive</u>, <u>Psychiatric</u>, and/or <u>Psychiatric and Psychological Evaluations</u>.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSTION |
|-------------------------------|-------|--|---|
| | Psyc | hiatric Conditions | |
| Adjustment Disorders | All | Submit all pertinent medical information and clinical status report. | If stable, resolved, no associated disturbance of thought, no recurrent episodes, and psychotropic medication(s) used for less than 6 months and discontinued for at least 3 months - Issue Otherwise - Requires FAA Decision |
| Attention Deficit Disorder | All | Submit all pertinent medical information and clinical status report to include documenting the period of use, name and dosage of any medication(s), and side- effects. If submitting neurocognitive test data, the applicant must have a drug screen for ADD medications done within 24 hours of the neurocognitive testing and submit the results. See <u>Disease Protocols</u> , ADHD/ADD. | Requires FAA Decision |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSTION | |
|---|------------------------|--|--|--|
| | Psychiatric Conditions | | | |
| Bipolar Disorder | All | Submit all pertinent medical information and clinical status report. Also see 3. below. | Requires FAA Decision | |
| Bereavement; Dysthymic; or Minor Depression | All | Submit all pertinent medical information and clinical status report. | If stable, resolved, no associated disturbance of thought, no recurrent episodes, and; a). psychotropic medication(s) used for less than 6 months and discontinued for at least 3 months – Issue b). No use of psychotropic medication(s) - Issue Otherwise - Requires FAA Decision | |
| Depression requiring the use of antidepressant medications | All | Submit all pertinent medical information and clinical status report. <u>See Use of</u> <u>Antidepressant</u> <u>Medication Policy</u> and <u>Disease Protocols</u> , <u>Depression Treated with</u> <u>SSRI Medications</u> . | Requires FAA Decision | |
| Personality Disorders | All | Submit all pertinent medical information and clinical status report. Also see 1. below. | Requires FAA Decision | |
| Psychosis | All | Submit all pertinent medical information and clinical status report. Also see 2. below. | Requires FAA Decision | |

| Pyschotropic medications for Smoking Cessation | All | Document period of use, name and dosage of medication(s) and side-effects. | If medication(s) discontinued for at least 30 days and w/o side- effects - Issue Otherwise – Requires FAA Decision |
|--|-----|---|---|
| Substance Abuse | All | Submit all pertinent medical information and clinical status report. Also see 6. below and <u>Disease</u> <u>Protocols - Substance</u> <u>Dependence/Abuse.</u> | Requires FAA Decision |
| Substance Dependence | All | Submit all pertinent medical information and clinical status report. Also see 5. Below and <u>Disease</u> <u>Protocols - Substance</u> Dependence/Abuse. | Requires FAA Decision |
| Suicide Attempt | All | Submit all pertinent medical information required. | Requires FAA Decision |

 The category of personality disorders severe enough to have repeatedly manifested itself by overt acts refers to diagnosed personality disorders that involve what is called "acting out" behavior. These personality problems relate to poor social judgment, impulsivity, and disregard or antagonism toward authority, especially rules and regulations. A history of long-standing behavioral problems, whether major (criminal) or relatively minor (truancy, military misbehavior, petty criminal and civil indiscretions, and social instability), usually occurs with these disorders. Driving infractions and previous failures to follow aviation regulations are critical examples of these acts.

Certain personality disorders and other mental disorders that include conditions of limited duration and/or widely varying severity may be disqualifying. Under this category, the FAA is especially concerned with significant depressive episodes requiring treatment, even outpatient therapy. If these episodes have been severe enough to cause some disruption of vocational or educational activity, or if they have required medication or involved suicidal ideation, the application should be deferred or denied issuance.

Some personality disorders and situational dysphorias may be considered disqualifying for a limited time. These include such conditions as gross

immaturity and some personality disorders not involving or manifested by overt acts.

- Psychotic Disorders are characterized by a loss of reality testing in the form of delusions, hallucinations, or disorganized thoughts. They may be chronic, intermittent, or occur in a single episode. They may also occur as accompanying symptoms in other psychiatric conditions including but not limited to bipolar disorder (e.g. bipolar disorder with psychotic features), major depression (e.g. major depression with psychotic features), borderline personality disorder, etc.
 All applicants with such a diagnosis must be denied or deferred.
- 3. Bipolar Disorders are considered on a continuum as part of a spectrum of disorders where there are significant alternations in mood. Generally, only one episode of manic or hypomanic behavior is necessary to make the diagnosis. Please note that cyclothymic disorder is part of this spectrum. Even if the bipolar disorder does not have accompanying symptoms that reach the level of psychosis, the disorder can be so disruptive of judgment and functioning (especially mania) as to pose a significant risk to aviation safety. Impaired judgment does occur even in the milder form of the disease. All applicants with a diagnosis of Bipolar Disorder must be denied or deferred.
- 4. Although they may be rare in occurrence, severe anxiety problems, especially anxiety and phobias associated with some aspect of flying, are considered significant. Organic mental disorders that cause a cognitive defect, even if the applicant is not psychotic, are considered disqualifying whether they are due to trauma, toxic exposure, or arteriosclerotic or other degenerative changes. (See **Item 18.m**.).
- 5. Substance dependence refers to the use of substances of dependence, which include alcohol and other drugs (i.e., PCP, sedatives and hypnotics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). Substance dependence is defined and specified as a disqualifying medical condition. It is disqualifying unless there is clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance for not less than the preceding 2 years.

Substance dependence is evidenced by one or more of the following: increased tolerance, manifestation of withdrawal symptoms, impaired control of use, or continued use despite damage to physical health or impairment of social, personal, or occupational functioning. Substance dependence is accompanied by various deleterious effects on physical health as well as personal or social functioning. There are many other indicators of substance dependence in the history and physical examination. Treatment for substance dependence-related problems, arrests, including charges of driving under the influence of drugs or alcohol, and vocational or marital disruption related to drugs or alcohol consumption are important indicators. Alcohol on the breath at the time of a

routine physical examination should arouse a high index of suspicion. Consumption of drugs or alcohol sufficient to cause liver damage is an indication of the presence of alcoholism.

- 6. Substance abuse includes the use of the above substances under any one of the following conditions:
 - a. Use of a substance in the last 2 years in which the use was physically hazardous (e.g., DUI or DWI) if there has been at any other time an instance of the use of a substance also in a situation in which the use was physically hazardous;
 - b. If a person has received a verified positive drug test result under an antidrug program of the Department of Transportation or one of its administrations; or
 - c. The Federal Air Surgeon finds that an applicant's misuse of a substance makes him or her unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held, or that may reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the applicant unable to perform those duties or exercise those privileges.

Substance dependence and substance abuse are specified as disqualifying medical conditions.

ITEM 48. General Systemic

| CHECK EACH ITEM IN APPROPRIATE COLUMN | NORMAL | ABNORMAL |
|---------------------------------------|--------|----------|
| 48. General Systemic | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(a)(b)(c), 67.213(a)(b)(c), and 67.313(a)(b)(c)

- (a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.
- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

A protocol for examinations applicable to Item 48 is not provided because the necessary history-taking, observation, and other examination techniques used in examining other systems have already revealed much of what can be known about the status of the applicant's endocrine and other systems. For example, the examination of the skin alone can reveal important signs of thyroid dysfunction, Addison's disease, Cushing's disease, and several other endocrine disorders. The eye may reflect a thyroid disorder (exophthalmos) or diabetes (retinopathy).

When the Examiner reaches Item 48 in the course of the examination of an applicant, it is recommended that the Examiner take a moment to review and determine if key procedures have been performed in conjunction with examinations made under other items, and to determine the relevance of any positive or abnormal findings.

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the <u>RFS</u>. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|------------|--|-----------------------|
| Bloo | d and Bloo | d-Forming Tissue Dise | ase |
| Anemia | All | Submit a current status report and all pertinent medical reports. Include a CBC, and any other tests deemed necessary | Requires FAA Decision |
| Hemophilia | All | Submit a current status report and all pertinent medical reports. Include frequency, severity and location of bleeding sites | Requires FAA Decision |
| Other disease of the blood or blood- forming tissues that could adversely affect performance of airman duties | All | Submit a current status report and all pertinent medical reports | Requires FAA Decision |
| Polycythemia | All | Submit a current status report and all pertinent medical reports; include CBC | Requires FAA Decision |

DISEASE/CONDITION CLASS EVALUATION DATA DISPOSITION

Diabetes, Pre-Diabetes, Metabolic Syndrome, and/or Insulin Resistance

| Diabetes Insipidus | All | Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects | Requires FAA Decision |
|---|-----|---|---|
| Pre-Diabetes (Metabolic Syndrome, Impaired Fasting Glucose, Insulin Resistance, Glucose Elevation/Intolerance, Polycystic Ovary Syndrome) | All | Review all pertinent medical records; current status to include names and dosage of medication(s) and side effects | See Pre-Diabetes Worksheet below. If airman meets all certification criteria – Issue. All others require FAA decision. Submit all evaluation data. |
| Diabetes Mellitus – Diet Controlled | All | See <u>Diabetes</u> <u>Mellitus -Diet</u> <u>Controlled Protocol</u> See chart of <u>Acceptable</u> <u>Combinations of Diabetes</u> <u>Medications</u> | If no glycosuria and normal HbA1c – Issue. All others require FAA decision. Submit all evaluation data. |
| Diabetes Mellitus II - Medication Controlled (Non Insulin) | All | See Diabetes Mellitus II - <u>Medication</u> Controlled (non insulin) Protocol See chart of <u>Acceptable</u> <u>Combinations of Diabetes</u> <u>Medications</u> | Initial Special Issuance - Requires FAA Decision Followup Special Issuances - See <u>AASI</u> Protocol |
| Diabetes Mellitus I & II - Insulin Treated | All | See Diabetes Mellitus I & II - <u>Insulin</u> <u>Treated Protocol</u> | Requires FAA Decision |

Pre-Diabetes Worksheet (Metabolic Syndrome, Impaired Fasting Glucose, Insulin Resistance, Glucose Elevation/Intolerance, Polycystic Ovary Syndrome)

The Examiner must review a current status report by the treating physician and any supporting documents to determine the applicant's eligibility for certification. If the applicant **meets ALL the acceptable certification criteria** listed below, the Examiner can issue. Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam.

| AME MUST REVIEW | ACCEPTABLE CERTIFICATION CRITERIA |
|--|---|
| Treating physician finds the condition stable on current regimen and no changes recommended | []Yes |
| Symptoms associated with diabetes | []None |
| Hypoglycemic events (symptoms or glucose less than or equal to 70 mg/dl) within the past 12 months. | [] None |
| Fasting blood sugar | [] Less than 126 mg/dl |
| Current A1C | [] Within last 90 days []Less than or equal to 6.5 mg/dL |
| Oral glucose tolerance test, if performed | [] Less than 200 mg/dl at 1 hour [] N/A |
| Medications for condition | [] None [] Metformin only (with no side effects) |

AME MUST NOTE in Block 60 either of the following:

[] Airman meets certification criteria for pre-diabetes (Metabolic Syndrome, Impaired Fasting Glucose, Insulin Resistance, Glucose Elevation/Intolerance, Polycystic Ovary Syndrome).

[] Airman had previous Special Issuance for this condition and now meets the regular issuance certification criteria for pre-diabetes (Metabolic Syndrome, Impaired Fasting Glucose, Insulin Resistance, Glucose Elevation/Intolerance, Polycystic Ovary Syndrome).

[] Airman does NOT meet certification criteria for pre-diabetes (Metabolic Syndrome, Impaired Fasting Glucose, Insulin Resistance, Glucose Elevation/Intolerance, Polycystic Ovary Syndrome)). I have deferred this exam. (Mail the supporting documents to FAA identifying which criteria were not met.)

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--|-------|---|--|
| | Endo | crine Disorders | |
| Acromegaly | All | Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects | Requires FAA Decision |
| Addison's Disease | All | Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects | Requires FAA Decision |
| Cushing's Disease or Syndrome | All | Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects | Requires FAA Decision |
| Hypoglycemia, whether functional or a result of pancreatic tumor | All | Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects | Requires FAA Decision |
| Hyperparathyroidism | All | Submit all pertinent medical records; current status;include names and dosage of medication(s) and side effects, and current serum calcium and phosphorus levels | If status post-surgery, disease controlled, stable and no sequela - Issue Otherwise - Requires FAA Decision |
| Hypoparathyroidism | All | Submit all pertinent medical records; current status; include names and dosage of medication(s) and side effects and current serum calcium and phosphorus levels | Requires FAA Decision |

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION |
|--------------------------|-------|--|---|
| Endocrine Disorders | | | |
| Hyperthyroidism | All | Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects and current TFTs | Initial Special Issuance – Requires FAA Decision Followup Special Issuances – See AASI Protocol |
| Hypothyroidism | All | Review all pertinent medical records; current status to include names and dosage of medication(s) and side effects and current TFTs | See Hypothyroidism Worksheet below. If airman meets all certification criteria – Issue. All others require FAA decision. Submit all evaluation data. Initial Special Issuance – Requires FAA Decision Followup Special Issuances – See AASI Protocol |
| Proteinuria & Glycosuria | All | Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects | Trace or 1+ protein and glucose intolerance ruled out - Issue Otherwise - Requires FAA Decision |

Hypothyroidism Worksheet

The Examiner must review a current status report by the treating physician and any supporting documents to determine the applicant's eligibility for certification. If the applicant **meets ALL the acceptable certification criteria** listed below, the Examiner can issue. Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam.

| AME MUST REVIEW | ACCEPTABLE CERTIFICATION CRITERIA |
|--|--|
| Treating physician finds the condition stable on current regimen and no changes recommended | [] Yes |
| Symptoms and signs | [] None of the following: fatigue, mental status impairment, or symptoms related to pulmonary, cardiac, or visual systems |
| Acceptable medications | [] Levothyroxine sodium (Synthroid, Levothyroid), porcine thyroid (Armour), liothyronine sodium (Cytomel), or liotrix (Thyrolar) |
| Normal TSH within the last 90 days | []Yes |

AME MUST NOTE in Block 60 one of the following:

[] Airman meets certification criteria for hypothyroidism.

[] Airman had a previous Special Issuance for this condition and now meets the regular issuance certification criteria for hypothyroidism.

[] Airman does NOT meet certification criteria for hypothyroidism. I have deferred this exam. (Mail the supporting documents to FAA identifying which criteria were not met.)

| DISEASE/CONDITION | CLASS | EVALUATION DATA | DISPOSITION | |
|---|------------------------------------|--|---|--|
| Hu | Human Immunodeficiency Virus (HIV) | | | |
| Acquired Immunodeficiency Syndrome (AIDS) | All | See HIV Protocol | Requires FAA Decision | |
| Human Immunodeficiency Virus (HIV) | All | See HIV Protocol | Requires FAA Decision | |
| | Ν | leoplasms | | |
| Breast Cancer | All | Submit all pertinent medical records, operative/ pathology reports, current oncological status report, including tumor markers, and any other testing; include duration of symptoms, name and dosage of drugs and side effects | Initial Special Issuance - Requires FAA Decision Followup Special Issuance's - See AASI Protocol | |
| Also see: | | | | |
| Acoustic Neuroma | | | | |
| Colon/ Rectal Cancer and other Abdominal Malignancies | | | | |
| G-U System Cancers | | | | |
| Kaposi's Sarcoma | | | | |
| Leukemias and Lymphomas | | | | |
| Malignant Melanomas | | | | |
| Eye Tumors | | | | |

ITEM 49. Hearing

| 49. Hearing | Record Audiometric Speech Discrimination Score Below |
|--|---|
| Conversational Voice Test at 6 Feet | |
| Pass Fail | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.105(a)(b)(c), 67.205(a)(b)(c), and 67.305(a)(b)(c)

- (a) The person shall demonstrate acceptable hearing by at least one of the following tests:
 - (1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.
 - (2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.
 - (3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969 (11 West 42nd Street, New York, NY 10036):

| Frequency (Hz) | 500 Hz | 1000 Hz | 2000 Hz | 3000 Hz |
|-----------------|--------|---------|---------|---------|
| Better ear (Db) | 35 | 30 | 30 | 40 |
| Poorer ear (Db) | 35 | 50 | 50 | 60 |

- (b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that-
 - (1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or
 - (2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.
- (c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

II. Examination Equipment and Techniques

- A. Order of Examinations
 - 1. The applicant must demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the Examiner, with the back turned to the Examiner.
 - 2. If an applicant fails the conversational voice test, the Examiner may administer pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969:

| Frequency (Hz) | 500 Hz | 1000 Hz | 2000 Hz | 3000 Hz |
|-----------------|--------|---------|---------|---------|
| Better ear (Db) | 35 | 30 | 30 | 40 |
| Poorer ear (Db) | 35 | 50 | 50 | 60 |

If the applicant fails an audiometric test and the conversational voice test had not been administered, the conversational voice test should be performed to determine if the standard applicable to that test can be met.

- 3. If an applicant is unable to pass either the conversational voice test or the pure tone audiometric test, then an audiometric speech discrimination test should be administered. A passing score is at least 70 percent obtained in one ear at an intensity of no greater than 65 Db.
- B. Discussion
 - Conversational voice test. For all classes of certification, the applicant must demonstrate hearing of an average conversational voice in a quiet room, using both ears, at 6 feet, with the back turned to the Examiner. The Examiner should not use only sibilants (S-sounding test materials). If the applicant is able to repeat correctly the test numbers or words, "pass" should be noted and recorded on FAA Form 8500-8, Item 49. If the applicant is unable to hear a normal conversational voice then "fail" should be marked and one of the following tests may be administered.
 - 2. Standard. For all classes of certification, the applicant may be examined by pure tone audiometry as an alternative to conversational voice testing or upon failing the conversational voice test. If the applicant fails the pure tone audiometric test and has not been tested by conversational voice, that test may be administered. The requirements expressed as audiometric standards according to a table of acceptable thresholds (American National Standards Institute [ANSI], 1969, calibration) are as follows:

| EAR(All classes of medical certification) | | | | |
|---|--------|---------|---------|---------|
| Frequency (Hz) | 500 Hz | 1000 Hz | 2000 Hz | 3000 Hz |
| Better ear (Db) | 35 | 30 | 30 | 40 |
| Poorer ear (Db) | 35 | 50 | 50 | 60 |

3. Audiometric Speech Discrimination. Upon failing both conversational voice and pure tone audiometric test, an audiometric speech discrimination test should be administered (usually by an otologist or audiologist). The applicant must score at least 70 percent at intensity no greater than 65 Db in either ear.

C. Equipment

- Approval. The FAA does not approve or designate specific audiometric equipment for use in medical certification. Equipment used for FAA testing must accurately and reliably cover the required frequencies and have adequate threshold step features. Because every audiometer manufactured in the United States for screening and diagnostic purposes is built to meet appropriate standards, most audiometers should be acceptable *if they are maintained in proper calibration* and are used in an adequately quiet place.
- 2. Calibration. It is critical that any audiometer be periodically calibrated to ensure its continued accuracy. Annual calibration is recommended. Also recommended is the further safeguard of obtaining an occasional audiogram on a "known" subject or staff member between calibrations, especially at any time that a test result unexpectedly varies significantly from the hearing levels clinically expected. This testing provides an approximate "at threshold" calibration. The Examiner should ensure that the audiometer is calibrated to ANSI standards or if calibrated to the older ASA/USASI standards, the appropriate correction is applied (see paragraph 3 below).
- 3. ASA/ANSI. Older audiometers were often calibrated to meet the standards specified by the USA Standards Institute (USASI), formerly the American Standards Association (ASA). These standards were based upon a U.S. Public Health Service survey. Newer audiometers are calibrated so that the zero hearing threshold level is now based on laboratory measurements rather than on the survey. In 1969, the American National Standards Institute (ANSI) incorporated these new measurements. Audiometers built to this standard have instruments or dials that read in ANSI values. For these reasons, *it is very important that every audiogram submitted (for values reported in Item 49 on FAA Form 8500-8) include a note indicating whether it is ASA or ANSI.* Only then can the FAA standards be appropriately applied. ASA or USASI values can be converted to ANSI by adding corrections as follows:

| Frequency (Hz) 500 l | Hz 1,000 Hz | 2,000 Hz | 3,000 Hz |
|----------------------|-------------|----------|----------|
| Decibels Added* 14 | 10 | 8.5 | 8.5 |

* The decibels added figure is the amount added to ASA or USASI at each specific frequency to convert to ANSI or older equivalent ISO values.

III. Aerospace Medical Disposition

- Special Issuance of Medical Certificates. Applicants who do not meet the auditory standards may be found eligible for a SODA. An applicant seeking a SODA must make the request in writing to the Aerospace Medicine Certification Division, AAM-300. A determination of qualifications will be made on the basis of a special medical examination by an ENT consultant, a MFT, or operational experience.
- Bilateral Deafness. If otherwise qualified, the AMCD may issue a combination medical/student pilot certificate with the limitation VALID FOR STUDENT PILOT PURPOSES ONLY as well as the limitation NOT VALID FOR CONTROL ZONES OR AREAS WHERE RADIO COMMUNICATION IS REQUIRED. This will enable the applicant to proceed with training to the point of a private pilot checkride. See **Items 25-30**.

When the student pilot's instructor confirms the student's eligibility for a private pilot checkride, the applicant should submit a written request to the AMCD, for an authorization for a MFT. This test will be given by an FAA inspector in conjunction with the checkride. If the applicant successfully completes the test, the FAA will issue a third-class medical certificate and SODA. Pilot activities will be restricted to areas in which radio communication is not required.

3. Hearing Aids. If the applicant requires the use of hearing aids to meet the standard, issue the certificate with the following restriction:

VALID ONLY WITH USE OF HEARING AMPLIFICATION

Some pilots who normally wear hearing aids to assist in communicating while on the ground report that they elect not to wear them while flying. They prefer to use the volume amplification of the radio headphone. Some use the headphone on one ear for radio communication and the hearing aid in the other for cockpit communications.

ITEMS 50- 54. Ophthalmologic Disorder

| 50. Distant Vision | | | |
|--------------------|-----|------------------|--|
| Right | 20/ | Corrected to 20/ | |
| Left | 20/ | Corrected to 20/ | |
| Both | 20/ | Corrected to 20/ | |

ITEM 50. Distant Vision

I. Code of Federal Regulations

First- and Second-Classes: 14 CFR 67.103(a) and 67.203(a)

(a) Distant visual acuity of 20/20 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/20 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate

Third-Class: 14 CFR 67.303(a)

(a) Distant visual acuity of 20/40 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/40 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.

II. Examination Equipment and Techniques

Equipment:

- 1. Snellen 20-foot eye chart may be used as follows:
 - a. The Snellen chart should be illuminated by a 100-watt incandescent lamp placed 4 feet in front of and slightly above the chart.
 - b. The chart or screen should be placed 20 feet from the applicant's eyes and the 20/20 line should be placed 5 feet 4 inches above the floor.
 - c. A metal, opaque plastic, or cardboard occluder should be used to cover the eye not being examined.
 - d. The examining room should be darkened with the exception of the illuminated chart or screen.
 - e. If the applicant wears corrective lenses, the uncorrected acuity should be determined first, then corrected acuity. If the applicant wears contact lenses, see the recommendations in Chapter 3. Items 31-34, Section II, #5,
 - f. Common errors:
 - 1. Failure to shield the applicant's eyes from extraneous light.
 - 2. Permitting the applicant to view the chart with both eyes.
 - 3. Failure to observe the applicant's face to detect squinting.
 - 4. Incorrect sizing of projected chart letters for a 20-foot distance.

- 5. Failure to focus the projector sharply.
- 6. Failure to obtain the corrected acuity when the applicant wears glasses.
- 7. Failure to note and to require the removal of contact lenses.
- 2. Acceptable Substitutes for Distant Vision Testing: any commercial available visual acuities and heterphoria testing devices.

There are specific approved substitute testers for color vision, which may not include some commercially available vision testing machines. For an approved list, see Item 52. Color Vision.

3. Directions furnished by the manufacturer or distributor should be followed when using the acceptable substitute devices for the above testing.

Examination Techniques:

1. Each eye will be tested separately, and both eyes together.

III. Aerospace Medical Disposition

A. When corrective lenses are required to meet the standards, an appropriate limitation will be placed on the medical certificate. For example, when lenses are needed for distant vision only:

HOLDER SHALL WEAR CORRECTIVE LENSES

For multiple vision defects involving distant and/or intermediate and/or near vision when one set of monofocal lenses corrects for all, the limitation is:

HOLDER SHALL WEAR CORRECTIVE LENSES

For combined defective distant and near visual acuity where multifocal lenses are required, the appropriate limitation is:

HOLDER SHALL WEAR LENSES THAT CORRECT FOR DISTANT VISION AND POSSESS GLASSES THAT CORRECT FOR NEAR VISION

For multiple vision defects involving distant, near, and intermediate visual acuity when more than one set of lenses is required to correct for all vision defects, the appropriate limitation is:

HOLDER SHALL WEAR LENSES THAT CORRECT FOR DISTANT VISION AND POSSESS GLASSES THAT CORRECT FOR NEAR AND INTERMEDIATE VISION

- B. An applicant who fails to meet vision standards and has no SODA that covers the extent of the visual acuity defect found on examination may obtain further FAA consideration for grant of an Authorization under the special issuance section of part 67 (14 CFR 67.401) for medical certification by submitting a report of an eye evaluation. The Examiner can help to expedite the review procedure by forwarding a copy of FAA Form 8500-7, Report of Eye Evaluation, that has been completed by an eye specialist (optometrist or ophthmologist)¹.
- C. Applicants who do not meet the visual standards should be referred to a specialist for evaluation. Applicants with visual acuity or ocular muscle balance problems may be referred to an eye specialist of the applicant's choice. The FAA Form 8500-7, Report of Eye Evaluation, should be provided to the specialist by the Examiner.

Any applicant eligible for a medical certificate through special issuance under these guidelines shall pass a MFT, which may be arranged through the appropriate agency medical authority. While waiting to complete a MFT, an applicant who is otherwise qualified for certification may be issued a medical certificate, which must contain the limitation "Valid for Student Pilot Privileges Only."

D. Amblyopia. In amblyopia ex anopsia, the visual acuity of one eye is decreased without presence of organic eye disease, usually because of strabismus or anisometropia in childhood. In amblyopia ex anopsia, the visual acuity loss is simply recorded in Item 50 of FAA form 8500-8, and visual standards are applied as usual. If the standards are not met, a report of eye evaluation, FAA Form 8500-7, should be submitted for consideration.

¹ In obtaining special eye evaluations in respect to the airman medical certification program or the air traffic controller health program, reports from an eye specialist are acceptable when the condition being evaluated relates to a determination of visual acuity, refractive error, or mechanical function of the eye. The FAA Form 8500-7, Report of Eye Evaluation, is a form that is designed for use by either optometrists or ophthalmologists.

ITEM 51.a. Near Vision

| 51.a. Near Vision | | |
|-------------------|-----|------------------|
| Right | 20/ | Corrected to 20/ |
| Left | 20/ | Corrected to 20/ |
| Both | 20/ | Corrected to 20/ |

ITEM 51.b. Intermediate Vision

| 51.b. Intermediate Vision – 32 Inches | | |
|---------------------------------------|-----|------------------|
| Right | 20/ | Corrected to 20/ |
| Left | 20/ | Corrected to 20/ |
| Both | 20/ | Corrected to 20/ |

I. Code of Federal Regulations

First- and Second-Classes: 14 CFR 67.103(b) and 67.203(b)

(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses. If age 50 or older, near vision of 20/40 or better, Snellen equivalent, at both 16 inches and 32 inches in each eye separately, with or without corrective lenses.

Third-Class: 14 CFR 67.303(b)

(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses.

II. Equipment and Examination Techniques

Equipment:

- 1. FAA Form 8500-1, Near Vision Acuity Test Chart, dated April 1993.
- For testing near at 16 inches and intermediate at 32 inches, acceptable substitutes: any commercially available visual acuities and heterophoria testing devices. For testing of intermediate vision, some equipment may require additional apparatus.

There are specific approved substitute testers for color vision, which may not include some commercially available vision testing machines. For an approved list, see Item, 52. Color Vision.

Examination Techniques:

- 1. Near visual acuity and intermediate visual acuity, if the latter is required, are determined for each eye separately and for both eyes together. Test values are recorded both with and without corrective glasses/lenses when either are worn or required to meet the standards. If the applicant is unable to meet the intermediate acuity standard unaided, then he/she is tested using each of the corrective lenses or glasses otherwise needed by that person to meet distant and/or near visual acuity standards. If the aided acuity meets the standard using any of the lenses or glasses, the findings are recorded, and the certificate appropriately limited. If an applicant has no lenses that bring intermediate and/or near visual acuity to the required standards, or better, in each eye, no certificate may be issued, and the applicant is referred to an eye specialist for appropriate visual evaluation and correction.
- 2. FAA Form 8500-1, Near Vision Acuity Test Chart, dated April 1993, should be used as follows:
 - a. The examination is conducted in a well-lighted room with the source of light behind the applicant.
 - b. The applicant holds the chart 16 inches (near) and 32 inches (intermediate) from the eyes in a position that will provide uniform illumination. To ensure that the chart is held at exactly 16 inches or 32 inches from the eyes, a string of that length may be attached to the chart.
 - c. Each eye is tested separately, with the other eye covered. Both eyes are then tested together.
 - d. The smallest type correctly read with each eye separately and both eyes together is recorded in linear value. In performing the test using FAA Form 8500-1, the level of visual acuity will be recorded as the line of smallest type the applicant reads accurately. The applicant should be allowed no more than two misread letters on any line.
 - e. Common errors:
 - 1. Inadequate illumination of the test chart.
 - 2. Failure to hold the chart the specified distance from the eye.
 - 3. Failure to ensure that the untested eye is covered.
 - 4. Failure to determine uncorrected and corrected acuity when the applicant wears glasses.
 - f. Practical Test. At the bottom of FAA Form 8500-1 is a section for Aeronautical Chart Reading. Letter types and charts are reproduced from

aeronautical charts in their actual size.

This may be used when a borderline condition exists at the certifiable limits of an applicant's vision. If successfully completed, a favorable certification action may be taken.

3. Acceptable substitute equipment may be used. Directions furnished by the manufacturer or distributor should be followed when using the acceptable substitute devices for the above testing.

III. Aerospace Medical Disposition

When correcting glasses are required to meet the near and intermediate vision standards, an appropriate limitation will be placed on the medical certificate. Contact lenses that correct only for near or intermediate visual acuity are not considered acceptable for aviation duties.

If the applicant meets the uncorrected near or intermediate vision standard of 20/40, but already uses spectacles that correct the vision better than 20/40, it is recommended that the Examiner enter the limitation for near or intermediate vision corrective glasses on the certificate.

For all classes, the appropriate wording for the near vision limitation is:

HOLDER SHALL POSSESS GLASSES THAT CORRECT FOR NEAR VISION

Possession only is required, because it may be hazardous to have distant vision obscured by the continuous wearing of reading glasses.

For first- and second-class, the appropriate wording for combined near and intermediate vision limitation is:

HOLDER SHALL POSSESS GLASSES THAT CORRECT FOR NEAR AND INTERMEDIATE VISION

For multiple defective distant, near, and intermediate visual acuity when unifocal glasses or contact lenses are used and correct all, the appropriate limitation is:

HOLDER SHALL WEAR CORRECTIVE LENSES

For multiple vision defects involving distance and/or near and/or intermediate visual acuity when more than one set of lenses is required to correct for all vision defects, the appropriate limitation is:

HOLDER SHALL WEAR LENSES THAT CORRECT FOR DISTANT VISION AND POSSESS GLASSES THAT CORRECT FOR NEAR AND INTERMEDIATE VISION

ITEM 52. Color Vision

| 52. Color Vision | 1 |
|------------------|------|
| | Pass |
| | Fail |

I. Code of Federal Regulations

First- and Second-Classes: 14 CFR 67.103(c) and 67.203(c)

(c) Color vision: Ability to perceive those colors necessary for the safe performance of airman duties.

Third-Class: 14 CFR 67.303(c)

(c) Color vision: Ability to perceive those colors necessary for the safe performance of airman duties.

II. Examination Equipment and Techniques

The following equipment and techniques apply only to airmen. Not all tests approved for airmen are acceptable for air traffic controllers (FAA employee 2152 series and contract tower air traffic controllers).

For ATCS information, see the end of this section or contact a Regional Flight Surgeon.

| EQUIPMENT | TEST | EDITION | PLATES |
|---------------------|---|-----------------|--------|
| Pseudoisochromatic | Test book should be held 30" from | | |
| plates | applicant | | |
| | Plates should be illuminated by at | | |
| | least 20' candles, preferably by a | | |
| | Macbeth Easel Lamp or a Verilux | | |
| | True Color Light (F15T8VLX) | | |
| | Only three seconds are allowed | | |
| | for the applicant to interpret and respond to a given plate | | |
| American Optical | lespond to a given plate | 1965 | 1-15 |
| American Optical | | 1905 | 1-15 |
| Company [AOC] | | and | |
| AOC-HRR | | 2 nd | 1-11 |
| Richmond-HRR | | 4 th | 5-24 |
| Dvorine | | 2 nd | 1-15 |
| Ishihara | | 14 Plate | 1-11 |
| | | 24 Plate | 1-15 |
| | | 38 Plate | 1-21 |
| Richmond, 15-plates | | 1983 | 1-15 |

Acceptable Substitutes: (May be used following the directions accompanying the instruments) Farnsworth Lantern; OPTEC 900 Color Vision Test; Keystone Orthoscope; Keystone Telebinocular; OPTEC 2000 Vision Tester (Model Nos. 2000 PM, 2000 PAME, and 2000 PI); OPTEC 2500; Titmus Vision Tester; Titmus 2 Vision Tester (Model Nos. T2A and T2S); Titmus i400.

III. Aerospace Medical Disposition

The following criteria apply only to airmen. Not all tests approved for airmen are acceptable for air traffic controllers (FAA employee 2152 series and contract tower air traffic controllers). For ATCS information, see the end of this section or contact a Regional Flight Surgeon.

An applicant meets the color vision standard if he/she passes any of the color vision tests listed in Examination Techniques, Item 52. Color Vision. If an applicant fails any of these tests, inform the applicant of the option of taking any of the other acceptable color vision tests listed in Item 52. Color Vision Examination Equipment and Techniques before requesting the Specialized Operational Medical Tests in Section D below.

Inform the applicant that if he/she takes and fails any component of the Specialized Operational Medical Tests in Section D, then he/she will not be permitted to take any of the remaining listed office-based color vision tests in Examination Techniques, Item 52. Color Vision as an attempt to remove any color vision limits or restrictions on their airman medical certificate. That pathway is no longer an option to the airman, and no new result will be considered.

