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COMDTINST M6410.3A

APR 04, 2012

COMMANDANT INSTRUCTION M6410.3A

Subj: COAST GUARD AVIATION MEDICINE MANUAL

- Ref:
- (a) Coast Guard Medical Manual, COMDTINST M6000.1 (series)
 - (b) Officer Accessions, Evaluations, and Promotions, COMDTINST M1000.3 (series)
 - (c) Coast Guard Air Operations Manual, COMDTINST M3710.1 (series)
 - (d) USCG Aeromedical Policy Letters (APL)
http://www.uscg.mil/hq/cg1/cg112/cg1121/aviation_med.asp
 - (e) USCG Aeromedical Technical Bulletins (ATB)
http://www.uscg.mil/hq/cg1/cg112/cg1121/aviation_med.asp
 - (f) Quality Improvement and Implementation Guide (QIIG) 8
<http://www.uscg.mil/hq/cg1/cg112/cg1122/QIIG.asp>
 - (g) Safety and Environmental Health Manual, COMDTINST M5100.47 (series)
 - (h) Department of Defense Human Factor Analysis and Classification System
 - (i) Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST M3710.4 (series)
 - (j) Immunizations and Chemoprophylaxis (Joint Publication), COMDTINST M6230.4 (series)

1. PURPOSE. This Manual establishes policy, assigns responsibilities, and provides guidelines regarding the Coast Guard Aviation Medicine Program.
2. ACTION. All Coast Guard unit commanders, commanding officers, officers-in-charge, deputy/assistant commandants, and chiefs of headquarters staff elements shall comply with the provisions of this Manual. Internet release is authorized.
3. DIRECTIVES AFFECTED. Coast Guard Aviation Medicine Manual, COMDTINST M6410.3 is cancelled.
4. MAJOR CHANGES. Major Changes to this Manual include: Adoption of AERO and personnel classifications related to AERO, transfer of content to ATBs and APLs, updating of qualifications, updating of anthropometrics, updates of medications and exogenous factors.

DISTRIBUTION – SDL No. 161

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5. REQUEST FOR CHANGES. Units and individuals may recommend changes by writing via the chain of command to: Commandant (CG-1121); U. S. Coast Guard; 2100 2nd STOP 7101; WASHINGTON, DC 20593-0001.
6. DISCUSSION. This Manual provides guidance for health care providers who directly support Coast Guard operations and provide medical care to Coast Guard and other military aviation personnel. Policies on various medical and operational situations that apply to the aviation community are discussed, including medical standards for aviation personnel, classification of aviation personnel, and medical clearance to fly. Aeromedical Policy Letters and Aeromedical Technical Bulletins are amplifying extensions of this Manual and carry full authority as programmatic policy.
7. RESPONSIBILITIES. Coast Guard Flight Surgeons (FS), Flight Surgeon Trainees (FST), Aviation Medical Officers (AMO), Aeromedical Physician Assistants (APA), other CG health care professionals and Health Services (HS) Technicians shall apply the policies and standards within this Manual whenever providing care to CG aviation personnel. Commanders of Coast Guard Air Stations and other commanding officers overseeing CG aviation personnel shall ensure that these policies and standards are applied with regards to the health care of these aviation personnel.

NOTE: Unless otherwise indicated, the term “Flight Surgeon” (FS) shall apply to “Flight Surgeon Trainee” (FST) as well.

8. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is intended to provide operational guidance for Coast Guard personnel and is not intended to nor does it impose legally-binding requirements on any party outside the Coast Guard.
9. RECORDS MANAGEMENT CONSIDERATIONS. This Manual has been evaluated for potential records management impacts. The development of this Manual has been thoroughly reviewed during the directives clearance process, and it has been determined there are no further records scheduling requirements, in accordance with Federal records Act U.S.C. 3101 et seq., National Archives and Records Administration (NARA) requirements, and the Information and Life cycle Management Manual, COMDTINST M5212.12 (series). This policy does not have any significant or substantial change to existing records management requirement.
10. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.
 - a. The development of this Manual and the general policies contained within it have been thoroughly reviewed by the originating office in conjunction with the Office of Environmental Management, and are categorically excluded (CE) under current USCG CE # 33 from further environmental analysis, in accordance with Section 2.B.2. and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1 (series). Because this Manual implements without substantive change guidance on, and provisions for, compliance with applicable environmental mandates, Coast Guard categorical exclusion #33 is appropriate.
 - b. This Directive will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change existing environmental conditions; or in consistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions resulting from the general policies in this Manual

must be individually evaluated for compliance with the National Environmental Policy Act (NEPA), DHS and Coast Guard NEPA policy, and compliance with all other environmental guidance provided within it for compliance with all applicable environmental laws prior to promulgating any directive, all applicable environmental considerations are addressed appropriately in this Manual.

11. FORMS/REPORTS. The forms referenced in this Manual are available in USCG Electronic Forms on the Standard Workstation or on the Internet: <http://www.uscg.mil/forms/>, CGPortal at <https://cgportal.uscg.mil/delivery/Satellite/uscg/References>; and Intranet at <http://cgweb.comdt.uscg.mil/CGForms>.

Maura K. Dollymore /s/
Rear Admiral, U.S. Coast Guard
Director of Health, Safety, and Work-Life

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CHAPTER 1. GENERAL INSTRUCTIONS AND PROCEDURES

- A. Aviation Personnel Medical Classification. The term “aviation personnel” includes all enlisted and officer personnel who hold an aviation rating. Due to the likelihood of deployment during crisis, emergency or surge operations, these members are considered career aviators and must maintain their fitness to fly as outlined in this Manual and References (a), (b), and (c). Aviation personnel are divided into aeromedical examination classes for entry purposes into the Aeromedical Electronic Resource Office (AERO) database:
1. Class 1. Comprises all pilot examinations for both initial entrance (accession) physical and current (rated) aviator exams. If the Class 1 initial exam expires or is about to expire prior to reporting date, the applicant must repeat, submit, and have on record a qualified Class 1 physical. Class 1 can be further broken down as follows:
 - a. Initial Class 1 (AERO Classification 1A): For initial entrance (accession) aviation medical examination (to be completed prior to requesting aviation training).
 - b. Comprehensive Class 1 (AERO Classification AA): For current (rated) aviators. This exam is equivalent to the historic biennial aviation medical examination (FDME).
 - c. Interim Class 1 (AERO Classification AB): For current (rated) aviators. This exam is done in the year between comprehensive FDMEs and should coincide with the PHA exam required for all Coast Guard (CG) personnel. It is also referred to as a Flight Duty Health Screening (FDHS).
 2. Class 2. Comprises all Flight Surgeons (FS), Flight Surgeon Trainees (FST), and Aeromedical Physician Assistants (APA). Class 2 can be further broken down as follows:
 - a. Initial Class 2 (AERO Classification FI): For new FS’s, FST’s, and APA’s (to be completed prior to requesting Aviation Medicine training).
 - b. Comprehensive Class 2 (AERO Classification FA): For current FS’s, FST’s, and APA’s. This exam is equivalent to the historic biennial aviation medical examination (FDME).
 - c. Interim Class 2 (AERO Classification FB): For current FS’s, FST’s and APA’s. This exam is done in the year between comprehensive FDMEs and should coincide with the PHA exam required for all CG personnel, also referred to as a FDHS.
 3. Class 3. Encompasses all other crewmembers authorized by competent authority to fly in Coast Guard aircraft as described in Chapter 8.B of Reference (c). Class 3 can be further stratified as follows:
 - a. Initial Class 3 (AERO Classification PI): For new aircrew members (to be completed prior to requesting aviation training).
 - b. Comprehensive Class 3 (AERO Classification PA): For current aircrew. This exam is equivalent to the historic biennial aviation medical examination (FDME).

- c. Interim Class 3 (AERO Classification PB): For current aircrew. This exam is done in the year between comprehensive FDMEs and should coincide with the PHA exam required for all CG personnel, also referred to as a FDHS.

B. Types of Aviation Physical Examinations. The terms Aeromedical Exam, Aviation Medical Exam, Flight Duty Exam and Flight Physical are used interchangeably. Within this context, three categories of flight duty medical exams are defined:

1. Initial FDME. Performed for accession purposes and is comprehensive. This is valid for up to 12 months regardless of physical class (should be completed and approved prior to requesting training).
2. Comprehensive FDME. Performed on aircrew every 2 years until age of 49 and then annually thereafter. This is equivalent to the historic Biennial Flight Physical. It is synchronized to expire at the end of the aircrew member's birth month at which time they will be due for the PHA and FDHS. Comprehensive FDMEs may be performed more frequently at the discretion of the aeromedical provider or as part of the requirements for aeromedical waivers or after a mishap.
3. FDHS. Performed on aviation personnel in conjunction with their PHA for those years in between the comprehensive FDMEs. It is synchronized to expire at the end of the aircrew member's birth month at which time they will be due for an FDME.

C. General Instructions for Aviation Examinations.

1. Purpose of Aviation Physical Examinations:
 - a. The CG physical examination for flying shall be limited to aviation personnel and authorized aviation candidates. The object of an aviation physical examination is to ensure individuals involved in aviation are physically, mentally and emotionally qualified for such duty, and to remove from aviation those who are temporarily or permanently unfit.
 - (1) For flight training candidates, the main objective is selecting individuals who should be able to fly safely and continue to do so for the duration of a flying career.
 - (2) For designated aviators, the objective is to determine if the individual should be able to fly safely during the succeeding examination interval (approximately 12 months).
 - b. Physical exams for flight duty performed on members of other military services should be performed in accordance with that service's policies where possible. Otherwise it may be completed by application of CG policies and procedures.
2. Performance of Aviation Physical Examinations.
 - a. To promote safety and to provide uniformity and completeness, an aviation physical examination must be performed by a currently qualified and appropriately designated Flight Surgeon (FS)/Flight Surgeon Trainee (FST)/Aviation Medical Officer (AMO)/Aeromedical

Physician Assistant (APA).

- b. Only medical officers who have successfully passed a course at a primary school of aviation medicine of the U. S. Armed Forces and the USCG Flight Surgeon Transition Course leading to the designation of “Flight Surgeon”, “Flight Surgeon Trainee”, “Aviation Medical Officer” or “Aeromedical Physician Assistant” are so authorized.
- c. Physician Assistants functioning as APAs must be working under the supervision of a FS/FST. Aviation physical exams performed by an APA must be countersigned by their designated FS/FST.

3. Documentation of Aviation Physical Examinations.

- a. The extent of the examination and the physical standards vary for the several classes of aviation personnel. In addition to meeting the standards in Sections 3-D Reference (a), additional information regarding medical suitability for certain mental and physical disorders can be found in Reference (d).
- b. All CG aviation physical examinations will be completed and submitted through the U.S. Army’s electronic medical record system known as AERO.
 - (1) Information on obtaining user access to the AERO system can be found at <http://www.uscg.mil/hq/cg1/cg112/cg1122/QIIG.asp> (#51).
 - (2) An AERO training platform is available at <https://aedr.rucker.amedd.army.mil/>.
 - (3) The AERO system automatically populates Report of Medical Examination, Form DD-2808, Report of Medical History, Form DD-2807-1 and Interim Abbreviated Flying Duty Medical Exam, Form DA-4497. Further guidance on the use of these forms can be found in Reference (a), Chapter 3.B and 3.C.

