2016

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, dispositions, and protocols necessary for completion of the FAA Form 8500-8, Application for Airman Medical 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/

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TABLE OF CONTENTS

TABLE OF CONTENTS 2
GENERAL INFORMATION 5
1. Legal Responsibilities of Designated Aviation Medical Examiners 6
2. Authority of Aviation Medical Examiners 7
3. Equipment Requirements 7
4. Medical Certification Decision Making 8
5. Authorization for Special Issuance and AME Assisted Special Issuance (AASI) 10
6. Privacy of Medical Information 13
7. Release of Information 14
8. No "Alternate" Examiners Designated 14
9. Who May Be Certified 14
10. Classes of Medical Certificates 16
11. Operations Not Requiring a Medical Certificate 17
12. Medical Certificates – AME Completion 17
13. Validity of Medical Certificates 18
14. Title 14 CFR § 61.53, Prohibition on Operations During Medical Deficiency 19
15. Reexamination of an Airman 20
16. Examination Fees 20
17. Replacement of Medical Certificates 20
18. Disposition of Applications and Medical Examinations 21
19. Protection and Destruction of Forms 21
20. Questions or Requests for Assistance 21
21. Airman Appeals 22
APPLICATION FOR MEDICAL CERTIFICATION 26
I. AME Guidance for Positive Identification of Airmen and Application Procedures 27
II. Prior to the Examination 27
ITEMS 1-2. Application for; Class of Medical Certificate Applied For 29
ITEMS 3-10. Identification 29
ITEMS 11-12. Occupation; Employer 30
ITEM 13. Has Your FAA Airman Medical Certificate Ever Been Denied, Suspended, or Revoked? 30
ITEMS 14-15. Total Pilot Time 31
ITEM 16. Date of Last FAA Medical Application 31
ITEM 17.a. Do You Currently Use Any Medication (Prescription or NONprescription)? 31
ITEM 17.b. Do You Ever Use Near Vision Contact Lens(es) While Flying? 32
ITEM 18. Medical History 32
ITEM 19. Visits to Health Professional Within Last 3 Years 39
ITEM 20. Applicant's National Driver Register and Certifying Declaration 40
ITEMS 21-22. Height and Weight 42

ITEMS 23-24. Statement of Demonstrated Ability (SODA); SODA Serial Number 44
ITEMS 25-30. Ear, Nose and Throat (ENT) 45
ITEMS 31-34. Eye 53
ITEM 36. Heart 72
ITEM 37. Vascular System 88
ITEM 38. Abdomen and Viscera 91
ITEM 39. Anus 98
ITEM 40. Skin 99
ITEM 41. G-U System 103
ITEMS 42-43. Musculoskeletal 120
ITEM 44. Identifying Body Marks, Scars, Tattoos 130
ITEM 45. Lymphatics 131
ITEM 46. Neurologic 133
ITEM 47. Psychiatric 151
ITEM 48. General Systemic 168
ITEM 49. Hearing 180
ITEMS 50- 54. Ophthalmologic Disorder 184
ITEM 55. Blood Pressure (updated 10/28/15) 199
ITEM 56. Pulse 201
ITEM 57. Urine Test 201
ITEM 58. ECG 202
APPLICATION REVIEW 205
ITEM 59. Other Tests Given 206
ITEM 60. Comments on History and Findings 207
ITEM 61. Applicant's Name 208
ITEM 62. Has Been Issued 208
ITEM 63. Disqualifying Defects 209
ITEM 64. Medical Examiner's Declaration 209
CACI CONDITIONS 210
DISEASE PROTOCOLS 211
PHARMACEUTICALS 295
SPECIAL ISSUANCES 318
SUBSTANCES OF DEPENDENCE/ABUSE 353
SYNOPSIS OF MEDICAL STANDARDS 360
STUDENT PILOT RULE CHANGE 362
GLOSSARY 364
ARCHIVES AND UPDATES 368

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. Standard Snellen Test. 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. Eye Muscle Test-Light. May be a spot of light 0.5cm in diameter, a regular muscle-test light, or an ophthalmoscope.

3. Maddox Rod. May be hand-type.

4. Horizontal Prism Bar. Risley or hand prism are acceptable alternatives.

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

6. Color Vision Test Apparatus. Pseudoisochromatic plates, American Optical Company (AOC), l965 edition; AOC-HRR, 2nd edition; Dvorine, 2nd edition; Ishihara, Concise 14 -, 24 -, or 38-plate editions; or Richmond (l983 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) -Tester MUST contain 2000-010 FAR color perception PIP plate to be approved; OPTEC 2500; Titmus Vision Tester; Titmus i400.

7. A Wall Target 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. Standard physician diagnostic instruments and aids including those necessary to perform urine testing for albumin and glucose and those to measure height and weight.

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

10. Audiometric equipment. 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; and/or
- 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 an 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. Whenever a court order or subpoena is received by the Examiner, the appropriate RFS or the AMCD should be contacted In order to ensure proper release of information. Similarly, unless the applicant's written consent for release routine in nature (e.g., accompanying a standard insurance company request), the FAA must be contacted 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-300
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 regardless of age.

There are, however, 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

Note: As of April 1, 2016 (per Final Rule [81 FR 1292]), AMEs will no longer be able to issue the **combined** FAA Medical Certificate and Student Pilot Certificate. See Student Pilot Rule Change.

b. Language Requirements

There is no language requirement for medical certification. However, if the AME has concerns about the applicant's English proficiency, they should contact their local FSDO and/or the RFS and document this in Block 60.

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 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 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 or Recreational Pilot

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

- 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 Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft; Final Rule.

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 print-out. 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 digital 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 certificate 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; and/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 the 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, unless otherwise directed by the FAA, must be transmitted electronically via AMCS within 14 days after completion to the AMCD. 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 re-designation of Examiners and the Aviation Medical Examiner Program; or
- 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; or
- 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 re-designation of Examiners;
- Requests for medical forms and stationery; or
- 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
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.

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 non-photo 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 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 MedXPress 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 MedXPress 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 MedXPress 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 Item 16 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 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, an aviation student may ask for a first-class medical certificate to see if he or she qualifies medically before entry into an aviation career. A recreational pilot may ask for a first- or second-class medical certificate if they desire.

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.

  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 *did not result in the issuance* 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 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 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 Protocol for Binocular Multifocal and Accommodating Devices. 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, 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.l. 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 18.n. and 47). 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 Item 60. (See Item 47);
- Forward the court records, arrest reports, and any military records to AMCD; and
- 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 IF 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; and
- 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; or
- **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:

- Aerospace Medical Dispositions, Item 47 – Substance Abuse
- 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

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, 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 AMCD.

ITEMS 21-22. Height and Weight

21. Height (inches)	22. Weight (pounds)

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 ÷ (65)^2] x 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

Body Mass Index Table

	Normal						Overweight					Obese										Extreme Obesity														
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 Weight (pounds)																																			
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. Statement of Demonstrated Ability (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 conditions 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 congenital 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 the applicant initially applies for medical certification, the AME should defer the exam with notes in Block 60 explaining this and include which FSDO the airman wants to use to take a Medical Flight Test.

The student may 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 have an authorization to take a medical flight test (MFT) from either RFS/AMCD. 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. Also see Protocol for Obstructive Sleep Apnea.

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.

ITEM 25. Head, Face, Neck, and Scalp

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 wearing of an oxygen mask	1st & 2nd	Submit all pertinent medical information and current status report	Requires FAA Decision
	3rd	Submit all pertinent medical information	If deformity does not interfere with administration of supplemental O^2 - Issue

ITEM 26. Nose

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Nose (Updated 02/24/2015)			
Evidence of severe allergic rhinitis*	All	Submit all pertinent medical information and current status report	Requires FAA Decision
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

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 with the stipulation that they do not exercise the privileges of airman certificate until they have stopped the medication and wait after the last dose until:
    - 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.
    - 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.
- 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.

*AME must warn airman to not operate aircraft until **four hours after any** hay fever desensitization injection.

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 affected 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 See Protocol for Obstructive Sleep Apnea	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
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 ophthalmologist. 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 iridoclesis 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 Wavefront-guided 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 they have been 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 and after consultation and review by an Examiner, the applicant may resume airman duties, 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 pre- and 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* 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, DEFER. Note in Block 60 along with which FSDO the airman wants to use to take a MFT
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
Pterygium	All	Document findings in Item 60	If less than 50% of the cornea and not affecting central vision - Issue Otherwise - Requires FAA Decision

*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.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Eyes - 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	Follow CACI - Glaucoma Worksheet. 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

CACI - Glaucoma Worksheet (Updated 4/29/15)

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 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.**	[ ] No

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified glaucoma**.** (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified glaucoma**.** Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified glaucoma**.** I have deferred. (Submit supporting documents.)

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
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
Paralysis with loss of ocular motion in any direction	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.

ITEM 35. Lungs and Chest

CHECK EACH ITEM IN APPROPRIATE COLUMN	Normal	Abnormal
35. Lungs and chest (Not including breast 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	Follow the CACI - Asthma Worksheet. 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

CACI - Asthma Worksheet (Updated 4/29/15)

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: o No in-patient hospitalizations o 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:

[ ] CACI qualified asthma. (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified asthma. Issued per valid SI/ASSI. (Submit supporting documents.)

[ ] NOT CACI qualified asthma. I have deferred. (Submit supporting documents.)

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Chronic Obstructive Pulmonary Disease (COPD)			
Chronic bronchitis, emphysema, or COPD[5]	All	Submit all pertinent medical information and current status report. Include an FVC/FEV1	**Initial Special Issuance** - Requires FAA Decision **Followup Special Issuances** - 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	Requires risk evaluation, per OSA Protocol. Document history and Findings.	If meets OSA Criteria – Issue, if otherwise qualified **Initial Special Issuance** - Requires FAA Decision **Followup Special Issuance** See AASI
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.

1. 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.

2. 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, alpha-adrenergic 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).
  - 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

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
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 GXT Protocols See GXT Additional BBB Requirements	If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision
History of Implanted Pacemakers	All	See Implanted Pacemaker Protocol	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			
1st 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
2nd 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
2nd Degree AV Block Mobitz II	All	CVE Protocol in accordance w/ Hypertensive Evaluation Specifications and 24-hour Holter	Requires FAA Decision
3rd Degree AV Block	All	CVE Protocol in accordance w/ Hypertensive Evaluation Specifications and 24-hour Holter	Requires FAA Decision
Pre-excitation	All	CVE Protocol, GXT, 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
Supraventricular Tachycardia	All	CHD Protocol with ECHO and 24-hour Holter	**Initial Special Issuance** - Requires FAA Decision **Followup Special Issuances** - See AASI Protocol

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Atrial Fibrillation			
Atrial Fibrillation: Chronic Paroxysmal/Lone	All	CVE Protocol with EST, ECHO and 24-hour Holter.	**Initial Special Issuance** - Requires FAA Decision **Followup Special Issuances** - 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
Coronary Heart Disease			
Coronary Heart Disease: Angina Pectoris Atherectomy; Coronary Bypass Grafting; Myocardial Infarction; PTCA; Rotoblation; and Stent Insertion	1st & 2nd	See CHD Protocol	Requires FAA Decision
	3rd	See CHD Protocol	**Initial Special Issuance** - Requires FAA Decision **Followup Special Issuances** - See AASI Protocol

Hypertension (HTN) All Classes Updated 10/28/15		
Disease/Condition	Evaluation Data	Disposition
A. No medication (If treating physician discontinued medications 30 days ago or longer.)	If airman meets standards:	ISSUE Summarize this history in Block 60.
B. Treated with 3 or fewer* acceptable medications.	See CACI – Hypertension Worksheet For additional information, see Hypertension FAQs	Follow the CACI – Hypertension Worksheet. Annotate Block 60.
C. Any of the following: • Treated with 4 or more* acceptable medications; • HTN is clinically uncontrolled; • Unacceptable medications are used; • Side effects are present; • Medical status of the airman is unclear; or • Certification has been specifically reserved to the FAA	Submit the following to the FAA for review: ☐ Current status report from treating physician with treatment plan, prognosis and how long the condition has been stable; ☐ Specific mention if there is a secondary cause for HTN or any evidence of a co-morbid condition (ex. diabetes or OSA), or end organ damage (ex. renal insufficiency, kidney disease, eye disease, MI, CVA heart failure, etc); and ☐ List of medications, dates started and stopped, and any side effects.	DEFER Submit the information to the FAA for a possible Special Issuance. Follow up Issuance Will be per the airman's authorization letter
Notes: *Number of medications counts each component. (Example: lisinopril/HCTZ is 2 medications.) If this airman is new to you or you are not certain of their HTN control, you may request a current status report from the treating physician for your review. If the airman did not meet standards on exam, See Item 55. Blood Pressure.		

CACI - Hypertension Worksheet (Updated 10/28/15)

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 7 days, 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 7 days 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) See Pharmaceuticals - Antihypertensive	[ ] Combinations of up to 3 of the following: Alpha blockers, Beta-blockers, calcium channel blockers, diuretics, ACE inhibitors, ARBs, direct renin inhibitors, and/or direct vasodilators are allowed. **NOT acceptable**: Centrally acting antihypertensive (ex: clonidine)
Side effects from medications	[ ] No

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified hypertension. (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified hypertension. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified hypertension. I have deferred. (Submit supporting documents.)

HYPERTENSION (HTN) - FREQUENTLY ASKED QUESTIONS (FAQs)

(Last Updated: 10/28/15)

We continue to see deferrals when an airman has HTN and is on medications. Please review the following FAQs before making a determination.

GENERAL:

1. **What is the FAA specified limit for blood pressure during an exam?**
   The maximum systolic during exam is 155mmHg and the maximum diastolic is 95mmHg during the exam. (See Item 55. Blood Pressure.)

2. **If during the exam the airman's blood pressure is higher than 155/95, do I have to defer?**
   Not necessarily. If the airman's blood pressure is elevated in clinic, you have any the following options:

   - Recheck the blood pressure. If the airman meets FAA specified limits on the second attempt, note this in Block 60 along with both readings. If the airman is still elevated, follow B:

   - Have the airman return to clinic 3 separate days over a 7-day period. If the airman meets FAA specified limits during these re-checks, note this and the readings in Block 60. Also note if there was a reason for the blood pressure elevation. If the airman does not demonstrate good control on re-checks, follow C:

   - Send the airman back to his/her treating physician for re-evaluation. If medication adjustment is needed, a 7-day no-fly period applies to verify no problems with the medication. If this can be done within the 14 day exam transmission period, you could then follow the Hypertension Disposition Table.

3. **Can I hold an exam longer than 14 days to allow the airman time provide the necessary information?**
   No.

MEDICATION(S):

4. **Can an airman fly while on HTN medication?**
   Yes, the majority of common blood pressure medications can be approved for flight. If the airman's blood pressure is controlled with 3 or fewer medications and there are no adverse medication side effects, the AME can often issue an unrestricted medical certificate (if otherwise qualified). See Hypertension Disposition Table.

5. **What HTN medications are acceptable/not acceptable by the FAA?**
   See Pharmaceuticals – Antihypertensive.

6. **The airman had medication(s) adjusted and now meets the standards, but it took longer than 14 days and the exam was deferred. What can the airman do now?**

   - If the airman is now well controlled and is on 3 or fewer medications, direct them to the CACI - Hypertension Worksheet. They should obtain the required information from their treating physician and submit it to the FAA.

   - If the airman is on 4 or more medications (combination medications count as the sum of their parts), direct them to the Hypertension Disposition Table. They should obtain the required information from their treating physician and submit it to the FAA.

7. **What if the treating physician stopped the medications less than 30 days ago?**
   See Section B of the Hypertensive Disposition Table and follow the CACI - Hypertension Worksheet.

8. **What if the airman stopped the medication on his/her own so they could fly?**
   Educate your airman (and their treating physician, if needed) that most HTN medications are acceptable and almost no one is denied for HTN.

9. **What if the airman has multiple conditions, e.g. HTN, Obstructive Sleep Apnea, and/or prior heart attack?**
   The airman must provide the required information for **each condition**.

10. **What if the airman is on a HTN medication that is not allowed by the FAA?**
    The treating physician can evaluate if the airman can safely be changed to an acceptable HTN medication.

    - If the medication(s) can be changed and the airman meets the required criteria, they should submit the items as detailed in Section C of the Hypertensive Disposition Table for FAA review. The treating physician note should describe the clinical rationale as to why the unacceptable medication was previously chosen and why it is ok for the airmen to be on a different medication now.

    - If the airman cannot safely be changed to an acceptable HTN medication, defer the exam and send in the documents listed in Section C of the Hypertensive Disposition Table for FAA review.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
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.
Valvular Disease (Updated 02-24-16)			
Aortic and Mitral Insufficiency	All	CHD Protocol with ECHO	**Initial Special Issuance** - Requires FAA Decision **Followup Special Issuances** - See AASI
Mitral Valve Repair	All	See CACI – Mitral Valve Repair Worksheet	Follow the CACI – Mitral Valve Repair Worksheet Annotate Block 60
Single Valve Replacement (Tissue, Mechanical, or Valvuloplasty)	1st & 2nd	See Cardiac Valve Replacement	Requires FAA Decision
Single Valve Replacement (Tissue, Mechanical, or Valvuloplasty)	3rd	See Cardiac Valve Replacement	**Initial Special Issuance** - Requires FAA Decision **Followup Special Issuances** - See AASI Protocol
Multiple Valve Replacement	All	Document history and findings, CVE Protocol, and submit appropriate tests.	Requires FAA Decision
All Other Valvular Disease	All	CHD Protocol with ECHO	Requires FAA Decision

	Mitral Valve Repair All Classes Updated 02/24/16	
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
A. **5 or more years ago** and no co-morbid conditions*	See CACI – Mitral Valve Repair Worksheet.	Follow the CACI – Mitral Valve Repair Worksheet Annotate Block 60.
B. **Less than 5 years ago** OR Any of the co-morbid conditions below*	After a **3 month recovery period** submit the following to the FAA for review: ☐ Hospital admission history and physical; ☐ Operative report/surgical report; ☐ Hospital discharge summary; ☐ Current status report from the treating cardiologist which should describe the type of repair, any complications, current treatment needed, and follow up plan; ☐ List of medications and side effects, if any; ☐ Cardiac testing performed AFTER the 3 month recovery period and within the last 90 days: o 24-hour Holter; o Electrocardiogram (ECG); o Echo; o Exercise Stress Test (EST); and ☐ Other imaging reports (if any) for studies performed by the treating cardiologist (eg. Cath, CTA, or MRA).	**DEFER** Submit the information to the FAA for review. **Follow up Issuance** Will be per the airman's authorization letter

Notes:
***Co-morbid conditions for FAA purposes include**:

- Cardiac disease (disease of other valves, ischemia, CHF, Left Ventricular Systolic Dysfunction (LVSD), Secondary or Functional mitral valve disease, arrhythmia, etc.);
- Connective tissue disorder (such as Marfan's or Ehlers-Danlos, etc.);
- Coumadin or other anticoagulation (other than ASA) due to a cardiac condition;
- Lung disease such as COPD (considered moderate to severe; any FEV1 or FVC less than 70%) or Pulmonary Hypertension; or
- Residual Mitral valve regurgitation listed as moderate or higher on cardiac echo.

CACI – Mitral Valve Repair Worksheet (Updated 2/24/2016)

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 airman had Mitral Valve Repair surgery **5 or more years ago** for primary mitral valve disease (not secondary MR or functional MR due to coronary heart disease, MI, ischemic disease, or cardiomyopathy).	[ ] Yes
A current status report from the treating cardiologist verifies the airman: • Is **asymptomatic** and stable; • Has no other current cardiac conditions*****; • Has not developed any new conditions, arrhythmias, or complications that would affect cardiac function; • Requires no more than a routine annual follow-up; and • No additional surgery is anticipated or recommended.	[ ] Yes
The airman has NO history of: • Connective tissue disorder (Marfan's or Ehlers-Danlos, etc.); • Lung disease: COPD (moderate or higher), or pulmonary HTN; or • Other cardiac disease (e.g. Congestive Heart Failure, ischemia, other valve disease, etc.)	[ ] Yes
The most recent echo was performed **within the last 24 months** shows: • Mitral valve regurgitation (if present) is classified as mild; • No other abnormalities on echo such as: o Dilated aorta greater than 4 cm; o Hypertrophic cardiomyopathy or other cardiomyopathy; o Left Atrial Enlargement; o Regurgitation of any valve moderate or higher; or o Structural abnormalities (dilated ventricle, atria, etc.)	[ ] Yes

Notes:
- If any valve other than mitral was involved, the information must be submitted to the FAA for review.
- An annual echo is not required for each FAA exam for this CACI.
- Anticoagulation is not routinely required for mitral valve repair. If Coumadin or other anticoagulation (other than ASA) is required for a cardiac condition, the AME should defer.

*****Atrial fibrillation treated with ablation and resolved is allowable.

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified Mitral Valve Repair.

[ ] Not CACI qualified Mitral Valve Repair. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified Mitral Valve Repair. I have deferred. (Submit supporting documents.)

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.
9. 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 multi-vessel 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

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
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
Vascular 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 - Requires FAA Decision
Raynaud's Disease	All	Document history and findings	If no impairment - Issue Otherwise - Requires FAA Decision
Phlebothrombosis or Thrombophlebitis	1st & 2nd	See Thrombophlebitis Protocol	Requires FAA Decision
	3rd	Document history and findings See Thrombophlebitis Protocol	A single episode resolved, not currently treated with anticoagulants, and a negative evaluation - Issue 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

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
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	Follow the CACI – Colitis Worksheet. If Airman meets all certification criteria – **Issue** **Initial Special Issuance** - Requires FAA Decision **Followup Special Issuance** - See AASI Protocol

CACI - Colitis Worksheet (Updated 4/29/15)

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:

[ ] CACI qualified colitis. (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified colitis. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified. I have deferred. (Submit supporting documents.)

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, follow the CACI - Hepatitis C - Chronic Worksheet (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 AASI Protocol

CACI - Hepatitis C - Chronic Worksheet (Updated 4/29/15)

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:

[ ] CACI qualified Hepatitis C - Chronic**.** (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified Hepatitis C - Chronic**.** Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified Hepatitis C - Chronic**.** I have deferred. (Submit supporting documents.)

DISEASE/CONDITION	CLASS	EVALUATION DATA	**DISPOSITION**
Abdomen and Viscera and Anus Conditions			
Hernia - Inguinal, Ventral or Hiatal	All	Document history and findings	If symptomatic; likely to cause any degree of obstruction - Requires FAA Decision Otherwise - **Issue**
Liver Transplant - Recipient	All	Submit items listed on the Protocol for Liver Transplant (Recipient)	**Initial Special** Issuance - Requires FAA decision **Follow up Special Issuance** – per Authorization Letter requirements
Liver Transplant - Donor	All	Review a current status report from the transplant surgeon or transplant team physician	**Initial certification** - If the current status report shows there were no complications, the airman is off all pain medications, functional status has returned to normal, and the treating physician has granted a full release - ISSUE Note in block 60 and send a copy of the current status report to the FAA for retention in the file *If there were complications, see the appropriate, related section(s) within the AME Guide. Submit additional reports as necessary. **Follow up Certification** –No follow up is required unless there are changes in condition
Liver + kidney Liver + heart Liver + other Combined Transplants	All	Submit the required items on the transplant protocol for each individual organ transplanted	**Defer** - Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Abdomen and Viscera and Anus Conditions			
Peptic Ulcer	All	See Peptic Ulcer Protocol	Requires FAA Decision
Splenomegaly	All	Provide hematologic workup	Requires FAA Decision
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 Issuances** - 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

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.

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

Skin Cancer All Classes Updated 8/26/2015		
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
Unknown pathology	If unable to verify pathology, have airman collect: ☐ Medical records describing the diagnosis and treatment; and ☐ Pathology report(s)	More info needed Once reports are received, refer to the appropriate skin cancer diagnosis in this section.
Basal cell cancer (BCC) **Squamous cell cancer (SCC)** Uncomplicated skin only No organ involvement	AME interview and exam findings consistent with uncomplicated local BCC or SCC completely treated (excised, destroyed, or Mohs procedure) and resolved.	**ISSUE** Note BCC or SCC treated in block 60. If complicated lesion, see below.
SCC or BCC Complicated lesion Metastatic lymph node or deep tissue involvement, aggressive pathology or other abnormalities Also see ENT section	Submit the following for FAA review: ☐ Medical records describing the diagnosis and treatment; ☐ Pathology report(s); ☐ Operative notes; ☐ Current status summary report that includes current or planned future treatment & prognosis; and ☐ Copies of any imaging performed (CT/MRI)	**DEFER** Submit reports to FAA for review. Follow-up certification - based on Special Issuance Authorization.
Melanoma Less than 0.75 mm in depth OR Melanoma in Situ	Review: ☐ Medical records describing the diagnosis and treatment; and ☐ Pathology report(s)	**ISSUE** If complete resection with clear margins, no recurrence, no metastatic disease, and favorable reports. Document in block 60 **AND** submit reports to FAA for retention in the file.
Melanoma Equal to 0.75 mm or greater in depth	Review and submit the following: ☐ Medical records describing the diagnosis and treatment; ☐ Pathology report(s); ☐ Operative notes; ☐ Current status report that includes if any additional lesions, any metastatic disease, any current or future treatment planned; and ☐ Current MRI brain	**DEFER** Submit reports to FAA for review. Follow-up certification - based on Special Issuance Authorization.
Metastatic Melanoma OR **Melanoma of Unknown Primary Origin**	Submit the following for FAA review: ☐ Info from Melanoma greater than 0.75 mm above; ☐ PET scan; and ☐ Copies of any additional testing performed by your treating physician not listed above	**DEFER** Submit supporting documents for FAA review.

DISEASE/CONDITION	EVALUATION DATA	DISPOSITION
Urticarial Eruptions All Classes		
Angioneurotic Edema	Submit all pertinent medical records and a current status report to include treatment	Requires FAA Decision
Chronic Urticaria	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).

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.

