

**Section IV**

**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.nomi.med.navy.mil/Nami/WaiverGuideTopics/index.htm>).

**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 three 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 designated naval aviators or Student Naval Aviators including Naval Flight Officers (NFO), technical observers, Naval Flight Surgeons (NFS), Aerospace Physiologists (AP), 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 (ATCs), Unmanned Aerial Vehicle (UAV) operators, flight deck, and flight line personnel.

(d) **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.

(e) **Aviation Designated Foreign Nationals.** The North Atlantic Treaty Organization and the Air Standardization Coordinating Committee have agreed that the following items remain the responsibility of the parent nation (nation of whose armed forces the individual is a member):

(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 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.

(6) More detailed information is located in the ARWG.

(f) Certain nondesignated 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 OPNAVINST 3710.7 series (Naval Air Training and Operating Procedures Standardization (NATOPS) General Flight and Operating Instructions) and shall be used to evaluate these personnel.

(2) Designation or redesignation as student (SNA, SNFO, SNFS, etc.) shall not occur prior to certification of physical qualification (PQ or NPQ/WR favorable BUMED endorsement of a Naval aviation applicant physical examination), and favorable endorsement of anthropometric qualification by cognizant line authority.

**15-64**

**Authorized  
Examiners**

(1) The aviation medical examination shall 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.

**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 Headquarters, U.S. Marine Corps (HQ/USMC) prior to a disqualified member assuming flight duties. See disposition of personnel found NPQ, article 15-79 below.

**15-65**

**Applicant, Student,  
and Designated  
Standards**

(1) Physical standards for SNA become Class I standards at the time of designation (commissioning) or redesignation as SNA; prior to that point in time SNA applicant physical standards shall apply. Physical standards for SNFO become designated NFO standards at the time of designation (commissioning) or redesignation as student flight officer (SNFO); prior to that point in time NFO applicant physical standards shall apply. Physical standards for applicants to other Class II and III communities transition from applicant to "designated" when orders to training are released from NAVPERSCOM or HQ, USMC.

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

(1) *Aeronautically Adaptable (AA)*. A member's aeronautical adaptability is assessed by a naval flight surgeon 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 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 SF 88 block 46 or DD 2808 block 74a shall 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 waiverable 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.nomi.med.navy.mil/Nami/WaiverGuideTopics/index.htm/> or request electronic copies from the Naval Aerospace Medical Institute, Attn: NAVAEROMEDINST, Code 342, 340 Hulse Road, Pensacola, FL 32508.

**15-70****Examination  
Frequency and  
Period of Validity**

(1) **Frequency.** As described in the OPNAVINST 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 3-month 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) shall comply with these frequency requirements as well as those specified by Bureau of Naval Personnel (BUPERS) or Commandant, Marine Corps (CMC) waiver approval

letters. Follow the OPNAVINST 3710.7 series, "flight personnel delinquent in receiving an aviation physical examination shall not be scheduled to fly unless a waiver has been granted by BUPERS/CMC."

(2) **Validity.** Aviator annual or periodic examinations expire on the last day of the birth month regardless of when the previous required examination was completed.

(a) If an applicant has not commenced aviation preflight indoctrination within 2 years (24 months) 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 shall apply.

(b) If an applicant has not commenced Air Traffic Control or other aircrew qualification training within 2 years (24 months) 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 2807-1, SF 93, or NAVMED 6120/2, as appropriate, and a physical examination recorded on the DD 2808 or SF 88. Applicants must also submit SF 507, Continuation of DD 2807 or SF 93, and anthropometric data. This examination must be typed or completed by electronic or Web-based tools.

(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 shall be entered on NAVMED 6410/10.

- (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 shall 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, but should include a personal introduction to their flight surgeon, 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 the Aerospace Physical Qualifications Physical Exam Disposition Web site 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 shall include:**

- (a) The results of the evaluation, entered on the SF 600, with statement of qualification for assigned flight duties (PQ, NPQ, or waiver status).
- (b) Updating the Adult Preventive and Chronic Care Flowsheet (DD 2766).
- (c) Disposition entry on the NAVMED 6150/2, Special Duty Medical Abstract.
- (d) A new Aeromedical Clearance Notice (NAVMED 6410/2) or Grounding Notice (NAVMED 6410/1). 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 and issued a clearance notice prior to returning to aviation duties. The only exception to this 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 shall be evaluated by a flight surgeon prior to resuming flight duties. The extent of the evaluation shall be determined by the flight surgeon. If a disqualifying condition is discovered, a request for waiver of standards shall be submitted.

The reason for the hospitalization and the result of the evaluation shall be recorded on the Special Duty Medical Abstract (NAVMED 6150/2). If found qualified, an Aeromedical Clearance Notice (NAVMED 6410/2) shall 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 shall be submitted to BUMED regardless of whether a new or existing disqualifying defect is noted.

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

(1) *Aeromedical Clearance Notice (NAVMED 6410/2)*. This form is the means to communicate to the aviation unit's commanding officer recommendations for fitness to fly and clearance for high- and moderate-risk training such as aviation physiology and water survival training. It is issued (with copies to the member and the unit safety or the NATOPS officer) after successful completion of an aviation physical, or after return to flight status following a temporary grounding. A corresponding health record entry shall be made on the NAVMED 6150/2, Special Duty Medical Abstract. It shall 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. Examiners authorized per article 15-64 above are the only personnel normally authorized to issue a NAVMED 6410/2 Aeromedical Clearance Notice. In remote locations, where the services of the above medical officers are not available, any specifically designated MDR may issue a NAVMED 6410/2, Aeromedical Clearance Notice in consultation with an aviation qualified medical officer. An Aeromedical Clearance Notice 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.

(2) *Aeromedical Grounding Notice (NAVMED 6410/1)*. This form is the means to communicate recommendations for fitness to fly to the aviation unit's commanding officer. All aviation personnel admitted to the sick list, hospitalized, or determined to have a medical problem that could impair performance of duties involving flight shall be issued an

Aeromedical Grounding Notice. All medical department personnel (corpsmen, Nurse Corps officers, etc.) are authorized to issue an Aeromedical Grounding Notice. An entry shall also be made in the member's health record on the Special Duty Medical Abstract (NAVMED 6150/2). This Aeromedical Grounding Notice shall remain in effect until the member has been examined by a flight surgeon and issued an Aeromedical Clearance Notice.

(a) Dental officers are authorized to issue a self limited Aeromedical Grounding Notice when a member on flight status receives a local anesthetic only.

(b) Administration of routine immunizations, which require temporary grounding, does not require issuance of an Aeromedical Grounding Notice.

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

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

**15-78****Submission of  
Examinations for  
Endorsement**

(1) *Required Exams*. The following physical examinations shall be submitted for review and endorsement to: Naval Operational Medicine Institute, Attn: NAMI Code 342, 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 2808 or SF 88 (Long Form) or NAVMED 6410/10 (Short Form)

including renewal or continuation of waivers for designated aviators following the ARWG requirements.

(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 2808 or SF 88. On the DD 2808, blocks 1-16 and 77-85 must be completed at a minimum and include all pertinent information. On the SF 88, blocks 1-17 and 42-47 must be completed at a minimum and include all pertinent clinical information.

(e) Following a medical grounding in excess of 60 days, a focused physical examination is required. Submission should include 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 flight surgeon 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) 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), an SF 88/SF 93 or a DD 2807/2808 with appropriate flight surgeon'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 2808 or SF 88 signed by the flight surgeon.

(2) The original handwritten DD 2807 or SF 93 or NAVMED 6120/2. The examining flight surgeon must comment on all positive responses and indicate if the condition is considered disqualifying or not considered disqualifying. The following shall be added to DD 2807 or an SF 93 or NAVMED 6120/2: "Have you ever been diagnosed with or received any level of treatment for alcohol abuse or dependence?"

(3) An SF 507, Continuation of SF 93, Aeromedical Applicant Questionnaire, shall 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 Timeliness**

(a) Annual examinations and other waiver provisions must be submitted to NAMI Code 342 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 CMC waiver.

(b) If submission is delayed, a 90-day extension may be requested from NAMI Code 342 by submitting an interval history and the proposed timeline for complying with waiver requirements.

**15-79****Disposition of Personnel Found NPQ**

(1) **General.** When aircrew do not meet aviation standards and are found NPQ, they may request a waiver of physical standards following OPNAVINST 3710.7 series and the Aeromedical Reference and Waiver Guide. In all cases, NAMI Code 342 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 shall 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 shall be submitted for BUMED endorsement, along with a waiver request if desired. 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 abuse or dependence 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 initiative to request or recommend a waiver will be taken by BUMED; the Commanding Officer, Naval Reserve Center; CMC; or NAVPERSCOM. In no case will this initiative be taken without informing the member's local command.

(e) All waiver requests shall 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 or by higher authority.

(3) The LBFS will consist of at least three medical officers, two of whom shall be flight surgeons.

(4) The LBFS's findings shall 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 shall 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 shall submit their reports within 10 working days to NAMI Code 342 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 an Aeromedical Clearance Notice pending final disposition of the case by NAMI Code 342 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 Aeromedical Clearance Notice shall expire no greater than 90 days from the date of the LBFS report.

(6) An LBFS shall not issue an Aeromedical Clearance Notice 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 shall not issue a Clearance Notice if the member currently holds a grounding letter issued by NAVPERSCOM or CMC stating that a waiver has previously been denied.

## **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 requested merely to challenge a physical standard or disqualification without evidence of special circumstances. Requests to convene a Special Board of Flight Surgeons for applicants are not routinely granted.

(3) Requests are directed to the OIC via the Director for Aeromedical Qualifications, (Code 342). The request shall include member's name, rank, 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 the member's written consent, the request shall 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.

**15-82****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 shall consist of a minimum of five members, three of whom shall be flight surgeons, and one of whom shall be a senior line officer as assigned by CNO (N78) or CMC. The presiding officer will be the Deputy Chief, BUMED, Operations assisted by the Director, Aerospace Medicine.

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

(4) The medical recommendations of this Board shall be final and shall be forwarded to NAVPERSCOM 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 shall be considered disqualifying for all aviation duty.

(1) **Blood Pressure and Pulse Rate.** These measurements shall 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 shall 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 shall 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 shall 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 lenses wear is authorized for ametropic designated aviation personnel of all classes as well as Class II and Class III applicants.

(4) SNA applicants whose uncorrected distant visual acuity does not exceed 20/400 may be eligible for a waiver authorizing use of contact lenses correction. SNA applicants whose uncorrected visual acuity exceeds 20/400 will not be waived for contact lenses use.

(5) The Aeromedical Reference and Waiver Guide provides additional guidelines and information required in support of contact lenses-related waivers.

(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) History of lens dislocation or displacement.

(10) 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.

(11) Defective color vision as evidenced by failure of FALANT/OPTEC or pseudo isochromatic plates (PIP), except for aviation physiology technicians.

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

(13) Eye surgery or any manipulation to correct poor vision such as radial keratotomy, photorefractive keratectomy, LASIK, intracorneal ring implants, orthokeratology (Ortho-K), or eye rubbing to reshape the cornea. Due to the Navy's progress with corneal refractive surgery, see the Aeromedical Reference and Waiver Guide 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 post-prandial 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 those conditions listed in article 15-58, the following conditions are disqualifying:

(a) History of Axis I diagnosis meeting current Diagnostic and Statistical Manual (DSM) criteria.

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

(2) Substance-related disorders. Aviation specific guidelines regarding alcohol abuse and alcohol dependence are outlined in BUMEDINST 5300.8 series.

(b) History of Axis II personality disorder diagnoses meeting current DSM criteria. 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 OPNAVINST 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.** 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) shall 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) Stereo booklet (Titmus Fly or Randot): 40 arc second circles.

(3) Verhoeff: 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) FALANT or OPTEC 900: 9 of 9 correct on the first trial or, if any are missed, at least 16 of 18 correct on the combined second and third trials.

(2) PIP color plates (Any red-green screening test with at least 14 diagnostic plates; see manufacturer instructions for scoring information), randomly administered under Macbeth lamp: scoring plates 2-15, at least 12 of 14 correct.

(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) **Fecal Occult Blood Testing.** required annually age 50 and older or if personal or family history dictates. Digital rectal exam is not required.

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

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

(8) **Alcohol abuse or dependence statement.** DD 2807 or SF 93 or NAVMED 6120/2, as appropriate. The following statement shall be added: "Have you ever been diagnosed or had any level of treatment for alcohol abuse or dependence?"

# 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 Goodlite eye chart. Vision testing procedures shall 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 shall 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.* 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 or history of speech therapy or facial fracture. See article 15-95 for text.

(4) *DD 2807 or SF 93.* The SF 507, Continuation of SF 93, shall 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 (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 Goodlite 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.* NOHOSH.

(4) *Depth Perception.* Not Required.

(5) *Slit Lamp Examination.* Required.

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

(c) *Reading Aloud Test.* Required if speech impediment exists or history of speech therapy or facial fracture. See article 15-95 for text.

(d) *The SF 507, Continuation of SF 93, Aeromedical Applicant Questionnaire.* This form shall be completed and signed by the applicant.

**15-89**

**Class II Personnel:  
Designated Naval Flight  
Surgeon, 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 Goodlite 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.* NOHOSH.

(4) *Depth Perception.* Not Required.

**15-90**

**Class II Personnel:  
Applicant Naval Flight  
Surgeon, 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 Goodlite letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(2) *Refraction.* No limits.

(3) *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 Goodlite 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.* NOHOSH.

(4) *Depth Perception.* Not required.

(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 Goodlite 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.* 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**

(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 Goodlite letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

(2) *Refraction.* No limits.

(3) *Depth Perception.* Not required.

(4) *Color Vision.* Not required.

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

(c) *Age.* Applicants must be less than 32 years of age.

(d) *Sinus X-rays.* Applicants must submit sinus films to NAMI Code 342 with initial physical examination.

**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) Cholecystectomy, once resolved.

(k) Hyperuricemia.

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

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

(n) Recurrently dislocating shoulder.

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

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

(q) Fracture or dislocation of cervical spine.

(r) Cervical fusion.

(s) Thoracolumbar fractures.

(t) History of craniotomy.

(u) History of decompression sickness.

(v) Anthropometric standards do not apply.

(w) 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 shall be examined in military MTFs, by a naval flight surgeon, 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 Goodlite letters are used, a score of 7/10 on the 20/20 line constitutes meeting visual acuity requirements.

**(2) Phorias.** NOHOSH.

**(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.* The “Banana Oil” test is required for all applicants and other aviation personnel as clinically indicated.

“You wished to know about my grandfather. Well, he is nearly 93 years old; he dresses himself in an ancient black frock-coat, usually minus several buttons; yet he still thinks as swiftly as ever. A long, flowing beard clings to his chin, giving those who observe him a pronounced feeling of the utmost respect. When he speaks, his voice is just a bit cracked and quivers a trifle. Twice each day he plays skillfully and with zest upon our small organ. Except in winter when the ooze of snow or ice is present, he slowly takes a short walk in the open air each day. We have often urged him to walk more and smoke less, but he always answers “Banana Oil.” Grandfather likes to be modern in his language.”

