

Change 165
Manual of the Medical Department
U.S. Navy
NAVMED P-117

1 Jun 2018

To: Holders of the Manual of the Medical Department

1. This Change. Updates articles 15-63 through 15-101 and creates NAVMED 6410/14.

a. Changes noted:

(1) Cancellation of BUMEDINST 5300.8 in its entirety.

(2) Updated seven citations of “Alcohol Abuse or Dependence” replaced by the currently accepted Diagnostic and Statistical Manual of Mental Disorders (DSM-5) “Alcohol Use Disorder.”

(3) Ten incidents of adjusting DSM-IV to DSM-5 and deleted obsolete use of diagnostic “Axis.”

(4) Inclusion and explanation of responsibilities for the Aerospace Medicine Physician Assistant and Aeromedical Examiner.

(5) Updated references to the Naval Air Training and Operating Procedures Standardization (NATOPS) manual to reflect its new instruction, Commander, Naval Air Forces (CNAF) M-3710.7.

(6) Updated nine references to Naval Aerospace Medicine Institute (NAMI) Code 342 were updated to Code 53-HN to reflect their current designation after the NAMI reorganization.

(7) Deleted references to NAVMED 6410/2 and NAVMED 6410/1 and replaced with DD Form 2992 which replaced both forms.

b. Changes noted for MANMED article 15-65. Included anthropometric qualification as a requirement for designation or redesignation as a student (student naval aviator (SNA), student naval flight officer (SNFO), or student naval flight surgeons (SNFS), etc.).

c. Changes noted for MANMED article 15-67. Deleted the outdated SF 88 form.

d. Changes noted for MANMED article 15-71. Removed anthropometric data as a requirement for a complete Aeromedical Examination.

e. Changes noted for MANMED article 15-73. Updated to allow for electronic means of completion of check-in documentation.

f. Changes noted for MANMED article 15-77:

(1) Deleted paragraph (1), Aeromedical Clearance Notice (NAVMED 6410/2) and paragraph (2), Aeromedical Grounding Notice (NAVMED 6410/1). Both forms have been replaced by the Medical Recommendation for Flying or Special Operations Duty (DD Form 2992).

(2) Added Medical Screening for Class III Flight Deck Personnel and Personnel who Maintain Aviator Night Vision Standards (NAVMED 6410/14).

g. Changes noted for MANMED article 15-78. Replaced "Have you ever been diagnosed with or received any level of treatment for alcohol abuse or dependence?" with "Have you ever been diagnosed with or received any level of treatment for an alcohol use disorder?"

h. Changes noted for MANMED article 15-79. Replaced "Aeromedical Reference and Waiver Guide outlines additional information required in the case of alcohol abuse or dependence waiver requests." with "The Aeromedical Reference and Waiver Guide outlines additional information required in the case of alcohol use disorder waiver requests."

i. Changes noted for MANMED article 15-81. Included preference for Electronic Data Interchange Personal Identifier (EDIPI) over social security number (SSN) to prevent unnecessary dissemination of SSNs.

j. Changes noted for MANMED article 15-82. Updated Senior Board of Flight Surgeons to include revised position titles.

k. Changes noted for MANMED article 15-84:

(1) Updated contact lens wear standards to include verbiage from MANMED Change 128 of 5 April 2007.

(2) Inclusion of Implantable Collamer Lenses as disqualifying for all aviation classes.

(3) Removed Farnsworth Lantern (FALANT) as a means to test color vision. Section updated to include pseudo isochromatic plates (PIP) as the primary test and Computerized Color Vision Testing as the secondary.

(4) Deferred specific guidance on refractive surgery to the Aeromedical Reference and Waiver Guide (ARWG).

l. Changes noted for MANMED article 15-85:

(1) Corrected of Distant Visual Acuity standards that were erroneously changed in previous change.

(2) Removed of FALANT as a means to test color vision. Section updated to include PIP as the primary test and Computerized Color Vision Testing as the secondary.

(3) Removed test-specific scoring criteria and defer to the ARWG for details.

(4) Provided clarification on periodicity of colorectal cancer screenings.

m. Changes noted for MANMED article 15-90. Removed requirement for depth perception and phorias. Approved by Aeromedical Advisory Council in August 2016 due to the fact that this class of aeromedical officers can not fly solo.

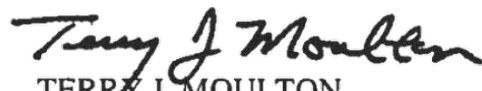
n. Changes noted for MANMED article 15-91. Included the requirement for slit lamp exam for fixed wing aircrew. The standard is that there can be no corneal pathology which necessitates the exam.

o. Changes noted for MANMED article 15-93. The requirement for a flight physical for aerospace physiology technicians has been removed and this article has been deleted in its entirety.

2. Action

a. Remove pages 15-47 through 15-74 replace with revised pages 15-47 through 15-74.

b. Record this Change 165 in the Record of Page Changes.


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Acting

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SPECIAL DUTY EXAMINATIONS AND STANDARDS

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15-62

Purpose of Aeromedical Examinations

(1) Aviation medical examinations are conducted to determine whether or not an individual is both physically qualified and aeronautically adapted to engage in duties involving flight.

(2) Aviation physical standards and medical examination requirements are developed to ensure the most qualified personnel are accepted and retained by naval aviation. Further elaboration of standards, medical examination requirements, and waiver procedures are contained in the Aeromedical Reference and Waiver Guide (ARWG); (see <http://www.med.navy.mil/sites/nmote/nami/arwg/Pages/AeromedicalReferenceandWaiverGuide.aspx>).

15-63

Classes of Aviation Personnel

(1) Applicants, students, and designated aviation personnel assigned to duty in a flying class and certain non-flying aviation related personnel defined below must conform to physical standards in this article. Those personnel are divided into four classes.

(a) **Class I.** Naval aviators and student naval aviators (SNA). For designated naval aviators, Class I is further subdivided into three Medical Service Groups based on the physical requirements for purposes of specific flight duty assignment:

(1) **Medical Service Group 1.** Aviators qualified for unlimited or unrestricted flight duties.

(2) **Medical Service Group 2.** Aviators restricted from shipboard aircrew duties (include V/STOL) except helicopter.

(3) **Medical Service Group 3.** Aviators restricted to operating aircraft equipped with dual controls and accompanied on all flights by a pilot or copilot of Medical Service Group 1 or 2, qualified in the model of aircraft operated. A separate request is required to act as pilot-in-command of multi-piloted aircraft.

(b) **Class II.** Aviation personnel other than pilots, designated naval aviators, or student naval aviators including naval flight officers (NFO), technical observers, naval flight surgeons (NFS), aerospace medicine physician assistants (APA), aerospace operational physiologists (NAOP), aerospace experimental psychologists (AEP), naval aerospace optometrists, naval aircrew (NAC) members, and other persons ordered to duty involving flying.

(c) **Class III.** Members in aviation-related duty not requiring them to personally be airborne including Air Traffic Controllers (ATC), flight deck, and flight line personnel.

(d) **Class IV.** Unmanned Aircraft Systems (UAS) Operators. Active duty and DON/DoD-GS members in aviation-related duty not required to personally be airborne including: Air vehicle operators (AVO), sensor operators (SO), mission payload operators (MPO), and unmanned aircraft commanders (UAC).

Note. The physical qualification submission requirements and any associated waiver recommendations are now based on the assigned UAS Group as listed in Commander Naval Air Forces (CNAF) M-3710.7 series or with respect to commercial, off-the-shelf, models by aircraft operating characteristics. While the physical standards across all of the UAS Groups remain the same, the physical exam processing requirements have changed appropriately to address operational requirements. UAS operators must be assessed and processed based on the highest UAS Group they are qualified to operate. UAS operators flying aircraft limited only to those of UAS Group 1 and 2 and small, commercial, off-the-shelf vehicles weighing 55 pounds or less may have their physicals performed by any qualified DoD medical provider and any associated waivers may be approved locally by individual unit commanders. The NAVMED 6410/13 UAS Physical Worksheet, and the ARWG continue to provide useful reference and guidance for all UAS classes. However, there are likely few conditions for the majority of the small UAS operators that may demand aeromedical standards above that of the general duty Sailor or Marine. In no case should an individual receive medical clearance with a medical condition present, which may incapacitate an individual suddenly, subtly, or without warning. Further, personnel may not perform UAS operations while using any medication whose known common adverse effects or intended action(s) affect alertness, judgment, cognition, special sensory function or coordination. This includes both over the counter and prescription medications.