General Disorders All Classes		
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
Congenital lesions of the kidney	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
Cystostomy and Neurogenic bladder	Requires evaluation, report must include etiology, clinical manifestation and treatment plan	Requires FAA Decision
Renal Dialysis	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	See **Renal Transplant Protocol**	Requires FAA Decision

	Chronic Kidney Disease(CKD) All Classes Updated 11/25/15	
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
A. eGFR **45 to 59**	No symptoms or complications and the underlying cause is not disqualifying.	**ISSUE** Summarize this history in block 60.
B. eGFR **35 to 44**	See CACI worksheet.	Follow the CACI – Chronic Kidney Disease Worksheet annotate block 60.
C. eGFR **34 or less** OR Symptoms or complications with any eGFR Proteinuria 2+ or higher or ACR is 300 or higher	Submit the following to the FAA for review: ☐ Current status report from the treating physician. It should note if the condition is stable or if additional treatment or dialysis is recommended; ☐ List of medications and side effects, if any; ☐ Recent lab (within last 90 days) o Renal function studies(creatinine, BUN and eGFR); o Albumin as dipstick or ACR; and o Hemoglobin and hematocrit ☐ Imaging reports (if performed by treating physician); and ☐ Assessment by treating physician if a cardiac evaluation is warranted	**DEFER** Submit the information to the FAA for a possible Special Issuance. **Followup Special Issuance** – Will be per the airman's Authorization Letter
ESRD requiring dialysis or kidney transplant	See table on previous page for more information.	**DEFER**

Notes: eGFR is a calculated/estimated value. If additional testing shows the actual renal function is higher than the eGFR, this should be stated in the note from the treating physician.

ACR= albumin creatinine ratio

CACI – CKD Chronic Kidney Disease Worksheet Updated 11/25/2015

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
A current status report from the treating physician that notes the airman: • Is asymptomatic and stable; • Has not developed any new conditions or complications that would affect renal function; • Any underlying conditions (such as diabetes, HTN, glomerulonephritis, PKD, or chronic obstruction) are well controlled; and • Comments that dialysis or transplant is not recommended or anticipated at this time.	[ ] Yes
eGFR is 35 or higher (most recent value, must be within the last 6 months).	[ ] Yes
Albumin on urine dipstick is trace or negative OR albumin creatinine ratio (ACR) is 29 or less	[ ] Yes
Hemoglobin is at least 10 gm/dL AND hematocrit is at least 30%	[ ] Yes
Current treatment	[ ] allowed HTN medication

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified Chronic Kidney Disease.

[ ] Not CACI qualified Chronic Kidney Disease. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified Chronic Kidney Disease. I have deferred. (Submit supporting documents.)

Inflammatory Conditions All Classes		
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
Acute (Nephritis)	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)	Submit all pertinent medical information and status report	Requires FAA Decision
Nephrosis	Submit all pertinent medical information and status report	Requires FAA Decision

	Kidney Stone(s) **(Nephrolithiasis, Renal Calculi)** **or Renal Colic** All Classes Updated 4/27/16	
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
A. Most recent event/diagnosis **<u>5 or more years ago</u>.**	No symptoms or current problems. Renal function has returned to normal. No ongoing treatment or surveillance needed.	**ISSUE** Summarize this history in Block 60.
B. Single stone that passed **<u>Less than 5 years ago</u>** with no complications*	If a **single stone passed** or is in the bladder with no further problems and imaging (such as a KUB) verifies **no retained stones**:	**ISSUE** Summarize this history in Block 60.
C. Multiple or **Retained** asymptomatic stone(s) **<u>Less than 5 years ago</u>** with no complications* **Note:** Use this for incidental findings.	See CACI worksheet	Follow the CACI – Retained Kidney Stones Worksheet. Annotate Block 60.
D. All others Complications* Symptomatic Underlying cause for recurrent stones	Submit the following to the FAA for review: ☐ Current status report from the treating urologist with treatment plan and prognosis; ☐ If underlying cause is identified, the status report should include diagnosis, treatment plan, prognosis and adherence to treatment for this condition; ☐ List of medications and side effects if any; ☐ Operative notes and discharge summary (if applicable);and ☐ Copies of imaging reports and lab (if already performed by treating physician)	**DEFER** Submit the information to the FAA for a possible Special Issuance. **Follow up Issuance** Will be per the airman's authorization letter

***Complications** include the following:

- Hydronephrosis (chronic).
- Metabolic/underlying condition requiring treatment/surveillance/monitoring
- Procedures (3 or more for kidney stones within the last 5 years)
- Renal failure or obstruction (acute or chronic).
- Sepsis or recurrent urinary tract infections due to stones

Metabolic evaluations and **imaging** should be performed as clinically indicated by the treating physician. Acceptable imaging includes KUB, ultrasound, IVP, or CT/MRI as clinically appropriate per the treating physician.

CACI – Retained Kidney Stone(s) Worksheet (Updated 4/27/2016)

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

A current status report from the treating physician that notes the airman's condition is:
 	
• Asymptomatic;
• Stable (**no increase in number or size of stones**);
• Unlikely to cause a sudden incapacitating event;
• If surgery has been performed, the airman:
  o Is off pain medication(s);
  o Has made a full recovery; and
  o Has a full release from the surgeon;
• No history of complications (including chronic hydronephrosis; metabolic/underlying condition; procedures (3 or more in the last 5 years); renal failure or obstruction; sepsis; or recurrent UTIs due to stones.)
	[ ] Yes

Is there an underlying cause for stone recurrence?	[ ] No
Current or recommended treatment After a single stone event - if follow up imaging verifies no further stone(s) present, annotate this in Block 60. No further follow up is required unless there is a change in condition.	[ ] None Supportive treatments such as hydration or medications (such as thiazides, allopurinol, or potassium citrate) to decrease recurrence **(with no side effects)** are allowed.

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified Retained Kidney Stones. (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified Retained Kidney Stones. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified Retained Kidney Stones. I have deferred. (Submit supporting documents.)

Neoplastic Disorders/Cancer

	Bladder Cancer All Classes Updated 8/26/2015	
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
A. Non metastatic and treatment completed **5 or more years ago**	No recurrence or ongoing treatment:	**ISSUE** Summarize this history in Block 60.
B. Non metastatic and treatment completed **less than 5 years ago**	See CACI worksheet. Local recurrence within the bladder only: Follow CACI – Bladder Cancer Worksheet.	Follow the CACI - Bladder Cancer Worksheet. Note in Block 60.
C. Metastatic disease, **muscle invasion,** **or** **Recurrent disease that has spread outside the bladder**	Information that needs to be submitted to the FAA for review: ☐ Current status report from oncologist describing treatment plan and prognosis; ☐ List of medications with attention to any chemotherapy agents and dates used; ☐ Treatment records including clinic notes or summary letter describing initial staging and treatment course; ☐ Operative notes and discharge summary (if applicable); ☐ Pathology report(s) (if applicable); and ☐ MRI/CT or PET scan reports (In some cases, the actual CDs will be required in DICOM format for FAA review.)	**DEFER** **Initial Issuance** - Submit the information to the FAA **Follow up Issuance** - Will be per the airman's authorization letter
Notes: If the airman is currently on radiation or chemotherapy, the treatment course must be completed before medical certification can be considered.		

CACI – Bladder Cancer Worksheet (Updated 08/26/2015)

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
A current status report from the treating physician. If it reveals: • Condition is stable; • If recurrence, there has been NO spread outside the bladder; • There is no current or historic evidence of any metastatic disease or muscle invasion; • Active treatment is completed (chemotherapy/radiation, etc.) and no new treatment is recommended at this time; and/or • If surgery has been performed, the airman is off pain medication(s), has made a full recovery, and has been released by the surgeon.	[ ] Yes
Symptoms	[ ] None
Current treatment Notes: If it has been 5 or more years since the airman has had any treatment for this condition, with no history of metastatic disease and no reoccurrence, CACI is not required. Note this in Block 60. (See disposition table.) If the airman is currently on chemotherapy or radiation treatment, defer the exam. (See disposition table.	[ ] None or maintenance intravesical BCG or mitomycin. (If these medications are used, the airman should not fly until 24 hours post treatment and asymptomatic.)

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified Bladder cancer. (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified Bladder cancer. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified Bladder cancer. I have deferred. (Submit supporting documents.)

	Prostate Conditions All Classes Updated 8/26/15	
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
A. Benign Prostatic Hypertrophy (BPH) or elevated PSA	If the airman has findings consistent with uncomplicated BPH with no evidence of prostate cancer:	**ISSUE** Summarize this history in Block 60
Notes: See Pharmaceuticals section for list of medications usually allowed.		
	Prostate Cancer All Classes	
A. Prostate Cancer Non metastatic With treatment completed **5 or more years ago**	If NO recurrence or ongoing treatment:	**ISSUE** Summarize this history in Block 60.
B. Prostate Cancer Non metastatic with treatment completed **less than 5 years ago**	See CACI worksheet.	Follow the CACI - Prostate Cancer Worksheet Note in Block 60.
C. Prostate Cancer With **Metastatic disease** Current OR any time in the past OR **Recurrence of disease** Including a biochemical recurrence (BCR) after prostatectomy	**Submit the following for FAA review:** ☐ Current status report from oncologist describing treatment plan, how long the condition has been stable, and prognosis; ☐ List of medications and presence or absence of side effects with specific attention to any chemotherapy, steroids, or hormone agents and dates used; ☐ Treatment records including clinic notes or a summary letter describing initial staging, disease course, locations of metastatic disease, and stability; ☐ Operative notes and discharge summary, if applicable; ☐ Pathology report(s), if applicable; and ☐ Results of MRI/CT or PET scan reports. (In some cases, the actual CDs will be required in DICOM format for FAA review).	**DEFER** **Initial Special Issuance** – Requires FAA Decision **Follow up Special Issuance** will be per the airman's authorization letter
Notes: If the airman is currently on radiation or chemotherapy, the treatment course should be completed before medical certification can be considered.		

CACI – Prostate Cancer Worksheet (Updated 8/26/2015)

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
A current status report from the treating physician reveals the: • Condition is stable with no spread or recurrence; • There is no current or historical evidence of any metastatic disease; • Active treatment is completed (chemotherapy/radiation, etc.) and no further treatment is recommended at this time; and • If surgery has been performed, the airman o Is off pain medications; o Has made a full recovery; and o Has been released by the surgeon	[ ] Yes
Current PSA (within the last 6 months)	[ ] 20 or less if no prostatectomy [ ] 0.2 or less after prostatectomy
Symptoms	[ ] None
Current treatment Notes: If it has been 5 or more years since the airman has had any treatment for this condition, with no history of metastatic disease and no reoccurrence, CACI is not required. Note this in Block 60. (See disposition table.)	[ ] None or active surveillance/watchful waiting or Brachytherapy

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified prostate cancer. (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified prostate cancer. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified prostate cancer. I have deferred. (Submit supporting documents.)

	Renal Cancer All Classes Updated 9/30/15	
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
A. Non metastatic with treatment completed **5 or more years ago**	If no recurrence or ongoing treatment:	**ISSUE** Summarize this history in Block 60.
B. Non metastatic with treatment completed **less than 5 years ago**	See CACI worksheet.	Follow the CACI-Renal Cancer Worksheet Note in Block 60
C. **Metastatic disease** Current OR any time in the past **OR** **Recurrence** of disease	Submit the following to the FAA for review: ☐ Current status report from your treating oncologist. It should describe the treatment plan, how long the condition has been stable, prognosis, and if any upcoming treatment change is planned or expected; ☐ List of medications and presence or absence of side effects with specific mention of chemotherapy and dates used; ☐ Treatment records including clinic notes or a summary letter describing initial staging, disease course, locations of metastatic disease, and stability; ☐ Operative notes and discharge, if applicable; ☐ Pathology report(s), if applicable; ☐ Results of MRI/CT or PET scan reports (In some cases, the actual CDs will be required in DICOM format for FAA review.); and ☐ Copies of most recent lab results performed by your treating physician.	**DEFER** Submit the information to the FAA for a possible Special Issuance. **Followup Special Issuance** – Will be per the airman's authorization letter

CACI – Renal Cancer Worksheet (Updated 9/30/2015)

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
Any evidence of: • Disease recurrence; • Extra capsular extension; • Metastatic disease; • Stage 4 disease; 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:

[ ] CACI qualified Renal Cancer. (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified Renal Cancer. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified Renal Cancer. I have deferred. (Submit supporting documents.)

	Testicular Cancer All Classes Updated 8/26/15	
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
A. Non metastatic and treatment completed **5 or more years ago**	No recurrence or ongoing treatment:	**ISSUE** Summarize this history in Block 60.
B. Non metastatic and treatment completed **less than 5 years ago**	See CACI worksheet.	Follow the CACI - Testicular Cancer Worksheet Note in Block 60.
C. Metastatic disease Current OR any time in the past **Recurrence of disease**	Submit the following to the FAA for review: ☐ Current status report from oncologist describing treatment plan and prognosis; ☐ List of medications with attention to any chemotherapy agents and dates used; ☐ Treatment records including clinic notes or summary letter describing disease course and initial staging; ☐ Operative notes and discharge summary (if applicable); ☐ Pathology report(s) (if applicable); ☐ MRI/CT or PET scan reports (in some cases, the actual CDs will be required in DICOM format for FAA review); and ☐ Serum tumor markers results (if applicable).	**DEFER** Submit the information to the FAA for a possible Special Issuance.
Notes: If the airman is currently on radiation or chemotherapy, the treatment course must be completed before medical certification can be considered. Watchful waiting is allowed. See CACI – Testicular Cancer Worksheet.		

CACI – Testicular Cancer Worksheet (Updated 8/26/15)

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
A current status report from the treating physician. If it reveals the: 1. Condition is stable with no spread or recurrence; 2. There is no current or historic evidence of any metastatic disease; 3. Active treatment is completed (chemotherapy/radiation, etc.) and no new treatment is recommended at this time; and 4. If surgery has been performed, the airman is off pain medication(s), has made a full recovery, and has been released by the surgeon.	[ ] Yes
Symptoms	[ ] None
Current treatment Notes: If it has been 5 or more years since the airman has had any treatment for this condition, with no history of metastatic disease and no reoccurrence, CACI is not required. Note this in Block 60. (See disposition table.) If the airman is currently on chemo or radiation treatment, defer the exam. (See disposition table.)	[ ] None, surveillance or watchful waiting

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified Testicular cancer. (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified Testicular cancer. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified Testicular cancer. I have deferred. (Submit supporting documents.)

Other G-U Cancers/Neoplastic Disorders

All Classes
Updated 9/30/15

DISEASE/CONDITION	EVALUATION DATA	DISPOSITION
Other 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.)	Interview airman	Currently cancer-free and released from oncology car**e – Issue and warn for recurrence** Summarize in Block 60 All others – see below
Other G-U cancers when treatment was completed less than 5 years ago or for which there is a history of metastatic disease	Submit a current status report, all pertinent medical reports to include staging, metastatic work up, and operative report if applicable.	Requires FAA decision

Nephritis

All Classes

DISEASE/CONDITION	EVALUATION DATA	DISPOSITION
Polycystic Kidney Disease	Submit all pertinent medical information and status report	If renal function is normal and no hypertension - **Issue** Otherwise - Requires FAA Decision
Pyelitis or Pyelonephritis	Submit all pertinent medical information and status report	If asymptomatic - **Issue** Otherwise - Requires FAA Decision
Pyonephrosis	Submit all pertinent medical information and status report	Requires FAA Decision

Urinary Systems All Classes Updated 9/30/15		
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
Hydronephrosis with impaired renal function	Submit all pertinent medical information and status report	Requires FAA Decision
Nephrectomy (non-neoplastic)	Submit all pertinent medical information and status report	If the remaining kidney function and anatomy is normal, without other system disease, hypertension, uremia, or infection of the remaining kidney – **Issue** Otherwise – Requires FAA Decision
Hematuria	Submit all pertinent medical information and status report.	If no underlying condition found after urology evaluation – **Issue** and submit evaluation to the FAA If underlying cause found, see that section.
Proteinuria and Glycosuria	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

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.

ITEM 42. Upper and Lower Extremities

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 pertinent medical reports	If applicant has a SODA issued on the basis of the amputation - **Issue** Otherwise - Requires FAA Decision After review of all medical data, the 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

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

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. If the airman successfully completes the MFT, a medical certificate and SODA will be sent to the airman from AMCD.

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.

[1] Essential tremor is not disqualifying unless it is disabling.

Item 43. Spine, Other Musculoskeletal

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	Follow the CACI - Arthritis Worksheet. 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

CACI - Arthritis Worksheet (Updated 4/29/15)

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 steroid conversion calculator), Methotrexate, hydroxychloroquine (Plaquenil - see mandatory eye evaluation requirement below), NSAIDS.
Complete blood count (CBC) and complete metabolic panel	[ ] Within 90 days [ ] Normal CBC, Liver Function Test, and Creatinine
FAA Report of Eye Evaluation Form 8500-7 is required if hydroxychloroquine (Plaquenil) is used.	[ ] 8500-7 Favorable and no concerns [ ] N/A

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified arthritis**.** (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified arthritis. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified arthritis. I have deferred. (Submit supporting documents.)

Gout and Pseudogout All Classes Updated 4/29/2015		
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSITION**
Gout **Pseudogout** Well controlled	Interview and examination reveal: ☐ No persistent symptoms or functional impairment. ☐ Med combinations of NSAIDS, uric acid reducers (allopurinol, etc.), or uric acid excreters (probenecid) with no aeromedically significant side effects.	**ISSUE** Note findings in Block 60.
Gout **Pseudogout** Functional impairment Joint deformity Kidney stones, recurrent Meds other than above Not controlled Persistent symptoms	Submit a current status report that addresses: ☐ Clinical course with severity and frequency of exacerbations to include interval between and date of most recent flare; extent of renal involvement; current treatment, side effects, and prognosis; and ☐ Describe extent of joint deformity or functional impairment and if it would impair operation of aircraft controls.	**DEFER** Submit records to the FAA for decision Follow up—per SI/AASI

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		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		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

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 a Medical Flight Test.

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

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Spine, other 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 Issuances** - 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 Issuances** - 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 • Carotid artery ultrasound studies • Cardiovascular Evaluation	Requires FAA Decision

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

		(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	
Completed Stroke (ischemic or hemorrhagic);	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 • 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) NOTE: required for ischemic stroke; for hemorrhagic stroke is required if clinically indicated (for example in a hemorrhagic stroke due to hypertension, even if felt to be transient hypertension) • Neurocognitive testing to "SPECIFICATIONS FOR	Requires FAA decision

		NEUROPSYCHO-LOGICAL EVALUATIONS FOR POTENTIAL NEUROCOGNITIVE IMPAIRMENT" required for all strokes **** For hemorrhagic strokes, the bleeding must be resolved as documented by CT or MRI	

Subdural, Epidural or Subarachnoid Hemorrhage	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)
		  • CT or MRI of the head
		  • Additional testing such as EEG, neurocognitive testing, etc., may be required as clinically indicated
			Requires FAA Decison

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 medical records, current neurologic report, name and dosage of medication(s) and side effects	Requires FAA 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

[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 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 System[4]			
Dystonia – primary or secondary; Huntington's Disease; Parkinson's Disease; Wilson's Disease; or Gilles de la Tourette Syndrome; Alzheimer's Disease; Dementia (unspecified); or Slow viral diseases i.e., Creutzfeldt -Jakob's Disease	All	Obtain medical records and current neurological status, complete neurological evaluation with appropriate laboratory and imaging studies, as indicated May consider Neuro-psychological testing	Requires FAA Decision

[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
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	Follow CACI - Migraine and Chronic Headache Worksheet. 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

[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.

Post-traumatic Headache	All	Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects	Requires FAA Decision

CACI - Migraine and Chronic Headache Worksheet (Updated 4/29/15)

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: o **no in-patient hospitalizations** o 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: 24 hour no-fly - Triptans 36 hour no-fly - Metoclopramide (Reglan); 96 hour no-fly - promethazine (Phenergan) **NOT acceptable**: Injectable medications and narcotics

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified migraine and chronic headaches. (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified migraine and chronic headaches. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified migraine and chronic headaches. I have deferred. (Submit supporting documents.)

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
Infections of the Nervous System			
Brain Abscess; Encephalitis; Meningitis; and Neurosyphilis	All	Complete neurological evaluation with appropriate laboratory and imaging studies	Requires FAA Decision
Neurologic 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

[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 seizure-free 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).

FAA Airman Seizure Questionnaire (Updated 6/29/16)

The following questions should be **answered by the AIRMAN** who should read through the entire questionnaire and complete all sections as appropriate. If the seizures occurred when the airman was a child, a parent or guardian familiar with the episodes should complete this form.

Section 1 - Big Seizures

Have you ever had a grand mal seizure or a big seizure where you lost consciousness or your whole body shook and stiffened?		Yes Go to A		No Go to Section 2 (next page)
A. How many have you had? *Enter a number*				
B. When was the first one? *Enter approximate date, how long ago, or your age at the time*				
C. When was the last one/most recent *Enter the approximate date*				
D. Do you ever have a warning before your big seizure(s)?		Yes	No Go to E	Don't know
	D1. Did you ever have this warning and not have a seizure?	Yes	No	Don't know
	D2. When was the last warning? *Enter actual date OR how long ago (in months)*	Date: Or months ago:		
	D3. Did this warning consist of any of the following? Unusual feeling in stomach or chest	Yes	No	Don't know
	Unusual smells or tastes?	Yes	No	Don't know
	Hearing unusual sounds or hearing difficulty?	Yes	No	Don't know
	See anything unusual, or have any change in your vision?	Yes	No	Don't know
	Behave in unusual ways such as smacking your lips, touching your clothes, or doing any other unusual things without intending to?	Yes	No	Don't know
	Have difficulty speaking or understand speech?	Yes	No	Don't know
E. Of the grand mal or big seizures that you had while awake, did they usually occur shortly after waking up? (Either in the morning or after a nap.)		Yes	No Go to F	Don't know
	E1. How many minutes after waking up would you say the grand mal or big seizure(s) usually occurred? *Check one*	[ ]15 min or less [ ]16-30 min [ ]31-45 min [ ]46-60 min [ ]More than 60 min		
F. Before the seizure started did you have jerking, shaking, or uncontrolled body movements or did your whole body jump suddenly, as if someone had startled you from behind?		Yes	No Go to Section 2 (next page)	Don't know
	F1. Which side was affected? *Check one*	[ ] Left side only [ ] Right side only [ ] Both sides [ ] One side; unsure of which [ ] Don't know		

Airman Name _____ MID#, PI#, or App ID#_____
(Printed)

Section 2 - Small Seizures

Have you ever had any small spells (other than grand mal or big seizures)?	Yes Go to A		No Go to Section 3 (next page)
A. When was the last time you had one of these spells? *Write in the approximate date OR age at which it occurred.*	Date:		Or age:
B. How long would you say the spell lasted? *Check one*	[ ] 15 seconds or less [ ] 16-30 seconds [ ] 31 -59 seconds	[ ] 1-2 min [ ] More than 2 minutes	
C. During this most recent spell, which of the following best describes your awareness of the surroundings? *Check one*	[ ] Fully aware [ ] Somewhat aware, but less aware than usual	[ ] Fully unaware	
D. During this spell, were you able to FUNCTION as you normally do?	Yes	No	Don't know
E. During this spell, were you able to COMMUNICATE as you normally do?	Yes	No	Don't know
F. After the spell was over, did you remember what happened during the spell or did you learn about it from someone else?	[ ] Yes, I remembered	[ ] No, someone else had to tell me	
G. During this spell, did any parts of your body move uncontrollably?	Yes	No Go to H	Don't know
G1. Which parts of the body were involved?	[ ] Arm [ ] Leg	[ ] Face [ ] Other	[ ] Don't know
G2. Was this only on one side?	Yes	No	Don't know
H. During this spell, did any parts of your body JERK suddenly and unexpectedly?	Yes	No Go to I	Don't know
H1. Which parts of the body were involved?	[ ] Arm [ ] Leg	[ ] Face [ ] Other	[ ] Total body [ ] Don't know
H2. Was this on only ONE SIDE?	Yes	No	Don't know
H3. Which side?	[ ] Left [ ] Right	[ ] One side; unsure which [ ] Unsure	
H4. Have you ever had a similar spell with jerking on the opposite side?	Yes	No	Don't know
H5. Would you say the jerking felt like an electric shock going through your body?	Yes	No	Don't know
H6. Has this type of spell usually occurred shortly after waking up (either in the morning or after a nap)?	Yes	No	Don't know
H7. Does this type of spell occur only when you are going to sleep?	Yes	No	Don't know
H8. Did this type of spell ever occur as a result of lights shining in your eyes (for example strobe lights, video games, reflections or sun glare?)	Yes	No	Don't know
I. During this spell, did you behave in unusual ways such as smacking your lips, touching your clothes, or doing any other unusual things without intending to?	Yes	No	Don't know
J. Did your eyelids flutter during this spell?	Yes	No	Don't know
K. Do you tend to be clumsy in the morning such as dropping things or spilling coffee or other drinks?	Yes	No	Don't know
L. During your spells, did you ever have any other symptoms?	Yes (explain in Section 5)	No	Don't know

Airman Name _____ MID#, PI#, or App ID#_____
(Printed)

Section 3 - Other

Do you ever have unexplained episodes of:

A. Unusual feelings in your stomach or chest?	Yes	No	Don't know
B. Unusual smells or tastes?	Yes	No	Don't know
C. Hearing unusual sounds or hearing difficulty?	Yes	No	Don't know
D. Seeing anything unusual or have any changes in your vision	Yes	No	Don't know
E. Behaving in unusual ways such as smacking your lips, touching your clothes, or doing any other unusual things without intending to?	Yes	No	Don't know
F. Having periods of lost time due to "spacing out" or daydreaming?	Yes	No	Don't know
G. Awaking in the morning with a bitten tongue or a bloody pillow?	Yes	No	Don't know
H. Awaking in the morning with unexplained bed wetting?	Yes	No	Don't know
I. Other (or comments)	Yes (explain in Section 5)	No	Don't know

Section 4 - Medication History

A. I am currently taking medication to prevent or control my seizures	Yes	No Go to B	Don't know
A1. I am currently taking medication to prevent or control my seizures	Name of med:		
	Dosage:		
	Date started:		Or age:
B. I took medication in the past.	Yes	No Go to Section 5	Don't know
B1. Previous medication information: *If you do not know the date or calendar year, enter your age when medication was stopped.*	Name of med:		
	Dosage:		
	Date started:		Or age:

Section 5 - Comments

Please enter additional explanation or comments for ANY part of this questionnaire:

If anyone other than the airman completed this form, list name and relationship to the airman:

Signature _____ **Date completed** _____

Airman Name _____ MID#, PI#, or App ID#_____
(Printed)

Other Conditions			
DISEASE/CONDITION	**CLASS**	**EVALUATION DATA**	**DISPOSITION**
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
Presence of any neurological condition or disease that potentially may incapacitate an individual			
Head Trauma associated with: Epidural or Subdural Hematoma; Focal Neurologic Deficit; Depressed Skull Fracture; or Any loss of consciousness, alteration of consciousness, or amnesia, regardless of duration	All	Submit all pertinent medical records, current status report, to include pre-hospital and emergency department records, operative reports, neurosurgical evaluation, name and dosage of medication(s) and side effects	Requires FAA Decision

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

[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 xanthine-containing (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);

4. 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 (14 CFR 67.401) 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 dependence, 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 Substances of Dependence/Abuse (Drugs and Alcohol) 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 SSRI Decision Path I

An applicant may be considered for an FAA Authorization of a Special Issuance (SI) of a Medical Certificate (Authorization) 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)

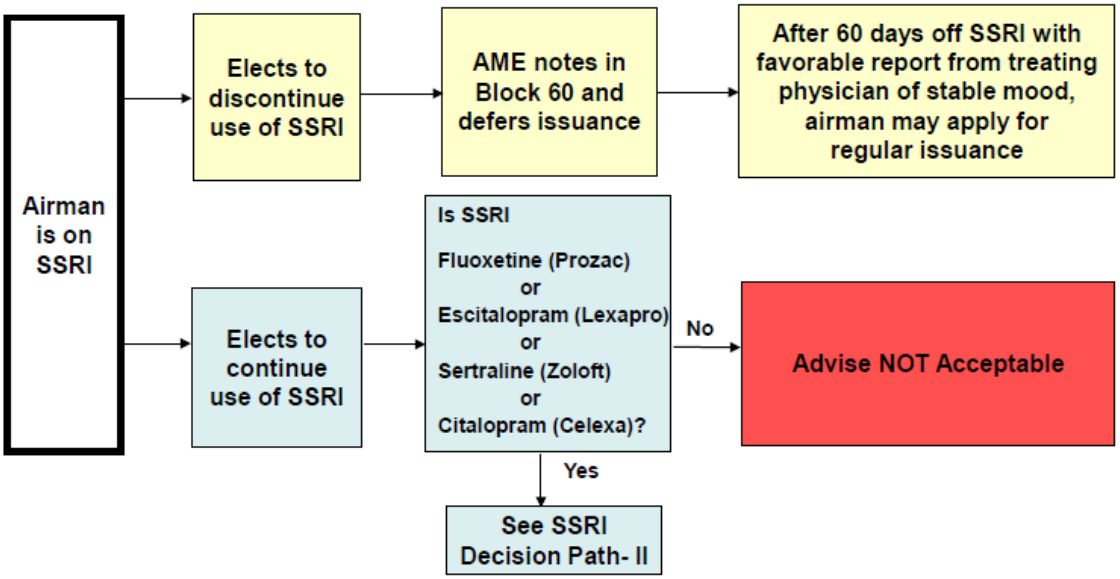
If the applicant is on a SSRI that is not listed above, the Examiner must advise that the medication is not acceptable for SI consideration.