(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’s evaluation shall be performed prior to returning to ATC duties. NAVMED 6410/2 shall 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:  
Designated and  
Applicant Unmanned  
Aerial Vehicle  
Operator Standards  
(Internal Pilot,  
External Pilot,  
Payload Operator)**

(1) Officers who maintain their aviation designators (pilot or NFO) must continue to meet the appropriate standards of their designation. USMC non-aviation designated officers or Navy officers no longer qualified for their previous aviation designator shall meet the same standards as external operators. All unmanned aerial vehicle operators must meet the same standards as ATCs, except:

(a) *Vision*

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

(2) *Phorias.* Must meet Class I standards.

(3) *Depth Perception.* Must meet Class I standards. Those who fail will be restricted to payload operator or internal pilot only.

(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.



**15-97**

**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 Unit 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 NAVPERS-COM submission or endorsement is required. 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 Goodlite 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.

**15-98**

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

(1) This paragraph includes all personnel not defined as critical. Frequency of screening is annual. 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.

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*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.*

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**15-99**

**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, shall be examined annually to determine visual standards qualifications. Record results in the member's health record. 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 Goodlite 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 (NOHOSH).

## 15-100

### Selected Passengers, Project Specialists, and Other Personnel

(1) Refer to OPNAVINST 3710.7 series. When ordered to duty involving flying for which special requirements have not been prescribed, personnel shall, 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 NAVMED 6410/2 issued if qualified. The examination shall 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 shall 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 shall be found fit to fly unless fit to undergo the training required in OPNAVINST 3710.7 series, for the aircraft or mission.

(a) *Vision*

(1) *Visual Acuity, Distant and Near.* No limits uncorrected. Must correct to 20/50 or better in one eye.

## 15-101

### Naval Aviation and 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 Goodlite 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, manic-depression, 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 and will be examined per the requirements of their aviation designation. Waiver requests will be processed following article 15-79.

## 15-102

### Diving Duty Examinations and Standards

(1) **Purpose.** Personnel whose duty exposes them to a hyperbaric environment must conform to the physical standards for Diving Duty. Such personnel include, US Navy Divers, those engaged in hyperbaric chamber duty (clinical, research, and recompression), hyperbaric sonar dome work, ship/boat divers, and candidates for similar duty that are trained in a U.S. Navy program (including Army OOB (diver) and Army and Air Force special operations). Compartment workers who are submariners and have a current medical examination filed in their health record will be considered qualified for hull containment testing, non-submariners or divers will require a diving duty medical examination. Special Warfare (SEAL) and Special Operations (EOD, Marine Force Recon) personnel who are Navy divers will follow the standards in article 15-105.

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*Note. The physical qualification standards for diving duty are a combination of standards required for initial acceptance into active duty and the additional standards listed in this chapter. Personnel on diving duty (designated Navy divers) must continue to meet this combined set of physical qualifications for continued diving duty service.*

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(2) It is therefore critical that the undersea medical officer (UMO), medically evaluating fitness for diving duty, be familiar with the physical standards required for initial acceptance for active duty in addition to the standards listed below.

(3) Waivers for initial application or continuance of duty may be requested if a disqualifying condition exists. The waiver request is routed from the attending UMO to NAVPERSCOM via the type commander (TYCOM) medical officer and BUMED Undersea Medicine and Radiation Health. Appropriate documentation for the waiver request includes:

(a) A special SF 600, prepared by the UMO, requesting the waiver referencing the specific standard for which the member is NPQ, a clinical synopsis including brief history, focused examination, clinical course, appropriate ancillary studies,

and appropriate specialty consultation, followed by a recommendation of "waiver recommended" or "waiver not recommended" with supporting rationale. An interim waiver can be requested via TYCOM Force Medical Officer from BUMED by e-mail.

(b) Endorsement by the member's commanding officer.

(c) Documentation of pertinent studies supporting the waiver or recommending disqualification (it is necessary to attach actual study results).

(d) Specialty consult supporting the waiver or recommending disqualification.

(4) A Diving Medical Examination (DME) will consist of a completed Medical History (DD 2807-1) and Medical Examination (DD 2808) with special attention to organ systems which affect the member's ability to safely function in underwater and various pressure environments.

#### (5) *Frequency of Examinations*

(a) The DME is performed on candidates when applying for initial diving duty. The anniversary examination is performed on designated divers at birth date at ages 20, 25, 30, 35, 40, 45, 50, and annually thereafter, and in support of waiver requests when a diver's physical condition requires a finding of NPQ for diving duty.

(b) All members on diving duty will have annual periodic health assessment (PHA) to maintain diving duty qualifications. This will include recommended preventive health examinations. For designated divers, the annual PHA will include documentation of skin cancer screening. Additionally, all designated divers require surveillance of hearing by having an audiogram performed at a minimum of every 5 years. If at any time a persisting significant threshold shift is documented, follow-up per occupational health and audiology requirements is mandated and surveillance must occur at a minimum of every 2 years. When a member's hearing falls outside the diving duty standards, a waiver must be pursued.

(6) *DMEs will be performed by one of the following:*

(a) A medical officer who has successfully completed the UMO course at the Naval Undersea Medical Institute (NUMI) and includes the diving medical officer (DMO) course given at the Navy Diving and Salvage Training Center (NDSTC). This officer will carry the secondary specialty code for UMO.

(b) Any Navy credentialed physician or other health care provider (see article 15-4) may perform a DME, but it must be reviewed and countersigned by a credentialed UMO (see article 15-102(6)(a) above).

(7) All applicants for initial and advanced dive training must have a valid MILPERS 1220 Exhibit 8, U.S. Military Diving Medical Screening Questionnaire, completed and signed by a UMO no later than 1 month prior to actual transfer to dive training. This document serves as an interval medical history from the time the original DD 2807-1/2808 were completed until time of transfer for accession to training in basic and advanced diving duty, as well as medical record screening for any missed or new condition that may be considered disqualifying (CD). Any condition found to be CD that has not been properly addressed previously, needs to be resolved *prior* to the member's transfer to dive training. The Exhibit 8 should be added to the member's medical record.

#### (7) *Diving Duty Standards*

(a) *General.* Any disease or condition that causes chronic or recurrent disability for duty assignment or has the potential of being exacerbated by the hyperbaric environment or diving duty is disqualifying.

#### (b) *Ear, Nose, and Throat*

(1) Chronic Eustachian tube dysfunction or inability to equalize middle ear pressure is disqualifying.

(2) Any persistent vertigo, disequilibrium, or imbalance with inner ear origin is disqualifying.

(3) Maxillofacial or craniofacial abnormalities precluding the comfortable use of diving headgear including headgear, mouthpiece, or regulator is disqualifying.

(4) Hearing in the better ear must meet standards for initial acceptance for active duty. While not disqualifying for diving duty, unilateral high-frequency hearing loss should receive appropriate otology evaluation and surveillance monitoring.

(5) Designated divers with full recovery from either tympanic membrane perforation or acute sinusitis may be reinstated at the discretion of the UMO.

**(c) Eyes and Vision**

(1) All Divers must have a minimum corrected visual acuity of 20/25 in one eye.

(2) Minimum uncorrected visual acuity:

(a) DMO, basic diving officer, self contained undersea breathing apparatus (SCUBA) divers, hyperbaric exposure non-diver qualified: +/- 8.00 diopters.

(b) Second Class diver, Navy Hospital Corpsman (NEC 8403-8427) assigned to diving duty, Army 21 series, Army or Air Force special operations: 20/20 in each eye.

(3) History of refractive corneal surgery is not considered disqualifying. However, candidates must wait 3 months following their most recent surgery (PRK or LASIK), have satisfactory improvement in visual acuity, and be fully recovered from any surgical procedure. A designated diver must wait 1 month post-LASIK/PRK and be fully recovered from any surgical procedure with satisfactory improvement in their visual acuity prior to resumption of diving.

(4) Orthokeratology lasting 6 months after cessation of hard contact lens wear is disqualifying.

(5) Lack of adequate color vision is disqualifying. See article 15-36(1)(d). Waivers will be considered on a case-by-case basis.

**(d) Pulmonary**

(1) Spontaneous pneumothorax is disqualifying.

(2) Traumatic pneumothorax (other than that caused by a diving-related pulmonary barotrauma) is disqualifying. A waiver request will be considered for a candidate or designated diver after a period of at least 6 months and must include:

(a) Normal pulmonary function testing.

(b) Standard, non-contrast chest CT.

(c) Favorable recommendation from a pulmonologist.

(d) Final evaluation and approval by attending UMO.

(3) Chronic obstructive or restrictive pulmonary disease is disqualifying.

(4) Candidates and designated divers undergoing drug therapy for a positive purified protein derivative (PPD) must complete a full course of INH therapy prior to the start of diver training or reinstatement to diving duty.

(5) Diving-related pulmonary barotrauma:

(a) Designated divers who experience mediastinal or subcutaneous emphysema following a violation of procedure are NPQ for diving duty for 1 month. They may be returned to diving duty following completion of the waiver process via BUMED to NAVPERS, if the diver is asymptomatic and is determined to have a normal, standard, non-contrast chest CT.

(b) A history of pulmonary barotrauma in a diver candidate is disqualifying. Designated divers who experience a pulmonary barotrauma following a dive with no procedural violations or a second episode of pulmonary barotrauma, are considered disqualified for diving duty. A waiver request will be considered if the diver is asymptomatic after 1 month and must include:

1. Pulmonary function testing.
2. Standard, non-contrast chest CT.
3. Favorable recommendation from a pulmonologist.
4. Evaluation by a UMO.

(e) **Skin.** Skin cancer or severe chronic or recurrent skin conditions exacerbated by sun exposure, diving, the hyperbaric environment or the wearing occlusive attire (e.g., a wetsuit) are disqualifying.

(f) **Gastrointestinal.** Current Section III standards, except:

(1) Gastroesophageal reflux disease that does not interfere with, or is not aggravated by, diving duty is not considered physically disqualifying.

(2) Designated divers with full recovery from acute infections of abdominal organs may be reinstated at the discretion of the UMO.

(3) Designated divers with a history of symptomatic or bleeding hemorrhoid may be reinstated at the discretion of the UMO.

(4) Designated divers with full recovery from abdominal surgery (including hernia repair) may apply for a waiver via the BUMED Director for Undersea and Special Operations to NAVPERS after 3 months of post-operative recovery.

(5) Gastric bypass surgery is disqualifying.

(g) **Genitourinary**

(1) Abnormal gynecologic cytology without evidence of invasive cancer requires appropriate evaluation and treatment, but is not considered disqualifying for diving duty. Invasive cancer is disqualifying.

(2) Designated divers with full recovery from acute infections of genitourinary organs may be reinstated at the discretion of the UMO.

(3) Pregnancy is CD for diving duty upon diagnosis. Post-partum members are eligible for diving duty at 6 months post spontaneous vaginal

delivery or caesarian section. Return to earlier duty requires waiver request via the BUMED Director for Undersea and Special Operations and NAVPERS.

(h) **Chronic Viral Infections.** Such as chronic hepatitis B, hepatitis C, or HIV are disqualifying. Chronic viral infections not associated with development of cancer (e.g., herpes simplex) are not disqualifying.

(i) **Dental**

(1) Any defect of the oral cavity or associated structures that interferes with the effective use of an underwater breathing apparatus is disqualifying.

(2) All divers must be DOD dental class 1 or 2 for diving duty.

(j) **Musculoskeletal**

(1) Any musculoskeletal condition that is chronic or recurrent which predisposes to diving injury, limits the performance of diving duties, or may confuse the diagnosis of a diving injury is disqualifying.

(2) Long bone pain in saturation or career divers should be aggressively evaluated with appropriate imaging. Any history, documentation, or x-ray finding of osteonecrosis involving articular surfaces is permanently disqualifying. Shaft involvement requires a waiver and annual longitudinal follow-up.

(3) Any fracture (including stress fractures) is disqualifying if it is less than 3 months post injury, and if there are any residual symptoms. Designated divers with full recovery from uncomplicated fractures with no residual pain may be reinstated at the discretion of the UMO.

(4) Bone or joint surgery is disqualifying if it is within 6 months and if there is any significant or functional residual symptoms. Retained hardware is not disqualifying unless it results in limited range of motion.

(k) **Psychiatric**

(1) Any Axis one or two DSM IV diagnosis is disqualifying until waiver is obtained by adjudication from NAVPERS via the BUMED Director for Undersea and Special Operations. Treatment of any emotional, psychologic, behavioral, or mental dysfunction should be completed and the

diver asymptomatic before return to duty is supportable by a waiver. No time limit is required post treatment but the recommendation of the attending mental health professional of fitness for full duty and concurrent assessment of fitness for duty by the attending undersea medical officer is sufficient to begin the waiver process. Use of psychotropic medication for any purpose including those that are not psychiatric such as smoking, migraine headaches, pain syndromes, is not prohibited with diving duty but should be approved by the attending undersea medical officer and master diver.

(2) Diagnosis of alcohol dependency will result in disqualification until successful completion of a treatment program and a 1-year aftercare program. A diagnosis of alcohol abuse or alcohol incident will result in disqualification from diving duty until all recommended treatment or courses mandated by the member's current commanding officer and/or SARP have been fully completed. The attending UMO will document assessment on fitness to return to diving duty and submit a waiver request package via the BUMED Director for Undersea and Special Operations to NAVPERS.

#### (l) *Neurological*

(1) Idiopathic seizures are disqualifying, except febrile convulsions before age 5. Two years of non-treated seizure-free time is necessary before a waiver will be considered. Seizures with known cause may be returned earlier to duty by waiver.

(2) Syncope, if recurrent, unexplained, or not responding to treatment is disqualifying.

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*Note. All DMEs require documentation of a full neurologic examination and tympanic membrane mobility in blocks 44 and 72b respectively on DD 2808.*

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#### (m) *Decompression Sickness/Arterial Gas Embolism*

(1) In diving duty candidates, any prior history of decompression sickness or arterial gas embolism is CD, and requires a waiver.

(2) Designated divers diagnosed with *any* decompression sickness (including symptoms of joint pain or skin changes) shall:

(a) Have an entry made in their medical record and signed by the attending UMO describing the events and treatment of the injury.

(b) Be evaluated by a cardiologist for the presence of a patent foramen ovale (PFO) with the results documented in the medical record.

(3) Designated divers diagnosed with AGE or DCS type II presenting with neurological, pulmonary or shock symptoms will be disqualified for diving duty pending NAVPERSCOM adjudication via BUMED Undersea Diving.

(a) Obtain brain +/- spine MRI (which ever is indicated) once the diver's condition is stabilized within 1 week from the time of the injury.

(b) If initial magnetic resonance imaging (MRI) is negative, and the diver had complete relief of symptoms following treatment, the diver can be returned to duty in 30 days following documentation in the service members record details of the clinical presentation, subsequent resolution of the injury, and interim waiver for return to duty by BUMED Undersea Medicine.

(c) If initial MRI shows acute findings, or the diver has residual symptoms following treatment, the diver will remain NPQ for diving duty until a waiver is obtained from NAVPERS for resumption of diving duty. The work up should include, at a minimum:

1. Initial MRI (within 1 week).
2. Follow-up MRI at 1 month.
3. Neurology consult.

#### (n) *Miscellaneous*

(1) The current use of bupropion for tobacco cessation is not disqualifying for diving duty, but attending UMO needs to put a note in the medical record authorizing continued diving duty while the service member is taking the medication.

(2) Qualified divers or candidates for diving duty are NPQ for diving duty when they are taking INH for positive PPD testing. Waiver to return to diving duty must be obtained.