An applicant does not meet the color vision standard if testing reveals:

- A. All Classes
 - 1. AOC (1965 edition) pseudoisochromatic plates: seven or more errors on plates 1-15.
 - 2. AOC-HRR (second edition): Any error in test plates 7-11. Because the first 4 plates in the test book are for demonstration only, test plate 7 is actually the eleventh plate in the book. (See instruction booklet.)
 - 3. Dvorine pseudoisochromatic plates (second edition, 15 plates): seven or more errors on plates 1-15.
 - 4. Ishihara pseudoisochromatic plates: Concise 14-plate edition: six or more errors on plates 1-11; the 24-plate edition: seven or more errors on plates 1-15; the 38-plate edition: nine or more errors on plates 1-21.
 - 5. Richmond (1983 edition) pseudoisochromatic plates: seven or more errors on plates 1-15.
 - OPTEC 900 Vision Tester and Farnsworth Lantern test: an average of more than one error per series of nine color pairs in series 2 and 3. (See instruction booklet.)

- 7. Titmus Vision Tester, Titmus 2 Vision Tester, Titmus i400, OPTEC 2000 Vision Tester, Keystone Orthoscope, or Keystone View Telebinocular: any errors in the six plates.
- 8. Richmond-HRR, 4th edition: two or more errors on plates 5-24. Plates 1-4 are for demonstration only; plates 5-10 are screening plates; and plates 11-24 are diagnostic plates.

B. Certificate Limitation. If an applicant fails to meet the color vision standard as interpreted above, but is otherwise qualified, the Examiner must issue a medical certificate bearing the limitation:

NOT VALID FOR NIGHT FLYING OR BY COLOR SIGNAL CONTROL

C. The color vision screening tests above (Section A) are not to be used for the purpose of removing color vision limits/restrictions from medical certificates of airmen who have failed the Specialized Operational Medical Tests below (Section D). See bold paragraph in the introduction of this section (above).

D. Specialized Operational Medical Tests for Applicants Who Do Not Meet the Standard. Applicants who fail the color vision screening test as listed, but desire an airman medical certificate without the color vision limitation, may be given, upon request, an opportunity to take and pass additional operational color perception tests. If the airman passes the operational color vision perception test(s), then he/she will be issued a Letter of Evidence (LOE).

- The operational tests are determined by the class of medical certificate requested. The request should be in writing and directed to AMCD or RFS. See NOTE for description of the operational color perception tests.
- Applicants for a third-class medical certificate need only take the Operational Color Vision Test (OCVT).
- The applicant is permitted to take the OVCT only once during the day. If the applicant fails, he/she may request to take the OVCT at night. If the applicant elects to take the OCVT at night, he/she may take it only once.
- For an upgrade to first- or second-class medical certificate, the applicant must first pass the OCVT during daylight and then pass the color vision Medical Flight Test (MFT). If the applicant fails the OCVT during the day, he/she will not be allowed to apply for an upgrade to First- or Second-Class certificate. If the applicant fails the color vision MFT, he/she is not permitted to upgrade to a firstor second-class certificate.

E. An LOE may restrict an applicant to a third-class medical certificate. Airmen shall not be issued a medical certificate of higher class than indicated on the LOE. Exercise care in reviewing an LOE before issuing a medical certificate to an airman.

F. Color Vision Correcting Lens (e.g. X-Chrom). Such lenses are unacceptable to the FAA as a means for correcting a pilot's color vision deficiencies.

G. Any tests not specifically listed above are unacceptable methods of testing for FAA medical certificate. Examples of unacceptable tests include, but are not limited to, the OPTEC 5000 Vision Tester (color vision portion), "Farnsworth Lantern *Flashlight,*" "yarn tests," and AME-administered aviation Signal Light Gun test (AME office use is prohibited). **Web-based color vision applications, downloaded, or printed versions of color vision tests are also prohibited**. Examiners must use actual and specific color vision plates and testing machinery for applicant evaluations.

NOTE: An applicant for a third-class airman medical certificate who has defective color vision and desires an airman medical certificate without the color vision limitation must demonstrate the ability to pass an Operational Color Vision Test (OCVT) during the day. The OCVT consists of the following:

- 1. A Signal Light Test (SLT): Identify in a timely manner aviation red, green, and white
- 2. Aeronautical chart reading: Read and correctly interpret in a timely manner aeronautical charts, including print in various sizes, colors, and typefaces; conventional markings in several colors; and, terrain colors

An applicant for a first- or second- class airman medical certificate who has defective color vision and desires an airman medical certificate without the color vision limitation must first demonstrate the ability to pass the OCVT during the day (as above) and then must pass a color vision Medical Flight Test (MFT). The color vision MFT is performed in the aircraft, including in-flight testing. It consists of the following:

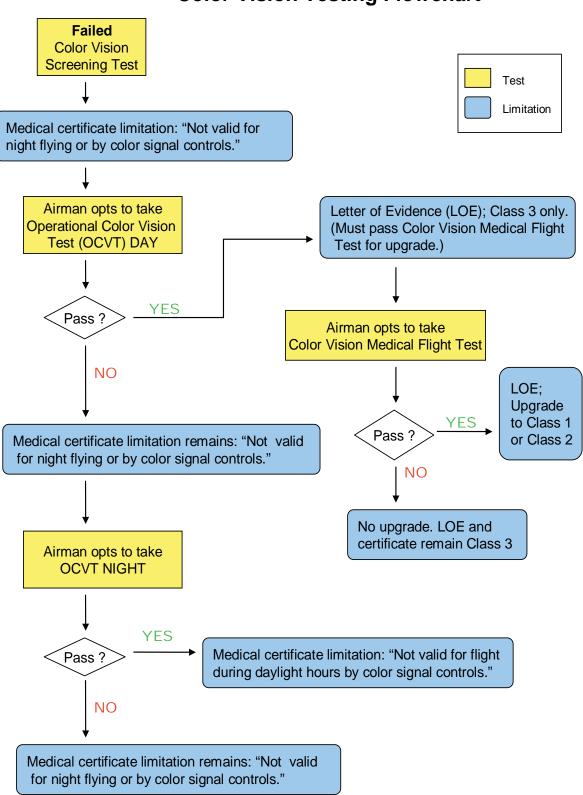
- 1. Read and correctly interpret in a timely manner aviation instruments or displays
- 2. Recognize terrain and obstructions in a timely manner
- 3. Visually identify in a timely manner the location, color, and significance of aeronautical lights such as, but not limited to, lights of other aircraft in the vicinity, runway lighting systems, etc.

Applicants who take and pass both the OCVT during the day and the color vision MFT will be given a letter of evidence (LOE) valid for all classes of medical certificates and will have no limitation or comment made on the certificate regarding color vision as they meet the standard for all classes. Applicants who take and pass only the OCVT during the day will be given an LOE valid only for third-class medical certificate.

An applicant who fails the SLT portion of the OCVT during daylight hours may repeat the test at night. Should the airman pass the SLT at night, the restriction:

NOT VALID FOR FLIGHT DURING DAYLIGHT HOURS BY COLOR SIGNAL CONTROL

will be placed on the replacement medical certificate. The airman must have taken the daylight hours test first and failed prior to taking the night test.



Color Vision Testing Flowchart

| | NTS FOR COLOR VISION SCREENING OF A SERIES and CONTRACT TOWER ATCSs) | TCS |
|---|---|---|
| Color Vision Test | Does not meet the standard (fails) if: | Supplier |
| Richmond-HRR, 4th edition All Ishihara test plates approved for airmen: | Any error on plates 5-10 | Richmond Products Ishihara |
| 14-Plate (plates 1-11) 24-Plate (plates 1-15) 38-Plate (plates 1-21) | More than 6 errors on plates 1-11 More than 2 errors on plates 1-15 More than 4 errors on plates 1-21 No errors on the 6 total trials on plates 4 | Keystone |
| Keystone View Telebinocular Titmus testers approved for airmen: Titmus, Titmus II, Titmus 2a/2s (one is manual, one is electronic) | and 5 Any errors on any of the 6 plates | View Titmus |
| OPTEC 2000 | Any errors on any of the 6 Stereo Optical Co., Inc., plates | Stereo Optical Co., Inc. |
| AOC-HRR, 2nd, 1-11 | Any errors on plates 5-10 | Richmond Products Richmond |
| Dvorine 2nd Edition | More than 2 errors on plates 1-15 | Products |
| Special Instructions Test Administration | The Examiner must document the color visio | |
| AME Office Inspection False Negatives | subject responses and the score. If MEDExp the examiner may fax or mail the results to th Surgeon or may document the findings in blo AME office inspections: The inspector must v inspect the condition of the color vision test in for fading, finger prints, pen or pencil smudge used. Only a Macbeth Easel or a Verilux True Illuminator (F15T8VLX) are acceptable. Roo must be off. Any test device with a restricted test set, like testers, generally have a high false alarm tes disproportionally high number of subjects are may be necessary to review the acceptability instrument. Regional Medical Offices are exp monitor this situation. | e Flight ck 60. isually hstrument, es; and lights e Daylight m lights the Titmus t. If a failing, it of that test ected to |
| (FAA EMPLOYEE 2152 | SERIES and CONTRACT TOWER ATCSs) | |
| AOC-PIP Bausch & Lomb Vision Tester D-15 | Mast OPTEC 900, 2500*, 5000* Prism | Stereo- Optic Titmus i400* Vision Chart - color letters |
| FALANT H-O Chart | Richmond-HRR Versions 2 and 3 Schilling | |

Any computer applications, downloaded, or printed versions of color vision tests are prohibited.

ITEM 53. Field of Vision

| 53. Field of Vision | |
|---------------------|----------|
| Normal | Abnormal |

I. Code of Federal Regulations

First- and Second-Classes: 14 CFR 67.103(d) and 67.203(d)

(d) Field of Vision: Normal

Third-Class: 14 CFR 67.303(d)

(d) Field of Vision: No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

II. Examination Equipment and Techniques

- 1. Fifty-inch square black matte surface wall target with center white fixation point; 2 millimeter white test object on black-handled holder:
 - 1. The applicant should be seated 40 inches from the target.
 - 2. An occluder should be placed over the applicant's right eye.
 - 3. The applicant should be instructed to keep the left eye focused on the fixation point.
 - 4. The white test object should be moved from the outside border of the wall target toward the point of fixation on each of the eight 4-degree radials.
 - 5. The result should be recorded on a worksheet as the number of inches from the fixation point at which the applicant first identifies the white target on each radial.
 - 6. The test should be repeated with the applicant's left eye occluded and the right eye focusing on the fixation point.
- 2. Alternative Techniques:
 - a. A standard perimeter may be used in place of the above procedure. With this method, any significant deviation from normal field configuration will

require evaluation by an eye specialist.

b. Direct confrontation. This is the least acceptable alternative since this tests for peripheral vision and only grossly for field size and visual defects. The Examiner, standing in front of the applicant, has the applicant look at the Examiner's nose while advancing two moving fingers from slightly behind and to the side of the applicant in each of the four quadrants. Any significant deviation from normal requires ophthalmological evaluation.

III. Aerospace Medical Disposition

A. Ophthalmological Consultations.

If an applicant fails to identify the target in any presentation at a distance of less than 23 inches from the fixation point, an eye specialist's evaluation must be requested. This is a requirement for all classes of certification. The Examiner should provide FAA Form 8500-14, Ophthalmological Evaluation for Glaucoma, for use by the ophthalmologist if glaucoma is suspected.

B. Glaucoma.

The FAA may grant an Authorization under the special issuance section of part 67 (14 CFR 67.401) on an individual basis. The Examiner can facilitate FAA review by obtaining a report of Ophthalmological Evaluation for Glaucoma (FAA Form 8500-14) from a treating or evaluating ophthalmologist.

NOTE: See AASI for History of Glaucoma

If considerable disturbance in night vision is documented, the FAA may limit the medical certificate: NOT VALID FOR NIGHT FLYING

C. Other Pathological Conditions.

See Items 31-34.

ITEM 54. Heterophoria

| | Esophoria | Exophoria | Right Hyperphoria | Left Hyperphoria |
|--|-----------|-----------|-------------------|------------------|
| 54. Heterophoria 20' (in prism diopters) | | | | |

I. Code of Federal Regulations

First- and Second-Classes: 14 CFR 67.103(f) and 67.203(f)

(f) Bifoveal fixation and vergence-phoria relationship sufficient to prevent a break in fusion under conditions that may reasonably be expected to occur in performing airman duties. Tests for the factors named in this paragraph are not required except for persons found to have more than 1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria. If any of these values are exceeded, the Federal Air Surgeon may require the person to be examined by a qualified eye specialist to determine if there is bifoveal fixation and an adequate vergence-phoria relationship. However, if otherwise eligible, the person is issued a medical certificate pending the results of the examination.

Third-Class: No Standards

II. Examination Equipment and Techniques

Equipment:

- 1. Red Maddox rod with handle.
- 2. Horizontal prism bar with graduated prisms beginning with one prism diopter and increasing in power to at least eight prism diopters.
- 3. Acceptable substitutes: any commercially available visual acuities and heterophoria testing devices.

There are specific approved substitute testers for color vision, which may not include some commercially available vision testing machines. For an approved list, See Item, 52. Color Vision.

Examination Techniques:

Test procedures to be used accompany the instruments. If the Examiner needs specific instructions for use of the horizontal prism bar and red Maddox rod, these may be obtained from a <u>RFS</u>.

III. Aerospace Medical Disposition

- First- and second-class: If an applicant exceeds the heterophoria standards (1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria), but shows no evidence of diplopia or serious eye pathology and all other aspects of the examination are favorable, the Examiner should not withhold or deny the medical certificate. The applicant should be advised that the FAA may require further examination by a qualified eye specialist.
- 2. Third-class: Applicants for a third-class certificate are not required to undergo heterophoria testing. However, if an applicant has strabismus or a history of diplopia, the Examiner should defer issuance of a certificate and forward the application to the AMCD. If the applicant wishes further consideration, the Examiner can help expedite FAA review by providing the applicant with a copy of FAA Form 8500-7, Report of Eye Evaluation.

ITEM 55. Blood Pressure

| 55. Blood Pressure | | |
|-------------------------|----------|-----------|
| | Systolic | Diastolic |
| (Sitting mm of Mercury) | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

- (b). No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds -
 - (1). Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2). May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c). No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved finds -
 - (1). Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2). May reasonably be expected, for the maximum duration of the airman

medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Measurement of blood pressure is an essential part of the FAA medical certification examination. The average blood pressure while sitting should not exceed 155 mm mercury systolic and 95 mm mercury diastolic maximum pressure for all classes. A medical assessment is specified for all applicants who need or use antihypertensive medication to control blood pressure. (See Section III. B. below.)

II. Examination Techniques

In accordance with accepted clinical procedures, routine blood pressure should be taken with the applicant in the seated position. An applicant should not be denied or deferred first-, second-, or third-class certification unless subsequent recumbent blood pressure readings exceed those contained in this Guide. Any conditions that may adversely affect the validity of the blood pressure reading should be noted.

III. Aerospace Medical Disposition

- A. Examining Options
 - 1. An applicant whose pressure does not exceed 155 mm mercury systolic and 95 mm mercury diastolic maximum pressure, who has not used antihypertensive medication for 30 days, and who is otherwise qualified should be issued a medical certificate by the Examiner.
 - 2. An applicant whose blood pressure is slightly elevated beyond the FAA specified limits, may, at the Examiner's discretion, have a series of 3 daily readings over a 7-day period. If the indication of hypertension remains, even if it is mild or intermittent, the Examiner should defer certification and transmit the application to the AMCD with a note of explanation.

The Examiner must defer issuance of a medical certificate to any applicant whose hypertension has not been evaluated, who uses unacceptable medications, whose medical status is unclear, whose hypertension is uncontrolled, who manifests significant adverse effects of medication, or whose certification has previously been specifically reserved to the FAA.

B. Initial and Followup Evaluation for Hypertensives Under Treatment -See **Hypertension Worksheet** (in the dispositions table, Item 36. Heart)

ITEM 56. Pulse

56. Pulse (Resting)

The medical standards do not specify pulse rates that, *per se*, are disqualifying for medical certification. These tests are used, however, to determine the status and responsiveness of the cardiovascular system. Abnormal pulse rates may be reason to conduct additional cardiovascular system evaluations.

II. Examination Techniques

The pulse rate is determined with the individual relaxed in a sitting position.

III. Aerospace Medical Disposition

If there is bradycardia, tachycardia, or arrhythmia, further evaluation is warranted and deferral may be indicated (see Item 36., Heart). A cardiac evaluation may be needed to determine the applicant's qualifications. Temporary stresses or fever may, at times, result in abnormal pulse readings. If the Examiner believes this to be the case, the applicant should be given a few days to recover and then be retested. If this is not possible, the Examiner should defer issuance, pending further evaluation.

ITEM 57. Urine Test

| 57. Urine Test (if abnormal, give results) | | | | | | | | |
|--|--------|--|----------|---------|-------|--|--|--|
| | | | | Albumin | Sugar | | | |
| | Normal | | Abnormal | | | | | |

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(a)(b), 67.213(a)(b), and 67.313(a)(b)

- (a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.
- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds –
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman

medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

Any standard laboratory procedures are acceptable for these tests.

III. Aerospace Medical Disposition

Glycosuria or proteinuria is cause for deferral of medical certificate issuance until additional studies determine the status of the endocrine and/or urinary systems. If the glycosuria has been determined not to be due to carbohydrate intolerance, the Examiner may issue the certificate. Trace or 1+ proteinuria in the absence of a history of renal disease is not cause for denial.

The Examiner may request additional urinary tests when they are indicated by history or examination. These should be reported on FAA Form 8500-8 or attached to the form as an addendum.

See Item 48., General Systemic.

ITEM 58. ECG

| 58. ECG (Date) | | |
|----------------|----|------|
| MM | DD | YYYY |
| | | |

I. Code of Federal Regulations

First-Class: 14 CFR 67.111(b)(c)

- (b) A person applying for first-class medical certification must demonstrate an absence of myocardial infarction and other clinically significant abnormality on electrocardiographic examination:
 - (1) At the first application after reaching the 35th birthday; and
 - (2) On an annual basis after reaching the 40th birthday.
- (c) An ECG will satisfy a requirement of paragraph (b) of this section if it is dated no earlier than 60 days before the date of the application it is to accompany and was performed and transmitted according to acceptable standards and techniques.

Note: All applicants for certification may be required to provide ECGs when indicated by history or physical examination.

II. Examination Techniques

- A. Date. The date of the most recent ECG shall be entered in Item 58 of FAA Form 8500-8 for all first-class applicants.
 - If a first-class applicant is due for a periodic ECG, the Examiner performs and transmits a current tracing according to established procedures. (See Section II. D. below).

However, some applicants (such as airline transport pilots who are employed by air carriers with medical departments) may have their company transmit a current ECG directly to the FAA. The Examiner need not require such an applicant to undergo another ECG examination and, if the applicant is otherwise qualified, a medical certificate may be issued. The Examiner should attach a statement to FAA Form 8500-8 to verify that a tracing has been transmitted from another source. The date of that ECG should be entered in Item 58.

- 2. If a first-class applicant is not required to have a periodic ECG with the current examination, the Examiner should record the date of the preceding ECG in Item 58.
- 3. If a second- or third-class applicant gives a history of having had an electrocardiogram, the test and date may be entered in Item 59. More importantly, the Examiner should indicate in Item 60 of FAA Form 8500-8 the history and its significance, if any.
- 4. If the applicant provides no statement and refuses to have a current ECG submitted by the Examiner, the Examiner should defer issuance of the medical certificate. When an ECG is due but is not submitted, the FAA will not affirm the applicant's eligibility for medical certification until the requested ECG has been received and interpreted as being within normal limits. Failure to respond to FAA requests for a required current ECG will result in denial of certification.

B. Currency

- 1. In order to meet regulatory requirements, a first-class applicant's periodic ECG must have been performed and transmitted within 60 days prior to the date of the first-class application (FAA Form 8500-8). The AMCD verifies currency of all periodic ECGs.
- There is no provision for issuance of a first-class medical certificate based upon a promise that an ECG will be obtained at a future date. In such circumstances, the Examiner should defer issuance and transmit the completed FAA Form 8500-8 to the AMCD

C. Interpretation

- 1. All ECGs required to establish eligibility for medical certification must be forwarded for interpretation to the Manager of the AMCD. This does not preclude submission of an interpretation by or through the Examiner.
- 2. Interpretation is accomplished by the staff and consultant cardiologists at the AMCD. Abnormalities are investigated to determine their significance, if any.
- D. Technique and Reporting Format for Required ECGs on First-class Applicants

The method for recording and transmitting ECGs is by digital electronic data transfer by the Examiner to the AMCD. Senior Examiners who perform first-class medical examinations are required to have access to this capability.

International Examiners who submit ECGs should use the following format for preparation and submission:

- See FAA Form 8065-1, Instructions for Preparation and Submittal of Electrocardiogram. However, the FAA also will accept 3-channel or 12-channel strips uncut or mounted on standard mounting paper. The following steps are essential to expedite processing of these tracings:
 - a. All leads must be properly identified.
 - b. Applicant and Examiner identification must be complete and the tracing must be dated.
- 2. Such hard-copy ECGs are microfilmed for permanent retention in the AMCD. Only tracings that can be microfilmed are acceptable.
- 3. Provide a Resting tracing. Tracings must be stapled to the ECG report form to ensure that all leads are appropriately coded and interpreted.

APPLICATION REVIEW

Items 59-64 of FAA Form 8500-8

ITEMS 59-64 of FAA Form 8500-8

This section provides guidance for the completion of Items 59-64 of the FAA Form 8500-8. The Examiner is responsible for conducting the examination. However, he or she may delegate to a qualified physician's assistant, nurse, aide, or laboratory assistant the testing required for Items 49-58. Regardless of who performs the tests, the Examiner is responsible for the accuracy of the findings, and this responsibility **may not** be delegated.

The medical history page of FAA Form 8500-8 must be completed and certified by the applicant or it will not appear in AMCS. After all routine evaluations and tests are completed, the Examiner should review FAA Form 8500-8. If the form is complete and accurate, the Examiner should add final comments, make qualification decision statements, and certify the examination.

ITEM 59. Other Tests Given

59. Other Tests Given

I. Code of Federal Regulations

All Classes: 14 CFR 67.413(a)(b)

- (a) Whenever the Administrator finds that additional medical information or history is necessary to determine whether an applicant for or the holder of a medical certificate meets the medical standards for it, the Administrator requests that person to furnish that information or to authorize any clinic, hospital, physician, or other person to release to the Administrator all available information or records concerning that history. If the applicant or holder fails to provide the requested medical information or history or to authorize the release so requested, the Administrator may suspend, modify, or revoke all medical certificates the airman holds or may, in the case of an applicant, deny the application for an airman medical certificate.
- (b) If an airman medical certificate is suspended or modified under paragraph (a) of this section, that suspension or modification remains in effect until the requested information, history, or authorization is provided to the FAA and until the Federal Air Surgeon determines whether the person meets the medical standards under this part.

II. Examination Techniques

Additional medical information may be furnished through additional history taking, further clinical examination procedures, and supplemental laboratory procedures.

On rare occasions, even surgical procedures such as biopsies may be indicated. As a designee of the FAA Administrator, the Examiner has limited authority to apply 14 CFR 67.413 in processing applications for medical certification. When an Examiner determines that there is a need for additional medical information, based upon history and findings, the Examiner is authorized to request prior hospital and outpatient records and to request supplementary examinations including laboratory testing and examinations by appropriate medical specialists. The Examiner should discuss the need with the applicant. The applicant should be advised of the types of additional examinations required and the type of medical specialist to be consulted. Responsibility for ensuring that these examinations are forwarded and that any charges or fees are paid will rest with the applicant. All reports should be forwarded to the AMCD, unless otherwise directed (such as by a RFS).

Whenever, in the Examiner's opinion, medical records are necessary to evaluate an applicant's medical fitness, the Examiner should request that the applicant sign an authorization for the Release of Medical Information. The Examiner should forward this authorization to the custodian of the applicant's records so that the information contained in the record may be obtained for attachment to the report of medical examination.

ITEM 60. Comments on History and Findings

Comments on all positive history or medical examination findings must be reported by **Item Number**. Item 60 provides the Examiner an opportunity to report observations and/or findings that are not asked for on the application form. Concern about the applicant's behavior, abnormal situations arising during the examination, unusual findings, unreported history, and other information thought germane to aviation safety should be reported in Item 60. The Examiner should record name, dosage, frequency, and purpose for all currently used medications.

If possible, all ancillary reports such as consultations, ECGs, x-ray release forms, and hospital or other treatment records should be attached. If the delay for those items would exceed 14 days, the Examiner should forward all available data to the AMCD, with a note specifying what additional information is being prepared for submission at a later date.

If there are no significant medical history items or abnormal physical findings, the Examiner should indicate this by checking the appropriate block.

ITEM 61. Applicant's Name

Item 61. Applicant's Name

The legal name applicant's name should be entered.

ITEM 62. Has Been Issued

| Item 62. Has Been Issued | Medical Certificate | Medical & Student Pilot Certificate |
|--------------------------|-------------------------------|---|
| | No Medical Certificate Issued | Deferred for Further Evaluation |
| | Has Been Denied | Letter of Denial Issued (Copy Attached) |

The Examiner must check the proper box to indicate if the Medical Certificate, FAA Form 8500-9 (white), or Medical Certificate and Student Pilot Certificate, FAA Form 8420-2 (yellow), has been issued. If neither form has been issued, the Examiner must indicate denial or deferral by checking one of the two lower boxes. If denied, a copy of the Examiner's Letter of Denial, should be forwarded to the AMCD.

- A. Applicant's Refusal. When advised by an Examiner that further examination and/or medical records are needed, the applicant may elect not to proceed. The Examiner should note this on FAA Form 8500-8. No certificate should be issued, and the Examiner should forward the application form to the AMCD, even if the application is incomplete.
- B. Anticipated Delay. When the Examiner anticipates a delay of more than 14 days in obtaining records or reports concerning additional examinations, the completed FAA Form 8500-8 should be transmitted to the AMCD with a note stating that additional information will follow. No medical certificate should be issued.
- C. Issuance. When the Examiner receives all the supplemental information requested and finds that the applicant meets all the FAA medical standards for the class sought, the Examiner should issue a medical certificate.
- D. Deferral. If upon receipt of the information the Examiner finds there is a need for even more information or there is uncertainty about the significance of the findings, certification should be deferred. The Examiner's concerns should be noted on FAA Form 8500-8 and the application transmitted to the AMCD for further consideration.

If the applicant decides at this point to abandon the application for a medical certificate, the Examiner should also note this on FAA Form 8500-8 and mail the incomplete form to the AMCD. An incomplete FAA Form 8500-8 should not be transmitted to the AMCD for further consideration.

E. Denial. When the Examiner concludes that the applicant is clearly ineligible for certification, the applicant should be denied, using the AME Letter of Denial. Use of this form will provide the applicant with the reason for the denial and with appeal rights and procedures. (See **General Information, 4**. Medical Certification Decision Making)

ITEM 63. Disqualifying Defects

The Examiner must check the "Disq" box on the Comments Page beside any disqualifying defect. Comments or discussion of specific observations or findings may be reported in **Item 60**. If all comments cannot fit in Item 60, the Examiner may submit additional information on a plain sheet of paper and include the applicant's full name, date of birth, signature, any appropriate identifying numbers (PI, MID or SSN), and the date of the exam.

If the Examiner denies the applicant, the Examiner must issue a Letter of Denial, to the applicant, and report the issuance of the denial in Item 60.

ITEM 64. Medical Examiner's Declaration

- The FAA designates specific individuals as Examiners and this status may not be delegated to staff or to a physician who may be covering the designee's practice.
- Before transmitting to AMCD, the Examiner must certify the exam and enter all appropriate information including his or her AME serial number.

DISEASE PROTOCOLS

PROTOCOLS

The following lists the Guide for Aviation Medical Examiners Disease Protocols, and course of action that should be taken by the Examiner as defined by aeromedical decision considerations. (Also see condition-specific CACI Certification Worksheets, which can be found in the Dispositions Section.)

- ALLERGIES, SEVERE
- ATTENTION DEFICIT/HYPERACTIVITY DISORDER
- BINOCULAR MULTIFOCAL AND ACCOMMODATING DEVICES
- CARDIAC TRANSPLANT
- CARDIOVASCULAR EVALUATION (CVE)
- CONDUCTIVE KERATOPLASTY
- CORONARY HEART DISEASE (CHD)
- DEPRESSION TREATED WITH SSRI MEDICATIONS
- DIABETES MELLITUS DIET CONTROLLED
- DIABETES MELLITUS Type II MEDICATION CONTROLLED (Non Insulin)
- DIABETES MELLITUS Type I or Type II INSULIN TREATED
- GRADED EXERCISE STRESS TEST REQUIREMENTS
- HUMAN IMMUNODEFICIENCY VIRUS (HIV)
- IMPLANTED PACEMAKER
- MUSCULOSKELETAL EVALUATION
- NEUROCOGNITIVE IMPAIRMENT
- PEPTIC ULCER
- **PSYCHIATRIC EVALUATION**
- PSYCHIATRIC AND PSYCHOLOGICAL EVALUATIONS
- PSYCHIATRIC SUBSTANCES of DEPENDENCE/ABUSE (Drugs and Alcohol)
- RENAL TRANSPLANT
- THROMBOEMBOLIC DISEASE
- VALVE REPLACEMENT

PROTOCOL FOR ALLERGIES, SEVERE

In the case of severe allergies, the Examiner should deny or defer certification and provide a report to the Aerospace Medical Certification Division, AAM-300, that details the period and duration of symptoms and the nature and dosage of drugs used for treatment and/or prevention.

SPECIFICATIONS FOR NEUROPSYCHOLOGICAL EVALUATIONS FOR ADHD OR ADD

<u>Why is a neuropsychological evaluation required</u>? Attention-Deficit/Hyperactivity Disorder (ADHD), formerly Attention Deficit Disorder (ADD), and medications used for treatment may produce cognitive deficits that would make an airman unsafe to perform pilot duties. This guideline outlines the requirements for a neuropsychological evaluation.

<u>Who may perform a neuropsychological evaluation</u>? Neuropsychological evaluations must be conducted by a licensed clinical psychologist who is either board certified or "board eligible" in clinical neuropsychology. "Board eligible" means that the clinical neuropsychologist has the education, training, and clinical practice experience that would qualify him or her to sit for board certification with the American Board of Clinical Neuropsychology, the American Board of Professional Neuropsychology, and/or the American Board of Pediatric Neuropsychology.

<u>Will I need to provide any of my medical records?</u> You should make records available to the neuropsychologist prior to the evaluation, to include:

- Copies of **all** records regarding prior psychiatric/substance-related hospitalizations, observations, or treatment not previously submitted to the FAA.
- A complete copy of your agency medical records. You should request a copy of your agency records be sent **directly** to the psychiatrist and psychologist by the Aerospace Medical Certification Division (AMCD) in Oklahoma City, OK. For further information regarding this process, please call (405) 954-4821, select the option for "duplicate medical certificate or copies of medical records," then select the option for "certified copies of medical records."

What must the neuropsychological evaluation report include? At a minimum:

- A review of all available records, including academic records, records of prior psychiatric hospitalizations, and records of periods of observation or treatment (e.g., psychiatrist, psychologist, or pediatric neuropsychiatrist treatment notes). Records must be in sufficient detail to permit a clear evaluation of the nature and extent of any previous mental disorders.
- A thorough clinical interview to include a detailed history regarding: psychosocial or developmental problems; academic and employment performance; legal issues; substance use/abuse (including treatment and quality of recovery); aviation background and experience; medical conditions, and **all** medication use; and behavioral observations during the interview and testing.
- A mental status examination.
- Interpretation of a full battery of neuropsychological and psychological tests **including, but not limited to,** the "core test battery" (specified below).
- An integrated summary of findings with an explicit diagnostic statement, and the neuropsychologist's opinion(s) and recommendation(s) regarding clinically or

aeromedically significant findings and the potential impact on aviation safety consistent with the Federal Aviation Regulations.

• The results of a urine drug screening test for ADHD/ADD medications, including psychostimulant medications. The sample must be collected at the conclusion of the neurocognitive testing or within 24 hours afterward.

<u>What is required in the "core test battery</u>?" The core test battery listed below provides a standardized basis for the FAA's review of cases, and must include:

- The complete Wechsler Adult Intelligence Scales (Processing Speed and Working Memory Indexes must be scored)
- Trail Making Test, Parts A and B (Reitan Trails A & B should be used since aviation norms are available for the original Reitan Trails A & B, but not for similar tests [e.g., Color Trails; Trails from Kaplan-Delis Executive Function, etc.])
- Executive function tests to include:
 (1) Category Test or Wisconsin Card Sorting Test, and
 (2) Stroop Color-Word Test
- Paced Auditory Serial Addition Test (PASAT).
- A continuous performance test (i.e., Test of Variables of Attention [TOVA], or Conners' Continuous Performance Test [CPT-II], or Integrated Visual and Auditory Continuous Performance Test [IVA+]), or Gordon Diagnostic System [GDS].
- Test of verbal memory (WMS-IV subtests, Rey Auditory Verbal Learning Test, or California Verbal Learning Test-II).
- Test of visual memory (WMS-IV subtests, Brief Visuospatial Memory Test-Revised, or Rey Complex Figure Test).
- Tests of Language including Boston Naming Test and Verbal Fluency (COWAT and a semantic fluency task).
- Psychomotor testing including Finger Tapping and Grooved Pegboard or Purdue Pegboard.
- Personality testing, to include the Minnesota Multiphasic Personality Inventory (MMPI-2). (The MMPI-2-RF is **not** an approved substitute. All scales, subscales, content, and supplementary scales **must** be scored and provided. **Computer scoring is required**. Abbreviated administrations are **not** acceptable.)
- Additional testing: If problems are noted on tests of reading or math, follow-up testing with appropriate achievement tests should be conducted (e.g., Woodcock-Johnson Tests of Achievement-III; Nelson-Denny Reading Test, especially Fluency and Comprehension; WRAT-IV Math; PIAT Reading Comprehension).
- CogScreen-Aeromedical Edition (CogScreen-AE) is recommended but not required.

NOTES: (1) All tests administered must be the most current edition of the test unless specified otherwise; (2) At the discretion of the examiner, additional tests may be clinically necessary to assure a complete assessment.

<u>What must be submitted</u>? The neuropsychologist's report as noted above, **plus** the supporting documentation below:

• Copies of all computer score reports (e.g., Pearson MMPI-2 Extended Score Report, TOVA, CPT-II or IVA+ Report).