4. Aviation Physical Examinations.

- a. Required.
 - (1) Aviation Physical. Enlisted and officer personnel who hold an aviation rating, regardless of classification, must have an authorized aviation physical (FDME or FDHS) within the preceding 12 months. Circumstances may require more frequent examinations.
 - (2) Annual. All designated aviation personnel must obtain an annual aviation physical examination commensurate with the type of duty to be performed. The examination is required every year after initial designation. This requirement alternates annually between FDME and FDHS.
 - (a) Upon reaching age 50, all aviation personnel must complete an FDME annually.
 - (b) An annual FDME is also required for aviation personnel of any age that have a

waiver (temporary or permanent) of physical standards that prohibits unrestricted flight (e.g., no single pilot).

- (3) Candidates for Designation as Class 1. All candidates for flight training, irrespective of current or pending accession in the CG, must pass a physical examination for flight training duty. The examination date must not precede the application date by more than 12 months.
- (4) Candidates for Designation as Class 2 and Class 3. An approved aviation physical examination less than 12 months old (FDME or FDHS) is required both prior to applying for a Class 2 or Class 3 aviation training program and prior to a Class 2 or Class 3 designation.
- (5) Aircraft Mishaps. Any CG member involved in a Class A or B aircraft mishap shall undergo a complete aviation physical examination as part of the mishap investigation. Examinations after other mishaps are left to the discretion of the unit FS/FST/AMO.

NOTE: Post-mishap examinations must be performed by an aviation medicine trained physician.

- (6) Separation. An aviation physical examination is not required of aviation personnel being separated from active duty. The requirements for examination are the same as those for the separation from active duty of non-aviation personnel.

b. Elective.

- (1) Federal Aviation Administration (FAA) Airmen Medical Certificate. After receiving FAA Aviation Medical Examiner (AME) training, CG FS/AMOs may request authorization from Commandant (CG-11) to perform second and third Class physical examinations and issue FAA Medical Certificates to all military personnel on active duty including active duty for training. The FAA Administrator furnishes AMEs with the necessary instructions, guides, and forms required for this purpose. Except in those instances where there is a military requirement for FAA certification, examination and issuance of medical certificates shall not interfere with the FS's primary duties. Whenever possible, certificates should be obtained in conjunction with a required aviation physical examination. Any additional cost of FAA AME training will be borne by the medical officer and not by the Coast Guard. Military FDMEs may be substituted for FAA Class 2 or 3 examinations.
- (2) At the request of any designated aviator, an aviation physical examination may be conducted for personal health concerns prior to the required annual examination, though it will not replace the required examination unless meeting the validity stipulations below.

5. Timing of Aviation Medical Exams.

- a. The exam will be performed within three months preceding the last day of the birth month.

- b. The period of validity of the exam will be aligned with the last day of the service member's birth month. (Example: Someone born on 3 October would have August, September, and October in which to accomplish his/her physical. No matter when accomplished in that time frame, the period of validity of that exam is until 31 October one year later.)
 - c. Members who have completed a Comprehensive FDME as a candidate for aviation training may be out of phase with their birth month. During the next birth month period these members shall complete the FDHS as part of their annual PHA.
6. Standards for Class 1.
- a. General. The physical examination and physical standards for Class 1 are the same as those prescribed in sections 3-C and 3-D of the Coast Guard Medical Manual, COMDTINST M6000.1 (series) as modified by the following subparagraphs.
 - b. History.
 - (1) History of any of the following is disqualifying: seizures, isolated or repetitive (grand mal, petit mal, psychomotor, or Jacksonian); head injury complicated by unconsciousness in excess of 12 hours or post traumatic amnesia or impaired judgment exceeding 48 hours; malaria, until adequate therapy has been completed and there are no symptoms while off all medication for 3 months.
 - (2) For Student Naval Aviator (SNA) candidates already in the CG, a complete review of the health record is critical. Flight Surgeons are authorized to postpone the examination of persons who fail to present their health record at the time of examination. In exercising this prerogative, due consideration must be made in cases where access to the individual's health record is administratively impractical.
 - c. Therapeutics and General Fitness. Note on the Report of Medical Examination, Form DD-2808 if the individual received medication or other therapeutic procedures within 24 hours of the examination. In general, individuals requiring therapeutics or who have observed lowering of general fitness (dietary, rest, emotional, etc.) which might affect their flying proficiency shall not be found qualified for duty involving flying.
 - d. Valsalva and Aeronautical Adaptability. Each aviation physical will have a Valsalva maneuver and AA (Aeronautical Adaptability) evaluated and noted.
 - e. Height. Minimum 157.4 cm (62 inches). Maximum 198 cm (78 inches).
 - f. Chest. Any condition that serves to impair respiratory function may be cause for rejection. Pulmonary function tests are recommended to evaluate individuals with a history of significant respiratory system problems.
 - g. Skin. Psoriasis unless mild by degree, not involving nail-pitting and not interfering with the wearing of military equipment or clothing.

h. Cardiovascular System.

(1) Cardiac arrhythmia, heart murmur, or other evidence of cardiovascular abnormalities shall be carefully studied. Evidence of organic heart disease, rhythm disturbances or vascular diseases, if considered to impair the performance of flying duties, is cause for rejection.

(2) Sinus Bradycardia. Extreme sinus bradycardia may be a reflection of an underlying conduction system abnormality. There may be an inability to increase the heart rate in response to increased demand.

(a) Waiver: If the heart rate increases with exercise, the bradycardia is Not Considered Disqualifying (NCD), and no waiver is required.

[1] If the resting HR is less than 45 bpm, supply a current EKG demonstrating a sinus rhythm without evidence of prolonged QT, pre-excitation (e.g., Wolff-Parkinson-White [WPW] Syndrome), cardiac hypertrophy, heart block, or ischemic changes. Any such changes require further work up.

[2] Provide a rhythm strip demonstrating a rise of at least 10 bpm from baseline with exercise in less than 2 minutes.

(b) Treatment: No treatment is indicated if the rate increases with exercise; the condition is NCD.

(c) Discussion: A resting HR<45 bpm in our population is usually caused by excellent physical conditioning.

i. Teeth. The following are disqualifying:

(1) Any carious teeth that would react adversely to sudden changes in barometric pressure or produce indistinct speech by direct voice or radio transmission.

(2) Any dental defect that would react adversely to sudden changes in barometric pressure or produce indistinct speech by direct voice or radio transmission.

(3) Fixed active orthodontic appliances require a waiver from Commander, Personnel Service Center (PSC) opm or epm. Fixed retainers are exempted.

(4) Routine crown and temporary dental work is not disqualifying for aviation missions. Temporary crowns should be cemented with permanent cement (like polycarboxylate or zinc oxyphosphate cement) until the permanent crown is delivered. Temporary grounding of 6-12 hours after procedures is appropriate. Such work may be disqualifying for deployment.

- j. Distant Visual Acuity (DVA). 20/20 DVA is required for all duties including flight. For uncorrected Visual Acuity (VA) other than 20/20, refer to Coast Guard AERO Guide v1.0, Table 5.
- k. Oculomotor Balance. The following are disqualifying:
 - (1) Esophoria greater than 8 prism diopters.
 - (2) Exophoria greater than 8 prism diopters.
 - (3) Hyperphoria greater than 1.0 prism diopters.
 - (4) Prism divergence at 20 feet and 13 inches is optional. These tests shall be accomplished only on designated aviators who have sustained significant head injury, central nervous system disease, or who have demonstrated a change in their phorias.
 - (5) Detailed discussion and waiver guidance are located in the Coast Guard Aeromedical Policy Letters (http://www.uscg.mil/hq/cg1/cg112/cg1121/docs/pdf/USCG_Aeromedical_Policy_Letters.pdf).
- l. Eyes. Any pathologic condition that may become worse or interfere with proper eye function under the environmental and operational conditions of flying disqualifies. History of radial keratotomy is disqualifying. Intraocular pressures shall be tested and reported with each periodic exam.
- m. Near Visual Acuity. 20/20 VA is required for all duties including flight. For uncorrected VA other than 20/20, refer to Coast Guard AERO Guide v1.0, Table 5. Multivision lenses are authorized for use while flying if uncorrected near vision is less than 20/40 in either eye.
- n. Color Vision. Normal color perception is required. The testing for color vision must be unaided or with standard corrective lenses only. Use of any lenses (such as Chromagen) or other device to compensate for defective color vision is prohibited. Details on examination technique are available in the Coast Guard AERO Technical Bulletins, Attachment 5 (http://www.uscg.mil/hq/cg1/cg112/cg1122/docs/qiig/QIIG_51_Att_5.pdf).
- o. Depth Perception. Normal depth perception is required. When any correction is required for normal depth perception it must be worn at all times. Details on examination technique are available in the Coast Guard AERO Technical Bulletins, Attachment 5 (http://www.uscg.mil/hq/cg1/cg112/cg1122/docs/qiig/QIIG_51_Att_5.pdf).
- p. Field of Vision. The field of vision for each eye shall be normal as determined by the finger fixation test. When there is evidence of abnormal contraction of the field of vision in either eye, the examinee shall be subjected to perimetric study for form. Any contraction of the form field of 15 degrees or more in any meridian is disqualifying.

- q. Refraction. There are no refractive limits.
- r. Ophthalmoscopic Examination. Any abnormality disclosed on ophthalmoscopic examination that materially interferes with normal ocular function is disqualifying. Other abnormal disclosures indicative of disease, other than those directly affecting the eyes, shall be considered with regard to the importance of those conditions.
- s. Ear. The examination shall relate primarily to equilibrium and the patency of eustachian tubes. A perforation or evidence of present inflammation is disqualifying. The presence of a small scar with no hearing deficiency and no evidence of inflammation does not disqualify. Perforation, or marked retraction of a drum membrane associated with chronic ear disease, is disqualifying.
- t. Sickle Cell Preparation Test. Quantitative hemoglobin electrophoreses greater than 40% Hemoglobin-s is disqualifying because of the risk of hypoxia induced red blood cell deformation in the aviation environment.

7. Candidates for Flight Training (Class 1 Initial).

- a. Standards. Candidates for flight training shall meet all the requirements of Class 1, with the following additions or limitations:
 - (1) Cardiovascular.
 - (a) Candidates with symptomatic accessory conduction pathways (WPW Syndrome or other ventricular pre-excitation patterns) are Considered Disqualifying (CD). No waiver is recommended for candidates with this condition left untreated.
 - (b) Candidates with WPW Syndrome who have had definitive treatment via Radio Frequency (RF) ablation with demonstrable non-conduction on follow-up Electrophysiologic Studies (EPS) are considered for waiver on a case-by-case basis.
 - (c) When incidentally noted asymptomatic accessory bypass tracts, proven incapable of sustained rapid conduction as demonstrated by EPS, are discovered in a candidate, the candidate will be considered qualified. In general, EPS is not recommended in asymptomatic individuals.
 - (2) Height. Candidates for Class I training must also satisfy the following anthropometric requirements: Refer to Coast Guard AERO Technical Bulletins (http://www.uscg.mil/hq/cg1/cg112/cg1122/docs/qiig/QIIG_51_Att_5.pdf) for procedural guidelines on measurements. See table below.