**(8) Special Studies**

(a) For candidates applying for initial dive duty and for designated divers undergoing anniversary physical examinations, the following special studies are required in support of DD 2808, and must be completed within the following timeframes:

(1) Within 3 months of the exam date:

(a) Chest x-ray (PA and lateral).

(b) Electrocardiogram.

(c) Audiogram.

(d) Dental Class (must be Class I or II).

(e) PPD.

(f) Vision (visual acuity, manifest refraction if uncorrected distant or near visual acuity is less than 20/20, field of vision, IOP if >40YO, color vision testing following article 15-36(1)(d)).

(g) CBC.

(h) Urinalysis.

(i) Fasting blood glucose.

(j) Hepatitis C screening.

(2) Any time prior to dive training (do not repeat for retention physicals):

(a) Blood type.

(b) G6PD.

(c) Sickle cell.

(b) In addition to BUMEDINST 6230.15 series (Immunization and Chemoprophylaxis) requirements, all diver candidates and designated divers must be immunized against both Hepatitis A and B. Diver candidates must have two doses of Hepatitis A immunization and at least the first two out of three doses of Hepatitis B immunization prior to the start of diver training.

**15-103****Nuclear Field Duty  
(Nuclear Power/Nuclear  
Weapons) Examinations  
and Standards**

(1) These standards are to ensure personnel are qualified for the Naval Nuclear Power Program (NNPP) and the Naval Nuclear Weapons Program. Service members qualified as submariners or surface warfare or any other duty should also have nuclear field duty listed for purpose on the SF 2808 and SF 2807-1 when they are candidates for training in the NNPP. All candidates for qualification in nuclear field duty must have their completed examinations reviewed and signed by an UMO. To ensure that all qualified nuclear field duty service members and applicants for this special duty have the same interpretation of these standards, regardless of geographic command location, to ensure that data can be compiled, trended, and researched effectively about the population as a whole, and to provide a single entry and exit point from this special duty, all disqualification and waiver of these standards will follow the chain of command to NAVPERSCOM via BUMED, Undersea Medicine. The service member must be qualified by recurrent examination every 5 years from his initial examination. This examination may be concurrent with the Radiation Health examination, but is not a substitute. The Radiation Health examination can not be an addendum of this examination.

(2) **Additional Standards.** Applicants must meet the general duty standards and those listed in article 15-104. For emphasis the following are noted as cause for disqualification from nuclear field duty:

(a) **Hearing.** Demonstrated inability to communicate and perform duty.

(b) **Vision.** Defective color vision is disqualifying (see article 15-36(1)(d)). Waivers will be considered on a case-by-case basis. Waiver submission requests must include a statement from the member's supervisor stating that the service member is able to perform his job accurately and without difficulty.



(c) **Psychiatric Disorders.** Because of the potential for misuse of Naval Nuclear Power Program or nuclear weapons resources, the psychological fitness of applicants must be carefully appraised by the examining physician. Service members (candidates) with below average intelligence, claustrophobia, history of personal ineffectiveness or general inability to do their duty, history of difficulties in interpersonal relations, lack of adaptability, personality disorders, unhealthy motivation for nuclear power duty or aversion toward nuclear power and/or nuclear weapons will be disqualified from nuclear field duty.

(1) Any prospective or qualified nuclear field duty service member diagnosed by a psychiatrist or clinical psychologist with organic mental disorders, schizophrenic disorders, paranoid disorders, psychotic disorders, major affective disorders, anxiety disorders, somatoform disorders or disassociative disorders will be recommended for nuclear field duty disqualification at the time of initial diagnosis.

(2) Personality disorders are disqualifying. If, in the opinion of the command, the attending UMO, and the mental health professional, the disorder will compromise the safety of the individual or another crew member, removal from nuclear field duty should be accomplished via appropriate administrative means. If a member is disqualified from nuclear field duty administratively, BUMED, Undersea and Special Operations must be advised.

(3) Disposition of personnel with suicidal ideation, gesture, or attempts shall be based on the underlying condition, as described above and determined by the cognizant attending physician and mental health professional. All cases of suicidal ideation, gesture, or attempt will be reviewed by the attending UMO chain of command and BUMED Undersea and Special Operations. It must be stressed that any consideration for return to duty in these cases must address the issue of whether the service member, in the written opinions of the attending physician and the member's commanding officer, can successfully return to the specific stresses and environment of nuclear field duty.

(4) Those personnel with psychiatric disorders such as acute situational stress reactions or adjustment reactions must be evaluated by the attending military physician in conjunction with a specialty psychiatric evaluation. Those cases which resolve completely, within 1 month, and without significant psychotherapy or psychoactive medication for less than a month can be found fit for nuclear field duty by the waiver adjudication process to NAVPERS by request from the attending medical officer, via the TYCOM medical officer, and via BUMED Undersea and Special Operations. Any consideration for return to duty in these cases must address the reasoning as to why 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 nuclear field duty.

(5) Any use of psychotropic medication in the previous year is disqualifying, including the use of psychotropic medications in the treatment of tobacco addiction. Waivers will be considered after a 1-year medical free period.

(6) Completion of the psychiatric portion of the clinical evaluation on the SF 2808 (report of Physical Examination) for a submarine duty physical will be based on a review of the health record for evidence of mental dysfunction and observation of the examinee's appearance, behavior, attitude, emotional expressiveness, thought content, orientation and awareness, memory, and general intellect. Specifically, the individual will be questioned about anxiety associated with tight or closed spaces, difficulty getting along with other personnel, and history of suicidal or homicidal ideation. Attending physician will determine if the history of suicidal or homicidal ideation requires evaluation by specialty examination.

(d) **Personnel Reliability Program (PRP).** Personnel entering the Nuclear Weapons Program must also meet the requirements for the Personnel Reliability Program, SECNAVINST 5510.35 series.

**(e) Migraine Headaches**

(1) A history of migraine headaches that are recurrent and incapacitating, or do not respond to chronic use of medications for control, will be found NPQ by the service member's attending physician. The service member will then have this determination for NPQ status adjudicated by NAVPERS via the TYCOM medical officer and BUMED Undersea and Special Operations. Included in the package for disqualification will be specialty consultation with neurology, and delineation of history of failure despite multiple treatments, and incapacitation to work when suffering the headache.

**(f) Substance Abuse and Use of Illegal Substances and Alcohol**

(1) A diagnosis of substance abuse of any kind is disqualifying.

(2) Current use of illegal substances is disqualifying.

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*Note. Waiver requests should include documentation of successful completion of a treatment program and 1 year of continued sobriety from the time of diagnosis.*

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(2) **Command Responsibility.** The commanding officer of each Navy activity that requires the Radiation Health Program is responsible for complete implementation of the program and must ensure compliance with requirements for physical standards. Visitors to a command, from another command which qualifies individuals for work exposing them to ionizing radiation, are responsible for completion of the visitor's radiation health examination.

(3) **Responsibility of the Occupational Ionizing Radiation Worker.** All personnel assigned to work in an environment with potential exposure to ionizing radiation must report the following to the medical department responsible for their compliance with the radiation health exam:

(a) Any physical condition which the individual feels may make them unable to work in an environment with possible exposure to ionizing radiation.

(b) Any radiation therapy or treatment received.

(c) Any radiopharmaceutical received for diagnosis or treatment.

(d) Any occupational radiation exposure received from other employment outside their usual duties for the command.

(e) Any open wounds or lesions.

(f) Any CT or fluoroscopic medical evaluations.

**(4) Types of Ionizing Radiation Medical Examinations**

(a) **Preplacement Examination (PE).** Prior to assuming work in a Navy command involving potential exposure to ionizing radiation, a service member will receive a preplacement examination following NAVMED P-5055, Chapter 2. However, those service members who are not routinely potentially exposed to ionizing radiation and who are not likely to exceed 0.5 rem per year are not required to have the preplacement examination. These workers, include visitors to the activity, messengers and delivery personnel, emergency response personnel, physicians, corpsmen, dentists, SEAL and explosive ordnance disposal personnel, and ships company and boat crew members whose potential for exposure is

**15-104**

**Occupational Exposure to Ionizing Radiation Examinations and Standards**

(1) **General.** NAVMED P-5055, Radiation Health Protection Manual, is the governing document for the Navy's Radiation Health Protection Program. NAVMED P-5055 provides ionizing radiation exposure limits, dosimetry and individual recording requirements, activity reporting requirements, and medical examination requirements. In all instances, physical examination standards for occupational and non-occupational exposure are determined by NAVMED P-5055. Any divergence between MANMED listed standards and the NAVMED P-5055 is resolved by reliance on the NAVMED P-5055.

minimal. Individuals who do not require the PE, and who receive greater than .5 rem exposure in a calendar year, must have a PE performed 2 weeks after realization that the limit has been exceeded.

(b) **Re-examination (RE).** Service members who are to be continued in routine duties requiring potential exposure to ionizing radiation in the course of their duty assignment must have a radiation medical examination, defined as an RE, every 5 years, within 30 days of their birthday following the year of initial employment.

(c) **Situational Examination (SE).** An SE is ordered by the attending physician for the radiation health program for a service member whenever that service member exceeds 3.0 rem/quarter/year or 5 rem per year. Additional requirements for an SE can be found in NAVMED P-5055, Chapter 4.

(d) **Termination Exam (TE).** All service members who have a history of possible exposure to ionizing radiation, either as a part of their regular duties (occupational worker) or as an occasional exposure in their duty assignment (non-occupational worker), must have a TE when they separate or terminate their active duty employment, and received a replacement examination (PE), when they are permanently removed from the Radiation Health Program, and when they are assigned or transferred to duties no longer involving occupational exposure.

(e) **Other Examinations.** All medical examinations and opinions rendered on behalf of an individual service member shall be brought to the cognizance of the attending physician in support of the service member's radiation health program. This is to coordinate care of the individual by ensuring that the additional examinations, diagnosis, and treatment are not confounded by possible exposure to ionizing radiation. In all cases, U.S. Navy medical personnel will determine whether or not an individual can continue to serve in a duty assignment with possible exposure to ionizing radiation.

#### (5) *Scope of Examination*

(a) The radiation medical examination will be written only on the form NAVMED 6470/13 and will include:

(1) **Medical History.** A focused medical history will include:

(a) History of accidental or occupational exposure to ionizing radiation above Table III limits in NAVMED P-5055.

(b) History of cancer.

(c) History of anemia.

(d) History of radiation therapy.

(e) History of radiopharmaceutical received for therapeutic experimental purposes.

(f) History of work involving handling of unsealed sources.

(g) Family history of cancer. Positive family history of cancer is not considered disqualifying.

(h) Significant illnesses or changes in medical history since the last ionizing radiation medical examination.

(2) **Medical Examination.** The examination will consist of the items described in the Physical Examination blocks of NAVMED 6470/13. The medical examination will place particular emphasis on determining the existence of cancer. A physician with training in the Navy Radiation Health Program will review any medical history or presence of disease states or abnormalities related to the following: history of occupational exposure to ionizing radiation in excess of that allowed by current directives; history of radiation therapy; and medical conditions which may be associated with exposure to ionizing radiation.

(3) **Special Studies.** The required special studies are:

(a) Complete blood count (CBC) that will include a white blood count (WBC) and hematocrit count.

(b) Urinalysis. Urine will be tested for red blood cells using microscopic high-powered field only.

(c) Chest x-ray must be completed within 1 year of the examination. Documentation of the results of the examination must be provided.

(d) Cancer screening of the colon for individuals age 50 and over must be completed within 3 years of the radiation medical examination. Cancer screening of the colon may include fecal occult blood testing, flexible sigmoidoscopy plus barium enema, or a colonoscopy. Documentation of the results of the examination must be provided.

(e) Prostate specific antigen (PSA) test for males age 40 and over.

(f) Cancer screening of the breast for females age 40 and over must be completed within 1 year of the radiation medical examination. Cancer screening of the breast may include a mammography examination by conventional x-ray or magnetic resonance imaging modalities. Documentation of the results of the examination must be provided.

(g) Pap smears for females must be completed within 3 years of the radiation medical examination. Documentation of the results of the examination must be provided. In addition, the following special studies may apply:

1. **Internal Monitoring.** All personnel assigned to duties involving the handling of radioactive material in a form such that they could reasonably be expected to exceed 10 percent of an annual limit on intake (ALI) i.e., .5 rem in 1 year through inhalation, ingestion or absorption will be evaluated for evidence of a partial body burden before and after assignment to such duties, e.g., at the start and completion of a tour involving these duties. Periodic monitoring will be conducted as deemed necessary by the responsible physician or radiation health officer. Additional requirements to perform internal monitoring due to specific work environments will be issued in applicable program radiological controls manuals with Chief, BUMED concurrence or as conditions of radioactive material permits.

2. **Bioassay.** When deemed necessary by the responsible physician or radiation health officer, a bioassay may be performed on body tissues, secretions, and excretions to estimate an exposure from internal contaminants. If a command

lacks the capability to perform appropriate bioassay, a request will be submitted to one of the support facilities designated in NAVMED P-5055, Chapter 3.

3. Additional requirements to perform special examinations due to specific work environments can be provided in the applicable program radiological controls manual with the Chief, BUMED point of contact, Director for Undersea and Special Operations approval.

#### (6) *Standards*

(a) Individuals found not physically qualified based upon these requirements may be re-evaluated at a later date. Unless specified, the following will be cause for rejection or disqualification unless the condition is reviewed and the individual found qualified for radiation work by the BUMED Radiation Effects Advisory Board (REAB) (refer to NAVMED P-5055, article 2-8):

(1) History of cancer.

(2) History of cancer therapy.

(3) History of leukemia.

(4) Open lesions or wounds (including lacerations, abrasions, and ulcerative, eruptive, or exfoliative lesions). These are disqualifying either on a temporary or permanent basis, depending on the condition, for individuals who handle radioactive material which is not hermetically sealed, until such time as the medical department representative or physician considers the wound to be adequately protected from radioactive contamination. Only cases that are considered to be disqualifying on a permanent basis need to be submitted to the REAB for evaluation.

(5) Abnormal blood count:

(a) CBC values outside the normal laboratory ranges will be CD, pending further clinical evaluation. The physician's evaluation of the CBC and his or her requests for other studies or consultations must be directed toward ruling out cancer.

(b) If cancer is determined, the case is to be submitted to the REAB. Otherwise, the physician can medically qualify the individual for radiation work. The basis for a determination of CD

must be given by the responsible physician as a comment in the Summary of Abnormal Findings and Recommendations block of NAVMED 6470/13.

(c) The laboratory used has normal values and they will be used for the Hematocrit and WBC count which must be transcribed on the NAVMED 6470/13.

(6) *Urinalysis.* Document the results of red blood cell (RBC) count only in block 15 of NAVMED 6470/13. If no RBCs are noted, enter "0" (zero).

(a) Red blood cells in the urine greater than three RBCs per high power field will be CD, pending further clinical evaluation. The physician's evaluation of the hematuria and his or her requests for other studies or consultations must be directed toward ruling out cancer. If cancer is determined, the case is required to be submitted to the REAB. Otherwise, the physician can medically qualify the individual for radiation work. The basis for a determination of CD or NCD must be given by the responsible physician as a comment in the Summary of Abnormal Findings and Recommendations block of NAVMED 6470/13.

(7) If an individual has internally deposited radionuclides associated with an intake of 50 percent of an ALI or more in 1 year, i.e., 2.5 rem, the individual shall be disqualified from duties involving occupational radiation exposure pending BUMED review. ALI values for some common isotopes are provided in the NAVMED P-5055, Appendix B.