NAVMED 6410/13, which should be performed and included in the health record for all UAS classes, can be found at:

http://www.med.navy.mil/directives/Pages/NAVME_DForms.aspx.

(e) *All United States Uniformed Military Exchange Aviation Personnel.* As agreed to by the Memorandum of Understanding between the Services, the Navy will generally accept the physical standards of the military service by which the member has been found qualified.

(f) *Aviation Designated Foreign Nationals.* The North Atlantic Treaty Organization and the Air Standardization Coordinating Committee have agreed that the items listed below remain the responsibility of the parent nation (nation of whose armed forces the individual is a member). More detailed information is located in the ARWG.

(1) Standards for primary selection.

(2) Permanent medical disqualification.

(3) Determination of temporary flying disabilities exceeding 30 days.

(4) Periodic examinations will be conducted according to host nation procedures.

(5) If a new medical condition arises, the military flight surgeon, aviation medical examiner (AME), or aerospace medicine physician assistant providing routine care will determine fitness to fly based on the host nation's aviation medicine regulations and procedures. Temporary flying disabilities likely to exceed 30 days and conditions likely to lead to permanent aeromedical disqualification should be referred to the parent nation.

(g) Certain non-designated personnel, including civilians, may also be assigned to participate in duties involving flight. Such personnel include selected passengers, project specialists, and technical observers. The specific requirements are addressed in the ARWG and CNAF M-3710.7 series (Naval Air Training and Operating Procedures Standardization (NATOPS) General Flight and Operating Instructions) and must be used to evaluate these personnel.

15-64

Authorized Examiners

(1) The aviation medical examination must be performed by a medical officer who is authorized by the Chief, Bureau of Medicine and Surgery or by the proper authority of the Army or Air Force who has current clinical privileges to conduct such examinations. Aviation Medical Examiners (AME) provide medical administrative support and primary care to flight status personnel and are authorized to complete an aviation medical examination. Naval Aerospace Medicine Physician Assistants (APA) are designated Flight Surgeon extenders who have graduated from the NAMI Aviation Medical Officer (AMO) course and work under the supervision of a designated Naval Flight Surgeon per current APA guiding instructions.

15-65

Applicant, Student, and Designated Standards

(1) Physical standards for SNA become Class I standards at the time of designation (winging). Prior to that point in time, SNA applicant physical standards must apply. Physical standards for student naval flight officer (SNFO) become designated NFO standards at the time of designation (winging) or redesignation as a SNFO; prior to that point in time NFO applicant physical standards will apply. Physical standards for applicants to other Class II and III communities transition from applicant to "designated" upon completion of the aviation training pipeline/completion of the required syllabus as per NATOPS, NAVPERS-COM, or Headquarters, U.S. Marine Corps (HQ/USMC) guidance.

(2) Designation or redesignation as a student (SNA, SNFO, SNFS, etc.) must not occur prior to certification of physical qualification (physically qualified (PQ) or not physically qualified (NPQ)/waiver recommended (WR) favorable, BUMED endorsement of a naval aviation applicant physical

examination), and anthropometric qualification verified through utilization of a Naval Aviation Anthropometric Compatibility Assessment (NAACA) report, which is endorsed by Naval Aviation Schools Command (NAVAVSCOLSCOM) as the cognizant line authority designated by CNAF. For further information on anthropometric accommodation and qualification, reference OPNAVINST 3710.37 series.

15-66

**Physically
Qualified (PQ) and
Not Physically
Qualified (NPQ)**

(1) *Physically Qualified (PQ)*. Describes aviation personnel who meet the physical and psychiatric standards required by their medical classification to perform assigned aviation duties.

(2) *Not Physically Qualified (NPQ)*. Describes aviation personnel who do not meet the physical or psychiatric standards required by their medical classification to perform assigned aviation duties. Aircrew who are NPQ may request a waiver of aeromedical standards. A waiver must be granted by NAVPERSCOM or HQ/USMC prior to a disqualified member assuming flight duties. See disposition of personnel found NPQ, article 15-79 below.

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15-67**Aeronautical
Adaptability (AA)**

(1) *Aeronautically Adaptable (AA)*. A member's aeronautical adaptability is assessed by a naval flight surgeon, aviation medical examiner, or aerospace medicine physician assistant each time an evaluation of overall qualification for duty involving flight is performed. AA has its greatest utility in the selection of aviation applicants (both officer and enlisted).

(a) Aviation officer applicants must demonstrate reasonable perceptual, cognitive, and psychomotor skills on the Aviation Selection Test Battery (ASTB) and other neurocognitive screening tests that may be requested.

(b) Applicants are generally considered AA on the basis of having the potential to adapt to the rigors of aviation by possessing the temperament, flexibility, and adaptive defense mechanisms to allow for full attention to flight (compartmentalization) and successful completion of training. Before selection, applicants are to be interviewed by the flight surgeon, aviation medical examiner, or aerospace medicine physician assistant for evidence of early interest in aviation, motivation to fly, and practical appreciation of flight beyond childhood fantasy. Evidence of successful coping skills, good interpersonal relationships, extra-curricular activities, demonstrated leadership qualities, stability of academic and work performance, and absence of impulsivity should also be thoroughly elicited.

(c) Designated aviation personnel are generally considered AA on the basis of demonstrated performance, ability to tolerate the stress and demands of operational training and deployment, and long-term use of highly adaptive defense mechanisms (compartmentalization).

(2) *Not Aeronautically Adaptable (NAA)*. When an individual is found to be PQ, but his AA is regarded as "unfavorable," the DD Form 2808 block 74a must be recorded as "physically qualified, but not aeronautically adaptable."

(a) Applicants are considered NAA if diagnosed as having a personality disorder or prominent maladaptive personality traits affecting flight safety, mission completion, or crew coordination.

(b) Designated aviation personnel are considered NAA if diagnosed as having a personality disorder or prominent maladaptive personality traits affecting flight safety, crew coordination, or mission execution.

(c) When evaluation of designated aviation personnel suggests that an individual is no longer AA, refer the member to, or consult with, the NAMI Aerospace Psychiatry Department.

(d) A final determination of NAA for designated aviation personnel may only be made following evaluation by or consultation with the NAMI Aerospace Psychiatry Department.

15-68**The Field Naval Aviator
Evaluation Board,
Field Naval Flight Officer
Evaluation Board, and
Field Flight Performance
Board**

(1) These are the normal mechanisms for handling administrative difficulties encountered with aviator performance, motivation, attitude, technical skills, flight safety, and mission execution. The above difficulties are not within the scope of AA. Aeromedical clearance is a prerequisite for ordering a board evaluation of an aviator, i.e., the member must be PQ and AA or NPQ and AA with a waivable condition.

15-69

The Aeromedical Reference and Waiver Guide

(1) This guide, prepared by NAMI and approved by BUMED, serves as an adjunct to this article and provides elaboration on specific aviation standards, examination techniques and methods, and policies concerning waivers for disqualifying conditions. This guide may be accessed and downloaded at: <http://www.med.navy.mil/sites/nmotc/nami/arwg/Page/AeromedicalReferenceandWaiverGuide.aspx> or request electronic copies from the Naval Aerospace Medical Institute, Attn: NAVAEROMEDINST, Code 53HN, 340 Hulse Road, Pensacola, FL 32508.

15-70

Examination Frequency and Period of Validity

(1) **Frequency.** As described in the CNAF M-3710.7 series, chapter 8, all aviation personnel involved in flight duties are required to be evaluated annually. Generally it is preferred that scheduling occurs within the interval from the first day of the month preceding their birth month until the last day of their birth month. However, examinations may be scheduled up to 3 months prior to expiration to accommodate specialty clinic and other scheduling issues. This 90-day window is referred to as the “vulnerability window.” To accommodate special circumstances such as deployment requirements, permanent change of station, temporary duty, or retirement, this window may be extended up to a maximum of 6 months with written approval by the member’s command. Aviation designated personnel (including those personnel who are assigned to non-flying billets or duties) must comply with these frequency requirements as well as those specified by Bureau of Naval Personnel (BUPERS) or Commandant, Marine Corps (CMC) waiver approval letters. According to the CNAF M-3710.7 series, “flight personnel delinquent in receiving an aviation physical examination must not be scheduled to fly unless a waiver has been granted by BUPERS/CMC.”

(2) **Validity.** Once completed, all examinations are valid until the last day of the following birth month.