• An appended score summary sheet that includes all scores for all tests administered. When available, **pilot norms must be used**. If pilot norms are not available for a particular test, then the normative comparison group (e.g., general population, age/education-corrected) must be specified. Also, when available, percentile scores must be included.

Recommendations should be strictly limited to the psychologist's area of expertise. Psychologists with questions are encouraged to call Chris Front, Psy.D, FAA Psychologist, at (202) 267-3767.

What else does the neuropsychologist need to know?

- The FAA will not proceed with a review of the test findings without the above data.
- The data and clinical findings will be carefully safeguarded in accordance with the APA Ethical Principles of Psychologists and Code of Conduct (2002) as well as applicable federal law.
- The raw neurocognitive testing data may be required at a future date for expert review by one of the FAA's consulting clinical neuropsychologists. In that event, authorization for release of the data **by the airman** to the expert reviewer will need to be provided.

Additional Helpful Information

- Will additional testing be required in the future? If eligible for unrestricted medical certification, no additional testing would be required. However, pilots found eligible for Special Issuance will be required to undergo periodic re-evaluations. The letter authorizing special issuance will outline required testing, which may be limited to specific tests or expanded to include a comprehensive test battery.
- 2. Useful references for the neuropsychologist:
 - MOST COMPREHENSIVE SINGLE REFERENCE: Aeromedical Psychology (2013). C.H. Kennedy & G.G. Kay (Editors). Ashgate.
 - Pilot norms on neurocognitive tests: Kay, G.G. (2002). Guidelines for the Psychological Evaluation of Aircrew Personnel. *Occupational Medicine*, *17* (2), 227-245.
 - Aviation-related psychological evaluations: Jones, D. R. (2008). Aerospace Psychiatry. In J. R. Davis, R. Johnson, J. Stepanek & J. A. Fogarty (Eds.), *Fundamentals of Aerospace Medicine (4th Ed.)*, (pp. 406-424). Philadelphia: Lippencott Williams & Wilkins.

PROTOCOL FOR BINOCULAR MULTIFOCAL AND ACCOMMODATING DEVICES

This Protocol establishes the authority for the Examiner to issue an airman medical certificate to binocular applicants using multifocal or accommodating ophthalmic devices.

Devices acceptable for aviation-related duties must be FDA approved and include:

Intraocular Lenses (multifocal or accommodating intraocular lens implants) Bifocal/Multifocal contact lenses

Examiners may issue as outlined below:

- Adaptation period before certification:
 - Surgical lens implantation minimum 3 months post-operative
 - Contact lenses (bifocal or multifocal) minimum one month of use
- Must provide a report to include the FAA Form 8500-7, Report of Eye Evaluation, from the operating surgeon or the treating eye specialist. This report must attest to stable visual acuity and refractive error, absence of significant side effects/complications, need of medications, and freedom from any glare, flares or other visual phenomena that could affect visual performance and impact aviation safety
- The following visual standards, as required for each class, must be met for each eye:

Distant First- and Second-Class

20/20 or better in each eye separately, with or without correction

Third-Class

20/40 or better in each eye separately, with or without correction

Near All Classes 20/40 or better in each eye separately (Snellen equivalent), with or without correction, as measured at 16 inches

Intermediate First- and Second-Class

20/40 or better in each eye separately (Snellen equivalent), with or without correction at age 50 and over, as measured at 32 inches

Third-Class

No requirement

Note: The above does not change the current certification policy on the use of monofocal nonaccommodating intraocular lenses.

PROTOCOL FOR CARDIAC TRANSPLANT

The Examiner must defer issuance. Issuance is considered for Third-class applicants only. FAA Cardiology Panel will review. Applicants found qualified will be required to provide annual followup evaluations. All studies must be performed within 30 days of application.

Requirements for consideration:

- A 1 year recovery period shall elapse after the cardiac transplant before consideration
- A current report from the treating transplant cardiologist regarding the status of the cardiac transplant, including all pre- and post-operative reports. A statement regarding functional capacity, modifiable cardiovascular risk factors, and prognosis for incapacitation
- Current blood chemistries (fasting blood sugar, hemoglobin A1C concentration, and blood lipid profile to include total cholesterol, HDL, LDL, and triglycerides), within 30 days
- Any tests performed or deemed necessary by all treating physicians (e.g., myocardial biopsy)
- Coronary Angiogram
- Graded Exercise Stress Test (see disease protocol) and stress echocardiogram
- A current 24-hour Holter monitor evaluation to include selective representative tracings
- Complete documentation of all rejection history, whether treated or not; include hospital records and reports of any tests done
- A complete history regarding any infectious process
- All complete history regarding any malignancy
- List of all present medications and dosages, including side effects.

It is the responsibility of each applicant to provide the medical information required to determine his/her eligibility for airman medical certification. A medical release form may help in obtaining the necessary information. Please ensure full name appears on any reports or correspondence.

All information shall be forwarded in one mailing to either:

Medical Appeals Section, AAM-313 Aerospace Medical Certification Division Federal Aviation Administration Post Office Box 26080 Oklahoma City OK 73125-9914 Medical Appeals Section, AAM-313 Aerospace Medical Certification Division Federal Aviation Administration 6700 S MacArthur Blvd., Room B-13 Oklahoma City OK 73169AASI FOR

PROTOCOL FOR CARDIOVASCULAR EVALUATION (CVE)

A current cardiovascular evaluation (CVE) must include:

- A personal and family medical history assessment
- Clinical cardiac and general physical examination
- An assessment and statement regarding the applicant's medications, functional capacity, and modifiable cardiovascular risk factors
- Prognosis for incapacitation
- Blood chemistries (fasting blood sugar, current blood lipid profile to include total cholesterol, HDL, LDL, and triglycerides) performed within the last 90 days

PROTOCOL FOR CONDUCTIVE KERATOPLASTY

Conductive Keratoplasty (CK) is a refractive surgery procedure. It is acceptable for aeromedical certification, with Special Issuance, after review by the FAA.

The following criteria are necessary for initial certification:

- The airman is not qualified for six months post procedure
- The airman must provide all medical records related to the procedure
- A current status report by the surgical eye specialist with special note regarding complications of the procedure or the acquired monocularity, or vision complaints by the airman
- A current FAA Form 8500-7, Report of Eye Evaluation
- A medical flight test may be necessary (consult with the FAA)
- Annual followups by the surgical eye specialist

PROTOCOL FOR EVALUATION OF CORONARY HEART DISEASE (CHD)

For the purpose of airman certification coronary heart disease (CHD) is divided into 4 broad categories, with or without myocardial infarction (MI):

- Open revascularization of any coronary artery(s) and left main coronary artery stenting (with or without MI). Open revascularization includes coronary artery bypass grafting (CABG; on- or off-pump), minimally invasive procedures by incision, and robot operations. Left main coronary artery stenting carries the same risk of future cardiac events as CABG, thus it is treated the same for certification or qualification purposes
- **Percutaneous intervention** (with or without MI). This includes angioplasty (PTCA) and bare metal or drug-eluting stents
- MI without any open or percutaneous intervention
- **MI from non-coronary artery disease causes**. Examples include epinephrine injection, cardiac trauma, complications of catheterization, Factor V Leiden, etc.

Recovery time before consideration and required tests will vary by the airman medical certificate applied for and the categories above.

- A. Required recovery times for all classes:
 - a. 6 months: Open revascularization of any coronary artery(s) or left main coronary artery stenting
 - b. 3 months:
 - Percutaneous intervention **excluding** left main coronary artery interventions
 - Myocardial infarction (MI), uncomplicated, without any open or percutaneous intervention procedures
 - MI from non-coronary artery disease
- B. Required documentation for all pilots with MI due to non-coronary artery disease:
 - a. Current status report from the treating physician
 - b. Copies of all medical records (inpatient and outpatient) pertaining to the event, including all labs, tests, or study results and reports.
- C. Required documentation for all pilots with any of the remaining conditions above:
 - a. The required documentation, including GXT and cardiac catheterization, must be accomplished no sooner than either 6 months or 3 months postevent, depending on the underlying condition as listed in Paragraph A. above
 - b. Copies of all medical records (inpatient and outpatient) pertaining to the event, including all labs, tests, or study results and reports.
 - c. Current status report from the treating cardiologist (cardiovascular evaluation (CVE)) including:
 - Personal and family medical history assessment; clinical cardiac and general physical examination; assessment and statement

regarding the applicant's functional capacity and prognosis for incapacitation

- Documentation of counselling on modifiable cardiovascular risk factors
- All medications and side-effects, if any
- Labs (lipids, blood glucose)
- d. Current Bruce Protocol Stress Test (GXT):
 - Third-class airmen maximal plain GXT
 - First and unlimited second-class airmen require maximal radionuclide GXT.
 - For specific GXT requirements see <u>Guidelines for GXT</u>
- D. Additional required documentation for first and unlimited* second class airmen a. For conditions requiring 6-month recovery:
 - 6-month post event cardiac catheterization
 - 6-month post event maximal radionuclide GXT (see above)
 - b. For conditions requiring 3-month recovery:
 - 3-month post event cardiac catheterization
 - 3-month post event maximal radionuclide GXT (see above)
 - c. The applicant should indicate if a lower class medical certificate is acceptable (if they are found ineligible for the class sought)
- E. Additional required documentation for percutaneous coronary intervention: The applicant must provide the operative or post procedure report. If a STENT was placed, the report must include make of STENT, implant location(s), and the length and diameter of each STENT.

A **SPECT** myocardial perfusion exercise stress test using technetium agents and/or thallium may be required for consideration for any class if clinically indicated or if the exercise stress test is abnormal by any of the usual parameters. The interpretive report and all **SPECT** images, preferably in black and white, must be submitted.

Note: If cardiac catheterization and/or coronary angiography have been performed, all reports and actual films (if films are requested) must be submitted for review. Copies should be made of all films to safeguard against loss. Films should be labeled with the applicant's name and return address.

* Limited second-class medical certificate refers to a second-class certificate with a functional limitation such as "Not Valid for Carrying Passengers for Compensation or Hire," "Not Valid for Pilot in Command, Valid Only When Serving as a Pilot Member of a Fully Qualified Two-Pilot Crew," etc.

SPECIFICATIONS FOR NEUROPSYCHOLOGICAL EVALUATIONS FOR TREATMENT WITH SSRI MEDICATIONS

<u>Why is a neuropsychological evaluation required</u>? Depression and other conditions treated with selective serotonin reuptake inhibitor (SSRI) medications, as well as the SSRIs themselves, may produce cognitive deficits that would make an airman unsafe to perform pilot duties. This guideline outlines the requirements for a neuropsychological evaluation.

<u>Who may perform a neuropsychological evaluation</u>? Neuropsychological evaluations must be conducted by a licensed clinical psychologist who is either board certified or "board eligible" in clinical neuropsychology. "Board eligible" means that the clinical neuropsychologist has the education, training, and clinical practice experience that would qualify him or her to sit for board certification with the American Board of Clinical Neuropsychology, the American Board of Professional Neuropsychology, and/or the American Board of Pediatric Neuropsychology.

<u>Will I need to provide any of my medical records?</u> You should make records available to the neuropsychologist prior to the evaluation, to include:

- Copies of all records regarding prior psychiatric/substance-related hospitalizations, observations or treatment not previously submitted to the FAA.
- A complete copy of your agency medical records. You should request a copy of your agency records be sent **directly** to the psychiatrist and psychologist by the Aerospace Medical Certification Division (AMCD) in Oklahoma City, OK. For further information regarding this process, please call (405) 954-4821, select the option for "duplicate medical certificate or copies of medical records," then select the option for "certified copies of medical records."

What must the neuropsychological evaluation report include? At a minimum:

- A review of all available records, including academic records, records of prior psychiatric hospitalizations, and records of periods of observation or treatment (e.g., psychiatrist, psychologist, or pediatric neuropsychiatrist treatment notes). Records must be in sufficient detail to permit a clear evaluation of the nature and extent of any previous mental disorders.
- A thorough clinical interview to include a detailed history regarding: psychosocial or developmental problems; academic and employment performance; legal issues; substance use/abuse (including treatment and quality of recovery); aviation background and experience; medical conditions, and **all** medication use; and behavioral observations during the interview and testing.
- A mental status examination.
- Interpretation of testing **including**, **but not limited to**, the tests as specified below.
- An integrated summary of findings with an explicit diagnostic statement, and the neuropsychologist's opinion(s) and recommendation(s) regarding clinically or

aeromedically significant findings and the potential impact on aviation safety consistent with the Federal Aviation Regulations.

What is required for testing?

- CogScreen-AE (a brief test battery developed specifically for use with pilots to assess the neurocognitive domains most critical to flight performance). If the neuropsychologist interprets the clinical interview and CogScreen-AE results to show no evidence of neuropsychological impairment or deficiencies, then no further neurocognitive testing needs to be conducted at that time as part of the evaluation.
- If the neuropsychologist interprets the clinical interview and CogScreen-AE results as raising concerns about or showing neuropsychological impairment or deficiencies, then the neuropsychologist should perform a full battery of testing. The required testing must include:
 - The Wechsler Adult Intelligence Scales (Processing Speed and Working Memory Indexes must be scored)
 - Trail Making Test, Parts A and B (Reitan Trails A & B should be used since aviation norms are available for the original Reitan Trails A & B, but not for similar tests [e.g., Color Trails; Trails from Kaplan-Delis Executive Function, etc.])
 - Executive function tests to include:
 - (1) Category Test or Wisconsin Card Sorting Test; and
 - (2) Stroop Color-Word Test
 - Paced Auditory Serial Addition Test (PASAT).
 - A continuous performance test (i.e., Test of Variables of Attention [TOVA], Conners' Continuous Performance Test [CPT-II], or Integrated Visual and Auditory Continuous Performance Test [IVA+]), or Gordon Diagnostic System [GDS].
 - Test of verbal memory (WMS-IV subtests, Rey Auditory Verbal Learning Test, or California Verbal Learning Test-II).
 - Test of visual memory (WMS-IV subtests, Brief Visuospatial Memory Test-Revised, or Rey Complex Figure Test.)
 - Tests of Language, to include the Boston Naming Test and testing for verbal fluency (i.e., the COWAT and a semantic fluency task).
 - Psychomotor testing, to include Finger Tapping and either Grooved Pegboard or Purdue Pegboard.
 - Personality testing to include Minnesota Multiphasic Personality Inventory (MMPI-2). (The MMPI-2-RF is **not** an approved substitute. All scales, subscales, content, and supplementary scales **must** be scored and provided. **Computer scoring is required**. Abbreviated administrations are **not** acceptable.)

NOTES: (1) All tests administered must be the most current edition of the test unless specified otherwise; (2) At the discretion of the examiner, additional tests may be clinically necessary to assure a complete assessment.

<u>What must be submitted</u>? The neuropsychologist's report as noted above, **plus** the supporting documentation below:

- Copies of all computer score reports (e.g., Pearson MMPI-2 Extended Score Report, CogScreen-AE Report).
- An appended score summary sheet that includes all scores for all tests administered. When available, **pilot norms must be used**. If pilot norms are not available for a particular test, then the normative comparison group (e.g., general population, age/education-corrected) must be specified. Also, when available, percentile scores must be included.

Recommendations should be strictly limited to the psychologist's area of expertise. Psychologists with questions are encouraged to call Chris Front, Psy.D, FAA Psychologist, at (202) 267-3767.

What else does the neuropsychologist need to know?

- The FAA will not proceed with a review of the test findings without the above data.
- The data and clinical findings will be carefully safeguarded in accordance with the APA Ethical Principles of Psychologists and Code of Conduct (2002) as well as applicable federal law.
- Raw psychological testing data may be required at a future date for expert review by one of the FAA's consulting clinical psychologists. In that event, authorization for release of the data **by the airman** to the expert reviewer will need to be provided.

Additional Helpful Information

- 1. Depressive disorders and medications used to treat depression are medically disqualifying for pilots. However, the Federal Air Surgeon has established a policy for Authorizations for Special Issuance of medical certificates for pilots treated with selective serotonin reuptake inhibitor (SSRI) medications who meet specific criteria.
- Where can I find the policy? The current policy is published in the Guide for Aviation Medical Examiners at http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/app_process/exam_tech/item47/amd/antidepressants/
- 3. What will be required if special issuance is authorized? Pilots found eligible for Special Issuance will be required to undergo periodic re-evaluations. Requirements for re-evaluation testing will be specified in the letter authorizing special issuance, and may be limited to the CogScreen-AE or expanded to include additional tests.
- 4. Useful references for the neuropsychologist:
 - MOST COMPREHENSIVE SINGLE REFERENCE: Aeromedical Psychology (2013). C.H. Kennedy & G.G. Kay (Editors). Ashgate.
 - Pilot norms on neurocognitive tests: Kay, G.G. (2002). Guidelines for the Psychological Evaluation of Aircrew Personnel. *Occupational Medicine*, *17* (2), 227-245.
 - Aviation-related psychological evaluations: Jones, D. R. (2008). Aerospace Psychiatry. In J. R. Davis, R. Johnson, J. Stepanek & J. A. Fogarty (Eds.), *Fundamentals of Aerospace Medicine (4th Ed.)*, (pp. 406-424). Philadelphia: Lippencott Williams & Wilkins.

PROTOCOL FOR DIABETES MELLITUS -DIET CONTROLLED

A medical history or clinical diagnosis of diabetes mellitus may be considered previously established when the diagnosis has been or clearly could be made because of supporting laboratory findings and/or clinical signs and symptoms. When an applicant with a history of diabetes is examined for the first time, the Examiner should explain the procedures involved and assist in obtaining prior records and current special testing.

Applicants with a diagnosis of diabetes mellitus controlled by diet alone are considered eligible for all classes of medical certificates under the medical standards, provided they have no evidence of associated disqualifying cardiovascular, neurological, renal, or ophthalmological disease. Specialized examinations need not be performed unless indicated by history or clinical findings. The Examiner must document these determinations on FAA Form 8500-8.

PROTOCOL FOR HISTORY DIABETES MELLITUS TYPE II MEDICATION-CONTROLLED (NON INSULIN)

This protocol is used for all diabetic applicants treated with oral agents or incretin mimetic medications (such as exenatide), herein referred to as medication(s).

An applicant with a diagnosis of diabetes mellitus controlled by use of a medication may be considered by the FAA for an Authorization of a Special Issuance of a Medical Certificate (Authorization). Following initiation of medication treatment, a 60-day period must elapse prior to certification to assure stabilization, adequate control, and the absence of side effects or complications from the medication. See chart of <u>Acceptable</u> <u>Combinations of Diabetes Medications</u>.

The initial Authorization decision is made by the AMCD and may not be made by the Examiner. An Examiner may re-issue a subsequent airman medical certificate under the provisions of the Authorization.

The initial Authorization determination will be made on the basis of a report from the treating physician. For favorable consideration, the report must contain a statement regarding the medication used, dosage, the absence or presence of side effects and clinically significant hypoglycemic episodes, and an indication of satisfactory control of the diabetes. The results of an A1C hemoglobin determination within the past 30 days must be included. Note must also be made of the presence of cardiovascular, neurological, renal, and/or ophthalmological disease. The presence of one or more of these associated diseases will not be, per se, disqualifying but the disease(s) must be carefully evaluated to determine any added risk to aviation safety.

Re-issuance of a medical certificate under the provisions of an Authorization will also be made on the basis of reports from the treating physician. The contents of the report must contain the same information required for initial issuance and specifically reference the presence or absence of satisfactory control, any change in the dosage or type of medication, and the presence or absence of complications or side effects from the medication. In the event of an adverse change in the applicant's diabetic status (poor control or complications or side effects from the medication), or the appearance of an associated systemic disease, an Examiner must defer the case with all documentation to the AMCD for consideration.

If, upon further review of the deferred case, AMCD decides that re-issuance is appropriate, the Examiner may again be given the authority to re-issue the medical certificate under the provisions of the Authorization based on data provided by the treating physician, including such information as may be required to assess the status of associated medical condition(s).

At a minimum, followup evaluation by the treating physician of the applicant's diabetes status is required annually for all classes of medical certificates.

An applicant with diabetes mellitus - Type II should be counseled by his or her Examiner regarding the significance of the disease and its possible complications.

The applicant should be informed of the potential for hypoglycemic reactions and cautioned to remain under close medical surveillance by his or her treating physician.

The applicant should also be advised that should their medication be changed or the dosage modified, the applicant should not perform airman duties until the applicant and treating physician has concluded that the condition is:

- under control;
- stable;
- presents no risk to aviation safety; and
- consults with the Examiner who issued the certificate, AMCD or RFS.

An applicant who uses insulin for the treatment of his or her diabetes may only be considered for an Authorization for a third-class airman medical certificate.

PROTOCOL FOR INSULIN-TREATED DIABETES MELLITUS - TYPE I & TYPE II

The FAA has established a policy that permits the special issuance medical certification of insulin-treated applicants for third-class medical certification. Consideration will be given only to those individuals who have been clinically stable on their current treatment regimen for a period of 6-months or more. Consideration is *not* being given for first- or second-class certification. Individuals certificated under this policy will be required to provide substantial documentation regarding their history of treatment, accidents related to their disease, and current medical status. If certificated, they will be required to adhere to stringent monitoring requirements and are prohibited from operating aircraft outside the United States. The following is a summary of the evaluation protocol and an outline of the conditions that the FAA will apply:

- A. Initial Certification
 - 1. The applicant must have had no recurrent (two or more) episodes of hypoglycemia in the past 5 years and none in the preceding 1 year which resulted in loss of consciousness, seizure, impaired cognitive function or requiring intervention by another party, or occurring without warning (hypoglycemia unawareness).
 - 2. The applicant will be required to provide copies of all medical records as well as accident and incident records pertinent to their history of diabetes.
 - A report of a complete medical examination preferably by a physician who specializes in the treatment of diabetes will be required. The report must include, as a minimum:
 - a. Two measurements of glycosylated hemoglobin (total A₁ or A_{1c} concentration and the laboratory reference range), separated by at least 90 days. The most recent measurement must be no more than 90 days old.
 - b. Specific reference to the applicant's insulin dosages and diet.
 - c. Specific reference to the presence or absence of cerebrovascular, cardiovascular, or peripheral vascular disease or neuropathy.
 - d. Confirmation by an eye specialist of the absence of clinically significant eye disease.
 - e. Verification that the applicant has been educated in diabetes and its control and understands the actions that should be taken if complications, especially hypoglycemia, should arise. The examining physician must also verify that the applicant has the ability and willingness to properly monitor and manage his or her diabetes.
 - f. If the applicant is age 40 or older, a report, with ECG tracings, of a maximal graded exercise stress test.

g. The applicant shall submit a statement from his/her treating physician, Examiner, or other knowledgeable person attesting to the applicant's dexterity and ability to determine blood glucose levels using a recording glucometer.

NOTE: Student pilots may wish to ensure they are eligible for medical certification prior to beginning or resuming flight instruction or training. In order to serve as a pilot in command, you must have a valid medical certificate for the type of operation performed.

- B. Subsequent Medical Certification
 - For documentation of diabetes management, the applicant will be required to carry and use a whole blood glucose measuring device with memory and must report to the FAA immediately any hypoglycemic incidents, any involvement in accidents that result in serious injury (whether or not related to hypoglycemia); and any evidence of loss of control of diabetes, change in treatment regimen, or significant diabetic complications. With any of these occurrences, the individual must cease flying until cleared by the FAA.
 - 2. At 3-month intervals, the airman must be evaluated by the treating physician. This evaluation must include a general physical examination, review of the interval medical history, and the results of a test for glycosylated hemoglobin concentration. The physician must review the record of the airman's daily blood glucose measurements and comment on the results. The results of these quarterly evaluations must be accumulated and submitted annually unless there has been a change. (See No. 1 above If there has been a change the individual must report the change(s) to the FAA and wait for an eligibility letter before resuming flight duties).
 - 3. On an annual basis, the reports from the examining physician must include confirmation by an eye specialist of the absence of significant eye disease.
 - 4. At the first examination after age 40 and at 5-year intervals, the report, with ECG tracings, of a maximal graded exercise stress test must be included in consideration of continued medical certification.
- C. Monitoring and Actions Required During Flight Operations

To ensure safe flight, the insulin using diabetic airman must carry during flight a recording glucometer; adequate supplies to obtain blood samples; and an amount of rapidly absorbable glucose, in 10 gm portions, appropriate to the planned duration of the flight. The following actions shall be taken in connection with flight operations:

- One-half hour prior to flight, the airman must measure the blood glucose concentration. If it is less than 100 mg/dl the individual must ingest an appropriate (not less than 10 gm) glucose snack and measure the glucose concentration one-half hour later. If the concentration is within 100 -- 300 mg/dl, flight operations may be undertaken. If less than 100, the process must be repeated; if over 300, the flight must be canceled.
- 2. One hour into the flight, at each successive hour of flight, and within one half hour prior to landing, the airman must measure their blood glucose concentration. If the

concentration is less than 100 mg/dl, a 20 gm glucose snack shall be ingested. If the concentration is 100 -- 300 mg/dl, no action is required. If the concentration is greater that 300 mg/dl, the airman must land at the nearest suitable airport and may not resume flight until the glucose concentration can be maintained in the 100 -- 300 mg/dl range. In respect to determining blood glucose concentrations during flight, the airman must use judgment in deciding whether measuring concentrations or operational demands of the environment (e.g., adverse weather, etc.) should take priority. In cases where it is decided that operational demands take priority, the airman must ingest a10 gm glucose snack and measure his or her blood glucose level 1 hour later. If measurement is not practical at that time, the airman must ingest a 20 gm glucose snack and land at the nearest suitable airport so that a determination of the blood glucose concentration may be made.

(Note: Insulin pumps are acceptable)

Protocol for Maximal Graded Exercise Stress Test Requirements

- If a plain GXT is required and is uninterpretable for any reason, a radionuclide GXT will then be required before further consideration
- GXT requirements:
 - 100% of predicted maximal heart rate unless medically contraindicated or prevented either by symptoms or medications
 - Complete Stage 3 (equivalent to at least 9 minutes)
 - Studies of less than 85% of maximum predicted heart rate and less than 9 minutes of exercise (6 minutes for age 70 or greater) may serve a basis for denial
 - Beta blockers and calcium channel blockers (specifically diltiazem and verapamil), or digitalis preparations should be discontinued for 24-48 hours prior to testing (if not contraindicated and only with the consent of the treating physician) in order to obtain maximum heart rate
 - If the GXT is done on beta blockers, calcium blockers, or digitalis drugs, the applicant must provide explanation from the treating cardiologist as to why the medication(s) cannot be held.
- The worksheet with blood pressure/pulse recordings at various stages, interpretive report, and actual ECG tracings* must be submitted
 - Tracings must include a rhythm strip, a full 12-lead ECG recorded at rest (supine and standing), one or more times during each stage of exercise, at the end of each stage, at peak exercise, and every minute during recovery for at least 5 minutes or until the tracings return to baseline level.*Computer generated, sample-cycle ECG tracings are unacceptable in lieu of the standard tracings. If submitted alone, this may result in deferment until this requirement is met

In patients with bundle branch blocks, LVH, or diffuse ST/T wave changes at rest, it will be necessary to provide a stress echo or nuclear stress test.

Remember, a phone call to either AMCD or RFS may avoid unnecessary deferral.

Reasons for not renewing an AASI:

- The applicant is unable to achieve at least 85% of maximal heart rate on stress testing or less than 9 minutes (6 minutes if age 70 or greater);
- The applicant develops 1 mm or greater ST segment depression at any time during stress testing, unless the applicant has additional medical evidence such as a nuclear imaging study or a stress echocardiogram showing the absence of reversible ischemia or wall motion abnormalities reviewed and reported by a qualified cardiologist;
- The nuclear stress testing shows evidence of reversible ischemia, a stress echocardiogram shows exercised induced wall motion abnormalities, or either study demonstrates a negative change from the prior study of the same type;
- The ejection fraction on a nuclear stress test or stress echocardiogram is 40% or less; or a 10% decrease from a prior study; or
- The applicant reports any other disqualifying medical condition or undergoes therapy not previously reported

Protocol for Graded Exercise Stress Test Bundle Branch Block Requirements

If the Bundle Branch Block (BBB) has been previously documented and evaluated, no further evaluation is required. A medical certificate should not be issued to any class if the applicant has a new onset of a BBB. A **right** BBB in an otherwise healthy person 30 years of age or younger should not require a CVE. All other individuals who do have a right BBB require a CVE but a radionuclide study should not be required unless the standard exercise stress test cannot be interpreted. A stress echocardiogram may be sufficient in most cases. A **left** BBB in a person of any age should have a CVE and should include a radionuclide perfusion study. **Those individuals who have a negative work-up may be issued the appropriate class of medical certificate. No followup is required.** If any future changes occur, a new current CVE will be required.

If areas of ischemia are noted, a coronary angiogram may be indicated for definitive diagnosis. According to the current literature, approximately 40% of individuals with LBBB will demonstrate a false positive thallium reperfusion defect in the septal area. If significant CAD is diagnosed, refer to Special Issuance guidelines. Some cases may be forwarded to a FAA-selected cardiology consultant specialist for review and recommendation for medical certification.

PROTOCOL FOR HISTORY OF HUMAN IMMUNODEFICIENCY VIRUS (HIV) RELATED CONDITIONS

Persons on antiretroviral medication will be considered only if the medication is approved by the U.S. Food and Drug Administration and is used in accordance with an acceptable drug therapy protocol. Acceptable protocols are cited in *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents* developed by the Department of Health and Human Services Panel on Clinical Practices for Treatment of HIV Infection.

Application for special issuance must include reports of examination by a physician knowledgeable in the treatment of HIV-infected persons and a medical history emphasizing symptoms and treatment referable to the immune and neurologic system. In addition, these reports must include a "viral load" determination by polymerase chain reaction (PCR), CD4+ lymphocyte count, a complete blood count, and the results of liver function tests. An assessment of cognitive function (preferably by *Cogscreen* or other test battery acceptable to the Federal Air Surgeon) must be submitted. Additional cognitive function tests may be required as indicated by results of the cognitive tests. At the time of initial application, viral load must not exceed 1,000 copies per milliliter of plasma, and cognitive testing must show no significant deficit(s) that would preclude the safe performance of airman duties.

Followup evaluations of applicants granted certification will include quarterly determinations of viral load by PCR, a CD4+ cell count, and the results of other laboratory and clinical tests deemed appropriate by the treating physician. These will be included in a written status report provided by the treating physician every 6-months. After the first two years of SI/SC, at FAA discretion, the frequency of the status reports may decrease.

In addition, the results of cognitive function studies will be required at annual intervals for medical clearance or medical certification of ATCS's and first- and second-class applicants. Third-class applicants will be required to submit cognitive function studies every 2 years.

Adverse clinical findings, including significant changes in cognitive test results or an increased viral load exceeding 5,000 copies per milliliter shall constitute a basis for withdrawing medical certification.

Exceptions, if any, will be based on individual consideration by the Federal Air Surgeon.

PROTOCOL FOR EVALUATION OF IMPLANTED PACEMAKER

A 2-month recovery period must elapse after the pacemaker implantation to allow for recovery and stabilization. Submit the following:

- 1. Copies of hospital/medical records pertaining to the requirement for the pacemaker, make of the generator and leads, model and serial number, admission/discharge summaries, operative report, and all ECG tracings.
- Evaluation of pacemaker function to include description and documentation of underlying rate and rhythm with the pacer turned "off" or at its lowest setting (pacemaker dependency), programmed pacemaker parameters, surveillance record, and exclusion of myopotential inhibition and pacemaker induced hypotension (pacemaker syndrome), Powerpack data including beginning of life (BOL) and elective replacement indicator/end of life (ERI/EOL).
- 3. Readable samples of all electronic pacemaker surveillance records post surgery or over the past 6 months, or whichever is longer. It must include a sample strip with pacemaker in free running mode and unless contraindicated, a sample strip with the pacemaker in magnetic mode.
- 4. An assessment and statement from a physician regarding general physical and cardiac examination to include symptoms or treatment referable to the cardiovascular system; the airman's interim and current cardiac condition, functional capacity, medical history, and medications.
- 5. A report of current fasting blood sugar and a current blood lipid profile to include: total cholesterol, HDL, LDL, and triglycerides.
- 6. A current Holter monitor evaluation for at least 24-consecutive hours, to include select representative tracings.
- 7. A current M-mode, 2-dimensional echocardiogram with Doppler.
- 8. A current Maximal Graded Exercise Stress Test Requirements
- 9. It is the responsibility of each applicant to provide the medical information required to determine his/her eligibility for airman medical certification. A medical release form may help in obtaining the necessary information.

All information shall be forwarded in one mailing to:

Medical Appeals Section, AAM-313 Aerospace Medical Certification Division Federal Aviation Administration Post Office Box 26080 Oklahoma City OK 73125-9914 Medical Appeals Section, AAM-313 Aerospace Medical Certification Division Federal Aviation Administration 6700 S MacArthur Blvd., Room B-13 Oklahoma City OK 73169

No consideration can be given for special issuance until all the required data has been received.

The use of the airman's full name and date of birth on all correspondence and reports will aid the agency in locating the proper file.

PROTOCOL FOR MEDICATION CONTROLLED METABOLIC SYNDROME

(Glucose Intolerance, Impaired Glucose tolerance, Impaired Fasting Glucose, Insulin Resistance, and Pre-Diabetes)

This protocol is used for all applicants with Glucose Intolerance, Impaired Glucose tolerance, Impaired Fasting Glucose, Insulin Resistance, and/or Pre-Diabetes treated with oral agents or incretin mimetic medications (exenatide), herein referred to as medication(s).

An applicant with a diagnosis of metabolic syndrome controlled by use of a medication may be considered by the FAA for an Authorization of a Special Issuance of a Medical Certificate (Authorization). Following initiation of medication treatment, a 60-day period must elapse prior to certification to assure stabilization, adequate control, and the absence of side effects or complications from the medication.

The initial Authorization decision is made by the AMCD and may not be made by the Examiner. An Examiner may re-issue a subsequent airman medical certificate under the provisions of the Authorization.

The initial Authorization determination will be made on the basis of a report from the treating physician. There must be sufficient information to rule out diabetes mellitus. For favorable consideration, the report must contain a statement regarding the medication used, dosage, the absence or presence of side effects and clinically significant hypoglycemic episodes, and an indication of satisfactory control of the metabolic syndrome. The results of an A1C hemoglobin determination within the past 30 days must be included. Note must also be made of the presence of cardiovascular, neurological, renal, and/or ophthalmological disease. The presence of one or more of these associated diseases will not be, per se, disqualifying but the disease(s) must be carefully evaluated to determine any added risk to aviation safety.