#### (7) *Special Documentation Requirements*

(a) The following specific requirements will be adhered to in completing NAVMED 6470/13. Local reproduction of this form is authorized:

(1) All radiation medical examinations require a physician's signature and date of review in block 36 of NAVMED 6470/13. This physician is responsible for reviewing the complete medical examination including laboratory and other information to determine qualification. The reviewing physician may be the same as the examining physician.

(2) Records of ionizing radiation medical examination (NAVMED 6470/13) must be signed by a credentialed physician who has received Radiation

Health Program training. Civilian examinations may be signed by the attending physician who has completed radiation health training. Examinations performed by a physician assistant or nurse practitioner must be countersigned by a physician who is trained per above. The reviewing physician's signature also satisfies the countersignature requirement.

(3) For the Summary of Abnormal Findings and Recommendations block of NAVMED 6470/13, any entry concerning an abnormal finding will have an indication of "NCD" or "CD".

(4) The examiner and/or the reviewing physician shall discuss the results of the ionizing radiation medical examination with the examinee, and completion of this discussion shall be documented by the examinee's signature on the NAVMED 6470/13.

(5) The number of RBCs in urine must be documented in the urinalysis block. If no RBCs are noted, enter "0" (zero).

(6) Non-completion of a radiation medical examination must be documented in the Summary of Abnormal Findings and Recommendation block of NAVMED 6470/13 with specific reasons for non-completion.

(7) The physician will assess whether the individual is physically qualified (PQ) or not physically qualified (NPQ) for ionizing radiation work, and document the results of this assessment in the Summary of Abnormal Findings and Recommendation block of NAVMED 6470/13. A summary of the basis for a finding of NPQ for ionizing radiation work shall also be documented in the same block.

(8) The fact that a termination medical examination is required will be entered on the front of the individual's health record jacket or employee medical file as "Termination Radiation Medical Examination Required." Both occupational work service members and non-occupational work service members require TEs.

(9) Results of bioassay and internal monitoring which document monitoring for internally deposited radioactivity will be documented as required in NAVMED P-5055, Chapter 5.

(10) Consultative reports from specialists shall be readily accessible in the patients medical record.

(11) No radiation medical examination report or portion thereof shall be removed from an individual's health record.

**(8) *Validity Periods and Correction of Deficient Examinations***

(a) A medical examination conducted for another purpose may not be upgraded to a radiation medical examination.

(b) Administrative correction for ionizing radiation medical examinations will be made as a single line drawn through erroneous entry, initialed, and corrected entry made. Corrected entries may be made in the Summary of Abnormal Findings and Recommendation block of NAVMED 6470/13 or on an addendum.

(c) Exception to the aforementioned validity period and correction procedures is that the medical examination and health record entries will conform to the standards prescribed at the time of the examination. Clinically upgrading or administratively correcting examinations which were conducted prior to implementing this change is not required.

**(9) *Radiation Effects Advisory Board (REAB)***

(a) The REAB serves to render determination relative to the effects of radiation as an authority established by the Chief, BUMED. The Board may be consulted in an official capacity for reference opinions germane to the Department of the Navy.

**(10) *Reporting Requirements for the REAB***

(a) The following medical examinations and supporting medical documents must be submitted to the BUMED, Director of Undersea Medicine and Special Operations for review by the REAB.

(1) Any finding of cancer.

(2) Findings on a medical history or medical examination of:

(a) History of ionizing radiation exposure or internal deposition in excess of that allowed by NAVMED P-5055, articles 2-4 and 4-3(1)(a).

(b) History of or ongoing cancer therapy.

(c) An intake in excess of 50 percent of an ALI of radioactive material not intentionally administered for medical diagnosis or treatment. A description of the analysis technique must be included with the submission.

(d) Any medical examination or condition which the responsible physician or commanding officer recommends for Chief, BUMED review. Such request for review will not be denied by any member of the chain of command.

(e) All situational examinations.

(f) Allegations or claim by a service member or employee that his or her physical condition was caused by exposure to ionizing radiation.

(b) The REAB will perform a review and determine the individual's fitness for radiation work. The REAB letter must include the reason for submittal, total lifetime exposure of the individual, summary of the individual's duties, and if appropriate the current or disqualifying diagnosis. All cases submitted to the BUMED REAB for review must include a summary letter from the referring physician to the REAB outlining the key elements of the question as well as a recommendation for continuation of exposure to ionizing radiation. In addition, the most recent radiation medical examination and/or supporting medical documentation directly related to the individual's medical condition, including pathology reports and special studies results, consultation reports, and any evaluations performed by the individual's private medical doctor. See NAVMED P-5055, Chapter 2, article 2-9 for documentation requirements for the REAB.

(c) Cases submitted to the BUMED REAB for reconsideration of an individual previously found NPQ by the BUMED REAB due to a diagnosis of cancer must include a current radiation medical examination performed subsequent to the individual completing all prescribed treatment. Additionally, supporting medical documentation must include conclusions by the treating physician and oncologist that the individual is free of cancer. A discussion of the medical procedures and pathology reports that support this conclusion should be provided. Finally, the treating physician's or oncologist's follow-up plan to ensure the worker remains cancer-free should also be provided.

**15-105****Naval Special Warfare and Special Operations (NSW/SO)**

(1) The purpose is to define medical requirements for accession into and continuance of duty for Navy special operations (explosive ordnance and Marine recon) and Naval special warfare (SEAL) and special warfare combat crewman (SWCC). This duty includes, military diving, combat swimming, lock in and lock out diving, free ascent training, breath-hold swimming, basic parachuting, high altitude low opening (HALO) parachuting, military free-fall parachuting, static line rappelling, and special duty qualifying via high risk training. Special operation and special warfare duty are the most physically and mentally demanding communities in the U.S. military, requiring isolated duty under harsh conditions with austere medical capabilities in every part of the world. Only the most physically and mentally qualified personnel should be selected, and those who are or may be reasonably expected to become unfit because of physical or mental conditions must be excluded. Certain disease states and physical conditions are incompatible with accession into and continuance of duty in NSW/SO. The physical qualification standards for diving duty are a combination of standards required for initial acceptance into active duty and the additional standards listed in the chapter on diving duty. This chapter likewise extends the General Standards for accession into military service and must also be met in addition to the more stringent standards below. Personnel on NSW/SO duty must continue to meet this combined set of physical qualifications for continued special duty service. This examination will be repeated within 90 days of the birthday every 5 years after initial qualification for this special duty.

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*Note. The physical qualification standards for diving duty are a combination of standards required for initial acceptance into active duty (MANMED Chapter 15, Section III) and the additional standards listed in the article on diving duty. This chapter extends those standards for diving duty and general standards for those personnel qualifying for NSW/SO. Personnel on NSW/SO duty must continue to meet this combined set of physical qualifications for continued special duty service.*

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(2) The following physical standards were established to support accession into training and continuance of duty without mission compromise or decreased personal safety. Requests for waiver of physical standards for members who do not meet minimum standards must be submitted through the service member's commanding officer via BUMED, Director for Undersea and Special Operations to NAVPERSCOM. It is important that the UMO reviewing and approving fitness for NSW/SO duty be familiar with the physical standards required for initial acceptance for active duty, as well as those required for general diving duty.

(3) The annual PHA is the appropriate mechanism for routine health screening of active duty members, and must likewise be completed for personnel on NSW/SO duty. Additional screening examinations required of those personnel on NSW/SO (beyond those performed as part of an appropriate PHA) are outlined below under Surveillance Examination.

(4) All applicants for initial and advanced dive training and NSW/SO training must have a valid MILPERS 1220 Exhibit 8, U.S. Military Diving Medical Screening Questionnaire, completed and signed by a UMO, no later than 1 month prior to actual transfer to dive training. This document serves as an interval medical history from the time the original DD 2807-1/2808 were completed until the time of transfer for accession to training in basic and advanced diving duty, as well as medical record screening for any missed or new condition that may be CD. Any condition found to be CD that has not been properly addressed previously, needs to be resolved *prior* to member's transfer to dive training. The MILPERS 1220, Exhibit 8 should be added to the member's medical record.

(5) Special duty medical examinations for the following communities can be examined following these standards by any physician, but an UMO must approve and review all examinations. The BUMED Director for Undersea and Special Operations can review and sign physical examinations for accession performed by another credentialed medical provider where a Navy UMO is not proximately available.

- (a) SEAL.
- (b) SWCC.

(c) Non-Navy U.S. candidates and foreign national candidates for SEAL or SWCC duty.

(d) USMC Force Recon.

(e) Explosive Ordnance Disposal.

(6) **Standards.** All NSW/SO duty service members must meet the minimum appointment, enlistment, or induction standards outlined in Chapter 15, Section III (some disqualifying conditions from those standards are repeated below for emphasis). In addition, the following are CD for NSW/SO duty:

(a) **General**

(1) Any disease or condition causing chronic or recurrent disability or frequent health care encounters, increases the hazards of isolation, or has the potential of being significantly exacerbated by extreme weather, stress, or fatigue is disqualifying. In all cases the potential for a condition to disrupt future operations through exacerbation and/or medical evacuation (MEDEVAC) should be considered.

(2) Any disease or condition that may be significantly exacerbated by the hyper/hypobaric environment.

(3) Use of any medication that may compromise mental or behavioral function or limit aerobic endurance is disqualifying. This includes use of psychotropic medications used for any reason i.e., physical illness (e.g., migraine, smoking cessation). Other disqualifying medications will have significant risk of mental or physically impairing side effects or necessitate close monitoring. For initial entry, daily or frequent use of any medication is CD.

(7) The following list of diagnoses is not intended to be all-inclusive. For conditions not listed, the guidance provided in 15-105(6)(a)(1) through 15-105(6)(a) (3) above should be used:

(a) **Ear, Nose, and Throat**

(1) Sleep apnea with cognitive impairment or daytime hyper somnolence is disqualifying.

(2) Vertigo, Meniere's syndrome, or other inner ear disorders of sufficient severity to interfere with satisfactory performance of duties are disqualifying.

(3) Chronic or recurrent motion sickness is disqualifying.

(4) Atresia of more than 25 percent of the external auditory canal.

(5) Any history of middle ear surgery excluding tympanoplasty.

(6) Chronic Eustachian tube dysfunction or inability to equalize middle ear pressure.

(7) Unilateral tinnitus.

(8) Any history of inner ear pathology or surgery, including but not limited to endolymphatic hydrops or true Meniere's disease.

(9) Abnormalities precluding the comfortable use of diving equipment, including headgear, mouthpiece, or regulator.

(10) Any laryngeal or tracheal framework surgery.

(b) **Dental.** All personnel must be dental class 1 or 2 at the time of transfer to NSW duty, including initial training.

(1) Any chronic condition that necessitates frequent episodes of dental care.

(2) Need for any prosthesis or appliance the loss of which could pose a threat to hydration or nutrition.

(3) Any condition, prosthesis, or appliance that interferes with use of underwater breathing apparatus.

(c) **Eyes**

(1) Corrected visual acuity worse than 20/25 in each eye.

(2) Uncorrected visual acuity worse than 20/200 OU.

(3) Deficient color vision following article 15-36(1)(d).

(4) Deficient night vision from any cause.

(5) Loss of depth perception from any cause.



(6) Photorefractive keratectomy (PRK), laser-assisted in-situ keratomileusis (LASIK), or hard contact lens wear for orthokeratology within the preceding 3 months is disqualifying for accession into NSW/SO. Visual result from appliance or surgery must meet the above corrected acuity standards and the patient must be discharged from ophthalmology follow-up with a disposition of "fit for full duty." Qualified NSW/SO service members may return to duty 1 month post refractive corneal surgery if they are fully recovered from surgery and have improved visual acuity.

(7) Intraocular lens implants.

(8) Glaucoma.

(9) Presence of a hollow orbital implant.

(10) Any acute or chronic recurrent ocular disorder which may interfere with or be aggravated by hyperbaric exposure.

(11) Radial keratotomy.

(d) **Pulmonary.** Any chronic or recurring condition which limits capacity for extremely strenuous aerobic exercise in extremes of temperature and humidity including, but not limited to, pulmonary fibrosis, fibrous pleuritis, lobectomy, neoplasia, or infectious disease process, including coccidiosis are disqualifying.

(1) Chronic obstructive or restrictive pulmonary disease, active tuberculosis, reactive airway disease or asthma after age 12, or sarcoidosis. Spontaneous pneumothorax and traumatic pneumothorax for a period of at least 6 months after removal of chest tube are disqualifying. The following are required before starting or resuming duty after recovery from traumatic pneumothorax or chest tube placement:

(a) Normal chest x-ray.

(b) Normal spirometry.

(c) Chest CT.

(d) Fit for diving duty recommendation from a pulmonologist.

(e) Evaluation by a DMO/UMO.

(2) Positive purified protein derivative (PPD) is disqualifying until completion of therapy.

(3) Pulmonary barotrauma is disqualifying with waivers being given following the appropriate waiver procedure above.

(e) **Cardiovascular.** Any condition that chronically or intermittently impairs exercise capacity, causes debilitating symptoms, or poses a risk for same. The following cardiac disorders require waiver submission:

(1) Cardiac dysrhythmia (single episode, recurrent, or chronic) other than 1st degree heart block.

(2) Atherosclerotic heart disease that is untreated.

(3) Pericarditis, chronic or recurrent.

(4) Unexplained or recurrent syncope.

(5) Myocardial damage or hypertrophy of any cause.

(6) Chronic anticoagulant use.

(7) Intermittent claudication or other peripheral vascular disease.

(8) Thrombophlebitis.

(9) Hypertension requiring three or more medications or is associated with any changes in any organ system.

(10) Any history of cardiac surgery other than closure of patent ductus arteriosus in infancy.

(f) **Skin.** Any chronic condition that requires frequent health care encounters, is unresponsive to topical treatment, causes long term compromise of skin integrity, or interferes with the wearing of required equipment, clothing, or camouflage paint. Any condition which may be exacerbated by sun exposure.

(g) **Gastrointestinal.** GI disorders requiring waiver submission include those which compromises nutritional or hydration status, causes recurrent abdominal pain (regardless of etiology), or results in recurrent or chronic vomiting, fecal incontinence, and constipation. The following disorders require waiver submission:

(1) Inflammatory bowel disease, irritable bowel syndrome, malabsorption syndromes.

(2) Cholelithiasis.

(3) Gastric or duodenal ulcers unless asymptomatic, off medication, and on unrestricted diet for at least 2 months.

(4) Recurrent or chronic pancreatitis.

(5) Esophageal strictures requiring more than one dilation.

(6) Chronic hepatitis of any etiology.

(h) **Endocrine and Metabolic.** Any condition requiring chronic medication or dietary modification is disqualifying for accession but may be waivable for designated NSW/SO. Additionally:

(1) History of heat stroke as a single episode is disqualifying for NSW/SO candidates. Recurrent heat stroke is disqualifying for designated NSW/SO personnel.

(2) Diabetes mellitus that requires insulin or gout that does not respond to treatment are disqualifying.

(3) Chronic use of oral corticosteroids is disqualifying.

(4) Two episodes of nephrolithiasis or a single episode due to a chronic metabolic abnormality is disqualifying for accession to duty. Three episodes for designated NSW/SO are disqualifying.

(5) Symptomatic hypoglycemia is disqualifying for accession into NSW/SO. Recurrent episodes are disqualifying for designated NSW/SO personnel.