Sitting Height Requirements

AIRCRAFT	BUTTOCK-KNEE LENGTH	SITTING HEIGHT	SITTING EYE HEIGHT	THUMB TIP REACH
HU-25	21.0-28.9	33.0-40.9	28.5 or Greater	27.0 or Greater
MH-65	21.0-28.9	33.0-40.9	28.5 or Greater	28.5 or Greater
MH-60	22.0-28.9	33.0-40.9	28.5 or Greater	29.0 or Greater
HC-130	21.0-28.9	33.0-40.9	28.5 or Greater	26.5 or Greater
HC-144	TBD	TBD	TBD	TBD

Table 1-1

Add: sitting eye height (SEH) and thumb tip reach (TTR) = 57 inches or greater.

(3) Vision.

(a) 20/20 Distant Visual Acuity (DVA) is required for all duties including flight. For uncorrected Visual Acuity (VA) other than 20/20, refer to Coast Guard AERO Guide v1.0, Table 5. While under the effects of a cycloplegic, the candidate must read 20/20 (with or without correction) each eye. The following are disqualifying:

[1] Total myopia greater than (minus) -1.50 diopters in any meridian.

[2] Total hyperopia greater than (plus) +3.00 diopters in any meridian.

[3] Astigmatism greater than (minus) -1.00 diopters. (Report the astigmatic correction in terms of the negative cylinder required.)

[4] The purpose of this cycloplegic examination is to detect large latent refractive errors that could result in a change of classes during an aviation career. Therefore, the maximum correction tolerated at an acuity of 20/20 shall be reported. Cycloplegics reported as any other acuity, e.g., 20/15 will be returned.

(b) The CG will consider sending candidates to Navy Flight School who have had corneal refractive surgery (CRS) and meet all of the enrollment criteria. CRS may be done by a DOD or a civilian provider. (This is an elective procedure. Guidelines for elective procedures are outlined in Chapter 2 of Reference (a). Candidates must have demonstrated refractive stability as confirmed by clinical records. Neither the spherical or cylindrical portion of the refraction may have changed more than 0.50 diopters during the two most recent postoperative manifest refractions separated by at least one month. The final manifest shall be performed no sooner than the end of the minimum waiting period (3 or 6 months depending on the degree of preoperative refractive error). The member must have postoperative uncorrected visual acuity of at least 20/50 correctable with spectacles to at least 20/20 for near and distance vision. Detailed enrollment criteria may be obtained via PSC-opm-2.

- (4) Hearing. In accordance with Reference (d).
- (5) Personality (Aeronautic Adaptability). Must demonstrate, in an interview with the Flight Surgeon, a personality make-up of such traits and reaction that will indicate that the candidate will successfully survive the rigors of the flight training program and give satisfactory performance under the stress of flying.
- (6) Chest x-ray. Aviation trainees must have had a chest x-ray within the past three years.

b. Reporting.

- (1) The importance of the physical examination of a candidate should be recognized not only by the examining Flight Surgeon but also by health services personnel assisting in the procedure and preparing the report. Candidates often come from a great distance or from isolated ships. If the examination cannot be completed in one working day, seek the Commanding Officer's help in making it possible for the candidate to remain available for a second working day. Careful planning should keep such cases to a minimum. If a report, upon reaching CG-PSC, is found to be incomplete and must be returned, the candidate will suffer undue delay in receiving orders and in some cases will be completely lost to the CG as a candidate. The preparation of the Report of Medical Examination, DD-2808 in the case of a candidate requires extreme care by all concerned.
 - (2) In a report of the examination of a candidate, rigid adherence to set standards is expected. The examining officers are encouraged to use freely that portion of the report that provides for "remarks" or "notes." Comments made under "remarks" are the examiner's opinion. Information from any source may be molded into an expression of professional opinion. A final recommendation of the examiner must be made. When such recommendation is not consistent with standards set by Commandant (CG-11) the examiner shall note that fact on the form under "remarks" or "notes" and a reasonable explanation made. When space on a Report of Medical Examination, Form DD-2808 is inadequate, use a Medical Record, Form SF-507.
8. Requirements for Class 2 Personnel. Flight Surgeon (FS)/Aviation Medical Officer (AMO)/Aeromedical Physician Assistants (APA), FS Candidates. While assigned to a Duty Involving Flight Operations billet, FS/AMOs/APAs shall meet the standards defined in Coast Guard AERO Guide v1.0 (http://www.uscg.mil/hq/cg1/cg112/cg1122/docs/qiig/QIIG_51_Att_4.pdf).
9. Requirements for Class 3 Aircrew.
- a. Aircrew Candidates/Class 3 Initial. Unless otherwise directed by Commander PSC (epm), personnel will not be permitted to undergo training leading to the designation of aircrewmembers unless a Flight Surgeon/Aviation Medical Officer has found them physically qualified for such training. Should it be desirable, for exceptional reasons, to place in training a candidate who does not meet the prescribed physical standards, the Commanding Officer may submit a

request for a waiver, with the Report of Medical Examination, DD-2808 and Report of Medical History, DD-2807-1 via AERO, to Commander PSC, justifying the request. Aircrew candidates shall meet the standards defined in Coast Guard AERO Guide v1.0 with a minimum height requirement of 152.5 cm/60 inches. Cycloplegic refraction and anthropometric measurements are not indicated. A chest x-ray is required within the previous 3 years.

- b. Aviation Mission Specialists (AMS)/AMS Candidates. Aviation Mission Specialists (Health Services Technicians (HS) who are assigned to flight orders), shall meet the standards for AERO Classification PA.
- c. Designated Aircrew. Aircrew shall meet the standards for Class 3, except the minimum height is 152.5 cm/60 inches.

10. Requirements for Special Duty Technical Observers. The term "technical observer" is applied to personnel who do not possess an aviation designation but who are detailed to duty involving flying. The examination shall relate primarily to equilibrium and the patency of eustachian tubes. They shall meet the standards prescribed for general duty. These personnel are not required to undergo a physical examination for flying provided a complete physical examination, for any purpose, has been passed within the preceding 60 months and intervening medical history is not significant. The physical examination need not be conducted by an FS/AMO. Technical observers who are required to undergo egress training must have a current (general purpose) physical examination and a status profile chit indicating "OK DIF/Dunker/Chamber."

11. Requirements for Special Duty/Landing Signal Officer (LSO).

- a. Physical Examinations for Landing Signal Officer (LSO).
 - (1) Candidates. Officer and enlisted candidates for training as LSO's shall have a physical examination prior to the training leading to qualification. LSO duties for flight deck require stricter visual acuity standards than those for general duty in the CG. Examination by a FS/AMO is not required.
 - (2) Reexamination. Biennial reexamination is required of all currently qualified LSO's.
- b. Physical Standards for LSO's. In addition to the physical standards required for officer and enlisted personnel, the following standards apply:
 - (1) Distant Visual Acuity. 20/20 Distant Visual Acuity (DVA) is required for all duties including flight (including LSO). For uncorrected Visual Acuity (VA) other than 20/20, refer to Coast Guard AERO Guide v1.0, Table 5, class 2/3/4 standards.
 - (2) Depth Perception. Normal depth perception is required.
 - (3) Color Vision. Normal color perception is required.

12. Refractive Surgery. All Classes: Certain Corneal refractive surgery can be waived for all classes.

NOTE: Class 1 can only undergo refractive surgery while serving in a non-flying status. Only Photorefractive Keratectomy (PRK), Laser In Situ Keratomileusis (LASIK), Laser Subepithelial Keratomileusis (LASEK), and Wave-Front Guided PRK (WFG-PRK) are approved. Other corneal refractive surgery, rings or implants are disqualifying and will be considered on a case by case basis.

- a. Medical Records. All pre-operative, operative and post operative medical records must be submitted for review by the waiver authority.
- b. Preoperative refractive limits:
 - (1) Sphere: -8.00 to +8.00 diopters.
 - (2) Cylinder: -3.00 to +3.00 diopters.
- c. Post-Operative Refractive Stability. Demonstration of post-operative refractive stability shall be demonstrated by 2 consecutive manifest refractions, obtained at least 30 days apart. For those with a pre-operative refraction of plano to -5.50 diopters of sphere the initial post operative refraction should be no sooner than 30 days after the surgery. A follow up refraction shall be done no sooner than 30 days after the initial post refraction. For those with a pre-operative refraction of -5.75 to -8.00 diopters of sphere or +0.25 to +6.00 diopters of sphere, the earliest manifest refraction is at 6 months post-op.
- d. Refractive Stability. If refractive stability is demonstrated as evidenced by less than a 0.50 diopters change over two separate exams at least four weeks apart, then the member can apply to PSC for a waiver 3 months after surgery. The post-operative manifest refractions can vary by no more than 0.50 diopters. Waiver consideration will not be made until this is achieved.
- e. Quality of Vision Questionnaire. The member must not have any visual complaints post operatively per the quality of vision questionnaire which is to be included in the waiver package (Reference: Coast Guard Aeromedical Policy Letters Corneal Refractive Surgery section.
http://www.uscg.mil/hq/cg1/cg112/cg1121/docs/pdf/USCG_Aeromedical_Policy_Letters.pdf
- f. Post Operative Standards. Post operatively the member must meet all aviation visual standards in this section. (Member must have 20/20 vision or vision correctable to 20/20 in both eyes).
- g. Submission of a Waiver. Submission of a waiver request and follow up will be IAW Coast Guard Aeromedical Policy Letter requirements. All required follow up exams will be accomplished on time and be within guidelines or conditions of the waiver will be deemed not met and the member will be grounded and required to re-submit the waiver request.

- h. Quality of Vision Questionnaire. A quality of vision questionnaire and visual acuity check is to be done every three months for one year after the surgery. This information is to be noted in the member's medical record and reviewed by the Flight Surgeon.

13. Contact Lenses.

- a. Class 1 personnel may be authorized by their local Flight Surgeon to wear contact lenses while flying (with Information Only documentation on the FDME/FDHS), provided the following conditions are met:
 - (1) Only gas permeable disposable soft lenses may be used.
 - (2) The lenses are to be removed during the hours of sleep.
 - (3) The lenses are disposed of after 2 weeks of use.
 - (4) All prescribed optometry follow-up visits are adhered to. After routine safe use has been established and documented by the prescribing optometric authority, an annual optometric recheck is the minimum required. A copy of the record of any visit to an eye care professional will be furnished by the member to the local Flight Surgeon for review and placement in the member's health record.
 - (5) Following any change in the refractive power of the contact lens, the member must be checked on the AFVT to ensure that CG Aviation standards for acuity and depth perception are met. In addition, the Flight Surgeon shall document that there is no lens displacement, when user moves his/her eyes through all 8 extreme ranges of gaze.
 - (6) Contact lens case, saline for eye use, and an appropriate pair of eyeglasses are readily accessible (within reach) to the lens wearer while in-flight.
 - (7) Contact lens candidate submits request to the command agreeing to abide the above conditions.
 - (8) The Flight Surgeon authorizes use of contact lenses after ensuring that such use is safe and the user fully understands the conditions of use. This authorization expires after one year. Initial and any annual re-authorizations shall be documented by an entry in the health record.
 - (9) Contact lens use is not a requirement for aviation operations. The decision to apply for authorization is an individual option. Accordingly, lens procurement and routine optometric care related to contact lens use at government expense are not authorized.
- b. The optional wearing of contact lenses by Class 2/3/Special Duty personnel performing duty involving flying and by Landing Signal personnel in the actual performance of their duties is authorized under the following circumstances:

- (1) Individuals are fully acclimated to wearing contact lenses and visual acuity is fully corrected by such lenses;
- (2) Individuals wearing contact lenses during flight related duties will meet applicable Coast Guard Aviation standards for visual acuity and depth perception.
- (3) Individuals wearing contact lenses while performing flight or air control duties have on their person, at all times, an appropriate pair of spectacles;
- (4) A Flight Surgeon has specifically authorized the wearing of contact lenses while performing flight or air control duties (An entry shall be made on the FDME/FDHS authorizing wearing of contact lenses.); and
- (5) Wearing contact lenses while performing aviation duties is an individual option. Accordingly, procuring contact lenses at government expense is not authorized.