Re-issuance of a medical certificate under the provisions of an Authorization will also be made on the basis of reports from the treating physician. The contents of the report must contain the same information required for initial issuance and specifically reference the presence or absence of satisfactory control, any change in the dosage or type of medication, and the presence or absence of complications or side effects from the medication. In the event of an adverse change in the applicant's status (development of diabetes mellitus, poor control or complications or side effects from the medication), or the appearance of an associated systemic disease, an Examiner must defer the case with all documentation to the AMCD for consideration.

If, upon further review of the deferred case, AMCD decides that re-issuance is appropriate, the Examiner may again be given the authority to re-issue the medical certificate under the provisions of the Authorization based on data provided by the

treating physician, including such information as may be required to assess the status of associated medical condition(s).

At a minimum, followup evaluation by the treating physician of the applicant's metabolic syndrome status is required annually for all classes of medical certificates.

An applicant with metabolic syndrome should be counseled by his or her Examiner regarding the significance of the disease and its possible complications, including the possibility of developing diabetes mellitus.

The applicant should be informed of the potential for hypoglycemic reactions and cautioned to remain under close medical surveillance by his or her treating physician.

The applicant should also be advised that should their medication be changed or the dosage modified, the applicant should not perform airman duties until the applicant and treating physician has concluded that the condition is:

- under control;
- stable;
- presents no risk to aviation safety; and
- consults with the Examiner who issued the certificate, AMCD or RFS.

An applicant who uses insulin for the treatment of his or her metabolic syndrome may only be considered for an Authorization for a third-class airman medical certificate.

PROTOCOL FOR MUSCULOSKELETAL EVALUATION

The Examiner should defer issuance.

An applicant with a history of musculoskeletal conditions must submit the following if consideration for medical certification is desired:

- Current status report
- Functional status report
- Degree of impairment as measured by strength, range of motion, pain

NOTE: If the applicant is otherwise qualified, the FAA may issue a limited certificate. This certificate will permit the applicant to proceed with flight training until ready for a medical flight test. At that time, and at the applicant's request, the FAA (usually the AMCD) will authorize the student pilot to take a medical flight test in conjunction with the regular flight test. The medical flight test and regular private pilot flight test are conducted by an FAA inspector. This affords the student an opportunity to demonstrate the ability to control the aircraft despite the handicap. The FAA inspector prepares a written report and indicates whether there is a safety problem. A medical certificate and statement of demonstrated ability (<u>SODA</u>), without the student limitation, may be provided to the inspector for issuance to the applicant, or the inspector may be required to send the report to the FAA medical officer who authorized the test.

When prostheses are used or additional control devices are installed in an aircraft to assist the amputee, those found qualified by special certification procedures will have their certificates limited to require that the device(s) (and, if necessary, even the specific aircraft) must always be used when exercising the privileges of the airman certificate.

SPECIFICATIONS FOR NEUROPSYCHOLOGICAL EVALUATIONS FOR POTENTIAL NEUROCOGNITIVE IMPAIRMENT

<u>Why is a neuropsychological evaluation required</u>? Head trauma, stroke, encephalitis, multiple sclerosis, other suspected acquired or developmental conditions, and medications used for treatment, may produce cognitive deficits that would make an airman unsafe to perform pilot duties. This guideline outlines the requirements for a neuropsychological evaluation.

<u>Who may perform a neuropsychological evaluation</u>? Neuropsychological evaluations must be conducted by a licensed clinical psychologist who is either board certified or "board eligible" in clinical neuropsychology. "Board eligible" means that the clinical neuropsychologist has the education, training, and clinical practice experience that would qualify him or her to sit for board certification with the American Board of Clinical Neuropsychology, the American Board of Professional Neuropsychology, and/or the American Board of Pediatric Neuropsychology.

<u>Will I need to provide any of my medical records?</u> You should make records available to the neuropsychologist prior to the evaluation, to include:

- Copies of all records regarding prior psychiatric/substance-related hospitalizations, observations or treatment not previously submitted to the FAA.
- A complete copy of your agency medical records. You should request a copy of your agency records be sent **directly** to the psychiatrist and psychologist by the Aerospace Medical Certification Division (AMCD) in Oklahoma City, OK. For further information regarding this process, please call (405) 954-4821, select the option for "duplicate medical certificate or copies of medical records," then select the option for "certified copies of medical records."

What must the neuropsychological evaluation report include? At a minimum:

- A review of all available records, including academic records, records of prior psychiatric hospitalizations, and records of periods of observation or treatment (e.g., psychiatrist, psychologist, or pediatric neuropsychiatrist treatment notes). Records must be in sufficient detail to permit a clear evaluation of the nature and extent of any previous mental disorders.
- A thorough clinical interview to include a detailed history regarding: psychosocial or developmental problems; academic and employment performance; legal issues; substance use/abuse (including treatment and quality of recovery); aviation background and experience; medical conditions, and **all** medication use; and behavioral observations during the interview and testing.
- A mental status examination.
- Interpretation of a full battery of neuropsychological and psychological tests **including**, **but not limited to**, the "core test battery" (specified below).

• An integrated summary of findings with an explicit diagnostic statement, and the neuropsychologist's opinion(s) and recommendation(s) regarding clinically or aeromedically significant findings and the potential impact on aviation safety consistent with the Federal Aviation Regulations.

<u>What is required in the "core test battery</u>?" The core test battery listed below provides a standardized basis for the FAA's review of cases, and must include:

- CogScreen-Aeromedical Edition (CogScreen-AE).
- The complete Wechsler Adult Intelligence Scales (Processing Speed and Working Memory Indexes must be scored),
- Trail Making Test, Parts A and B (Reitan Trails A & B should be used since aviation norms are available for the original Reitan Trails A & B, but not for similar tests [e.g., Color Trails; Trails from Kaplan-Delis Executive Function, etc.])
- Executive function tests to include:
 (1) Category Test or Wisconsin Card Sorting Test, and
 (2) Stroop Color-Word Test
- Paced Auditory Serial Addition Test (PASAT).
- A continuous performance test (i.e., Test of Variables of Attention [TOVA], or Conners' Continuous Performance Test [CPT-II], or Integrated Visual and Auditory Continuous Performance Test [IVA+]), or Gordon Diagnostic System [GDS].
- Test of verbal memory (WMS-IV subtests, Rey Auditory Verbal Learning Test, or California Verbal Learning Test-II),
- Test of visual memory (WMS-IV subtests, Brief Visuospatial Memory Test-Revised, or Rey Complex Figure Test),
- Tests of Language including Boston Naming Test and Verbal Fluency (COWAT and a semantic fluency task),
- Psychomotor testing including Finger Tapping and Grooved Pegboard or Purdue Pegboard.
- Personality testing, to include the Minnesota Multiphasic Personality Inventory (MMPI-2). (The MMPI-2-RF is **not** an approved substitute. All scales, subscales, content, and supplementary scales **must** be scored and provided. **Computer scoring is required**. Abbreviated administrations are **not** acceptable.)

NOTES: (1) All tests administered must be the most current edition of the test unless specified otherwise; (2) At the discretion of the examiner, additional tests may be clinically necessary to assure a complete assessment.

<u>What must be submitted</u>? The neuropsychologist's report as noted above, **plus** the supporting documentation below:

- Copies of all computer score reports (e.g., CogScreen-AE score report, Pearson MMPI-2 Extended Score Report, TOVA, CPT-II or IVA+ Report).
- An appended score summary sheet that includes all scores for all tests administered. When available, **pilot norms must be used**. If pilot norms are not available for a particular test, then the normative comparison group (e.g.,

general population, age/education-corrected) must be specified. Also, when available, percentile scores must be included.

Recommendations should be strictly limited to the psychologist's area of expertise. Psychologists with questions are encouraged to call Chris Front, Psy.D, FAA Psychologist, at (202) 267-3767.

What else does the neuropsychologist need to know?

- The FAA will not proceed with a review of the test findings without the above data.
- The data and clinical findings will be carefully safeguarded in accordance with the APA Ethical Principles of Psychologists and Code of Conduct (2002) as well as applicable federal law.
- The raw neurocognitive testing data may be required at a future date for expert review by one of the FAA's consulting clinical neuropsychologists. In that event, authorization for release of the data **by the airman** to the expert reviewer will need to be provided.

Additional Helpful Information

- 5. Will additional testing be required in the future? If eligible for unrestricted medical certification, no additional testing would be required. However, pilots found eligible for Special Issuance will be required to undergo periodic re-evaluations. The letter authorizing special issuance will outline required testing, which may be limited to specific tests or expanded to include a comprehensive test battery.
- 6. Useful references for the neuropsychologist:
 - MOST COMPREHENSIVE SINGLE REFERENCE: Aeromedical Psychology (2013). C.H. Kennedy & G.G. Kay (Editors). Ashgate.
 - Pilot norms on neurocognitive tests: Kay, G.G. (2002). Guidelines for the Psychological Evaluation of Aircrew Personnel. *Occupational Medicine*, *17* (2), 227-245.
 - Aviation-related psychological evaluations: Jones, D. R. (2008). Aerospace Psychiatry. In J. R. Davis, R. Johnson, J. Stepanek & J. A. Fogarty (Eds.), *Fundamentals of Aerospace Medicine (4th Ed.)*, (pp. 406-424). Philadelphia: Lippencott Williams & Wilkins.

PROTOCOL FOR PEPTIC ULCER

An applicant with a history of an active ulcer within the past 3-months or a bleeding ulcer within the past 6-months must provide evidence that the ulcer is healed if consideration for medical certification is desired.

Evidence of healing must be verified by a report from the attending physician that includes the following information:

- Confirmation that the applicant is free of symptoms
- Radiographic or endoscopic evidence that the ulcer has healed
- The name and dosage medication(s) used for treatment and/or prevention, along with a statement describing side effects or removal

This information should be submitted to the AMCD. Under favorable circumstances, the FAA may issue a certificate with special requirements. For example, an applicant with a history of bleeding ulcer may be required to have the physician submit followup reports every 6-months for 1 year following initial certification.

The prophylactic use of medications including simple antacids, H-2 inhibitors or blockers, proton pump inhibitors, and/or sucralfates may not be disqualifying, if free from side effects.

An applicant with a history of gastric resection for ulcer may be favorably considered if free of sequela.

SPECIFICATIONS FOR PSYCHIATRIC EVALUATIONS

<u>Why is a psychiatric evaluation required?</u> Mental disorders, as well as the medications used for treatment, may produce symptoms or behavior that would make an airman unsafe to perform pilot duties. This guideline outlines the requirements for these evaluations.

<u>Will I need to provide any of my medical records?</u> You should make records available to the psychiatrist prior to their evaluations, to include:

- Copies of all records regarding prior psychiatric/substance-related hospitalizations, observations or treatment not previously submitted to the FAA.
- A complete copy of your agency medical records. You should request a copy of your agency records be sent **directly** to the psychiatrist by the Aerospace Medical Certification Division (AMCD) in Oklahoma City, OK. For further information regarding this process, please call (405) 954-4821, select the option for "duplicate medical certificate or copies of medical records," then select the option for "certified copies of medical records."

THE PSYCHIATRIC EVALUATION

<u>Who may perform a psychiatric evaluation?</u> Psychiatric evaluations must be Psychiatry and Neurology or the American Board of Osteopathic Neurology and Psychiatry.

- We strongly advise using a psychiatrist with experience in aerospace psychiatry and/or familiarity with aviation standards. Using a psychiatrist without this background *may* limit the usefulness of the report.
- If we have specified that additional qualifications in **addiction psychiatry** or **forensic psychiatry** are required, *please* ensure that the psychiatrist is aware of these requirements and has the qualifications and experience to conduct the evaluation.

What must the psychiatric evaluation report include? At a minimum:

- A review of all available records, including academic records, records of prior psychiatric hospitalizations, and records of periods of observation or treatment (e.g., psychiatrist, psychologist, social worker, counselor, or neuropsychologist treatment notes). Records must be in sufficient detail to permit a clear evaluation of the nature and extent of any previous mental disorders.
- A thorough clinical interview to include a detailed history regarding: psychosocial or developmental problems; academic and employment performance; legal issues; substance use/abuse (including treatment and quality of recovery); aviation background and experience; medical conditions, and **all** medication use; and behavioral observations during the interview.
- A mental status examination.

 An integrated summary of findings with an explicit diagnostic statement, and the psychiatrist's opinion(s) and recommendation(s) for treatment, medication, therapy, counseling, rehabilitation, or monitoring should be explicitly stated. Opinions regarding clinically or aeromedically significant findings and the potential impact on aviation safety must be consistent with the Federal Aviation Regulations.

<u>What must be submitted by the psychiatrist?</u> The psychiatrist's comprehensive and detailed report, as noted above, <u>plus</u> copies of supporting documentation. Recommendations should be strictly limited to the psychiatrist's area of expertise. Psychiatrists with questions are encouraged to call Charles Chesanow, D.O., FAA Chief Psychiatrist, at (202) 267-3767.

SPECIFICATIONS FOR PSYCHIATRIC AND PSYCHOLOGICAL EVALUATIONS

Why are both a psychiatric and a psychological evaluation required? Mental disorders, as well as the medications used for treatment, may produce symptoms or behavior that would make an airman unsafe to perform pilot duties. Due to the differences in training and areas of expertise, separate evaluations and reports are required from **both** a qualified psychiatrist and a qualified clinical psychologist for determining an airman's medical qualifications. This guideline outlines the requirements for these evaluations.

<u>Will I need to provide any of my medical records?</u> You should make records available to both the psychiatrist and clinical psychologist prior to their evaluations, to include:

- Copies of all records regarding prior psychiatric/substance-related hospitalizations, observations or treatment not previously submitted to the FAA.
- A complete copy of your agency medical records. You should request a copy of your agency records be sent **directly to** the psychiatrist and psychologist by the Aerospace Medical Certification Division (AMCD) in Oklahoma City, OK. For further information regarding this process, please call (405) 954-4821, select the option for "duplicate medical certificate or copies of medical records," then select the option for "certified copies of medical records."

THE PSYCHIATRIC EVALUATION

<u>Who may perform a psychiatric evaluation?</u> Psychiatric evaluations must be conducted by a qualified psychiatrist who is board-certified by the American Board of Psychiatry and Neurology or the American Board of Osteopathic Neurology and Psychiatry.

- We strongly advise using a psychiatrist with experience in aerospace psychiatry. Using a psychiatrist without this background *may* limit the usefulness of the report.
- If we have specified that additional qualifications in addiction psychiatry or forensic psychiatry are required, *please* ensure that the psychiatrist is aware of these requirements and has the qualifications and experience to conduct the evaluation.

What must the psychiatric evaluation report include? At a minimum:

• A review of all available records, including academic records, records of prior psychiatric hospitalizations, and records of periods of observation or treatment (e.g., psychiatrist, psychologist, social worker, counselor, or neuropsychologist

treatment notes). Records must be in sufficient detail to permit a clear evaluation of the nature and extent of any previous mental disorders.

- A thorough clinical interview to include a detailed history regarding: psychosocial or developmental problems; academic and employment performance; legal issues; substance use/abuse (including treatment and quality of recovery); aviation background and experience; medical conditions, and **all** medication use; and behavioral observations during the interview.
- A mental status examination.
- An integrated summary of findings with an explicit diagnostic statement, and the psychiatrist's opinion(s) and recommendation(s) for treatment, medication, therapy, counseling, rehabilitation, or monitoring should be explicitly stated. Opinions regarding clinically or aeromedically significant findings and the potential impact on aviation safety must be consistent with the Federal Aviation Regulations.

<u>What must be submitted by the psychiatrist?</u> The psychiatrist's comprehensive and detailed report, as noted above, **plus** copies of supporting documentation. Recommendations should be strictly limited to the psychiatrist's area of expertise. Psychiatrists with questions are encouraged to call Charles Chesanow, D.O., FAA Chief Psychiatrist, at (202) 267-3767.

THE PSYCHOLOGICAL EVALUATION

<u>Who may perform a psychological evaluation</u>? Clinical psychological evaluations must be conducted by a clinical psychologist who possesses a doctoral degree (Ph.D., Psy.D., or Ed.D.), has been licensed by the state to practice independently, and has expertise in psychological assessment. We strongly advise using a psychologist with experience in aerospace psychology. Using a psychologist without this background may limit the usefulness of the report.

What must the psychological evaluation include? At a minimum:

- A review of all available records, including academic records, records of prior psychiatric hospitalizations, and records of periods of observation or treatment (e.g., psychiatrist, psychologist, social worker, counselor, or neuropsychologist treatment notes). Records must be in sufficient detail to permit a clear evaluation of the nature and extent of any previous mental disorders.
- A thorough clinical interview to include a detailed history regarding: psychosocial or developmental problems; academic and employment performance; legal issues; substance use/abuse (including treatment and quality of recovery); aviation background and experience; medical conditions, and **all** medication use; and behavioral observations during the interview.
- A mental status examination.
- Interpretation of a full battery of psychological tests including, but not limited to, the "core test battery" (specified below).

 An integrated summary of findings with an explicit diagnostic statement, and the psychologist's opinion(s) and recommendation(s) for treatment, medication, therapy, counseling, rehabilitation, or monitoring should be explicitly stated. Opinions regarding clinically or aeromedically significant findings and the potential impact on aviation safety must be consistent with the Federal Aviation Regulations.

<u>What is required in the "core test battery</u>?" The core test battery listed below provides a standardized basis for the FAA's review of cases, and must include: a. Intellectual/Neurocognitive domain, to include **both**:

- The Wechsler Adult Intelligence Scale (recent edition; Processing Speed and Working Memory Indexes must be scored).
- The Trail Making Test, Parts A & B (Reitan Trails A & B should be used since aviation norms are available for the original Reitan Trails A & B, but not for similar tests [e.g., Color Trails; Trails from Kaplan-Delis Executive Function, etc.].)
- b. Personality domain, to include the Minnesota Multiphasic Personality Inventory-2. (The MMPI-2-RF is **not** an approved substitute. All scales, subscales, content, and supplementary scales **must** be scored and provided. **Computer scoring is required**. Abbreviated administrations are **not** acceptable.)
- c. For cases in which there are questions regarding reality testing/thought disorder and/or defensive invalid profiles were produced on the self-report measure(s), the Rorschach (Rorschach Performance Assessment System [R-PAS]) is preferred. Exner's Comprehensive System is also accepted.
- d. For cases in which the clinical history or presentation indicates a possible personality disorder, the Millon Clinical Multiaxial Inventory-III (MCMI-III).
- e. Additional tests that the psychologist deems clinically necessary (based upon presenting problem, clinical history and/or clinical presentation) to assure a complete assessment.
- f. Findings suggesting deficits in the Intellectual/Neurocognitive domain, the examiner *should* either:
 - Refer the airman for a neuropsychological evaluation by a qualified clinical neuropsychologist in order to determine the extent and likely aeromedical significance of any neurocognitive deficit(s); or
 - 2) If the examiner is a qualified clinical neuropsychologist, administer a comprehensive battery of neuropsychological tests.

Note: <u>Requirements for neuropsychological testing are listed in the addendum</u> <u>below</u>.

<u>What must be submitted</u>? The neuropsychologist's report as noted above, **plus** the supporting documentation below.

- For self-report measures: Copies of all computer score reports (e.g., Pearson MMPI-2 Extended Score Report, Pearson MCMI-III Profile Report with Grossman Facet Scores),
- For performance measures: Copies of entire protocol (e.g., Rorschach response sheets, location charts, and associated computer score reports,)
- For intellectual/neurocognitive measures: An appended score summary sheet that includes all scores for all tests administered. When available, **pilot norms must be used.** If pilot norms are not available for a particular test, then the normative comparison group (e.g., general population, age/education-corrected) must be specified. Also, when available, percentile scores must be included.

Recommendations should be strictly limited to the psychologist's area of expertise. Psychologists with questions are encouraged to call Chris Front, Psy.D, FAA Psychologist, at (202) 267-3767.

What else does the psychologist need to know?

- The FAA will not proceed with a review of the test findings without the above data.
- The data and clinical findings will be carefully safeguarded in accordance with the APA Ethical Principles of Psychologists and Code of Conduct (2002) as well as applicable federal law.
- Raw psychological testing data may be required at a future date for expert review by one of the FAA's consulting clinical psychologists. In that event, authorization for release of the data **by the airman** to the expert reviewer will need to be provided.

Additional Helpful Information:

Will additional evaluations or testing be required in the future? If eligible for unrestricted medical certification, no additional evaluations would be required. However, pilots found eligible for Special Issuance will be required to undergo periodic re-evaluations. The letter authorizing special issuance will outline the specific evaluations or testing required.

Useful references for the psychologist:

- MOST COMPREHENSIVE SINGLE REFERENCE: Aeromedical Psychology (2013). C.H. Kennedy & G.G. Kay (Editors). Ashgate.
- Pilot norms on neurocognitive tests: Kay, G.G. (2002). Guidelines for the Psychological Evaluation of Aircrew Personnel. *Occupational Medicine*, *17* (2), 227-245.
- Aviation-related psychological evaluations: Jones, D. R. (2008). Aerospace Psychiatry. In J. R. Davis, R. Johnson, J. Stepanek & J. A. Fogarty (Eds.),
- Fundamentals of Aerospace Medicine (4th Ed.), (pp. 406-424). Philadelphia: Lippencott Williams & Wilkins.

ADDENDUM – IF NEUROPSYCHOLOGICAL TESTING IS INDICATED

<u>Who may perform a neuropsychological evaluation</u>? Neuropsychological evaluations must be conducted by a licensed clinical psychologist who is either board certified or "board eligible" in clinical neuropsychology. "Board eligible" means that the clinical neuropsychologist has the education, training, and clinical practice experience that would qualify him or her to sit for board certification with the American Board of Clinical Neuropsychology, the American Board of Professional Neuropsychology, and/or the American Board of Pediatric Neuropsychology.

<u>Requirements for the evaluation</u>. Requirements for providing records to the neuropsychologist, conducting the evaluation, and submitting reports are the same as noted above for the clinical psychologist.

<u>What is required in the "core test battery</u>?" The core test battery listed below provides a standardized basis for the FAA's review of cases, and must include:

- CogScreen-Aeromedical Edition (CogScreen-AE).
- The complete Wechsler Adult Intelligence Scales (Processing Speed and Working Memory Indexes must be scored).
- Trail Making Test, Parts A and B (Reitan Trails A & B should be used since aviation norms are available for the original Reitan Trails A & B, but not for similar tests [e.g., Color Trails; Trails from Kaplan-Delis Executive Function, etc.])
- Executive function tests to include:
 (3) Category Test or Wisconsin Card Sorting Test, and
 (4) Stroop Color-Word Test
- Paced Auditory Serial Addition Test (PASAT).
- A continuous performance test (i.e., Test of Variables of Attention [TOVA], or Conners' Continuous Performance Test [CPT-II], or Integrated Visual and Auditory Continuous Performance Test [IVA+]), or Gordon Diagnostic System [GDS].
- Test of verbal memory (WMS-IV subtests, Rey Auditory Verbal Learning Test, or California Verbal Learning Test-II).
- Test of visual memory (WMS-IV subtests, Brief Visuospatial Memory Test-Revised, or Rey Complex Figure Test).
- Tests of Language including Boston Naming Test and Verbal Fluency (COWAT and a semantic fluency task).
- Psychomotor testing including Finger Tapping and Grooved Pegboard or Purdue Pegboard.
- Personality testing, to include the Minnesota Multiphasic Personality Inventory (MMPI-2). (The MMPI-2-RF is **not** an approved substitute. All scales, subscales, content, and supplementary scales **must** be scored and provided. **Computer scoring is required**. Abbreviated administrations are **not** acceptable.)

NOTES: (1) All tests administered must be the most current edition of the test unless specified otherwise; (2) At the discretion of the examiner, additional tests may be clinically necessary to assure a complete assessment.

<u>What must be submitted</u>? The neuropsychologist's report, plus

- Copies of all computer score reports (e.g., CogScreen-AE score report, Pearson MMPI-2 Extended Score Report, TOVA, CPT-II or IVA+ Report).
- An appended score summary sheet that includes all scores for all tests administered. When available, **pilot norms must be used**. If pilot norms are not available for a particular test, then the normative comparison group (e.g., general population, age/education-corrected) must be specified. Also, when available, percentile scores must be included.

PROTOCOL FOR RENAL TRANSPLANT

An applicant with a history of renal transplant must submit the following if consideration for medical certification is desired:

- 1. Hospital admission, operative report and discharge summary
- 2. Current status report including:
 - The etiology of the primary renal disease
 - History of hypertension or cardiac dysfunction
 - Sequela prior to transplant
 - A comment regarding rejection or graft versus host disease (GVHD)
 - Immunosuppressive therapy and side effects, if any
 - The results of the following laboratory results: CBC, BUN, creatinine, and electrolytes

PROTOCOL FOR SUBSTANCES OF DEPENDENCE/ABUSE (DRUGS - ALCOHOL)

The Examiner must defer issuance.

An applicant with a history of substances of dependence/abuse (drugs - alcohol) must submit the following if consideration for medical certification is desired:

- A current status report from a physician certified in addictive disorders and familiar with aviation standards
- A personal statement attesting to the substance and amount, and date last used
- If attended a rehabilitation clinic/center, provide dates and copies of treatment plan

NOTE: The applicant may be required to submit additional information before medical disposition can be rendered. See Specifications on following pages.

SPECIFICATIONS FOR PSYCHIATRIC AND NEUROPSYCHOLOGICAL EVALUATIONS FOR SUBSTANCE ABUSE/DEPENDENCE

Why are both a psychiatric and a neuropsychological evaluation required?

Substance use disorders, including abuse and dependence, not in satisfactory recovery make an airman unsafe to perform pilot duties. These evaluations are required to assess the disorder, quality of recovery, and potential other psychiatric conditions or neurocognitive deficits. Due to the differences in training and areas of expertise, separate evaluations and reports are required from **both** a qualified psychiatrist and a qualified clinical psychologist for determining an airman's medical qualifications. This guideline outlines the requirements for these evaluations.

Will I need to provide any of my medical records? You should make records available to both the psychiatrist and clinical neuropsychologist prior to their evaluations, to include:

- Copies of **all** records regarding prior psychiatric/substance-related hospitalizations, observations or treatment not previously submitted to the FAA.
- A complete copy of your agency medical records. You should request a copy of your agency records be sent **directly** to the psychiatrist and psychologist by the Aerospace Medical Certification Division (AMCD) in Oklahoma City, OK. For further information regarding this process, please call (405) 954-4821, select the option for "duplicate medical certificate or copies of medical records," then select the option for "certified copies of medical records."

THE PSYCHIATRIC EVALUATION

Who may perform a psychiatric evaluation? Psychiatric evaluations must be conducted by a qualified psychiatrist who is board-certified by the American Board of Psychiatry and Neurology or the American Board of Osteopathic Neurology and Psychiatry, and must either be board certified in Addiction Psychiatry or have received training in the Human Intervention Motivation Study (HIMS) program. Preference is given for those who have completed HIMS training. Using a psychiatrist without this background may limit the usefulness of the report.

What must the psychiatric evaluation report include? At a minimum:

- A review of all available records, including academic records, records of prior psychiatric hospitalizations, and records of periods of observation or treatment (e.g., psychiatrist, psychologist, social worker, counselor, or neuropsychologist treatment notes). Records must be in sufficient detail to permit a clear evaluation of the nature and extent of any previous mental disorders.
- A thorough clinical interview to include a detailed history regarding: psychosocial or developmental problems; academic and employment performance; legal issues; substance use/abuse (including treatment and quality of recovery);

aviation background and experience; medical conditions, and **all** medication use; and behavioral observations during the interview.

- A mental status examination.
- An integrated summary of findings with an explicit diagnostic statement, and the psychiatrist's opinion(s) and recommendation(s) for treatment, medication, therapy, counseling, rehabilitation, or monitoring should be explicitly stated. Opinions regarding clinically or aeromedically significant findings and the potential impact on aviation safety must be consistent with the Federal Aviation Regulations.

<u>What must be submitted by the psychiatrist?</u> The psychiatrist's comprehensive and detailed report, as noted above, **plus** copies of supporting documentation. Recommendations should be strictly limited to the psychiatrist's area of expertise. Psychiatrists with questions are encouraged to call Charles Chesanow, D.O., FAA Chief Psychiatrist, at (202) 267-3767.

THE NEUROPSYCHOLOGICAL EVALUATION

<u>Who may perform a neuropsychological evaluation</u>? Neuropsychological evaluations must be conducted by a licensed clinical psychologist who is either board certified or "board eligible" in clinical neuropsychology. "Board eligible" means that the clinical neuropsychologist has the education, training, and clinical practice experience that would qualify him or her to sit for board certification with the American Board of Clinical Neuropsychology, the American Board of Professional Neuropsychology, and/or the American Board of Pediatric Neuropsychology. The clinical neuropsychologist also must have completed HIMS training.

What must the neuropsychological evaluation report include? At a minimum:

- A review of all available records, including academic records, records of prior psychiatric hospitalizations, and records of periods of observation or treatment (e.g., psychiatrist, psychologist, or pediatric neuropsychiatrist treatment notes). Records must be in sufficient detail to permit a clear evaluation of the nature and extent of any previous mental disorders.
- A thorough clinical interview to include a detailed history regarding: psychosocial or developmental problems; academic and employment performance; legal issues; substance use/abuse (including treatment and quality of recovery); aviation background and experience; medical conditions, and <u>all</u> medication use; and behavioral observations during the interview and testing.
- A mental status examination.
- Interpretation of a full battery of neuropsychological and psychological tests **including but not limited to** the "core test battery" (specified below).
- An integrated summary of findings with an explicit diagnostic statement, and the neuropsychologist's opinion(s) and recommendation(s) regarding clinically or aeromedically significant findings and the potential impact on aviation safety consistent with the Federal Aviation Regulations.

<u>What is required in the "core test battery</u>?" The core test battery listed below provides a standardized basis for the FAA's review of cases, and must include:

- CogScreen-Aeromedical Edition (CogScreen-AE)
- The complete Wechsler Adult Intelligence Scales (Processing Speed and Working Memory Indexes must be scored)
- Trail Making Test, Parts A and B (Reitan Trails A & B should be used since aviation norms are available for the original Reitan Trails A & B, but not for similar tests [e.g., Color Trails; Trails from Kaplan-Delis Executive Function, etc.])
- Executive function tests to include:
 (5) Category Test or Wisconsin Card Sorting Test, AND
 (6) Stroop Color-Word Test
- Paced Auditory Serial Addition Test (PASAT)
- A continuous performance test (i.e., Test of Variables of Attention [TOVA], or Conners' Continuous Performance Test [CPT-II], or Integrated Visual and Auditory Continuous Performance Test [IVA+]), or Gordon Diagnostic System [GDS].
- Test of verbal memory (WMS-IV subtests, Rey Auditory Verbal Learning Test, or California Verbal Learning Test-II)
- Test of visual memory (WMS-IV subtests, Brief Visuospatial Memory Test-Revised, or Rey Complex Figure Test)
- Tests of Language including Boston Naming Test and Verbal Fluency (COWAT and a semantic fluency task)
- Psychomotor testing including Finger Tapping and Grooved Pegboard or Purdue Pegboard
- Personality testing, to include the Minnesota Multiphasic Personality Inventory (MMPI-2)

(The MMPI-2-RF is **not** an approved substitute. All scales, subscales, content, and supplementary scales **must** be scored and provided. **Computer scoring is required**. Abbreviated administrations are **not** acceptable.)

NOTES: (1) All tests administered must be the most current edition of the test unless specified otherwise; (2) At the discretion of the examiner, additional tests may be clinically necessary to assure a complete assessment.

<u>What must be submitted</u>? The neuropsychologist's report as noted above, **plus** the supporting documentation below:

- Copies of **all** computer score reports (e.g., CogScreen-AE score report, Pearson MMPI-2 Extended Score Report, TOVA, CPT-II or IVA+ Report).
- An appended score summary sheet that includes all scores for all tests administered. When available, **pilot norms must be used**. If pilot norms are not available for a particular test, then the normative comparison group (e.g., general population, age/education-corrected) must be specified. Also, when available, percentile scores must be included.

Recommendations should be strictly limited to the psychologist's area of expertise. Psychologists with questions are encouraged to call Chris Front, Psy.D, FAA Psychologist, at (202) 267-3767.

What else does the psychologist need to know?

- The FAA will not proceed with a review of the test findings without the above data.
- The data and clinical findings will be carefully safeguarded in accordance with the APA Ethical Principles of Psychologists and Code of Conduct (2002) as well as applicable federal law.
- Raw psychological testing data may be required at a future date for expert review by one of the FAA's consulting clinical psychologists. In that event, authorization for release of the data **by the airman** to the expert reviewer will need to be provided.

Additional Helpful Information

- 7. Will additional evaluations or testing be required in the future? If eligible for unrestricted medical certification, no additional evaluations would be required. However, pilots found eligible for Special Issuance will be required to undergo periodic re-evaluations. The letter authorizing special issuance will outline the specific evaluations or testing required.
- 8. Useful references for the psychologist:
 - MOST COMPREHENSIVE SINGLE REFERENCE: Aeromedical Psychology (2013). C.H. Kennedy & G.G. Kay (Editors). Ashgate.
 - Pilot norms on neurocognitive tests: Kay, G.G. (2002). Guidelines for the Psychological Evaluation of Aircrew Personnel. *Occupational Medicine*, *17* (2), 227-245.
 - Aviation-related psychological evaluations: Jones, D. R. (2008). Aerospace Psychiatry. In J. R. Davis, R. Johnson, J. Stepanek & J. A. Fogarty (Eds.), *Fundamentals of Aerospace Medicine (4th Ed.)*, (pp. 406-424). Philadelphia: Lippencott Williams & Wilkins.