(i) **Genitourinary.** Urinary incontinence, renal insufficiency, recurrent urinary tract infections, chronic or recurrent scrotal pain is disqualifying.

(j) **Musculoskeletal.** Any condition which limits ability to perform extremely strenuous activities (weight-bearing and otherwise) for protracted periods.

(1) Requirement for any medication, brace, prosthesis, or other appliance to achieve normal function is eligible for waiver package submission after evaluation by a UMO.

(2) Any injury or condition which results in limitations despite full medical and/or surgical treatment is eligible for waiver by attending UMO evaluation.

(3) Any condition which necessitates frequent absences or periods of light duty is disqualifying.

(4) Back pain, regardless of etiology, that is chronically or recurrently debilitating or is exacerbated by performance of duty requires a waiver submission.

(5) Radiculopathy of any region or cause and any history of spine surgery is disqualifying for candidates. Designated NSW personnel may be qualified by attending UMO for duty if symptom free with a normal examination by an orthopedist or neurosurgeon after surgery.

(6) Chronic myopathic processes causing pain, atrophy, or weakness and partial or complete amputation requires a waiver.

(7) For initial training: fracture (including stress fracture) within preceding 3 months or any bone or joint surgery within preceding 6 months is disqualifying.

(8) Any condition which may confuse the diagnosis of a diving injury requires documentation in the medical record.

(9) History, documentation, or radiographic findings of osteonecrosis, particularly dysbaric osteonecrosis requires a waiver.

(k) **Neurologic/Psychiatric.** Any chronic or recurrent condition resulting in abnormal motor, sensory, or autonomic function or in abnormalities in mental status, intellectual capacity, mood, judgment, reality testing, tenacity, or adaptability may be disqualifying and waiver should be sought.

(1) Migraine (or other recurrent headache syndrome) which is frequent and debilitating, or is associated with changes in motor, sensory, autonomic, or cognitive function is disqualifying.

(2) Seizure disorder or history of seizures other than single childhood febrile seizure is disqualifying. A single seizure related to oxygen

toxicity, other toxic exposure, or immediately associated with head trauma requires NPQ NSW/SO until waiver is obtained via BUMED from NAVPERS-COM.

(3) Peripheral neuropathy due to systemic disease is disqualifying. Impingement neuropathy (e.g., carpal tunnel syndrome) is not disqualifying if a surgical cure is achieved. Small, isolated patches of diminished sensory function are not disqualifying if not due to a systemic or central process, but must be thoroughly documented in the health record.

(4) Speech impediments (stammering, stuttering, etc.) that impair communication, any history of surgery involving the central nervous system, and Cerebrovascular disease including stroke, penetrating head injury, transient ischemic attack, and vascular malformation are disqualifying.

(5) Closed head injury is disqualifying if there is:

(a) Cerebrospinal fluid leak.

(b) Intracranial bleeding.

(c) Depressed skull fracture with dural laceration.

(6) Post-traumatic amnesia (PTA) from closed head injury is disqualifying per the following schedule:

(a) PTA less than 60 minutes is disqualifying for at least 1 month. A normal brain MRI and normal examination by a neurologist or neurosurgeon is required before return to duty. If 2 years has elapsed since the injury, MRI is required, neuro specialty consultation is not.

(b) PTA lasting 1 to 24 hours is permanently disqualifying for candidates. Waiver may be entertained for designated NSW/SO after 1 year if brain MRI and neurologic and neuro-psychological evaluations are normal.

(c) PTA greater than 24 hours is permanently disqualifying for candidates. Waiver may be entertained for designated NSW/SO after 2 years if brain MRI and neurologic and neuro-psychological evaluations are normal.

(7) Alcohol abuse or dependence and substance abuse are immediately disqualifying. Waiver

may be entertained after completion of treatment and 1 year of aftercare. Relapse is permanently disqualifying.

(8) Illegal drug use is disqualifying in qualified NSW/SO. Waiver is required as noted above. Illegal drug use for individuals accessing NSW/SO duty requires waivers if 3 years has not elapsed since last use.

(9) Decompression illness with residual neurologic impairment, AGE, and near drowning, should follow the guidelines under diving duty with MRI study, attending UMO evaluation, and specialty consultation. Waiver is required for all service members before return to diving duty.

#### (1) *Miscellaneous*

(1) Cancer treatment (except excision of skin cancer) will result in NPQ status for 1 year. A qualified UMO will provide waiver submission. Waiver may be entertained for earlier return to duty if the commanding officer concurs with return of physical capability.

(2) Chronic immune insufficiency of any cause, chronic anemia, and abnormal hemoglobin, platelet function, and coagulability are disqualifying.

(3) Allergy to environmental substances, inability to wear required gear, clothing, or camouflage paint, or allergy to medications that is life threatening are all disqualifying.

(4) Chronic or recurrent idiopathic pain syndromes that may mimic serious disease (e.g., abdominal pain, chest pain, and headache) are disqualifying.

#### (8) *Procedures*

(a) Periodicity of examinations are every 5 years on the birth date plus or minus 90 days. The waiver procedure is for the attending UMO to initiate a clinical summary and letter requesting a waiver for a condition covered by these standards as well as those for accession. The rest of the package will include any specialty consultation on the condition for which the waiver or disqualification is requested and any supporting radiologic examination or laboratory studies. The routing will be via the commanding officer of the NSW/SO service member via the NSW/SO TYCOM via the Director, BUMED Undersea and Special Operations to NAVPERSCOM. NAVPERSCOM will authorize or deny the waiver.

(b) *Special tests.* All NSW examinations will include the following tests:

(1) Audiometry.

(2) Visual acuity (with refraction of worse than 20/20 in both eye and tonometry if age 40 or greater).

(3) Type 2 dental examinations.

(4) Twelve-lead electrocardiogram.

(5) Initial echocardiographic evaluation for patent foramen ovale on accession is not required for NSW/SO duty; however qualified operators should obtain the study at the next anniversary examination.

(6) WBC count, platelet count, and hemoglobin and hematocrit, urine analysis (UA), fasting lipid panel, and blood glucose are required. Abnormalities should be appropriately evaluated.

(7) HIV testing per current SECNAV directive.

(8) PSA testing is required with anniversary exam at age 40 or greater.

(9) Chest x-ray is required with each anniversary examination.

(10) Laboratory standards will be the normal range for the laboratory performing the tests. Urinalysis should always be with microscopy for the anniversary exam and on accession. A dipstick is adequate for acute disease identification only.

(9) *Surveillance Examination.* All members on NSW/SO will have an annual PHA to maintain diving duty qualifications. This will include recommended preventive health examinations. For designated NSW/SO, the annual PHA will include documentation of skin cancer screening. Additionally, all designated NSW/SO require surveillance of hearing by having an audiogram performed at a minimum of every 5 years. If at any time a persisting significant threshold shift is documented, follow-up per occupational health and audiology requirements is mandated and surveillance must occur at a minimum of every 2 years. When a member's hearing falls outside the diving duty standards, a waiver must be pursued.

## 15-106

### Submarine Duty

(1) *Purpose.* The purpose of the standard submarine duty is to maximize mission capability by ensuring mental and physical readiness of the submarine force. The risk of medical morbidity arising from unrecognized submariner illness, which includes the hazard of medical evacuation at sea, is a result of very limited medical capability afloat. The requirements listed herein are for the submarine force only. The requirements for embarking non-submarine qualified military, civilian, government, or contractor are specified in SECNAVINST 6420.1 series.

(a) Submarine candidates must meet the physical standards for appointment, enlistment, or induction as outlined in the general standards section. Medical examinations must be reviewed and signed by a Navy UMO for designated active duty submariners. Students for accession to submarine duty must also have their physical examinations reviewed and signed by a UMO. Those individuals NPQ for submarine duty, need BUMED Undersea and Special Operations review, prior to submission of waiver request of NAVPERS. Interim waiver for physical standards for continued duty or accession to submarine training can be granted by the Director, BUMED Undersea and Special Operations pending final adjudication by NAVPERS.

(b) The standards for continuation of submarine duty will be the same as for first acceptance for submarine duty. All medical waivers and disqualifications from submarine duty shall be applied for via the Director for BUMED Undersea and Special Operations to NAVPERSCOM for final adjudication.

(1) Submarine personnel reporting for duty following an absence of greater than 7 days due to illness or injury, hospitalization for any reason, or reported on by a medical board (see article 18-27(3)), must have a UMO examination and health record review to determine fitness for duty.

(2) Submarine personnel who have been found deficient in the physical standards, or whose physical and mental performance in submarines would be detrimental to their health, other members of the crew, or the mission of the submarine, should

be processed for submarine disqualification. The service member’s UMO will make a recommendation on the DD 2808/DD 2807-1 and on the member’s SF 600 for all persons being processed for submarine physical disqualification. This package will be amplified by specialty consultation and summary, and pertinent radiological and laboratory studies. This package will be routed through the submarine chain of command to the TYCOM who will medically endorse and forward to NAVPERSCOM via the Director, BUMED Undersea and Special Operations.

(2) *Special Submarine Duty Standards.* In addition to the standards listed in Section III, the following physical conditions are causes for rejection:

(a) *Ears*

(1) A history of chronic inability to equalize pressure manifested by repeated aural barotraumas, perforations, or persistent ear pain secondary to minor pressure variations (e.g., in aircraft, airlock, or elevator) is disqualifying.

(2) Qualified personnel must demonstrate ability to communicate verbally and perform their duty.

(b) *Eyes*

(1) The minimum uncorrected visual acuity is 20/300 in either eye with at least monocular visual correction to 20/25.

(2) Defective color vision is disqualifying (see article 15-36(1)(d)). Waivers will be considered on a case-by-case basis. Waiver submission requests must include a statement from the member’s supervisor stating that the service member is able to perform his job accurately and without difficulty.

(3) Waivers are not required for submariners who have had successful LASIK or PRK correction of their vision if stable postoperative vision meets the criteria of article 106(2)(b)(1) above and if the following are met:

(a) Candidates for entry into submarine duty must have a 3-month waiting period following their most recent corneal surgery prior to their qualifying submarine physical examination.

(b) For qualified submariners:

1. Authorization is required from the attending UMO and commanding officer.

2. Waiver is not required for successful LASIK or PRK correction.

3. Corneal refractive surgery is for shore duty service members only and must be more than 1 month lapse prior to resuming any unscheduled submarine operations.

4. A UMO interview and medical record entry is required after completion of surgery.

(c) *Lungs*

(1) A history of asthma or reactive airway disease after the 13th birthday is disqualifying. A medical specialist shall be consulted when the diagnosis of asthma is entertained by the UMO. The specialist will characterize the disease process according to intermittent or continuous mild, moderate, or severe. The requirement for daily and rescue treatment also needs to be defined by the consultation.

(2) Chronic obstructive pulmonary disease diagnosed by medical specialist and requiring medical treatment is disqualifying.

(3) A history of spontaneous pneumothorax is disqualifying. A history of traumatic pneumothorax requires waiver submission with chest CT scan and pulmonology consultation.

(d) *Abdominal Organs and Gastrointestinal System*

(1) A history of gastrointestinal tract disease of any kind is disqualifying if any of the following conditions are met:

(a) The use of daily medication has been required for 30 or more days in the previous year.

(b) Any history of bleeding (hematemesis or hematochezia).

(c) Any history of organ perforation.

(d) A current history of chronic or any history of recurrent diarrhea.

(2) Any history of pancreatitis is disqualifying.

(3) Asplenic service members are considered disqualified from duty on submarines. However, appropriate immunization and a lack of severe infection within 1 year of the splenectomy will enable consideration of a waiver.

(4) Bariatric surgery is disqualifying and will not be waived. All other bowel, abdominal, and pelvic surgery will be considered for a waiver.

(e) *Urinary System*

(1) Submarine duty candidates with a history of a urinary tract stone are disqualified.

(2) Personnel already qualified in submarines who develop a urinary tract stone are disqualified, however a waiver will be considered on a case-by-case basis. Prophylactic treatment with medication should be considered for qualified submariners.

(f) *Extremities*

(1) Conditions resulting in decreased strength, range of motion loss, and symptoms of inhibiting pain of such nature to interfere with ready movement about a submarine or performance of duties are disqualifying.

(2) Disorders causing a person to be excessively prone to injury are disqualifying.

(g) *Spine, Scapula, Ribs, and Sacroiliac Joints.* Any disorder that precludes quick movement in confined spaces or inability to stand or sit for prolonged periods is disqualifying.

(h) *Skin*

(1) Any skin disease which may be aggravated by the submarine environment is disqualifying.

(2) Acne vulgaris, moderate or severe is disqualifying, but may be waived with medical therapy. Therapy with Accutane is disqualifying for submarine duty.

(3) Psoriasis, eczema, recurrent rashes, or atopic dermatitis that may be worsened by the submarine environment are disqualifying.

(4) Skin cancer is disqualifying until definitive treatment.

(i) *Psychiatric.* The psychological fitness of applicants for submarine duty must be carefully evaluated, because of the unique nature of the submarine environment and the responsibilities placed upon each person in a submarine. Service members (candidates) with below average intelligence, claustrophobia, history of personal ineffectiveness or inability to do their duty, history of difficulties in interpersonal relations, lack of adaptability, personality disorders, unhealthy motivation for submarine duty or aversion toward nuclear power and/or nuclear weapons will be disqualified from submarine duty.

(1) Any prospective or qualified submariner diagnosed by a psychiatrist or clinical psychologist with organic mental disorders, schizophrenic disorders, paranoid disorders, psychotic disorders, major affective disorders, anxiety disorders, somatoform disorders or disassociative disorders will be recommended for submarine disqualification at the time of initial diagnosis. Waivers will be considered on an individual basis.

(2) Personality disorders are disqualifying for entry into submarine service, but are not medically disqualifying for submarine designated individuals. If, in the opinion of the command, the attending UMO, and the mental health professional, the disorder will compromise the safety of the submarine, crew morale or mission execution, removal from submarine duty should be accomplished via appropriate administrative means. The term "environmental unadaptability" is not a medical diagnosis and should not be used in medical assessments. However the command may use "environmental unadaptability" as justification for administrative disqualification from submarine duty, particularly in those individuals whose maladaptive behavior precludes acceptable performance in the submarine force.

(3) Minor situational psychiatric disorders, such as acute situational stress reactions or adjustment disorders are not normally disqualifying for submarine duty. Individuals with these conditions will be evaluated by the attending group or squadron UMO, in conjunction with formal psychiatric evaluation when necessary. In cases which resolve completely, quickly, and without significant psychotherapy, individuals may be found fit for submarine

duty locally by the attending UMO. Those cases in which a question exists for continued fitness for submarine duty must be reviewed by the TYCOM medical officer and the Director, BUMED Undersea and Special Operations on a disqualification or waiver request to NAVPERS. If the condition cannot be quickly resolved, but is amenable to appropriate treatment with a reasonable return to submarine duty, disqualification is warranted with consideration for a waiver following a period of limited duty. If the condition is not amenable to treatment and, in the opinion of the command and the UMO, likely to preclude acceptable performance in the submarine environment, disqualification from submarine service should be requested from NAVPERS via TYCOM medical and the Director, BUMED Undersea and Special Operations. A previous history of ADHD and treatment with psycho stimulant up to age 16 is not disqualifying.