CHAPTER 2. AEROMEDICAL CLEARANCE TO PERFORM AVIATION DUTIES**A. Assignment To and Continuation of Duty Involving Flying.**

1. The process of designation for aviation duties in the CG is an administrative process described in Reference (b).
2. Only the unit commanding officer may authorize designated aviation personnel to perform aviation duties.
3. To assist the commanding officer, medical personnel shall make a recommendation regarding the physical and mental health of aviation personnel.
4. Fitness to perform aviation duties is a determination independent of the determination of fitness for continued service.

B. Process for Designation as Physically Qualified (PQ) for Aviation Duty.

1. Aviation personnel are considered PQ for aviation duties when:
 - a. A FS/FST/AMO/APA finds that the examinee meets the physical and mental standards for aviation duty prescribed in this Manual and References (a) and (d).
 - b. The examining FS/FST/AMO/APA considers the examinee aeronautically adapted for actual control of the aircraft (see chapter 4).
 - c. The exam has been approved by appropriate Reviewing Authority.
2. Restrictions until physically qualified:
 - a. No person shall assume initial duty/training involving actual control of aircraft, aircraft maintenance, or non-pilot aviation duties until Commander (PSC) has approved the person's flight physical and notification has been received from Commander (PSC) by the person's command that such person is physically qualified for flight duty.
 - b. Designated aviation personnel may be recommended for continued flying duty when they are found physically qualified and aeronautically adapted by a FS/FST/AMO/APA, pending Commander (PSC) approval of the periodic flight physical.
 - c. Designated aviation personnel identified to have a medical condition that is CD should not resume flying duties until Commander (PSC) has approved a waiver and notification has been received from Commander (PSC) by the person's command that such person is physically qualified for flight duty. Exception: a local commander may permit an individual to continue performance of aviation duties pending completion of the formal waiver process after consideration of a favorable recommendation made to Commander (PSC) by a fully qualified flight surgeon (FST/AMO/APA must have concurrence from an FS). This should only be considered for minor defects that will not preclude safe and efficient performance of flying duties and will not be aggravated by aviation duty or military mission.

C. Reporting Medical Fitness for Flying Duties.

1. Medical Recommendation for Flying Duty, Form CG-6020 is the official document used to notify the aviation commander of the certification of medical fitness for all classes of military and civilian aircrew. Information on the use of this form may be found in this chapter and in Reference (e).
2. The authority to issue a Medical Recommendation for Flying Duty, Form CG-6020, grounding the member includes all medical officers, dental officers, and health service technicians.
3. For non-aviation qualified Healthcare providers who see aviation personnel currently in flight status (DIFOPS), consultation with an aviation medicine officer must be completed prior to final disposition of the patient to confirm appropriate Fitness for Flying Duty status, especially when presumed FFD.
4. Flight surgeons, FSTs, AMOs and APAs are the only medical personnel authorized to issue a Medical Recommendation for Flying Duty, Form CG-6020 recommending the resumption of flight duties
5. All aviation personnel shall have a current Medical Recommendation for Flying Duty, Form CG-6020 in their health record and on file at their duty station. Issue/re-issue of this form shall occur before an aviator carries out duties involving flight.
6. Upon reporting to a new duty station or upon returning from an extended absence from flying duty for any reason or when otherwise indicated, aviation personnel shall be interviewed by an FS/FST/AMO/APA in order to determine their current health, verify that a current aviation physical examination has been conducted, and to administratively review their health record. If the FS/FST/AMO/APA deems it appropriate, a physical examination may be conducted to determine their physical fitness to continue or resume flying duties. In all such cases, the appropriate grounding or clearance notation shall be completed on Medical Recommendation for Flying Duty, Form CG-6020 and the necessary notation made in the individual's health record. Certain special circumstances that may require a physical exam include:
 - a. Post-hospitalization. A post-hospitalization examination may be required.
 - b. Alcohol Abuse. See APL
 - c. Pregnancy. See APL
7. Aviation personnel admitted to the sick list (binnacle) or hospitalized shall be suspended from all duty involving flying.
 - a. Upon the recommendation of a medical officer (not restricted to an FS/FST/AMO/APA), the commanding officer may relieve from flying duty or suspend the flight training of an individual deemed unfit for such duty. In all instances a Medical Recommendation for Flying Duty, Form CG-6020, grounding the member, shall be issued.
 - b. Aviation personnel presenting to a non-FS/FST/AMO/APA for any physical or mental health

complaint shall be automatically grounded until cleared by an FS/FST/AMO/APA. This includes evaluation by a health service technician and evaluations within the Employee Assistance Program (EAP) for personal/mental health conditions which may impact on safety of flight. [Exception: Routine dental treatment, which is covered in the Dental APL Reference (d)].

- c. When aviation personnel are subsequently deemed fit to resume flying duties, they shall be examined by an FS/FST/AMO/APA, with the exceptions as discussed below, and the clearance noted on Medical Recommendation for Flying Duty, Form CG-6020, which shall be submitted to the commanding officer. Based on this recommendation, the commanding officer may authorize resumption of such duty or training.

8. For units without an FS/FST/AMO/APA assigned or when the assigned FS/AMO/APA is on leave or TAD:

- a. In the absence of an assigned FS/FST/AMO, a Medical Officer (MO) including APA, Dental Officer (DO) or Health Services Technician (HS) may issue a clearance on Medical Recommendation for Flying Duty, Form CG-6020 after concurrence has been received from an FS or FST.
- b. Concurrence can be obtained by either electronic or verbal communication. Medical recommendation for flying issued by an MO, DO, or HS must include the name, rank, and duty station of the authorizing FS/FST as well as the time and date of communication.

9. Restriction by Commanding Officer (CO).

- a. Medical recommendation for grounding or clearance may only be made to the CO by medical personnel using Medical Recommendation for Flying Duty, Form CG-6020.
- b. The CO may relieve from flying duty any individual reported physically incapacitated for such duty or suspend the flight training of any individual reported physically incapacitated for such duty.
- c. When the individual is subsequently reported physically fit by an FS/FST/AMO, the CO may authorize resumption of such duty or training.

D. Aeromedical Consultation Advisory Board (ACAB).

1. Purpose: the ACAB is established to consider unusual, complicated, or controversial medical fitness for aviation duty cases. The ACAB assists the Commander (PSC-PSD-med) flight surgeon in making a waiver recommendation. By majority vote, the ACAB will make a positive or negative recommendation for waiver to the appropriate waiver authority for final decision. The opinion of dissenting member(s) may also be included.
2. Composition: voting members of this board include the flight surgeons assigned to Commandant (CG-11) and Commander (PSC-PSD-med), the airframe managers assigned to Commandant (CG-711) and the detailing officers assigned to Commander (PSC-epm) for enlisted and (PSC-opm) for officers who are responsible for detailing aviation personnel. Only a fully qualified Coast Guard flight surgeon may be a voting member assigned to an ACAB. When evaluating a

particular case, a quorum will be considered established when there are three flight surgeons (including one from Commander (PSC)), the appropriate airframe manager and the appropriate detailing officer present.

3. An ACAB panel may only be convened by Commander (PSC) for:
 - a. A complicated case referred from Commander (PSC-PSD-med) directly to the ACAB for recommendation.
 - b. A waiver request denied by Commander (PSC) and appeal made to the ACAB, through Commander (PSC), for a case not seen by the ACAB initially.
4. Naval Aeromedical Institute (NAMI) specialists or Army Aeromedical specialty consultants may be requested as consultants for waiver disposition without convening an ACAB. Specialty consultations may be requested and arranged by local command.

E. Medical Recommendation for Flying Duty, Form CG-6020.

1. Medical Recommendation for Flying Duty, Form CG-6020, is the official document used to notify the Air Station command of the certification of medical fitness for all classes of military and civilian aircrew. Each item of the Medical Recommendation for Flying Duty, Form CG-6020, shall be completed as directed in the Medical Recommendation for Flying Duty, Form CG-6020, ATB (Reference (e)).
2. The Medical Recommendation for Flying Duty, Form CG-6020, is required for all aviation personnel regardless of current duty assignment. All aviation personnel shall have a current Medical Recommendation for Flying Duty, Form CG-6020, in their health record and on file at their duty station. Issue/re-issue of this form shall occur before an aviator carries out duties involving flight.
3. Any health care professional may temporarily suspend aviation personnel from flight duty. When informing the commanding officer, they should prepare and sign a Medical Recommendation for Flying Duty, Form CG-6020, recommending temporary medical suspension (DNIF-Duties Not Including Flying).
4. Only an FS/FST/AMO may authorize aviation personnel as medically fit for flying duties (FFD-Fit for Full Duty) by signing the Medical Recommendation for Flying Duty, Form CG-6020, recommending flying duty.
5. Events that require a Medical Recommendation for Flying Duty, Form CG-6020 to be completed:
 - a. Upon completion of a flight physical.
 - b. After an aircraft mishap.
 - c. When reporting to a new duty station or upon being assigned to operational flying duty.

- d. When admitted to and discharged from any medical or dental treatment facility (inpatient or outpatient, military or civilian).
- e. Sick in quarters.
- f. Interviewed for or entered into a drug/alcohol treatment program.
- g. Evaluated by mental/behavioral health (to include Employee Assistance Program [EAP], private marital counseling, or other civilian related services).

NOTE: Member is required to self report to the unit flight surgeon based on operational necessity to ensure safety of flight operations.