PROTOCOL FOR THROMBOEMBOLIC DISEASE

An applicant with a history of thromboembolic disease must submit the following if consideration for medical certification is desired:

1. Hospital admission and discharge summary

- 2. Current status report including:
 - Detailed family history of thromboembolic disease
 - Neoplastic workup, if clinically indicated
 - PT/PTT
 - Protein S & C
 - Leiden Factor V
 - If still anticoagulated with warfarin (Coumadin), submit all (no less than monthly) INRs from time of hospital discharge to present

For applicants who are **just beginning warfarin (Coumadin)** treatment the following is required:

- Minimum observation time of 6 weeks after initiation of warfarin therapy;
- Must also meet any required observation time for the underlying condition; AND
- 6 INRs, no more frequently than 1 per week

PROTOCOL FOR CARDIAC VALVE REPLACEMENT

Applicants with tissue and mechanical valve replacement(s) are considered after the following:

- A 6-month recovery period shall elapse after the valve replacement to ensure recovery and stabilization. First- and second-class initial applicants are reviewed by the Federal Air Surgeon's cardiology panel;
- Copies of hospital/medical records pertaining to the valve replacement; include make, model, serial number and size, admission/discharge summaries, operative report, and pathology report;
- If applicable, a current evaluation from the attending physician regarding the use of Coumadin to confirm stability without complications, drug dose history and schedule, and International Normalized Ratio (INR) values (within acceptable range) accomplished at least <u>monthly</u> during the past 6-month period of observation;
- A current report from the treating physician regarding the status of the cardiac valve replacement. This report should address your general cardiovascular condition, any symptoms of valve or heart failure, any related abnormal physical findings, and must substantiate satisfactory recovery and cardiac function without evidence of embolic phenomena, significant arrhythmia, structural abnormality, or ischemic disease.
- A current 24-hour Holter monitor evaluation to include select representative tracings;
- Current M-mode, 2-dimensional echocardiogram with Doppler. Submit the video resulting from this study;
- A current maximal GXT See GXT Protocol;
- If cardiac catheterization and coronary angiography have been performed, all reports and films must be submitted, if requested, for review by the agency. Copies should be made of all films as a safeguard against loss;.
- Following heart valve replacement, first- and second-class certificate holders shall be followed at 6-month intervals with clinical status reports and at 12-month intervals with a CVE, standard ECG, and Doppler echocardiogram. Holter monitoring and GXT's may be required periodically if indicated clinically. For third-class certificate holders, the above followup testing will be required annually unless otherwise indicated.
- Single, Mechanical and Valvuloplasty See AASI for Cardiac Valve Replacement;
- Multiple Heart Valve Replacement. Applicants who have received multiple heart valve replacements must be deferred, however, the AMCD may consider certification of all classes of applicants who have undergone a Ross procedure (pulmonic valve transplanted to the aortic position and pulmonic valve replaced by a bioprosthesis).

It is the responsibility of each applicant to provide the medical information required to determine his/her eligibility for airman medical certification. A medical release form may help in obtaining the necessary information.

All information shall be forwarded in one mailing to:

| Medical Appeals Section, AAM-313 | Medical Appeals Section, AAM-313 |
|--|--|
| Aerospace Medical Certification Division | Aerospace Medical Certification Division |
| Federal Aviation Administration | Federal Aviation Administration |
| Post Office Box 26080 | 6700 S MacArthur Blvd., Room B-13 |
| Oklahoma City OK 73125-9914 | Oklahoma City OK 73169 |

No consideration can be given for Authorization for Special Issuance of a Medical Certificate until all the required data has been received.

Use your full name on any reports or correspondence will aid us in locating your file.

PHARMACEUTICALS

PHARMACEUTICAL MEDICATIONS

As an Examiner you are required to be aware of the regulations and Agency policy and have a responsibility to inform airmen of the potential adverse effects of medications and to counsel airmen regarding their use. There are numerous conditions that require the chronic use of medications that do not compromise aviation safety and, therefore, are permissible. Airmen who develop short-term, self-limited illnesses are best advised to avoid performing aviation duties while medications are used.

Aeromedical decision-making includes an analysis of the underlying disease or condition and treatment. The underlying disease has an equal and often greater influence upon the determination of aeromedical certification. It is unlikely that a source document could be developed and understood by airmen when considering the underlying medical condition(s), drug interactions, medication dosages, and the sheer volume of medications that need to be considered.

Do Not Issue - Do Not Fly

The information in this section is provided to advise Aviation Medical Examiners (AMEs) about two medication issues:

- Medications for which they should not issue applicants without clearance from the Federal Aviation Administration (FAA), AND
- Medications for which for which they should advise airmen to not fly and provide additional safety information to the applicant.

The lists of medications in this section are not meant to be all-inclusive or comprehensive, but rather address the most common concerns.

Do Not Issue. AMEs should not issue airmen medical certificates to applicants who are using these medications. If there are any questions, please call the Regional Flight Surgeon's office or the Aerospace Medicine Certification Division.

- Anticholinergics (oral)
- Antiseizure medications, even if used for non-seizure conditions
- <u>Centrally acting antihypertensives</u>, including but not limited to clonidine, reserpine, guanethidine, guanadrel, guanabenz, and methyldopa
- Bromocriptine
- Dopamine agonists used for Parkinson's disease or other medical indications: Pramipexole (Mirapex), ropinirole (Requip) and rotigotine (NeuPro). All carry warnings for suddenly falling asleep during activities of daily living
- Mefloquine (Lariam)

- Over-active bladder medications. Almost all of these medications are antimuscarinic. Antimuscarinic medications carry strong warnings about potential for sedation and impaired cognition
- Varenicline (Chantix)
- An open prescription for regular or intermittent use of any drug or substance classified under the Controlled Substances Act (Schedules I – V).
 - This includes medical marijuana, even if legally allowed or prescribed under state law.
 - Note: exceptions would be for documented temporary use of the drug solely for a medical procedure or for a medical condition, and the medication has been discontinued.
- Most psychiatric or psychotropic medications, including but not limited to antipsychotics, most antidepressants (see <u>SSRI policy</u>), antianxiety drugs, mood stabilizers, attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD) medications, sedative-hypnotics and tranquilizers
- High doses of oral steriods (greater than 20 mg prednisone or <u>prednisone-equivalent</u> per day)
- Agents for treating cancer, including chemotherapeutics, biologics, etc., whether used for induction, "maintenance," or suppressive therapy
- Antiangina medications
- <u>Concurrent use of a beta-blocker plus a sulfonylurea or insulin or a</u> <u>meglitinide</u>. Commonly used meglitinides include repaglinide (Prandin) and nateglinide (Starlix). Commonly used sulfonylureas include: acetohexamide (Dymelor); chloropropamide (Diabinese); tolazamide (Tolinase); tolbutamide (Orinase); glimepiride (Amaryl); glipizide (Glucotrol, Glucotrol XL); glyburide (DiaBeta, Micronase, Glynase); glyburide plus metformin (Glucovance); glipizide plus metformin (Metaglip)
- Any medication newly approved by the Food and Drug Administration (FDA) (those drugs issued initial FDA marketing approval within the past 12 months). We require at least one-year of post-marketing experience with a new drug before we will consider whether we can safely certificate an applicant using the drug. New antibiotics, lipid-lowering drugs, and antihypertensive medications can be considered earlier than one year. Please contact the RFS or AMCD for guidance on specific applicants.

Do Not Fly. Airmen should not fly while using any of the medications in the Do Not Issue section above or using any of the medications or classes/groups of medications listed below. All of these medications below may cause sedation (drowsiness) or impair cognitive function, seriously degrading pilot performance. This impairment can occur even when the individual feels alert and is apparently functioning normally – in other words, the airman can be "unaware of impair."

For aviation safety, airmen should <u>not fly following the last dose of any of the</u> <u>medications below</u> until a period of time has elapsed equal to:

- 5-times the maximum pharmocologic half life of the medication; or
- 5-times the maximum hour dose interval **if** pharmacologic half-life information is not available. For example, there is a 30-hour wait time for a medication that is taken every 4 to 6 hours (5 times 6)

<u>Sleep aids</u>. All the currently available sleep aids, both prescription and over-the-counter (OTC), can cause impairment of mental processes and reaction times, even when the individual feels fully awake.

- Click <u>here</u> for the wait times for currently available prescription sleep aids
- Diphenhydramine (e.g., Benadryl). Many OTC sleep aids contain diphenhydramine as the active ingredient. The wait time after diphenhydramine is 60 hours (based on maximum pharmacologic half life)

<u>Allergy medications</u>. Antihistamines found in many allergy and other types of medications can cause sedation and may **not** be used for flight. This applies to nasal formulations as well as oral.

Exception: Nonsedating antihistamines (loratadine, desloratadine, and fexofenadine) may be used while flying, if symptoms are controlled without adverse side effects after an adequate initial trial period.

Label warnings. Airmen should not fly while using any medication, prescription or OTC, that carries a label precaution or warning that it may cause drowsiness or advises the user "be careful when driving a motor vehicle or operating machinery." This applies even if label states "until you know how the medication affects you" and even if the airman has used the medication before with no apparent adverse effect. Such medications can cause impairment even when the airman feels alert and unimpaired (see "unaware of impair" above).

"**Pre-medication**" or "pre-procedure" drugs. This includes all drugs used as an aid to outpatient surgical or dental procedures.

Narcotic pain relievers. This includes but is not limited to morphine, codeine, oxycodone (Percodan; Oxycontin), and hydrocodone (Vicodin, etc.).

Muscle relaxants. This includes but is not limited to carisoprodol (Soma) and cyclobenzaprine (Flexeril).

Over-the-counter active dietary supplements such as Kava-Kava and Valerian.

The list of medications referenced below provides aeromedical guidance about specific medications or classes of pharmaceutical preparations and is applied by using sound aeromedical clinical judgment. This list is not meant to be totally inclusive or comprehensive. No independent interpretation of the FAA's position with respect to a medication included or excluded from the following should be assumed.

ACNE MEDICATIONS

ALLERGY – Antihistamines

ALLERGY – Immunotherapy

ANTACIDS

ANTICOAGULANTS

ANTIDEPRESSANTS

ANTIHYPERTENSIVE

CONTRACEPTIVES AND HORMONE REPLACEMENT THERAPY

DIABETES MELLITUS – Type II Medication Controlled (Not Insulin)

DIABETES MELLITUS – Insulin Treated GLAUCOMA MEDICATIONS

MALARIA MEDICATION

SEDATIVES

SLEEP AIDS

ACNE MEDICATIONS

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.113(c) Second-Class Airman Medical Certificate: 67.213(c) Third-Class Airman Medical Certificate: 67.313(c)

II. MEDICAL HISTORY:

Topical acne medications, such as Retin A, and oral antibiotics, such as tetracycline, used for acne are acceptable if the applicant is otherwise qualified.

For applicants using oral isotretinoin (Accutane), there is a mandatory 2-week waiting period after starting isotretinoin prior to consideration. This medication can be associated with vision and psychiatric side effects of aeromedical concern - specifically decreased night vision/ night blindness and depression. These side-effects can occur even after cessation of isotretinoin. A report must be provided with detailed, specific comment on presence or absence of psychiatric and vision side-effects. The AME must document these findings in Block 60, Comments on History and Findings. Some applicants will have to be deferred. For applicants issued, there must be a "NOT VALID FOR NIGHT FLYING" restriction on the medical certificate. A waiting period and detailed information is required to remove this restriction. The restriction cannot be removed until all the requirements are met. See Pharmaceutical Considerations below.

III. AEROMEDICAL DECISION CONSIDERATIONS: See **Item 40**, Skin. <u>http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/app_process/exam_tech/item40/amd/cutaneous/</u>

IV. PROTOCOL: N/A

V. PHARMACEUTICAL CONSIDERATIONS:

- Use of oral isotretinoin must be permanently discontinued for at least 2 weeks prior to consideration date (confirmed by the prescribing physician) and;
- Eye evaluation must be done in accordance with specifications in 8500-7 and;
- The airman must provide a signed statement of discontinuation that:
 - Confirms the absence of any visual disturbances and psychiatric symptoms, and
 - Acknowledges requirement to notify the FAA and obtain clearance prior to performing any aviation safety-related duties if use of isotretinoin is resumed

ALLERGY – ANTIHISTAMINES

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.105(b)(c) Second-Class Airman Medical Certificate: 67.205(b)(c) Third-Class Airman Medical Certificate: 67.305(b)(c)

II. MEDICAL HISTORY: Item 18.e., Hay fever or allergy

The applicant should report frequency and duration of symptoms, any incapacitation by the condition, treatment, and side effects. The Examiner should inquire whether the applicant has ever experienced any barotitis ("ear block"), barosinusitis, alternobaric vertigo, or any other symptoms that could interfere with aviation safety.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 26, Nose

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/approcess/exam_tech/item26/amd/

Also, see Aerospace Medical Disposition table and Item 35, Lungs and Chest http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/ap p_process/exam_tech/item35/amd/

IV. PROTOCOL: See Disease Protocols – Allergies, Severe

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/de c_cons/disease_prot/antihistamines/

V. PHARMACEUTICAL CONSIDERATIONS:

For hay fever requiring antihistamines:

- The nonsedating antihistamines loratadine, desloratadine, and fexofenadine may be used while flying **if**, **after an adequate initial** "**trial period**," symptoms are controlled without adverse side effects.
- Applicants with seasonal allergies requiring any other antihistamine (oral and/or nasal) may be certified by the examiner **only as follows**:
 - With the stipulation that they do not exercise the privileges of airman certificate while taking the medication, AND
 - Wait after the last dose until either:
 - At least five maximal dosing intervals* have passed. For example, if the medication is taken every 4-6 hours, wait 30 hours (5x6) after the last dose to fly, or,
 - At least five times the maximum terminal elimination half-life has passed. For example, if the medication half-life* is 6-8 hours, wait 40 hours (5x8) after the last dose to fly.
 - * Examiners are encouraged to look up the dosing intervals and half-life.
 - For hay fever controlled by **Desensitization**, AME must warn airman to not operate aircraft until **four hours after** each injection.
 - Airmen who are exhibiting symptoms, regardless of the treatment used, must not fly.

In all situations, the examiner must notate the evaluation data in Block 60

ALLERGY - IMMUNOTHERAPY

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.105(b)(c) Second-Class Airman Medical Certificate: 67.205(b)(c) Third-Class Airman Medical Certificate: 67.305(b)(c)

II. MEDICAL HISTORY: Item 18.e., Hay fever or allergy.

The applicant should report frequency and duration of symptoms, any incapacitation by the condition, treatment, and side effects. The Examiner should inquire whether the applicant has ever experienced any barotitis ("ear block"), barosinusitis, alternobaric vertigo, or any other symptoms that could interfere with aviation safety.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 26, Nose,

Aerospace Medical Disposition table <u>http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g</u> <u>uide/app_process/exam_tech/item26/amd/</u>

Also, see Aerospace Medical Disposition table and Item 35, Lungs and Chest <u>http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/app_process/exam_tech/item35/amd/</u>

IV. PROTOCOL - See Disease Protocols – Allergies, Severe

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/dec_cons/disease_prot/antihistamines/

V. PHARMACEUTICAL CONSIDERATIONS

- For conditions controlled by desensitization, AME must warn the airman to not operate aircraft until **four hours after** each injection.
- Sublingual immunotherapy (SLIT) used for allergic rhinitis is **not** acceptable

ANTACIDS

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.113(b)(c) Second-Class Airman Medical Certificate: 67.213(b)(c) Third-Class Airman Medical Certificate: 67.313(b)(c)

II. MEDICAL HISTORY: Item 18.i., Stomach, liver, or intestinal trouble. The applicant should provide history and treatment, pertinent medical records, current status report, and medication. If a surgical procedure was done, the applicant must provide operative and pathology reports.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 38, Abdomen

and Viscera, Aerospace Medical Disposition Table. http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/app_process/exam_tech/item38/amd/conditions/

IV. PROTOCOL: See Peptic Ulcer

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/dec_cons/disease_prot/peptic/

V. PHARMACEUTICAL CONSIDERATIONS

The prophylactic use of medications including simple antacids, H-2 inhibitors or blockers, proton pump inhibitors, and/or sucralfates may not be disqualifying, if free from side effects.

ANTICOAGULANTS

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.113(b)(c) Second-Class Airman Medical Certificate: 67.213(b)(c) Third-Class Airman Medical Certificate: 67.313(b)(c)

II. MEDICAL HISTORY: Item 18.g. Heart or vascular trouble.

The applicant should describe the condition to include, dates, symptoms, treatment, and provide medical reports to assist in the certification decision-making process. These reports should include, as indicated by the applicable underlying condition(s) and class applied for: 24-hour Holter monitor, operative reports of any coronary intervention (including the original cardiac catheterization report), stress tests (including worksheets and original tracings or a legible copy). For myocardial perfusion imaging, we require the interpretive report and copies of the actual images in **both** grey-scale and color (in digital format or hard copy.) Per Part 67, for all classes of medical certificates, there is cause for denial if there is an established medical history or clinical diagnosis of myocardial infarction, angina pectoris, cardiac valve replacement, permanent cardiac pacemaker implantation, heart replacement, or coronary heart disease (CHD) that has required treatment (or if untreated, that has been symptomatic or clinically significant).

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 36, Heart,

Aerospace Medical Disposition table <u>http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g</u> uide/app_process/exam_tech/item36/amd/

IV. PROTOCOL: As per the specific underlying condition(s), see

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/dec_cons/disease_prot/

V. PHARMACEUTICAL CONSIDERATIONS

For applicants who are **just beginning warfarin (Coumadin)** treatment the following is required:

- Minimum observation time of 6 weeks after initiation of warfarin therapy;
- Must also meet any required observation time for the underlying condition; AND
- 6 INRs, no more frequently than 1 per week

For applicants who are on an **established use of warfarin (Coumadin)**, status report from the treating physician should address and include:

- Drug dose history and schedule;
- Comment regarding side effects; AND
- A minimum of monthly International Normalized Ratio (INRs) results for the immediate prior 6 months.

ANTIDEPRESSANTS

I. CODE OF FEDERAL REGULATIONS First-Class Airman Medical Certificate: 67.107 Second-Class Airman Medical Certificate: 67.207 Third-Class Airman Medical Certificate: 67.307

II. MEDICAL HISTORY: **Item 18.m.,** Mental disorders of any sort; depression, anxiety, etc.

An affirmative answer to Item 18.m. requires investigation through supplemental history taking. Dispositions will vary according to the details obtained. An applicant with an established history of a personality disorder that is severe enough to have repeatedly manifested itself by overt acts, a psychosis disorder, or a bipolar disorder must be denied or deferred by the Examiner.

III. AEROMEDICAL DECISION CONSIDERATIONS: See **Item 47.,** Psychiatric, Aerospace Medical Disposition table.

IV. PROTOCOL: See Aerospace Medical Dispositions, **Item 47**., Psychiatric Conditions

V. PHARMACEUTICAL CONSIDERATIONS

The use of a psychotropic drug is disqualifying for aeromedical certification purposes – this includes all antidepressant drugs, including selective serotonin reuptake inhibitors (SSRIs). However, the FAA has determined that airmen requesting first, second, or third class medical certificates while being treated with one of four specific SSRIs may be considered (see Item 47., Psychiatric Conditions – Use of Antidepressant Medications). The Authorization decision is made on a case by case basis. **The Examiner may not issue.**

ANTIHYPERTENSIVE

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.113(b)(c) Second-Class Airman Medical Certificate: 67.213(b)(c) Third-Class Airman Medical Certificate: 67.313(b)(c)

II. MEDICAL HISTORY: Item 18.h., High or low blood pressure.

The applicant should provide history and treatment, type of medication, purpose, and duration of use. Issuance of a medical certificate is dependant on current blood pressure levels and whether the applicant is taking anti-hypertensive medication. The Examiner should also determine if the applicant has a history of complications, adverse reactions to therapy, hospitalization, etc.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 36, Heart -

Hypertension

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/app_process/exam_tech/item36/amd/hypertension/

Also see **Item 55**, Blood Pressure

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/app_process/exam_tech/item55/amd/

IV. PROTOCOL: See Hypertension Worksheet

V. PHARMACEUTICAL CONSIDERATIONS

- Medications acceptable to the FAA for treatment of hypertension in airmen include all Food and Drug Administration (FDA) approved diuretics, alphaadrenergic blocking agents, beta-adrenergic blocking agents, calcium channel blocking agents, angiotension converting enzyme (ACE inhibitors) agents, and direct vasodilators.
- NOT acceptable to the FAA:
 - Centrally acting agents (such as reserpine, guanethidine, guanadrel, guanabenz, and methyldopa).
 - A combination of beta-adrenergic blocking agents used with insulin, <u>meglitinides, or sulfonylureas</u>.
- The Examiner must defer issuance of a medical certificate to any applicant whose hypertension has not been evaluated, who uses unacceptable medications, whose medical status is unclear, whose hypertension is uncontrolled, who manifests significant adverse effects of medication, or whose certification has previously been specifically reserved to the FAA.

CONTRACEPTIVES AND HORMONE REPLACEMENT THERAPY

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.113(b)(c) Second-Class Airman Medical Certificate: 67.213(b)(c) Third-Class Airman Medical Certificate: 67.313(b)(c)

II. MEDICAL HISTORY: Use of Oral or Repository Contraceptives or Hormonal Replacement Therapy are not disqualifying for medical certification. If the applicant is experiencing no adverse symptoms or reactions to hormones and is otherwise qualified, the Examiner may issue the desired certificate.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Medical History above and **Item 41., G-U-System, <u>Gender Identity Disorder</u>**

IV. PROTOCOL: N/A

V. PHARMACEUTICAL CONSIDERATIONS: See Medical History above.

DIABETES MELLITUS - INSULIN TREATED

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.113(a)(b)(c) Second-Class Airman Medical Certificate: 67.213(a)(b)(c) Third-Class Airman Medical Certificate: 67.313(a)(b)(c)

II. MEDICAL HISTORY: Item 18.k., Diabetes.

The applicant should describe the condition to include, symptoms and treatment. Comment on the presence or absence of hyperglycemic and/or hypoglycemic episodes. A medical history or clinical diagnosis of diabetes mellitus requiring insulin or other hypoglycemic drugs for control are disqualifying. The Examiner can help expedite the FAA review by assisting the applicant in gathering medical records and submitting a current specialty report.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 48,

General Systemic Aerospace Medical Disposition table.

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/app_process/exam_tech/item48/amd/diabetes/

The FAA has established a policy that permits the special issuance medical certification of insulin treated applicants for **third class medical certification only**. Consideration will be given only to those individuals who have been clinically stable on their current treatment regimen for a period of 6-months or more.

IV. PROTOCOL: See Diabetes Mellitus Type I or Type II - Insulin-Treated Protocol

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/dec_cons/disease_prot/diabetes_insulin/

V. PHARMACEUTICAL CONSIDERATIONS

- Insulin pumps are an acceptable form of treatment.
- Combination of insulin with beta-bockers is not permitted
- Combination of insulin with other anti-diabetes medication (s): not all combinations of DM medications are allowed by the FAA, even if each medication within the combination is acceptable as monotherapy. See chart of <u>Acceptable Combinations of Diabetes Medications</u>. Contact Regional Flight Surgeon's office or AMCD.

DIABETES MELLITUS TYPE II -MEDICATION CONTROLLED (NOT INSULIN)

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.113 (a)(b)(c) Second-Class Airman Medical Certificate: 67.213(a)(b)(c) Third-Class Airman Medical Certificate: 67.313(a)(b)(c)

II. MEDICAL HISTORY: Item 18.k. Diabetes.

The applicant should describe the condition to include symptoms and treatment. Comment on the presence or absence of hyperglycemic and/or hypoglycemic episodes. A medical history or clinical diagnosis of diabetes mellitus requiring insulin or other hypoglycemic drugs for control is disqualifying. The Examiner can help expedite the FAA review by assisting the applicant in gathering medical records and submitting a current specialty report.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 48, Diabetes

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/app_process/exam_tech/item48/amd/diabetes/

IV. DISEASE PROTOCOL: See Diabetes Mellitus Type II - Medication Controlled <u>http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g</u>uide/dec_cons/disease_prot/diabetes_med/

V. PHARMACEUTICAL CONSIDERATIONS

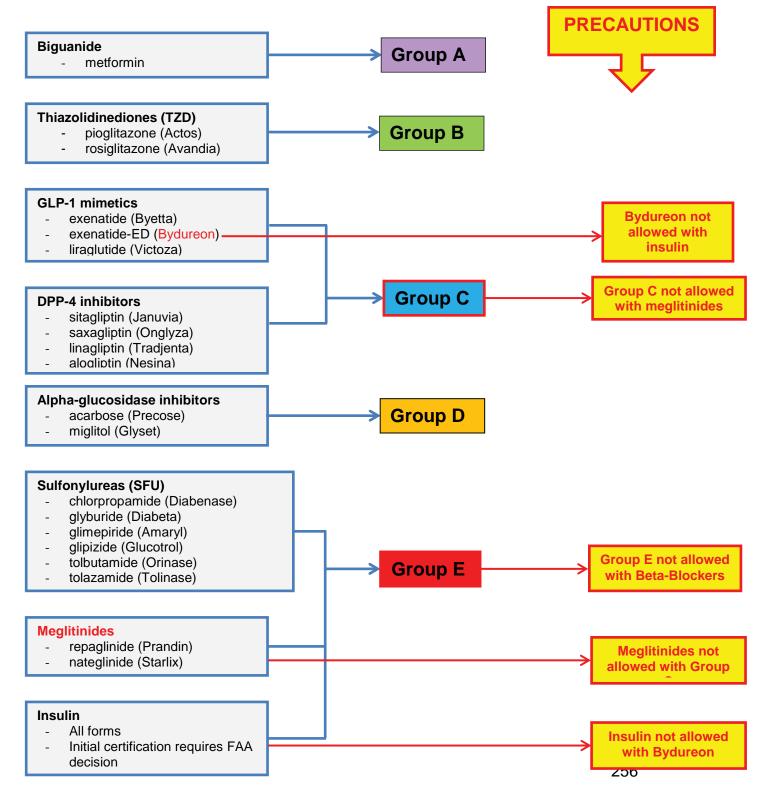
- a. Combination of DM medications with antihypertensives:
 - Disqualifying Combinations. Certification of airmen using meglitinides or sulfonylureas, along with beta-blockers is not permitted.
 Commonly used meglitinides include repaglinide (Prandin) and nateglinide (Starlix). Commonly used sulfonylureas include: acetohexamide (Dymelor); chloropropamide (Diabinese); tolazamide (Tolinase); tolbutamide (Orinase); glimepiride (Amaryl); glipizide (Glucotrol, Glucotrol XL); glyburide (DiaBeta, Micronase, Glynase); glyburide plus metformin (Glucovance); glipizide plus metformin (Metaglip).
 - Allowable Combinations. Certification of airmen using the combination of a beta-blocker with the following diabetes medications is permitted: alpha-glucosidase inhibitors [acarbose (Precose), miglitol (Glyset)]; biguanides [metformin (Glucophage)]; thiazolidinediones [pioglitazone (Actos)]; DDP-4 inhibitors [sitagliptin (Januvia)]; and incretin mimetics [exenatide (Byetta)].

See chart of Acceptable Combinations of Diabetes Medications on the next page.

Acceptable Combinations of Diabetes Medications

Use: no more than one medication from each group (A-E) below, no more than 3 medications total

- Initial certification of all applicants with diabetes mellitus (DM) requires FAA decision
- Pre-Diabetes on Metformin only See <u>CACI worksheet</u>
- For applicants on AASI for DM, follow the AASI
- Consult with FAA for any medications not on this chart
- Fixed-dose combination medications <u>count as 2 medications</u>



GLAUCOMA MEDICATIONS

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.113(b)(c) Second-Class Airman Medical Certificate: 67.213 (b)(c) Third-Class Airman Medical Certificate: 67.313(b)(c)

II. MEDICAL HISTORY: **Item 18.,d,** Medical History, Eye or vision trouble except glasses.

The applicant should provide history and treatment, pertinent medical records, current status report, and medication and dosage.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 32,

Ophthalmoscopic http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/g uide/app_process/exam_tech/item32/amd/

IV. PROTOCOL: N/A

V. PHARMACEUTICAL CONSIDERATIONS

A few applicants have been certified following their demonstration of adequate control with oral medication. Neither miotics nor mydriatics are necessarily medically disqualifying. However, miotics such as pilocarpine cause pupillary constriction and could conceivably interfere with night vision.

Although the FAA no longer routinely prohibits pilots who use such medications from flying at night, it may be worthwhile for the Examiner to discuss this aspect of the use of miotics with applicants. If considerable disturbance in night vision is documented, the FAA may limit the medical certificate: NOT VALID FOR NIGHT FLYING.

MALARIA MEDICATIONS

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.113(c) Second-Class Airman Medical Certificate: 67.213(c) Third-Class Airman Medical Certificate: 67.313(c)

II. MEDICAL HISTORY: This medication is absolutely disqualifying for pilots and air traffic controllers (ATCSs). Mefloquine (Lariam) is associated with adverse neuropsychiatric side-effects, even weeks after the drug is discontinued. Because of the association with adverse neuropsychiatric side-effects, even weeks after discontinuation, a pilot who elects to use mefloquine for malaria prophylaxis or who contracts malaria and is treated with mefloquine will be disqualified for pilot duties for the duration of use of mefloquine and for 4 weeks after the last dose. In this instance, the pilot **must contact the FAA** or his/her Aviation Medical Examiner prior to returning to flight duties after use.

III. AEROMEDICAL DECISION CONSIDERATIONS: For return to pilot or ATCS duties there must be no history of neurologic or psychiatric symptoms during and or after mefloquine use. Examples of symptoms related to mefloquine use include: dizziness or vertigo, tinnitus, and loss of balance; anxiety, paranoia, depression, restlessness or confusion, hallucinations and psychotic behavior.

IV. PROTOCOL: N/A

V. PHARMACEUTICAL CONSIDERATIONS:

- Use of mefloquine must be discontinued for at least 4 weeks prior to consideration and:
- The airman or contract tower ATCS must contact the FAA agency flight surgeon or their AME before resuming pilot or contract tower ATCS duties
- The agency ATCS must contact the agency flight surgeon for clearance determination prior to resuming safety sensitive duties
- For return to pilot or ATCS duties there must be no history of neurologic or psychiatric symptoms during and or after mefloquine use

SEDATIVES

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.107 Second-Class Airman Medical Certificate: 67.207 Third-Class Airman Medical Certificate: 67.307

II. MEDICAL HISTORY and CONVICTIONS OR ADMINISTRATIVE ACTIONS.

Medical History: Item **18.n**., Substance Dependence; or failed a drug test ever; or substance abuse or use of illegal substance in the last 2 years.

"Substance" includes alcohol and other drugs (e.g., PCP, sedatives and hypnotics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). For a "yes" answer to Item 18.n., the Examiner should obtain a detailed description of the history. A history of substance dependence or abuse is disqualifying. The Examiner must defer issuance of a certificate if there is doubt concerning an applicant's substance use.

Convictions or Administrative Actions: Item **18.v.**, Conviction and/or Administrative Action History

The events to be reported are specifically identified in Item 18.v. of FAA Form 8500-8. If "yes" is checked, the applicant must describe the conviction(s) and/or administrative action(s) in the EXPLANATIONS box. The description must include:

- The alcohol or drug offense for which the applicant was convicted or the type of administrative action involved (e.g., attendance at an educational or rehabilitation program in lieu of conviction; license denial, suspension, cancellation, or revocation for refusal to be tested; educational safe driving program for multiple speeding convictions; etc.);
- The name of the state or other jurisdiction involved; and
- The date of the conviction and/or administrative action

If there have been no new convictions or administrative actions since the last application, the applicant may enter "PREVIOUSLY REPORTED, NO CHANGE." Convictions and/or administrative actions affecting driving privileges may raise questions about the applicant's fitness for certification and may be cause for disqualification.

A single driving while intoxicated (DWI) conviction or administrative action usually is not cause for denial if there are no other instances or indications of substance dependence or abuse. The Examiner should inquire regarding the applicant's alcohol use history, the circumstances surrounding the incident, and document those findings in **Item 60**.

NOTE: The Examiner should advise the applicant that the reporting of alcohol or drug offenses (i.e., motor vehicle violation) on the history part of the medical application does not relieve the airman of responsibility to report each motor vehicle action to the FAA within 60 days of the occurrence to the Civil Aviation Security Division, AAC-700; P.O. Box 25810; Oklahoma City, OK 73125-0810.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 47., Psychiatric, Aerospace Medical Disposition table.

IV. PROTOCOL: See Substances of Dependence/Abuse Protocol

V. PHARMACEUTICAL CONSIDERATIONS

A. Aerospace Medical Dispositions, Item 47. Psychiatric Conditions

SLEEP AIDS

I. CODE OF FEDERAL REGULATIONS First-Class Airman Medical Certificate: 67.113(c) Second-Class Airman Medical Certificate: 67.213(c) Third-Class Airman Medical Certificate: 67.313(c)

II. MEDICAL HISTORY: Use of sleep aids is a potential risk to aviation safety due to effects of the sleep aid itself or the underlying reason/condition for using the sleep aid.

All the currently available sleep aids, both prescription and over the counter, can cause impairment of mental processes and reaction times, even when the individual feels fully awake. (As examples, see the Food and Drug Administration drug safety communications on zolpidem and eszopiclone)

Medical conditions that chronically interfere with sleep are disqualifying regardless of whether a sleep aid is used or not. Examples may include primary sleep disorders (e.g., insomnia, sleep apnea) or psychological disorders (e.g., anxiety, depression). While sleep aids may be appropriate and effective for short term symptomatic relief, the primary concern should be the diagnosis, treatment, and resolution of the underlying condition before clearance for aviation duties.

Occasional or limited use of sleep aids, such as for circadian rhythm disruption in commercial air operations, is allowable for pilots and air traffic controllers. Daily/nightly use of sleep aids is not allowed regardless of the underlying cause or reason. **See Pharmaceutical Considerations below.**

III. AEROMEDICAL DECISION CONSIDERATIONS: N/A

IV. PROTOCOL: N/A

V. PHARMACEUTICAL CONSIDERATIONS:

Because of the potential for impairment, we require a minimum wait time between the last dose of a sleep aid and performing pilot or ATCS duties. This wait time is based on the pharmacologic elimination half-life of the drug (half-life is the time it takes to clear half of the absorbed dose from the body). The minimum required wait time after the last dose of a sleep aid is 5-times the maximum elimination half-life.

The table on the following page lists several commonly prescribed sleep aids along with the required minimum wait times for each.

| SLEEP AID WAIT TIMES | | |
|----------------------|--|--|
| Trade Name | Generic Name | Required minimum waiting time after last dose before resuming pilot or ATCS duties |
| Ambien | zolpidem* | 24 hours |
| Ambien CR | zolpidem (extended release) | 24 hours |
| Edluar | zolpidem (dissolves under the tongue) | 36 hours |
| Intermezzo | zolpidem (for middle of the night awakening) | 36 hours |
| Lunesta | eszopiclone | 30 hours |
| Restoril | temazepam | 72 hours |
| Rozerem | ramelteon | 24 hours |
| Sonata | zaleplon | 6 hours |
| Zolpimist | zolpidem (as oral spray) | 48 hours |

* NOTE: The different formulations of zolpidem have different half-lives, thus different wait times.