(4) Disposition of personnel with suicidal ideation, gesture, or attempts shall be based on the underlying condition, as described above and determined by the cognizant UMO and mental health professional. All cases of suicidal ideation, gesture, or attempt will be reviewed by the TYCOM medical officer and the Director, BUMED Undersea and Special Operations. It must be stressed that any consideration for return to duty in these cases must address the issue of whether the service member, in the written opinions of the attending UMO and the member's commanding officer, can successfully return to the specific stresses and environment of submarine duty.

(5) Any use of psychotropic medication in the previous year is disqualifying. Waivers will be considered after a 1-year medical free period. **Exception.** The use of psychotropic medications for 30 days or less in the treatment of tobacco addiction is not disqualifying.

(6) Completion of the Psychiatric portion of the clinical evaluation on the SF 2808 (Report of Physical Examination) for a submarine duty physical will be based on the examiner's review of the health record for evidence of mental dysfunction and observation of the examinee's appearance, behavior, attitude, emotional expressiveness, thought content, orientation and awareness, memory, and general intellect. Specifically, the individual will be questioned about anxiety associated with tight or closed

spaces, difficulty getting along with other personnel, and history of suicidal or homicidal ideation. The attending physician will determine if the history of suicidal ideation requires further specialty examination.

(j) *Dental*

(1) Indication of, or currently under treatment for any acute infection or disease of the soft tissue of the oral cavity.

(2) Candidates for basic submarine school must be classified by a dental officer as Class I or II (see article 6-101) prior to executing such orders.

(3) Dental conditions requiring extensive or prolonged follow-up which can not be completed during a ship's deployment cycle must be disqualified until the dental problem is definitively resolved, e.g., orthodontics.

(k) *Systemic Diseases and Miscellaneous Conditions*

(1) Allergic or atopic manifestations which require allergy immunotherapy.

(2) A history of migraine headaches that are recurrent and incapacitating such that they prevent completion of daily duty assignment, or fail treatment with preventive medication to reduce severity or frequency are disqualifying. Neurological consultation should be obtained in all service members who are referred for disqualification or waiver. Frequency of headaches ashore and at sea, severity of headaches, and work history with occurrence of headaches, and prophylactic treatment attempts and response should be included in final determination request.

(3) A single seizure is disqualifying. Waiver or disqualification package should include mitigating circumstances if any, complete seizure or environment description, family history for seizures, neurological evaluation, and at least 2 years seizure free without medication.

(4) Diabetes mellitus is disqualifying

(a) Diabetes mellitus requiring the use of insulin for control will not be considered for a waiver.

(b) Diabetes mellitus controlled without the use of insulin will be considered for a waiver. Waiver package submissions must include documentation of a current medical regimen, a current hemoglobin A1C level, and current documentation of the presence or absence of any end organ damage.

(5) Disorders of sleep and wakefulness are disqualifying only after submission of neurological and pulmonary medical specialty consultation that a bona fide disorder exists, documentation of impact on daily duty assignment by the disorder, and documentation of failure of behavioral sleep hygiene treatment.

(6) Metabolic syndrome (hypertension, hyperlipidemia, and glucose intolerance) is disqualifying. Waivers will be considered when the syndrome is under good control. Good control is evidenced by:

(a) Blood pressure readings consistently below 140 systolic and 90 diastolic.

(b) Hemoglobin A1C of 6.5 or less without the use of insulin.

(c) Low density lipoprotein (LDL) of 160 or less.

(3) **Special Studies.** In addition to the special studies required in article 15-5, also perform a standard chest x-ray on initial accession and when clinically indicated.

(4) **Periodicity.** Medical examinations for submarine duty will be conducted at least once every 5 years from the date of initial examination.

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*Note. All waiver requests for disqualifying medical and physical conditions noted above should follow the submarine chain of command to NAVPERSCOM via the Director, BUMED Undersea and Special Operations. Accession requests for submarine duty arising outside of submarine force which would require a waiver, because of existence of above medical and physical conditions, should be directed to NAVPERSCOM via the Director, BUMED Undersea and Special Operations.*

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## 15-107

### Explosives Handler and Explosives Motor Vehicle Operator Examinations and Standards

(1) **Scope.** This special duty examination is required for those active duty personnel assigned as explosives handlers and explosives motor vehicle operators. The applicant must have a current physical examination (per section I of this chapter). Per 49 CFR 383, military personnel are exempt from the requirements of the Federal Motor Vehicle Safety Act of 1986.

(2) **Periodicity.** This examination is required every 5 years for active duty personnel up to age 50, then annually. The annual PHA shall be completed each year, and if any potentially disqualifying medical conditions are identified, the member shall be referred to the cognizant medical officer for evaluation for fitness for duty as an explosives handler/explosives vehicle operator.

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*Note. Navy explosive ordinance disposal personnel must also meet the requirements of article 15-102 (Dive Duty).*

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(3) Civilian employees who operate commercial vehicles or who are explosives handlers and/or explosives vehicle operators shall comply with the physical examination requirements of 49 CFR 391, via completion of a physical examination as specified in the "medical surveillance/certification examination for explosives handlers and explosives vehicle operators," Program 720, Occupational Medical Surveillance Procedures Manual and Medical Matrix Edition 7, NEHC-TM OM-6260 (February 2001) or latest edition. Employees who are qualified under this section meet the physical standards of 49 CFR 391.41, and shall be issued a medical certificate per 49 CFR 391.43. Explosives handlers must meet the qualifications outlined above but a FMCSA certificate will not be issued to them. Civilian contract personnel need only be qualified in accordance with FMCSA and 49 CFR.391 requirements.



(4) Individuals assigned to duties as explosives handlers or explosives vehicle operators are responsible to report to their supervisor or Medical Department personnel any physical or mental condition which may pose a health or safety hazard to self, coworkers, or the public. Supervisors are responsible to direct such personnel to the appropriate medical department for evaluation. In addition to Section III, specific disqualifying conditions include:

(a) **Hearing.** Unaided hearing loss averaging more than 40 dB at 500, 1000, and 2000Hz (ANSI) in the better ear.

(b) **Vision**

(1) Distant visual acuity that does not correct to at least 20/40 in each eye.

(2) For military active duty, visual fields affecting performance of duty. For civilian personnel, field of vision less than 70 degrees in the horizontal meridian in each eye is disqualifying.

(3) **Color perception.** Inability to distinguish red, green and amber either by FALANT test (see 15-37) or for civilians by other clinically accepted color vision testing.

(c) **Heart and Vascular System**

(1) A medical history or clinical diagnosis of myocardial infarction, angina pectoris, coronary insufficiency, thrombosis, or any other cardiovascular disease of a variety known to be accompanied by syncope, dyspnea, collapse or congestive cardiac failure.

(2) Current clinical diagnosis of hypertension likely to interfere with his/her ability to operate a commercial vehicle.

(d) **Musculoskeletal System**

(1) Extremities. Any loss of foot, hand or arm, any impairment of grasp, or limb deformity impairing assigned duties is disqualifying.

(2) Any history or clinical diagnosis of rheumatic, arthritic, orthopedic or neuromuscular disease or impairment likely to interfere with assigned duties is disqualifying.

(e) **Neurologic.** Medical history or clinical diagnosis of epilepsy, recurrent syncope, or any condition which is likely to cause loss or, or altered states of consciousness.

(f) **Endocrine.** Any history or clinical diagnosis of diabetes currently requiring insulin for control is disqualifying.

(g) **Psychiatric**

(1) Any mental, nervous, organic, or functional disease or psychiatric disorder likely to interfere with assigned duties.

(2) Current diagnosis of alcoholism with less than one year sobriety.

(3) Use of any Schedule I drug, amphetamine, narcotic or addicting drug or substance (excluding tobacco) or illegal drug. Use of amphetamines is not disqualifying if the drug is prescribed by a licensed medical practitioner very familiar with the assigned duties who has advised the member that the prescribed drug will not adversely affect the member's performance of duties.

(h) **Additional special studies:**

(1) Urinalysis. Positive findings for protein, blood or glucose require further evaluation.

(2) Fasting glucose and lipid panel at pre-placement (baseline) examination and every 5 years. EKG once after age 40.

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*Reference. The NEHC TM OM 6260, Medical Matrix is available at: <http://www-nehc.med.navy.mil/ocmed/Matrix.htm>.*

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(5) **There is no waiver process for this qualification.** However, in the event that a member is disqualified for explosive handler/explosive driver duty, the applicant may request a review of the case by an occupational medicine physician at a Navy MTF for a second opinion. In the absence of a local occupational medicine physician, the case may be forwarded to the occupational medicine directorate at the Navy Environmental Health Center for review.

**15-108****Landing Craft  
Air Cushion (LCAC)  
Medical Examinations**

(1) To select for LCAC crew duty only the most physically and mentally qualified personnel and to exclude those who may become unfit because of pre-existing physical or mental defect. Certain pre-existing disease states and physical conditions that may develop are incompatible with the simultaneous goals of operational safety, mission accomplishment and individual health. LCAC physical standards were established and are maintained to fulfill these goals.

(2) All applicants and designated personnel assigned to duty as crew members aboard any U.S. Navy air cushion vehicle must conform to the physical standards in this article. Designated LCAC personnel are considered PQ if they meet applicant medical standards, and demonstrate an ability to tolerate the stress and demands of operational training and deployment. LCAC crew personnel are divided into three classes:

(a) **Class I.** Crew personnel engaged in the actual control of the LCAC. These include the craftmaster and engineer, the student craftmaster, and the student engineer.

(b) **Class IA.** Crew personnel engaged in navigation of the LCAC, but not responsible for actual control of the craft. These include the Navigator and the student Navigator.

(c) **Class II.** Crew personnel not engaged in the actual control of the LCAC. These include the loadmaster and deck mechanic, the student loadmaster, and the student deck mechanic.

(3) The LCAC physical examination is conducted to determine whether an individual is physically qualified to engage in designated LCAC duties. Upon completion of a thorough evaluation, candidates will be designated either:

(a) Physically Qualified (PQ).

(b) Not Physically Qualified (NPQ), Waiver Not Recommended.

(c) NPQ, Waiver Recommended.

(d) **Temporarily Disqualifying Medical Conditions.** For any temporary medical condition that precludes the LCAC crew member from the full performance of their LCAC duties, the following procedures shall be followed:

(1) For medical conditions less than 90 days duration, a complete physical examination is not required, but a DD 2808 should be submitted that details the medical condition and all pertinent clinical information. Ensure, as a minimum, blocks 1-16 and 42-46 are complete.

(2) For medical conditions that last between 90 days and 6 months or require a Limited Duty Medical Board, submit a complete physical examination per articles 15-4 and 15-5.

(4) The scope of the physical examination will be adequate to effectively determine if the individual meets the appropriate medical standards. A complete physical examination shall be conducted per Section I of this Chapter. In addition, the following question shall be added to the DD 2808: "Have you ever been diagnosed with, or received treatment for, alcohol abuse or dependency?" Any positive answer shall be evaluated and documented.

(a) LCAC crew applicants and designated personnel must meet the standards in article 15-109.

(b) Conditions listed as disqualifying may be waived on an individual basis following article 15-108. However, additional medical specialty evaluations may be required to confirm no functional impairment is present or likely to occur.

**(5) Examination Requirements**

(a) **All Class I (Craftmaster, Engineer) and Class IA (Navigator) applicants** will undergo an initial applicant physical examination no more than 1 year before acceptance into phase 1 of the LCAC training program. In addition to an applicant physical examination, all Class I applicants require psychomotor testing consistent with standards established by Naval Operational Medicine Institute (Code 341), Operational Psychology Division.

(b) **Class II (Loadmaster Deck Mechanic) applicants** must meet current medical standards for transfer and surface fleet duty following guidelines in the Enlisted Transfer Manual and MANMED article 15-109 (as indicated).

(c) **Designated LCAC Personnel.** The extent of the examination is determined by the type of duty to be performed, age, designation status, and any disqualifying medical conditions. If a crew member fails to meet applicant standards and is found NPQ, yet still wishes to perform LCAC duties, a waiver may be requested for each NPQ medical condition from the Commander, Navy Personnel Command (NPC-409). In all such cases, the Surface Warfare Medicine Institute (SWMI) shall be an addressee on the waiver request. Information about the medical condition or defect must be of such detail that reviewing officials should be able to make an informed assessment of the request itself, and also be able to place the request in the context of the duties to be performed. Authorization to request a waiver resides with the crew member, their commanding officer, or the examining or responsible medical provider. All waiver requests shall be either initiated or endorsed by the applicant's commanding officer.

(6) All changes in the status of Class I and IA LCAC crew members shall be immediately entered into the Special Duty Medical Abstract (NAVMED 6150/2).

(7) **Mandatory Requirements for LCAC Crew Members Medically Suspended from LCAC Duty.** If an LCAC crew member is found to be NPQ, or is suspended from duty for greater than 60 days for any medical condition, a "fitness to continue" physical examination (completed forms DD 2807-1/2808) shall be completed before resuming duties. The report of that examination shall then be submitted to the SWMI for waiver consideration or recommendation for a medical board. Submit to SWMI a copy of any examination permanently disqualifying designated LCAC personnel for archival purposes.

(8) **Medical Waiver Requests**

(a) **Class I and Class IA LCAC Crew Applicants and Designated Personnel.** Forward medical waiver requests for all Class I crew members and applicants to the Commander, Navy Personnel Command (NPC-409C) via SWMI. A copy of all approved waivers must be sent from NPC-409C to SWMI for archival purposes.

(b) **Class II LCAC Crew Applicants.** Forward medical waiver requests for all Class II crew applicants to NPC-409C via the TYCOM medical officer, a copy of all Class II approved waivers must be sent from NPC-409C to SWMI for archival purposes.

(c) **Medically-Suspended Designated LCAC Crew Members.** Forward medical waiver requests for LCAC crew personnel who are medically suspended to the TYCOM medical officer via the chain of command. The TYCOM medical officer must evaluate and approve medical waiver requests for designated LCAC crew personnel (as opposed to LCAC crew applicants). A copy of the TYCOM medical officer's final decision concerning the waiver request will be forwarded to SWMI for archival purposes.

(9) **Periodicity of Examinations**

(a) **All LCAC Class I and Class IA crew personnel** will undergo a complete physical examination (see 15-4 and 15-5) within 30 days of their birthday at ages 21, 24, 27, 30, 33, 36, 39, and annually thereafter.

(b) **All LCAC Class II personnel** will undergo a complete physical examination within 30 days of their birthday every 5 years.

(10) **Reporting Attrition of LCAC Crew Personnel.** Development of an accurate personnel database is critical to the evolution of the LCAC crew selection and evaluation process, and of particular importance is information on the attrition of LCAC crew personnel. Therefore report details on such attrition, medical and non-medical, to SWMI for analysis and archival purposes.

**15-109**

**Landing Craft Air Cushion (LCAC) Medical Standards**

(1) The presence of any of the following will be considered disqualifying for all LCAC duties:

(a) *Ears, Nose, and Throat and Hearing*

(1) Seasonal aero-allergic disease of such severity to prevent normal daily activity (frequent bouts of sinus infection, nasal obstruction, ocular disease, etc.) not controlled with oral or nasal medication.

(2) Recurrent attacks of vertigo or Meniere’s syndrome or labyrinthine disorders of sufficient severity to interfere with satisfactory performance of duties uncontrolled with medication.

(3) Chronic, or recurrent motion sickness, uncontrolled with medication.

(4) Untreated sleep apnea with cognitive impairment or daytime hyper-somnolence. Nasal continuous positive airway pressure treatment may be permissible if it does not impact the function or safety of the vessel, unit, or crew.

