### Change 136 Manual of the Medical Department U.S. Navy NAVMED P-117

### 16 Apr 2010

To: Holders of the Manual of the Medical Department

1. <u>This Change</u> revises Chapter 15, articles 15-103 - Nuclear Field Duty, 15-104 - Occupational Exposure to Ionizing Radiation, and 15-106 - Submarine Duty.

#### 2. Summary of Changes

a. Chapter 15, Articles 15-103 and 106

(1) Incorporates contents of interval ACNs where pertinent.

(2) Reconciles wording and formatting between these closely related articles to the extent feasible.

(3) Provides brief overviews of important considerations for non-Undersea Medical Officers (UMOs) performing these examinations.

(4) Synchronizes the periodicity of Nuclear Field, Submarine, and Occupational Exposure to Ionizing Radiation Duty examinations.

(5) Removes Independent Duty Corpsmen (IDCs) from the lists of authorized examiners.

(6) Grants examining UMOs latitude in applying General Duty standards for qualified personnel.

(7) Removes most cases of nephrolithiasis, abdominal surgery, and obstructive sleep apnea from the list of disqualifying conditions under Article 15-106.

(8) Adds female reproductive system standards to Article 16-106.

(9) Expands the sections on psychological and cognitive conditions, using standard Diagnostic and Statistical Manual, 4<sup>th</sup> edition (DSM IV) terminology.

(10) Provides improved guidance for obtaining waivers, including electronic interim waivers.

b. <u>Chapter 15, Article 15-104</u>. The governing directive for Occupational Exposure to Ionizing Radiation is the Radiation Health Protection Manual (NAVMED P-5055). Historically, revisions to MANMED and NAVMED P-5055 have not been synchronized, leading to considerable confusion among examiners and others. By eliminating detailed guidance from MANMED and referring the reader to NAVMED P-5055, the potential for conflicting guidance is greatly diminished.

#### 3. Action

- a. Remove pages 15-49 and 15-50 and replace with like-numbered pages.
- b. Remove pages 15-77 through 15-94 and replace with like-numbered pages.
- c. Record this Change 136 in the Record of Page Changes.

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(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 <u>http://www.nomi.med.navy.mil/Nami/WaiverGuideTopics/index.htm</u>).



(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 multipiloted 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.

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 man-dated by the member's current commanding officer and/or SARP have been fully completed. The attend-ing 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.

#### (1) 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.

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

(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:

<u>1</u>. 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).

#### <u>(e)</u> 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)).

<u>(g)</u> 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.

- <u>(b)</u> 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.



#### **Nuclear Field Duty**

(1) *Characteristics.* Nuclear field duty involves work in the Naval Nuclear Propulsion and/or Nuclear Weapons programs. A very high degree of reliability, alertness, and good judgment is required in order for operations to be conducted safely and to maintain the integrity and accountability of these critical programs. It should be noted that nuclear field duty is not the same as occupational exposure to ionizing radiation (ionizing radiation work). While all nuclear field personnel must also be qualified as ionizing radiation workers, not all ionizing radiation workers are nuclear field personnel. Examples of the latter category are medical radiology personnel and industrial radiographers.

(2) *Applicability.* Current and prospective nuclear field personnel.

#### (3) **Examinations**

(a) Periodicity. For candidates, no more than 1 year before reporting for initial nuclear field training. Periodicity between examinations will not exceed 5 years up to age 50. After age 50, periodicity will not exceed every 2 years, e.g., an individual examined at age 46 would be re-examined at age 51, an individual examined at age 47, 48, 49, or 50 would be re-examined at age 52. Beginning at age 60, the examination is required annually. Nuclear field duty examinations must be performed no later than 1 month following the anniversary date (month and year) of the previous physical examination date. For example, for an exam performed on a 20-year old on the 15th of February 2010, the next examination must be completed by 31 March 2015. A complete physical examination is also required prior to returning to nuclear field duty after a period of disqualification. All Nuclear Field Duty examinations shall be performed concurrently with a Radiation Medical Exam (RME), (per MANMED article 15-104 and NAVMED P-5055) and documented separately on their respective forms.

(b) *Scope.* The examiner will pay special attention to the mental status, psychiatric, and neurologic components of the examination, and will

review the entire health record for evidence of past impairment. Specifically, the individual will be questioned about anxiety related to working with nuclear power or nuclear weapons, difficulty getting along with other personnel, and history of suicidal or homicidal ideation. The only laboratory tests required are those done for the concurrent RME. The examination shall be recorded on DD Form 2807-1 and DD Form 2808. Laboratory data and radiationspecific historical questions documented on the NAVMED 6470/13 for the RME need not be duplicated on the DD Form 2807-1 and DD Form 2808 for the nuclear field duty examination. The following studies are required within 3 months prior to the exam:

- (1) Audiogram.
- (2) Visual acuity.

(3) Color vision (as determined per MANMED Chapter 15, article 15-36(1)(d)).