SPECIAL ISSUANCES

AASIS for ALL CLASSES AASIS for THIRD-CLASS

AASI COVERSHEET

Authorization for Special Issuance of a Medical Certificate and AME Assisted Special Issuance (AASI)

A. Special Issuance.

At his discretion, the Federal Air Surgeon may grant an Authorization for Special Issuance of a Medical Certificate (Authorization), with a specified validity period, to an applicant who does not meet the established medical standards. The applicant must demonstrate to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety for the validity period of the Authorization. The Federal Air Surgeon may authorize a special medical flight test, practical test, or medical evaluation for this purpose. An airman medical certificate issued under the provisions of an Authorization expires no later than the Authorization expiration date or upon its withdrawal. An airman must again show to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate issued under the provisions of an Authorization expires no later than the Authorization expiration date or upon its withdrawal. An airman must again show to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety in order to obtain a new airman medical certificate/Authorization under Title 14 of the Code of Federal Regulations (14 CFR) §67.401.

See Title 14 of the Code of Federal Regulations (14 CFR) §67.401.

B. AME Assisted Special Issuance (AASI).

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization to an applicant who has a medical condition that is disqualifying under 14 CFR Part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. Examiners may reissue an airman medical certificate under the provisions of an Authorization, if the applicant provides the requisite medical information required for determination. Examiners may not issue initial Authorizations. An Examiner's decision or determination is subject to review by the FAA

AME Assisted Special Issuance (AASI)

The following pages of the Guide for Aviation Medical Examiners introduce the AME Assisted Special Issuance (AASI) process.

The Guide refers to a number of selected medical conditions that are initially disgualifying (if the applicant does not meet the issue criteria in the Aerospace Medicine Dispositions Tables or the Certification Worksheets) and must be deferred to the AMCD or RFS. If this is a first-time application for an AASI for a disgualifying disease/condition, and the applicant has all of the requisite medical information necessary for a determination, the Examiner must defer, and submit all of the documentation to the AMCD or your RFS.

Following the granting of an Authorization for Special Issuance of a Medical Certificate (Authorization) by the AMCD or RFS, an Examiner may reissue a medical certificate to an applicant with a medical history of an initially disgualifying condition once the AASI's specialized criteria is met and the applicant is otherwise qualified.

| ARTHRITIS and/ or PSORIASIS | HEPATITIS C |
|--|-----------------------------------|
| ASTHMA | HYERTHYROIDISM |
| ATRIAL FIBRILLATION | HYPOTHYROIDISM |
| BLADDER CANCER | LYMPHOMA and HODGKIN'S DISEASE |
| BREAST CANCER | MELANOMA |
| CHRONIC LYMPHOCYTIC LEUKEMIA | MELANOMA |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASE | MIGRAINE HEADACHES |
| COLITIS | MITRAL and AORTIC INSUFFICIENCY |
| (Ulcerative or Crohn's Disease) or Irritable Bowel Syndrome | PAROXYSMAL ATRIAL TACHYCARDIA |
| COLON CANCER | |
| DEEP VENOUS THROMBOSIS (DVT), | PROSTATE CANCER |
| PULMONARY EMBOLISM (PE), and/ or HYPERCOAGULOPATHIES | RENAL CALCULI |
| DIABETES MELLITUS – TYPE II | RENAL CARCINOMA |
| Medication Controlled (Not Insulin) | SLEEP APNEA |
| GLAUCOMA | TESTICULAR CANCER |

AASI FOR ARTHRITIS AND/ OR PSORIASIS

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with <u>14 CFR § 67.401</u>. The Authorization letter is accompanied by attachments which specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or <u>RFS</u> for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- The type of arthritis or psoriasis;
- A general assessment of the condition and its effect on daily activities;
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects; and
- For arthritis comments regarding range of motion of neck, upper and lower extremities, hands, etc.

- The applicant has developed any associated systemic manifestations;
- For arthritis new joints have become involved;
- The applicant required change in medication used for control of the disease; or
- The applicant is taking steroid doses equivalent to more than 20 mg of prednisone per day (<u>steroid conversion calculator</u>)

AASI FOR ASTHMA

Note: If the applicant has mild symptoms that are infrequent, have not required hospitalization, or use of steroid medication, and no symptoms in flight, the Examiner may issue an airman medical certificate. See Item 35., Lungs and Chest Aerospace Medical Disposition.

If the applicant does not meet the above criteria, the Examiner must follow the AASI process.

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- The applicant's current medical status that addresses frequency of attacks and whether the attacks have resulted in emergency room visits or hospitalizations;
- The Examiner should caution the applicant to cease flying with any exacerbation as warned in § 61.53;
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects; and
- Results of pulmonary function testing, if deemed necessary, performed within the last 90 days

- The symptoms worsen;
- There has been an increase in frequency of emergency room, hospital, or outpatient visits;
- The FEV1 is less than 70% predicted value;
- The applicant requires 3 or more medications for stabilization; or
- The applicant is taking steroid doses equivalent to more than 20 mg of prednisone per day (steroid conversion calculator)

AASI FOR ATRIAL FIBRILLATION

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A summary of the applicant's medical condition since the last FAA medical examination, including a statement regarding any further episodes of atrial fibrillation;
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects;
- A report of a current 24-hour Holter Monitor performed within the last 90 days;
- A minimum of monthly International Normalized Ratio (INR) results for the immediate prior 6 months, for airmen being treated with warfarin (Coumadin).

- Holter Monitor demonstrates: HR >120 BPM or Pauses >3 seconds;
- More than 20% of INR values are <2.0 or >3.0; or
- The applicant develops emboli, thrombosis, bleeding that required medical intervention, or any other cardiac condition previously not diagnosed or reported.

AASI FOR BLADDER CANCER

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA; and
- A current status report performed within 90 days that must include all the required followup items and studies as listed in the Authorization letter and that confirms absence of recurrent disease

- There has been any recurrence of the cancer; or
- Any new treatment is initiated

AASI FOR BREAST CANCER

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA; and
- A current status report performed within the last 90 days that must include all the required followup items and studies as listed in the Authorization letter and that confirms absence of recurrent disease.

- There has been any recurrence of the cancer; or
- Any new treatment is initiated.

AASI FOR CHRONIC LYMPHOCYTIC LEUKEMIA

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A clinical followup report from the treating physician that includes an update of the condition of the applicant since the last examination; and
- The results of any applicable laboratory results, including a complete blood count performed within the last 90 days.

- The condition currently requires treatment with a chemotherapeutic agent; or
- The white blood cell count has risen above 80,000; or
- Any new treatment is initiated

AASI FOR CHRONIC OBSTRUCTIVE PULMONARY DISEASE

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A statement regarding symptomatology of the condition;
- A statement addressing any associated illnesses, such as heart failure;
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects; and
- A pulmonary specialist evaluation that includes the results of a current pulmonary function test, performed within the last 90 days

- The FEV1 or FEV1/FVC is less than 70%;
- The applicant has developed an associated cardiac condition, or
- The applicant is taking steroid doses equivalent to more than 20 mg of prednisone per day (steroid conversion calculator)

AASI FOR COLITIS (ULCERATIVE OR CROHN'S DISEASE) OR IRRITABLE BOWEL SYNDROME

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A statement regarding the extent of disease;
- A statement regarding the frequency of exacerbation (the applicant should cease flying with any exacerbation as warned in § 61.53); and
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects.

- There is a current exacerbation of the illness;
- The applicant is taking medications such as Lomotil, steroid doses equivalent to more than 20 mg of prednisone per day (<u>steroid conversion</u> <u>calculator</u>), antispasmodics, and anticholinergics; or
- The pattern of exacerbations is increasing in frequency or severity; or applicant underwent surgical intervention.

AASI FOR COLON/COLORECTAL CANCER

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA; and
- An update of the status of the malignancy since the last FAA medical examination, to include the results of a current (performed within the last 90 days) carcinoembryonic antigen (CEA), if a baseline value is available

- There has been any progression of the disease or an increase in CEA or
- Any new treatment is initiated

AASI FOR DEEP VENOUS THROMBOSIS (DVT), PULMONARY EMBOLISM (PE), AND/ OR HYPERCOAGULOPATHIES

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with <u>14 CFR § 67.401</u>. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition and the applicant has all the required medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or <u>RFS</u> for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A summary of the applicant's medical condition since the last FAA medical examination, including a statement regarding any further episodes of DVT, PE or other complication of hypercoagulopathy (see below*);
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects; and
- A minimum of monthly International Normalized Ratio (INR) results for the immediate prior 6 months for those being treated with warfarin (Coumadin).

- More than 20 percent of INR values are <2.0 or >3.0 for those being treated with warfarin (Coumadin); or
- The applicant develops emboli, thrombosis, bleeding that required medical intervention, or any other cardiac or neurologic condition previously not diagnosed or reported.

AASI FOR DIABETES MELLITUS - TYPE II MEDICATION CONTROLLED (NOT INSULIN)

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with <u>14 CFR § 67.401</u>. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has provided all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or <u>RFS</u> for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A current status report from the physician treating the airman's diabetes, including:
 - A statement attesting that the airman is maintaining his or her diabetic diet;
 - A statement regarding any diabetic symptomatology; including any history of hypoglycemic events and any cardiovascular, renal, neurologic, or ophthalmologic complications; and
 - The results of a current HgA1c level performed within last 30 days.

- The applicant has been placed on insulin;
- The HgA1c level is greater than 9.0 mg%
- Any hypoglycemic event
- The applicant has developed evidence of any of the following:
 - o Cardiovascular disease,
 - Neurologic disease, including any change in degree of peripheral neuropathy,
 - Ophthalmologic disease,
 - Renal disease (including a Creatinine over 2.0)
- The airman has been placed on any amlynomimetics, such as pramlintide (Symlin)
- The applicant is using more than 3 DM medications
- The applicant is using a combination not allowed by <u>Acceptable Combinations of</u> <u>Diabetes Medications</u>
- The airman has been placed on beta-blockers AND his/her oral diabetes medications include any sulfonlyurea and/or any meglitinide. Commonly used meglitinides include repaglinide (Prandin) and nateglinide (Starlix). Commonly used sulfonylureas include: acetohexamide (Dymelor); chloropropamide (Diabinese); tolazamide (Tolinase); tolbutamide (Orinase); glimepiride (Amaryl); glipizide (Glucotrol, Glucotrol XL); glyburide (DiaBeta, Micronase, Glynase); glyburide plus metformin (Glucovance); glipizide plus metformin (Metaglip). See chart of <u>Acceptable Combinations of Diabetes Medications</u>
- Any new treatment is initiated

AASI FOR GLAUCOMA

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- Certification only granted for open-angle-glaucoma and ocular hypertension;
- The FAA Form 8500-14, Glaucoma Eye Evaluation Form is filled out by the treating eye specialist; and
- A set of visual fields measurements is provided.

- The FAA Form 8500-14 Glaucoma Eye Evaluation Form demonstrates visual acuity incompatible with the medical standards; or
- There is a change in visual fields or adverse change in ocular pressure.

AASI FOR HEPATITIS C

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- Any symptoms the applicant has developed;
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects; and
- A current liver function profile performed within the last 90 days.

- The applicant has developed symptoms;
- There has been a change in treatment regimen or the applicant has been placed on alpha-interferon;
- Any side effects from required medication; or
- An adverse change in liver function studies.

AASI FOR HYPERTHYROIDISM

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA current statement of the condition since last FAA medical examination;
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects; and
- Current thyroid function studies performed within last 90 days.

- The applicant has developed hypothyroidism; or
- The thyroid function studies are elevated, suggesting inadequate treatment; or
- The applicant developed an associated illness, such as dysrhythmia.

AASI FOR HYPOTHYROIDISM

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects;
- A statement regarding any other associated problems, such as cardiac or visual; and
- A statement regarding the current thyroid stimulating hormone (TSH) level performed within the last 90 days.

- The applicant develops a related problem in another system, such as cardiac; or
- The TSH level is elevated.

AASI FOR LYMPHOMA AND HODGKIN'S DISEASE

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA; and
- An update of the status of the disease from the last FAA medical examination and any testing deemed necessary by the treating physician.

- There has been any recurrence or disease progression
- Any new treatment is initiated

AASI FOR MELANOMA

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA, and
- A current status report performed within the last 90 days that must include all the required followup items and studies as listed in the Authorization letter and that confirms absence of recurrent disease

The Examiner must defer to the AMCD or Region if:

- There has been any recurrence of the cancer, or
- Any new treatment is initiated

Note:

* A Special Issuance or AASI is required for any metastatic melanoma regardless of Breslow level

* A Special Issuance or AASI is required for any melanoma which exhibits Breslow Level > .75 mm with or without metastasis

* A melanoma that exhibits a Breslow Level < .75 mm which has no evidence of metastasis may be regular issued.

AASI FOR MIGRAINES

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A statement regarding the frequency of headaches and/or other associated symptoms since last followup report;
- A statement regarding if the characteristics of the headaches changed; and
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects.

- The frequency of headaches and/or other symptoms increase since the last followup report; or
- The applicant is placed on medication(s), such as isometheptene mucate, narcotic analgesic, tramadol, tricyclic-antidepressant medication, etc.

AASI FOR MITRAL OR AORTIC INSUFFICIENCY

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A summary of the applicant's medical condition since the last FAA medical examination, including a statement regarding any further episodes of atrial fibrillation; and
- A current 2-D echocardiogram with Doppler performed within the last 90 days.

- The mean gradient across the valve reaches 40 mm HG;
- New symptoms occur;
- An arrhythmia develops; or
- The treating physician or Examiner reports the murmur is now moderate to severe (Grade III or IV).

AASI FOR PAROXYSMAL ATRIAL TACHYCARDIA

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A statement regarding any recurrences since the last FAA medical examination; and
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects.

- There have been one or more recurrences; or
- The applicant has received some treatment that was not reported in the past, such as radiofrequency ablation

AASI FOR PROSTATE CANCER

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A current status of the medical condition to include any testing deemed necessary; and
- A current PSA level performed within the last 90 days.

- The PSA rises at a rate above 0.75 ng/ml per year;
- A new treatment is initiated; or
- Any metastasis has occurred.

AASI FOR RENAL CALCULI

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA;
- A statement from your treating physician regarding the location of the retained stone(s), estimation as to size of stone, and likelihood of becoming symptomatic; and
- A current report of appropriate imaging study (IVP, KUB, Ultrasound, or Spiral CT Scan) and provide a metabolic work-up, both performed within the last 90 days.

- If the treating physician comments that the current stone has a likelihood of becoming symptomatic;
- If the retained stone(s) has moved when compared to previous evaluations; or
- If the stone(s) has become larger when compared to previous evaluations.

AASI FOR RENAL CARCINOMA

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA; and
- A current status report performed within the last 90 days that must include all the required followup items and studies as listed in the Authorization letter and that confirms absence of recurrent disease.

- There has been any recurrence of the cancer; or
- Any new treatment is initiated.

AASI FOR SLEEP APNEA

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA; and
- A current report (performed within the last 90 days) from the treating physician that references the present treatment, whether this has eliminated any symptoms and with specific comments regarding daytime sleepiness. If there is any question about response to or compliance with treatment, then a Maintenance of Wakefulness Test (MWT) will be required.

The Examiner must defer to the AMCD or Region if:

- There is any question concerning the adequacy of therapy;
- The applicant appears to be non-compliant with therapy;
- The MWT demonstrates sleep deficiency; or
- The applicant has developed some associated illness, such as right-sided heart failure.

AASI FOR TESTICULAR CARCINOMA

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA; and
- A current status report performed within the last 90 days that must include all the required followup items and studies as listed in the Authorization letter and that confirms absence of recurrent disease.

The Examiner must defer to the AMCD or Region if:

- There has been any recurrence of the cancer; or
- Any new treatment is initiated.

AME Assisted Special Issuance (AASI) for Third-Class Airman Medical Certificate

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

The AASI's listed below are presently restricted to the issue of a **third-class** airman medical certificate.

An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI or the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

For Third-class:

Coronary Heart Disease (CHD) (to include): Angina Pectoris Atherectomy Brachytherapy Coronary Bypass Grafting Myocardial Infarction Percutaneous Transluminal Angioplasty (PTCA) Rotoblation Stent Insertion

Valve Replacement

AASI FOR CORONARY HEART DISEASE (CHD)

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to reissue an airman medical certificate to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations, (14 CFR) part 67. This AASI is presently restricted to the issue of a **third-class** airman medical certificate for an applicant with a history of Angina Pectoris; Atherectomy; Brachytherapy; Coronary Bypass Grafting; Myocardial Infarction; Percutaneous Transluminal Angioplasty (PTCA); Rotoblation; or Stent Insertion. First- and second-class applicants must be deferred to the FAA.

The FAA physicians provide the initial certification decision and grant the Authorization for Special Issuance of a Medical Certificate (Authorization) in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the issuance determination. If this is first-time application for an AASI for the above disease/condition, and the airman has all the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD or your <u>RFS</u> for the initial determination.

Examiners may reissue an airman medical certificate if the applicant provides the following:

- An Authorization granted by the FAA;
- A current status report performed within the past 90 days in accordance with the CHD Protocol; and
- A current maximal GXT See GXT Protocol

The Examiner must defer medical certification to AMCD or Region if:

- The applicant complains of chest pain at any time (exclude chest pain with a firm diagnosis of non-cardiac causes of chest pain);
- The applicant has another event (myocardial infarction, or restenosis requiring CABG, atherectomy, brachytherapy, PTCA, or stent);
- The applicant for whatever reason is placed on a long acting nitrate;
- The applicant's risk factors are inadequately controlled; or
- Has any reason for not renewing an AASI See GXT Protocol; or
- The applicant develops bleeding that required medical intervention or other cardiac condition not previously diagnosed or reported.

AASI FOR SINGLE VALVE REPLACEMENT

AME Assisted Special Issuance (AASI) is a process that provides Examiners the ability to re-issue an airman medical certificate under the provisions of an Authorization for Special Issuance of a Medical Certificate (Authorization) to an applicant who has a medical condition that is disqualifying under Title 14 of the Code of Federal Regulations (14 CFR) part 67.

This AASI is presently restricted to the issue of a **third-class** airman medical certificate. First- and second-class applicants must be deferred to the FAA. An FAA physician provides the initial certification decision and grants the Authorization in accordance with 14 CFR § 67.401. The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the re-issuance determination. If this is a first-time application for an AASI for the above disease/condition, and the applicant has all the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or RFS for the initial determination.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, if the applicant provides the following:

- An Authorization granted by the FAA
- A current status report performed within the past 90 days in accordance with the CHD Protocol
- A current 2D echocardiogram performed within 90 days
- For Mechanical Heart Values A minimum of monthly International Normalized Ratio (INR) results for the immediate prior six months

The Examiner must defer medical certification to AMCD or Region if:

- The airman requires another valve procedure
- Evidence of perivalvular leaking via echocardiogram
- The post procedure valve area is less than 1.0 cm²
- New onset arrhythmia such as of atrial fibrillation/flutter, ventricular bigeminy, ventricular tachycardia, Mobitz Type II or greater AV block, complete heart block, RBBB, LBBB or LVH
- More than 20% of INR values are less than 2.5 or greater than 3.5. In select cases of a Bileaflet (St. Jude) valve in the aortic position, INR values between 2.0 and 3.0 may be accepted (check with FAA)
- The applicant reports any other disqualifying medical condition or undergoes therapy not previously reported
- The applicant develops emboli, thrombosis, bleeding that required medical intervention, or any other cardiac condition previously not diagnosed or reported

Aviation Medical Examiner Assisted Special Issuance (AASI) Certificate Issuance

I have reviewed the enclosed medical report(s) and have determined that the report(s) is in accordance with this applicant's Authorization for Special Issuance of a Medical Certificate and the AASI Protocol established for certificate issuance.

I have issued a ______-class medical certificate to the airman named below with all other limitations listed on the original certificate. The certificate issued is timed limited by the restriction "NOT VALID FOR ANY CLASS AFTER _____"

Date

Check all that apply:

Interim certificate issued for disease(s)/condition(s) below – No examination performed.

| ALL | AASI CONDITION | ALL | AASI CONDITION | ALL | AASI CONDITION |
|------------------------|--|------------|---|------------------------|--|
| | Arthritis | | Metabolic Syndrome, Glucose Intolerance, Impaired Glucose Tolerance, Impaired Fasting Glucose, Insulin Resistance, and Pre-Diabetes | | Prostate Cancer |
| | Asthma | | Glaucoma | | Renal Calculi |
| | Atrial Fibrillation | | Hepatitis C | | Renal Cancer |
| | Bladder Cancer | | Hyperthyroidism | | Sleep Apnea |
| | Breast Cancer | | Hypothyroidism | | Testicular Cancer |
| | Chronic Lymphocytic Leukemia | | Lymphoma and Hodgkins | | Warfarin (Coumadin) Therapy for Deep Venous Thrombosis, Pulmonary Embolism, and/ or Hypercoagulopathies. |
| | Chronic Obstructive Pulmonary | | Melanoma | | |
| | Colitis (Ulcerative or Crohn's) | | Migraine Headaches | | |
| | Colon Cancer | | Mitral and Aortic Insufficiency | | |
| | Diabetes Mellitus – Type II Medication Controlled | | Paroxysmal Atrial Tachycardia | | |
| THIRD CLASS ONLY | AASI CONDITION | | | THIRD CLASS ONLY | |
| | Coronary Heart Disease (CHI | D) | | | |

Certificate issued - New application and examination performed.

AIRMAN INFORMATION:

Name:

PI:

DOB:

AVIATION MEDICAL EXAMINER (AME) INFORMATION:

AME Name (Print):

AME Signature:

AME Number:

Date:

SUBSTANCES OF DEPENDENCE/ABUSE

Substances of Dependence/Abuse

As an Examiner you are required to be aware of the regulations and Agency policy and have a responsibility to inform airmen of the potential adverse effects of medications and to counsel airmen regarding their use. There are numerous conditions that require the chronic use of medications that do not compromise aviation safety and, therefore, are permissible. Airmen who develop short-term, self-limited illnesses are best advised to avoid performing aviation duties while medications are used.

Aeromedical decision-making includes an analysis of the underlying disease or condition and treatment. The underlying disease has an equal and often greater influence upon the determination of aeromedical certification. It is unlikely that a source document could be developed and understood by airmen when considering the underlying medical condition(s), drug interactions, medication dosages, and the shear volume of medications that need to be considered. A list may encourage or facilitate an airmen's self-determination of the risks posed by various medical conditions especially when combination therapy is used. A list is subject to misuse if used as the sole factor to determine certification eligibility or compliance with 14 CFR part 61.53, Prohibition of Operations During Medical Deficiencies. Maintaining a published a list of "acceptable" medications is labor intensive and in the final analysis only partially answers the certification question and does not contribute to aviation safety.

Therefore, the list of medications referenced provides aeromedical guidance about specific medications or classes of pharmaceutical preparations and is applied by using sound aeromedical clinical judgment. This list is not meant to be totally inclusive or comprehensive. No independent interpretation of the FAA's position with respect to a medication included or excluded from the following should be assumed. See <u>Aviation Industry Antidrug and Alcohol</u> <u>Misuse Prevention Programs</u>

Substances of Dependence/Abuse

| ALCOHOL DEPENDENCE/ABUSE | MARIJUANA |
|--------------------------|---------------------|
| AMPHETAMINES | NARCOTICS |
| ANXIOLYTICS | PHENCYCLIDINE (PCP) |
| COCAINE | PSYCHOTROPIC |
| HYPNOTICS | STIMULANTS |
| HALLUCINOGENS | TRANQUILIZERS |

The following is applicable to each Substances of Dependence/Abuse referenced above:

I. CODE OF FEDERAL REGULATIONS

First-Class Airman Medical Certificate: 67.107 Second-Class Airman Medical Certificate: 67.207 Third-Class Airman Medical Certificate: 67.307

II. MEDICAL HISTORY and CONVICTIONS OR ADMINISTRATIVE ACTIONS.

Medical History: **Item 18.n.,** Substance dependence; or failed a drug test ever; or substance abuse or use of illegal substance in the last 2 years.

"Substance" includes alcohol and other drugs (e.g., PCP, sedatives and hypnotics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). For a "yes" answer to Item 18.n., the Examiner should obtain a detailed description of the history. A history of substance dependence or abuse is disqualifying. The Examiner must defer issuance of a certificate if there is doubt concerning an applicant's substance use.

Convictions or Administrative Actions: **Item 18.v**., Conviction and/or Administrative Action History

The events to be reported are specifically identified in Item 18.v. of FAA Form 8500-8. If "yes" is checked, the applicant must describe the conviction(s) and/or administrative action(s) in the EXPLANATIONS box. The description must include:

• The alcohol or drug offense for which the applicant was convicted or the type of administrative action involved (e.g., attendance at an educational or rehabilitation program in lieu of conviction; license denial, suspension,

cancellation, or revocation for refusal to be tested; educational safe driving program for multiple speeding convictions; etc.);

- The name of the state or other jurisdiction involved; and
- The date of the conviction and/or administrative action

If there have been no new convictions or administrative actions since the last application, the applicant may enter "PREVIOUSLY REPORTED, NO CHANGE." Convictions and/or administrative actions affecting driving privileges may raise questions about the applicant's fitness for certification and may be cause for disqualification.

A single driving while intoxicated (DWI) conviction or administrative action usually is not cause for denial if there are no other instances or indications of substance dependence or abuse. The Examiner should inquire regarding the applicant's alcohol use history, the circumstances surrounding the incident, and document those findings in **Item 60**.

NOTE: The Examiner should advise the applicant that the reporting of alcohol or drug offenses (i.e., motor vehicle violation) on the history part of the medical application does not relieve the airman of responsibility to report each motor vehicle action to the FAA within 60 days of the occurrence to the Civil Aviation Security Division, AAC-700; P.O. Box 25810; Oklahoma City, OK 73125-0810.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 47.,

Psychiatric, Aerospace Medical Disposition table.

IV. PROTOCOL: See <u>Substances of Dependence/Abuse Protocol</u>. For specification guidelines, see <u>Substance of Dependence/Abuse (Drugs and Alcohol) Specification Evaluation.</u>

V. Aviation Industry Antidrug and Alcohol Misuse Prevention Programs

SYNOPSIS OF MEDICAL STANDARDS

| (2) Angina pectoris; (3) Coronary heart disease (CHD) that has been treated or, if untreated, that has been symptomatic or clinically significant; (4) Myocardial infarction; (5) Cardiac valve replacement; (6) Permanent cardiac pacemaker; (7) Heart replacement; (8) Psychosis; (9) Bipolar disorder; (10) Personality disorder that is severe enough to have repeatedly manifested itself by overt acts; (11) Substance dependence; (12) Substance abuse; (13) Epilepsy; (14) Disturbance of consciousness and without satisfactory explanation of cause, | | | | | | |
|--|-------------------------------|---|---|---|--|---|
| DISTANT VISION 20/2001 better in each eye separately, with or information of the separately, with or without correction. separately, with or without correction. NEAR VISION 20/40 or better in each eye separately (Snellen equivalent), with or without correction, as measured at 16 inches. No requirement. INTERMEDIATE VISION 20/40 or better in each eye separately (Snellen equivalent), with or without order the average conversational voice in a quier com, using bott ears at 6 feet, with the verse colors necessary for safe performance of airman duties. COLOR VISION Ability to perceive those colors necessary for safe performance of airman duties. HEARING Demonstrate hearing of an average conversational voice in a quier com, using bott ears at 6 feet, with the back turned to the examiner or pass one of the audiometric tests below. AUDIOLOGY Audiometric speech discrimination test: Score at least 70% reception in one ear. Pure tone audiometric test. Unaided, with thresholds no worse than: 500 Hz 1,000 Hz 2,000 Hz 3,000 Hz Better Ear 35 0B 30 dB 30 dB 60 dB ENT No tear disease or condition manifested by, or that may reasonably be expected to maintained by, vertigo or a disturbance of speech or equilibrium. PULSE No diagnosis of psychosis, or bipolar disorder, or severe personality disorders. SUBSTANCE A diagnosis or medical history of "substance | Certificate | | t Pilot | | | |
| INTERM VISION correction, as measured at 16 inches. INTERMEDIATE VISION 20/40 or better in each eye separately (Snellen equivalent), with or without correction at age 50 and over, as measured at 32 inches. No requirement, over, as measured at 32 inches. COLOR VISION Ability to perceive those colors necessary for safe performance of airman duties. Demonstrate hearing of an average conversational voice in a quiet room, using both ears at 6 feet, with the back turned to the examiner or pass one of the audiometric tests below. AUDIOLOGY Audiometric speech discrimination test. Score at least 70% reception in one ear. Pure tone audiometric test. Unaided, with thresholds no worse than: Better Ear 35 Db 30 dB 30 dB 40 dB Worst Ear 35 dB 50 dB 60 dB 60 dB ENT No era disease or condition manifested by, or that may reasonably be expected to maintained by, vertigo or a disturbance of speech or equilibrium. PULSE Not disqualifying per se. Used to determine cardiac system status and responsiveness. BLOOD PRESSURE No specified values stated in the standards. The current guideline maximum value is 155/95. ELECTRO- CARDIOGRAM (ECG) A diagnosis or medical history of "substance dependence" is disqualifying unless thare is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustatined total abstinence from the substance(s) for no | DISTANT VISION | | | eparately, with or | separa | tely, with or without |
| INTERMEDIATE VISION equivalent), with or without correction at age 50 and over, as measured at 32 inches. No requirement. COLOR VISION Ability to perceive those colors necessary for safe performance of airman duties. Demonstrate hearing of an average conversational voice in a quiet room, using both tests below. Demonstrate hearing of an average conversational voice in a quiet room, using both tests below. AUDIOLOGY Audiometric speech discrimination test. Score at least 70% reception in one ear. Pure tone audiometric test. Unaided, with thresholds no worse than: Enter Ear 500 Hz 1,000 Hz 2,000 Hz 3,000 Hz Better Ear 35 Db 30 dB 30 dB 40 dB Worst Ear 35 dB 50 dB 60 dB 60 dB ENT No ear disease or condition manifested by, or that may reasonably be expected to maintainee by, vertigo or a disturbance of speech or equilibrium. PULSE No tracquiristing per se. Used to determine cardiac system status and responsiveness. BLOOD PRESSURE At age 35 and annually after age 40 annually after age. A history of "substance dependence" is disqualifying unless there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s). For ot less there is established clinical evid | NEAR VISION | | | | valent), w | ith or without |
| Demonstrate hearing of an average conversational voice in a quiet room, using bott ears at 6 feet, with the back turned to the examiner or pass one of the audiometric tests below. AUDIOLOGY Audiometric speech discrimination test: Score at least 70% reception in one ear. Pure tone audiometric test. Unaided, with thresholds no worse than: S00 Hz 1,000 Hz 2,000 Hz 3,000 Hz Better Ear 35 Db 30 dB 30 dB 40 dB Worst Ear 35 dB 50 dB 50 dB 60 dB ENT No ear disease or condition manifested by, or that may reasonably be expected to maintained by, vertigo or a disturbance of speech or equilibrium. PULSE Not disqualifying per se. Used to determine cardiac system status and responsiveness. Not routinely required. BLOOD PRESSURE No specified values stated in the standards. The current guideline maximum value is 155/95. At age 35 and annually after age 40 Not routinely required. SUBSTANCE At age 35 and annually after age 40 Not routinely required. SUBSTANCE A diagnosis or medical history of "substance dependence" is disqualifying unless thare is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. A history of "substance abued" within the preceding 2 years is disqualifying sustained total abstinence from th | INTERMEDIATE VISION | equivalent), with | or without co | rrection at age 50 and | No req | uirement. |
| HEARING ears at 6 feet, with the back turned to the examiner or pass one of the audiometric tests below. AUDIOLOGY Audiometric speech discrimination test: Score at least 70% reception in one ear. Pure tone audiometric test. Unaided, with thresholds no worse than: Better Ear 35 Db 30 dB 30 dB 40 dB Better Ear 35 dB 50 dB 50 dB 60 dB ENT No ear disease or condition manifested by, or that may reasonably be expected to maintained by, vertigo or a disturbance of speech or equilibrium. PULSE Not disqualifying per se. Used to determine cardiac system status and responsiveness. BLOOD PRESSURE No specified values stated in the standards. The current guideline maximum value is 155/95. ELECTRO-CARM (ECG) At age 35 and annually after age 40 annually after | COLOR VISION | Ability to perceiv | e those color | s necessary for safe pe | erformanc | e of airman duties. |
| ADDOLOGY Pure tone audiometric test. Unaided, with thresholds no worse than: 500 Hz 1,000 Hz 2,000 Hz 3,000 Hz Better Ear 35 Db 30 dB 30 dB 40 dB Worst Ear 35 dB 50 dB 50 dB 60 dB ENT No ear disease or condition manifested by, or that may reasonably be expected to maintained by, vertigo or a disturbance of speech or equilibrium. PULSE Not disqualifying per se. Used to determine cardiac system status and responsiveness. BLOOD PRESSURE No specified values stated in the standards. The current guideline maximum value is 155/95. ELECTRO-CARDIOGRAM (ECG) At age 35 and annually after age 40 Not routinely required. MENTAL No diagnosis of psychosis, or bipolar disorder, or severe personality disorders. A diagnosis of psychosis, or bipolar disorder, or severe personality disorders. A diagnosis of psychosis, or bipolar disorder, or severe personality disorders. SUBSTANCE DEPENDENCE AND A diagnosis or medical history of "substance dependence" is disqualifying unless there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. A history of "substance aluses" within the preceding 2 years is disqualifying. "Substance" includes alcohol and other drugs (i.e., PCP, sedat | HEARING | ears at 6 feet, w | | | | |
| Better Ear 35 Db 30 dB 30 dB 40 dB Worst Ear 35 dB 50 dB 50 dB 60 dB ENT No ear disease or condition manifested by, or that may reasonably be expected to maintained by, vertigo or a disturbance of speech or equilibrium. PULSE Not disqualifying per se. Used to determine cardiac system status and responsiveness. BLOOD PRESSURE No specified values stated in the standards. The current guideline maximum value is 155/95. ELECTRO-CARD (CAR) At age 35 and annually after age 40 MENTAL No diagnosis of psychosis, or bipolar disorder, or severe personality disorders. SUBSTANCE A diagnosis or medical history of "substance dependence" is disqualifying unless there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. A history of "substance abuse" within the preceding 2 years is disqualifying. "Substance" includes alcohol and other drugs (i.e., PCP, sedatives and hynoptics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). DISQUALIFYING CONDITIONS Unless otherwise directed by the FAA, the Examinent must deput or defer if the applicant has a history of: (1) Diabetes mellitus requiring hypoglycemic medication; (2) Angina pectoris; (3) Coronary heart disease (CHD) that has been treated or, if untreated, that has been symptomatic or clinically significant; (4) Myocardial infarction; (5) Cardiac valve replacement; (6 | AUDIOLOGY | | | | | |
| Worst Ear 35 dB 50 dB 50 dB 60 dB ENT No ear disease or condition manifested by, or that may reasonably be expected to maintained by, vertigo or a disturbance of speech or equilibrium. PULSE Not disqualifying per se. Used to determine cardiac system status and responsiveness. BLOOD PRESSURE No specified values stated in the standards. The current guideline maximum value is 155/95. ELECTRO-CARDIOGRAM (ECG) At age 35 and annually after age 40 Not routinely required. MENTAL No diagnosis of psychosis, or bipolar disorder, or severe personality disorders. A diagnosis or medical history of "substance dependence" is disqualifying unless there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. A history of "substance abuse" within the preceding 2 years is disqualifying. "Substance includes alcohol and other drugs (i.e., PCP, sedatives and hynoptics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). DISQUALIFYING CONDITIONS Unless otherwise directed by the FAA, the Examiner must deny or defer if the applicant has a history of: (1) Diabetes mellitus requiring hypoglycemic medication; (2) Angina pectoris; (3) Coronary heart disease (CHD) that has been treated or, if untreated, that has been symptomatic or clinically significant; (4) Myocardial infarction; (5) Cardiac valve replacement; (6) Permanent cardiac pacemaker; (7) Heart replacement; (8) Psychosis; (9) Bipolar disorder; (10) Personality diso | | 500 Hz | 1,000 Hz | 2,000 Hz | | 3,000 Hz |
| ENT No ear disease or condition manifested by, or that may reasonably be expected to maintained by, vertigo or a disturbance of speech or equilibrium. PULSE Not disqualifying per se. Used to determine cardiac system status and responsiveness. BLOOD PRESSURE No specified values stated in the standards. The current guideline maximum value is 155/95. ELECTRO- CARDIOGRAM (ECG) At age 35 and annually after age 40 Not routinely required. MENTAL No diagnosis of psychosis, or bipolar disorder, or severe personality disorders. SUBSTANCE A diagnosis or medical history of "substance dependence" is disqualifying unless thare is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. A history of "substance abuse" within the preceding 2 years is disqualifying. "Substance "includes alcohol and other drugs (i.e., PCP, sedatives and hynoptics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). DISQUALIFYING CONDITIONS Unless otherwise directed by the FAA, the Examiner must deny or defer if the applicant has a history of: (1) Diabetes mellitus requiring hypoglycemic medication; (2) Angina pectoris; (3) Coronary heart disease (CHD) that has been treated or, if untreated, that has been symptomatic or clinically significant; (4) Myocardial infarction; (5) Cardiac valve replacement; (6) Permanent cardiac pacemaker; (7) Heart replacement; (8) Psychosis; (9) Bipolar disorder; (10) Personality disorder that is severe enough to have repeatedly manifested itself by overt acts; (1 | Better Ear | 35 Db | 30 dB | 30 dB | | 40 dB |
| ENT maintained by, vertigo or a disturbance of speech or equilibrium. PULSE Not disqualifying per se. Used to determine cardiac system status and responsiveness. BLOOD PRESSURE No specified values stated in the standards. The current guideline maximum value is 155/95. ELECTRO- CARDIOGRAM (ECG) At age 35 and annually after age 40 MENTAL No diagnosis of psychosis, or bipolar disorder, or severe personality disorders. A diagnosis or medical history of "substance dependence" is disqualifying unless there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. A history of "substance abuse" within the preceding 2 years is disqualifying. "Substance" includes alcohol and other drugs (i.e., PCP, sedatives and hynoptics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). DISQUALIFYING CONDITIONS Unless otherwise directed by the FAA, the Examiner must deny or defer if the applicant has a history of: (1) Diabetes mellitus requiring hypoglycemic medication; (2) Angina pectoris; (3) Coronary heart disease (CHD) that has been treated or, if untreated, that has been symptomatic or clinically significant; (4) Myocardial infarction; (5) Cardiac valve replacement; (6) Permanent cardiac pacemaker; (7) Heart replacement; (8) Psychosis; (9) Bipolar disorder; (10) Personality disorder that is severe enough to have repeatedly maifested itself by overt acts; (11) Substance dependence; (12) Substance abuse; (13) Epilepsy; (14) Disturbance of consciousness and without satisfactory explanation of cause, and (15) Transient loss | Worst Ear | 35 dB | 50 dB | 50 dB | | 60 dB |
| PULSE responsiveness. BLOOD PRESSURE No specified values stated in the standards. The current guideline maximum value is 155/95. ELECTRO-CARDIOGRAM (ECG) At age 35 and annually after age 40 Not routinely required. MENTAL No diagnosis of psychosis, or bipolar disorder, or severe personality disorders. A diagnosis or medical history of "substance dependence" is disqualifying unless there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. A history of "substance abuse" within the preceding 2 years is disqualifying. "Substance" includes alcohol and other drugs (i.e., PCP, sedatives and hynoptics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). DISQUALIFYING CONDITIONS Unless otherwise directed by the FAA, the Examiner must deny or defer if the applicant has a history of: (1) Diabetes mellitus requiring hypoglycemic medication; (2) Angina pectoris; (3) Coronary heart disease (CHD) that has been treated or, if untreated, that has been symptomatic or clinically significant; (4) Myocardial infarction; (5) Cardiac valve replacement; (6) Permanent cardiac pacemaker; (7) Heart replacement; (8) Psychosis; (9) Bipolar disorder; (10) Personality disorder that is severe enough to have repeatedly manifested itself by overt acts; (11) Substance dependence; (12) Substance abuse; (13) Epilepsy; (14) Disturbance of consciousness and without satisfactory explanation of cause, and (15) Transient loss of control of nervous system function(s) without satisfactory explanation of cause. <td>ENT</td> <td></td> <td></td> <td></td> <td></td> <td></td> | ENT | | | | | |
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| SUBSTANCE DEPENDENCE AND SUBSTANCE ABUSEA diagnosis or medical history of "substance dependence" is disqualifying unless there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. A history of "substance abuse" within the preceding 2 years is disqualifying. "Substance" includes alcohol and other drugs (i.e., PCP, sedatives and hynoptics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals).Unless otherwise directed by the FAA, the Examiner must deny or defer if the applicant has a history of: (1) Diabetes mellitus requiring hypoglycemic medication; (2) Angina pectoris; (3) Coronary heart disease (CHD) that has been treated or, if untreated, that has been symptomatic or clinically significant; (4) Myocardial infarction; (5) Cardiac valve replacement; (6) Permanent cardiac pacemaker; (7) Heart replacement; (8) Psychosis; (9) Bipolar disorder; (10) Personality disorder that is severe enough to have repeatedly manifested itself by overt acts; (11) Substance dependence; (12) Substance abuse; (13) Epilepsy; (14) Disturbance of consciousness and without satisfactory explanation of cause, and (15) Transient loss of control of nervous system function(s) without satisfactory explanation of cause. | | | ge 40 | Not routinely required | Ι. | |
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| NOTE: For further information, contact your Regional Flight Surgeon. | | applicant has a history of: (1) Diabetes mellitus requiring hypoglycemic medication; (2) Angina pectoris; (3) Coronary heart disease (CHD) that has been treated or, if untreated, that has been symptomatic or clinically significant; (4) Myocardial infarction; (5) Cardiac valve replacement; (6) Permanent cardiac pacemaker; (7) Heart replacement; (8) Psychosis; (9) Bipolar disorder; (10) Personality disorder that is severe enough to have repeatedly manifested itself by overt acts; (11) Substance dependence; (12) Substance abuse; (13) Epilepsy; (14) Disturbance of consciousness and without satisfactory explanation of cause, and (15) Transient loss of control of nervous system function(s) without satisfactory explanation of cause. | | | | |
| | NOTE: For further information | tion, contact your | Regional Flig | ght Surgeon. | | |