(a) If an applicant has not commenced aviation preflight indoctrination within 2 years of the conduct of a favorably endorsed BUMED applicant physical and recording of anthropometric measurements, the applicant must successfully complete an aviation long form flight physical (see article 15-71 below), have anthropometric data reassessed, and meet the defined Class I or Class II standards prior to commencing aviation training. If the member is designated as an SNA at the time of subsequent aviation flight physicals, SNA physical standards will apply.

(b) If an applicant has not commenced air traffic control or other aircrew qualification training within 2 years of the conduct of a favorably endorsed BUMED applicant physical, the applicant must successfully complete an aviation long form flight physical (see article 15-71 below) and meet the defined aviation standards prior to commencing aviation training.

15-71

Complete Aeromedical Examination (Long Form)

(1) A complete physical examination includes a medical history recorded on the DD Form 2807-1 and a physical examination recorded on the DD Form 2808. Applicants must also submit an SF 507 and a Continuation of DD Form 2807. This examination must be typed or completed in the individual’s Aeromedical Electronic Resource Office (AERO) record.

(2) The following aviation personnel are required to receive complete examinations:

(a) Applicants for all aviation programs (officer and enlisted).

(b) All aviation personnel at ages 20, 25, 30, 35, 40, 45, 50, and annually thereafter.

(c) Personnel specifically directed by higher authority.

(d) Personnel found fit for full duty by medical board following a period of limited duty.

(e) All personnel involved in an aviation-related mishap.

15-72

Abbreviated Aeromedical Examination (Short Form)

(1) The results of this examination must be entered on NAVMED 6410/10, and the individual's Aeromedical Electronic Resource Office (AERO) record, only for initial waiver requests or for members whose waiver stipulates annual submission.

(a) **Purpose.** This examination is used for aviation personnel who do not require a complete physical as listed above.

(b) **Elements.** All elements of the abbreviated aeromedical examination must be completed. The NAVMED 6410/10 is considered incomplete if any blocks are left blank with no entry. Individual items may be expanded as required based on the interval medical history, health risk assessment, and physical findings.

15-73

Check-In Examinations

(1) All aviation personnel reporting to a new command must present to the aviation clinic for a fitness to fly examination. For students who have commenced training, a check-in examination is not required for transferring to another phase of training when medical care will continue to be given at the same medical treatment facility. The extent of this examination is determined by the flight surgeon, aviation medical examiner, or aerospace medicine physician assistant but should include a personal introduction, a complete review of the medical record for past medical problems, currency of physical examination, medical waivers for flight, and immunization and medical readiness currency. Check-in examinations require logging onto AERO to assure required physical examination submissions are up to date and to assure compliance with any waiver provisions that may apply. Links to this web site may be accessed from the Aeromedical Reference and Waiver Guide contents menu.

(2) **Documentation must include:**

(a) The results of the evaluation, entered on the SF 600 or in the member's electronic health record, with statement of qualification for assigned flight duties (PQ, NPQ, or waiver status).

(b) Updating the Adult Preventive and Chronic Care Flowsheet (DD Form 2766).

(c) Disposition entry on the NAVMED 6150/2, Special Duty Medical Abstract.

(d) A new Medical Recommendation for Flying or Special Operational Duty (DD Form 2992). An aerospace medicine physician assistant must be allowed to issue a DD Form 2992 authorizing flight without NFS or AME co-signature. Specific attention is required to existing waivers.

(e) A review of all duty not involving flying (DNIF) periods for patterns of frequent or excessively prolonged grounding or if cumulative DNIF periods in any single year appear to exceed 60 days.

15-74**Post-Grounding
Examinations**

(1) Following any period of medical grounding, aviation personnel must be evaluated by a flight surgeon, aviation medical examiner, or aerospace medicine physician assistant and issued a DD Form 2992 authorizing flight prior to returning to aviation duties. The extent of the evaluation must be determined by the flight surgeon, aviation medical examiner, or aerospace medicine physician assistant. An aerospace medicine physician assistant may issue a DD Form 2992 recommending return to flight without NFS or AME co-signature. The only exception to these requirements is self-limited grounding notices issued by a dental officer under special circumstances as discussed in article 15-77 below.

15-75**Post-Hospitalization
Examinations**

(1) Following return to duty after admission to the sick list or hospital (including medical boards), aviation personnel must be evaluated by a NFS, AME, or APA prior to resuming flight duties. The extent of the evaluation must be determined by the NFS, AME, or APA. If a disqualifying condition is discovered, a request for waiver of standards must be submitted. If deemed medically appropriate, an APA may issue a DD Form 2992 recommending return to flight without NFS or AME co-signature. The reason for the hospitalization and the result of the evaluation must be recorded on the Special Duty Medical Abstract (NAVMED 6150/2). If found qualified, a DD Form 2992 authorizing flight must be issued.

15-76**Post-Mishap
Examinations**

(1) Appendix N of OPNAVINST 3750.6 series details medical enclosures and physical examination requirements for mishap investigations. All post-mishap examinations must be submitted to BUMED regardless of whether a new or existing disqualifying defect is noted.

15-77**Forms and Health
Record Administration**

(1) *Medical Recommendation for Flying or Special Operational Duty (DD Form 2992)*. This form is the means to communicate to the aviation unit's commanding officer recommendations for fitness to fly, clearance and grounding, as well as clearance for high and moderate-risk training such as aviation physiology and water survival training. Examiners authorized per article 15-64 above (NFS, AME, APA) are the only personnel normally authorized to issue a DD Form 2992 recommending aeromedical clearance. In remote locations, where the services of the above medical officers are not available, any specifically designated MDR may issue a DD Form 2992 in consultation with an aviation qualified medical officer. See BUMEDINST 6410.9 series for additional details.

(a) The DD Form 2992 is issued (with copies to the member and the unit safety or NATOPS officer) after successful completion of an aviation physical, or after return to flight status following a temporary grounding. A corresponding health record entry must be made on the Special Duty Medical Abstract (NAVMED 6150/2). It must contain a statement regarding contact lens use for those personnel authorized for their use by the flight surgeon. Waivers are valid for the specified condition(s) only.

(b) A DD Form 2992 with the medical recommendation returning an aviator to flight is always issued with an expiration date. Generally, expiration is timed to coincide with the validity of aviator annual or periodic examinations which expire on the last day of the member's birth month. Reissue of the aeromedical clearance as part of an aviator annual or periodic examination certifies that the member is in full compliance with all waiver provisions, special submission requirements, and BUMED recommendations contained in the original waiver letter from NAMI. Specific waiver provisions may be verified on the NAMI disposition Web site.

(c) All aviation personnel admitted to the sick list, hospitalized, or determined to have a medical concern that could impair performance of duties involving flight must be issued a DD Form 2992 recommending grounding to the commanding officer. All medical department personnel (Corpsmen, Nurse Corps officers, etc.) are authorized to issue a DD Form 2992 recommending grounding. Similar to article 15-77, paragraph (1)(a), an entry must also be made in the member's health record on the Special Duty Medical Abstract (NAVMED 6150/2). A recommendation against flight must remain in effect until the member has been examined by a flight surgeon, aviation medical examiner, or aerospace medicine physician assistant and issued a DD Form 2992 recommending return to flight.

(d) Dental officers are authorized to issue a self-limited DD Form 2992 that recommends grounding. This typically only applies when a member on flight status receives a local anesthetic.

(e) Administration of routine immunizations, which require temporary grounding, does not require issuance of a DD Form 2992.

(2) **Special Duty Medical Abstract (NAVMED 6150/2).** All changes in status of the aviator must be immediately entered into the Special Duty Medical Abstract (NAVMED 6150/2).

(3) **Medical Screening for Class III Flight Deck Personnel and Personnel who Maintain Aviator Night Vision Standards (NAVMED 6410/14).** NAVMED 6410/14 is used for the annual screening of critical and non-critical flight deck personnel and non-aviator personnel required to maintain aviator night vision standards.

(4) **Filing of Physical Examinations.** Completed physical examinations must be filed in sequence with other periodic examinations and a copy kept on file for 3 years by the facility performing examination.

15-78

Submission of Examinations for Endorsement

(1) **Required Exams.** Required exams can be performed, completed, and submitted by a flight surgeon, aviation medical examiner, or aerospace medicine physician assistant. The following physical examinations must be submitted for review and endorsement through the Aeromedical Electronic Resource Office (AERO) to: Navy Medicine Operational Training Center (NMOTC), Attn: NAMI Code 53HN, 340 Hulse Road, Pensacola, FL 32508:

(a) Applicants for all aviation programs (officer and enlisted).