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

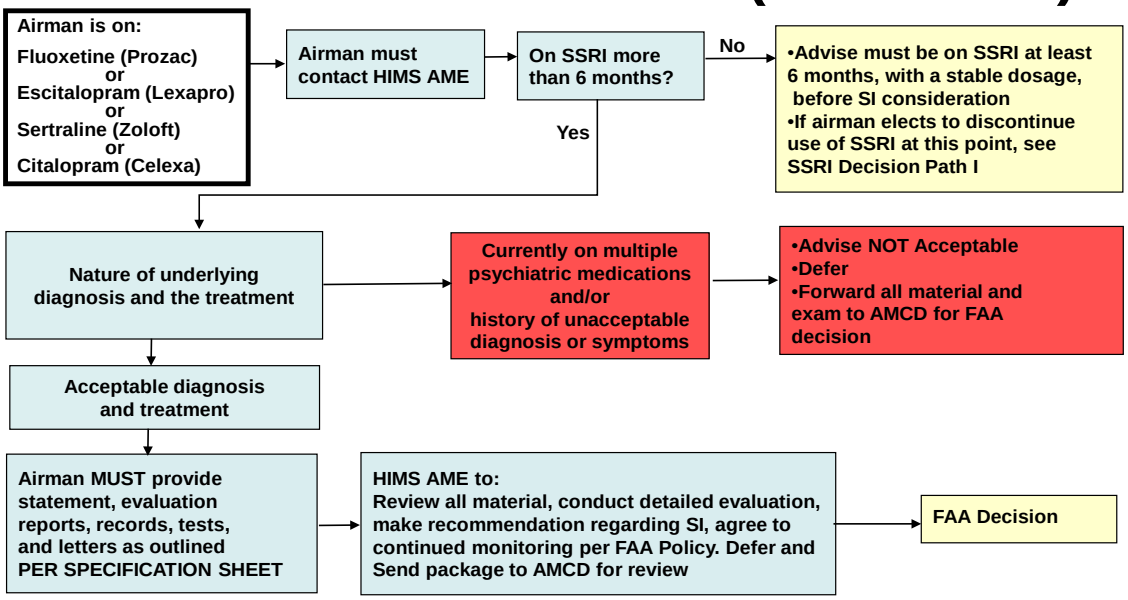
- Psychosis
- Suicidal ideation
- Electro convulsive therapy
- Treatment with multiple SSRIs concurrently
- Multi-agent drug protocol use (prior use of other psychiatric drugs in conjunction with SSRIs.)

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 SSRI Decision Path II (HIMS AME). The HIMS AME will also conduct the follow up evaluation after initial issuance. See SSRI Follow Up Path , SSRI Specification Sheet – for Initial Consideration, and Disease Protocols, Specifications for Neuropsychological Evaluations for Treatment with SSRI Medications.

SSRI Decision Path - I



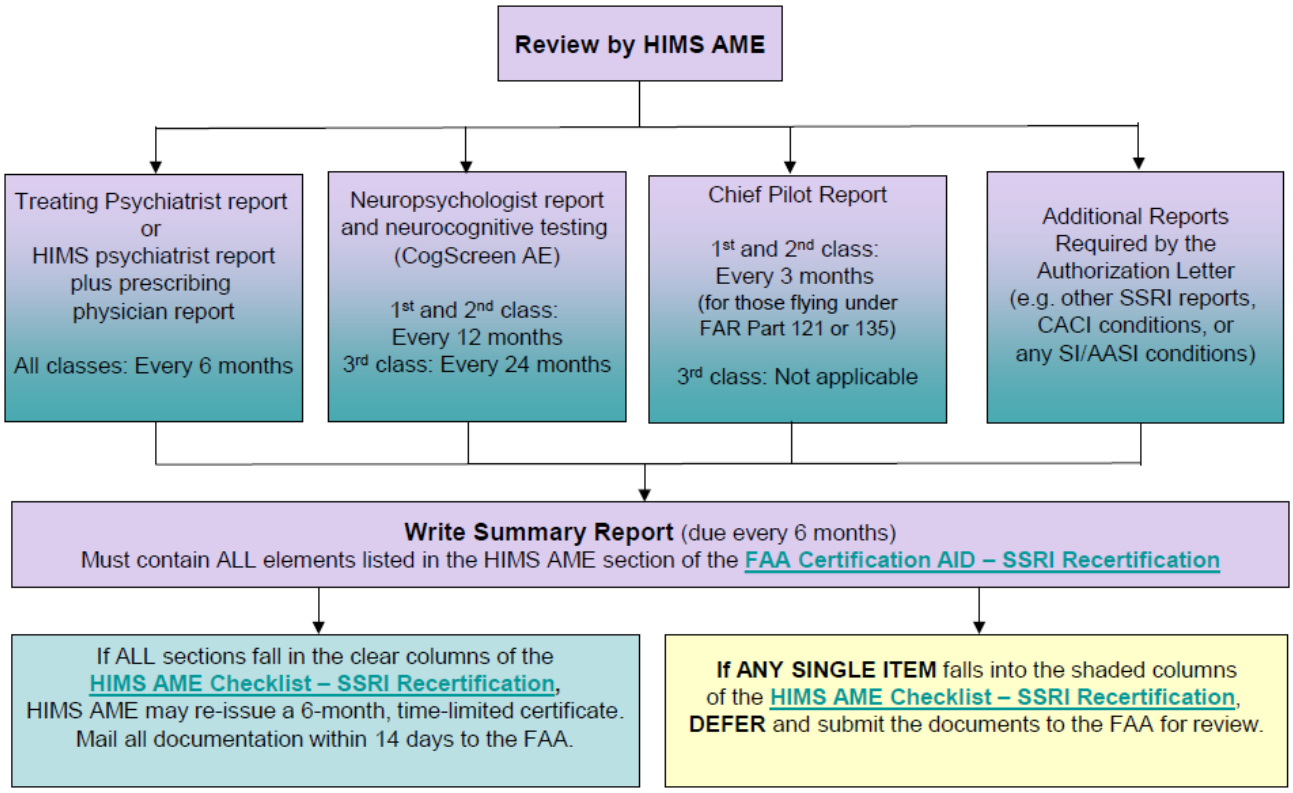
SSRI Decision Path – II (HIMS AME)



SSRI Follow Up Path for the HIMS AME

Updated 05/25/16

HIMS AME must see the airman in person every 6 months and review ALL the documents required on the HIMS AME Checklist – SSRI Recertification



See:

HIMS AME Checklist – SSRI Recertification

FAA Certification AID – SSRI Recertification

HIMS AME Checklist - SSRI Recertification

(Updated 5/25/16)

Airman Name _____ PI#_____

Instructions to the HIMS AME:

- Address the following items based on your in office exam and documentation review;
- **Submit this Checklist** (signed and dated by the HIMS AME); AND
- **Include supporting documentation reviewed to complete this Checklist** (including your HIMS AME report) **within 14 days to:**

Federal Aviation Administration
Aerospace Medical Certification Division AAM-300
PO Box 26080, Oklahoma City, OK 73125-9914

I reviewed the airman's SSRI Authorization Letter dated: _____
(Date of Authorization Letter)

1. **HIMS AME FACE-TO-FACE, IN OFFICE EVALUATION: Required <u>EVERY 6 months</u> for <u>ALL CLASSES</u>**

	No	Yes
• Interval visit summaries (if any) are unfavorable or reflect concerns……		
• Any concerns about the airman's current psychiatric status based on your clinical interview, evaluation, and review of reports? ……		
• Any new psychiatric conditions identified or any change in medication or dose during this period?..…		
• Any abnormal physical exam or mental exam findings? ……		
• Any NEW condition(s) that would require Special Issuance? (Do not include any new CACI qualified Condition.) ……		

2. **TREATING PSYCHIATRIST REPORT**: **Required <u>EVERY 6 months</u> for <u>ALL CLASSES</u>**
   OR
   HIMS PSYCHIATRIST REPORT plus **PRESCRIBING PHYSICIAN REPORT**

	Yes	No
• Report(s) is/are favorable with no anticipated or interim treatment changes ……		
• The airman is **on the same medication <u>at the same dose</u>** stated in the Authorization letter?.....		

3. **NEUROPSYCHOLOGIST REPORT**: Required <u>EVERY 12 months for 1st and 2nd class a</u>nd <u>every 24 months for 3rd class</u> (unless otherwise specified on the Authorization Letter).

	Not due	Yes	No
• Concludes <u>NO</u> aeromedically significant cognitive deficits or adverse changes?..……..			
• CogScreen is attached? ……			
• Additional neuropsych testing (if performed or required) is attached? ……			

4. **CHIEF PILOT REPORT(S)**: **Required <u>EVERY 3 months</u>**
   (Only Commercial pilots holding first- or second-class certificates):

	N/A	Yes	No
• Report(s) is/are favorable?.....……..			

5. **ADDITIONAL REPORTS required by Authorization letter**

	N/A	Yes	No
o SSRI related (drug testing, therapy reports, etc.) reports are favorable……..			
o Reports required for other non-SSRI conditions meet Authorization requirements……..			

	Yes	No
6. I have no other concerns about this airman and recommend re-certification for Special Issuance……..		

_____ HIMS AME Signature

_____ Date of Evaluation

If **ALL** items fall into the clear column, the AME may issue with the time limitation specified in the Authorization letter.

If ANY SINGLE ITEM falls into the SHADED COLUMN, the AME MUST DEFER or contact the FAA AND EXPLAIN in the HIMS evaluation report.

FAA CERTIFICATION AID – SSRI Recertification (Page 1 of 2)

(Updated 5/25/16)

The following information is to assist your treating physician/ provider who may be unfamiliar with FAA medical certification requirements. It lists the ABSOLUTE MINIMUM information required by the FAA to make a determination on an airman medical certificate. You should strongly consider taking **a copy to each evaluator so they understand what specific information is needed in their report to the FAA.** If each item is not addressed by the corresponding provider there may be a **delay** in the processing of your medical certification until that information is submitted. Additional information such as clinic notes or explanations should also be submitted as needed. All reports must be CURRENT (within the last 90 days) for FAA purposes.

REPORT FROM	REQUIRED INTERVAL	MUST SPECIFICALLY ADDRESS OR STATE THE FOLLOWING (SSRI Recertification)
HIMS AME	Every 6 months or per Authorization Letter for all classes	1. Must be a face-to-face, in person evaluation every 6 months. 2. Summarize findings from additional interim evaluations that were performed by any other venue (phone/ video/ email), either at the AME's discretion or as required by the Authorization Letter (every 1-3 months). 3. Summarize your aeromedical impression and evaluation as a HIMS AME based on the face-to-face evaluation AND review of the supporting documents. 4. If you do not agree with the supporting documents, or if you have additional concerns not noted in the documentation, please discuss your observations or concerns. 5. State if the airman meets all the requirements of the Authorization Letter or describe why they do not. 6. Review and comment if there has been any change in the dose or type of medication stated in the Authorization Letter. 7. Do you recommendation continued Special Issuance in this airman? 8. Agreement to continue to serve as the airman's HIMS AME and follow this airman per FAA policy. 9. Agreement to immediately notify the FAA (at 405-954-4821) of any change in condition, deterioration in psychiatric status or stability, if the medication dosage has changed, or there is a plan to reduce or discontinue any medication. 10. Using the HIMS AME Checklist –SSRI Recertification, comment on any items that fall into the shaded category. 11. Submit the SSRI check list, your HIMS AME written report, and all required supporting documentation that you reviewed with your package.
PSYCHIATRIST INTERIM HISTORY REPORT (or treating physician as noted in the Authorization letter) If the prescribing physician is not a psychiatrist, items #2-7 must be submitted from the prescribing physician IN ADDITION TO the psychiatrist report.	Every 6 months or per Authorization Letter	1. Summarize clinical findings and status of how the airman is doing. 2. Have there been any new symptoms or hospitalizations? 3. Did a change in dose or medication occur or is one recommended or anticipated? 4. Have there been any clinical concerns or changes in treatment plan? 5. Has the clinical diagnosis changed? 6. Agreement to immediately notify the FAA (at 405-954-4821) or AME if there are any changes in the airman's condition, dosage, change in medication or if the medication is stopped. 7. Interval treatment records such as clinic or hospital notes should also be submitted.

FAA CERTIFICATION AID – SSRI Recertification (Page 2 of 2)

(Updated 5/25/16)

The following information is to assist your treating physician/ provider who may be unfamiliar with FAA medical certification requirements. It lists the ABSOLUTE MINIMUM information required by the FAA to make a determination on an airman medical certificate. You should strongly consider taking **a copy to each evaluator so they understand what specific information is needed in their report to the FAA.** If each item is not addressed by the corresponding provider there may be a **delay** in the processing of your medical certification until that information is submitted. Additional information such as clinic notes or explanations should also be submitted as needed. All reports must be CURRENT (within the last 90 days) for FAA purposes.

REPORT FROM	REQUIRED INTERVAL	MUST SPECIFICALLY ADDRESS OR STATE THE FOLLOWING (SSRI Recertification)
CLINICAL PSYCHOLOGIST OR NEUROPSYCHOLOGIST CogScreen Results (or neurocognitive testing as required per the Authorization Letter) AND Neurocognitive evaluation	1st and 2nd class: Every 12 months or per Authorization Letter 3rd class: Every 24 months or per Authorization Letter	CogScreen information results that must be addressed in the narrative: 1. Specify the norm used: • Major Carrier (age-corrected); or • Regional Carrier (NOT age-corrected) [also acceptable for GA pilots]; or • GA Pilot Norms (age-corrected) 2. Specify Session Number administered (listed on Page 1 and Page 2 of printout). Session 1 for initial test *only*; retests should be Session 2 or incrementally higher. Clinical report MUST specifically comment on the following CogScreen items. If they have changed or are not normal, the narrative must discuss these findings and if they are of any clinical or aeromedical concern: 1. Any increase in LRPV (page 4) 2. Taylor Factor scores (page 5) 3. Base Rate for Speed, Accuracy, or Process (page 4) The psychologist or neuropsychologist report should also specifically mention: 1. The overall neurocognitive status of the airman. 2. Any adverse neurocognitive findings or a decline in condition. 3. If additional focused neuropsych testing is/was required or recommended. If any additional testing was performed, the report must explain why the testing was performed, the results, and how that fits into the airman's overall neurocognitive status. 4. Any other concerns or absence of concerns. 5. Agreement to immediately notify the FAA (at 405-954-4821) or AME if there are any changes or deterioration in the psychological status or stability in the airman's condition. 6. Submit the entire CogScreen report (approximately 13 pages) and any additional testing (if performed).
CHIEF PILOT OR AIRLINE MANAGEMENT DESIGNEE If the airman is 1st or 2nd class and employed by an air carrier	1st and 2nd class: Every 3 months (bring cumulative reports to AME evaluation every 6 months.) 3rd class: Not applicable	Report must address: 1. The airman's performance and competence. 2. Crew interaction. 3. Mood (if available). 4. Presence or absence of any other concerns.
ADDITIONAL PROVIDERS Additional reports for SSRI or any other condition noted in Authorization Letter	Every 6 months or per Authorization Letter	Varies. See the airman's Authorization Letter. Include any drug testing results, therapist follow up reports, social worker reports, etc. If the prescribing physician is NOT a psychiatrist, reports from the prescribing physician and their clinic office notes must be submitted in addition to the required psychiatric evaluations (see above). If the airman has other non-SSRI conditions that require a special issuance, those reports should also be submitted according to the Authorization Letter.

SSRI SPECIFICATION SHEET – FOR INITIAL CONSIDERATION

(Updated 6/29/2016)

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, Specifications for Neuropsychological Evaluations for Treatment with SSRIs.

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.
   - The HIMS AME must include a statement agreeing to serve as your 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 Disease Protocols for specifications for Neurocognitive, Psychiatric, and/or Psychiatric and Psychological Evaluations.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSTION
Psychiatric 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 Disease Protocols, 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. See Use of Antidepressant Medication Policy and Disease Protocols, Specifications for Neuropsychological Evaluations for Treatment with SSRI Medications.	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 Disease Protocols - Substance Dependence/Abuse.	Requires FAA Decision
Substance Dependence	All	Submit all pertinent medical information and clinical status report. Also see 5. Below and Disease Protocols - Substance Dependence/Abuse.	Requires FAA Decision
Suicide Attempt	All	Submit all pertinent medical information required.	Requires FAA Decision

1. 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.

2. 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 anti-drug 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 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
Blood and Blood-Forming Tissue Disease			
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	Follow the CACI - Pre-Diabetes Worksheet If airman meets all certification criteria – **Issue.** **All others** require FAA decision. Submit all evaluation data.
Diabetes Mellitus – Diet Controlled	All	See Diabetes Mellitus -Diet Controlled Protocol See chart of Acceptable Combinations of Diabetes Medications	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 - Medication Controlled (non insulin) Protocol See chart of Acceptable Combinations of Diabetes Medications	**Initial Special Issuance** - Requires FAA Decision **Followup Special Issuances** - See AASI Protocol
Diabetes Mellitus I & II - Insulin Treated	All	See Diabetes Mellitus I & II - Insulin Treated Protocol	Requires FAA Decision

CACI - Pre-Diabetes Worksheet (Updated 11/06/15)
(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 2 hours [ ] N/A
Medications for condition	[ ] None [ ] Metformin only (after a 14-day trial period with no side effects)

AME MUST NOTE in Block 60 either of the following:

[ ] CACI qualified Pre-Diabetes (Metabolic Syndrome, Impaired Fasting Glucose, Insulin Resistance, Glucose Elevation/Intolerance, Polycystic Ovary Syndrome). (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified Pre-Diabetes (Metabolic Syndrome, Impaired Fasting Glucose, Insulin Resistance, Glucose Elevation/Intolerance, Polycystic Ovary Syndrome). Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified Pre-Diabetes (Metabolic Syndrome, Impaired Fasting Glucose, Insulin Resistance, Glucose Elevation/Intolerance, Polycystic Ovary Syndrome). I have deferred. (Submit supporting documents.)

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Endocrine 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	Follow the CACI - Hypothyroidism Worksheet. 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

CACI - Hypothyroidism Worksheet (Updated 07/29/15)

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 one year	[ ] Yes

AME MUST NOTE in Block 60 one of the following:

[ ] CACI qualified hypothyroidism. (Documents do not need to be submitted to the FAA.)

[ ] Not CACI qualified hypothyroidism. Issued per valid SI/AASI. (Submit supporting documents.)

[ ] NOT CACI qualified hypothyroidism. I have deferred. (Submit supporting documents.)

	Gender Dysphoria All Classes Updated 01/27/16	
CONDITION	**EVALUATION DATA**	**DISPOSITION**
A. Completed gender reassignment surgery **5 or more years ago** OR Treated with hormone therapy **for 5 or more years**	If there is no evidence of a mental health diagnosis and the airman is doing well on current treatment:	**ISSUE** Annotate Block 60
B. Treated with Hormone therapy* for **less than 5 years** OR Gender reassignment surgery **less than 5 years ago** OR History of a **coexisting mental health concern** OR **History of mental health treatment** such as psychotherapy or medications for any condition other than Gender Dysphoria (Information is required if the airman has ever had a mental health diagnosis [including substance use disorder] or has received treatment for a mental health condition at any time. If treatment was short-term counseling for Gender Dysphoria only, note in Block 60.)	Submit the following to the FAA for review: ☐ A completed FAA Gender Dysphoria Mental Health Status Report or an evaluation from the treating physician, using World Professional Association for Transgender Health guidelines (WPATH), which addresses items listed in the Mental Health Status Report. ☐ Updated evaluations AFTER: • Hormone therapy: If on hormones, a current status report describing the length of time on the medication and side effects, if any. • Surgery: If surgery has been performed within the last one year, a status report from the surgeon or current treating physician showing full release, off any sedation or pain medication, and any surgical complications (e.g. DVT/PE/cardiac, etc.).	**DEFER** Submit the information to the FAA for review. **Follow up Issuance** Will be per the airman's authorization letter

Notes:

The AME may ISSUE (no further information is needed), **if the airman**:

- Was evaluated for or diagnosed with Gender Dysphoria and has never undergone treatment (counseling or support group for GD does not require information);
- Has no history of other mental health diagnoses or treatment; and
- Is otherwise qualified

***Side effects from hormone therapy can be aeromedically significant. The airman should be warned not to fly per Title 14 CFR 61.53 if they experience medication side effects.

FAA Gender Dysphoria Mental Health Status Report

(Updated 01/29/16)

Name _____ Birthdate _____

Applicant ID# _____ PI# _____

The following information must be addressed in the treating provider's evaluation. Evaluation should be performed in accordance with a comprehensive mental health assessment following the World Professional Association for Transgender Health (WPATH) guidelines. Submit either this form* or supporting documentation addressing each item to your AME or to the FAA at:

Federal Aviation Administration
Aerospace Medical Certification Division AAM-300
PO Box 26080
Oklahoma City, OK 73125-9914

1. I am a board certified psychiatrist or licensed psychologist AND I meet the criteria for "a qualified mental health professional" per WPATH (current version) guidelines. — [ ] Yes | [ ] No-explain

2. This airman meets the DSM-5 diagnostic criteria for Gender Dysphoria and the condition is not secondary to, or better accounted for, by other diagnoses. — [ ] Yes | [ ] No-explain

3. PSYCHIATRIC HISTORY:

Current mental health diagnosis or coexisting mental health concerns….....	[ ] None	[ ] Yes-explain
Previous mental health diagnosis or coexisting mental health concerns.....	[ ] None	[ ] Yes-explain
ER visit or hospitalization for any psychiatric illness or condition ever…….....	[ ] None	[ ] Yes-explain
Any suicide attempt(s) ever.....……..…….....	[ ] None	[ ] Yes-explain
Substance Use disorder per DSM-5…… (e.g. alcohol, cannabis, stimulants, hallucinogens, opioids)	[ ] None	[ ] Yes-explain

4. PSYCHIATRIC TREATMENT: (List start and end dates on each. For medications, also note name, dose, and side effects, if any.)

Current use……	[ ] None	[ ] Yes-explain
Previous use……..	[ ] None	[ ] Yes-explain
Psychotherapy for any condition other than GD (e.g. depression, anxiety)……..	[ ] None	[ ] Yes-explain
Other treatments (e.g. cognitive therapy, talk therapy, electroconvulsive therapy)	[ ] None	[ ] Yes-explain

5. CURRENT STATUS: Airman is doing well. There are no mental health concerns. Psychotherapy (if any) is for gender dysphoria only. No other treatment is needed (do not include support group or support group counseling). — [ ] Yes | [ ] No-explain

6. Any evidence of cognitive dysfunction or is a formal neuropsychological evaluation indicated? — [ ] None | [ ] Yes-explain

7. Do you have ANY concerns regarding this airman? — [ ] None | [ ] Yes-explain

_____ _____
Treating Provider Signature Date of Evaluation

_____ _____
Name or Office Stamp Phone Number

***For any response which requires further explanation, submit supporting documentation. In some cases, actual records will be required.**

Human Immunodeficiency Virus (HIV)

All Classes

Updated 04/27/16

DISEASE/CONDITION	EVALUATION DATA	DISPOSTITIONS
HIV medication taken for long-term prevention or Pre-Exposure Prophylaxis (PrEP) in an HIV negative airman* **Note:** This **does NOT** include use for short-term Post-Exposure Prophylaxis (PEP) - (ex: healthcare exposure.)	Review a current status report from the prescribing physician that verifies: ☐ HIV status is negative; ☐ Appropriate lab studies are being monitored; ☐ Medication is Truvada (tenofovir-emtricitabine); and ☐ No side effects from the medication.	**ISSUE** Note this in Block 60 and submit the initial current status and lab report to FAA for retention in the airman's file. Inform the airman that if they develop any problems with the medication, change in prophylactic medications, or seroconvert to HIV+ status they must report this to the FAA. **For continued certification:** If no change in medication and HIV status remains negative, the AME may issue and note this in Block 60.
Human Immunodeficiency Virus (HIV) Use this disposition if the airman has a history of HIV only.	See HIV Protocol	**DEFER** Requires FAA Decision
Acquired Immunodeficiency Syndrome (AIDS) Use this disposition if the airman has EVER had a history of AIDS.	See HIV Protocol	**DEFER** Requires FAA Decision

Neoplasms All Classes		
DISEASE/CONDITION	**EVALUATION DATA**	**DISPOSTITIONS**
Breast Cancer	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 Issuances** - 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		

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.