- h. When treated by a health care professional who is not a military FS/FST/AMO/APA.
 - i. When treated as an outpatient for conditions or with drugs which are disqualifying for aviation duties and upon return to flight duties after such treatment and recovery.
 - j. Upon return to flight status after termination of temporary medical suspension (grounding), issuance of waiver for aviation service, or requalification after medical or nonmedical termination of aviation service.
 - k. To indicate medical clearance for participation in safety/survival training such as under water egress (dunker) or high altitude simulation/low pressure chamber.
 - l. Other occasion as required by the FS/FST/AMO/APA.
6. Personnel authorized to sign the Medical Recommendation for Flying Duty, Form CG-6020, are:
- a. Any health care provider may sign Medical Recommendation for Flying Duty, Form CG-6020, for the purpose of restricting aviation personnel from aviation duties (temporary medical suspension/grounding).
 - b. Only an FS/FST/AMO may sign the Medical Recommendation for Flying Duty, Form CG-6020, to return aviation personnel to FFD.
 - c. If a FS/FST/AMO is not physically present, medical clearance to fly may be granted:
 - (1) By telephonic guidance from an FS/FST/AMO. The name of the consulted FS/FST/AMO shall be annotated on the Medical Recommendation for Flying Duty, Form CG-6020, and in the patient health record.
 - (2) By an APA without the telephonic guidance of an FS/FST/AMO provided that an FS/FST/AMO reviews the medical record of the encounter and co-signs the Medical

Recommendation for Flying Duty, Form CG-6020, within 72 hours (may occur electronically).

7. Medical Recommendation for Flying Duty, Form CG-6020, may be used to extend the validity period of a flight physical by no more than 30 days. After expiration of this extension, aviation personnel must complete the flight physical and be medically qualified or be administratively restricted from flying duties.
8. Forms similar to Medical Recommendation for Flying Duty, Form CG-6020, used by other branches of the U.S. Armed Services and Host Allied Nations will be accepted by the Coast Guard when aeromedical support is provided by those services/nations and Medical Recommendation for Flying Duty, Form CG-6020, is not available.

CHAPTER 3. AERONAUTICAL ADAPTABILITY

A. Explanation of Aeronautical Adaptability.

1. Aeronautically Adaptable Aviation Candidates. Prospective aviation personnel, who have the potential to adapt to the rigors of the aviation environment by possessing the temperament, flexibility, and appropriate defense mechanisms necessary to suppress anxiety, maintain a compatible mood and devote full attention to flight and successful completion of a mission.
2. Aeronautically Adapted Designated Aviation Personnel. Aviation personnel who have demonstrated the ability to utilize long term appropriate defense mechanisms, and display the temperament and personality traits necessary to maintain a compatible mood, suppress anxiety and devote full attention to flight safety and mission completion.

B. Determination of Aeronautical Adaptability.

1. A determination of Aeronautical Adaptability (AA) is required for all flying duty examinations. An unsatisfactory AA as the cause of medical unfitness for flying duty for any flight class is due to an unsatisfactory aptitude or psychological factors, or otherwise being not adaptable for military aeronautics.
2. Only a fully qualified military flight surgeon may render a finding of AA UNSATISFACTORY (UNSAT).
3. An unsatisfactory AA is mandatory if any of the following conditions are present:
 - a. Adjustment disorders, psychological factors affecting physical condition and conditions not attributable to a mental disorder that are a focus of attention or treatment and Axis II conditions (personality traits and disorders) as a primary diagnosis.
 - b. Concealment of significant and/or disqualifying medical conditions on the history form or during interviews.
 - c. Presence of any psychiatric condition which in itself is disqualifying.
 - d. An attitude toward military flying that is clearly less than optimal: e.g., the person appears to be motivated overwhelmingly by the prestige, pay, or other secondary gains rather than the flying itself.
 - e. Clearly noticeable personality traits such as immaturity, self-isolation, difficulty with authority, poor interpersonal relationships, impaired impulse control, or other traits which are likely to interfere with group functioning as a team member in a military setting, even though there are insufficient criteria for a personality disorder diagnosis.
 - f. Review of the history or medical records reveal multiple or recurring physical complaints that strongly suggest either a somatization disorder or a propensity for physical symptoms during times of psychological stress.

- g. History of arrests, illicit drug use or social “acting out” which indicates immaturity, impulsiveness, or antisocial traits. Experimental use of drugs during adolescence, minor traffic violations, or clearly provoked isolated impulsive episodes may be acceptable but should receive thorough psychiatric and psychological evaluation.
 - h. Significant, prolonged and/or currently unresolved interpersonal or family problems (for example, marital dysfunction, significant family opposition or conflict concerning the member’s aviation career), as revealed through record review, interview, or other sources, which would be a potential hazard to flight safety or would interfere with flight training or flying duty.
- 4. An unsatisfactory AA may be given for signs and symptoms other than those mentioned above if in the opinion of the FS the mental or physical factors might be exacerbated under the stresses of military aviation or the person might not be able to carry out his or her duties in a mature and responsible fashion.
- 5. The examiner shall review all the available information and make an assessment of the individual’s medical qualifications for the type of flying duty to be performed. Generally, clinical syndromes except adjustment and personality disorders should lead to a finding of CD. Adjustment disorders, psychological factors affecting physical condition, and conditions not attributable to a mental disorder that are a focus of attention or treatment and Axis II conditions (personality traits and disorders) as a primary diagnosis, should lead to a finding of “physically qualified but not aeronautically adapted (AA).”

CHAPTER 4. AEROMEDICAL WAIVER POLICY

- A. Failure to Meet Aeromedical Fitness for Duty Standards. Assignment to and continuation of duty involving flying is an administrative process. Except for enlisted personnel in aviation ratings, fitness to perform aviation duties is a determination independent of the determination of fitness for continued service. The process regarding physical disqualifications and waivers for aviation personnel are outlined in the Coast Guard AERO Guide v1.0 (http://www.uscg.mil/hq/cg1/cg112/cg1122/docs/qiig/QIIG_51_Att_4.pdf).
- B. Aeromedical Waiver.
1. Aeromedical Waiver. An aeromedical waiver authorizes performance of aviation duties when an individual does not meet the prescribed medical standards found in this Manual and Reference (a).
 2. Authority for Waivers. Commander (PSC-epm (enlisted), opm (officers), and rpm (reserve)) have the sole authority to grant aeromedical waivers. The decision to authorize an aeromedical waiver is based on many factors, including the policy developed by Commandant (CG-11); the recommendation of the flight surgeon(s) in Commander (PSC-PSD-med); the recommendation, if any, of the ACAB, and the best interest of the Coast Guard.
 3. Types of Aeromedical Waivers:
 - a. Temporary. A temporary waiver may be authorized when a physical defect or condition has not stabilized and may either progressively increase or decrease in severity. These waivers are authorized for a specific period of time and require medical re-evaluation prior to being extended.
 - b. Permanent. A permanent waiver may be authorized when a defect or condition is not normally subject to change or progressive deterioration, and it has been clearly demonstrated that the condition does not impair the individual's ability to perform aviation duty.
- C. Waiver Guidelines.
1. The APLs located on the Commandant (CG-1121) website, Reference (d) contain specific waiver guidelines for many conditions/medications and may be found at: http://uscg.mil/hq/cg1/cg112/cg1121/aviation_med.asp.
 2. Prior to requesting a waiver, the requesting medical officer shall consider and where appropriate make comment on:
 - a. Safety of Flight.
 - (1) The unforgiving nature of the aviation environment.
 - (2) Ability of the individual to perform the aviation duties required.

- (3) The potential of sudden incapacitation negatively affecting safe flight or mission completion.
- (4) The individual's ability to respond to an emergency event.
- (5) The individual's ability for rapid and safe evacuation from the aircraft.
- (6) The individual's ability to assist others with rapid and safe evacuation from the aircraft.
- (7) Any potential detrimental effects or side effects of treatment or medications.

b. Impact of the aviation environment on the medical condition.

- (1) Adverse effect on the individual's medical condition.
 - (2) Medical conditions or treatments that could increase the probability of permanent disability or death during a mishap(e.g., following a traumatic mishap, an aviator using Beta-blockers for hypertension may be unable to generate the cardiac output necessary to keep him/her alive until rescue/medical care is provided.)
3. If a member is under consideration by the physical disability evaluation system, no medical waiver request shall be submitted for physical defects or conditions described in the Physical Evaluation Board Narrative Summary (PEB NarSum). All waiver requests received for conditions described in the medical board will be returned to the member's unit without action.
 4. A service member found to be fit for duty by a physical evaluation board approved by the Commandant may be granted a waiver to perform aviation duty.
 5. A service member determined to be not fit for duty by a physical evaluation board approved by the Commandant will not be granted a waiver and will be referred to a Medical Evaluation Board. In these cases, the provisions for retention on active duty contained in Physical Disability Evaluation System, COMDTINST M1850.2 (series) apply.

D. Procedures for Recommending Aeromedical Waivers.

1. Aviation Medical Officer. A FS/FST/AMO/APA shall report any medical condition or defect that does not meet the aviation medical standards by:
 - a. Entering a detailed description of the defect in Block 77 of the Report of Medical Examination, Form DD-2808.
 - b. Indicating that either a temporary or permanent waiver is recommended.
 - c. Confirming that the service member desires a waiver.

NOTE: If the member does not desire a waiver, the service member should be recommended for grounding and a Medical Evaluation Board (MEB) initiated.

- d. Preparing an aeromedical summary (AMS) as to the medical appropriateness of a waiver based on the member's ability to perform his/her duties (Reference (d)) and submit through AERO. A waiver recommendation from an APA must be countersigned by their designated FS/FST supervisor.

2. Commander (PSC) Level.

- a. Flight surgeon in Commander (PSC-PSD-med) will review the medical waiver request and consider written CG policy and associated APL, the guidelines in this chapter, and any consultation with appropriate sources.
- b. A recommendation for or against the waiver will be submitted to the requisite Commander (PSC) office (opm/epm/rpm). Recommendation for waiver will include any ongoing follow-up, lab tests, etc that are required and define the reporting period and means (e.g. Member will have liver function tests done every three months with results reported on the biennial physical).
- c. The Commander (PSC) aeromedical waiver recommendation must be made by a CG designated Flight Surgeon. FSTs/AMOs/APAs are not authorized to make aeromedical waiver recommendations at the Commander (PSC) level.
- d. Recommendations for waivers in unusual or complicated cases in conflict with written Coast Guard policy/APL shall be referred for review and recommendation to the Commandant's Aeromedical Consultative Advisory Board.

E. Action on Receipt of an Aeromedical Waiver Authorization.

1. A command receiving authorization from the Commander PSC (epm/opm/rpm) for the waiver of a physical standard shall carefully review the information provided to determine any duty limitation imposed and specific instructions for future medical evaluations.
2. Unless otherwise indicated in the authorization, a waiver applies only to the designation the aviator holds at the time that the waiver is granted. A waiver granted to an aviator becomes invalid should that service member change designation.
3. A copy of the waiver authorization shall be retained in both the members' service and health records. All subsequent examinations shall indicate a waiver is or was in effect and shall include any updated information per waiver requirements.

CHAPTER 5. MEDICAL AVIATION OFFICER (FS/FST/AMO/APA) DESIGNATIONS, TRAINING, ASSIGNMENTS AND DUTIES

A. Medical Aviation Officer Designations.

1. Flight Surgeon (FS). Any physician in the categories listed below may request via endorsement from the local command, HSWL SC OM, Aviation Medicine Standardization Officer (AMSO), and Commandant (CG-11), designation as a CG FS by Commander (PSC-opm). Commandant (CG-11) will provide the initial set of CG FS insignia to officers so designated.

NOTE: All candidates for designation as an FS must provide documentation of successful completion of the CG Flight Surgeon Transition Course and the recurrent training requirements outlined in Reference (c).