(b) Any Class I, II, or III designated member requesting new waiver of physical standards.

(c) Periodic waiver continuation examinations may be submitted on the DD Form 2808 (Long Form) or NAVMED 6410/10 (Short Form) including renewal or continuation of waivers for designated aviators following the ARWG requirements if stipulated in the NAMI waiver letter.

(d) When a temporary medical grounding period is anticipated to exceed 60 days, this examination need not be a complete physical examination as listed above, but should detail the injury or illness on a DD Form 2808. On the DD Form 2808, blocks 1-16 and 77-85 must be completed at a minimum and include all pertinent information.

(e) Following a medical grounding in excess of 60 days, a focused physical examination is required. Submission should include a treatment course, the specialist's and flight surgeon's recommendations for return to flight status, medical board report, and an LBFS report. If waiver is required, submit request following the applicable instructions.

(f) If the member's NFS, AME or APA recommends any permanent change in Service Group or flying status.

(g) Personnel who were previously disqualified and so reported to BUMED that are subsequently found to be physically qualified.

(h) Aviation personnel who have been referred to medical board for disposition, regardless of the outcome.

(i) All long form physical examinations at the ages of 20, 25, 30, 35, 40, 45, 50, and annually thereafter.

(j) Waiver continuation or modification requests for designated personnel and members currently in training may be submitted as an aeromedical summary (AMS), an Abbreviated Aeromedical Evaluation (i.e., short form physical), or a DD Form 2807/DD Form 2808 with appropriate flight surgeon, AME, or APA's comments recommending continuation or modification and commanding officer's concurrence.

(2) **Required Items.** Submission packages must include the following items:

(a) **Applicants, all classes:**

(1) The original typed DD Form 2808 signed by the flight surgeon, AME, or APA.

(2) The original handwritten DD Form 2807. The examining flight surgeon, AME, or APA must comment on all positive responses and indicate if the condition is considered disqualifying or not considered disqualifying. The following must be added to DD Form 2807: "Have you ever been diagnosed with or received any level of treatment for an alcohol use disorder?"

(3) An SF 507, Continuation of DD Form 2807, Aeromedical Applicant Questionnaire, must be completed and signed by the applicant.

(4) 12-lead electrocardiogram tracing for all aviation applicants.

(b) **Designated, all classes:**

(1) Long form physical examinations at the ages of 20, 25, 30, 35, 40, 45, 50, and annually thereafter.

(2) **For all new waiver requests:**

(a) If waiver is requested within the 90-day window of vulnerability defined in article 15-70 above, submit the examination that is normally conducted that year.

(b) If waiver is requested outside the 90-day window of vulnerability defined in article 15-70 above, submit a copy of the most recently conducted examination (long or short form) and an aeromedical summary detailing relevant interval history and a focused examination related to the physical standard requiring the new waiver.

(3) For periodic waiver continuation examinations, unless otherwise directed by the NAVPERS or CMC waiver letter, submit a long form or short form following the birthday celebrated that year.

(3) **Submission Timelines**

(a) Annual examinations and other waiver provisions must be submitted to NAMI Code 53HN within 30 days prior to the last day of the birth month in order to continue or renew the aeromedical clearance under a previously granted BUPERS or CME waiver.

(b) If submission is delayed, a 90-day extension may be requested from NAMI Code 53HN by submitting an interval history and the proposed timeline for complying with waiver requirements.

15-79

Disposition of Personnel Found Not Physically Qualified (NPQ)

(1) **General.** When aircrew do not meet aviation standards and are found NPQ, they may request a waiver of physical standards following CNAF M-3710.7 series and the Aeromedical Reference and Waiver Guide. In all cases, NAMI Code 53HN must be a via addressee. In general, applicants and students in early phases of training are held to a stricter standard than designates and are less likely to be recommended for a waiver. In those instances where a waiver is required, members must not begin instructional flight

until the waiver has been granted by NAVPERSCOM, the Commandant of the Marine Corps (CMC), or appropriate waiver granting authority. Sufficient information about the medical condition or defect must be provided to permit reviewing officials to make an informed assessment of the request itself and place the request in the context of the duties of the Service member.

(2) ***Newly Discovered Disqualifying Defects.*** If a disqualifying defect is discovered during any evaluation of designated personnel, an Aeromedical Summary must be submitted for BUMED endorsement, along with a waiver request if deemed appropriate. An AMS is required for an initial waiver for all personnel. The Aeromedical Reference and Waiver Guide outlines additional information required in the case of alcohol use disorder waiver requests.

(3) ***Personnel Authorized to Initiate the Requests for Waivers of Physical Standards***

(a) The Service member initiates the waiver request in most circumstances.

(b) The commanding officer of the member may initiate a waiver request.

(c) The examining or responsible medical officer may initiate a waiver request.

(d) In certain cases the; the Commanding Officer, Naval Reserve Center initiative to request or recommend a waiver will be taken by BUMED; CMC; or NAVPERSCOM. In no case will this initiative be taken without informing the member's local command.

(e) All waiver requests must be either initiated or endorsed by the member's commanding officer.

(4) ***Format and Routing of Waiver Requests.*** Refer to the Aeromedical Reference and Waiver Guide for addressing, routing, and waiver format.

15-80

Local Board of Flight Surgeons (LBFS)

(1) This Board provides an expedient way to return a grounded aviator to flight status pending official BUMED endorsement and granting of a waiver by NAVPERSCOM or CMC for any NEW disqualifying condition. The LBFS may also serve as a medical endorsement for waiver request. Additionally, this Board may be conducted when a substantive question exists about an aviator's suitability for continued flight status.

(2) The LBFS may be convened by the member's commanding officer, on the recommendation of the member's flight surgeon, aviation medical examiner, or by higher authority.

(3) The LBFS will consist of at least three medical officers, two of whom must be flight surgeons or aviation medical examiners. An aerospace medicine physician assistant may serve as one of the required medical officers on a LBFS when a flight surgeon or aviation medical examiner is unavailable, however, the flight surgeon or aviation medical examiner must act as senior board member.

(4) The LBFS's findings must be recorded in chronological narrative format as an aeromedical summary (AMS) to include the aviator's current duty status, total flight hours and duties, recent flight hours in current aircraft type, injury or illness necessitating grounding, hospital course with medical treatment used, follow-up reports, and specialists' and LBFS recommendation. Pertinent consultation reports and documentation must be included as enclosures to the report. Once a decision has been reached by the LBFS, the patient should be informed of the Board's recommendations. Local Boards must submit their reports within 10 working days to NAMI Code 53HN via the patient's commanding officer.

(5) Based on its judgment and criteria specified in the Aeromedical Reference and Waiver Guide, if a LBFS recommends that a waiver of physical standards is appropriate, the senior member of the board may issue a DD Form 2992 recommending a return to flight pending final disposition of the case by NAMI Code 53HN and NAVPERSCOM, or CMC. An aeromedical clearance may be issued only for conditions outlined in the Aeromedical Reference and Waiver Guide where information required for a waiver is specified. The DD Form 2992 must expire no greater than 90 days from the date of the LBFS report.

(6) An LBFS must not issue a DD Form 2992 recommending a return to flight to personnel whose condition is not addressed by the ARWG. In those cases, an LBFS endorsement of a waiver request should be forwarded to NAMI with a request for expedited review if required.

(7) An LBFS must not issue a DD Form 2992 recommending a return to flight if the member currently holds a grounding letter issued by NAVPERSCOM or CMC stating that a waiver has previously been denied, or when the ARWG specifically states that an LBFS adjudication is not authorized.

requested merely to challenge a physical standard or disqualification without evidence of special circumstances.

(3) Requests are directed to the OIC via the Director for Aeromedical Qualifications, (Code53HN). The request must include member's name, rank, EDIPI (preferred) or SSN, unit or squadron address, and flight surgeon contact information. The requesting letter should convey an understanding of why the member was aeromedically grounded and a specific appeal of why the case warrants consideration by a special board. With properly executed DD Form 2870, Authorization for Disclosure of Medical and Dental Information, the member's written consent, the request must include copies of all clinic visits, specialty consultations, laboratory reports, and imaging and other special studies that relate to his or her history that have not been included in any previous waiver requests.

(4) Requests for a Special Board of Flight Surgeons does not, in and of itself, guarantee a board will be convened.