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

1. 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

1. 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 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

1. 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.

2. Bilateral Deafness. See Items 25-30. If otherwise qualified, 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

ITEM 50. Distant Vision

50. Distant Vision		
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(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 commercially 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.

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, 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.

2. 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
☐ 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

TESTS APPROVED FOR AIRMEN ARE NOT ALL ACCEPTABLE FOR AIR TRAFFIC CONTROLLERS (ATCS - FAA employee 2152 series and contract tower air traffic controllers). For ATCS color vision criteria, see Acceptable Test Instruments for Color Vision Screening of ATCS chart at the end of this section or contact a Regional Flight Surgeon.

The following equipment and techniques apply **TO AIRMEN ONLY**:

EQUIPMENT	TEST	EDITION	PLATES
Pseudoisochromatic plates	Test book should be held 30'' from 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 Company [AOC]		1965	1-15
AOC-HRR		2nd	1-11
Richmond-HRR		4th	5-24
Dvorine		2nd	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) - Tester MUST contain 2000-010 FAR color perception PIP plate to be approved; OPTEC 2500; Titmus Vision Tester; Titmus i400.

III. Aerospace Medical Disposition

TESTS APPROVED FOR AIRMEN ARE NOT ALL ACCEPTABLE FOR AIR TRAFFIC CONTROLLERS (ATCS - FAA employee 2152 series and contract tower air traffic controllers). For ATCS color vision criteria, see Acceptable Test Instruments for Color Vision Screening of ATCS chart at the end of this section or contact a Regional Flight Surgeon.

The following criteria apply **TO AIRMEN ONLY:**

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.
6. 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 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 first- or 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.

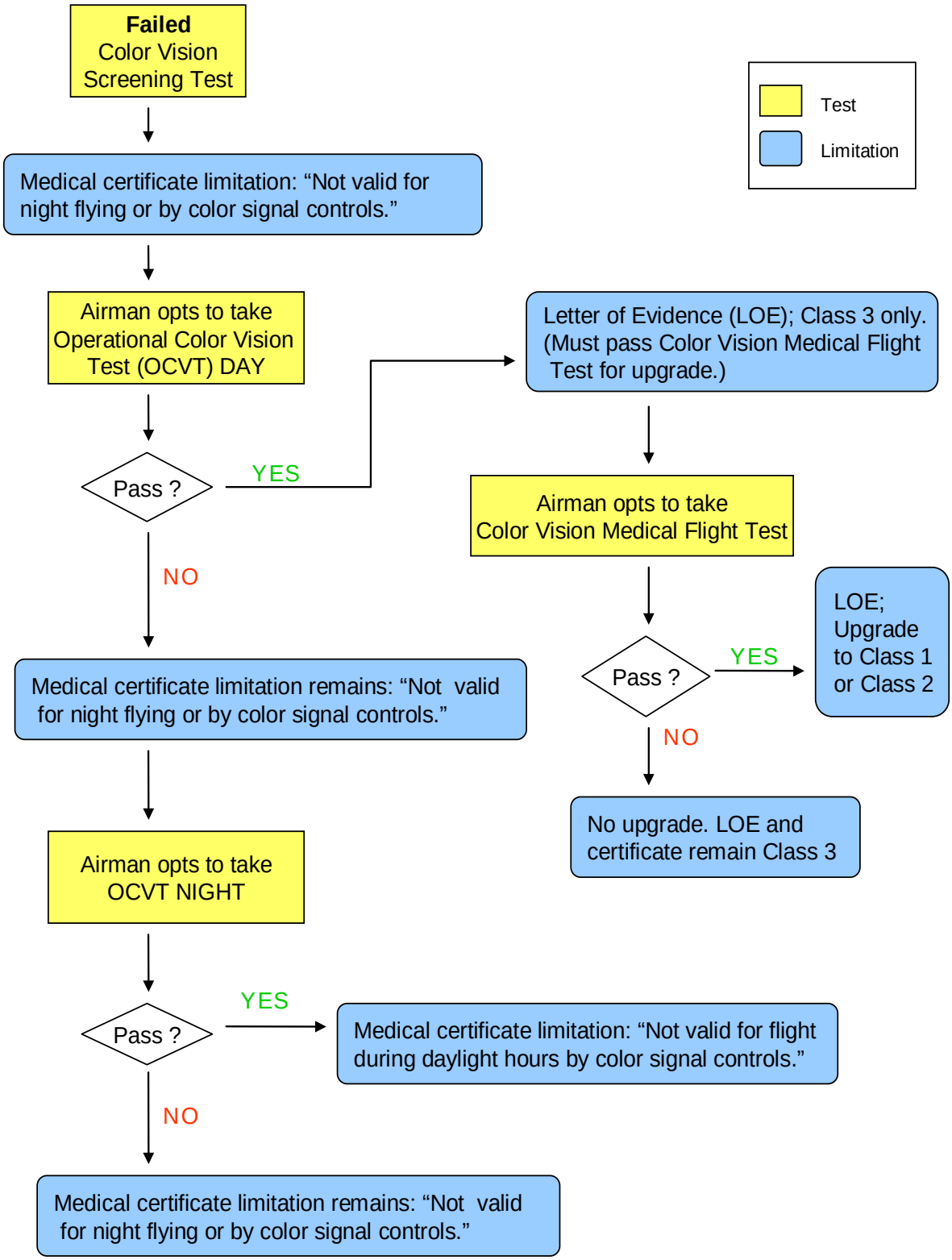
Applicants who take and pass both the OCVT during the day and the color vision MFT will be given a letter of evidence (LOE) valid for all classes of medical certificates and will have no limitation or comment made on the certificate regarding color vision as they meet the standard for all classes. Applicants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



ACCEPTABLE TEST INSTRUMENTS FOR COLOR VISION SCREENING OF ATCS (FAA EMPLOYEE 2152 SERIES and CONTRACT TOWER ATCSs)		
Color Vision Test	**Does not meet the standard (fails) if:**	**Supplier**
Richmond-HRR, 4th edition	Any error on plates 5-10	Richmond Products
All Ishihara test plates approved for airmen:		Ishihara
14-Plate (plates 1-11)	More than 6 errors on plates 1-11	
24-Plate (plates 1-15)	More than 2 errors on plates 1-15	
38-Plate (plates 1-21)	More than 4 errors on plates 1-21	
Keystone View Telebinocular	No errors on the 6 total trials on plates 4 and 5	Keystone View
Titmus testers approved for airmen: Titmus	Any errors on any of the 6 plates	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
Dvorine 2nd Edition	More than 2 errors on plates 1-15	Richmond Products
Special Instructions		
Test Administration	The Examiner must document the color vision test instrument used, version, answer sheet with the actual subject responses and the score. If MEDExpress is used the examiner may fax or mail the results to the Flight Surgeon or may document the findings in block 60.	
AME Office Inspection	AME office inspections: The inspector must visually inspect the condition of the color vision test instrument, for fading, finger prints, pen or pencil smudges; and lights used. Only a Macbeth Easel or a Verilux True Daylight Illuminator (F15T8VLX) are acceptable. Room lights must be off.	
False Negatives	Any test device with a restricted test set, like the Titmus testers, generally have a high false alarm test. If a disproportionally high number of subjects are failing, it may be necessary to review the acceptability of that test instrument. Regional Medical Offices are expected to monitor this situation.	
UNACCEPTABLE TEST INSTRUMENTS FOR COLOR VISION SCREENING OF ATCS (FAA EMPLOYEE 2152 SERIES and CONTRACT TOWER ATCSs)		
AOC-PIP	Mast	Stereo-Optic
Bausch & Lomb Vision Tester	OPTEC 900, 2500*, 5000*	Titmus i400*
D-15	Prism	Vision Chart - color letters
FALANT	Richmond-HRR Versions 2 and 3	
H-O Chart	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

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

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 RFS.

III. Aerospace Medical Disposition

1. 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 (updated 10/28/15)

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. If the airman's blood pressure is elevated in clinic, you have any of the following options:

   - Recheck the blood pressure. If the airman meets FAA specified limits on the second attempt, note this in Block 60 along with both readings.

   - Have the airman return to clinic 3 separate days over a 7-day period. If the airman meets FAA specified limits during these re-checks, note this and the readings in Block 60. Also note if there was a reason for the blood pressure elevation.

   - Send the airman back to his/her treating physician for re-evaluation. If medication adjustment is needed, a 7-day no-fly period applies to verify no problems with the medication. If this can be done within the 14 day exam transmission period, you could then follow the Hypertension Disposition Table.

   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 **CACI** - **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.

1. 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.

2. 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:

1. 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	☐
☐	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 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 in Block 60. 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 exam should be transmitted to AMCD with a note in Block 60 stating that additional information is still needed. The exam should be transmitted deferred. 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 in Block 60 and the application transmitted as deferred 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.

CACI CONDITIONS

(Updated 6/24/15)

Conditions AMEs Can Issue (CACI) is a series of conditions which allow AMEs to regular issue if the applicant meets the parameters of the CACI Condition Worksheet. The worksheets provide detailed instructions to the examiner and outline condition-specific requirements for the applicant.

1. Review the disposition table BEFORE the CACI worksheet to verify a CACI is required.
2. **If all the CACI criteria are met and the applicant is otherwise qualified,** the AME may issue on the first exam or the first time the condition is reported to the AME without contacting AMCD/RFS. Document the appropriate notes in Block 60 and keep the supporting documents in your files; they do not need to be submitted to the FAA at this time.
3. If the requirements are not met, the AME must defer the exam and send the supporting documents to the FAA.

CACIs with Certification Worksheets:

ARTHRITIS

ASTHMA

BLADDER CANCER

CHRONIC KIDNEY DISEASE

COLITIS

GLAUCOMA

HEPATITIS C – CHRONIC

HYPERTENSION

HYPOTHYROIDISM

RETAINED KIDNEY STONE(S)

MIGRAINE AND CHRONIC HEADACHE

MITRAL VALVE REPAIR

PRE-DIABETES

PROSTATE CANCER

RENAL CANCER

TESTICULAR CANCER

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 (Maximal)
- GRADED EXERCISE STRESS TEST REQUIREMENTS (Bundle Branch Block)
- HUMAN IMMUNODEFICIENCY VIRUS (HIV)
- IMPLANTED PACEMAKER
- LIVER TRANSPLANT (RECIPIENT)
- METABOLIC SYNDROME – MEDICATION CONTROLLED
- MUSCULOSKELETAL EVALUATION
- NEUROCOGNITIVE IMPAIRMENT
- OBSTRUCTIVE SLEEP APNEA (OSA)*
- PEPTIC ULCER
- PSYCHIATRIC EVALUATION
- PSYCHIATRIC AND PSYCHOLOGICAL EVALUATIONS
- RENAL TRANSPLANT
- SUBSTANCES of DEPENDENCE/ABUSE (Drugs and Alcohol)
- THROMBOEMBOLIC DISEASE
- VALVE REPLACEMENT

* OSA Reference Materials are located at the end of the Protocols below

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

Why is a neuropsychological evaluation required? 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.

Who may perform a neuropsychological evaluation? 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.

Will I need to provide any of my medical records? 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.

What is required in the "core test battery?" 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.

What must be submitted? 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

1. 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 non-accommodating 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 <u>one mailing</u> 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 post-event, 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 Guidelines for GXT

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

Why is a neuropsychological evaluation required? 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.

Who may perform a neuropsychological evaluation? 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.

Will I need to provide any of my medical records? 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.

What must be submitted? 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.
2. Where can I find the policy? The current policy is published in the Guide for Aviation Medical Examiners at Item 47. Psychiatric Conditions - Use of Antidepressant Medications.
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 medication may be considered by the FAA for an Authorization of a Special Issuance of a Medical Certificate (Authorization). For medications currently allowed, see chart of Acceptable Combinations of Diabetes Medications.

When medication is started the following time periods must elapse prior to certification to assure stabilization, adequate control, and the absence of side effects or complications from the medication.

- Metformin only. A 14 day period must elapse.
- Any other single diabetes medication requires a 60-day period.

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 DIABETES or HYPERGLYCEMIA ON ORAL MEDICATIONS STATUS REPORT signed and completed by the airman's treating provider or a report from the treating physician. 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.

DIABETES or HYPERGLYCEMIA ON ORAL MEDICATIONS
STATUS REPORT

(Updated 5/27/2015)

Name _____ Birthdate _____

Applicant ID# _____ PI#_____

Please have the provider who treats your diabetes enter the information in the space below. Return the completed form to your AME or to the FAA at:

Using US Postal Service: **or**
Federal Aviation Administration
Aerospace Medical Certification Division AAM-300
Mike Monroney Aeronautical Center
PO BOX 25082
Oklahoma City, OK 73125

Using special mail (UPS, FedEx, etc.)
Federal Aviation Administration
Aerospace Medical Certification Division-AAM-300
Civil Aerospace Medical Institute, Bldg. 13
6700 S. MacArthur Blvd, Room 308
Oklahoma City, OK 73169

1. Provider printed name _____ and phone # _____
2. Date of last clinical encounter for diabetes _____
3. Date of most recent DIABETES MEDICATION change _____
4. Hemoglobin A1C lab value _____ and date _____
   (A1C lab value must be taken more than 30 days after medication change and within 90 days of re/certification)
5. List ALL current medications (for any condition) *

_____
_____
_____
_____
_____

If YES is circled on any of the questions below, please attach narrative, tests, etc.

6. Any side effects from medications Yes No
7. ANY episode of hypoglycemia in the past year Yes No
8. Any evidence of progressive diabetes induced end organ disease

   Cardiac……. Yes No
   Neurological……. Yes No
   Ophthalmological……. Yes No
   Peripheral neuropathy……. Yes No
   Renal disease…….. Yes No

9. Does this patient take ANY form of insulin Yes No
10. Any clinical concerns? Yes No

_____ _____
Treating Provider Signature Date

*Note: See Acceptable Combinations of Diabetes Medications for airman.

PROTOCOL FOR INSULIN-TREATED DIABETES MELLITUS - TYPE I & TYPE II

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. The FAA has an established policy that permits the special issuance medical certification to some insulin treated applicants. Individuals certificated under this policy will be required to provide medical documentation regarding their history of treatment, accidents, and current medical status. If certificated, they will be required to adhere to 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 for third class applicants. First and second class applicants will be evaluated on a case-by-case basis by the Federal Air Surgeon's Office.

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.

3. 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 A_1 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

1. 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:

1. 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 than 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 pharmais 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.

For persons taking HIV medication for long-term prevention or Pre-Exposure Prophylaxis (PrEP), see Item 48. General Systemic - Human Immunodeficiency Virus (HIV)**.**

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.

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. For initial consideration, see the following **Human Immunodeficiency Virus (HIV) Specification Sheet** for the required clinical reports and documentation (including cognitive testing).

If granted Authorization for Special Issuance, follow-up requirements will be specified in the Authorization letter. However, the usual requirements will be:

- First 2 years of surveillance: see the **Under 2 Year Surveillance HIV Specification Sheet**

- After the first 2 years of surveillance: see the **After 2 Years Surveillance HIV Specification Sheet**

HUMAN IMMUNODEFICIENCY VIRUS (HIV) SPECIFICATION

Persons who are infected with the HIV and who do not have a diagnosis of Acquired Immunodeficiency Syndrome (AIDS) may be considered for any class medical certificate, if otherwise qualified. Persons on an 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. Current studies should be submitted no later than 30-days from test date. In order to be considered for a medical certificate the following data must be provided:

1. A current report from a physician knowledgeable in the treatment of HIV-infected persons and a medical history emphasizing symptoms and treatment referable to the immune system;
2. Current viral load determination by polymerase chain reaction (PCR) – for persons who have had an AIDS defining illness 2 determinations, 1 month apart);
3. Current CD4 (for persons who have had an AIDS defining illness, 2 determinations, 1 month apart) and lymphocyte count;
4. Current complete blood count (CBC) with differential;
5. Results of current liver function tests;
6. BUN and creatine;
7. a. A current assessment of cognitive function (preferably by CogScreen-AE [Aeromedical Edition] or other test battery) must be provided with the Initial application. Follow-up neurological-psychological evaluations are required annually for first and second-class pilots and every other year for third-class.

   b. If CogScreen-AE is not available, we suggest the following:

      1. MMPI
      2. WAIS-R
      3. Memory Test (one of the following)
         a. Wechsler Memory Scale
         b. Rey auditory Verbal Learning Test
      4. Trails Making Test (A&B)
      5. Category Test (booklet or machine)
      6. Sensory-Motor Screening
      7. Language Functioning Test (one of the following)
         a. Speech Sounds Perception Test
         b. Aphasia Screening Test

All of the above should be submitted together in one mailing to:

Using US Postal Service: **or**
Federal Aviation Administration
Aeromedical Certification Branch-AAM-311
Mike Munroney Aeronautical Center
PO BOX 25082
Oklahoma City, OK 73125

Using special mail (UPS, FedEx, etc.)
Federal Aviation Administration
Aeromedical Certification Branch-AAM-311
Mike Munroney Aeronautical Center
6700 S. MacArthur Blvd, Room B-59
Oklahoma City, OK 73169

1. For applicants with a history of cytomegalovirus (CMR) retinitis, a current ophthalmological evaluation with visual fields must be provided with the initial application and at 6 month-intervals thereafter.

UNDER 2 YEAR SURVEILLANCE HIV SPECIFICATION

Please provide our office with a current status report from a treating physician knowledgeable and experienced in the treatment of HIV-infected persons. This report should include the information outlined below, along with any separate additional testing.
The results should be sent to the Aerospace Medical Certification Division (AMCD) After review, if the airman is determined qualified, AMCD/Regional Flight Surgeon (RFS) will send a letter to the airman authorizing the Aviation Medical Examiner (AME) to issue a new time-limited medical certificate, as applicable.
Both the initial and subsequent medical determinations may only be made by the RFS or AMCD.

The current status report should include:

- Every 3 months: determinations of viral load, CD4 cell count, a clinical assessment of cognitive function, and any other laboratory and clinical tests deemed necessary by the treating physician. These results may be aggregated and included in the written current status report every 6 months unless there is an adverse change;

- Every 6 months a written current status report from the treating physician knowledgeable and experienced in the treatment of HIV-infected persons. To include the following: a medical history emphasizing symptoms and treatment referable to the immune system, any signs or symptoms of atherosclerotic cardiovascular disease, and diabetes mellitus or insulin resistance and a clinical assessment of cognitive function;

- Formal cognitive/neuropsychiatric testing, preferably with CogScreen-AE [Note: initial and periodic testing should be done with the same test instruments each time in order to allow valid comparisons over time]. Formal cognitive function testing if due; and

- Any other tests advised by the treating physician.

AFTER 2 YEARS SURVEILLANCE HIV SPECIFICATION

Please provide our office with a current status report from a treating physician knowledgeable and experienced in the treatment of HIV-infected persons. This report should include the information outlined below, along with any separate additional testing.

The results should be sent to the Aerospace Medical Certification Division (AMCD) After review, if the airman is determined qualified, AMCD/Regional Flight Surgeon (RFS) will send a letter to the airman authorizing the Aviation Medical Examiner (AME) to issue a new time-limited medical certificate, as applicable.
Both the initial and subsequent medical determinations may only be made by the RFS or AMCD.

The current status report should include:

- Every 6 months: determinations of viral load, CD4 cell count, a clinical assessment of cognitive function and any other laboratory and clinical tests deemed necessary by the treating physician. These results may be aggregated and included in a written current status report every 12 months unless there is an adverse change;

- Every 12 months a written current status report from the treating physician knowledgeable and experienced in the treatment of HIV-infected persons. To include the following: a medical history emphasizing symptoms and treatment referable to the immune system, any signs or symptoms of atherosclerotic cardiovascular disease, and diabetes mellitus or insulin resistance and a clinical assessment of cognitive function;

- Formal cognitive/neuropsychiatric testing, preferably with CogScreen-AE [Note: initial and periodic testing should be done with the same test instruments each time in order to allow valid comparisons over time]. Formal cognitive function testing if due; and

- Any other tests advised by the treating physician.

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.

2. 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 LIVER TRANSPLANT (RECIPIENT)

(Updated 7/29/15)

The Examiner must defer initial issuance. An applicant with a history of liver transplant must submit the following for consideration of a medical certificate. Applicants found qualified will be required to provide annual follow up evaluations per their authorization letter.

Requirements for **initial consideration**:

- A six (6) month post-transplant recovery period with documented stability for the last three (3) months;

- Pre-transplant treatment notes that identify the diagnosis, indication for transplant, and any sequelae prior to transplant. If alcohol was a contributing factor (abuse or dependence), submit evidence of treatment and recovery;

- Hospital reports to include admission note, operative note, and hospital discharge summary;

- A current status report from the treating physician that describes:
    - The status of the transplant, functional capacity, modifiable risk factors, and prognosis for incapacitation; and
    - Any recent or expected change in treatment plan

- Complication history such as:
    - Rejection or graft versus host disease/GVHD;
    - Infection Hepatitis C (HCV) or CMV; and/or
    - Malignancy due to hepatocellular carcinoma (HCC) or following transplant and initiation of immune-suppressants

- Current medication list to include names and dosage of immunosuppressive medications, the presence or absence of any side effects, and how long the airman has been on these medications.

- Lab and images to include copies of most recent lab performed by the treating physician (CBC, CMP with LFTs) and any other tests deemed necessary by the treating physician such as imaging or liver biopsy

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 diabetes mellitus controlled by medication may be considered by the FAA for an Authorization of a Special Issuance of a Medical Certificate (Authorization). For medications currently allowed, see chart of Acceptable Combinations of Diabetes Medications.

When medication is started the following time periods must elapse prior to certification to assure stabilization, adequate control, and the absence of side effects or complications from the medication.

- Metformin only. A 14 day period must elapse.
- Any other single diabetes medication requires a 60-day period.

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.

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 (SODA) may be provided to the airman from AMCD/RFS office if the MFT is successful and the airman is otherwise qualified.

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

Why is a neuropsychological evaluation required? 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.

Who may perform a neuropsychological evaluation? 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.

Will I need to provide any of my medical records? 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.

What is required in the "core test battery?" 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.

What must be submitted? 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 OBSTRUCTIVE SLEEP APNEA

Quick Start for AMES

Sleep apnea has significant safety implications due to cognitive impairment secondary to the lack of restorative sleep and is disqualifying for airman medical certification. The condition is part of a group of sleep disorders with varied etiologies. Specifically, sleep apneas are characterized by abnormal respiration during sleep. The etiology may be obstructive, central or complex in nature. However, no matter the cause, the manifestations of this disordered breathing present safety risks that include, but are not limited to, excessive daytime sleepiness (daytime hypersomnolence), cardiac dysrhythmia, sudden cardiac death, personality disturbances, refractory hypertension and, as mentioned above, cognitive impairment. Certification may be considered once effective treatment is shown.

This protocol is designed to evaluate airmen who may be presently at risk for Obstructive Sleep Apnea (OSA) and to outline the certification requirements for airmen diagnosed with OSA. While this protocol focuses on OSA, the AME must also be mindful of other sleep-related disorders such as insomnia, parasomnias, sleep-related movement disorders (e.g. restless leg syndrome and periodic leg movement), central sleep apnea and other hypersomnias, circadian rhythm sleep disorders, etc., that may also interfere with restorative sleep. All sleep disorders are also potentially medically disqualifying if left untreated. If one of these other sleep-related disorders is initially identified during the examination, the AME must contact their RFS or AMCD for guidance.

Risk Information

The American Academy of Sleep Medicine has established the risk criteria (utilizing Tables 2 and 3) for OSA. When applying Table 2 and 3, the AME is expected to employ their clinical judgment.

Educational information for airmen can be found in the FAA Pilot Safety Brochure on Obstructive Sleep Apnea. Supplemental information for AMEs can be found in OSA Reference Materials, which can be found at end of the Protocols section.

Persons with physical findings such as a retrograde mandible, large tongue or tonsils, neuromuscular disorders, or connective tissue anomalies are at risk of OSA requiring treatment despite a normal or low BMI. OSA is also associated with conditions such as refractory hypertension requiring more than two medications for control, diabetes mellitus, and atrial fibrillation. Over 90% of individuals with a BMI of 40 or greater have OSA requiring treatment. Up to 30% of individuals with OSA have a BMI less than 30.