SUMMARY OF MEDICAL STANDARDS – Revised April 3, 2006

GLOSSARY

GLOSSARY/ACRONYMS

AAM - Office of Aerospace Medicine

AASI - AME Assisted Special Issuance - Criteria under which an Examiner may reissue a medical certificate for a third-class applicant with a medical history of a disqualifying condition, who has already received a Special Issuance Authorization from the FAA, and criteria to defer issuance to AMCD or RFS for these situations.

AMCD - Aerospace Medical Certification Division - located at the Civil Aerospace Medical Institute in Oklahoma City, Oklahoma

AMCS - Airman Medical Certification System - allows the AME to electronically submit FAA Form 8500-8, Application for Airman Medical Certificate or Airman Medical and Student Pilot Certificate, to AMCD.

AME - Aviation Medical Examiner - a physician designated by the FAA and given the authority to perform airman physical examinations for issuance of secondand third-class medical and student pilot certificates. (NOTE: Senior Examiners perform first-class airman examinations).

- ATCS Air Traffic Control Specialist
- AV Atrioventricular
- BUN Blood Urea Nitrogen Test
- CAD Coronary Artery Disease
- **CAMI** Civil Aerospace Medical Institute
- CAT Computerized Axial Tomography Scan
- **CBC** Complete Blood Count
- **CEA** Carcinoembryonic Antigen
- **CFR** Code of Federal Regulations
- CHD Coronary Heart Disease
- CT Computed Tomography Scan

- CVE Cardiovascular Evaluation
- **DOT** Department of Transportation
- DUI/DWI Driving Under the Influence/Driving While Intoxicated
- ECG Electrocardiogram
- ECHO Echocardiographic images
- ENT Ear, Nose, and Throat
- FAA Federal Aviation Administration
- FAR Federal Aviation Regulations
- FSDO Flight Standards District Office
- **GXT** Graded Exercise Test
- HgbA1C Hemoglobin A1C
- **INR-** International Normalized Ratio
- **IVP** Intravenous Pyelography Test
- KUB Kidneys, Ureters and Bladder
- MFO Medical Field Office
- MFT Medical Flight Test
- MRI Magnetic Resonance Imaging
- MVP Mitral Valve Prolapse
- NTSB National Transportation Safety Board
- PAC's Premature Arterial Contractions
- PET Radioactive High-Tech Scan
- **PFT** Pulmonary Function Test
- **PSA** Prostate Specific Antigen

- PT Prothrombin Time
- PTT Partial Thromboplastin Time
- **PVC's** Premature Ventricular Contractions
- **RF** Radio Frequency Ablation
- RFS Regional Flight Surgeon
- SODA Statement of Demonstrated Ability
- **TFT** -Thyroid Function Test
- US -Ultrasound

ARCHIVES AND UPDATES

| Guide Version | Official Date | Revision Number | Description Of Change | Reason For Update |
|------------------|------------------|--------------------|--------------------------|--|
| 2014 | 7/25/2014 | 1. | Medical Policy | In General Information, Classes of Medical Certificates and also in Validity of Medical Certificates, revise to include language regarding necessity for original AME or FAA physician signature on certificates. |
| 2014 | 07/23/2014 | 1. | Medical Policy | In AASI, Diabetes Mellitus, Medication Controlled (Not Insulin), revise to include that applicant must be deferred if taking more than 3 Diabetes medications or is using a combination prohibited in the the Acceptable Combinations of Diabetes Medical Chart. |
| 2014 | 05/16/2014 | 1. | Administrative | In Pharmaceuticals (Therapeutic Medications), Malaria, reorder category content. |
| | | 2. | Medical Policy | In Pharmaceuticals, (Therapeutic Medicatins), Sleep Aids, revise to include warning on eszopiclone. |
| | | 3. | Medical Policy | In Item 46. Neurologic, In the dispositions table, change "Dystonia musculorum deformans" to "Dystonia - primary or secondary." |
| 2014 | 05/12/2014 | 1. | Medical Policy | In Acceptable Combinations of Diabetes Medications Chart, revise to add alogliptin (Nesina). |
| 2014 | 05/05/2014 | 1. | Medical Policy | In Decision Considerations, Disease Protocols - Graded Exercise Stress Test Requirements, revise to remove hyperventilation requirement from testing. |
| 2014 | 04/22/2014 | 1. | Administrative | In Pharmaceuticals (Therapeutic Medications) revise Acceptable Combinations of Diabetes Medications to include link to the Pre-Diabetes CACI Worksheet. |

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|------|------------------------------|----|----------------|--|
| 2014 | 04/17/2014 | 1. | Medical Policy | In Pharmaceuticals (Therapeutic Medications) revise to include chart of Acceptable Combinations of Diabetes Medications. |
| | | 2. | Administrative | In Applicant History, Item 3., (Last Name; First Name; Middle Name.), revise to clarify instructions if applicant has no middle name. |
| 2014 | 03/28/2014 | 1. | Administrative | In Disease Protocols, add acronyms to Protocol for Cardiovascular Evaluation (CVE) and Protocol for Evaluation of Coronary Heart Disease (CHD). |
| 2014 | 03/20/2014 | 1. | Medical Policy | In CACI Certification Worksheets, add worksheet for Colitis. Revise Colitis Dispositions Table and Colitis Special Issuance criteria to reflect the change. |
| 2014 | 03/14/2014 | 1. | Medical Policy | In Disease Protocols, Cardiovascular Evaluation, revise to clarify criteria. |
| | | 2. | Medical Policy | In Disease Protocols, Coronary Heart Disease, revise to clarify criteria. |
| | | 3. | Medical Policy | In Disease Protocols, Graded Exercise Stress Test Requirements, revise to clarify criteria. |
| 2014 | 03/14/2014 | 1. | Medical Policy | In Exam Techniques, III. Aerospace Medical Disposition, revise to clarify the definition of Conditions AMEs Can Issue (CACI). |
| 2014 | 03/10/14 | 1. | Medical Policy | In Item 47. Psychiatric, Use of Antidepressant Medications, revise policy to change the required time applicant must be on a stable dose of the SSRI from 12 months to 6 months. |
| 2014 | 02/05/2014 | 1. | Medical Policy | In Pharmaceuticals (Therapeutic Medications) – Anticoagulants and in Disease Protocols – Thromboembolic Disease, revise to policy include required wait time after initial start of warfarin |

| | | | | (Coumadin) treatment. |
|------|------------|----|--------------------|---|
| 2014 | 01/16/2014 | 1. | Medical Policy | In Equipment Requirements and Item 52. Color Vision, |
| | | | | remove APT-5 Color Vision Tester. |
| | | 2 | Medical Policy | In Pharmaceuticals |
| | | - | inical call i oney | (Therapeutic Medications), add |
| | | | | new "Do Not Issue-Do Not Fly" |
| | | | | section. |
| 2014 | 01/01/2014 | 1. | Administrative | Revise cover page to reflect the |
| | | | | current calendar year. |
| 2013 | 12/23/2013 | 1. | Administrative | In Pharmaceutical (Therapeutic |
| | | | | Medications), Sleep Aids, add a |
| | | | | link for FDA studies. |
| 2013 | 12/12/2013 | 1. | Medical Policy | In Pharmaceutical (Therapeutic |
| | | | | Medications), Acne |
| | | | | Medications, revise policy to |
| | | | | include language on use of |
| | | | | topical acne medications, such |
| | | | | as Retin A, and oral antibiotics, |
| | | | | such as tretracycline. |
| 2013 | 12/06/2013 | 1. | Administrative | In AASI, change title of Deep |
| | | | | Venous Thrombosis/Pulmonary |
| | | | | Embolism - Warfarin |
| | | | | (Coumadin) Therapy to "Deep |
| | | | | Venous Thrombosis (DVT), |
| | | | | Pulmonary Embolism (PE), |
| | | | | and/ or Hypercoagulopathies". |
| | | | | Title of block on the Certificate |
| 0010 | | | | Issuance sheet also changed. |
| 2013 | 11/06/2013 | 1. | Medical Policy | In Item 46. Neurologic, revise |
| | | | | the Cerebrovascular Disease |
| | | | | dispositions table to expand on |
| | | | | criteria for Transient Ischemic |
| | | | | Attack, Completed Stroke |
| | | | | (ischemic or hemorrhagic), and Subdural, Epidural or |
| | | | | · · · |
| 2013 | 9/27/2013 | 1. | Medical Policy | Subarachnoid Hemorrhage. In General Information, |
| 2013 | 3/21/2013 | 1. | MEDICAL FUNCY | Equipment Requirements – |
| | | | | Color Vision Test Apparatus, |
| | | | | remove Titmus II Vision Tester |
| | | | | (Model Nos. TII and TIIS) from |
| | | | | the list of approved testers. |
| 2013 | 9/27/2013 | 1. | Medical Policy | In Disease Protocols, revise |
| 2010 | | •• | modical i onoy | Hypertension Worksheet to |
| | | | | clarify criteria whereby AME |
| | | | | can assess current status. |
| | + | | | |
| 2013 | 9/17/2013 | 1. | Medical Policy | In Disease Protocols, add new |

| r | | | | |
|------|-----------|----|----------------|--|
| | | | | [GDS]) to evaluation sheets for Attention Deficit/Hyperactivity Disorder; Depression Treated with SSRI Medications; Neurocognitive Impairment; and Psychiatric and Neuropsychological Evaluations for Substance Abuse/Dependence. |
| | | 2. | Medical Policy | In Disease Protocols listing, rename "Substances of Dependence/Abuse (Drugs and Alcohol)" to "Psychiatric – Substances of Dependence/Abuse (Drugs and Alcohol." |
| | | 3. | Administrative | Add updated link for the International Standards on Personnel Licensing. |
| 2013 | 8/16/2013 | 1. | Medical Policy | In Pharmaceuticals, Malaria Medications, update policy information regarding the use of mefloquine. |
| | | 2. | Medical Policy | In Special Issuances, update policy for prednisone usage for treatment of Asthma, Arthritis, Colitis, and/ or Chronic Obstructive Pulmonary Disease. |
| | | 3. | Medical Policy | In Special Issuances, revise introductory language to clarify requirements for deferral. Specifically if "the applicant does not meet the issue criteria in the Aerospace Medicine Dispositions Tables or the Certification Worksheets." |
| 2013 | 8/14/2013 | 1, | Medical Policy | In Item 41. G-U System – Neoplastic Disorders, revise dispositions table language from "Any other G-U Neoplastic Disorder" to "All G-U cancers when treatment was completed less than 5 years ago or for which there is a history of metastatic disease." Also, direct Examiners to reference the specific cancers in this category for requirements and dispositions. |

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|------|------------|----|---|--|
| 2013 | 7/30/2013 | 1. | Medical Policy | In Pharmaceuticals, add information page on Sleep Aids, including wait times. |
| | | 2. | Errata | In Examination Techniques, Item 36. Heart – Syncope, correct typographical error: bilatcarotid Ultrasound to bilateral carotid Ultrasound. |
| 2013 | 6/19/2013 | 1. | Medical Policy | In Item 41. G-U System – Neoplastic Disorders, revise dispositions table to include criteria for "All G-U Cancers when treatment was completed more than 5 years ago and there is no history of metastatic disease." |
| 2013 | 06/13/2013 | 1. | Medical Policy | Revise language in all Certification Worksheets: (Arthritis, Asthma, Renal Cancer, Glaucoma, Hepatitis C, Hypertension, Hypothyroidism, Migraine – Chronic Headaches, and Pre Diabetes) to add "Applicants for first- or second- class must provide this information annually; applicants for third-class must provide the information with each required exam." |
| | | 2. | Medical Policy | In Item 35. Lungs and Chest, revise Asthma Worksheet to include "FEV1, FVC, and FEV1/FVC are all equal to or greater than 80% predicted before bronchodilators" and Pulmonary Function Test "is not required if the only treatment is PRN use on one or two days a week of a short-acting beta agonist (e.g. albuterol)." |
| | | 3. | Administrative | In Item 43. Spine and Other Musculoskeletal, revise Arthritis Worksheet to include link to steroid conversion calculator. |
| | | 4. | Medical policy and Administrative | In Item 41. G-U System – Neoplastic Disorders, revise Renal Cancer Worksheet to state "ECOG performance status or equivalent is 0." Include link to ECOG |

| | | | | Derfermenne Ctatue definitione |
|------|------------|-----|------------------|------------------------------------|
| | | | | Performance Status definitions. |
| | | 5. | Medical Policy | In Item 48. General Systemic – |
| | | | | Pre-Diabetes, Diabetes, |
| | | | | Metabolic Syndrome, and/or |
| | | | | Insulin Resistance, revise |
| | | | | dispositions table to include |
| | | | | Polycystic Ovary Syndrome. |
| | | 6. | Medical Policy | In Item 48. General Systemic - |
| | | • | | Pre-Diabetes, Diabetes, |
| | | | | Metabolic Syndrome, and/or |
| | | | | Insulin Resistance, revise Pre- |
| | | | | Diabetes Worksheet to include |
| | | | | |
| 0010 | 00/44/0040 | 4 | Ma dia al Dalian | Polycystic Ovary Syndrome. |
| 2013 | 06/11/2013 | 1. | Medical Policy | In Dispositions Table, Item 46. |
| | | | | Neurologic, revise language to |
| | | | | reflect that "Any loss of |
| | | | | consciousness, alteration of |
| | | | | consciousness, or amnesia, |
| | | | | regardless of duration" requires |
| | | | | FAA Decision. |
| 2013 | 06/04/2013 | 1. | Medical Policy | In Dispositions Table, Item 38. |
| | | | | Abdomen and Viscera, |
| | | | | Hepatitis C, revise to show that |
| | | | | if disease is resolved without |
| | | | | sequela and need for |
| | | | | medications, the AME can |
| | | | | issue. |
| 2013 | 05/15/2013 | 1. | Medical Policy | In Dispositions Table, Item 43. |
| 2010 | 00/10/2010 | | Medical Folloy | Arthritis – add row for |
| | | | | certification criteria for |
| | | | | Osteoarthritis and variants on |
| | | | | |
| | | | | PRN NSAIDS only. |
| | | 2. | Medical Policy | In Dispositions Table, Item 55. |
| | | | | Blood Pressure, Hypertension |
| | | | | Worksheet, revise to "treating |
| | | | | physician or AME findsetc." |
| 2013 | 05/08/2013 | 1. | Administrative | In Archives and Modifications, |
| | | | | change title to "Archives and |
| | | | | Updates." |
| | | 2. | Administrative | In AME Assisted Special |
| | | | | Issuances (AASI), revise |
| | | | | language on the introductory |
| | | | | page and all 25 AASI pages |
| | | | | from "If this is a first time |
| | | | | issuance of an Authorization for |
| | | | | |
| | | | | the above disease/condition" |
| | | | | to "If this is a first-time |
| | | | | application for an AASI for the |
| | 0.4/0.0/11 | · . | | above disease/condition" |
| 2013 | 04/09/13 | 1. | Medical Policy | In Examination Techniques, |

| | |
|-------|--|
| | Item 35. Lungs and Chest, |
| | revise dispositions table for |
| | Asthma. Introduce Asthma |
| | Worksheet with certification |
| | criteria under which the AME |
| | |
| | can regular issue. |
| 2. | In Examination Techniques, |
| | Item 43. Spine and Other |
| | Musculoskeletal, revise |
| | dispositions table for Arthritis. |
| | Introduce Arthritis Worksheet |
| | |
| | with certification criteria under |
| | which the AME can regular |
| | issue. |
| 3. | In Examination Techniques, |
| | Item 41. G-U System – |
| | Neoplastic Disorders, revise |
| | dispositions table for Prostatic, |
| | - |
| | Renal, and Testicular |
| | Carcinomas. Introduce Renal |
| | Cancer Worksheet with |
| | certification criteria under which |
| | the AME can regular issue. |
| 4. | In Examination Techniques, |
| | Items 31 - 34. Eye, revise |
| | - · · |
| | Examination techniques and |
| | dispositions table for |
| | Glaucoma. Introduce |
| | Glaucoma Worksheet with |
| | certification criteria under which |
| | the AME can regular issue. |
| 5. | In Examination Techniques, |
| 0. | Items 38. Abdomen and |
| | |
| | Viscera, revise dispositions |
| | table for Hepatitis C - Chronic. |
| | Introduce Hepatitis C – Chronic |
| | Worksheet with certification |
| | criteria under which the AME |
| | can regular issue. |
| 6. | In Examination Techniques, |
| 0. | • |
| | Items 55. Blood Pressure, |
| | revise dispositions table for |
| | Hypertension. Introduce |
| | Hypertension Worksheet with |
| | certification criteria under which |
| | the AME can regular issue. |
| 7. | In Disease Protocols, delete |
| · · · | |
| | Hypertension Protocol. |
| 8. | In Examination Techniques, Items 48. General Systemic – |
| | |

| | Endocrine Disorders, revise |
|-----|---|
| | dispositions table for |
| | Hypothyroidism. Introduce |
| | Hypothyroidism Worksheet with |
| | certification criteria under which |
| | |
| | the AME can regular issue. |
| 9. | In Examination Techniques, |
| | Items 46. Neurologic – |
| | Headaches, revise dispositions |
| | table for Migraine and Chronic |
| | Headache. Introduce Migraine |
| | and Chronic Headache |
| | |
| | Worksheet with certification |
| | criteria under which the AME |
| | can regular issue. |
| 10. | In Examination Techniques, |
| | Items 48. General Systemic – |
| | Diabetes, Metabolic Syndrome, |
| | - |
| | and/or Insulin Resistance, |
| | revise dispositions table to add |
| | Pre-Diabetes. Introduce Pre- |
| | Diabetes Worksheet with |
| | certification criteria under which |
| | the AME can regular issue. |
| 11. | In Disease Protocols, delete |
| | protocol for Medication |
| | • |
| | Controlled Metabolic Syndrome |
| | (Glucose Intolerance, Impaired |
| | Glucose Tolerance, Impaired |
| | Fasting Glucose, Insulin |
| | Resistance, and Pre-Diabetes) |
| 12. | In Disease Protocols, revise |
| | Diet Controlled Diabetes |
| | Mellitus and Metabolic |
| | |
| | Syndrome. Change title to |
| | Diabetes Mellitus – Diet |
| | Controlled. |
| 13. | In Disease Protocols, revise |
| | title of Medication Controlled |
| | Diabetes Mellitus - Type II. |
| | , |
| | Change name to Diabetes |
| | Mellitus Type II – Medication |
| | Controlled (Non Insulin). Also, |
| | in Pharmaceuticals section, |
| | revise name of protocol link to |
| | reflect title change. |
| 14. | In Disease Protocols, revise |
| 4. | - |
| | title of Insulin Treated Diabetes |
| | |
| | Mellitus - Type I or Type II. Change title to Diabetes |

| | I | | | |
|------|----------|-----|------------------|----------------------------------|
| | | | | Mellitus Type I or Type II – |
| | | | | Insulin Treated. Also, in |
| | | | | Pharmaceuticals section, revise |
| | | | | name of protocol link to reflect |
| | | | | title change. |
| | | 15. | | In Pharmaceuticals, |
| | | | | Antihypertensives, change |
| | | | | name of protocol link from |
| | | | | Hypertension Protocol to |
| | | | | Hypertension Worksheet. |
| | | 16. | | In AME Assisted Special |
| | | | | Issuance (AASI), delete AASI |
| | | | | for Metabolic Syndrome, |
| | | | | Glucose Intolerance, Impaired |
| | | | | Glucose Tolerance, Impaired |
| | | | | Fasting Glucose, Insulin |
| | | | | Resistance, and Pre-Diabetes. |
| 2013 | 03/05/13 | 1. | Medical Policy | In Disease Protocols, add |
| | | | | Specifications for |
| | | | | Neuropsychological |
| | | | | Evaluations for ADHD/ADD. |
| | | 2. | Medical Policy | In Disease Protocols, add |
| | | 2. | weater oney | Specifications for |
| | | | | Neuropsychological |
| | | | | Evaluations for Treatment with |
| | | | | SSRI Medications. |
| | | 3. | Medical Policy | In Disease Protocols, add |
| | | 0. | We diddi i olicy | Specifications for |
| | | | | Neuropsychological |
| | | | | Evaluations for Potential |
| | | | | Neurocognitive Impairment. |
| | | 4. | Medical Policy | In Disease Protocols, add |
| | | т. | Wiedical Folicy | Specifications for Psychiatric |
| | | | | Evaluations. |
| | | 5. | Medical Policy | In Disease Protocols, add |
| | | 0. | We diddi i olicy | Specifications for Psychiatric |
| | | | | and Psychological Evaluations. |
| | | 6. | Medical Policy | In Disease Protocols, add |
| | | 0. | | Specifications for Psychiatric |
| | | | | and Neuropsychiatric |
| | | | | Evaluations for Substance |
| | | | | Abuse/Dependence. |
| | | 7. | Medical Policy | In Item 47. Psychiatric |
| | | | incuration oncy | Conditions, revise table to |
| | | | | include reference to new |
| | | | | Psychiatric Specification |
| | | | | Sheets. |
| | | 8. | Medical Policy | In Item 47. Psychiatric |
| | | 0. | | Conditions, revise SSRI |
| | | | | Specifications Sheet to remove |
| | | | | Specifications Sheet to remove |

| | | | | Federal Register link and |
|------|----------|----|---------------------------------------|-----------------------------------|
| | | | | include link to Specifications |
| | | | | for Neuropsychological |
| | | | | Evaluations for Treatment with |
| | | | | SSRI Medications. |
| 2013 | 02/15/13 | 1. | Medical Policy | In Item 47. Psychiatric |
| | | | | Conditions, revise Table of |
| | | | | Medical Dispositions to include |
| | | | | additional evaluation guidance. |
| | | 2. | Medical Policy | In Item 52. Color Vision, revise |
| | | | , , , , , , , , , , , , , , , , , , , | to state that use of computer |
| | | | | applications, downloaded |
| | | | | versions, or printed versions of |
| | | | | color vision tests are prohibited |
| | | | | for evaluation. |
| | | 3. | Medical Policy | In Disease Protocols, Disease |
| | | 5. | Medical Folicy | Protocols - Human |
| | | | | |
| | | | | Immunodeficiency Virus (HIV), |
| | | | | revise to include statement on |
| | | | | status report requirements after |
| | | | | the first two years of SI/SC. |
| 2013 | 01/03/13 | 1. | Administrative | Revise cover page to reflect the |
| | | | | current calendar year. |
| 2012 | 12/14/12 | 1. | Medical Policy | In Item 47. Psychiatric |
| | | | | Conditions, revise SSRI |
| | | | | Specifications sheet to change |
| | | | | "neurocognitive testing" to |
| | | | | "CogScreen-AE testing." |
| 2012 | 12/06/12 | 1. | Medical Policy | In Item 47. Psychiatric |
| | | | | Conditions, revise SSRI |
| | | | | Decision Path I chart to change |
| | | | | application wait time from 90 |
| | | | | days to 60 days. Also, revise |
| | | | | SSRI Follow Up Path chart to |
| | | | | change "neurocognitive testing" |
| | | | | to "CogScreen-AE testing." |
| 2012 | 10/24/12 | 1. | Medical Policy | In Disease Protocols – |
| 2012 | 10/24/12 | 1. | INICULAI FUILY | Coronary Heart Disease, |
| | | | | remove reference to FAA Form |
| | | | | |
| | | | | 8500-20 Medical Exemption |
| | | | | Petition. Form 8500-20 is |
| | 4.0/0// | | | cancelled. |
| 2012 | 10/01/12 | 1. | Administrative | Revise language throughout |
| | | | | the AME Guide to reflect |
| | | | | procedural changes as dictated |
| | | | | by MedXPress, the mandatory |
| | | | | electronic application system |
| | | | | for airmen. (Effective October |
| | | | | 1, 2012) |
| | | | | |

| | | 2. | Modical Policy | In Special Issuances, Atrial |
|------|----------|----|----------------|--|
| | | | Medical Policy | In Special Issuances, Atrial Fibrillation, revise to specify INR requirement for airmen being treated with warfarin (Coumadin). |
| 2012 | 08/09/12 | 1. | Errata | In Examination Techniques, Item 52. Color Vision; revise title of chart for Acceptable Test Instruments for Color Vision Screening of ATCS (FAA Employee 2151 Series and Contract) to "Acceptable Test Instruments for Color Vision Screening of ATCS (FAA Employee 2151 Series and Contract Tower ATCSs.)" |
| 2012 | 07/20/12 | 1. | Medical Policy | In accordance with the direct final rule (14 CFR Part 67 [Docket No. FAA-2012-0056; Amdt. No 67-21]),"Removal of the Requirement for Individuals Granted the Special Issuance of a Medical Certificate To Carry Their Letter of Authorization While Exercising Pilot Privileges," references to the requirement to carry an LOA were removed from the General Information and Special Issuances sections of the Guide. |
| 2012 | 07/03/12 | 1. | Medical Policy | In Item 41. G-U System, remove information on "Contraceptives and Hormone Replacement Therapy." Move this information to a new page of the same title within the Pharmaceuticals section. |
| 2012 | 06/30/12 | 1. | Medical Policy | In Item 41. G-U System, create new section for pregnancy. |
| 2012 | 06/07/12 | 1. | Medical Policy | In Item 41. G-U System, revise guidance on Gender Identity Disorder to specify requirements for current status report, psychiatric and/or psychological evaluations, and surgery follow-up reports. |
| 2012 | 05/25/12 | 1. | Medical Policy | In Item 52. Color Vision, add chart for criteria and acceptable tests for Air Traffic Controllers |

| | г г | | | (EAA ampleurae 2450 series |
|------|----------|----|---------------------------------------|--|
| | | | | (FAA employee 2152 series |
| 0010 | 04/04/40 | 4 | Markart Dalls | and Contract Tower ATCS). |
| 2012 | 01/31/12 | 1. | Medical Policy | In Decision Considerations. |
| | | | | Aerospace Medical |
| | | | | Dispositions, Item 45. |
| | | | | Lymphatics, revise title from |
| | | | | 'Hodgkin's Disease – |
| | | | | Lymphoma" to "Lymphoma and |
| | | | | Hodgkin's Disease." |
| 2012 | 01/26/12 | 1. | Medical Policy | In Examination Techniques. |
| | | | | Item 48. Hypothyroidism, add |
| | | | | note that AMES may call FAA |
| | | | | for verbal clearance if airman |
| | | | | presents current lab reports. |
| | | 2. | Medical Policy | In Pharmaceuticals, Allergy – |
| | | | | Desensitization Injections, |
| | | | | Change the title and references |
| | | | | to Allergy – Immunotherapy. |
| | | | | Add note stating that sublingual |
| | | | | immunotherapy (SLIT) is not |
| | | | | acceptable. |
| | | 3. | Medical Policy | In Examination Techniques, |
| | | | | Item 36. Heart, remove |
| | | | | requirement for reporting serum |
| | | | | potassium values if the airman |
| | | | | is taking diuretics. |
| | | 4. | Medical Policy | In Protocol for Evaluation of |
| | | | · · · · · · · · · · · · · · · · · · · | Hypertension, remove |
| | | | | requirement for reporting serum |
| | | | | potassium if the airman is |
| | | | | taking diuretics. |
| | | 5. | Medical Policy | In Item 36. Heart – Dispositions |
| | | 0. | | Table, Coronary Artery |
| | | | | Disease, revise table to clarify |
| | | | | evaluation data required for |
| | | | | third class. |
| 2012 | 01/03/12 | 1. | Administrative | Revise cover page to reflect the |
| 2012 | 01/00/12 | | | current calendar year. |
| | | 2. | Medical Policy | In General Information, Medical |
| | | ۷. | | Certificates – AME Completion, |
| | | | | revise language to clarify |
| | | | | signature requirements. |
| 2011 | 12/13/11 | 1. | Medical Policy | In Examination Techniques, |
| 2011 | 12/13/11 | 1. | MEDICAL FUNCY | Item 52. Color Vision, revise to |
| | | | | |
| | | | | include Color Vision Testing Flowchart. |
| 2014 | 12/01/11 | 1. | Modical Daliay | In Pharmaceuticals |
| 2011 | 12/01/11 | 1. | Medical Policy | |
| | | | | (Therapeutic Medications) |
| | | | | section, change title of |
| | | | | Antihistaminic and |