(5) Tracheal or laryngeal stenosis of such a degree to cause respiratory embarrassment on moderate exertion.

(6) Unaided hearing loss which adversely effects safe and effective performance of duty in the Surface Fleet/LCAC environment.

(7) *Hearing Test.* An audiogram is required for all LCAC applicants. It will be performed within 90 days of reporting to the assigned assault craft unit, and annually thereafter. Audiometric loss in excess of the following limits for each frequency disqualifies the LCAC applicant. Designated crew members already assigned to a craft shall be NPQ with waiver consideration.

TABLE - MAXIMUM HEARING LOSS (ANSI 1969)

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

(8) *Equilibrium.* Use the self-balancing test (SBT). The examinee stands erect, without shoes, with heels and large toes touching. The examinee then flexes one knee to a right angle, closes the eyes then attempts to maintain this position for 15 seconds. The results of the test are recorded as “steady,” “fairly steady,” “unsteady” or, “failed.” Inability to pass this test for satisfactory equilibrium disqualifies the candidate.

(b) *Eyes and Vision*

(1) Any ophthalmologic disorder that causes, or may progress to, significantly degraded visual acuity beyond that allowed in Section III of this Chapter.

(2) Any disorder which results in the loss of depth perception or diminished color vision.

(3) Night blindness of such a degree that precludes unassisted night travel.

(4) Glaucoma, with optic disk changes, not amenable to treatment.

(5) A history of refractive corneal surgery. Photorefractive keratectomy and laser in situ keratomileusis are permitted for the surface warfare community if vision is stable for at least 6 months post procedure. Radial keratotomy is disqualifying but may be waived. Intracorneal ring implants are not approved and are disqualifying.

(6) *Distant Visual Acuity.* Determine visual acuity by using a 20 foot eye lane with standard Goodlite letters and lighting. The Armed Forces Vision Tester (AFVT) is an acceptable alternative. If corrective lenses are necessary for LCAC duty, the LCAC crew personnel must be issued the approved lens-hardened eye wear for proper interface with operational headgear (i.e., aviation frames/gas mask). A spare pair of corrective lenses must be carried at all times during operations.

(a) *For Class I and IA personnel* student applicants, minimum distant visual acuity shall be no less than 20/100 uncorrected each eye and correctable to 20/20 each eye. For previously designated Class I and Class IA personnel, minimum distant visual acuity shall be no less than 20/200 uncorrected each eye and correctable to 20/20 each eye.

(b) *For Class II personnel*, there are no uncorrected limits, but shall correct following the standards in article 15-35. If correction is necessary for LCAC personnel, corrective lenses shall be worn at all times during LCAC operations.

(7) *Near Visual Acuity.* Either the AFVT or the near vision testing card shall be used to test near vision. A minimum near visual acuity of 20/200 in each eye, correctable to 20/20, is acceptable. For Class II there are no uncorrected limits. If correction is necessary, corrective lenses shall be worn at all times during LCAC operations.

(8) *Refraction.* Refraction of the eyes is required on the initial screening examination if the applicant requires corrective lenses to meet visual acuity standards.

(a) For Class I and IA personnel, acceptable limits are +/- 6.0 diopters in any meridian. Cylinder correction may not exceed 3.0 diopters.

(b) Class II applicants shall meet accession standards for refraction (article 15-35).

(9) *Depth Perception.* This test should be performed using a Verhoeff Stereopter or, if unavailable, the AFVT lines A-D for Class I and lines A-C for Class IA and II. Pass-Fail standards per article 15-85(1)(d) shall be followed. Normal depth perception (aided or unaided) is required. If visual correction is necessary for normal depth perception, corrective lenses must be worn at all times during LCAC operations.

(10) *Oculomotor Balance.* The vertical and lateral phoria may be tested with the horopter or with the AFVT. Any lateral phoria greater than 10 prism diopters is disqualifying (greater than 6 prism diopters requires an ophthalmologic evaluation). Any vertical phoria greater than 1.5 prism diopters is disqualifying and requires an ophthalmologic consultation, for Class II, no obvious heterotropias or symptomatic heterophia (NOHOSH) is acceptable.

(11) *Inspection of the Eyes.* Follow guidelines within article 15-85(1). The examination must include a fundoscopic examination. Any pathological condition that might become worse, interfere with the proper wearing of contact lenses or functioning of the eyes under fatigue, night vision goggle use or LCAC operating conditions shall disqualify all LCAC crew candidates.

(12) *Color Vision.* All LCAC crew personnel assigned duties involving the actual control of the craft on to navigational observation duties must pass the Farnsworth Lantern Test (FALANT), or pass 12/14 Pseudo Isochromatic Plates (PIP) if the FALANT is unavailable.

(13) *Night Vision.* Any indicators or history of night blindness disqualifies the applicants due to the importance of night vision and night vision supplemental to LCAC operations.

(14) *Field of Vision.* Fields should be full to simple confrontation. Any visual field defect should receive ophthalmologic referral to pursue underlying pathology.

(15) *Intraocular Tension.* Schiottz, non-contact (air puff), or applanation tonometry must be used to measure intraocular tension. Tonometric readings consistently above 20 mm Hg in either eye, or a difference of 5mm Hg between the two eyes, should receive an ophthalmologic referral for further evaluation. This condition is disqualifying until an ophthalmologic evaluation, including formal visual field determination has been completed.

(c) *Lungs and Chest Wall*

(1) Active asthma.

(2) Chronic or recurrent bronchitis that requires repeated medical care.

(3) Chronic obstructive pulmonary disease, symptomatic with productive cough, history of recurrent pneumonia and/or dyspnea with mild exertion.

(4) Active Tuberculosis (see BUMED-INST 6224.8 series).

(5) Respiratory compromise as a result of hypersensitivity reaction to foods, e.g., peanuts, shell fish.

(6) Conditions of the lung or chest wall resulting in restriction to respiratory excursion that limits physical activity.

(7) Recurrent spontaneous pneumothorax.

(d) *Cardiovascular*

(1) Atherosclerotic heart disease associated with congestive heart failure, repeated angina attacks, or evidence of myocardial infarction.

(2) Pericarditis, chronic or recurrent.

(3) Cardiac arrhythmia when symptomatic enough to interfere with the successful performance of duty, or adversely impacts the member's safety (e.g., chronic atrial fibrillation, significant chronic ventricular dysrhythmia).

(4) Second or third degree heart block.

(5) Near or recurrent syncope of cardiac origin.

(6) Hypertrophic cardiomyopathy.

(7) Any cardiac condition, (myocarditis) producing myocardial damage to the degree that there is fatigue, palpitations, and dyspnea with ordinary physical activity.

(8) Cardiac surgery (adult) if 6-8 months after surgery, EF is < 40 percent, congestive heart failure (CHF) exists or there significant inducible ischemia.

(9) If any chronic cardiovascular drug therapy which would interfere with the performance of duty and/or is required to prevent a potentially fatal outcome or severely symptomatic event (e.g., anti-coagulation).

(10) Intermittent claudication

(11) Thrombophlebitis, recurrent.

(12) Hypertension with associated changes in brain, heart, kidney or optic fundi (KWB Grade II or greater) or requiring three or more medications for control.

(13) *Blood Pressure and Pulse Rate*

(a) *Blood Pressure* is determined twice. First after the examinee has been supine for at least 5 minutes, and second after standing motionless for 3 minutes. A persistent systolic blood pressure of greater than 139mm is disqualifying and a persistent diastolic blood pressure of greater than 89mm is disqualifying as is orthostatic or symptomatic hypotension.

(b) *Pulse Rate*. Shall be determined in conjunction with blood pressure. An EKG must be obtained in the presence of a relevant history of arrhythmia, or pulse rate of less than 45 or greater than 100. Resting and standing pulse rates shall not persistently exceed 100.

(e) *Gastrointestinal System*

(1) Any condition which prevents adequate maintenance of the member's nutritional status or requires dietary restrictions not reasonably possible in the operational environment.

(2) Active colitis, regional enteritis or irritable bowel syndrome, peptic ulcer disease, or duodenal ulcer disease. Condition is considered inactive when member has been asymptomatic on an unrestricted diet, without medication during the past 2 years and has no radiographic or endoscopic evidence of active disease.

(3) Recurrent or chronic pancreatitis.

(4) Gastritis not responsive to therapy. Severe, chronic gastritis, with repeated symptoms requiring hospitalization and confirmed by gastroscopic examination.

(5) Hepatitis (infectious and/or symptomatic).

(6) Esophageal strictures requiring frequent dilation, hospitalization.

(7) Fecal incontinence.

(8) Cholelithiasis without cholecystectomy.

(f) *Endocrine and Metabolic*

(1) Any abnormality whose replacement therapy presents significant management problems.

(2) Diabetes type I (IDDM), any history of diabetic ketoacidosis, or two or more hospitalizations within 5 years for complications of diabetes type II (NIDDM).

(3) Symptomatic hypoglycemia or history of any postprandial symptoms resembling those of postprandial syndrome (e.g., postprandial tachycardia, sweating, fatigue, or a change in mentation after eating).

(4) Gout with frequent (>3/yr) acute exacerbations.

(5) Any disorder requiring daily oral steroids.

(g) *Genitourinary System*

(1) Abnormal gynecologic cytology without evidence of invasive cancer requires appropriate evaluation and treatment, but is NCD for diving duty. Invasive cancer is disqualifying.

(2) Endometriosis with dysmenorrhea incapacitating to a degree which necessitates recurrent absences from duty of more than 48 hours if uncontrolled by medication.

(3) Menstrual cycle irregularities (menorrhagia, metrorrhagia, polymenorrhea) incapacitating to a degree which necessitates recurrent absences from duty of more than 48 hours if uncontrolled by medication.

(4) Urinary incontinence.

(5) Renal lithiasis with a diagnosis of hypercalcemia or other metabolic disorder producing stones, structural anomaly, or history of a stone not spontaneously passed. A metabolic workup should be performed if a history is given of a single prior episode of renal calculus with no other complications factors.

(6) Single kidney if complications with remaining kidney.

(7) Conditions associated in member's history with recurrent renal infections (cystic kidney, hypoplastic kidney lithiasis, etc.).

(8) Pregnancy is disqualifying for training and deployment based upon environmental exposures and access to adequate health care. Refer to OPNAV-INST 6000.1 series for specifics on the commanding officer's and medical officer's responsibilities and requirements.

(h) *Extremities*

(1) Condition which results in decrease strength or range motion of such nature to interfere with the performance of duties or presents a hazard to the member in the operational environment.

(2) Amputation of part or parts of the upper extremity which results in impairment equivalent to the loss of the use of a hand.

(3) Any condition which prevents walking, running, or weight bearing.

(4) Inflammatory conditions involving bones, joints, or muscles that after accepted therapy, prevent the member from performing the preponderance of his or her expected duties in the operational environment.

(5) Malunion or non-union of fractures which after appropriate treatment, there remains more than a moderate loss of function due to the deformity.

(6) Chronic knee or other joint pain which, even with appropriate therapy, is incapacitating to a degree which necessitates recurrent absences from duty of more than 48 hours.

(i) *Spine*

(1) Conditions which preclude ready movement in confined spaces, and inability to stand or sit for prolonged periods.

(2) Chronic back pain (with or without demonstrable pathology) with either: (1) documented neurological impairment or (2) a history of recurrent inability to perform assigned duties for more than 48 hours two or more times within the past 6 months, and documentation after accepted therapy that resolution is unlikely.

(3) Scoliosis of greater than 20 degrees, or kyphosis of greater than 40 degrees.

(j) *Skin*

(1) Any chronic skin condition of a degree of nature which requires frequent outpatient treatment or hospitalization, is unresponsive to conventional treatments, and interferes with the satisfactory performance of duty in the operational environment and/or the wearing of the uniform or personal safety equipment.

(2) Scleroderma.

(3) Psoriasis, atopic dermatitis, or eczema, widespread and uncontrolled with medication.

(4) Lymphedema.

(5) Chronic urticaria.

(6) Hidradenitis, recurrent, that interferes with the performance of duty.

(7) Known hypersensitivity to occupational agents, e.g., solvents, fluxes, latex, nickel, etc.

(k) *Neurologic*

(1) History of headaches or facial pain if frequently recurring, or disabling, or associated with transient neurological impairments that are uncontrolled on oral medications or require repeated hospitalization.

(2) History of unexplained or recurrent syncope.

(3) History of convulsive seizures of any type except for a single simple seizure associated with a febrile illness before age 5.

(4) Encephalitis, or any other disease resulting in neurological sequela, or an abnormal neurological examination.

(5) Post-traumatic syndrome defined as headaches, dizziness, memory or concentration difficulties, sleep disturbance, behavior alterations, or personality changes after a head injury.

(6) Narcolepsy.

(7) Flaccid or spastic paralysis, or muscular atrophy producing loss of function that precludes satisfactory performance of duty or impacts the safety of the member in the operational environment.

(1) *Psychiatric.* Because of the nature of the duties and responsibilities of each LCAC crew member, the psychological suitability of members must be carefully appraised. The objective is to elicit evidence of tendencies which might prevent satisfactory adjustments to surface fleet life. A mental health review covering the psychiatric items in this article and any other pertinent personal history items, must be conducted by the examining medical officer. A psychiatric referral is not required to obtain this history. This general mental health review will determine the applicant's basic stability, motivation, and capacity to maintain acceptable performance under the special stresses encountered during LCAC operations.

(1) Any history of an Axis I diagnosis as defined by the current DSM is disqualifying (no waivers are typically given). Adjustment disorders are NPQ only during the active phase.

(2) Axis II personality disorders, including mood, anxiety, and somatoform disorders, and prominent maladaptive personality traits are disqualifying. They are waiverable if the individual has been symptom free without treatment for 1 year.

(3) Substance-related disorders (alcohol or controlled substance) are disqualifying. Upon satisfactory completion of an accepted substance abuse program, and total compliance with an after-care program, a waiver may be considered when 1 year has elapsed post-treatment. Continuation of a waiver would be contingent upon continued compliance with the after-care program and continuing total abstinence.

(4) Claustrophobia, questionable judgment or affect, poor coping skills, or any other evidence for poor adaptation to LCAC duty conditions, is considered disqualifying and requires a mental health consultation for waiver consideration.

(5) The taking of a psychotropic medication of low toxicity such as low dose selective serotonin reuptake inhibitor (SSRI) is not reason in itself for disqualification from service in the surface fleet force. Low-toxicity prescription psychotropics are acceptable as long as the underlying conditions will not become life or function threatening, will not pose a risk for dangerous disruptive behavior, nor



create a duty-limiting, medical evacuation, early return situation should medication use cease or the medication become ineffective.

(6) It must be stressed that any consideration for return to duty in psychiatric cases must address the issue of whether the service member, in the opinion of the medical officer (unit or type command) and the member's commanding officer, successfully return to the specific stresses and environment of LCAC duty.