- **AME Actions** - On every exam, the Examiner must triage the applicant into one of 6 groups:

  - If the applicant is on a Special Issuance Authorization for OSA (**Group/Box 1 of OSA flow chart**), select Group 1 on the AME Action Tab:
    - Follow AASI/SI for OSA
    - Notate in Block 60; and
    - Issue, if otherwise qualified

  - If the applicant has had a prior sleep assessment (**Group/Box 2 of OSA flow chart**), select Group 2 on the AME Action Tab:

    - If the airman is under treatment, provide the requirements of the AASI and advise the airman they must get the Authorization of Special Issuance;
    - Give the applicant Specification Sheet A and advise that a letter will be sent from the Federal Air Surgeon requesting more information. The letter will state that the applicant has 90 days to provide the information to the FAA/AME;
    - Notate in Box 60;
    - Issue, if otherwise qualified

  - If the applicant does not have an AASI/SI or has not had a previous assessment, the AME must:

    - Calculate BMI; and
    - Consider AASM risk criteria Table 2 & 3
    - If the AME determines the applicant is not currently at risk for OSA (**Group/Box 3 of OSA flow chart**), select Group 3 on the AME Action Tab:
      - Notate in Block 60; and
      - Issue, if otherwise qualified

    - If the applicant is at risk for OSA but in the opinion of the AME the applicant is at low risk for OSA , the AME must (**Group/Box 4 of OSA flow chart**), select Group 4 on the AME Action Tab:

      - Discuss OSA risks with applicant;
      - Provide resource and educational information, as appropriate;
      - Issue, if otherwise qualified; and
      - Notate in Block 60

  - If the applicant is at high risk for OSA, the AME must (**Group/Box 5 of OSA flow chart**), select Group 5 on the AME Action Tab:

- Give the applicant Specification Sheet B and advise that a letter will be sent from the Federal Air Surgeon requesting more information. The letter will state that the applicant has 90 days to provide the information to the FAA/AME
- Notate in Block 60; and
- Issue, if otherwise qualified

- If the AME observes or the applicant reports symptoms which are severe enough to represent an immediate risk to aviation safety of the national airspace (**Group/Box 6 of OSA flow chart**), select Group 6 on the AME Action Tab.
    - Notate in Block 60
    - **THE AME MUST DEFER**

American Academy of Sleep Medicine
Guidance on Obstructive Sleep Apnea
http://www.aasmnet.org/Resources/clinicalguidelines/OSA_Adults.pdf

AASM Table 2

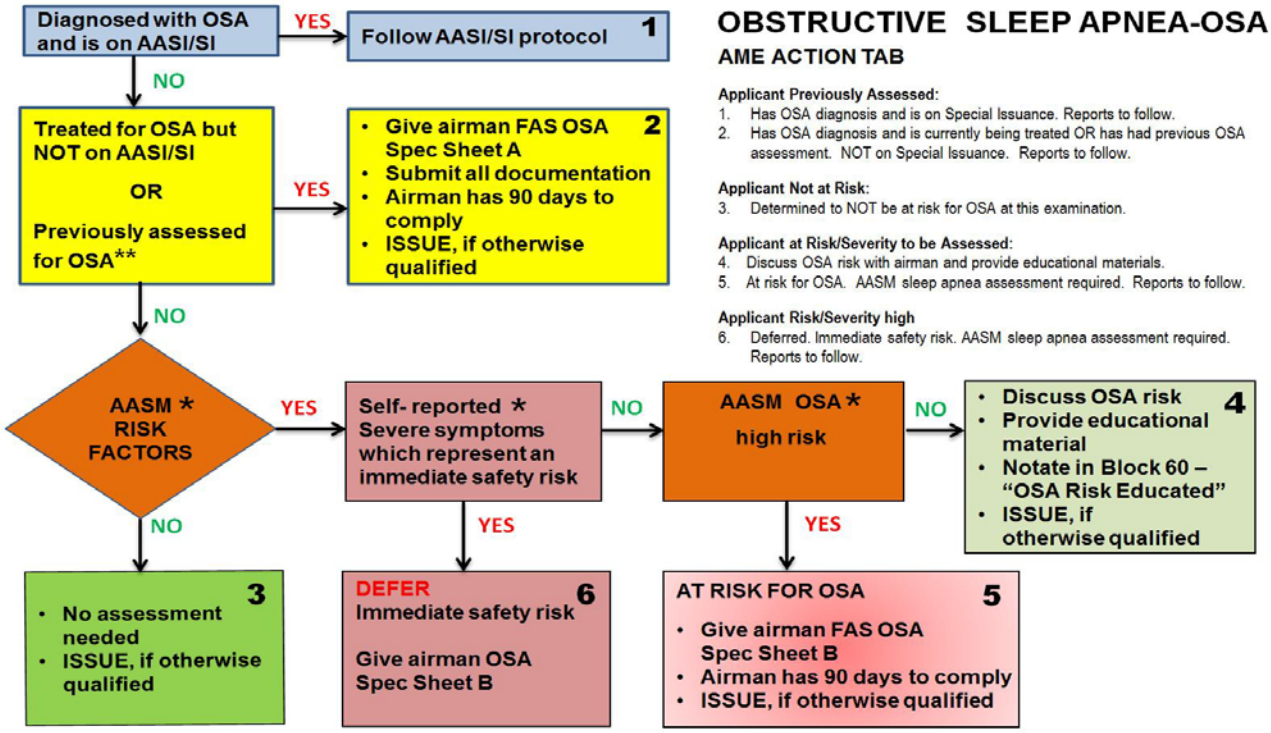
Patients at High Risk for OSA Who Should Be Evaluated for OSA Symptoms:

- Obesity (BMI > 35)
- Congestive heart failure
- Atrial fibrillation
- Treatment refractory hypertension
- Type 2 diabetes
- Nocturnal dysrhythmias
- Stroke
- Pulmonary hypertension
- High-risk driving populations
- Preoperative for bariatric surgery

AASM Table 3

Questions about OSA that Should Be Included in Routine Health Maintenance Evaluations:

- Is the patient obese?
- Is the patient retrognathic?
- Does the patient complain of daytime sleepiness?
- Does the patient snore?
- Does the patient have hypertension?



OBSTRUCTIVE SLEEP APNEA-OSA

AME ACTION TAB

Applicant Previously Assessed:

1. Has OSA diagnosis and is on Special Issuance. Reports to follow.
2. Has OSA diagnosis and is currently being treated OR has had previous OSA assessment. NOT on Special Issuance. Reports to follow.

Applicant Not at Risk:

3. Determined to NOT be at risk for OSA at this examination.

Applicant at Risk/Severity to be Assessed:

4. Discuss OSA risk with airman and provide educational materials.
5. At risk for OSA. AASM sleep apnea assessment required. Reports to follow.

Applicant Risk/Severity high

6. Deferred. Immediate safety risk. AASM sleep apnea assessment required. Reports to follow.

* See AASM Tables 2 and 3. AME must use clinical judgment in applying AASM criteria. The risk of OSA is determined by an integrated assessment of history, symptoms, and physical/clinical findings. No disqualification of airmen should be based on BMI alone.

** If the applicant has been previously assessed, has previously provided the information, was negative for evidence of OSA, AND has no changes in risk factors since the last exam, proceed with the flow chart as with any other applicant.

Obstructive Sleep Apnea Specification Sheet A
Information Request

Your application for airman medical certification submitted this date indicates that you have been treated or previously assessed for Obstructive Sleep Apnea (OSA).

You must provide the following information to the Aerospace Medical Certification Division (AMCD) or your Regional Flight Surgeon within 90 days:

- All reports and records regarding your assessment for OSA by your primary care physician and/or a sleep specialist.
- If you are currently being treated, also include:
    - A signed Airman Compliance with Treatment form or equivalent;
    - The results and interpretive report of your most recent sleep study; and
    - A current status report from your treating physician indicating that OSA treatment is still effective.
        - **For CPAP/ BIPAP/ APAP:**
          A copy of the cumulative annual PAP device report. Target goal should show use for at least 75% of sleep periods and an average minimum of 6 hours use per sleep period.
        - **For Dental Devices or for Positional Devices:**
          Once Dental Devices with recording / monitoring capability are available, reports must be submitted.
- To expedite the processing of your application, please submit the aforementioned information **in one mailing** using your reference number (PI, MID, or APP ID).

Using Regular Mail (US Postal Service)
Federal Aviation Administration
Aerospace Medical Certification Division
AAM-300
Civil Aerospace Medical Institute
PO BOX 25082
Oklahoma City, OK 73125-9867

or

Using Special Mail (FedEx, UPS, etc.)
Federal Aviation Administration
Aerospace Medical Certification Division
AAM-300
Civil Aerospace Medical Institute, Bldg. 13
6700 S. MacArthur Blvd., Room 308
Oklahoma City, OK 73169

OBSTRUCTIVE SLEEP APNEA SPECIFICATION SHEET B
ASSESSMENT REQUEST

Due to your risk for Obstructive Sleep Apnea (OSA), and to review your eligibility to have a medical certificate, you must provide the following information to the Aerospace Medical Certification Division (AMCD) or your Regional Flight Surgeon's Office for review within 90 days:

- A current OSA assessment in accordance with the American Academy of Sleep Medicine (AASM) by your AME, personal physician, or a sleep medicine specialist.

- If it is determined that a sleep study is necessary, it must be either a Type I laboratory polysomnography or a Type II (7 channel) unattended home sleep test (HST) that provides comparable data and standards to laboratory diagnostic testing. **It must be interpreted by a sleep medicine specialist and must include diagnosis and recommendation(s) for treatment, if any.**

- In communities where a Level II HST is unavailable, the FAA will accept a level III HST. If the HST is positive for OSA, no further testing is necessary and treatment in accordance with the AASI must be followed. However, if the HST is equivocal, a higher level test such as an in-lab sleep study will be needed unless a sleep medicine specialist determines no further study is necessary and documents the rationale.

If your sleep study is **positive for a sleep-related disorder, you may not exercise the privileges of your medical certificate until you provide:**

- A signed Airman Compliance with Treatment form or equivalent;

- The results and interpretive report of your most recent sleep study; and

- A current status report from your treating physician addressing compliance, tolerance of treatment, and resolution of OSA symptoms.

If you are **not diagnosed with a sleep-related disorder or the study was negative for a sleep-related disorder**, you may continue to exercise the privileges of your medical certificate, but the evaluation report along with the results of any study, if conducted, must be sent to the FAA at the address below. All information provided will be reviewed and is subject to further FAA action.

In order to expedite the processing of your application, please submit the aforementioned information **in one mailing** using your reference number (PI, MID, or APP ID).

Using Regular Mail (US Postal Service) **or**
Federal Aviation Administration
Aerospace Medical Certification Division
AAM-300
Civil Aerospace Medical Institute
PO BOX 25082
Oklahoma City, OK 73125-9867

Using Special Mail (FedEx, UPS, etc.)
Federal Aviation Administration
Aerospace Medical Certification Division
AAM-300
Civil Aerospace Medical Institute, Bldg. 13
6700 S. MacArthur Blvd., Room 308
Oklahoma City, OK 73169

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

Why is a psychiatric 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. This guideline outlines the requirements for these evaluations.

Will I need to provide any of my medical records? 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

Who may perform a psychiatric evaluation? 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.

What must be submitted by the psychiatrist? 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.

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.

Will I need to provide any of my medical records? 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 t**o 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.

- 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.

What must be submitted by the psychiatrist? 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

Who may perform a psychological evaluation? 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.

What is required in the "core test battery?" 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:
   1) 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: Requirements for neuropsychological testing are listed in the addendum below.

What must be submitted? 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

Who may perform a neuropsychological evaluation? 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.

Requirements for the evaluation. Requirements for providing records to the neuropsychologist, conducting the evaluation, and submitting reports are the same as noted above for the clinical psychologist.

What is required in the "core test battery?" 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.

What must be submitted? 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.

What must be submitted by the psychiatrist? 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

Who may perform a neuropsychological evaluation? 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 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.

What is required in the "core test battery?" 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.

What must be submitted? 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 monthly 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
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 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.

REFERENCE MATERIALS FOR OBSTRUCTIVE SLEEP APNEA (OSA)

Table of Contents

1. Guidance

a. OSA Protocol and Decisions Consideration table
b. Quick-Start for AMEs
c. OSA Flow Chart
d. AASM Tables 2 and 3
e. AME Actions
f. Specification Sheet A
g. Specification Sheet B

2. AASI

a. AASI
b. Airman Compliance with Treatment form (signature document)

3. Supplemental and Educational Information

a. Frequently Asked Questions (FAQs)
b. BMI Calculator and Chart
c. Questionnaires
    i. Berlin
    ii. Epworth Sleepiness Scale
    iii. STOP BANG
d. FAA OSA Brochure

4. For AMEs Who Elect to Perform OSA Assessment

a. AASM Guidelines
b. AME Statement (signature document)

Decision Considerations
Disease Protocols – Obstructive Sleep Apnea

Quick Start for AMES

Sleep apnea has significant safety implications due to cognitive impairment secondary to the lack of restorative sleep and is disqualifying for airman medical certification. The condition is part of a group of sleep disorders with varied etiologies. Specifically, sleep apneas are characterized by abnormal respiration during sleep. The etiology may be obstructive, central or complex in nature. However, no matter the cause, the manifestations of this disordered breathing present safety risks that include, but are not limited to, excessive daytime sleepiness (daytime hypersomnolence), cardiac dysrhythmia, sudden cardiac death, personality disturbances, refractory hypertension and, as mentioned above, cognitive impairment. Certification may be considered once effective treatment is shown.

This protocol is designed to evaluate airmen who may be presently at risk for Obstructive Sleep Apnea (OSA) and to outline the certification requirements for airmen diagnosed with OSA. While this protocol focuses on OSA, the AME must also be mindful of other sleep-related disorders such as insomnia, parasomnias, sleep-related movement disorders (e.g. restless leg syndrome and periodic leg movement), central sleep apnea and other hypersomnias, circadian rhythm sleep disorders, etc., that may also interfere with restorative sleep. All sleep disorders are also potentially medically disqualifying if left untreated. If one of these other sleep-related disorders is initially identified during the examination, the AME must contact their RFS or AMCD for guidance.

Risk Information

The American Academy of Sleep Medicine has established the risk criteria (utilizing Tables 2 and 3) for OSA. When applying Table 2 and 3, the AME is expected to employ their clinical judgment.

Educational information for airmen can be found in the FAA Pilot Safety Brochure on Obstructive Sleep Apnea.

Persons with physical findings such as a retrograde mandible, large tongue or tonsils, neuromuscular disorders, or connective tissue anomalies are at risk of OSA requiring treatment despite a normal or low BMI. OSA is also associated with conditions such as refractory hypertension requiring more than two medications for control, diabetes mellitus, and atrial fibrillation. Over 90% of individuals with a BMI of 40 or greater have OSA requiring treatment. Up to 30% of individuals with OSA have a BMI less than 30.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Sleep Apnea			
Obstructive Sleep Apnea	All	Requires risk evaluation, per OSA Protocol. Document history and Findings.	If meets OSA Criteria – Issue, if otherwise qualified **Initial Special Issuance** - Requires FAA Decision **Followup Special Issuance** See AASI
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

OSA QUICK-START for AMEs

The AME while performing the triage function must conclude one of six possible determinations. The AME is **not** required to perform the assessment or to comment on the presence or absence of OSA. For more information, view this instructional video on the screening process.

Step 1 - Determine into which group (1-6) the airman falls.

Applicant Previously Assessed:
Group 1: Has OSA diagnosis and is on Special Issuance. Reports to follow.
Group 2: Has OSA diagnosis OR has had previous OSA assessment. NOT on Special Issuance. Reports to follow.

Applicant Not at Risk:
Group 3: Determined to NOT be at risk for OSA at this examination.

Applicant at Risk/Severity to be assessed:
Group 4: Discuss OSA risk with airman and provide educational materials.
Group 5: At risk for OSA. AASM sleep apnea assessment required.

Applicant Risk/Severity Extremely High:
Group 6: Deferred. Immediate safety risk. AASM sleep apnea assessment required. Reports to follow.

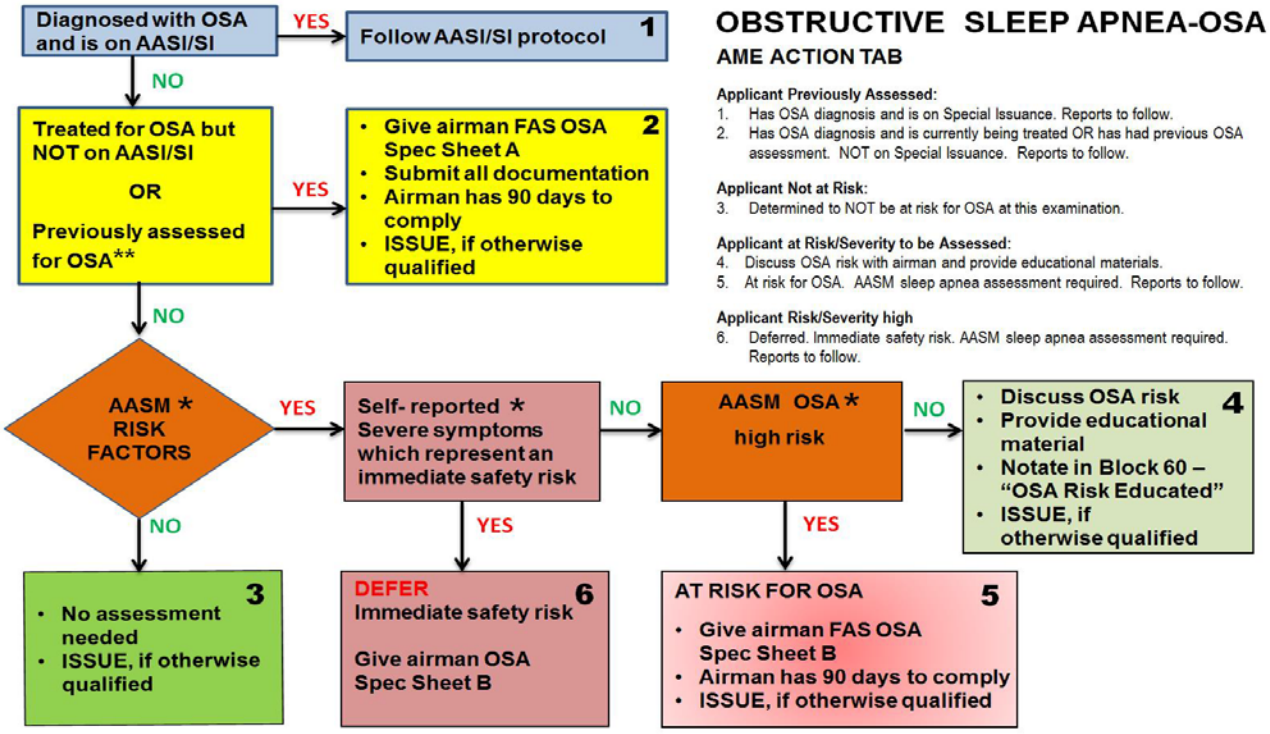
Step 2 – Document findings in Block 60.

Step 3 – Check appropriate triage box in the AME Action Tab.

Step 4 – Issue, if otherwise qualified.

In assessing airmen for groups 4 and 5, the AME is expected to use their own clinical judgment, using AASM information, when making the triage decision.
Some AMEs have voiced the desire to perform the OSA assessment. **While we do not recommend it**, the AME may perform the OSA assessment provided that it is in accordance with the clinical practice guidelines established by the American Academy of Sleep Medicine.*

*If a sleep study is conducted, it must be interpreted by a sleep medicine specialist.



OBSTRUCTIVE SLEEP APNEA-OSA

AME ACTION TAB

Applicant Previously Assessed:

1. Has OSA diagnosis and is on Special Issuance. Reports to follow.
2. Has OSA diagnosis and is currently being treated OR has had previous OSA assessment. NOT on Special Issuance. Reports to follow.

Applicant Not at Risk:

3. Determined to NOT be at risk for OSA at this examination.

Applicant at Risk/Severity to be Assessed:

4. Discuss OSA risk with airman and provide educational materials.
5. At risk for OSA. AASM sleep apnea assessment required. Reports to follow.

Applicant Risk/Severity high

6. Deferred. Immediate safety risk. AASM sleep apnea assessment required. Reports to follow.

* See AASM Tables 2 and 3. AME must use clinical judgment in applying AASM criteria. The risk of OSA is determined by an integrated assessment of history, symptoms, and physical/clinical findings. No disqualification of airmen should be based on BMI alone.

** If the applicant has been previously assessed, has previously provided the information, was negative for evidence of OSA, AND has no changes in risk factors since the last exam, proceed with the flow chart as with any other applicant.

American Academy of Sleep Medicine
Guidance on Obstructive Sleep Apnea
http://www.aasmnet.org/Resources/clinicalguidelines/OSA_Adults.pdf

AASM Table 2

Patients at High Risk for OSA Who Should Be Evaluated for OSA Symptoms:

- Obesity (BMI > 35)
- Congestive heart failure
- Atrial fibrillation
- Treatment refractory hypertension
- Type 2 diabetes
- Nocturnal dysrhythmias
- Stroke
- Pulmonary hypertension
- High-risk driving populations
- Preoperative for bariatric surgery

AASM Table 3

Questions about OSA that Should Be Included in Routine Health Maintenance Evaluations:

- Is the patient obese?
- Is the patient retrognathic?
- Does the patient complain of daytime sleepiness?
- Does the patient snore?
- Does the patient have hypertension?

AME Actions - On every exam, the Examiner must triage the applicant into one of 6 groups:

- If the applicant is on a Special Issuance Authorization for OSA (**Group/Box 1 of OSA flow chart)**, select Group 1 on the AME Action Tab:
    - Follow AASI/SI for OSA
    - Notate in Block 60; and
    - Issue, if otherwise qualified

- If the applicant has had a prior OSA assessment (**Group/Box 2 of OSA flow chart**), select Group 2 on the AME Action Tab:
    - If the airman is under treatment, provide the requirements of the AASI and advise the airman they must get the Authorization of Special Issuance;
    - Give the applicant Specification Sheet A and advise that a letter will be sent from the Federal Air Surgeon requesting more information. The letter will state that the applicant has 90 days to provide the information to the FAA/AME;
    - Notate in Box 60;
    - Issue, if otherwise qualified

- If the applicant does not have an AASI/SI or has not had a previous assessment, the AME must:
    - Calculate BMI; and
    - Consider AASM risk criteria Table 2 & 3
    - If the AME determines the applicant is not currently at risk for OSA (**Group/Box 3 of OSA flow chart**), select Group 3 on the AME Action Tab:
        - Notate in Block 60; and
        - Issue, if otherwise qualified

    - If the applicant is at risk for OSA but in the opinion of the AME the applicant is at low risk for OSA , the AME must (**Group/Box 4 of OSA flow chart**), select Group 4 on the AME Action Tab:

        - Discuss OSA risks with applicant;
        - Provide resource and educational information, as appropriate;
        - Notate in Block 60; and
        - Issue, if otherwise qualified

- If the applicant is at high risk for OSA, the AME must (**Group/Box 5 of OSA flow chart**), select Group 5 on the AME Action Tab:

    - Give the applicant Specification Sheet B and advise that a letter will be sent from the Federal Air Surgeon requesting more information. The letter will state that the applicant has 90 days to provide the information to the FAA/AME
    - Notate in Block 60; and
    - Issue, if otherwise qualified

- If the AME observes or the applicant reports symptoms which are severe enough to represent an immediate risk to aviation safety of the national airspace (**Group/Box 6 of OSA flow chart),** select Group 6 on the AME Action Tab.

    - Notate in Block 60

    - **THE AME MUST DEFER**

Obstructive Sleep Apnea Specification Sheet A
Information Request

Your application for airman medical certification submitted this date indicates that you have been treated or previously assessed for Obstructive Sleep Apnea (OSA).

You must provide the following information to the Aerospace Medical Certification Division (AMCD) or your Regional Flight Surgeon within 90 days:

- All reports and records regarding your assessment for OSA by your primary care physician and/or a sleep specialist.
- If you are currently being treated, also include:
  - A signed Airman Compliance with Treatment form or equivalent;
  - The results and interpretive report of your most recent sleep study; and
  - A current status report from your treating physician indicating that OSA treatment is still effective.
    - **For CPAP/ BIPAP/ APAP:**
      A copy of the cumulative annual PAP device report. Target goal should show use for at least 75% of sleep periods and an average minimum of 6 hours use per sleep period.
    - **For Dental Devices or for Positional Devices:**
      Once Dental Devices with recording / monitoring capability are available, reports must be submitted.
- To expedite the processing of your application, please submit the aforementioned information **in one mailing** using your reference number (PI, MID, or APP ID).

Using Regular Mail (US Postal Service) **or** **Using Special Mail (FedEx, UPS, etc.)**

Federal Aviation Administration
Aerospace Medical Certification Division
AAM-300
Civil Aerospace Medical Institute
PO BOX 25082
Oklahoma City, OK 73125-9867

Federal Aviation Administration
Aerospace Medical Certification Division
AAM-300
Civil Aerospace Medical Institute, Bldg. 13
6700 S. MacArthur Blvd., Room 308
Oklahoma City, OK 73169

OBSTRUCTIVE SLEEP APNEA SPECIFICATION SHEET B
ASSESSMENT REQUEST

Due to your risk for Obstructive Sleep Apnea (OSA), and to review your eligibility to have a medical certificate, you must provide the following information to the Aerospace Medical Certification Division (AMCD) or your Regional Flight Surgeon's Office for review within 90 days:

- A current OSA assessment in accordance with the American Academy of Sleep Medicine (AASM) by your AME, personal physician, or a sleep medicine specialist.

- If it is determined that a sleep study is necessary, it must be either a Type I laboratory polysomnography or a Type II (7 channel) unattended home sleep test (HST) that provides comparable data and standards to laboratory diagnostic testing. **It must be interpreted by a sleep medicine specialist and must include diagnosis and recommendation(s) for treatment, if any.**

If your sleep study is **positive for a sleep-related disorder, you may not exercise the privileges of your medical certificate until you provide:**

- A signed Airman Compliance with Treatment form or equivalent;

- The results and interpretive report of your most recent sleep study; and

- A current status report from your treating physician addressing compliance, tolerance of treatment, and resolution of OSA symptoms.

If you are **not diagnosed with a sleep-related disorder or the study was negative for a sleep-related disorder**, you may continue to exercise the privileges of your medical certificate, but the evaluation report along with the results of any study, if conducted, must be sent to the FAA at the address below. All information provided will be reviewed and is subject to further FAA action.

In order to expedite the processing of your application, please submit the aforementioned information **in one mailing** using your reference number (PI, MID, or APP ID).

Using Regular Mail (US Postal Service)
Federal Aviation Administration
Aerospace Medical Certification Division
AAM-300
Civil Aerospace Medical Institute
PO BOX 25082
Oklahoma City, OK 73125-9867

or

Using Special Mail (FedEx, UPS, etc.)
Federal Aviation Administration
Aerospace Medical Certification Division
AAM-300
Civil Aerospace Medical Institute, Bldg. 13
6700 S. MacArthur Blvd., Room 308
Oklahoma City, OK 73169

AME Assisted - All Classes – Obstructive Sleep Apnea (OSA)

Examiners may re-issue an airman medical certificate to airmen currently on an AASI for OSA **if the airman provides the following:**

- An Authorization granted by the FAA;
- Signed Airman Compliance with Treatment form or equivalent from the airman attesting to absence of OSA symptoms and continued daily use of prescribed therapy; and
- A current status report from the treating physician indicating that OSA treatment is still effective.
    - **For CPAP/ BIPAP/ APAP:**
        - A copy of the cumulative annual PAP device report which shows **actual time used** (rather than a report typically generated for insurance providers which only shows if use is greater or less than 4 hours). Target goal should show use for at least 75% of sleep periods and an average minimum of 6 hours use per sleep period.
        - For persons with an established diagnosis of OSA who do not have a recording CPAP, a one year exception will be allowed to provide a personal statement that they regularly use CPAP and before each shift when performing flight or safety duties.
    - **For Dental Devices and/or for Positional Devices:**
      No conditions known to be co-morbid with OSA (e.g., diabetes mellitus, hypertension treated with more than two medications, atrial fibrillation, etc). Once Dental Devices with recording / monitoring capability are available, reports must be submitted.
    - **For Surgery:**
      For successfully treated surgical patients, a statement attesting to the continued absence of OSA symptoms is required.

Defer to the AMCD or the Region for further review if:

- Concerns about adequacy of therapy or non-compliance;
- Significant weight gain or development of conditions known to be co-morbid with OSA (e.g., diabetes mellitus, hypertension treated with more than two medications, atrial fibrillation, etc).