(5) The board is convened by the OIC, NAMI, at the request of the member's commanding officer or higher authority.

(6) The board's recommendations (along with minority reports, if indicated) are forwarded to BUMED (Aerospace Medicine). Although normally forwarded to NAVPERSCOM or to CMC for implementation without change, BUMED has the prerogative to modify or reverse the recommendation.

15-81

Special Board of Flight Surgeons

(1) This Board consists of designated naval flight surgeons appointed as voting members by the Officer in Charge (OIC), Naval Aerospace Medical Institute. The OIC, NAMI, serves as the Board President. Guidelines are published in NAVOPMEDINST 1301.1 series. Copies of this instruction can be requested through the NAMI Web site.

(2) The Special Board of Flight Surgeons evaluates medical cases, which, due to their complexity or uniqueness, warrant a comprehensive aeromedical evaluation. Regardless of the presenting complaint, the patient is evaluated by all clinical departments at NAMI. A Special Board of Flight Surgeons should not be

15-82

Senior Board of Flight Surgeons (SBFS)

(1) The SBFSs at BUMED serves as the final appeal board to review aeromedical dispositions as requested by NAVPERSCOM, the Chief of Naval Operations (CNO), or CMC.

(2) The Board must consist of a minimum of five members, three of whom must be flight surgeons, and one of whom must be a senior line officer as assigned by CNO (N98) or CMC. The presiding officer will be the Assistant Deputy Chief, Operational Medicine and Capabilities Development (BUMED-M9), Assistant Deputy Chief, Healthcare Operations (BUMED-M3) assisted by the Aerospace Medicine Branch Head (BUMED-M95).

(3) Individuals whose cases are under review must be offered the opportunity to appear before this Board.

(4) The medical recommendations of this Board must be final and must be forwarded to NAVPERS-COM or CMC within 5 working days of the completion of the Board.

15-83

Standards for Aviation Personnel

(1) *Differences between flying Classes.* In general, applicants for aviation programs are held to stricter physical standards than trained and designated personnel and will be less likely to be recommended for waivers. Refer to the Aeromedical Reference and Waiver Guide for specific information. Likewise, standards for Class III personnel are somewhat less stringent than for Class I and II; exceptions to disqualifying conditions for Class III personnel are listed in article 15-94 below.

(2) *Fitness for Duty.* Personnel must meet the physical standards for general military service in the Navy as a prerequisite before consideration for any aviation duty. Any member who has been the subject of either a limited duty board or PEB-adjudicated medical board, must be found "fit for full duty" before he or she is eligible for a waiver of aeromedical standards.

15-84

Disqualifying Conditions For all Aviation Duty

In addition to the disqualifying defects listed in MANMED Chapter 15, Section III (Physical Standards), the following must be considered disqualifying for all aviation duty.

(1) *Blood Pressure and Pulse Rate.* These measurements must be determined after examinee has been sitting motionless for at least 5 minutes.

(a) *Blood Pressure.* Standing and supine measurements are not required.

1. Systolic greater than 139 mm Hg.
2. Diastolic greater than 89mm Hg.

(b) *Pulse Rate.* If the resting pulse is less than 45 or over 100, an electrocardiogram must be obtained. A pulse rate of less than 45 or greater than 100 in the absence of a significant cardiac history and medical or electrocardiographic findings must not in itself be considered disqualifying.

(2) *Ear, Nose, and Throat.* In addition to the conditions listed in articles 15-37 through 15-39, the following conditions are disqualifying:

(a) Any acute otorhinolaryngologic disease or disorder.

(b) A history of allergic rhinitis (seasonal or perennial) after the age of 12, unless the following conditions are met:

1. Symptoms, if recurrent, are adequately controlled by topical steroid nasal spray, cromolyn nasal spray, leukotriene inhibitor, or authorized antihistamines.
2. Waters' view x-ray of the maxillary sinuses shows no evidence of chronic sinusitis or other disqualifying condition.

3. Nasal examination (using speculum and illumination) shows no evidence of mucosal edema causing nasal obstruction, nor nasal polyps of any size.

4. Allergy immunotherapy has not been used within the past 12 months.

5. Normal Eustachian tube function is present.

(c) Eustachian tube dysfunction with the inability to equalize middle ear pressure.

(d) Chronic serous otitis media.

(e) Cholesteatoma or history thereof.

(f) History of traumatic or surgical opening of the tympanic membrane (including PE tubes) after age 12 unless completely healed.

(g) Presence of traumatic or surgical opening of the inner ear.

(h) Auditory ossicular surgery.

(i) Any current nasal or pharyngeal obstruction except for asymptomatic septal deviation.

(j) Chronic sinusitis, sinus dysfunction or disease, or surgical ablation of the frontal sinus.

(k) History of endoscopic sinus surgery.

(l) Nasal polyps or a history thereof.

(m) Recurrent sinus barotrauma.

(n) Recurrent attacks of vertigo or dysequilibrium.

(o) Meniere's disease or history thereof.

(p) Acoustic neuroma or history thereof.

(q) Radical mastoidectomy.

(r) Recurrent calculi of any salivary gland.

(s) Speech impediment, which impairs communication, required for aviation duty. See article 15-95 below for "Reading Aloud" testing procedures.

(3) *Eyes*

(a) All aviation personnel must fly with distant visual acuity corrected to 20/20 or better.

(1) If uncorrected distant visual acuity is worse than 20/100, personnel are required to carry an extra pair of spectacles.

(2) If uncorrected near visual acuity is worse than 20/40, personnel must have correction available.

(3) Contact lens wear is authorized for ametropic designated aviation personnel of all classes as well as Class II and Class III applicants.

(4) The Aeromedical Reference and Waiver Guide provides additional guidelines and information required in support of contact lens wear. When the requirements for successful contact lens wear have been met, the flight surgeon must add the following statement to the aeromedical clearance notice: Contact lens wear is authorized.

(b) In addition to those conditions listed in article 15-42, the following conditions are disqualifying:

(1) Chorioretinitis or history thereof.

(2) Inflammation of the uveal tract; acute, chronic, recurrent or history thereof, except healed reactive uveitis.

(3) Pterygium which encroaches on the cornea more than 1 mm.

(4) Optic neuritis or history thereof.

(5) Herpetic corneal ulcer or keratitis or history of recurrent episodes.

(6) Severe lacrimal deficiency (dry eye).

(7) Elevated intraocular pressure as evidenced by a reading of greater than 22 mm Hg, by applanation tonometry. A difference of 5 mm Hg or greater between eyes is also disqualifying.

(8) Intraocular lens implants.

(9) Implantable Collamer Lenses (ICL) are considered disqualifying for all aviation classes; refer to the ARWG for waiver policy for each class.

(10) History of lens dislocation or displacement.

(11) History of eye muscle surgery in personnel whose physical standards require stereopsis. Other aviation personnel with such history require a normal ocular motility evaluation before being found qualified.

(12) Defective color vision as evidenced by failure of the pseudo isochromatic plates (PIP), or Computerized Color Vision Tester (CCVT). Members with initial flight physical before January 1, 2017 may utilize a lantern test as a backup test for color vision. (See ARWG for validated and accepted tests.)

(13) Aura of visual migraine or other transient obscuration of vision.

(14) For any case involving refractive surgery or any manipulation to correct vision, see the ARWG, Ophthalmology section, for specific standards and waiver applicability.

(4) **Lungs and Chest Wall.** In addition to those conditions listed in article 15-42, the following conditions are disqualifying:

(a) Congenital and acquired defects of the lungs, spine, chest wall, or mediastinum that may restrict pulmonary function, cause air trapping, or affect the ventilation perfusion balance.

(b) Chronic pulmonary disease of any type.

(c) Surgical resection of lung parenchyma.

(d) Pneumothorax or any history thereof.

(e) Abnormal or unexplained chest radiograph findings.

(f) Positive PPD (tuberculin skin test) without documented evaluation or treatment.

(5) **Heart and Vascular.** In addition to those conditions listed in articles 15-43 and 15-52, the following conditions are disqualifying:

(a) Mitral valve prolapse (MVP). See the ARWG for submission requirements of “echo only” MVP.

(b) Bicuspid aortic valve.

(c) History or electrocardiogram (EKG) evidence of:

(1) Ventricular tachycardia defined as three consecutive ventricular beats at a rate greater than 99 beats per minute.

(2) Wolff-Parkinson-White syndrome or other pre-excitation syndrome predisposing to paroxysmal arrhythmias.