| | 1 | | | |
|------|----------|----|---------------------------------------|------------------------------------|
| | | | | Desensitization Injections to |
| | | | | include the word "Allergy." |
| | | | | Also, change title of Diabetes |
| | | | | Mellitus – Type II Medication |
| | | | | Controlled to include "(Non |
| | | | | Insulin)." This title was also |
| | | | | changed in the AASI. |
| | | 2. | Medical Policy | In Pharmaceuticals |
| | | | · · · · · · · · · · · · · · · · · · · | (Therapeutic Medications) Acne |
| | | | | Medications, revise page |
| | | | | format to clarify policy. |
| 2011 | 11/16/11 | 1. | Medical Policy | In General Information, |
| 2011 | 11/10/11 | 1. | Medical Folicy | Disposition of Applications and |
| | | | | |
| | | | | Medical Examinations, Clarify |
| | | | | to indicate that Student Pilot |
| | | | | Applications and Examinations |
| | | | | must be transmitted to AMCD |
| | | | . | within 7 days. |
| 2011 | 11/01/11 | 1. | Medical Policy | In Pharmaceuticals – Insulin, |
| | | | | revise to clarify guidance on |
| | | | | medication combinations. |
| 2011 | 10/24/11 | 1. | Administrative | In Aerospace Medical |
| | | | | Dispositions, Item 49. Hearing, |
| | | | | clarify guidance on hearing |
| | | | | aids. |
| 2011 | 09/15/11 | 1. | Medical Policy | In Examination Techniques, |
| | | | | Item 31 – 34. Eye - |
| | | | | Orthokeratology, revise to |
| | | | | clarify policy. |
| | | 2. | Medical Policy | In Aerospace Medical |
| | | | , | Dispositions, Item 31. Eyes – |
| | | | | General, revise to include |
| | | | | information on Keratoconus. |
| | | 3. | Medical Policy | In General Information, |
| | | 5. | | Equipment Requirements, |
| | | | | revise to include equipment to |
| | | | | |
| 2011 | 00/12/11 | 1 | Madiaal Dalias | measure height and weight. |
| 2011 | 09/12/11 | 1. | Medical Policy | In Aerospace Medical |
| | | | | Dispositions, Item 47., |
| | | | | Psychiatric Conditions – Use of |
| | | | | Antidepressants, include SSRI |
| | | | | Specification Sheet for |
| | | | | guidance. |
| | | 2. | Medical Policy | In Pharmaceuticals, |
| | | | | Antidepressants, revise to |
| | | | | clarify medical history, protocol, |
| | | | | and pharmaceutical |
| | | | | considerations. |
| | | 3. | Administrative | In Table of Contents, renumber |
| | | | | entries listed on pages iii and |
| | 1 | | | |

| | | | | iv. |
|------|----------|----|----------------|--|
| 2011 | 08/12/11 | 1. | Medical Policy | In Special Issuances, Third- Class AME Assisted – Valve Replacement, revise to include additional criteria for deferral ("the applicant develops emboli, thrombosis, etc."). |
| | | 2. | Medical Policy | In Special Issuances, AME Assisted – All Classes – Atrial Fibrillation, revise to include additional criteria for deferral ("bleeding that required medical intervention"). |
| | | 3. | Medical Policy | In Special Issuances, AME Assisted – All Classes – Warfarin (Coumadin) Therapy for Deep Venous Thrombosis (DVT), Pulmonary Embolism (PE), and/ or Hypercouagulopathies, revise to include additional criteria for deferral ("bleeding that required medical intervention"). |
| | | 4. | Medical Policy | In Special Issuances, Third- Class AME Assisted – Coronary Heart Disease, revise to include additional criteria for deferral ("bleeding that required medical intervention"). |
| 2011 | 08/09/11 | 1. | Medical Policy | In Disease Protocols, Coronary Heart Disease, correct in item A.1.b., "replacement" to "repair." |
| | | 2. | Administrative | In Pharmaceuticals – Antihypertensive, revise to clarify unacceptable medications. |
| | | 3. | Administrative | In Examination Techniques, Item 36., Heart, revise to clarify unacceptable medications. |
| | | 4. | Administrative | In Aerospace Medical Dispositions, Item 55., revise to clarify blood pressure limits. |
| | | 5. | Administrative | In Aerospace Medical Dispositions, Item 47., Psychiatric Conditions, revise table to include information on depression requiring the use of antidepressant medications. |
| | | 6. | Administrative | In Disease Protocols, |

| | | | | Hypertension, revise to clarify |
|------|----------|----|----------------|---|
| | | | | unacceptable medications. |
| 2011 | 05/25/11 | 1. | Administrative | In Examination Techniques, |
| | | | | Item 47., Psychiatric, revise |
| | | | | SSRI Follow Up Chart to clarify |
| | | | | procedure. |
| 2011 | 05/08/11 | 1. | Administrative | In Pharmaceuticals, reorganize |
| | | | | and clarify the page content for |
| | | | | Acne Medications, Antacids, |
| | | | | Anticoagulants, Antihistaminic, |
| | | | | Antihypertensive, |
| | | | | Desensitization Injections, |
| | | | | Diabetes – Type II Medication |
| | | | | Controlled, Glaucoma |
| | 00/11/11 | | | Medications, and Insulin. |
| 2011 | 03/11/11 | 1. | Medical Policy | In Aerospace Medical |
| | | | | Dispositions, Item 47., Psychiatric Conditions, clarify |
| | | | | |
| | | | | policy verbiage on Bipolar Disorder and Psychosis. |
| 2011 | 03/02/11 | 1. | Medical Policy | In Aerospace Medical |
| 2011 | 00/02/11 | 1. | Medical Folicy | Dispositions, Item 47., |
| | | | | Psychiatric Conditions, add |
| | | | | section titled "Use of |
| | | | | Antidepressant Medication," to |
| | | | | state revised policy on use of |
| | | | | SSRIs. |
| 2011 | 02/23/11 | 1. | Medical Policy | In Aerospace Medical |
| | | | | Dispositions, Item 52., Color |
| | | | | Vision, clarify pass criterion for |
| | | | | OPTEC 900 Vision Tester. |
| 2011 | 02/03/11 | 1. | Medical Policy | In Medical History, Item 18. v., |
| | | | | History of Arrest(s), |
| | | | | Conviction(s), and/ or |
| | | | | Administrative Action(s), |
| | | | | reorder, revise, and clarify |
| 2011 | 01/31/11 | 1. | Errata | deferral and issuance criteria. Revise to correct transposed |
| 2011 | 01/31/11 | 1. | Liidid | words in title: Decision |
| | | | | Considerations, Disease |
| | | | | Protocols – "Graded Exercise |
| | | | | Stress Test – Bundle Branch |
| | | | | Block Requirements." |
| 2011 | 01/07/11 | 1. | Administrative | Revise cover page to reflect |
| | | | | current calendar year. |
| 2010 | 11/23/10 | 1. | Medical Policy | In Exam Techniques, Item 26. |
| | | | | Nose and Item 35. Lungs and |
| | | | | Chest, revise and clarify criteria |
| | | | | for hay fever medications. |
| | | 2. | Medical Policy | In Pharmaceuticals |

| Г Г | | | | (The series Marting (ins.) |
|------|----------|----|----------------|-------------------------------------|
| | | | | (Therapeutic Medications) - |
| | | | | Desensitization Injections, |
| | | | | revise and clarify criteria for hay |
| 0010 | 40/00/40 | | Madia-UD-P- | fever medications. |
| 2010 | 10/29/10 | 1. | Medical Policy | In Aerospace Medical |
| | | | | Dispositions, Item 52. Color |
| | | | | Vision, remove Titmus II Vision |
| | | | | Tester (Model Nos. TII and |
| | | | | TIIS) as an acceptable |
| | | | | substitute for color vision |
| | | | | testing. |
| 2010 | 09/20/10 | 1. | Medical Policy | In AASI Protocol for Arthritis, |
| | | | | change title to "Arthritis and/ or |
| | | | | Psoriasis." Clarify |
| | | | | authorization and deferral |
| | | | | criteria. |
| 2010 | 09/03/10 | 1. | Medical Policy | In Exam Techniques, Item 21- |
| | | | | 22 Height and Weight, add |
| | | | | Body Mass Index Chart and |
| | | | | Formula Table. |
| 2010 | 06/15/10 | 1. | Medical Policy | In Aerospace Medical |
| | | | | Dispositions, Item 48, General |
| | | | | Systemic, clarify disposition for |
| | | | | Hyperthroydism and |
| | | | | Hypothyrodism. First Special |
| | | | | Issuance requires FAA |
| | | | | decision. Guidance for |
| | | | | Followup Special Issuance is |
| | | | | found in AASI Protocol. |
| | | 2. | Administrative | In AASI Protocol for |
| | | | | Hyperthyroidism and Protocol |
| | | | | for Hypothyroidism, clarify |
| | | | | criteria for deferring and |
| | | | | issuing. |
| 2010 | 05/20/10 | 1. | Administrative | In Aerospace Medical |
| | | | | Dispositions, Item 47, |
| | | | | Psychiatric Conditions Table of |
| | | | | Medical Dispositions, clarify |
| | | | | "see below" information in |
| | | | | Evaluation Data column. |
| 2010 | 03/17/10 | 1. | Medical Policy | In Disease Protocols, Binocular |
| | | | | Multifocal and Accommodating |
| | | | | Devices, clarify criteria for |
| | | | | adaptation period before |
| | | | | certification. |
| | | 2. | Medical Policy | In Applicant History, Item 17b, |
| | | | | revise and clarify criteria |
| | | | | regarding use of types of |
| | | | | contact lenses. |
| | | 3. | Medical Policy | In Exam Techniques, Items 31- |

| | | | | 24 Eva Contact Langes |
|------|------------|----|----------------|---|
| | | | | 34 Eye – Contact Lenses, |
| 2010 | 01/20/10 | 1. | Administrative | revise and clarify criteria. |
| 2010 | 01/20/10 | 1. | Administrative | Revise cover page to reflect current calendar year. |
| | | 2. | Medical Policy | In Applicant History, Item 18 |
| | | ۷. | Weulcal Folicy | Medical History, v. History of |
| | | | | Arrest(s), Conviction(s), and/or |
| | | | | Administrative Action(s), revise |
| | | | | and clarify deferral and |
| | | | | issuance criteria. |
| 2009 | 12/08/09 | 1. | Medical Policy | In Examination Techniques, |
| 2009 | 12/00/09 | 1. | Medical Folicy | Item 52. Color Vision, remove |
| | | | | |
| | | | | APT-5 as an acceptable color |
| 2000 | 10/00/00 | 4 | Madical Daliay | vision tester. |
| 2009 | 10/22/09 | 1. | Medical Policy | In Examination Techniques, |
| | | | | Item 52. Color Vision, add note |
| | | | | to Agency-Designated AMEs: |
| | | | | "Not all tests approved for pilots |
| | | | | are acceptable for FAA ATCSs. |
| 2000 | 10/16/00 | 1 | Madical Daliay | Contact RFS for current list." |
| 2009 | 10/16/09 | 1. | Medical Policy | In Special Issuance, Diabetes |
| | | | | Mellitus – Type II, Medication |
| | | | | Controlled, revise to reflect |
| | | | | further criteria required for AME |
| | | | | re-issuance: current status |
| | | | | report from physician treating |
| | | | | diabetes to include any history |
| | | | | of hypoglycemic events and |
| | | | | any cardiovascular, renal, |
| | | | | neurologic or opththalmologic |
| | | | | complications; and HgA1c level |
| | | | | performed within the last 30 |
| | 00/00/0000 | | | days. |
| 2009 | 09/30/2009 | 1. | Medical Policy | In Disease Protocols, Diabetes |
| | | | | Mellitus – Type I or Type II, |
| | | | | Insulin Treated, add note to |
| | | | | indicate that insulin pumps are |
| | | | | acceptable. |
| | | 2. | Medical Policy | In Disease Protocols, revise |
| | | | | main listing to reflect addition of |
| | | | | "Diabetes Mellitus and |
| | | | | Metabolic Syndrome – Diet |
| | | | | Controlled" and "Metabolic |
| | | | | Syndrome (Glucose |
| | | | | Intolerance, Impaired Glucose |
| | | | | tolerance, Impaired Fasting |
| | | | | Glucose, Insulin Resistance, |
| | | | | and Pre-Diabetes) - Medication |
| | | | | Controlled." |
| | | 3. | Medical Policy | In Aerospace Medical |

| | | | | Dispositions, Item 48. General Systemic – Diabetes, Metabolic Syndrome, and/or Insulin Resistance, revise table to reflect addition of "Diabetes Mellitus and Metabolic Syndrome – Diet Controlled" and "Metabolic Syndrome (Glucose Intolerance, Impaired Glucose tolerance, Impaired Fasting Glucose, Insulin Resistance, and Pre-Diabetes) - Medication Controlled." |
|------|------------|----|----------------|---|
| | | 4. | Medical Policy | In Disease Protocols, add new protocol outlining Metabolic Syndrome, Medication Controlled. |
| | | 5. | Medical Policy | In Disease Protocols, Diabetes Mellitus – Diet Controlled, revise to reflect Diabetes Mellitus and Metabolic Syndrome (Glucose Intolerance, Impaired Glucose tolerance, Impaired Fasting Glucose, Insulin Resistance, and Pre-Diabetes) - Diet Controlled |
| 2009 | 09/21/2009 | 1. | Errata | In Disease Protocols, Substances of Dependence/Abuse (Drugs and Alcohol), change "personnel statement" to "personal statement." |
| | | 2. | Medical Policy | In Special Issuance, Colon Cancer; Chronic Lymphocytic Leukemia; Diabetes Mellitus – Type II, Medication Controlled; and Lymphoma and Hodgkin's Disease, add if "Any new treatment is initiated" – to criteria for deferment to AMCD or Region. |
| | | 3. | Medical Policy | In Aerospace Medical Dispositions, Item 48. General Systemic, Diabetes – change title to "Diabetes, Metabolic Syndrome, and/or Insulin Resistance." Also add new table entry to reflect criteria for "Metabolic Syndrome or Insulin |

| | | | | Resistance." |
|------|---------------|-----|------------------|----------------------------------|
| | | 4. | Medical Policy | In AME Assisted Special |
| | | 4. | Medical Folicy | • |
| | | | | Issuance, All Classes – added |
| | | | | entry and criteria for Metabolic |
| | | | | Syndrome (Glucose |
| | | | | Intolerance, Impaired Glucose |
| | | | | Tolerance, Impaired Fasting |
| | | | | Glucose, Insulin Resistance, |
| | | | | and Pre-Diabetes). Also added |
| | | | | entry on AASI Certificate |
| | | | | Issuance sheet. |
| | | 5. | Administrative | In General Information, Who |
| | | | | May Be Certified, b. Language |
| | | | | Requirements – added |
| | | | | information to clarify guidance |
| | | | | on certification and reporting |
| | | | | |
| 2009 | 07/30/2009 | 1. | Medical Policy | process. |
| 2009 | 07/30/2009 | 1. | iviedical Policy | In Pharmaceuticals, Acne |
| | | | | Medications, add language to |
| | | | | further clarify instructions for |
| | 0=/00/00 | · · | | deferral and restrictions. |
| 2009 | 07/09/2009 | 1. | Medical Policy | In Pharmaceuticals, Diabetes |
| | | | | Mellitus – Type II, Medication |
| | | | | Controlled, revise to remove |
| | | | | amlynomimetics from allowable |
| | | | | combinations. |
| | | 2. | Medical Policy | In AASI, Diabetes Mellitus – |
| | | | | Type II, Medication Controlled, |
| | | | | revise criteria for deferring to |
| | | | | AMCD or region. |
| 2009 | 05/13/2009 | 1. | Medical Policy | In General Information, |
| | | | , | Equipment Requirements and |
| | | | | Examination Equipment and |
| | | | | Techniques, Item 52. Color |
| | | | | Vision, add OPTEC 2500 as |
| | | | | acceptable vision testing |
| | | | | substitute. |
| 2009 | 04/30/2009 | 1. | Errata | In Examination Techniques, |
| 2009 | 04/30/2009 | 1. | Lilala | • |
| | | | | Item 31-34. Eye, correct |
| | | | | typographical error in form |
| | | | | number. Revised to reflect |
| | 0.4/0.4/20005 | | | "8500-7." |
| 2009 | 04/24/2009 | 1. | Medical Policy | In AASI, Diabetes Mellitus – |
| | | | | Type II, Medication Controlled; |
| | | | | and Pharmaceuticals, Diabetes |
| | | | | Mellitus - Type II, Medication |
| | | | | Controlled - revise to clarify |
| | | | | criteria for deferring to AMCD |
| | | | | or region also to clarify |
| | | | | allowable medication |
| | | | | |

| | | | | combinations. |
|------|------------|----|----------------|--|
| 2009 | 02/04/2009 | 1. | Administrative | Revise cover page to reflect current calendar year. |
| 2008 | 12/11/2008 | 1. | Medical Policy | In Examination Techniques, Item 52. Color Vision, revise language to specify that AME- administered aviation Signal Light Gun test is prohibited. |
| 2008 | 10/30/2008 | 1. | Errata | In Examination Techniques and Aerospace Medical Dispositions, Item 52. Color vision, revise to list correct testing plates for Richmond HRR, 4 th Edition. |
| 2008 | 10/10/2008 | 1. | Administrative | In General Information, create new section 12. "Medical Certificates – AME Completion." |
| | | 2. | Administrative | In Table Of Contents, General Information, adjust and renumber listings to reflect inclusion of Medical Certificates – AME Completion. |
| | | 3. | Medical Policy | In Examination Techniques, Item 52., Color Vision, add new vision tester. |
| | | 4. | Medical Policy | In Aerospace Medical Disposition, Item 52. Color Vision, revise section A., All Classes, to include standard for new vision tester. |
| 2008 | 09/17/2008 | 1. | Medical Policy | Change Applicant History, 18. v. Conviction and/or Administrative Action History to "History of Arrest(s), Conviction(s), and/or Administrative Action(s). Revise language within 18. v. to include reference to arrests. |
| | | 2. | Medical Policy | Revise Applicant History to create a new section, 18.y. Medical Disability Benefits. |
| | | 3. | Medical Policy | Revise Entire Guide to replace any usage of term "Urinalysis" with "Urine Test(s)." |
| 2008 | 09/05/2008 | 1. | Administrative | Change cover page to remove "Version V" title. Change title to reflect current calendar year. |
| | | 2. | Medical Policy | In General Information, |

| | 1 | | | |
|----|------------|----|----------------------------------|---|
| | | | | Equipment Requirements, and in Examination Techniques Items 50, 51, and 54, revise acceptable vision testing equipment requirements. |
| V. | 07/31/2008 | 3. | Medical Policy Medical Policy | In Aerospace Medical Dispositions, Item 52., Color Vision, revise to provide guidance on Specialized Operational Medical Tests: the Operational Color Vision Test and the Medical Flight Test. Also, update list of acceptable and unacceptable color vision testing equipment. In General Information, Equipment Requirements, and in Examination Techniques |
| | | | | (Items 50-52 and 54), revise acceptable vision testing equipment. |
| V. | 07/16/2008 | 1. | Medical Policy | In General Information, Validity of Medical Certificates, revise third-class duration standards for airmen under age 40. |
| | | 2. | Medical Policy | In General Information, Requests for Assistance, revise to remove references to international and military examiners. |
| | | 3. | Administrative | In General Information, Classes of Medical Certificates, revise to clarify "flying activities" to "privileges." |
| | | 4. | Medical Policy | In Special Issuances, revise to include language requiring airman to carry Authorization when exercising pilot privileges. |
| | | 5 | Medical Policy | In Applicant History, Guidance for Positive Identification of Airmen, revise to include link to 14 CFR §67.4. Applicants must show proof of age and identity. |
| V. | 04/1/2008 | 1. | Administrative | In General Information, Who May Be Certified, add guidance on ICAO standard for English Proficiency, Operational Level 4. |
| | | 2. | Medical Policy | In General information, Equipment Requirements, |

| | | | | · · · · · · · · · · · · · · · · · · · |
|---------|------------|----|----------------|---------------------------------------|
| | | | | revise list of acceptable |
| | | | | equipment, particularly |
| | | | | acceptable substitute |
| | | | | equipment for vision testing. |
| | | 3. | Medical Policy | In Exam Techniques, Item 50, |
| | | | | Distant Vision, revise |
| | | | | equipment list of acceptable |
| | | | | substitutes. |
| | | 4. | Medical Policy | In Exam Techniques, Item 51. |
| | | | | Near and Intermediate Vision, |
| | | | | revise equipment table of |
| | | | | acceptable substitutes. |
| | | 5. | Medical Policy | In Exam Techniques, Item 54. |
| | | | | Heterophoria, revise equipment |
| | | | | table of acceptable substitutes. |
| V. | 02/01/2008 | 1. | Medical Policy | In Exam Techniques, Item. 52. |
| | | | | Color Vision, revise Section E., |
| | | | | which clarifies unacceptable |
| | | | | tests. |
| V. | 01/11/2008 | 1. | Medical Policy | In AME Assisted Special |
| | | | | Issuance (AASI), add section |
| | | | | on Warfarin (Coumadin) |
| | | | | Therapy for Deep Venous |
| | | | | Thrombosis, Pulmonary |
| | | | | Embolism, and/ or |
| | | | | Hypercoagulopathies. |
| | | 2. | Medical Policy | Revise AASI coversheet to |
| | | | | include box for Warfarin |
| | | | | (Coumadin) Therapy for Deep |
| | | | | Venous Thrombosis, |
| | | | | Pulmonary Embolism, and/ or |
| | | | | Hypercoagulopathies. |
| ۷. | 11/26/2007 | 1. | Administrative | In General Information, Validity |
| | | | | of Medical Certificates, delete |
| | | | | note for "Flight outside the |
| | | | | airspace |
| | | | | of the United States of |
| | | | | America." |
| | | 2. | Administrative | In Disease Protocols, |
| | | | | Conductive Keratoplasty (CK), |
| | | | | revise description of CK |
| | | | | procedure. |
| | | 3. | Errata | In Aerospace Medical |
| | | | | Dispositions, Item 31. Eye, |
| | | | | correct typographical error. |
| | | 4. | Medical Policy | In Pharmaceuticals, add |
| | | | | "Malaria Medications." |
| ۷. | 11/26/2007 | 5. | Medical Policy | In Exam Techniques, Item |
| | | | | 51. Near and Intermediate |
| | | | | vision, add Keystone |

| | | Orthoscope and Keystone Telebinocular. |
|----|----------------|--|
| 6. | Administrative | In Airman Certification Forms, add note regarding International Standards on Personnel Licensing. |
| 7. | Administrative | In General Information, Equipment Requirements, add note regarding the possession and maintenance of equipment. |
| 8. | Administrative | In General Information, Privacy of Medical Information, add note on the protection of privacy information. |
| 9. | Administrative | In General Information, Disposition of Applications, add note to include electronic submission by international AME's. |

| V. | 11/26/2007 | 10. | Medical Policy | In Exam Techniques and Criteria, 31-34 Eye, Refractive Procedures, revise to include Wavefront-guided LASIK. |
|----|------------|-----|----------------|---|
| V. | 09/01/2007 | 1. | Administrative | Revise title of Disease Protocols, "Antihistamines" to "Allergies, Severe." |
| | | 2. | Administrative | In Pharmaceuticals, add "Acne Medications" and "Glaucoma Medications." |
| | | 3. | Medical Policy | Add policy regarding use of isotretinoin (Accutane) in Pharmaceuticals; Aerospace Medical Dispositions, Item 40. Skin; and Examination Techniques and Criteria for Qualification, Item. 40 Skin |
| | | 4. | Errata | Revise Protocol for Maximal Graded Exercise Stress Test Requirements to change "8 minutes" to "9 minutes." |
| | | 5. | Errata | In Aerospace Medical Dispositions, Item. 36. Heart – Atrial Fibrillation - change "CHD Protocol with ECHO and 24-hour Holter" to read "See CVE Protocol with EST, Echo, and 24-hour Holter." |
| | | 6. | Medical Policy | Revise Aerospace Medical Dispositions, Item 36. Heart - Syncope. |
| | | 7. | Medical Policy | Revise Examination Techniques and Criteria for Qualification, Item. 36 Heart – Auscultation. |

| Guide Version | Official Date | Revision Number | Description Of Change | Reason For Update |
|------------------|------------------|--------------------|--------------------------|--|
| V. | 09/01/2007 | 8. | Administrative | In Pharmaceuticals, Antihypertensive, V. Pharmaceutical Considerations – remove "D. AME Assisted – All Classes, Atrial Fibrillation." |
| | | 9. | Administrative | In Pharmaceuticals, Antihistaminic, V. Pharmaceutical Considerations – add "C. Aerospace Medical Dispositions, Item 35. Lungs and Chest." |
| | | 10. | Medical Policy | Revise Disease Protocols, Coronary Heart Disease to clarify requirements for consideration for any class of airman medical certification. |
| | | 11. | Errata | Revise Disease Protocols, Coronary Heart Disease to remove "Limited to Flight Engineer Duties." |
| V. | 04/25/2007 | 1. | Administrative | Move Leukemia, Acute and Chronic from Aerospace Medical Dispositions Item 48. General Systemic to Item 48. General Systemic, Blood and Blood-Forming Tissue Disease. |

| Guide Version | Official Date | Revision Number | Description Of Change | Reason For Update |
|------------------|------------------|--------------------|--------------------------|--|
| V. | 04/25/2007 | 2. | Administrative | Revise Aerospace Medical Dispositions Item 48. General Systemic to include disposition table titled "Neoplasms." |
| | | 3. | Administrative | Move Breast Cancer from Aerospace Medical Dispositions Item 38. Abdomen and Viscera - Malignancies to Item 48. General Systemic, Neoplasms. Also, move Colitis (Ulcerative, Regional Enteritis or Crohn's disease) and Peptic Ulcer from Aerospace Medical Dispositions Item 38. Abdomen and Viscera – Malignancies to Item 38. Abdomen and Viscera and Anus Conditions. |
| | | 4. | Administrative | Update individual Pharmaceutical pages to include "Pharmaceutical Considerations." |
| V. | 11/20/2006 | 1. | Medical Policy | Insert into Disease Protocols a new section on Cardiac Transplant for Class III certificates only. |
| | | 2. | Errata | Corrected AASI on Mitral or Aortic Insufficiency to read "mean gradient." |

| Guide Version | Official Date | Revision Number | Description Of Change | Reason For Update |
|------------------|------------------|--------------------|--------------------------|---|
| V. | 08/23/2006 | 1. | Errata | INR values for mechanical valves should have read between 2.5 and 3.5, except for certain types of bileaflet valves in the aortic position. |
| | | 2. | Administrative | Clarified the Hypertension Protocol regarding initiation and change of medication and the suspension of pilot duties. |
| | | 3. | Errata | Maximal graded exercise stress test requirement for under age 60 corrected to 9 minutes. |
| | | 4. | Medical Policy | Remove prohibition on bifocal contact lenses or lenses that correct for near and/or intermediate vision in Items 31-34, Eyes; Section 5, Contact Lenses. |
| | | 5. | Medical Policy | Update Neurological Conditions Disposition Table and Footnote #21 with guidance on Rolandic Seizure. |
| | | 6. | Administrative | Clarified language in General Information, Item 9. Who May Be Certified; a. Age Requirements. |

Archives and Modifications

| Guide Version | Official Date | Revision Number | Description Of Change | Reason For Update |
|------------------|------------------|--------------------|--------------------------|---|
| V. | 04/03/2006 | 1. | Administrative | Redesign the appearance and navigable format of the <i>Guide</i> for Aviation Medical Examiners |
| | | 2. | Administrative | Install a Search Engine located in the Navigation Bar |
| | | 3. | Administrative | Revise Heading Titles for Chapters 2, 3, and 4 |
| | | 4. | Administrative | Insert a Special Issuances section located in the Navigation Bar and into the General Information section |
| | | 5. | Administrative | Insert a Policy Updates section to post new and revised Administrative and Medical Policies |
| | | 6. | Medical Policy | Insert into the AME Assisted Special Issuance (AASI) section a Testicular Carcinoma AASI |
| | | 7. | Medical Policy | Revise Atrial Fibrillation AASI |
| | | 8. | Medical Policy | Revise Asthma AASI |
| | | 9. | Medical Policy | Revise Hyperthyroidism and Hypothyroidism AASIs |
| | | 10. | Medical Policy | Insert a new AASI subsection containing Coronary Heart Disease and Single Valve Replacement applicable for Third-Class only |

Archives and Modifications

| Guide Version | Official Date | Revision Number | Description Of Change | Reason For Update |
|------------------|------------------|--------------------|--------------------------|---|
| V. | 04/03/2006 | 11. | Medical Policy | Insert into the Disease Protocols section a new Coronary Heart Disease and Graded Exercise Stress Test Protocol, and revise the Valve Replacement Protocol |
| | | 12. | Administrative | Insert Items 49 – 58 into the Examination Techniques section |
| | | 13. | Medical Policy | Revise Item 35. Lungs and Chest, Asthma, Aerospace Medical Disposition Table |
| | | 14. | Medical Policy | Revise Item 36. Heart, Atrial Fibrillation, Aerospace Medical Disposition Table |
| | | 15. | Medical Policy | Revise Item 36. Heart, Coronary Heart Disease, Aerospace Medical Disposition Table |
| | | 16. | Medical Policy | Revise Item 36. Heart, Valvular Disease, Aerospace Medical Disposition Table |
| | | 17. | Medical Policy | Revise Item 48. General Systemic, Hyperthyroidism and Hypothyroidism, Aerospace Medical Disposition Table |
| | | 18. | Medical Policy | Revise all Oral Medications - Diabetes Mellitus, Type II references |
| | | 19. | Medical Policy | Revise FAA Form 8500-7, Report of Eye Evaluation |

| Guide Version | Official Date | Revision Number | Description Of Change | Reason For Update |
|------------------|------------------|--------------------|--------------------------|--|
| IV. | 07/31/2005 | 1. | Administrative | Redesign the appearance and navigable format of the <i>Guide</i> <i>for Aviation Medical</i> <i>Examiners</i> |
| | | 2. | Administrative | Revise Section 9., Refractive Surgery heading in Items 31- 34. Eyes, to Refractive Procedures |
| | | 3. | Medical Policy | Insert Conductive Keratoplasty into Section 9, Items 31-34, Eyes, and into Item 31's Aerospace Medical Disposition Table |
| | | 4. | Administrative | Replace optometrist or ophthmologist reference(s) to "eye specialist" |
| | | 5. | Medical Policy | Insert Pulmonary Embolism into Item 35, Lungs and Chest, Aerospace Medical Disposition Table |
| | | 6. | Medical Policy | Insert Deep Vein Thrombosis and Pulmonary Embolism into Item 37, Vascular System, Aerospace Medical Disposition Table |
| | | 7. | Medical Policy | Insert Deep Vein Thrombosis and Pulmonary Embolism into the Thromboembolic Protocol. |

| Guide Version | Official Date | Revision Number | Description Of Change | Reason For Update |
|------------------|------------------|--------------------|--------------------------|--|
| IV. | 01/16/2006 | 8. | Medical Policy | Insert into the Disease Protocol section a Conductive Keratoplasty Protocol |
| | | 9. | Medical Policy | Delete a paragraph located in Item 31-34. EYE, Section 4. Monocular vision |
| | | 10. | Medical Policy | Insert into the Disease Protocol section a Binocular Multifocal and Accommodating Devices Protocol |
| | | 11. | Medical Policy | Insert into the AME Assisted Special Issuance (AASI) section the new Bladder, Breast, Melanoma, and Renal Carcinoma AASI's |
| 111. | 11/01/2004 | 1. | Medical Policy | Revise AASI Process to include First- and Second- class Airman Medical Certification |
| | | 2. | Administrative | Insert into General Information, a new Section 10 that provides Sport Pilot Provisions |
| | | 3. | Administrative | Update revised Title 14, Code of Federal Regulations, §61.53 |
| | | 4. | Administrative | Insert a link to download a revised AME Letter of Denial |
| | | 5. | Administrative | Insert a link to download a printable AASI Certificate Coversheet |

| Guide Version | Official Date | Revision Number | Description Of Change | Reason For Update |
|------------------|------------------|--|--------------------------|--|
| 11. | 02/13/2004 | 1. | Administrative | Install Search Engine located in the Navigation Bar |
| | | 2. | Administrative | Insert a WHAT'S NEW link located in the Navigation Bar |
| | | 3. | Administrative | The "Instructions" site of the 2003 Guide is deleted and incorporated into the "Introduction" and "Available Downloads" located in the Navigation Bar |
| | | 4. | Administrative | Insert an "Available Downloads" site located in the Navigation Bar |
| | | 5. | Administrative | Insert a Table of Contents and an Index into the pdf version of the 2004 Guide |
| | | 6. | Administrative | Insert a one-page synopsis of the Medical Standards located in the Navigation Bar |
| | | 7. | Medical Policy | Insert Section 6. Orthokeratology into Items 31- 34. Eye |
| | | 8. | Administrative | Relocate Item 46. Footnote # 21 from Head Trauma to Footnote #19, Headaches |
| | | 9. | Administrative | Insert Attention Deficit Disorder into Item 47's, Aerospace Medical Disposition Table |
| | | 10. | Medical Policy | Revise Item 60; Comments on History and Findings |
| | | 11. | Medical Policy | Revise Item 63; Disqualifying Defects |
| | | 12. | Medical Policy | Delete from AASI's a History of Monocularity |
| | | 13. | Administrative | Insert an Archives located in the Navigation Bar |
| | 09/16/2004 | 14. | Administrative | Insert CAD Ultrasound into Item 37's, Aerospace Medical Disposition Table |
| ١. | 09/24/2003 | Introduction of the 2003 Guide for Aviation Medical Examiners Website | | |