- a. A CG Flight Surgeon Trainee (FST) who has completed the requisite number of hours of flight time and syllabus requirements. Commander (PSC-opm) designates an officer as a FS upon receipt of certification of completion of the required flight time and other requirements in CG aircraft subsequent to the FST designation, with endorsement as stipulated in chapter 5.
 - b. A physician graduate of the Navy or Air Force Residency in Aerospace Medicine, a graduate of the 6-month flight surgeon training course at the Naval Aerospace Medical Institute, Aerospace Medicine Board Certified Physician, or an officer previously designated as an FS by another Armed Service who has served at least one year as a flight surgeon in that service Commandant (CG-1121) will verify the flight hours, past experience and training of such an officer), can be considered for designation as an FS via review by a Flight Surgeon Designation Board composed of representatives from Health, Safety, and Work-Life Service Center (HSWL SC) Operational Medicine, Aviation Medicine Standardization Officer (AMSO), and Commandant (CG-1121), each with a single vote and requiring unanimous agreement.
2. Flight Surgeon Trainee (FST). Any physician who meets the requirements listed below may request via endorsement from the local command, Health, Safety, and Work-Life Service Center (HSWL SC) Operational Medicine, Aviation Medicine Standardization Officer (AMSO), and Commandant (CG-11), designation as a CG FST by Commander (PSC-opm). A designated FST is authorized to wear the insignia awarded by their Primary Flight Surgeon Training course. CG Flight Surgeon and Air Crew insignia are not authorized.
 - a. Currently assigned to a CG air station.
 - b. Graduate of either the U. S. Air Force Aerospace Medicine Primary Course or the U. S. Army Flight Surgeon Primary Course.
 - c. Has documentation of successful completion of the Flight Surgeon Transition Course (FSTC) and recurrent training requirements as outlined in Reference (c).

- d. A physician graduate of the Navy or Air Force Residency in Aerospace Medicine, a graduate of the 6-month flight surgeon training course at the Naval Aerospace Medical Institute, or an officer previously designated as an FS by another Armed Service who has served at least one year as a flight surgeon in that service, by default when not reviewed by a Flight Surgeon Designation Board, or when an FSDB does not grant FS designation upon review.
3. Aviation Medical Officer (AMO). Any physician who meets the requirements listed below may request via endorsement from the local command, HSWL SC OM, Aviation Medicine Standardization Officer (AMSO), and Commandant (CG-11), to be designated as a CG AMO by Commander (PSC-opm). A designated AMO is eligible to wear the insignia awarded by their Primary Flight Surgeon Training course. CG Flight Surgeon and Air Crew insignia are not authorized.
 - a. A physician graduate of the U.S. Air Force Aerospace Medicine Primary Course or the U. S. Army Flight Surgeon Primary Course who has not yet been assigned to an air station.
 - b. A physician graduate of the U.S. Air Force Aerospace Medicine Primary Course or the U. S. Army Flight Surgeon Primary Course who is unable to satisfactorily complete the FSTC or recurrent training requirements as outlined in Reference (c).
 - c. An FST who, while assigned to an air station, fails to complete the requirements to become a fully qualified flight surgeon within 24 months. In these cases, Commander (PSC-opm) re-designates the FST as an AMO (waiver with extension of 12 months may be considered for extenuating circumstances [submitted to Commandant (CG-1121)]). This redesignation may also result in re-assignment to a non-aviation duty station.
 4. Aeromedical Physician Assistant (APA). Any physician assistant graduate of the U. S. Army Flight Surgeon Primary Course may request, with endorsement from the local FS, HSWL SC (OM), and Commandant (CG-1121), to be designated as a CG APA by Commander (PSC-opm). A designated APA is eligible to wear the insignia awarded by their Primary Flight Surgeon Training course. CG Flight Surgeon and Air Crew insignia are not authorized. Privileged APA's will use "APA" in their signature block to identify their role.
 - a. Officers shall request and receive clinical privileges as an APA prior to functioning in this capacity.
 - b. APAs are not eligible for assignment to any air station as the sole provider of aviation medical support. The best practice approach for delivery of aviation medicine services at an air station is the partnership of a FS/FST with an APA.
 - c. All aviation related administrative actions such as submission of flight physicals, aeromedical summaries and Medical Recommendation for Flying Duty, Form CG-6020, shall be endorsed by the APAs supervising FS/FST.
 - d. APAs and their supervising FS/FST shall follow the guidelines set forth in Reference (f).

B. Medical Aviation Officer Training.

1. All medical aviation officers (FS/FST/AMO/APA).
 - a. All medical aviation officers are required to successfully complete a primary aviation medicine course and the CG Flight Surgeon Transition Course.
 - b. PHS and CG medical officers serving full-time with the CG may attend short-term and refresher courses, conferences, seminars, workshops, and similar sessions of a technical, scientific, or professional nature. Such training may be authorized at government expense where it is applicable and beneficial to the CG and the individual.
 - c. Training requests for professional development shall be submitted in accordance with the standard CG procedure to the respective HSWL RP for funding. PHS and CG medical officers may also apply for attendance at required training courses by submitting Short- Term Resident Training Request, Form CG-5223 to Commandant (CG-11) via the chain of command.
 - d. In conjunction with References (a) and (c), Aviation Medical Officers are required to participate in a program of continuing education in operational medicine and aviation.
2. Flight Surgeon. Additional requirements for all FSs assigned to a CG air station or regularly engaged in Duty Involving Flight Operations (DIFOPS) are:
 - a. Complete the semiannual and annual training requirements as outlined in chapter 8 of Reference (c).
 - b. Receive training on unit-unique equipment, operating area survival demands and equipment, area familiarization, hospital sites within operating area, and local policy and procedures prior to any operational flying.
 - c. Attend a land survival briefing, or view a locally produced audio-visual presentation tailored to the problems unique to the unit's operating environment.
 - d. When the FS is geographically remote from their assigned air station, funding for initial and recurring aviation specific (and required) training shall be provided by Commandant (CG-11) / Health, Safety, and Work-Life Service Center (HSWL SC).
3. Flight Surgeon Trainee. Additional requirements for FSTs - complete the training listed below within the first year of assignment to an Air Station. Upon completion of this additional training, the FST may become eligible for designation as a Flight Surgeon.
 - a. The FST must complete a minimum of 48 hours of flight time in CG aircraft. At least eight hours must be during night operations and flight time shall be evenly distributed over all airframe types at the unit. Record of flight hours, aircraft type, and mission profile will be maintained in a flight log book and copies submitted for verification when requesting FS designation.

- b. In order to develop an appreciation for the mental sharpness and physical stamina required of aviation personnel in their hangar deck duties, the FST will observe at least a portion of each of the following aircraft maintenance procedures (these observations shall be documented in the Flight Record log book):
 - (1) Aircraft engine removal.
 - (2) QA check after aircraft engine installation.
 - (3) Aircraft Generator change.
 - (4) Radar maintenance or repair.
 - (5) Corrosion control activities.
 - (6) Refueling.
 - (7) Crew preflight and post-flight routines.
 - c. The FST is required to learn the missions, crew designations and roles, as well as the capabilities and limitations of each type of CG aircraft. Flight time in aircraft not normally located at the Air Station to which the FST is assigned is desirable (within the constraints of cost and time) to round out the FST's familiarity with the CG aviation community.
 - d. The FST must also complete the same semiannual and annual requirements imposed on Flight Surgeons as outlined in Reference (c).
- 4. Aviation Medical Officer. AMOs shall complete the training requirements for a medical aviation officer. In addition, where opportunity exists they are encouraged (but not required) to participate in the recurrent training for FS/FSTs.
 - 5. Aviation Physician Assistant. APAs shall complete the training requirements for a medical aviation officer. In addition, where opportunity exists they are encouraged (but not required) to participate in the recurrent training for FS/FSTs.

C. Medical Aviation Officer Assignment.

- 1. Flight Surgeon. FSs are eligible for assignment to any CG physician billet.
- 2. Flight Surgeon Trainee. Assignment to a CG air station is required in order to receive designation as an FST. Failure to achieve designation as an FS within 24 months of completion of Aviation Medicine/Flight Surgeon Primary training may result in re-assignment to a non-air station, in addition to reversion to AMO designation.
- 3. Aviation Medical Officer. AMOs are not eligible for assignment to any air station as the sole provider of aviation medical support. AMOs may be collocated at an air station with a FS/FST and may carry out authorized aviation medical services at other duty assignments. Under special circumstances, exception to this policy may be granted at the discretion of Commandant

(CG-11).

4. Aviation Physician Assistant.

- a. Training leading to the designation of APA is entirely voluntary and contingent on meeting Class 2 aviation physical standards.
- b. APAs are not eligible for assignment to any air station as the sole provider of aviation medical support. The best practice approach for delivery of aviation medicine services at an air station is the partnership of a FS/FST with an APA.
- c. APAs shall have a designated FS/FST assigned within their AOR, responsible for oversight of all aviation medicine services provided by the APA and for approval (electronically or by co-signature) of all aviation medicine related documents (flight PEs, aeromedical summaries, medical clearance for flying).
- d. APAs are eligible to receive Aviation Career Incentive Pay (ACIP) via request from Commandant (CG-1121).
- e. An APA that functions as a crewmember shall receive the same training and meet the same qualifications as other crewmembers, to include 9D5 Dunker Egress training, SEAS/SWET training, other periodic training, as outlined in chapter 8.D of Reference (c), and winter survival training, if appropriate.
- f. APA-Designation (APA-D).
 - (1) Recognizing that certain APA's may seek additional qualifications within the CG Aviation Medical Program, the non-designated APA may pursue, on a voluntary basis, advanced designation as an APA. The APA-D is based upon the concept applied to the FST and FS Program, respectively. Similar to the expectations of the FST, the goal of the APA-D program is to improve the skill set of the APA (non-designated) while enhancing the integration of an operationally trained health care provider within the aviation program.
 - (2) The requirements for the APA-D will include the initial privileging as an APA and the completion of the FST syllabus in its entirety on the same timeline.
 - (3) Formal designation must be requested by memo via the supervising FS/FST, SME, HSWL SC OM, AMSO and Commandant (CG-1121), routed to Commander PSC-opm-2. Supporting documents should include: Aeromedical diploma, Attestation of completion of FST syllabus from supervising FS/FST, and copy of orders assigning duties to an Air Station.
 - (4) Upon approval of APA-D, the APA is authorized wear of CG APA-D wings (Navy Medical Service Corps [MSC] Aviation Physiologist Insignia) in place of their FS training course wings.

(5) Designated APA's will use "APA-D" in their signature block to identify their role.