(3) All atrioventricular and intraventricular conduction disturbances, regardless of symptoms.

(4) Other EKG abnormalities consistent with disease or pathology and not explained by normal variation.

(6) **Abdominal Organs and Gastrointestinal System.** In addition to those conditions listed in article 15-44, the following conditions are disqualifying:

(a) Gastrointestinal hemorrhage or history thereof.

(b) Gastroesophageal reflux disease.

(c) Barrett’s Esophagus.

(d) Irritable Bowel Syndrome unless asymptomatic and controlled by diet alone.

(7) **Endocrine and Metabolic Disorders.** In addition to those conditions listed in article 15-56, the following condition is disqualifying:

(a) Hypoglycemia or documented history thereof including postprandial hypoglycemia or if symptoms significant enough to interfere with routine function.

(b) All hypothyroidism.

(8) **Genitalia and Urinary System.** In addition to those conditions listed in articles 15-45 through 15-47, the following conditions are disqualifying:

(a) Urinary tract stone formation or history thereof.

(b) Hematuria or history thereof.

(c) Glomerulonephritis, glomerulonephropathy or history thereof.

(9) **Extremities.** In addition to those conditions listed in articles 15-49 through 15-51, the following conditions are disqualifying:

(a) Internal derangement or surgical repair of the knee including anterior cruciate ligament, posterior cruciate ligament, or lateral collateral ligaments.

(b) Absence or loss of any portion of any digit of either hand.

(10) **Spine.** In addition to the conditions listed in article 15-48, the following conditions are disqualifying:

(a) Chronic or recurrent spine (cervical, thoracic, or lumbosacral) pain likely to be accelerated or aggravated by performance of military aviation duty.

(b) Scoliosis greater than 20 degrees.

(c) Kyphosis greater than 40 degrees.

(d) Any fracture or dislocation of cervical vertebrae or history thereof; fracture of lumbar or thoracic vertebrae with 25 percent or greater loss of vertebral height or history thereof.

(e) Cervical fusion, congenital or surgical.

(11) **Neurological Disorders.** In addition to those conditions listed in article 15-57, the following conditions are disqualifying:

(a) History of unexplained syncope.

(b) History of seizure, except a single febrile convulsion, before 5 years of age.

(c) History of headaches or facial pain if frequently recurrent, disabling, requiring prescription medication, or associated with transient neurological impairments.

(d) History of skull penetration, to include traumatic, diagnostic, or therapeutic craniotomy, or any penetration of the duramater or brain substance.

(e) Any defect in bony substance of the skull interfering with the proper wearing of military aviation headgear or resulting in exposed dura or moveable plates.

(f) Encephalitis within the last 3 years.

(g) History of metabolic or toxic disturbances of the central nervous system.

(h) History of arterial gas embolism. Decompression sickness Type I or II, if not fully resolved. Comprehensive neurologic evaluation is required to document full resolution.

(i) Injury of one or more peripheral nerves, unless not expected to interfere with normal function or flying safety.

(j) History of closed head injury associated with traumatic brain injury or any of the following:

(1) CSF leak.

(2) Intracranial bleeding.

(3) Skull fracture (linear or depressed).

(4) Initial Glasgow Coma Scale of less than 15.

(5) Time of loss of consciousness and/or post-traumatic amnesia greater than 5 minutes.

(6) Post-traumatic syndrome (headaches, dizziness, memory and concentration difficulties, sleep disturbance, behavior or personality changes).

(12) **Psychiatric.** In addition to the conditions listed in article 15-58, the following amplifying information is provided:

(a) Adjustment disorders are disqualifying only during the active phase.

(b) Substance-related disorders. Aviation specific guidelines regarding alcohol use disorders are outlined in the Aeromedical Reference and Waiver Guide (ARWG) maintained by NAMI.

(c) Personality disorders or prominent maladaptive personality traits result in a determination of NAA.

(13) **Systemic Diseases and Miscellaneous Conditions.** In addition to those conditions listed in articles 15-55 and 15-59, the following conditions are disqualifying:

- (a) Sarcoidosis or history thereof.
- (b) Disseminated lyme disease or lyme disease associated with persistent abnormalities that are substantiated by appropriate serology.
- (c) Hematocrit. Aviation specific normal values: Males, 40.0-52.0; females, 37.0-47.0.
 - (1) Values outside normal ranges (average of three separate blood draws) require hematology or internal medicine consultation. If no pathology is detected, the following values are not considered disqualifying: Males, 38.0-39.9; females, 35.0-36.9.
 - (2) Any anemia associated with pathology is disqualifying.
- (d) Chronic disseminated infectious diseases not otherwise listed in 15-55, 15-59 or the Aeromedical Reference and Waiver Guide.
- (e) Chronic systemic inflammatory or autoimmune diseases not otherwise listed in 15-55, 15-59 or the Aeromedical Reference and Waiver Guide.

(14) **Obstetrics and Gynecology.** In addition to those conditions listed in article 15-45, the following conditions are disqualifying for Class I and Class II personnel:

- (a) Pregnancy.
- (b) Refer to CNAF M-3710.7 series for Class I and Class II personnel during the first and second trimester.

(15) **Medication.** Any dietary supplement use or chronic use of medication is disqualifying except for those supplements and medications specifically listed in the Aeromedical Reference and Waiver Guide as not disqualifying.

15-85

Class I: Personnel Standards

In addition to the standards in Chapter 15, Section III (Physical Standards) and the general aviation standards, Class I aviators must meet the following standards.

(1) *Vision*

(a) **Distant Visual Acuity.** Service Group 1 - 20/100 or better each eye uncorrected, corrected to 20/20 or better each eye. Service Group 2 - 20/200 or better each eye uncorrected, corrected to 20/20 or better each eye. Service Group 3 - 20/400 or better each eye uncorrected, corrected to 20/20 or better each eye. The first time distant visual acuity of less than 20/20 is noted a manifest refraction (not cycloplegic) must be performed recording the correction required for the aviator to see 20/20 in each eye (all letters correct on the 20/20 line).

(b) **Refraction.** Refractions will be recorded using minus cylinder notation. There are no limits. However, anisometropia may not exceed 3.50 diopters in any meridian.

(c) **Near Visual Acuity.** Must correct to 20/20 in each eye using either the AFVT or standard 16 Snellen or Sloan notation near point card. Bifocals are approved.

(d) **Depth Perception.** Only stereopsis is tested. Must pass any one of the following three tests:

(1) AFVT: at least A – D with no misses.

(2) Circle Stereogram (See the ARWG for validated and accepted tests): 40 arc second circles.

(3) Stereopter (See the ARWG for validated and accepted tests): 8 of 8 correct on the first trial or, if any are missed, 16 of 16 correct on the combined second and third trials.

(e) **Field of Vision.** Must be full.

(f) **Oculomotor Balance**

(1) No esophoria more than 6.0 prism diopters.

(2) No exophoria more than 6.0 prism diopters.

(3) No hyperphoria more than 1.50 prism diopters.

(4) Tropia or Diplopia in any direction of gaze is disqualifying.

(g) **Color Vision.** Must pass any one of the following two tests:

(1) PIP color plates (Any red-green screening test with at least 14 diagnostic plates; see manufacturer instructions for scoring information), randomly administered under a True Daylight Illuminator lamp. (See the ARWG for validated and accepted tests).

(2) Computerized color vision test. (See the ARWG for validated and accepted tests.)

(3) Aviation personnel who previously passed using the Farnsworth Lantern (FALANT) prior to 1 January 2017 may continue to use this testing method, if available.

(h) **Fundoscopy.** No pathology present.

(i) **Intraocular Pressure.** Must be less than or equal to 22 mm Hg. A difference of 5 mm Hg or greater between eyes requires an ophthalmology consult, but if no pathology noted, is not considered disqualifying.

(2) **Hearing (ANSI 1969)**

TABLE 1

Frequency (Hz)	Better Ear (dB)	Worse Ear (dB)
500	35	35
1000	30	30
2000	30	50

(3) **Chest X-Ray.** At accession and as clinically indicated.

(4) **EKG.** At accession and at ages 25, 30, 35, 40, 45, 50, and annually thereafter.

(5) **Colorectal Cancer (CRC) Screening.** Required for ages 50 and older and must be performed per current guidelines and standard of care practices. Following a negative colonoscopy, annual fecal occult blood tests can be suspended for at least 5 years depending on testing modality and findings. See the ARWG for the most up to date guidelines.

(6) **Self Balance Test.** Must pass.