(m) **Systemic Diseases and Miscellaneous Conditions.** Any acute or chronic condition that affects the body as a whole and interferes with the successful performance of duty, adversely impacts the member's safety, or presents a hazard to the member's shipmates or the mission:

- (1) Spondylopathy.
- (2) Sarcoidosis (progressive, not responsive to therapy or with severe or multiple organ involvement).
- (3) Cancer treatment within 5 years (except testicular, cervical or basal cell).
- (4) Anemia that is symptomatic and not responsive to conventional treatments.
- (5) Leukopenia, when complicated by recurrent infections.
- (6) Atopic (allergic) disorders. A documented episode of a life-threatening generalized reaction (anaphylaxis) to stinging insects (unless member has completed immunotherapy and is radio-allergosorbent technique RAST or skin test negative) or a documented moderate to severe reaction to common foods, spices, or additives.
- (7) Any defect in the bony substance of the skull interfering with the proper fit and wearing of military headgear.
- (8) History of heat pyrexia (heat stroke) or a documented predisposition to this condition including inherited or acquired disorders of sweat mechanism or any history of malignant hyperthermia.

(n) **Special Studies.** In addition to the special studies required in article 15-5, also perform/obtain:

- (1) A PPD on initial assignment and when clinically indicated.
- (2) A 12-lead EKG performed with their NAMI physical examinations, and as applicable thereafter. The baseline EKG must be marked not to be removed from health record and must be retained in the health record until that record is permanently closed. Each baseline EKG or copy thereof shall bear adequate identification including full name, grade or rate, social security number, designator facility of origin and a legible interpretation by a medical officer.

(3) A chest x-ray.

(o) **General Fitness and Medications.** A notation will be recorded on the DD 2807-1/DD 2808 for individuals receiving any medications on a regular basis or within 24 hours of the LCAC examinations. In general, individuals requiring medications or whose general fitness might affect their LCAC duty proficiency shall be found NPQ for duty aboard an LCAC. Record status in block 74 of the DD 2808 (e.g., "NPQ-LCAC Duty").

(p) **Height and Weight.** All candidates will meet enlistment height/weight and body fat percentage requirements per OPNAVINST 6110.1 series.

(q) **Teeth**

- (1) Personnel in dental class 1 and 2 are qualified.
- (2) If a candidate is dental class 3 due only to periodontal status not requiring surgery, the candidate will be accepted as qualified after obtaining a dental waiver.

(r) **Articulation.** Candidates must speak clearly and distinctly and without an impediment of speech that may interfere with radio communications. Use the reading aloud test below for this determination.

(1) **Reading Aloud Test.** The “Banana Oil” test is required for all applicants and other aviation personnel as clinically indicated. The applicant reads aloud the following text:

You wished to know about my grandfather. Well he is nearly 93 years old; he dresses himself in an ancient black frock-coat usually minus several buttons; yet he still thinks as swiftly as ever. A long flowing beard clings to his chin giving those who observe him a pronounced feeling of the utmost respect. When he speaks, his voice is just a bit cracked and quivers a trifle. Twice each day he plays skillfully and with zest upon our small organ. Except in winter when the ooze of snow or ice is present, he slowly takes a short walk in the open air each day. We have often urged him to walk more and smoke less, but he always answers “Banana Oil.” Grandfather likes to be modern in his language.

## 15-110

### Firefighting Instructor Personnel Examinations and Standards

(1) **Scope.** This special duty examination is required for those active duty personnel assigned as firefighting instructors. The examination shall be conducted as per “medical surveillance/certification exam for firefighters,” Program 707, Occupational Medical Surveillance Procedures Manual and Medical Matrix Edition 7, NEHC-TM OM-6260 (February 2001) or latest edition.

(a) Shipboard ancillary duty fire personnel need meet only general shipboard duty physical requirements.

(b) Medical screening requirements for “all hands” firefighting screening are set by the training facility.

(2) **Periodicity.** This examination is required every 5 years for personnel up to age 50, then annually. The annual PHA shall be completed each year, and if any potentially disqualifying medical conditions are identified, the member shall be referred to the cognizant medical officer for evaluation for fitness for duty as a firefighting instructor.

(3) **Additional Standards.** In addition to the standards in Section III, the following will be cause for disqualification:

(a) **Head and neck.** Any condition which would interfere with proper fitting or seal of respiratory protection equipment.

(b) **Vision.** Uncorrected DVA 20/100 or worse binocularly, corrected binocular vision 20/40 or greater.

(c) **Hearing.** Unaided hearing loss averaging more than 40dB at 500, 1000, and 2000Hz (ANSI) in the better ear. Vertigo or Meniere’s syndrome.

(d) **Lungs and Chest.** Reactive airways disease (asthma) after age 12. Current restrictive or obstructive pulmonary disease.

(e) **Skin.** Contact allergies of the skin that involve substances associated with firefighting. Skin conditions and facial contours which would not allow successful respiratory fit test and the use of personal protective equipment.

(f) **General and Miscellaneous Conditions and Defects.** Any medical condition that would place the individual at increased risk of heat-related injury or results in the inability to don and wear personal protective equipment.

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Reference. NEHC TM OM 6260, Medical Matrix is available at: <http://www-nehc.med.navy.mil/occmcd/Matrix.htm>.

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(4) **There is no waiver process for this qualification.** However, in the event that a member is disqualified for fire fighter instructor duty, the applicant may request a review of the case by an occupational medicine physician at a Navy MTF for a second opinion. In the absence of a local occupational medicine physician, the case may be forwarded to the occupational medicine directorate at the Navy Environmental Health Center for review.

## SECTION V

# REFERENCES AND RESOURCES AND ACTIVE DUTY WOMEN

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## 15-111

### References and Resources

The following issues are not covered explicitly in this chapter, but are related to “physical standards” or “medical examinations” and therefore listed here for ease of reference. This list is not intended to be inclusive of all related topics. USMC Enlisted: MARCORSEPSMAN Chapters 1, 6, and 8.

Administrative Separation for Convenience of the Government, Personality Disorders - Navy Enlisted MILPERSMAN 1910-122; USMC Enlisted: MARCORSEPMAN Chapters 1 and 6.

Administrative Separation for Erroneous Enlistment - Navy Enlisted: MILPERSMAN 1910-130; USMC Enlisted: MARCORSEPMAN Chapters 1 and 6.

Administrative Separation for Defective Enlistment - Navy Enlisted: MILPERSMAN 1910-132; USMC Enlisted: MARCORSEPMAN Chapters 1 and 6.

Administrative Separation for Fraudulent Enlistment - Navy Enlisted: MILPERSMAN 1910-134; USMC Enlisted: MARCORSEPMAN Chapters 1 and 6.

Administrative Separation of Officers - Navy: MILPERSMAN 1920; USMC; Enlisted: MARCORSEPMAN Chapters 1 and 3.

Assignment Screening - BUMEDINST 1300.2 and MILPERSMAN 1300-801.

Dental Examinations - Manual of the Medical Department Chapter 6, article 6-99.

Department of Defense Forms - <http://www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm>.

Department of Defense Directives and Instructions - <http://www.dtic.mil/whs/directives/>.

Department of Defense Medical Examination Review Board (DODMERB) - <https://dodmerb.tricare.osd.mil/>; NAVMEDCOMINST 6120.2.

Fitness for Duty Examinations - BUMEDINST 6120.20.

HIV Policy - DOD Instruction 6485.1; SECNAVINST 5300.30.

Limited Duty (LIMDU) - MILPERSMAN 1306-1200 (Enlisted); MILPERSMAN 1301-225 (Officers); Manual of the Medical Department (MANMED), Chapter 18.

Marine Corps Separations Manual (MARCORSEPMAN MCPO P1900.16F) - This is not available on the Web site.

Military Personnel Manual (MILPERSMAN) - [http://buperscd.technology.navy.mil/bup\\_updt/upd\\_CD/BUPERS/MILPERS/MilpersmanPDF\\_TOC.htm](http://buperscd.technology.navy.mil/bup_updt/upd_CD/BUPERS/MILPERS/MilpersmanPDF_TOC.htm).

Navy Medicine Forms - <http://navymedicine.med.navy.mil/> Click on “Directives” then on the next web page click on “Forms.”

Overseas Screening - BUMEDINST 1300.2; MILPERSMAN 1300-800.

Physical Disability/PEB - DOD Instructions 1332.18, 1332.38, 1332.39; SECNAVINST 1850.4 series; Manual of the Medical Department (MANMED), Chapter 18.

Physical Readiness Program (PRT) - OPNAVINST 6110.1; MILPERSMAN 6110-010.

Pre-confinement examinations - SECNAVINST 1640.9 series.

Deployment Health Evaluations - DOD Instructions 6490.3, Pre-Deployment Assessment form DD 2795, Post-Deployment Assessment form DD 2796.

Preventive Health Assessment (PHA) - OPNAVINST 6120.3 series.

Reservists - Separation from Active Duty: MILPERSMAN 1916 and SECNAVINST 1770.3; Physical Risk Classification: MILPERSMAN 6110-020; Mobilization: OPNAVINST 3060.7 series and BUPERSINST 1001.39 series.

**15-112****Active Duty  
Women**

(1) **Purpose.** To provide annual health assessment recommendations for all female active duty members and reservists on active duty, hereafter identified as servicewomen.

(2) **General.** Policies and procedures for the medical care of non-active duty beneficiaries, including reservists are addressed in NAVMEDCOMINST 6320.3B.

(3) **Scope of Examination.** An annual health assessment is recommended for all servicewomen. Annual health assessment examination recommendations for servicewomen, include, but are not limited to, the following:

(a) Weight check to screen for obesity using BMI calculation<sup>1</sup> (available at the following Web site: [www.nhlbisupport.com/bmi](http://www.nhlbisupport.com/bmi)).

(b) Blood pressure measurement.

(c) Chlamydia screening for all sexually active women aged 25 and younger, and other asymptomatic women at risk for infection.<sup>1</sup> This can be performed using any FDA-approved method.

(d) **Papanicolaou (Pap) smear**

(1) **First screen.** Delayed until 3 years after the onset of sexual activity or by 21 years, whichever comes first.<sup>2</sup>

(2) **Women younger than age 30.** Required annual Pap screening.<sup>2</sup>

(3) **Women age 30 and older screening.** If a woman age 30 or older has negative results on three consecutive annual Pap tests, then she may be rescreened with a Pap smear alone every 2-3 years.<sup>2</sup>

(4) **Women of any age** who are immunocompromised, are infected with HIV, or were exposed in utero to DES should be screened annually.<sup>2</sup>

(5) **Discontinuation of Pap screening.** Women who have had a hysterectomy with the removal of the cervix for benign reasons and with no history of an abnormal Pap smear can discontinue

Pap smear testing. Women who have had such a hysterectomy but who have a history of CIN 2 or 3 should be screened annually until they have three consecutive, and negative vaginal Pap tests; then they can discontinue Pap screening<sup>2</sup>.

(e) **Clinical Breast Examination.** Beginning at age 20 and should be performed at least every 3 years until age 40 when it should then be done annually.<sup>3</sup>

(f) **Mammography**

(1) A screening mammogram is recommended for all women annually beginning at age 40 with a clinical breast examination.<sup>3</sup>

(2) For high risk women, such as women who have a family history of breast cancer in a premenopausal first degree relative, baseline mammography should begin 10 years prior to the age of onset of disease in that relative (or sooner if clinically indicated) and then be performed annually.<sup>3</sup>

(g) **Lipid Screening (fasting lipid panel) for all women aged 45 and older.** Women aged 20-45 should be screened if clinically indicated, for risk factors such as diabetes, family history of cardiovascular disease before age 50 years in male relatives or age 60 years in female relatives, family history suggestive of familial hyperlipidemia, multiple coronary heart disease risk factors (e.g., tobacco use, hypertension).<sup>1</sup>

(h) **Colorectal Cancer (CRC) Screening** is recommended for all women beginning at age 50.<sup>3</sup> Women at high risk for colon cancer should begin at age 40. Women with positive Fecal Occult Blood Test (FOBT), adenomatous polyps on sigmoidoscopy, or with lesions seen on Air Contrast Barium Enema (ACBE) should be referred for colonoscopy. Colonoscopy is the preferred screening tool for women with inflammatory bowel disease (IBD), suspected hereditary polyposis, strong Family History of CRC, and adenomatous malignancies of other organ such as breast, ovary, endometrium, or urinary tract. Once a woman has been identified with a personal history of an adenomatous polyp or colon cancer, only colonoscopy should be used for polyp or tumor surveillance. Recommendations for CRC screening are evolving. At the present time, CRC screening can be accomplished by any of the following three methods:

(1) FOBT testing every year and flexible sigmoidoscopy every 3 to 5 years.

(2) ACBE every 5 years.

(3) Colonoscopy every 10 years.<sup>3</sup>

(4) **Immunization** status must be reviewed to ensure all required immunizations have been administered and are current. Overdue immunizations must be administered and the servicewoman should be advised when forthcoming immunizations are due.

(5) **Occupational risk and surveillance** must be evaluated and reviewed for appropriate monitoring. Ensure pertinent screening is documented within the medical record and updated on the DD 2766.

(6) **Counseling Requirements.** Counseling is required to be performed annually and documented on the DD 2766. Counseling elements include:

(a) Unintended pregnancy prevention, contraceptive counseling, family planning, and sexually transmitted disease (STD) prevention counseling.

(b) Counseling should be based on information from a careful lifestyle and sexual history and should take into account the individual abilities, concerns, risks, and preferences of each servicewoman.

(c) Counseling should include discussion regarding:

(1) Birth control options available, their efficacies, the ability of different contraceptive methods to protect against STDs and (HIV) infection, and how to obtain birth control.

(2) Risk behaviors (i.e., tobacco, alcohol and drug use; multiple sexual partners).

(3) Emergency contraception, discussion including that it is not a form of birth control, its efficacy and safety, and how it can be obtained.

(d) Health promotion and clinical preventive services counseling should be targeted to individual risk factors and behaviors.

(1) Counseling may include information on seat belt use; prevention of skin cancer, injury, heat illness, suicide, violence; prevention of physical, emotional, and/or sexual abuse.

(2) Nutrition counseling should include discussion regarding folic acid and calcium supplements.

(7) **Exceptions to Examination Recommendations.** When a health care provider determines a servicewoman does not require a portion of the annual health assessment examination, the provider shall discuss the basis for this determination and advise her of the time frame for, and the content of, the next examination. Exceptions and recommendations should be documented in the medical record on an SF 600.

#### (8) **Notification of Results**

(a) **Pap Smear Results.** Normal Pap smear results will be provided to the patient within 30 days and abnormal results will be provided to the patient as soon as possible.

#### (b) **Mammogram Results**

(1) Screening mammogram results will be provided to the patient within 30 days of the mammogram being performed.

(2) Diagnostic mammogram (e.g., for evaluation of a lump) results will be provided to the patient as soon as possible.

#### (9) **Responsibilities**

(a) Commanding officers are responsible for compliance with the elements of this article.

(b) Medical department personnel are responsible for providing the required health assessment components of care.

(c) Servicewomen are responsible for making and keeping appointments for the recommended annual health assessment examination components.

#### (10) **Forms**

(a) SF 600 is available on the GSA Web site at: [http://www.gsa.gov/Portal/gsa/ep/formslibrary.do?view\\_Type=DETAIL&formId=4951AF308C046D9785256A3F0005BE96](http://www.gsa.gov/Portal/gsa/ep/formslibrary.do?view_Type=DETAIL&formId=4951AF308C046D9785256A3F0005BE96).

(b) DD 2766 is available at the following Web site: <http://www.dtic.mil/whs/directives/infomgt/forms/forminfo/forminfopage2306.html>.

#### Footnotes:

<sup>1</sup> US Preventive Services Task Force (USPSTF)

<sup>2</sup> American College of Obstetricians and Gynecologists (ACOG)

<sup>3</sup> American Cancer Society (ACS)

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