D. Medical Aviation Officer Duties.

1. All Medical Aviation Officers. All medical aviation officers shall be credentialed to perform the general duties of medical officers outlined in Reference (a).
2. Flight Surgeon. FS assigned to Duties Involving Flight Operations (DIFOPS) billets must provide a significant degree of operational oversight and interaction with the Air Station community in order to ensure the highest level of health, safety, and well-being within the unit. FS shall maintain current aircrew qualifications and minimums, including flight time, as stipulated in the Reference (c). While medical care to aviators is an important component of their duties, it is by no means the only critical element in FS support to aviation operations. CG flight surgeons are expected to participate in all aspects of aviation safety. In order to adequately meet the needs of an air station safety program, a flight surgeon is expected to spend a minimum of one half day per week engaged in non-clinical safety related activities at the air station:
 - a. Aviation Medicine Expert. Be a subject matter expert in the Coast Guard Aviation Medicine Manual, COMDTINST M6410.3 (series).
 - b. Aviation personnel fitness for flight duty. Ensure that aviation personnel are physically and psychologically fit for flight duty and attempt to learn any unusual circumstances which might adversely affect their flight proficiency; this includes getting acquainted with each pilot and crew member.
 - c. Recommendations to the CO. Make recommendations to the CO concerning the health status of aviation personnel. In particular, only a FS, Aviation Medical Officer (AMO) or Aeromedical PA (APA) shall issue "up" chits, except as noted in the Coast Guard Aviation Medicine Manual, COMDTINST M6410.3 (series).
 - d. Know the Unit. Thoroughly understand all operational missions of the aviation unit and participate as a frequent flight crew member during routine training missions and on operational missions such as MEDEVACS and SAR, as appropriate. Unit FSs shall carry out regular and unscheduled visits to unit aviation spaces. This provides opportunity for the FS to better understand what aviators are doing and how they are doing it. The FS can informally inspect the work space and methods and identify any safety risks that have gone unnoticed or are being ignored. These visits may uncover work routines that explain injury/illness patterns identified in the clinic (e.g. inappropriate lifting techniques leading to recurrent back injury, shared computer keyboards without readily available means for hand/keyboard sanitization). Work space morale and unit cohesiveness can be better assessed and it is common for aviators to share concerns with the FS during these visits when they might not do so during a clinic visit. In addition, unit FSs are expected to participate in all command functions, ceremonies and morale events.
 - e. Know the aircraft. Systems, configuration and capabilities are constantly changing in CG air

craft. For this reason, FSs shall fly regularly in all unit aircraft. Arranging to fly on specific flights can be extremely informative such as with personnel new to the unit, with crewmembers who have been grounded for an extended period or with crewmembers that the FS suspects may have developed some degree of compromised AA. Routinely flying on training and mission flights allows the FS to observe crew interaction, how well Crew Resource Management is utilized and how changes in aircraft configuration or mission execution may be impacting flight safety.

- f. Air Station Flight Safety Program. In accordance with chapter 2.F.4.d of Reference (g), the unit flight surgeon shall be designated in writing as a member of the Permanent Mishap Board and should maintain a mishap response kit (Reference (e)). They should meet regularly with the flight safety officer and participate in all safety training activities. FSs are encouraged to participate in unit Flight Safety Board meetings and should be assigned to unit Human Factors Councils where they exist. They are expected to be subject matter experts in Human Factors Analysis (Reference (h)).
- g. Air Operations Manual. Be familiar with the Coast Guard Air Operations Manual, COMDTINST M3710.1 (series), with specific emphasis on Chapter 6, Rescue and Survival Equipment, Chapter 7, Flight Safety, and the sections of Chapter 3 (Flight Rules) dealing with protective clothing and flotation equipment.
- h. On call duty. Qualified FS/FSTs assigned to an air station and AMOs [at the discretion of Commandant (CG-1121) via endorsement from HSWL SC OM] shall participate in an on call program designed to provide rapid support for CG operations and consultation services to mission planners regarding medical evacuation requests.

(1) CG Operations. The regional duty FS shall be available for medically related consultation:

- (a) Contingency support during disaster response/national security/LE actions.
- (b) In support of regional operational units such as Coast Guard Cutters with and without Independent Duty Health Service Technicians.
- (c) In support of on-sight, area and regional commanders during operations which may have force protection concerns such as Alien Migration Interdiction Operations and large scale disasters.

NOTE: Medical recommendations from the duty FS shall not be influenced by a person's nationality, citizenship or legal status, and shall only be based upon medical judgment relevant to the reported condition of the individual patient applying current medical decision making principles (Evidence Based Medicine, etc.).

(2) MEDEVAC mission support.

- (a) Appropriate mission planning for medical evacuation demands meticulous application

of operational risk management processes. By virtue of their training and experience, unit FSs represent the best subject matter experts on the potential operational gain from a MEDEVAC mission and can also describe what requirements the victim will have for safe recovery and transport should a mission be executed. This information is essential for mission planners and enables them to compare potential gain with mission risk.

- (b) The duty FS has no tasking authority for MEDEVAC missions; they make recommendations only. A medical recommendation for or against medical evacuation must be based only on the duty FS's expert opinion regarding the medical gain. Operational risk assessment is the sole purview of mission planners and operations personnel, though an FS may be asked to weigh in on the operational risk balance through their knowledge of aviation platforms, missions, and human factors.
 - (c) There shall be a single standard of care for all cases and a medical recommendation for or against medical evacuation shall never be based on a person's nationality, citizenship or legal status.
 - (d) Unit FSs should be prepared to participate as aircrew on MEDEVAC missions tasked to their unit, even when not on call. This should not be construed to mean that they must maintain a B-0 status at all times, but should factor into their liberty planning (unless in a leave/TDY status) the possibility of being recalled.
 - (e) To assure that District/Sector Command Centers and unit operations officers have rapid access to the on call regional FS, HSWL SC shall provide funding for pagers and/or cell phones to all FS duty watch standers.
 - (f) The duty FS shall make every effort to respond telephonically within five minutes.
- (3) A regional senior flight surgeon shall be assigned by HSWL SC (with related notification made to Commandant (CG-1121)). This is a collateral duty. Responsibilities of the senior flight surgeon include:
- (a) Generating an on call duty schedule for regional FSs and assuring appropriate dissemination of the schedule to District/Sector Command Centers, HSWL SC OM, and Commandant (CG-1121).
 - (b) Establishing and maintaining positive working relationships with regional district and sector command centers and area commanders. This would include attendance at regional SAR conferences and participating in discussions on MEDEVAC related issues such as CPR-in-progress. Local FSs and FSTs should participate in this activity as well.
 - (c) Conducting MEDEVAC quality of service and case specific review data collection. Information collected should include mission planner's customer satisfaction with respect to on call FS response/support as well as a review of all cases where an

unanticipated negative patient outcome occurred.

- (d) Senior flight surgeons shall insure that regional FS/FSTs new to the MEDEVAC call roster are placed in a probationary period and provided with supervision and back up during their initial involvement in MEDEVAC call. New FS/FSTs should be conferenced in during MEDEVAC calls with qualified FSs for learning purposes, and the qualified FS should discuss the case afterwards with the “student” to reinforce the learning. Additional methods, extent, and duration of this probationary period are at the discretion of the senior flight surgeon and should be based on the new watchstander’s prior experience, training and confidence level. Failure to internalize the on call FS role by the new FS/FST and persistence of the probationary status beyond 24 months shall prompt referral to a Flight Surgeon Designation Board for review and possible re-designation to FST or AMO status.
- (4) Further details regarding roles, responsibilities and methods for MEDEVAC mission support can be found in Reference (e).
- i. The unit flight surgeon shall be responsible for oversight of the unit Rescue Swimmer (RS) EMT Continuing Education (CE) program (Reference (i)). Under this supervision, all unit RSs will acquire 24 hours of EMT level CE required for periodic recertification by NREMT. The unit flight surgeon will participate in scheduling and teaching the classroom and practical training as well as serving as the certifying authority for all rescue swimmers’ EMT CE credits. Training should focus on common patient scenarios in maritime rescue.
- j. Personal protective and survival equipment. Be thoroughly familiar with the types and uses of personal protective and survival equipment carried on aircraft at the unit. The Flight Surgeon shall be familiar with the Rescue and Survival Systems Manual, COMDTINST M10470.10 (series).
- k. Aviation training program. Actively participate in the unit aviation physiology training program to ensure that aviation personnel are capable of coping with the hazards of flight by presenting lectures and demonstrations which include, but are not limited to:
- (1) Fatigue.
 - (2) Medication and nutritional supplement use in aviation personnel.
 - (3) Emergency medicine.
 - (4) Survival.
 - (5) Disorientation.
 - (6) Night vision.
 - (7) Reduced barometric pressure.
 - (8) Crash injury avoidance.
 - (9) Stress.

- (10) Drug and alcohol use and abuse.
- l. Aircraft Mishap Analysis Boards. When so assigned by Commandant (CG-11), participate as the medical member of Aircraft Mishap Analysis Boards and be responsible for completing the MO's report in accordance with Chapter 2 of Reference (g).
 - m. The medical representative (voting member) from Commandant (CG-11) to the Commandant's Aviation Safety Board, the Commandant's Vessel Safety Board and the Commandant's Shore Safety Board must be a designated CG Flight Surgeon. Information regarding participation on such boards, including recommended procedures, may be found in Reference (g).
 - n. In accordance with Reference (b), the medical representative (voting member) from Commandant (CG-11) to the Commander (PSC) Aviator Evaluation Board (AEB) must be a designated CG Flight Surgeon, preferably with airframe and aviator role familiarity.
 - o. All aviation medicine decisions/recommendations from Commander (PSC-PSD-med) regarding medical clearance to fly must be made by a designated Coast Guard Flight Surgeon.
 - p. Continuing education. Participate in a program of continuing education and training in aviation and operational medicine. This shall include familiarity with information published for and training with FSs in other branches of the Armed Forces in accordance with Chapter 1.C of Reference (a).
 - q. FSs are strongly encouraged to maintain close contact with regionally assigned AMOs who may be providing aviation related medical services. The FS should be proactive in establishing a consultative relationship that supports the AMO.
3. Flight Surgeon Trainee. FSTs are expected to carry out all of the duties described for medical aviation officers and FSs with the exception that they are not authorized to perform the duties of a regional senior flight surgeon or be assigned as a voting member to any Commandant or Commander (PSC) Board.
4. Aviation Medical Officer. In addition to the duties of a medical aviation officer, AMOs may be credentialed to provide aviation medicine related care. This would include performing flight physicals, aeromedical summaries and issuing Medical Recommendation for Flying Duty, Form CG-6020. AMOs is not authorized to participate in the on call program without a designation as described in this manual. AMOs are encouraged but not required to participate in FS aviation safety activities described in this chapter. They shall not be assigned as voting members to Commander (PSC) or Commandant Boards. AMOs are not authorized to serve on unit Flight Standards Boards, Permanent Mishap Boards or Human Factors Councils, but may be designated as an alternate if the unit flight surgeon is not available. AMOs are strongly encouraged to maintain close contact with regionally assigned FSs. They should be pro-active in consulting with a regional FS regarding complex aviation medical issues or whenever they are unsure regarding aviation medicine policy or procedure.

5. Aviation Physician Assistant. In addition to the duties for medical aviation officers, APAs may be credentialed to provide aviation medicine related care. This would include performing flight physicals, aeromedical summaries and issuing Medical Recommendation for Flying Duty, Form CG-6020. APAs are not authorized to participate in the on call program. APAs are encouraged but not required to participate in Unit FS aviation safety activities described in this chapter. They shall not be assigned as voting members to Commander (PSC) or Commandant Boards. APAs are not authorized to serve on unit Flight Standards Boards, Permanent Mishap Boards or Human Factors Councils, but may be designated as an alternate if the unit flight surgeon is not available.