(7) **Dental.** Must have no defect which would react adversely to changes in barometric pressure (Type I or II dental examination required).

(8) **Alcohol Use Disorder Statement.** DD Form 2807. The following statement must be added: "Have you ever been diagnosed or had any level of treatment for an alcohol use disorder?"

15-86**Student Naval Aviator
(SNA) Applicants**

All applicants for pilot training must meet Class I standards except as follows:

(1) **Vision**

(a) **Visual Acuity, Distant and Near.** Uncorrected visual acuity must not be less than 20/40 each eye, correctable to 20/20 each eye using a Sloan letter crowded eye chart. Vision testing procedures must comply with those outlined on the Aerospace Reference and Waiver Guide.

(b) **Refraction.** If uncorrected distant visual acuity is less than 20/20 either eye, a manifest refraction must be recorded for the correction required to attain 20/20. If the candidate's distant visual acuity is 20/20, a manifest refraction is not required. Total myopia may not be greater than -1.50 diopters in any meridian, total hyperopia no greater than +3.00 diopters in any meridian, or astigmatism no greater than -1.00 diopters. The astigmatic correction must be reported in minus cylinder format.

(c) **Cycloplegic Refraction.** This is required for all candidates to determine the degree of spherical ametropia. The refraction should be performed to maximum plus correction to obtain best visual acuity. Due to the effect of lens aberrations with pupil dilation, visual acuity or astigmatic correction, which might

disqualify the candidate, should be disregarded if the candidate meets the standards for visual acuity and astigmatism with manifest refraction.

(d) *Near Point of Convergence.* Not required.

(e) *Slit Lamp Examination with corneal topographic mapping.* Required.

(f) *Dilated Fundus Examination.* Required.

(2) *Hearing (ANSI 1969)*

TABLE 2

Frequency (Hz)	Decibel (dB)
500	25
1000	25
2000	25
3000	45
4000	55

(3) *Reading Aloud Test.* Required if speech impediment exists, is suspected, or there is a history of speech therapy or facial fracture. See article 15-95 for text.

(4) *DD Form 2807* and the SF 507, Continuation of DD Form 2807, must be completed and signed by the applicant.

15-87

Class II Personnel: Designated Naval Flight Officer (NFO) Standards

(1) Must meet Class I standards except as follows:

(a) *Vision*

(1) *Visual Acuity, Distant and Near.* No limit uncorrected. Must correct to 20/20 each eye.

(2) *Refraction.* No limits.

(3) *Oculomotor Balance.* No Obvious heteroTropia or Symptomatic heteroPhoria (NOTOSP or NOHOSH).

(4) *Depth Perception.* Not required.

15-88

Class II Personnel: Applicant Naval Flight Officer (NFO) Standards

(1) Must meet Class I standards, except as follows:

(a) *Vision*

(1) *Visual Acuity, Distant and Near.* No limit uncorrected. Must correct to 20/20 each eye. If the AFVT or Sloan letter crowded eye chart letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(2) *Refraction.* Manifest refraction must not exceed +/-8.00 diopters in any meridian (sum of sphere and cylinder) with astigmatism no greater than -3.00 diopters. Refraction must be recorded in minus cylinder format. Must have no more than 3.50 diopters of anisometropia.

(3) *Oculomotor Balance.* No Obvious heteroTropia or Symptomatic heteroPhoria (NOTOSP or NOHOSH).

(4) *Depth Perception.* Not Required.

(5) *Slit Lamp Examination.* Required.

(b) *Hearing.* Same as SNA Applicant.

(c) *Reading Aloud Test.* Required if a speech impediment exists, is suspected, or there is a history of speech therapy or facial fracture. See ARWG for text.

(d) *The SF 507, Continuation of DD Form 2807, Aeromedical Applicant Questionnaire.* This form must be completed and signed by the applicant.

15-89

**Class II Personnel:
Designated Naval Flight
Surgeon, Naval Aerospace Medicine
Physician Assistant, Naval Aerospace
Physiologist, Naval Aerospace
Experimental Psychologist,
and Naval Aerospace
Optometrist Standards**

(1) Must meet Class I standards, except as follows:

(a) *Vision*

(1) *Visual Acuity, Distant and Near.*

No limit uncorrected. Must correct to 20/20 each eye. If the AFVT or Sloan letter crowded eye chart letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(2) *Refraction.* No limits.

(3) *Oculomotor Balance.* No Obvious heteroTropia or Symptomatic heteroPhoria (NO-TOSP or NOHOSH).

(4) *Depth Perception.* Not Required.

15-90

**Class II Personnel:
Applicant Naval Flight
Surgeon, Naval Aerospace Medicine
Physician Assistant, Naval Aerospace
Physiologist, Naval Aerospace
Experimental Psychologist,
and Naval Aerospace
Optometrist Standards**

(1) All applicants must meet SNA Applicant standards except as follows:

(a) *Vision*

(1) *Visual Acuity, Distant and Near.*

No limit uncorrected. Must correct to 20/20 each eye. If the AFVT or Sloan letter crowded eye chart letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(2) *Refraction.* No limits.

(3) *Oculomotor Balance.* No Obvious heteroTropia or Symptomatic heteroPhoria (NOTOSP or NOHOSH).

(4) *Depth Perception.* Not Required.

(5) *Slit Lamp Exam.* Required for all applicants.

15-91

**Class II Personnel:
Designated and
Applicant Naval
Aircrew (Fixed Wing)
Standards**

(1) Must meet Class I standards except as follows:

(a) ***Vision***

(1) ***Visual Acuity, Distant and Near.*** No limit uncorrected. Must correct to 20/20 each eye. If the AFVT or Sloan letter crowded eye chart letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(2) ***Refraction.*** No limits.

(3) ***Oculomotor Balance.*** No Obvious heteroTropia or Symptomatic heteroPhoria (NOTOSP or NOHOSH).

(4) ***Depth Perception.*** Not required.

(5) ***Slit Lamp Exam.*** Required for all applicants.

(b) ***Hearing.*** Designated must meet Class I standards. Applicants must meet SNA Applicant standards.

15-92

**Class II Personnel:
Designated and
Applicant Naval
Aircrew (Rotary Wing)
Standards**

(1) USN and USMC must meet Class I standards, except as follows:

(a) ***Vision***

(1) ***Visual Acuity, Distant and Near.*** Must be uncorrected 20/100 or better, each eye corrected to 20/20. If the AFVT or Sloan letter crowded eye chart letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(2) ***Refraction.*** No limits.

(3) ***Oculomotor Balance.*** No Obvious heteroTropia or Symptomatic heteroPhoria (NOTOSP or NOHOSH).

(b) ***Hearing.*** Designated must meet Class I standards. Applicants must meet SNA Applicant standards.

15-93

**Class II Personnel:
Designated and Applicant
Aerospace Physiology
Technician Standards**

This article was deleted. Aerospace physiology technicians no longer require flight physicals.

15-94**Class III Personnel:
Non-Disqualifying
Conditions**

(1) Class III personnel must meet standards for aviation personnel in article 15-84, but within those limitations, the following conditions are not considered disqualifying.

(a) Hematocrit between 38.0 and 39.9 percent in males or between 35.0 and 36.9 percent in females, if asymptomatic.

(b) Nasal or paranasal polyps.

(c) Chronic sinus disease, unless symptomatic and requiring frequent treatment.

(d) Lack of valsalva or inability to equalize middle ear pressure.

(e) Congenital or acquired chest wall deformities, unless expected to interfere with general duties.

(f) Mild chronic obstructive pulmonary disease.

(g) Pneumothorax once resolved.

(h) Surgical resection of lung parenchyma if normal function remains.

(i) Paroxysmal supraventricular dysrhythmias, after normal cardiology evaluation, unless symptomatic.

(j) Hyperuricemia.

(k) Renal stone once passed or in stable position.

(l) Internal derangements of the knee unless restricted from general duty.

(m) Recurrently dislocating shoulder.

(n) Scoliosis, unless symptomatic or progressive. Must meet general duty standards.

(o) Kyphosis, unless symptomatic or progressive. Must meet general duty standards.

(p) Fracture or dislocation of cervical spine.

(q) Cervical fusion.

(r) Thoracolumbar fractures once healed and stable.

(s) History of craniotomy.

(t) History of decompression sickness.

(u) Anthropometric standards do not apply.

(v) No limits on resting pulse if asymptomatic.