Note: The Examiner may request AMCD review to discontinue the AASI if there are indications that the airman no longer has OSA (e.g., significant weight loss and a negative study or surgical intervention followed by 3 years of symptom abatement and absence of significant weight gain or co-morbid conditions). **In most cases, a follow-up sleep study will be required to remove the AASI.**

AIRMAN COMPLIANCE WITH TREATMENT
OBSTRUCTIVE SLEEP APNEA (OSA)

I _____ (print name) certify that (check one):

___ I have been using _____ (CPAP/ Dental / or Positional Device) for OSA as prescribed. I am tolerating the therapy well and have no symptoms of OSA (e.g. daytime sleepiness or lack of mental attention or concentration).

___ I have been surgically treated for OSA and I have no symptoms of OSA (e.g. daytime sleepiness or lack of mental attention or concentration).

I understand and acknowledge that I will receive the new requirements for continuation of my special issuance of Obstructive Sleep Apnea and I will comply with the requirements at my next FAA medical certificate renewal or reapplication.

Applicant Name: _____

Date of Birth: _____

Reference Number: (PI, MID, or APP ID): _____

Applicant Signature _____ Date _____

OSA – FREQUENTLY ASKED QUESTIONS (FAQS)

(Last Updated: 04/03/15)

GENERAL:

1. **Where can I view the video explaining the process?**
   The instructional video for AMEs is available here or at: http://www.faa.gov/tv/?mediaId=1029

2. **Where can I find the specification sheets and educational material?**
   All OSA reference materials can be found at:
   http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/dec_cons/disease_prot/osa/ref_materials/

3. **Does this process involve other sleep disorder conditions? (E.g. Period Limb Movement Disorder, narcolepsy, central sleep apnea, etc.)**
   No. This process is for obstructive sleep apnea only. If it is clear that the airman suffers from a different sleep disorder, DEFER and submit any supporting documentation for FAA decision.

TRIAGE:

4. **I am not a sleep specialist. How am I supposed to determine if an airman is high risk enough to send for a sleep evaluation? How many risk factors must be present before additional testing is required?**
   The AME should triage the airman based on the FAA OSA Flow Chart, supporting clinical guidelines, and good clinical judgment to determine the appropriate category for the airman.

5. **The airman was assessed 5 years ago for OSA but did not have a polysomnogram. The evaluation was negative. Is he required to have an updated sleep evaluation or a sleep study?**
   No. If there has been NO CHANGE in his/her risk factors, follow Group/Box 2 of the flow chart and submit a copy of the previous assessment. However, if there has been a change in risk factors (e.g. elevated BMI, new atrial fibrillation, refractory hypertension, etc.), triage using the flow chart to determine if the airman needs a repeat assessment.

6. **If I mark the radio button (1-6) and have no concerns, do I still need to put notes in Block 60 regarding the OSA triage?**
   Yes. It is only required for Group/Box 4 to document that education was given. However, it may be useful to document the rationale for triage decisions, especially for Group/Box 2, 5, and 6.

SLEEP EVALUATION AND SLEEP STUDY:

7. **Is a sleep evaluation the same as a sleep study?**
   No. Please reference the AASM guidelines. A sleep evaluation is needed when the triage process indicates that the airman is at high risk for OSA. The sleep evaluation is used to determine if a sleep study is warranted.

8. **Do I have to turn in the "AME Assessment Statement" for every airman?**
   No. This statement page is only used by an AME who PERFORMS the sleep evaluation (in accordance with AASM guidelines) and finds that the airman does not have evidence of OSA. This is NOT to be used for the routine triage function.

9. **Does the FAA require a specific type of sleep study if one is warranted?**
   Yes. The FAA requires that the test be either a Type I laboratory polysomnography or a Type II (7 channel) unattended home sleep test (HST) that provides comparable data and standards to laboratory diagnostic testing. It does not have to be a chain of custody study.

10. **What if the doctor or insurance provider is only willing to do a level III Home Sleep Test (HST)?**
    In communities where a Level II HST is unavailable, the FAA will accept a level III HST. If the HST is positive for OSA, no further testing is necessary and treatment in accordance with the AASI must be followed. However, if the HST is equivocal, a higher level test such as an in-lab sleep study will be needed unless a sleep medicine specialist determines no further study is necessary and documents the rationale.

11. **If I do the sleep evaluation and determine the airman needs a sleep study, as the AME, can I interpret the sleep study?**
    The AME may only interpret the sleep study if he/she is a sleep medicine specialist.

CERTIFICATE, EXTENSION, AND DENIAL PROCESS:

12. **If an airman is in Group/Box 5 (at risk for OSA) they have 90 days to comply with getting an evaluation. Does the AME issue a time-limited, 90 day certificate?**
    No. Issue a regular (not time limited) certificate, if the airman is otherwise qualified. The AME MAY NOT issue a time-limited certificate without an authorization from the FAA.

13. **I evaluated the airman and triaged him into Group/ Box 5. He had a sleep study and is doing well on CPAP treatment. Does he have to wait for a time-limited certificate before he can return to flight duties?**
    No. Once the airman is compliant with and doing well on treatment, he has met the requirements for 14 CFR 61.53. The airman may return to flight status with the current certificate issued by the AME, PROVIDED that ALL the required information regarding OSA evaluation and treatment has been submitted to the FAA for review.

14. **Once the AME issues a regular certificate, who is responsible for keeping track of the 90 days?**
    The FAA will keep track of the 90 days.

15. **The airman has a prior SI/AASI for OSA that only asks for a current status report. Can I issue this year if he does not bring in any other information on the OSA?**
    Yes. The AME may issue this year based on the previous SI/AASI if those requirements were met.

16. **Can the airman continue to submit only a current status report until his current AASI expires?**
    No. An airman currently on an SI/AASI for OSA will receive a new SI/AASI letter this year. At that point, he/she will have to comply with the new documentation requirements.

17. **What if the airman cannot get a sleep evaluation in 90 days?**
The airman may request a one-time, 30-day extension by phone by calling AMCD at (405) 954-4821 and selecting Option 1 when prompted. They may also mail a request to AMCD (see Specification Sheet B for address) or by contacting their RFS office.

18. **If I give the airman Specification Sheet A or B and he does not submit the required evaluation within 90 days and after the 30 day extension (if requested), what will happen?**
The airman will receive a failure to provide (FTP) denial.

TREATMENT AND FOLLOW UP:

19. **How long does an airman have to be on CPAP with a new diagnosis of OSA before they can return to flying?**
The airman may submit the completed compliance statement and required documents to the FAA for review as soon as they are tolerating the therapy without difficulty and have no symptoms of OSA.

20. **The airman has mild or moderate sleep apnea. Is he required to use CPAP?**
In most cases an AHI of 15 or more will require CPAP.

21. **If the airman has a sleep study and is diagnosed with OSA does he/she get a new certificate?**
Yes. Once a diagnosis of OSA is established, a Special Issuance is required. When the airman submits the required supporting documents to the FAA, he/she will be evaluated for a Special Issuance.

22. **If an airman has a previously unreported history of OSA being treated with CPAP, can the AME issue?**
Yes. Issue a regular certificate (Group/Box 2), if the airman is otherwise qualified, and submit the required information for FAA decision.

23. **What if the airman is high risk and has had a previous sleep study that was positive, but not one of the approved tests? He is currently on CPAP and doing well. Does he have to get a new sleep study?**
Follow Group/Box 2 and submit the required information for FAA decision.

24. **The airman had a sleep study in the past and did not have sleep apnea. It was not an approved test type. Will he have to get another sleep study?**
The AME should follow the triage flow chart. If the airman is determined to be Group/Box 5 or 6, he/she will need a sleep evaluation. If a sleep study is warranted, it will need to be an approved test type (see FAQ #9). Submit the required information for FAA decision.

25. **The airman has OSA and was on CPAP in the past. He has now lost weight and is only on a dental device. What do I do now?**
Follow Group/Box 2 and submit the required information for FAA decision.

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 ÷ (65)^2] x 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

Body Mass Index Table

	Normal						Overweight					Obese										Extreme Obesity														
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 Weight (pounds)																																			
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.*

Berlin Questionnaire©

Height (m) _____ Weight (kg) _____ Age
Male / Female

Please choose the correct response to each question.

Category 1

1. Do you snore?
□ a. Yes
□ b. No
□ c. Don't know

If you answered 'yes':

2. You snoring is:
□ a. Slightly louder than breathing
□ b. As loud as talking
□ c. Louder than talking

3. How often do you snore?
□ a. Almost every day
□ b. 3-4 times per week
□ c. 1-2 times per week
□ d. 1-2 times per month
□ e. Rarely or never

4. Has your snoring ever bothered other people?
□ a. Yes
□ b. No
□ c. Don't know

5. Has anyone noticed that you stop breathing during your sleep?
□ a. Almost every day
□ b. 3-4 times per week
□ c. 1-2 times per week
□ d. 1-2 times per month
□ □ e. Rarely or never

Category 2

6. How often do you feel tired or fatigued after your sleep?
□ a. Almost every day
□ b. 3-4 times per week
□ c. 1-2 times per week
□ d. 1-2 times per month
□ e. Rarely or never

7. During your waking time, do you feel tired, fatigued or not up to par?
□ a. Almost every day
□ b. 3-4 times per week
□ c. 1-2 times per week
□ d. 1-2 times per month
□ e. Rarely or never

8. Have you ever nodded off or fallen asleep while driving a vehicle?
□ a. Yes
□ b. No

If you answered 'yes':

9. How often does this occur?
□ a. Almost every day
□ b. 3-4 times per week
□ c. 1-2 times per week
□ d. 1-2 times per month
□ e. Rarely or never

Category 3

10. Do you have high blood pressure?
□ Yes
□ No
□ Don't know

Scoring Berlin Questionnaire

The questionnaire consists of 3 categories related to the risk of having sleep apnea. Patients can be classified into High Risk or Low Risk based on their responses to the individual items and their overall scores in the symptom categories.

Categories and Scoring:

Category 1: Items 1, 2, 3, 4, and 5;
Item 1: if '**Yes**', assign **1 point**
Item 2: if '**c**' or '**d**' is the response, assign **1 point**
Item 3: if '**a**' or '**b**' is the response, assign **1 point**
Item 4: if '**a**' is the response, assign **1 point**
Item 5: if '**a**' or '**b**' is the response, assign **2 points**
Add points. *Category 1 is positive if the total score is 2 or more points*.

Category 2: items 6, 7, 8 (item 9 should be noted separately).
Item 6: if '**a**' or '**b**' is the response, assign **1 point**
Item 7: if '**a**' or '**b**' is the response, assign **1 point**
Item 8: if '**a**' is the response, assign **1 point**
Add points. *Category 2 is positive if the total score is 2 or more points.*

Category 3 is positive if the answer to item 10 is '**Yes**' or if the BMI of the patient is greater than 30kg/m^2.
(BMI is defined as weight (kg) divided by height (m) squared, i.e.., kg/m^2).

High Risk: if there are 2 or more categories where the score is positive.

Low Risk: if there is only 1 or no categories where the score is positive.

Epworth Sleepiness Scale

The original version of the ESS was first published in 1991. However, it soon became clear that some people did not answer all the questions, for whatever reason. They may not have had much experience in some of the situations described in ESS items, and they may not have been able to provide an accurate assessment of their dozing behaviour in those situations. However, if one question is not answered, the whole questionnaire is invalid. It is not possible to interpolate answers, and hence item-scores, for individual items. This meant that up to about 5 % of ESS scores were invalid in some series.

In 1997, an extra sentence of instructions was added to the ESS, as follows:
''It is important that you answer each question as best you can'.

With this exhortation, nearly everyone was able to give an estimate of their dozing behaviour in all ESS situations. As a result, the frequency of invalid ESS scores because of missed item-responses was reduced to much less than 1%.

The 1997 version of the ESS is now the standard one for use in English or any other language. It is available in pdf here.

Epworth Sleepiness Scale

Name: _____ Today's date: _____

Your age (Yrs): _____ Your sex (Male = M, Female = F): _____

How likely are you to doze off or fall asleep in the following situations, in contrast to feeling just tired?

This refers to your usual way of life in recent times.

Even if you haven't done some of these things recently try to work out how they would have affected you.

Use the following scale to choose the **most appropriate number** for each situation:

0 = would **never** doze
1 = **slight chance** of dozing
2 = **moderate chance** of dozing
3 = **high chance** of dozing

It is important that you answer each question as best you can.

Situation	**Chance of Dozing (0-3)**
Sitting and reading _____	___
Watching TV _____	___
Sitting, inactive in a public place (e.g. a theatre or a meeting) _____	___
As a passenger in a car for an hour without a break _____	___
Lying down to rest in the afternoon when circumstances permit _____	___
Sitting and talking to someone _____	___
Sitting quietly after a lunch without alcohol _____	___
In a car, while stopped for a few minutes in the traffic _____	

THANK YOU FOR YOUR COOPERATION

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STOP BANG Questionnaire

Height inches/cm:
Age:
Male/Female
BMI:
Weight lb/kg:
Collar size of shirt: S, M, L, XL, or inches/cm neck circumference:

1. *S*noring
Do you *s*nore loudly (louder than talking or loud enough to be heard through closed doors)?
Yes No

2. *T*ired
Do you often feel *t*ired, fatigued, or sleepy during daytime?
Yes No

3. *O*bserved - Has anyone *o*bserved you stop breathing during your sleep?
Yes No

4. Blood *p*ressure
Do you have or are you being treated for high blood *p*ressure?
Yes No

5. BMI -BMI more than 35 kg/m2?
Yes No

6. *A*ge - *A*ge over 50 years old?
Yes No

7. Neck circumference - Neck circumference greater than 40 cm?
Yes No

8. *G*ender – Male?
Yes No

* Neck circumference is measured by staff

High risk of OSA: answering yes to three or more items
Low risk of OSA: answering yes to less than three items

Adapted from:
STOP Questionnaire
A Tool to Screen Patients for Obstructive Sleep Apnea
Frances Chung, F.R.C.P.C., Balaji Yegneswaran, M.B.B.S.,† Pu Liao, M.D.,‡ Sharon A. Chung, Ph.D.,§*
Santhira Vairavanathan, M.B.B.S.,_ Sazzadul Islam, M.Sc.,_ Ali Khajehdehi, M.D.,† Colin M. Shapiro, F.R.C.P.C.#
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Asleep at the controls

On a daytime flight one February day in 2008, a commercial aircraft with three crewmembers and 40 passengers flew past its destination airport after both the captain and first officer fell asleep. The pilot awoke and turned back to the destination airport, where all deplaned safely - but behind schedule. The National Transportation Safety Board determined that contributing factors to the incident were the captain's undiagnosed obstructive sleep apnea (OSA) and the flight crew's recent work schedules, which included several days of early-morning start times.

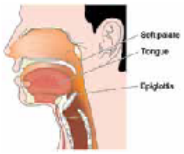
An obscure condition tackles a pro lineman

With the shocking death of NFL lineman Reggie White, the problem of OSA was thrust into the limelight. Up to that time, OSA was relatively unknown outside the medical community. Today, OSA is recognized as a major contributor to many possible health-related ailments. In some estimates, it has been suggested that OSA affects-

- 4 - 7% of middle-aged people.
- 70% of clinically obese patients.
- 34% of all NFL lineman.
- 30% - 50% of patients with heart disease.
- 60% of patients suffering strokes.

The pathophysiology of OSA

Apnea is a medical term that means "being without respiration." Obstructive sleep apnea is characterized as a repetitive upper airway obstruction during sleep, as a result of narrowing of the respiratory passages. Most people with this disorder are overweight and have higher deposits of adipose (fatty) tissue in their respiratory passages, and the size of their soft palates and tongues are larger than average. These conditions decrease the size of the upper airway and decrease airway muscle tone, especially when sleeping in the supine (back down and horizontal) position. Gravity can pull tissue down and over the airway, further decreasing its size, impeding air flow to the lungs during inhalation.



The major impact of OSA

Snoring can result when the airway becomes partially obstructed. With further tissue obstruction of the airway, there may be complete occlusion. Whether the obstruction is partial (hypopnea) or total (apnea), the subject struggles to breathe and is aroused from sleep. Often, these sleep interruptions are unrecognized, even if they occur hundreds of times a night. The real danger is that the OSA sufferers may not realize the condition and are only aware that they typically awaken feeling sleepy and tired. Losing sleep is more than a simple inconvenience. Good, sound sleep is essential for good health and clear mental and emotional functioning. Additionally, OSA is associated with a reduction in blood oxygen levels feeding the brain, which, of course, is a major health concern. Repetitive decreases in blood oxygen levels associated with OSA may eventually increase:

- Blood pressure.
- Strain on the cardiovascular system.
- Risk of heart attack.
- Risk of stroke.

A costly problem on the ground

The National Sleep Foundation (NSF) estimates that sleep deprivation and sleep disorders cost Americans more than $100 billion annually in lost productivity, medical expenses, sick leave, and property and environmental damage. In addition, the NSF estimates that -

- About 70 million people in the U.S. have some sort of sleep problem.
- 40 million suffer from chronic sleep disorders.
- As many as 30 million are affected by intermittent, sleep-related problems.

The National Highway Traffic Safety Administration conservatively estimates that -

- 100,000 accidents are caused by drowsy drivers each year, resulting in more than 1,500 fatalities, 71,000 injuries, and $12.5 billion in diminished productivity and property loss.
- People with OSA have a *six times* greater risk factor for automobile accidents.

A potential problem in flight?

The implications for pilots and crewmembers are significant. It has been suggested that people with mild-to-moderate OSA can show performance degradation equivalent to 0.06 to 0.08% blood alcohol levels, which is the measure of *legal intoxication* in most states. Most pilots will not fly intoxicated, but OSA sleep deprivation may be causing the equivalent effects! Further exacerbating the problem are time zone changes and post-flight alcohol consumption, which can inhibit wakefulness. Normally, when you stop breathing while asleep, the brain automatically sends a wake-up call after about 10 seconds, and you wake up, gasping for air. Multiple time zone changes and alcohol consumption both inhibit arousal mechanisms and may result in oxygen deprivation of 30 seconds or longer before you heed the wake-up call. When you add up the oxygen starvation resulting from many occurrences per night, along with the subsequent arousals, the effect is significant fatigue.

Recognizing OSA

Typically, a person suffering from OSA is not aware of the condition. The only way it can be detected is through a *sleep study*. A complaint of loud and excessive snoring may be an important clue, since that is characteristically the first sign of OSA. Other symptoms suggesting OSA include:

- Difficulty in concentrating, thinking, or remembering.
- Daytime sleepiness, fatigue, and the need to take frequent naps.
- Headaches.
- Irritability.
- Short attention span.

Treating OSA

Once recognized and identified, OSA is highly treatable, either with surgery or non-surgical approaches. Obviously, non-surgical methods should be tried first -

- *Behavioral changes*

- Change sleeping position (sleep on side or stomach).
- Change sleeping environment (mattress, light level, temperature, etc.).
- Lower body fat (10% weight loss will decrease the OSA index by 25%).

- *Dental appliances*

- Dental appliances that thrust the lower jaw forward or otherwise open the airway are an excellent treatment for mild-to-moderate OSA and are about 75% effective.

- *Continuous positive airway pressure (CPAP) machine*

- Probably the best, non-surgical treatment for any level of OSA.
- Uses air pressure to hold the tissues open during sleep.
- Decreases sleepiness, as measured by surveys and objective tests.
- Improves cognitive functioning on tests.

- *Medications*

- Any medication taken for OSA must be approved by the FAA.
- Nasal steroid sprays are effective.
- Medications that have been studied include medroxyprogesterone, acetazolamide, and theophylline.

- *Surgical Methods*

These can be very significant (painful) surgeries that don't always succeed. They should be used only after non-surgical methods have failed.

- *Nasal airway surgery:* Corrects for swelling of the turbinates, septal deviation, and nasal polyps.
- *Palate implants:* Stiffen the palate to prevent it from collapsing
- *Uvulopalatopharyngoplasty:* Prevents collapse of the palate, tonsils, and pharynx.
- *Tongue reduction surgery:* Decreases the size of the base of the tongue.
- *Genioglossus advancement:* Pulls the tongue forward to enlarge the airway.

The Bottom Line

If you experience one or more symptoms of obstructive sleep apnea, it is recommended that you consult a physician, since OSA treatment scores a very high success rate. What about your medical certificate? If your OSA is treatable, you can maintain your airman medical certificate and continue to enjoy your aviation career. However, flying with untreated OSA constitutes an unnecessary risk and can become a safety-of-flight issue.

It's up to you! So...*sleep on it!*

Medical Facts for Pilots
Publication No. AM-400-10/1
Written by
J.R. Brown
Federal Aviation Administration
Civil Aerospace Medical Institute

To request copies of this brochure, contact:
FAA Civil Aerospace Medical Institute
Shipping Clerk, AAM-400
P.O. Box 25082
Oklahoma City, OK 73125
(405)-954-4831

Physiological Training Classes for Pilots

If you are interested in taking a one-day aviation physiological training course with altitude chamber and vertigo demonstrations or a one-day survival course, learn about how to sign up for these courses that are offered at 13 locations across the U.S. by visiting this FAA Web site:

www.faa.gov/pilots/training/airman_education/aerospace_physiology/index.cfm

OK-10-2545

For AMEs Who Elect to Perform the OSA Assessment

Evaluating the risk of Obstructive Sleep Apnea (OSA) requires clinical judgment based on an **integrated assessment of history, symptoms, AND physical/clinical findings.** If an AME elects to perform the assessment for OSA, he/she must follow the American Academy of Sleep Medicine guidelines.

After completing the assessment, if the diagnosis of OSA is not made, the AME must sign and submit the AME Assessment Statement - OSA. If the AME confirms the presence of OSA, then full clinical note with test results, if performed, must be submitted.

History of findings that suggest increased risk of OSA include:
- Hypertension requiring more than 2 medications for control or refractory hypertension
- Type 2 Diabetes
- Atrial fibrillation or nocturnal dysrhythmias
- Congestive heart failure
- Stroke
- Pulmonary hypertension
- Motor vehicle accidents, especially those associated with sleepiness/drowsiness
- Under consideration for bariatric surgery

Symptoms that suggest an increased risk of OSA include:
- Snoring
- Daytime sleepiness
- Witnessed apneas
- Complaints of awakening with sensation of gasping or choking
- Non-refreshing sleep
- Frequent awakening (sleep fragmentation) or difficulty staying asleep (maintenance insomnia)
- Morning headaches
- Decreased concentration
- Problems or difficulty with memory or memory loss
- Irritability

Physical/clinical findings that suggest increased risk of OSA include:
- High score on an OSA screening questionnaire (e.g., Berlin, Epworth)
- Increased neck circumference (>17 inches in men, >16 inches in women)
- A Modified Mallampati score of 3 or 4 (assessment of the oral cavity)
- Retrognathia
- Lateral peritonsilar narrowing
- Macroglossia
- Tonsillar hypertrophy
- Elongated/enlarged uvula
- High arched/narrow hard palate
- Nasal abnormalities such as polyps, deviation and turbinate hypertrophy
- Obesity (AASM guidelines)

AME ASSESSMENT STATEMENT – OSA

AMEs who elect to perform an OSA assessment and find that the applicant does not meet the American Academy of Sleep Medicine (AASM) diagnostic criteria for OSA, must submit this statement to the FAA.

Airman/ Patient Name _____ DOB: _____

Reference Number (PI, MID, or App ID): _____

_____ (initial) I have performed an OSA assessment in accordance with AASM guidelines and have determined that there is no evidence of OSA requiring treatment at this time. (If a sleep study was performed it must be attached).

_____

_____

PHYSICIAN NAME _____

Address: _____

Office Telephone Number: _____

PHYSICIAN
SIGNATURE_____DATE_____

Mail this form to:

Using Regular Mail (US Postal Service) **or** **Using Special Mail (FedEx, UPS, etc.)**

Federal Aviation Administration
Aerospace Medical Certification Division
AAM-300
Civil Aerospace Medical Institute
PO BOX 25082
Oklahoma City, OK 73125-9867

Federal Aviation Administration
Aerospace Medical Certification Division
AAM-300
Civil Aerospace Medical Institute, Bldg. 13
6700 S. MacArthur Blvd., Room 308
Oklahoma City, OK 73169

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
- Centrally acting antihypertensives, 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 SSRI policy), 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 prednisone-equivalent per day)
- Agents for treating cancer, including chemotherapeutics, biologics, etc., whether used for induction, "maintenance," or suppressive therapy
- Antiangina medications
- 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 not fly following the last dose of any of the medications below until a period of time has elapsed equal to:

- 5-times the maximum pharmacologic 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)

Sleep aids. 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.

- See 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).

Allergy medications. 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

ERECTILE DYSFUNCTION AND BENIGN PROSTATIC HYPERPLASIA 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**.

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

Also, see Aerospace Medical Disposition table and Item 35, Lungs and Chest

IV. PROTOCOL: See Disease Protocols – Allergies, Severe

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

Also, see Aerospace Medical Disposition table and **Item 35**, Lungs and Chest

IV. PROTOCOL - See Disease Protocols – Allergies, Severe

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.

IV. PROTOCOL: See Peptic Ulcer

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

IV. PROTOCOL: As per the specific underlying condition(s), see Disease Protocols

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

(Updated 10/28/15)

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.

III. AEROMEDICAL DECISION CONSIDERATIONS:

See Item 36. Heart, Hypertension
Also see Item 55. Blood Pressure

IV. PROTOCOL: N/A. See Hypertension Disposition table

V. PHARMACEUTICAL CONSIDERATIONS

- Seven-day (7) no fly/ground trial is required when starting a new hypertension (HTN) medication to verify no side effects.
- AME should issue (if otherwise qualified) if the airmen is on 3 or fewer medications
- Uses of beta-adrenergic blockers ARE allowed with insulin, meglitinides, or sulfonylureas.

ACCEPTABLE HTN Medications (when certification criteria are met)	
✓ Alpha adrenergic blockers	✓ Calcium channel blockers
✓ Angiotensin converting enzyme (ACE) inhibitors	✓ Direct renin inhibitors
✓ Angiotensin II receptor antagonists (ARBs)	✓ Direct vasodilators
✓ Beta-adrenergic blockers	✓ Diuretics

UNACCEPTABLE HTN Medications (as a single agent or in any combination product) **DO NOT ISSUE**
• Clonidine (ex. Catapres/Clorpres) • guanabenz • guanfacine/Tenex • methyldopa • Nitrates (ex. nitroglycerin/isosorbide dinitrate/isosorbide mononitrate) • resperine

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 48., General Systemic, Gender Dysphoria**

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.

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 48, General Systemic Aerospace Medical Disposition table.