CHAPTER 6. AVIATION CAREER INCENTIVE PAY (ACIP)**A. Aviation Career Incentive Pay (ACIP).**

1. Aviation Career Incentive Pay (ACIP) is authorized for designated FS/FSTs contingent on the frequent and regular performance of operational flying duty in accordance with Public Health Service Commissioned Corps Personnel Manual, CC22.3, Instruction 3. The following is required:
 - a. Designation letter as a FS or FST must be forwarded to Division of Commissioned Personnel (DCP) Compensation Branch (CB) by PHS Liaison.
 - (1) PHS Liaison submits a memo to DCP/CB verifying that the FS/FST is authorized ACIP at their current assignment.
 - (2) A new memo is required after any PCS.
 - b. CB will review designation and billet and issue orders designating officer as an FS or FST and establishing the Aviation Service Date (ASD).
 - (1) Until PHS has processed these orders, the member is not entitled to ACIP.
 - (2) The member should ensure that this paperwork is properly filed or entitlement to ACIP will be delayed.
 - c. CB will process an order to authorize payment of ACIP effective as of the date of designation on PHS orders.
 - d. ACIP is not continuous or automatic.
 - (1) Flight hour reports must be submitted monthly, even if no hours are flown, to the Public Health Service (DCP/CB).
 - (2) The hours must be certified by the operational command.
2. Specific guidance on applying for ACIP can be found in Reference (e).
3. Aviation Medical Officers are not eligible for ACIP.
4. Aeromedical Physician Assistants (APAs) are not eligible for ACIP. APAs may be eligible to receive hazardous duty incentive pay (HDIP) as an aircrew member at the discretion of the unit commander.

CHAPTER 7. MEDICATION USE IN AVIATION PERSONNEL

A. Introduction: Aeromedical Concerns and Waivers.

1. Aeromedical Concerns. Aviation personnel should be evaluated for restriction from flying duties when initiating any medication and shall be advised of potential side effects. When using a medication, the following should be considered:
 - a. The medication or underlying medical condition may not be compatible with aviation duty (i.e. the medication may be NCD, but the medical condition may be Considered Disqualifying (CD) or vice versa).
 - b. Medication is effective and essential to treatment.
 - c. Aircrew member is free of aeromedically significant side effects after an observation period, as defined for each medication in Reference (d).
2. Medication Use Waivers. Commandant (CG-11) has reviewed and classified a wide range of medications for use in the aviation environment. Medications are designated Class 1, 2, 3 and 4 (see Reference (d)). The class defines any restrictions/waivers needed in aviation personnel using this medication (Class description below). Medications not on this list are currently incompatible with the aviation environment or little information of its safe use in the aviation environment exists. Therefore, medications, nutritional supplements and performance enhancing products not on this list are restricted for use in aviation personnel and require clearance for use by a CG FS prior to use. New medications will be reviewed and waiver requests will be considered on a case-by-case basis.
3. Waiver Authority. Procedures and other information for recommending a waiver are found in chapter 5 of this Manual.
4. Follow-Up. Appropriate follow-up is predicated upon the specific medication and the underlying medical condition. The requirements for a specific drug can be found in Reference (d).

B. Medication Classes.

1. Class 1. Over-the-counter medications should only be used under the guidance of a FS/FST/AMO/APA because even occasional or infrequent use may impair the ability to safely carry out flight duties or negatively impact survivability of an otherwise survivable mishap/incident. Additionally, the medical condition being treated must not be disqualifying. Class 1 medications do not require a waiver when used in accordance with standard prescribing practices. Self-medication with any drug, nutritional or herbal supplement except as outlined above is prohibited.
2. Class 2. These medications do not require a waiver when used under the supervision of a flight surgeon. **CAUTION: These medications must be noted on the Flight Physical as “Information Only” and the FS/AMO/APA must comment on usage and dosage.** First time use requires a 24-hour grounding period to ensure the member is free of significant side effects. Subsequent use does not require grounding if the medication is known to be free of significant side effects.

3. Class 3. These medications and the underlying disease process require a waiver.
4. Class 4. These medications are CD, necessitate grounding, and are not waiverable. Included as Class 4 are any medications or nutritional/dietary/herbal supplements that are not listed in the APLs. Any medication and/or supplement not listed in this policy is considered Class 4 and prohibited. A period of continuous grounding is mandatory from the initiation of therapy of use through cessation of these drugs plus a specified time period for physiologic clearance of the drug from the body.

C. Nutritional/Herbal/Dietary Supplements and Performance Enhancing Products.

1. Nutritional, dietary and herbal medicines/supplements as well as performance enhancing substances are not medications and therefore are not regulated by the Food and Drug Administration (FDA). As a consequence these products are not subjected to the same rigorous scientific validation of safety, potency, purity and efficacy required for FDA approved medications.
2. Prior to using any of these products, aviation personnel shall discuss such use with their FS/AMO/APA.

D. Motion Sickness Agents.

1. Motion sickness is grounding and medications used to treat motion sickness are grounding.
2. An FS/FST shall be consulted prior to administering motion sickness medications to aviation personnel and prior to return to flying duties.
3. Aviation personnel must be free of residual symptoms and off motion sickness medications for 24 hours prior to resuming aviation duties.

E. Immunizations and Immunotherapy.

1. Immunizations.

- a. All aviation personnel shall be considered Mission Critical Personnel (Coast Guard Pandemic Influenza Force Health Protection Policy, COMDTINST M6220.12 (series)) for the purpose of immunizations.
- b. Complete instructions concerning immunizations can be found in Reference (j).
- c. Because of the possibility of adverse reactions (both local and systemic), aviation personnel who receive immunizations shall be grounded for 12 hours following immunization(s). For uncomplicated immunization, no formal grounding paperwork (i.e. down chit) is necessary.
- d. Should aeromedically significant side effects develop, the member must be formally grounded (use of Medical Recommendation for Flying Duty, Form CG-6020). In accordance with chapter 2-10 of Reference (j), adverse event reporting using the

Vaccine Adverse Event Reporting System (<http://www.vaers.hhs.gov/>) may be required.

- e. Medical departments should make every effort to schedule immunizations in a manner that will minimize potential negative impact on flight schedules (e.g. giving immunizations to the off-going duty section).
- f. Immunotherapy:
 - (1) Allergy desensitization (immunotherapy) is permitted in aviation personnel.
 - (2) The underlying condition must not be disqualifying or is waived.
 - (3) The member must have a waiver for immunotherapy.
 - (4) Personnel shall be grounded for 12 hours after receiving allergy immunotherapy.

CHAPTER 8. EXOGENOUS FACTORS**A. Blood Donation.** Aviation personnel:

1. Shall obtain permission from the commanding officer before donating blood;
2. Shall be grounded for a period of 3 days (72 hours) after a donation of 200 cc or more of blood;
3. Shall be grounded for a period of 7 days after a donation of 500 cc or more of blood.

NOTE: The standard unit of donated blood is less than 500 cc.

4. Shall not donate blood more often than every 120 days.
5. Aircrew personnel should not be permitted to engage in flights above 35,000 feet, night flying, or other demanding flights for a period of one week after blood donation.
6. Examination by a flight surgeon is not required for return to full flight status.
7. Donation of plasma, platelets or other blood components that results in less than 200cc of whole blood loss is grounding for only 24 hours.

B. Bone Marrow Donation. Aviation personnel selected for and undergoing bone marrow donation are grounded for a minimum of 7 days. Upon reevaluation, the medical officer may determine that an additional grounding period and/or further sick leave are necessary. Return to full flight status must include a satisfactory medical examination, repeat CBC evaluation with return to acceptable values, and clearance by a flight surgeon.

C. Decompression Experience. Aviation personnel are restricted from flight duty until fully evaluated and released for flight duty by a flight surgeon when symptoms or reactions occur during or after decompression.

D. Diving. The incidence of decompression sickness during aerial flight is significantly enhanced after exposure to an environment above atmospheric pressure such as SCUBA diving.

1. Aviation personnel will not fly or perform low-pressure chamber “runs” within 24 hours following SCUBA diving, compressed air dives or hyperbaric chamber dives. If an urgent operational requirement dictates, aviation personnel may fly within 24 hours of SCUBA diving only after the examination by and clearance of a FS/AMO/APA and the authorization of the commanding officer.
2. Aviation personnel are restricted from flying following any decompression symptoms during or following a dive until examined and cleared by a FS/AMO/APA.

E. Caffeine. Excessive intake of caffeine from coffee, tea, cola, etc., can cause excitability, sleeplessness, loss of concentration, decreased awareness, and dehydration. Caffeine intake of 450 mg per day (3 to 4 cups of drip coffee) is the recommended maximum intake. Caffeine use when managed appropriately, can aid in maximizing performance during long sorties or periods of

sustained operations, however, the caffeine effect is maximized in individuals who are not habituated to its effects as regular users.

F. Alcohol.

1. Alcohol containing beverages. Requires 12 hours of flight restriction following termination of use (12 hour “Bottle-to-throttle” rule). Prior to resumption of flight duties there must be no residual effects. Residual effects include headache, nausea, weakness, dizziness, fatigue, or any other form of mental impairment.
2. Non-Alcoholic Beer. Contains a small amount of alcohol and requires the same restrictions as other alcohol containing beverages (above).
3. For information related to alcohol abuse, alcohol incidents and alcohol dependence see Reference (d).

G. Tobacco Abuse. Aviation personnel are discouraged from smoking tobacco at all times. Carbon monoxide has a deleterious effect on night vision as well as a detrimental effect on the physiologic effects at any altitude of flight. Use of any tobacco products is prohibited during the performance of flight duties and aboard any military aircraft.

ACRONYMS

AA	Aeronautically Adapted
ACAB	Aeromedical Consultation Advisory Board
AMSO	Aviation Medicine Standardization Officer
APA	Aeromedical Physician Assistant
APL	Aeromedical Policy Letters
AME	Aviation Medical Examiner
AMO	Aviation Medical Officer
ATB	Aeromedical Technical Bulletins
CD	Considered Disqualifying
CGHRMS	Coast Guard Human Resource Management System
CG-6020	Medical Recommendation For Flying Duty
DD-2807-1	Report of Medical History
DD-2808	Report of Medical Examination
DIFOPS	Duty Involving Flight Operation
DNIF	Duties Not Including Flying
DO	Dental Officer
EAP	Employee Assistance Program
FAA	Federal Aviation Administration
FEB	Flight Examining Board
FFD	Fit For Duty
FS	Flight Surgeon
FSDB	Flight Surgeon Designation Board
FST	Flight Surgeon Trainee
HS	Health Services Technician
HSWL SC	Health, Safety, and Work-Life Service Center
HSWL SC OM	HSWL SC Operational Medicine
MO	Medical Officer
MRRS	Medical Readiness Reporting System
NPQ	Not Physically Qualified
OTC	Over the Counter
PQ	Physically Qualified
RAT	Read Aloud Test
RF	Radio Frequency
RP	Regional Practice
SEAS	Survival Emergency Air System
SF-507	Medical Record
SF-600	Chronological Record of Medical Care
SNA	Student Naval Aviator
SWET	Shallow Water Egress Training
UNFAV	Unfavorable
UNSAT	Unsatisfactory
USMTF	Uniformed Service Military Treatment Facility