15-95**Class III Personnel:
ATCs-Military and
Department of the
Navy Civilians,
Designate, and
Applicant Standards**

(1) Military must meet the standards in Chapter 15, Section III (Physical Standards); civilians must be examined in military MTFs, by a naval flight surgeon, AME, or APA and must meet the general requirements for Civil Service employment as outlined in the Office of Personnel Management, Individual Occupational Requirements for GS-2152: Air Traffic Control Series. Both groups have the following additional requirements:

(a) Vision

(1) **Visual Acuity, Distant and Near.** No limit uncorrected. Must correct to 20/20 or better in each eye. If the Armed Forces Vision Test (AFVT) or Sloan letter crowded eye chart letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(2) **Phorias.** No Obvious heteroTropia or Symptomatic heteroPhoria (NOTOSP or NO-HOSH).

(3) **Depth Perception.** Not required.

(4) **Slit Lamp Examination.** Required for applicants only.

(5) **Intraocular Pressure.** Must meet aviation standards.

(6) **Color Vision.** Must meet Class I standards.

(b) **Hearing.** Applicants must meet SNA Applicant standards. Designated must meet Class I standards.

(c) **Reading Aloud Test.** This test is required for all ATC applicants. See the ARWG for test details.

(d) **Pregnancy.** Pregnant ATCs are to be considered PQ, barring medical complications, until such time as the medical officer, the member or the command determines the member can no longer perform as an ATC.

(e) **Department of the Navy Civilian ATCs.**

(1) There are no specific height, weight, or body fat requirements.

(2) When a civilian who has been ill in excess of 30 days returns to work, a formal flight surgeon, AME, or APA's evaluation must be performed prior to returning to ATC duties. A DD Form 2992 must be used to communicate clearance for ATC duties to the commanding officer.

(3) Waiver procedures are listed in the Aeromedical Reference and Waiver Guide.

15-96

**Class III Personnel:
Critical Flight Deck
Personnel Standards
(Director, Spotter, Checker,
Non-Pilot Landing Safety Officer
and Helicopter Control Officer
and Any Other Personnel Specified
by the Commanding Officer)**

(1) Frequency of screening is annual. Waivers of physical standards are determined locally by the senior

medical department representative and commanding officer. No BUMED or NAVPERSCOM submission or endorsement is required. Results will be documented on the NAVMED Form 6410/14. Must meet the standards in Chapter 15, Section III (Physical Standards), except as follows:

(a) **Vision**

(1) **Visual Acuity, Distant and Near.** No limits uncorrected. Must correct to 20/20. If the AFVT or Sloan letter crowded eye chart letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(2) **Field of Vision.** Must have full field of vision.

(3) **Depth Perception.** Must meet Class I standards.

(4) **Color Vision.** Must meet Class I standards.

15-97

**Class III Personnel:
Non-Critical Flight Deck
Personnel Standards**

(1) This paragraph includes all personnel not defined as critical. Frequency of screening is annual. Results will be documented on the NAVMED Form 6410/14. Must meet the standards in Chapter 15, Section III (Physical Standards) except as follows:

(a) **Visual Acuity, Distant and Near.** No limits uncorrected. Must correct to 20/40 or better in one eye, 20/30 or better in the other.

Note. Because of the safety concerns inherent in performing duties in the vicinity of turning aircraft, flight line workers should meet the same standards as their flight deck counterparts.

15-98

**Class III Personnel:
Personnel Who
Maintain Aviator
Night Vision Standards**

(1) Personnel, specifically those aircrew survival equipmentmen (USN PR or USMC MOS 6060) and aviation electrician's mates (USN AE or USMC MOS 64xx), assigned to duty involving maintenance of night vision systems, or selected for training in such maintenance, must be examined annually to determine visual standards qualifications. Record results on NAVMED Form 6410/14. Waivers are not considered. Standards are as follows:

(a) **Distant Visual Acuity.** Must correct to 20/20 or better in each eye and correction must be worn. If the AFVT or Sloan letter crowded eye chart letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(b) **Near Visual Acuity.** Must correct to 20/20.

(c) **Depth Perception.** Not required.

(d) **Color Vision.** Must meet Class I standards.

(e) **Oculomotor Balance.** No Obvious heteroTropia or Symptomatic heteroPhoria (NOTOSP or NOHOSH).

15-99

**Class III Personnel:
Water Survival Training
Instructors (NAWSTI) and
Rescue Swimmer School
Training Programs Standards**

(1) Applicants, designated and instructor rescue swimmers must meet the general standards outlined in Chapter 15, Section III. In addition, the following standards apply:

(a) **Visual Acuity, Distant and Near**

(1) **Applicant Surface Rescue Swimmer.** No worse than 20/100 uncorrected in either eye. Must correct to 20/20 each eye.

(2) **Designated Surface Rescue Swimmer.** No worse than 20/200 uncorrected in either eye. Must correct to 20/20 each eye.

(3) **Naval Aviation Water Survival Training Program Instructor.** No limits uncorrected. Must correct to 20/20 in the better eye, no less than 20/40 in the worse eye.

(4) **All categories.** If the AFVT or Sloan letter crowded eye chart letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(b) **Psychiatric.** Because of the rigors of the high risk training and duties they will be performing, the psychological fitness of applicants must be carefully appraised by the examining physician. The objective is to elicit evidence of tendencies which militate against assignment to these critical duties. Among these are below average intelligence, lack of motivation, unhealthy motivation, history of personal ineffectiveness, difficulties in interpersonal relations, a history of irrational behavior or irresponsibility, lack of adaptability, or documented personality disorders.

(1) Any examinee diagnosed by a psychiatrist or clinical psychologist as suffering from depression, psychosis, bipolar disorder, paranoia, severe neurosis, severe borderline personality, or schizophrenia will be recommended for disqualification at the time of initial examination.

(2) Those personnel with minor psychiatric disorders such as acute situational stress reactions must be evaluated by the local medical officer in conjunction with a formal psychiatric evaluation when necessary. Those cases which resolve completely, quickly and without significant psychotherapy can be found fit for continued duty. Those cases in which confusion exists, review by the TYCOM force medical officer for fleet personnel or the Director, Bureau of Medicine and Surgery, Qualifications and Standards for shore-based personnel.

Any consideration for return to duty in these cases must address the issue of whether the service member, in the opinion of the medical officer and the member's commanding officer, can successfully return to the specific stresses and environment of surface rescue swimmer duty.

(c) *Special Requirements*

(1) Surface designated rescue swimmer school training program instructors (RSSTPI), surface rescue swimmers, applicant and designated, and non-aviation designated NAWSTI, will have their physical examination conducted by any privileged provider under the guidance and periodicity provided in Section I. Waiver requests must be submitted to BUMED, Director of Surface Medicine.

(2) Aviation designated NAWSTI and aviation designated RSSTPI will have their physical examinations performed by a flight surgeon, AME, or APA and will be examined per the requirements of their aviation designation. Waiver requests will be processed following article 15-79.

15-101

**Selected Passengers,
Project Specialists,
And Other Personnel**

(1) Refer to CNAF M-3710.7 series. When ordered to duty involving flying for which special requirements have not been prescribed, personnel must, prior to engaging in such duties, be examined to determine their physical qualification for aerial flights, an entry made in their Health Record, and a DD Form 2992 issued if qualified. The examination must relate primarily to the circulatory system, musculoskeletal system, equilibrium, neuropsychiatric stability, and patency of the Eustachian tubes, with such additional consideration as the individual's specific flying duties may indicate. The examiner must attempt to determine not only the individual's physical qualification to fly a particular aircraft or mission, but also the physical qualification to undergo all required physical and physiological training associated with flight duty. No individual will be found fit to fly unless fit to undergo the training required in CNAF M-3710.7 series, for the aircraft or mission. Consult with the Navy ARWG for additional information.

(a) *Vision*

(1) *Visual Acuity, Distant and Near.*

No limits uncorrected. Must correct to 20/50 or better in one eye.

15-100

**Class IV Personnel:
Applicant Active Duty and
DON/DoD-GS Unmanned Aircraft
Systems (UAS) Operator Standards
[Air Vehicle Operators (AVO),
Sensor Operators (SO), Mission
Payload Operators (MPO),
and Unmanned Aircraft
Systems Commanders (UAC)]**

Note: Civilian contract operators must abide by their individual contracts.

(1) Physical standards vary by vehicle operating characteristics. Please see the U.S. Navy Aeromedical Reference and Waiver Guide, Chapter 1, Aviation Physical Standards, for all details.