IV. PROTOCOL: See Diabetes Mellitus Type I or Type II - Insulin-Treated Protocol

V. PHARMACEUTICAL CONSIDERATIONS

- Insulin pumps are an acceptable form of treatment.
- Combinations of anti-diabetes medication (s): The chart of Acceptable Combinations of Diabetes Medications (pdf) summarizes the acceptable medications for both monotherapy and combination therapy. The chart organizes medications into groups based on similarity of mechanisms of actions and/or therapeutic effects.

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 such as the DIABETES or HYPERGLYCEMIA ON ORAL MEDICATIONS STATUS REPORT. See Item 48, Diabetes

III. AEROMEDICAL DECISION CONSIDERATIONS: See Item 48, Diabetes

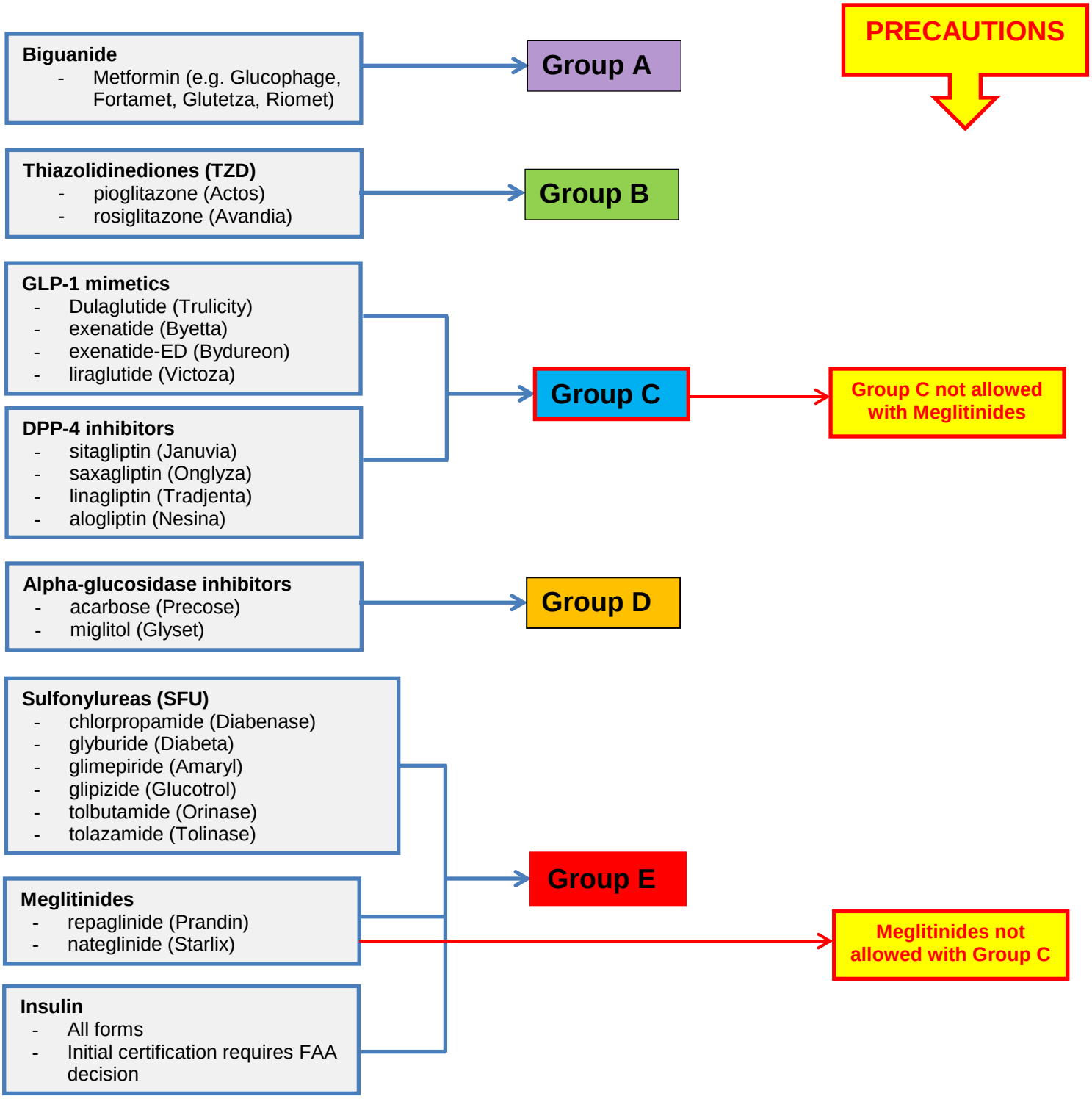
IV. DISEASE PROTOCOL: See Diabetes Mellitus Type II - Medication Controlled

V. PHARMACEUTICAL CONSIDERATIONS: Combinations of anti-diabetes medication (s): The chart of Acceptable Combinations of Diabetes Medications (pdf) summarizes the acceptable medications for both monotherapy and combination therapy. The chart organizes medications into groups based on similarity of mechanisms of actions and/or therapeutic effects.

Acceptable Combinations of Diabetes Medications (Updated 04/27/16)

Use: no more than one medication from each group (A-E) below. Up to 3 medications total are considered acceptable for routine treatment according to generally accepted standards of care for diabetes (American Diabetes Association; American Association of Clinical Endocrinologists). For applicants receiving complex care (e.g., 4-drug therapy), refer the case to AMCD.

- **Initial certification of all applicants with diabetes melitus (DM) requires FAA decision**
- **For applicants on AASI for DM, follow the AASI**
- **Consult with FAA for any medications not on this chart**
- **Fixed-dose combination medications *count as 2 medications***



Note: Amylinomimetics (e.g., pramlintide (Symlin) are not considered acceptable for medical certification.

ERECTILE DYSFUNCTION AND BENIGN PROSTATIC HYPERPLASIA MEDICATIONS

(Updated 4/27/16)

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 medication for erectile dysfunction (ED) and/or benign prostatic hyperplasia (BPH) may not be disqualifying for medical certification if there are no side effects, the underlying condition is not aeromedically significant, and the applicant is otherwise qualified. If the medication is used for any other condition, do not issue – FAA approval is required.

III. AEROMEDICAL DECISION CONSIDERATIONS: See **Item 41. G-U System**,

IV. PROTOCOL: N/A

V. PHARMACEUTICAL CONSIDERATIONS: The use of medications below for G-U conditions including ED and BPH may not be disqualifying, if free from side effects. For the required minimum wait time after use, see the table below.

If the medications below are used for any other non G-U condition (e.g., pulmonary arterial hypertension [PAH]) the examiner must defer issuance of a medical certificate.

- Alpha blockers are allowed for daily use if there no side effects. No minimum wait time is required after use once the airman has successfully passed the 7-day ground trial period required for all hypertension medication.
- If alpha blockers are used in combination with PDE5 inhibitors (common examples are listed below), the airman should not fly until verification that no hypotensive episodes or other side effects are noted.
- Nitrates are **not** allowed.

ERECTILE DYSFUNCTION AND BENIGN PROSTATIC HYPERPLASIA PDE-5 INHIBITOR MEDICATION WAIT TIMES		
Trade Name	Generic Name	Required minimum waiting time after last dose before resuming pilot duties
Cialis (daily use)	Tadalafil	Daily use is not acceptable for aeromedical purposes
Cialis (prn use)	Tadalafil	36 hours
Levitra	Vardenafil	8 hours
Staxyn	Vardenafil	8 hours
Stendra	Avanafil	8 hours
Viagra	Sildenafil	8 hours

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

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

(Updated 4/27/16)

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. 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 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 must contact the FAA agency flight surgeon or their AME before resuming pilot duties
- For return to pilot 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

(Updated 4/27/16)

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. 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 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 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

LAST UPDATE: June 29, 2016

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 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 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

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 disqualifying (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 disqualifying 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 disqualifying condition once the AASI's specialized criteria is met and the applicant is otherwise qualified.

ARTHRITIS and/ or PSORIASIS

ASTHMA

ATRIAL FIBRILLATION

BLADDER CANCER

BREAST CANCER

CHRONIC KIDNEY DISEASE

CHRONIC LYMPHOCYTIC LEUKEMIA

CHRONIC OBSTRUCTIVE PULMONARY DISEASE

COLITIS
(Ulcerative or Crohn's Disease) or Irritable Bowel Syndrome

COLON CANCER

DEEP VENOUS THROMBOSIS (DVT), PULMONARY EMBOLISM (PE), and/ or HYPERCOAGULOPATHIES

DIABETES MELLITUS – TYPE II
Medication Controlled (Not Insulin)

GLAUCOMA

HEPATITIS C

HYPERTENSION

HYPERTHYROIDISM

HYPOTHYROIDISM

LYMPHOMA and HODGKIN'S DISEASE

MELANOMA

MIGRAINE HEADACHES

MITRAL and AORTIC INSUFFICIENCY

PAROXYSMAL ATRIAL TACHYCARDIA

PROSTATE CANCER

RENAL CALCULI

RENAL CARCINOMA

SLEEP APNEA

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 14 CFR § 67.401. 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 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 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 Examiner must defer to the AMCD or Region if:

- 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 (steroid conversion calculator)

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 Examiner must defer to the AMCD or Region if:

- 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).

The Examiner must defer to the AMCD or Region if:

- 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

The Examiner must defer to the AMCD or Region if:

- 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.

The Examiner must defer to the AMCD or Region if:

- There has been any recurrence of the cancer; or
- Any new treatment is initiated.

AASI FOR CHRONIC KIDNEY DISEASE (CKD)

(Updated 11/25/2015)

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 report from the treating physician detailing:
    - How long the condition has been stable and asymptomatic;
    - If there has been any significant change in eGFR or renal function;
    - Any interval development of other complications or abnormal physical exam findings (such as diabetes, uncontrolled HTN, or clinically significant proteinuria);
    - Most recent lab results including eGFR, creatinine, hemoglobin, hematocrit and urine albumin or ACR;
    - The name and dosage of medication(s) and presence or absence of any side effects; and
    - Statement from the treating physician if there is any evidence of cardiovascular disease

The Examiner must defer to the AMCD or Region if:

- The condition is no longer stable (per the treating physician note);
- Dialysis has been started or transplant has occurred;
- The airman is taking a medication that is not acceptable (See Pharmaceuticals – Antihypertensive) or has aeromedically significant side effects from the medication;
- Anemia with hemoglobin less than 10 gm/dL or hematocrit less than 30% is present; or
- The eGFR is 29 or less; (if this occurs, the airman will need to submit additional testing to show stability [such as inulin clearance testing, creatinine clearance testing, or a 24-hour urine creatinine result] and the nephrologist's clinical interpretation of results, prognosis, and plan for follow up).

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 Examiner must defer to the AMCD or Region if:

- 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 Examiner must defer to the AMCD or Region if:

- 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.

The Examiner must defer to the AMCD or Region if:

- 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 (steroid conversion calculator), 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

The Examiner must defer to the AMCD or Region if:

- 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 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 required 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 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).

* The Examiner must defer to the AMCD or Region if:

- 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 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. The information can be submitted using the DIABETES or HYPERGLYCEMIA ON ORAL MEDICATIONS STATUS REPORT.

Examiners may re-issue an airman medical certificate under the provisions of an Authorization, provided that the applicant does not require insulin, remains on an acceptable oral medication therapy according to the chart Acceptable Combinations of Diabetes Medications, and if the applicant provides the following:

- An Authorization granted by the FAA AND either
- A DIABETES or HYPERGLYCEMIA ON ORAL MEDICATIONS STATUS REPORT **OR**
- 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 Examiner must defer to the AMCD or Region if, since the applicant's last exam:

- The applicant has been placed on insulin;
- The HgA1c level is greater than 9.0 mg%
- The applicant has experienced:
    - Severe Hypoglycemia event(s) - requiring assistance of another person to actively administer carbohydrates, glucagon, or take other corrective actions (plasma glucose concentrations may not be available)*;
    - Documented Symptomatic Hypoglycemia event(s) - typical symptoms of hypoglycemia accompanied by a measured plasma glucose concentration ≤70 mg/dL (≤3.9 mmol/L)*;
    - Asymptomatic Hypoglycemia – no reported symptoms but a measured plasma glucose concentration ≤54 mg/dL (≤3.0 mmol/L)
- The applicant has developed evidence of any of the following:
    - 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 any medication (single or in combination) that falls outside the framework of Acceptable Combinations of Diabetes Medications
- The applicant has required treatment other than routine outpatient follow-up (e.g. emergency department, inpatient admission) for diabetes (e.g. hypoglycemia, ketoacidosis, non-ketotic hyperglycemia) or diabetes-related conditions.
- The applicant has experienced any event suggesting hypoglycemia unawareness or hypoglycemia-associated autonomic failure.

* Reference: Hypoglycemia Workgroup of the ADA & The Endocrine Society

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 Examiner must defer to the AMCD or Region if:

- 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 Examiner must defer to the AMCD or Region if:

- 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 HYPERTENSION (HTN)

(Updated 10/28/2015)

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 report from the treating physician detailing:
    - If the is condition stable and, if so, for how long;
    - Any secondary cause for the HTN;
    - Any co-morbid condition (such as diabetes, obstructive sleep apnea); and
    - Any history of end organ damage (such as heart failure, myocardial infarction, cerebrovascular accident, kidney disease, eye disease); and
    - The name and dosage of medication(s) and presence or absence of any side effects.

The Examiner must defer to the AMCD or Region if:

- The condition is not stable or has become uncontrolled (per the treating physician note);
- The airman is taking a medication that is not acceptable (See Pharmaceuticals – Antihypertensive);
- The airman has aeromedically significant side effects from the medication;
- There is a new co-morbid condition, complication, or end organ damage; or
- The end organ damage condition(s) do not meet FAA requirements. (See the applicable section for the specific condition(s) in the AME guide)

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 Examiner must defer to the AMCD or Region if:

- 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 Examiner should defer to the AMCD or Region if:

- 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.

The Examiner must defer to the AMCD or Region if:

- There has been any recurrence or disease progression
- Any new treatment is initiated

AASI FOR MELANOMA (Updated 08/26/2015)

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 equal to or deeper than 0.75 mm with or without metastasis.
- A melanoma that exhibits a Breslow Level of less than 0.75 mm and 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 Examiner must defer to the AMCD or Region if:

- 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 Examiner must defer to the AMCD or Region if:

- 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.

The Examiner must defer to the AMCD or Region if:

- 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 Examiner must defer to the AMCD or Region if:

- 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.

The Examiner must defer to the AMCD or Region if:

- 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.

The Examiner must defer to the AMCD or Region if:

- There has been any recurrence of the cancer; or
- Any new treatment is initiated.

AASI FOR OBSTRUCTIVE SLEEP APNEA (OSA)

AME Assisted - All Classes – Obstructive Sleep Apnea (OSA)

Examiners may re-issue an airman medical certificate to airmen currently on an AASI for OSA **if the airman provides the following:**

- An Authorization granted by the FAA;
- Signed Airman Compliance with Treatment form or equivalent from the airman attesting to absence of OSA symptoms and continued daily use of prescribed therapy; and
- A current status report from the treating physician indicating that OSA treatment is still effective.
    - **For CPAP/ BIPAP/ APAP:**
        - A copy of the cumulative annual PAP device report which shows **actual time used** (rather than a report typically generated for insurance providers which only shows if use is greater or less than 4 hours). Target goal should show use for at least 75% of sleep periods and an average minimum of 6 hours use per sleep period.
        - For persons with an established diagnosis of OSA who do not have a recording CPAP, a one year exception will be allowed to provide a personal statement that they regularly use CPAP and before each shift when performing flight or safety duties.
    - **For Dental Devices and/or for Positional Devices:**
      No conditions known to be co-morbid with OSA (e.g., diabetes mellitus, hypertension treated with more than two medications, atrial fibrillation, etc). Once Dental Devices with recording / monitoring capability are available, reports must be submitted.
    - **For Surgery:**
      For successfully treated surgical patients, a statement attesting to the continued absence of OSA symptoms is required.

Defer to the AMCD or the Region for further review if:

- Concerns about adequacy of therapy or non-compliance;
- Significant weight gain or development of conditions known to be co-morbid with OSA (e.g., diabetes mellitus, hypertension treated with more than two medications, atrial fibrillation, etc).

Note: The Examiner may request AMCD review to discontinue the AASI if there are indications that the airman no longer has OSA (e.g., significant weight loss and a negative study or surgical intervention followed by 3 years of symptom abatement and absence of significant weight gain or co-morbid conditions). **In most cases, a follow-up sleep study will be required to remove the AASI.**

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 RFS 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 cm^2
- 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 (Updated 11/25/15)

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		Diabetes Mellitus – Type II Medication Controlled		Mitral and Aortic Insufficiency
	Asthma		Metabolic Syndrome, Glucose Intolerance, Impaired Glucose Tolerance, Impaired Fasting Glucose, Insulin Resistance, and Pre-Diabetes		Paroxysmal Atrial Tachycardia
	Atrial Fibrillation		Glaucoma		Prostate Cancer
	Bladder Cancer		Hepatitis C		Renal Calculi
	Breast Cancer		Hypertension		Renal Cancer
	Chronic Kidney Disease		Hyperthyroidism		Sleep Apnea
	Chronic Lymphocytic Leukemia		Hypothyroidism		Testicular Cancer
	Chronic Obstructive Pulmonary		Lymphoma and Hodgkins		Warfarin (Coumadin) Therapy for Deep Venous Thrombosis, Pulmonary Embolism, and/ or Hypercoagulopathies.
	Colitis (Ulcerative or Crohn's)		Melanoma		
	Colon Cancer		Migraine Headaches		
THIRD CLASS ONLY	AASI CONDITION			THIRD CLASS ONLY	
	Coronary Heart Disease (CHD)				

☐ 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

LAST UPDATE: June 29, 2016

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 Aviation Industry Antidrug and Alcohol Misuse Prevention Programs

HIMS AME Checklist - Drug and Alcohol Monitoring Recertification

(Updated 5/25/16)

Airman Name _____ PI#_____

Instructions to the HIMS AME:

- Address the following items based on your in-office exam and documentation review;
- **Submit this Checklist** (it must be signed and dated by the HIMS AME); **AND**
- **Include supporting documentation reviewed to complete this checklist** (including your HIMS AME report) **within 14 days to:**

Federal Aviation Administration
Aerospace Medical Certification Division AAM-300
PO Box 26080, Oklahoma City, OK 73125-9914

I reviewed the airman's HIMS Authorization Letter dated: _____
(Date of Authorization letter)

1. **HIMS AME FACE-TO-FACE, IN OFFICE EVALUATION: Required <u>EVERY 6 months for ALL CLASSES</u>**
   Any concerns that the airman is not successfully engaged in a continued abstinence-based recovery program or is not working a good program based on your clinical interview/evaluation and review of reports? ……..
   - Interval evaluations (every 3 months or as required by Authorization Letter) were unfavorable?.....
   - Any evidence or concern the airman has not remained abstinent?……
   - Any positive drug or alcohol tests since last HIMS evaluation? ……
   - Any evidence of noncompliance or concern the airman is not working a good recovery program?….
   - Any NEW condition(s) that would require Special Issuance? (Do not include any new CACI qualified condition.)……....

No	Yes

2. **TREATING PSYCHIATRIST REPORT** or **HIMS PSYCHIATRIST REPORT: Required <u>EVERY 12 months for ALL CLASSES</u>** unless a different time interval is specifically stated in the Authorization Letter.
   - Report(s) is/are favorable (no anticipated or interim treatment changes)……..
   - The psychiatrist recommends no additional treatment or monitoring.…….....

Yes	No

Items 3 - 5: The AME should review. Do not submit these items (3-5) to the FAA <u>unless concerns are noted.</u>

3. **AFTERCARE COUNSELOR REPORTS**: For 1st and 2nd class: Required every 3 months; 3rd class: Per Authorization Letter.
   - Show continued participation and abstinence-based sobriety? …….....

N/A	Yes	No

4. **CHIEF PILOT REPORT(S):** Required monthly for commercial pilots holding first- or second-class certificates (N/A for third-class):
   - Report(s) is/are favorable? …….....

N/A	Yes	No

5. **PEER PILOT REPORTS:** Required monthly for commercial pilots holding first- or second-class certificates (N/A for third-class):
   - Report(s) is/are favorable with continued total abstinence? …….

N/A	Yes	No

6. **ADDITIONAL REPORTS:** Required **<u>ONLY</u> when specified by the Authorization letter**
   - HIMS related (AA attendance, therapy reports, etc.) are favorable and meet authorization requirements……..
   - Reports required for other **non-HIMS** conditions all meet Authorization requirements……....

N/A	Yes	No

7. I have no other concerns about this airman and recommend re-certification for Special Issuance. **……**

Yes	No

_____ HIMS AME Signature

_____ Date of Evaluation

If ALL items fall into the clear column, the AME may issue with the time limitation specified in the Authorization letter.

If ANY SINGLE ITEM falls into the SHADED COLUMN, the AME MUST DEFER or contact the FAA for guidance AND EXPLAIN in the HIMS evaluation report.

FAA CERTIFICATION AID – Drug and Alcohol Monitoring Recertification (Page 1 of 2)

(Updated 5/25/2016)

The following information is to assist your treating physician/provider who may be unfamiliar with FAA medical certification requirements. It lists the ABSOLUTE MINIMUM information required by the FAA to make a determination on an airman medical certificate. You should strongly consider taking **a copy to each evaluator so they understand what specific information is needed in their report to the FAA.** If each item is not addressed by the corresponding provider there may be a **delay** in the processing of your medical certification until that information is submitted. Additional information such as clinic notes or explanations should also be submitted as needed. All reports must be CURRENT (within the last 90 days) for FAA purposes.

REPORT FROM	REQUIRED INTERVAL	MUST SPECIFICALLY ADDRESS OR STATE THE FOLLOWING (Drug and Alcohol Monitoring Recertification)
HIMS AME	Every 6 months or per Authorization Letter for all classes	1. Must be a face-to-face, in-person evaluation. 2. Must be performed by the HIMS AME listed on the Authorization Letter. 3. Summarize findings from additional interim evaluations that were performed by any other venue (phone/video/email), either at the AME's discretion or as required by the Authorization Letter (every 1-3 months). 4. Summarize your aeromedical impression and evaluation as a HIMS AME based on the face-to-face evaluation AND review of the supporting documents. ☐ Any evidence (such as a positive test) or concern the airman has not remained abstinent? ☐ Any evidence or concern the airman has not been compliant with the recovery program? ☐ If you do not agree with the supporting documents or if you have additional concerns not noted in the documentation, please discuss your observations or concerns. 5. State if the airman meets all the requirements of the Authorization Letter or describe why they do not. 6. Do you recommend continued Special Issuance in this airman? 7. Agreement to continue to serve as the airman's HIMS AME and follow this airman per FAA policy. 8. Agreement to immediately notify the FAA (at 405-954-4821) of any change in condition, deterioration or stability, or if there is any positive drug or alcohol testing. 9. Using the HIMS AME Checklist - Drug and Alcohol Monitoring Recertification, comment on any items that fall into the shaded category on the Checklist. 10. Submit the HIMS AME Checklist, your HIMS AME written report, and all required supporting documentation that you reviewed with your package.
DRUG OR ALCOHOL TESTING	Every 6 months or per Authorization Letter	1. Must be random, unannounced drug/alcohol testing. (Urine EtG/EtS, PEth testing or a mobile alcohol monitoring system are preferred.) 2. At a minimum, frequency must be 14 tests over a 12-month period (can be more frequent at AME discretion). 3. Must state if the testing is performed by: ☐ HIMS AME ☐ Air Carrier testing program/office. Air Carrier must immediately notify the HIMS AME of any positive test HIMS AME may require additional testing to supplement the testing conducted by the Air Carrier. ☐ Other, such as return to duty testing from a substance abuse professional or a DOT/FAA drug abatement program. 4. HIMS AME must immediately report any positive test to the FAA.
PSYCHIATRIST HISTORY REPORT	Every 12 months or per Authorization Letter	1. Summarize clinical findings and status of how the airman is doing. 2. Note any clinical concerns or changes in treatment plan. 3. Recommendations for any additional treatment or monitoring, if applicable. 4. Agreement to immediately notify the FAA or AME (at 405-954-4821) if there are any changes in the airman's condition. 5. Interval treatment records if any, such as clinic or hospital notes, should also be submitted.

FAA CERTIFICATION AID – Drug and Alcohol Monitoring Recertification (Page 2 of 2)

(Updated 5/25/2016)

The following information is to assist your treating physician/provider who may be unfamiliar with FAA medical certification requirements. It lists the ABSOLUTE MINIMUM information required by the FAA to make a determination on an airman medical certificate. You should strongly consider taking **a copy to each evaluator so they understand what specific information is needed in their report to the FAA.** If each item is not addressed by the corresponding provider there may be a **delay** in the processing of your medical certification until that information is submitted. Additional information such as clinic notes or explanations should also be submitted as needed. All reports must be CURRENT (within the last 90 days) for FAA purposes.

REPORT FROM	REQUIRED INTERVAL	MUST SPECIFICALLY ADDRESS OR STATE THE FOLLOWING (Drug and Alcohol Monitoring Recertification)
GROUP AFTERCARE COUNSELOR (ex: AA meeting)	1st and 2nd class: Every 3 months or per Authorization Letter 3rd class: As required per Authorization Letter	Progress report should include: 1. If the airman is continuing to participate in abstinence-based sobriety. 2. How often the airman attends (weekly or per Authorization Letter). 3. Agreement to immediately notify the HIMS AME if there are any changes or deterioration in the airman's condition.
CHIEF PILOT, FLIGHT OPERATION SUPERVISOR, OR AIRLINE MANAGEMENT DESIGNEE If the airman is 1st or 2nd class and employed by an air carrier	1st and 2nd class: Every month (bring cumulative reports to HIMS AME evaluation every 6 months.) 3rd class: Not applicable	Monthly reports must address: 1. The airman's performance and competence. 2. Crew interaction. 3. Mood (if available). 4. Presence or absence of any other concerns.
PEER PILOT (Ex: from employer, ALPA, etc.)	1st and 2nd class: Every month (bring cumulative reports to HIMS AME evaluation every 6 months.) 3rd class: Not applicable	Must attest to the best of their knowledge, the airman's continued total abstinence from drugs or alcohol.
ADDITIONAL PROVIDERS Additional reports for HIMS or any other condition noted in Authorization Letter	Every 6 months or per Authorization Letter	Varies. See the airman's Authorization Letter. Include any applicable psychotherapy notes, therapist follow up reports, social worker reports, AA sponsor contact, etc. If the airman has other non-SSRI conditions that require a special issuance, those reports should also be submitted according to the Authorization Letter.

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 Substances of Dependence/Abuse Protocol . For specification guidelines, see Substance of Dependence/Abuse (Drugs and Alcohol) Specification Evaluation.

V. Aviation Industry Antidrug and Alcohol Misuse Prevention Programs

SYNOPSIS OF MEDICAL STANDARDS

LAST UPDATE: June 29, 2016

SUMMARY OF MEDICAL STANDARDS – Revised April 3, 2006

Medical Certificate Pilot Type	First-Class Airline Transport Pilot	Second-Class Commercial Pilot	Third-Class Private Pilot
DISTANT VISION	20/20 or better in each eye separately, with or without correction.		20/40 or better in each eye 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.		
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.
COLOR VISION	Ability to perceive those colors necessary for safe performance of airman duties.		
HEARING	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:		

	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.	
SUBSTANCE DEPENDENCE AND SUBSTANCE ABUSE	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 hypnotics, 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.	

NOTE: For further information, contact your Regional Flight Surgeon.

STUDENT PILOT RULE CHANGE

LAST UPDATE: June 29, 2016

Student Pilot Rule Change

(Updated 04/08/16)

As of **April 1, 2016**, AMEs are no longer able to issue the ***combined*** FAA Medical Certificate and Student Pilot Certificate. Student Pilots must have a **separate** Student Pilot Certificate and a **separate** FAA Medical Certificate.

This change is due to a new Final Rule published on 01/12/16 [81 FR 1292]. It is in response to section 4012 of the Intelligence Reform and Terrorism Prevention Act and facilitates security vetting by the Transportation Security Administration (TSA) of student pilot applicants prior to certificate issuance.

The airman, student pilot airman, and non-FAA Air Traffic Control Specialist will continue to require a medical exam issued by an AME.

The student pilot will need a valid medical certificate prior to solo flight.

What has changed for the AME regarding the MEDICAL CERTIFICATE?

- **Medical Flight Test:**
  If the AME determines a MFT is needed (such as for a vision defect, amputation or orthopedic condition), the AME must DEFER the exam.
- **Age Requirement:**
  There is no age requirement for a medical certificate. The exam should be timed so that the medical certificate is valid at the time of solo flight.
- **Restrictions are no longer used by the AME:**
  "Valid for flight test only"; "Valid for student pilot purposes only"; "Not valid until (date of 16th birthday)."
- **English Proficiency:**
  There is no language requirement for medical certification. However, if the AME has concerns about the applicant's English proficiency, they should contact their local FSDO and/or the RFS and document this in Block 60. See General Information - Who May Be Certified, Language Requirements**.**
- **Transmittal time:**
  The AME has **14 days** to transmit exams. The previous requirement to transmit student exams within 7 days no longer applies.

Helpful Resources regarding the Student Pilot Certificate:

The student pilot certificate will now be issued by a Flight Standards District Office (FSDO), an FAA-designated pilot examiner, an airman certification representative associated with a part 141 flight school, or a certificated flight instructor (CFI).

The minimum age for the student pilot certificate is 16.

- See FAQs for AMEs. A description of the changes can be found in the Advisory Circular/AC 61-65F.
- Resident and US citizen student pilots follow Student Pilot's Certificate Requirements.
- Foreign student pilots (non-resident) follow the Alien Flight Student Program.

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 to AMCD.

AME - Aviation Medical Examiner - a physician designated by the FAA and given the authority to perform airman physical examinations for issuance of second- and third-class medical 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

OSA - Obstructive Sleep Apnea

PAC - Premature Atrial Contraction

PET - Positron Emission Tomography

PFT - Pulmonary Function Test

PSA - Prostate Specific Antigen

PT - Prothrombin Time

PTT - Partial Thromboplastin Time

PVC - Premature Ventricular Contraction

RF - Radio Frequency Ablation

RFS - Regional Flight Surgeon

SODA - Statement of Demonstrated Ability

TFT -Thyroid Function Test

US -Ultrasound

ARCHIVES AND UPDATES

LAST UPDATE: June 29, 2016

Guide Version	Official Date	Revision Number	Description Of Change	Reason For Update
2016	06/29/2016	1.	Medical Policy	In Item 46. Neurologic, added new FAA Airman Seizure Questionnaire.
		2.	Medical Policy	In Item 47. Psychiatric, changed the title of the SSRI Specification Sheet to SSRI Specification Sheet – for Initial Consideration. Appropriate hyperlinks were also renamed in the Web version of the AME Guide.
		3.	Medical Policy	In Item 47. Psychiatric, changed title of Depression Treated with SSRI Medications to Specifications for Neuropsychological Evaluations for Treatment with SSRI Medications. Appropriate hyperlinks were also renamed in the Web version of the AME Guide.
2016	05/25/2016	1.	Medical Policy	In Item 47. Psychiatric, added new SSRI Follow Up Path for the HIMS AME. Chart has new title and content. This replaces the previously titled "SSRI Follow Up Path."
		2.	Medical Policy	In Item 47. Psychiatric, added HIMS AME Checklist – SSRI Recertification.
		3.	Medical Policy	In Item 47. Psychiatric, added FAA Certification AID – SSRI Recertification.
		4.	Medical Policy	In Substances of Dependence/Abuse, added HIMS AME Checklist – Drug and Alcohol Monitoring Recertification.
		5.	Medical Policy	In Substances of Dependence/Abuse, added FAA Certification AID – Drug and Alcohol Monitoring Recertification.
		6.	Errata	Removed duplicated punctuation on CACI - Pre Diabetes Mellitus Worksheet.
2016	04/27/2016	1.	Medical Policy	References to ATCS removed

				from the AME Guide with the exception of use in General Information - Classes of Medical Certificate and in Item 52. Color Vision – ATCS testing criteria.	
		2.	Medical Policy	In Item 41. GU- Kidney Stone(s) - (Nephrolithiasis, Renal Calculi) or Renal Colic - All Classes, revised Disposition Table to clarify criteria.	
		3.	Medical Policy	Revised title of CACI – Kidney Stone(s) Worksheet to CACI – Retained Kidney Stone(s) Worksheet.	
		4.	Medical Policy	In the Acceptable Combinations of Diabetes Medications Chart, add dulaglutide (Trulicity) to the GLP-1 section.	
		5.	Errata	In the Glossary, revise entries for PAC, PET, and PVC.	
2016	04/08/2016	1.	Medical Policy	Update information on the Student Pilot Rule Change page. AMEs have 14 days to transmit the exams.	
2016	03/08/2016	1.	Medical Policy	As of **April 1, 2016** (per Final Rule [81 FR 1292]), AMEs will no longer be able to issue the **combined** FAA Medical Certificate and Student Pilot Certificate. Student Pilots will have a **separate** Student Pilot Certificate and a **separate** FAA Medical Certificate. As such, all AME instructions regarding the issuance of a combined certificate have been removed from the AME Guide. In addition, a section explaining the policy change has been added. See Student Pilot Rule Change.	
		2.	Administrative	In Application Process for Medical Certification, Applicant History, II. Prior to the Examination, revise to change any “MedX” references to MedXpress.	
		4.	Administrative	In Item 31. Eyes, General – revise language in disposition	

				table for Amblyopia.	
		5.	Administrative	In Item 42. Upper and Lower Extremities, Item 49. Hearing, and Disease Protocol for Musculoskeletal, revise language to clarify process.	
		6.	Administrative	In Glossary, revise entries for AMCS and AME to clarify definition.	
2016	03/08/2016	1.	Administrative	In all dispositions tables for conditions with CACIs, where applicable, revise language in Evaluation Data column to “See CACI” and revise language in Disposition column to “Follow CACI.”	
2016	02/24/2016	1.	Medical Policy	In Item 36. Heart, Valvular Disease Disposition Table, reorganize and add entry for Mitral Valve Repair.	
		2.	Medical Policy	In Item 36. Heart, add Mitral Valve Repair Disposition Table.	
		3.	Medical Policy	In Item 36. Heart, add CACI – Mitral Valve Repair Worksheet.	
		4.	Medical Policy	In the PDF version of The Guide, Item 26. Nose, revise information on severe allergic rhinitis and hay fever requiring antihistamines so information is consistent with the Web version.	
		5.	Errata	In Special Issuances, AASI for Mitral or Aortic Insufficiency, correct typographical error.	
2016	01/27/2016	1.	Medical Policy	In Item, 41. G-U System, Gender Identity Disorder, rename to Gender Dysphoria, update information, and relocate entry to Item 48, General Systemic, Gender Dysphoria.	
		2.	Medical Policy	In Item 48. General Systemic, Gender Dysphoria, add Gender Dysphoria Mental Health Status Report form.	
		3.	Medical Policy	In Item 41. G-U System, Pregnancy, remove and relocate entry to Item 48., General Systemic, Pregnancy.	

		4.	Medical Policy	In Pharmaceuticals, Contraceptive and Hormone Replacement Therapy, III Aeromedical Considerations, change reference from Item 41. Gender Identity Disorder to Item 48. General Systemic, Gender Dysphoria.
		5.	Errata	In Synopsis of Medical Standards, correct typographical error.
2016	01/01/2016	1.	Administrative	Revise cover page to reflect the current calendar year.
2015	11/25/2015	1.	Medical Policy	In Item 41. G-U Systems, General Disorders, add Chronic Kidney Disease Dispostion Table.
		2.	Medical Policy	In Item 41. G-U Systems, General Disorders, add CACI – Chronic Kidney Disease Worksheet.
		3.	Administrative	On main CACI Certification Worksheets page, add entry for Chronic Kidney Disease.
		4.	Medical Policy	In Special Issuances, add AASI for Chronic Kidney Disease.
		5.	Administrative	On main AASI page, add entry for Chronic Kidney Disease.
		6.	Medical Policy	In AME Assisted Special Issuances (AASI), revise AASI Coversheet to include box for Chronic Kidney Disease.
2015	11/06/2015	1.	Errata	In Item 48. General Systemic – CACI – Pre Diabetes Worksheet, corrected typographical errror in Accebtable Certification Criteria: Oral glucose test, if performed, should be less than 200 mg/dl at **2** hours.
2015	10/28/2015	1.	Medical Policy	In Item 36. Heart, revise Hypertension Dispositions Table to clarify certification requirements.
		2.	Medical Policy	In Item 36. Heart, revise CACI – Hypertension Worksheet to

				provide example of clonidine as a centrally acting antihypertensive(s), which is **not acceptable**.
		3.	Medical Policy	In Item 36. Heart, add Hypertension – Frequently Asked Questions (FAQs).
		4.	Medical Policy	In Pharmaceuticals (Therapeutic Medications) - Antihypertensives, revise to include table with examples of medications that are acceptable and not acceptable for treatment of hypertension.
		5.	Medical Policy	In AME Assisted Special Issuances (AASI), add AASI for Hypertension.
		6.	Medical Policy	In AME Assisted Special Issuances (AASI), revised AASI Coversheet to include box for Hypertension.
		7.	Medical Policy	In Item 55. Blood Pressure, Decision Considerations, revise to include more information on AME options if airman's blood pressure is higher than 155/95 during the exam.
2015	09/30/2015	1.	Medical Policy	In Item 41. G-U Systems, add Kidney Stone(s) Dispositions Table.
		2.	Medical Policy	In Item 41. G-U Systems, add CACI – Kidney Stone(s) Worksheet.
		3.	Medical Policy	In Item 41. G-U Systems, Neoplastic Disorders,Dispostions Table, revise information for Renal Cancer.
		4.	Medical Policy	In Item 41. G-U Systems, Neoplastic Disorder, revise the CACI – Renal Cancer Worksheet to include "disease recurrence and stage 4 disease" as part of criteria AME must review.
		5.	Medical Policy	In Item 41. G-U Systems,

				Urinary System, revise Disposition Table to include information on Hematuria, Proteinuria, and Glycosuria. Removed information on renal calculi, which is now captured in Kidney Stone (s) Disposition Table.
		6.	Administrative	In Item 41. G-U Systems, revised the list of conditions to appear in the following order: -General Disorders -Gender Identity Disorders -Inflamatory Conditions -Kidney Stone(s) -Neoplastic Disorders • Bladder Cancer • Prostate Cancer • Renal Cancer • Testicular Cancer • Other G-U Cancers/Neoplastic Disorders -Nephritis -Pregnancy -Urinary System
2015	08/26/2015	1.	Medical Policy	In Item 41. G-U Systems, Neoplastic Disorders, Dispositions Table, revise information for Prostate Cancer.
		2.	Medical Policy	In Item 41. G-U System, Neoplastic Disorders, add CACI – Prostate Cancer Worksheet.
		3.	Medical Policy	In Item 42. G-U System, Neoplastic Disorders, add Prostate Conditions Dispositions Table to include information on BPH and elevated PSA.
		4.	Medical Policy	On CACI Conditions main page, revise guidance to clarify that if all the CACI criteria are met and the applicant is otherwise qualified, the AME may issue on the first exam or the first time the condition is reported to the AME without contacting AMCD/RFS. AMEs

				should document the appropriate notes in Block 60 and keep the supporting documents in their files; they do not need to be submitted to the FAA at this time.
		5.	Administrative	In Special Issuance, AASI for Melanoma and in Item 40. Skin, Disposition Table for Skin Cancer – All Classes, revise to clarify expression of Breslow level. (Removed < > signs.) EX: "Melanoma less than 0.75 mm in depth or Melanoma in Situ" and "Melanoma equal to 0.75mm or greater in depth."
		6.	Administrative	In Item 41. G-U System – Neoplastic Disorders, Disposition Table – Testicular Cancer – All Classes and in Disposition Table – Bladder Cancer – All Classes, revise to clarify - "Non metastatic and treatment completed 5 or more years ago."
		7.	Administrative	In CACI – Bladder Cancer Worksheet and CACI – Testicular Cancer Worksheet, revise information in notes to clarify: "If it has been **5 or more years** since…"
2015	07/29/2015	1.	Medical Policy	In Item 41. G-U System, Neoplastic Disorders, Dispositions Table, revise information for Bladder Cancer.
		2.	Medical Policy	In Item 41. G-U System, Neoplastic Disorders, add CACI – Bladder Cancer Worksheet.
		7.	Medical Policy	In Item 48. General Systemic - Endocrine Disorders, revised CACI – Hypothyroidism Worksheet. Changed normal TSH from 90 days to one year.

		8.	Medical Policy	In Item 38. Abdomen and Viscera, Dispositions, revise to include criteria for Liver Transplant - Recipient, Liver Transplant - Donor, and Combined Transplants (Liver in combination with kidney, heart, or other organ.)
		9.	Medical Policy	In Protocols, add protocol for Liver Transplant – (Recipient).
2015	06/24/2015	1.	Medical Policy	In Item 41. G-U System, Neoplastic Disorders, Dispositions Table, revise information for Testicular Cancer.
		2.	Medical Policy	In Item 41. G-U System, Neoplastic Disorders, add CACI – Testicular Cancer Worksheet.
		3.	Medical Policy	In Pharmaceuticals (Therapeutic Medications), add guidance for use of Erectile Dysfunction and/or Benign Prostatic Hyperplasia Medications, including table of wait times.
		4.	Medical Policy	In CACI – Hypertension Worksheet, revise to change medication wait time from 2 weeks to 7 days.
		5.	Medical Policy	In PDF version of the Guide, create a page listing all CACI worksheets. In both PDF and Web versions of the Guide, include instructions for the Examiner to review the disposition table first to verify that a CACI is required.
2015	06/17/2015	1.	Administrative	In Protocols, Diabetes Mellitus Type I and Type II – Insulin Treated, clarify diabetes requirements by class.
		2.	Administrative	In Pharmaceuticals, Diabetes Mellitus Type I and Type II – Insulin Treated, remove redundant language. Retain

				links to applicable Diabetes information elsewhere in the AME Guide.
2015	05/27/2015	1.	Medical Policy	In Item 48. General Systemic, Dispositions Table for Human Immunodeficiency Virus (HIV), add issuance criteria for HIV negative airmen taking long-term prevention or Pre-Exposure Prophylaxis (PrEP). Also added link to the information in Protocol for Human Immunodeficiency Virus (HIV).
		2.	Medical Policy	In Protocols, Diabetes Mellitus Type II – Medication Controlled, added PDF form "DIABETES or HYPERGLYCEMIA ON ORAL MEDICATIONS STATUS REPORT." Links to the form also added in Pharmaceuticals, Diabetes Mellitus Type II – Medication Controlled (Not Insulin) and in Special Issuances AME Assisted - All Classes - Diabetes Mellitus - Type II, Medication Controlled (Not Insulin).
2015	04/29/2015	1.	Medical Policy	In Item 40. Skin, replace dispositions table for Malignant Melanoma with an expanded table named "Skin Cancers – All classes."
		2.	Administrative	In all CACI worksheets, revise note in Block 60 language to read: • CACI qualified (condition). • Not CACI qualified (condition). Issued per valid SI/AASI. (Submit supporting documents.) • NOT CACI qualified

				(condition). I have deferred.
		3.	Medical Policy	In Disease Protocols, Obstructive Sleep Apnea, Reference Materials, revise Specification Sheet B to include bullet: “In communities where a Level II HST is unavailable, the FAA will accept a level III HST. If the HST is positive for OSA, no further testing is necessary and treatment in accordance with the AASI must be followed. However, if the HST is equivocal, a higher level test such as an in-lab sleep study will be needed unless a sleep medicine specialist determines no further study is necessary and documents the rationale.”
		4.	Medical Policy	In Disease Protocols, Protocol for History of Diabetes Mellitus Type II Medication – Controlled (Non Insulin), Protocol for Metabolic Syndrome, and CACI – Pre Diabetes, revise to add 14 day wait period for use of Metformin only. (Any other single diabetes medication requires a 60-day wait period.)
		5.	Medical Policy	In Item 43. Spine and other Musculoskeletal, add a disposition table for Gout and Pseudogout.
2015	04/21/2015	1.	Medical Policy	In Disease Protocols, Protocol for Diabetes Mellitus, Type I and Type II – Insulin Treated, revise language to remove reference to class of certification.
		2.	Medical Policy	In Pharmaceuticals (Therapeutic Medications) Diabetes Mellitus – Insulin Treated, revise language under III. Aeromedical Decision Considerations. Remove reference to class of certification.
2015	04/16/2015	1.	Medical Policy	In Disease Protocols, Protocol

				for History Diabetes Mellitus Type II Medication-Controlled (Non-Insulin) and in Protocol for Medication Controlled Metabolic Syndrome, remove: “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.”
		2.	Administrative	To bring the PDF version of the Guide up-to-date with the online version: In Item 36. Heart, C. Medication, NOT ACCEPTABLE - Remove "A combination of beta-adrenergic blocking agents used with insulin, meglitinides, or sulfonylureas.”
2015	04/03/2015	1.	Medical Policy	In Disease Protocols, Obstructive Sleep Apnea, Reference Materials, Frequently Asked Questions (FAQs), add new FAQ: **“What if the doctor or insurance provider is only willing to do a level III Home Sleep Test (HST).”**
2015	03/19/2015	1.	Medical Policy	In Disease Protocols, Obstructive Sleep Apnea, add new section within the Reference Materials for Frequently Asked Questions (FAQs).
		2.	Administrative	In Disease Protocols, Obstructive Sleep Apnea, add a link for the FAA OSA screening video.
2015	03/10/2015	1.	Administrative	In Disease Protocols, Obstructive Sleep Apnea, create additional hyperlinks within the material.
2015	03/02/2015	1.	Medical Policy	In Disease Protocols, revise guidance to introduce “Protocol for Obstructive Sleep Apnea (OSA).”
		2.	Medical Policy	In Disease Protocols, add new section, “Reference Materials for Obstructive Sleep Apnea

				(OSA)," to the end of the Protocols.
		3.	Medical Policy	In AME Assisted – All Classes - Sleep Apnea, revise guidance on certification criteria. Change title to "AME Assisted – All Classes – Obstructive Sleep Apnea (OSA)."
		4.	Medical Policy	In Item. 35, Lungs and Chest, Revise guidance in Decisions Considerations Table regarding Obstructive Sleep Apnea.
		5.	Medical Policy	In Item. 25-30, Ear, Nose and Throat, add link to Protocol for Obstructive Sleep Apnea.
		6.	Medical Policy	In Item. 28, Mouth and Throat Decision Considerations Table, add link to Protocol for Obstructive Sleep Apnea.
		7.	Administrative	In Protocols, revise table of contents page to show entry for Obstructive Sleep Apnea (OSA). In the PDF version of the AME Guide, add note to indicate location of the "Obstructive Sleep Apnea (OSA) – Reference Materials."
2015	02/11/2015	1	Administrative	In Item. 52, Color vision, revise format to emphasize existing policy – "Color vision tests approved for airmen ARE NOT all acceptable for air traffic controllers."
		2.	Medical Policy	In Protocol for History of Human Immunodeficiency Virus (HIV) Related Conditions, revise language and insert links to specification sheets to clarify criteria for Special Issuance and follow-up.
2014	12/17/2014	1.	Medical Policy	In Pharmaceuticals, Anti-hypertensives, revise to state that the combination use of beta-blockers and insulin, meglitinides, or sulfonylurea is now allowed.
2014	12/01/2014	1.	Medical Policy	In Pharmaceuticals, Do Not Issue – Do Not Fly, remove "Concurrent use of a beta-

				blocker plus a sulfonylurea or insulin or a meglitinide" from the Do Not Issue listing.
2014	12/01/2014	1.	Administrative	Review Guide and remove any erroneous references to Titmus II Vision (TII, TIIs) Testers. Tester was previously removed (09/27/13) as acceptable for airmen.
2014	11/24/2014	1.	Administrative	In Disease Protocols, review and adjust table of contents order.
2014	10/22/2014	1.	Medical Policy	In Pharmaceuticals, Diabetes Mellitus Type II – Medication Controlled (Not Insulin), revise chart of Acceptable Combinations of Diabetes Medications to include alogliptin (Nesina) and trade names for metformin (Glucophage, Fortament, Glutetza, Riomet.)
2014	10/20/2014	1.	Medical Policy	In Pharmaceuticals, Diabetes Mellitus – Insulin Treated and in Diabetes Mellitus – Diabetes Mellitus Type II – Medication Controlled (Not Insulin), revise guidance under V. Pharmaceutical Considerations regarding chart of Acceptable Combinations of Diabetes Medications.
		2.	Medical Policy	In Pharmaceuticals, revise chart of Acceptable Combinations of Diabetes Medications regarding Bydureon and Beta-Blockers.
		3.	Medical Policy	In AASI, Diabetes Mellitus – Type II Medication Controlled (not insulin), revise guidance regarding deferral criteria.
2014	09/10/2014	1.	Medical Policy	In General Information, Equipment Requirements and in Item. 52, Color Vision, revise to indicate that the OPTEC 2000 vision tester (Models 2000 PM, 2000 PAME, 2000 PI) MUST contain the 2000-010 FAR color perception PIP plate to be approved.
2014	08/6/2014	1.	Medical Policy	In General Information, Classes

				of Medical Certificates and also in Validity of Medical Certificates, revise to include language regarding digital signatures of authorized FAA physicians on certificates.
2014	07/25/2014	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 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 Medications), 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.
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	03/10/2014	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 (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 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 Subarachnoid Hemorrhage.
2013	09/27/2013	1.	Medical Policy	In General Information, Equipment Requirements – Color Vision Test Apparatus, remove Titmus II Vision Tester (Model Nos. TII and TIIS) from the list of approved testers.

2013	09/27/2013	1.	Medical Policy	In Disease Protocols, revise Hypertension Worksheet to clarify criteria whereby AME can assess current status.
2013	09/17/2013	1.	Medical Policy	In Disease Protocols, add new test (Gordon Diagnostic System [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	08/16/2013	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	08/14/2013	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.
2013	07/30/2013	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	06/19/2013	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 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 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. 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** finds…etc.”
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 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, 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, 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 title of Insulin Treated Diabetes Mellitus - Type I or Type II. Change title to Diabetes 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 Specifications for Neuropsychological Evaluations for Treatment with SSRI Medications.
		3.	Medical Policy	In Disease Protocols, add Specifications for Neuropsychological Evaluations for Potential Neurocognitive Impairment.
		4.	Medical Policy	In Disease Protocols, add Specifications for Psychiatric Evaluations.

		5.	Medical Policy	In Disease Protocols, add Specifications for Psychiatric and Psychological Evaluations.
		6.	Medical Policy	In Disease Protocols, add Specifications for Psychiatric and Neuropsychiatric Evaluations for Substance Abuse/Dependence.
		7.	Medical Policy	In Item 47. Psychiatric Conditions, revise table to include reference to new Psychiatric Specification Sheets.
		8.	Medical Policy	In Item 47. Psychiatric Conditions, revise SSRI 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 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 – Coronary Heart Disease, remove reference to FAA Form 8500-20 Medical Exemption Petition. Form 8500-20 is 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.	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 (FAA employee 2152 series 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 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 current calendar year.
		2.	Medical Policy	In General Information, Medical Certificates – AME Completion, revise language to clarify signature requirements.
2011	12/13/11	1.	Medical Policy	In Examination Techniques, Item 52. Color Vision, revise to include Color Vision Testing Flowchart.
2011	12/01/11	1.	Medical Policy	In Pharmaceuticals (Therapeutic Medications) section, change title of Antihistaminic and 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, 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,

				Equipment Requirements, revise to include equipment to 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 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 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 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 deferral and issuance criteria.
2011	01/31/11	1.	Errata	Revise to correct transposed 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 (Therapeutic Medications) - Desensitization Injections, revise and clarify criteria for hay 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 31-34 Eye – Contact Lenses, 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 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, Item 52. Color Vision, remove APT-5 as an acceptable color 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. 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 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 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 process.
2009	07/30/2009	1.	Medical Policy	In Pharmaceuticals, Acne Medications, add language to further clarify instructions for 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, Item 31-34. Eye, correct typographical error in form number. Revised to reflect “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, 4th 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, Equipment Requirements, and in Examination Techniques Items 50, 51, and 54, revise acceptable vision testing equipment requirements.
		3.	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.
V.	07/31/2008	1.	Medical Policy	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.
V.	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.”
		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.
V.	11/26/2007	9.	Administrative	In General Information, Disposition of Applications, add note to include electronic submission by international AME's.
		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.
V.	04/03/2006	1.	Administrative	Redesign the appearance and navigable format of the *Guide 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

V.	04/03/2006	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

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
IV.	07/31/2005	1.	Administrative	Redesign the appearance and navigable format of the *Guide for Aviation Medical Examiners*
		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

IV.	07/31/2005	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.
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
III.	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
II.	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
I.	09/24/2003	Introduction of the 2003 Guide for Aviation Medical Examiners Website		