(c) *Examiners.* Nuclear field duty physical examinations may be performed by any physician, physician assistant, or nurse practitioner with appropriate clinical privileges. Examinations not performed by an Undersea Medical Officer (UMO) or graduate of a Residency in Aerospace Medicine (RAM) will be reviewed and co-signed by a UMO or RAM. All reviewing authority signatures must be accompanied by the "UMO" or "RAM" designation, as appropriate. A UMO is defined as a medical officer who has successfully completed the entire UMO Course conducted by the Naval Undersea Medical Institute.

(4) Standards. The standards delineated in this chapter define the conditions which are considered disqualifying for nuclear field duty. The standards delineated in Chapter 15, Section III (General Standards) are universally applicable to all nuclear field duty candidates. Certain of the General Standards are applicable to continued qualification for nuclear field duty whereas others are not. UMOs and RAMs, based on their specialty training and subject matter expertise, are charged with applying the General Standards to qualified nuclear field personnel when appropriate to ensure physical and mental readiness to perform their duties without limitation. Standards in this article take precedence over General Standards where conflicts exist. All nuclear field personnel must meet the physical

standards for occupational exposure to ionizing radiation (MANMED article 15-104 and NAVMED P-5055). Submarine designated nuclear field personnel must meet the physical standards for submarine duty (MANMED article 15-106). Nuclear weapons personnel must meet the requirements of the Personnel Reliability Program (SECNAVINST 5510.35 series).

(a) *General.* Any condition, combination of conditions, or treatment which may impair judgment or alertness, adversely affect reliability, or foster a perception of impairment is disqualifying. Nuclear field personnel returning to duty following an absence of greater than 7 days due to illness or injury, hospitalization for any reason, or after being reported on by a medical board must have a properly documented UMO or RAM evaluation to determine fitness for continued nuclear field duty.

(b) *Hearing.* Demonstrated inability to communicate and perform duty is disqualifying.

(c) Eyes

(1) Visual acuity not correctable to 20/ 25 in at least one eye is disqualifying.

(2) Defective color vision is disqualifying. For qualified nuclear field workers, waiver requests must include a statement from the member's supervisor stating that the member is able to perform his or her job accurately and without difficulty. For candidates, the examiner must include evidence that primary and secondary colors can be discerned.

(d) *Psychological and Cognitive*. Psychological fitness for nuclear field duty must be carefully and continuously evaluated in all nuclear field personnel. It is imperative that individuals working in these programs have a very high degree of reliability, alertness, and good judgment. Disorders italicized below refer to diagnoses or categories described in the DSM-IV-TR.

(1) Delirium, dementia, amnestic and other cognitive disorders, mental disorders due to a general medical condition, schizophrenia and other psychotic disorders, mood disorders, anxiety disorders, somatoform disorders, factitious disorders, dissociative disorders, eating disorders, and impulsecontrol disorders not elsewhere classified are disqualifying. (2) Disorders usually first diagnosed in infancy, childhood, or adolescence, sleep disorders, and sexual and gender identity disorders are disqualifying if they interfere with safety and reliability or foster a perception of impairment.

(a) Current Attention Deficit Hyperactivity Disorder (ADHD) is disqualifying, but a history of ADHD greater than 1 year prior to military service is not disqualifying.

(b) Communication disorders, including but not limited to any speech impediment which significantly interferes with production of speech, repeating of commands, or allowing clear verbal communications, are disqualifying.

(3) Personality disorders are disqualifying for entry into nuclear field duty. For nuclear field designated personnel, personality disorders may be administratively disqualifying if they are of significant severity as to preclude safe and successful performance of duties. In these cases, administrative processing should be pursued per the Military Personnel Manual (MILPERSMAN). The term "environmental unadaptability" is not a medical diagnosis and should not be used in medical assessments. A command may use "environmental unadaptability" as justification for administrative disqualification from nuclear field duty, particularly in those individuals whose maladaptive behavior precludes acceptable performance of their duties or fosters the perception of impairment or unreliability.

(4) Adjustment disorders and brief situational emotional distress such as acute stress reactions or bereavement are not normally disqualifying for nuclear field duty. Individuals with these conditions shall be evaluated by the attending UMO or RAM, in conjunction with formal psychiatric evaluation. In cases which resolve completely within 30 days, individuals may be found fit for nuclear field duty by the attending UMO or RAM. Conditions lasting longer than 30 days are disqualifying. Waiver may be considered after complete resolution.

(5) History of suicidal ideation, gesture, or attempt is disqualifying. These situations must be taken very seriously and require formal evaluation by a mental health specialist. Waivers will be considered based on the underlying condition as determined by the attending UMO or RAM and mental health professional. Any consideration for return to duty must address whether the service member, in the written opinions of the attending UMO or RAM and the member's commanding officer, can return successfully to the specific stresses and environment of nuclear field duty.

(6) History of self-mutilation, including but not limited to cutting, burning, and other selfinflicted wounds, is disqualifying whether occurring in conjunction with suicidality or as an abnormal coping mechanism.

#### (7) Substance Abuse and Dependence

(a) Medically disqualifying for all nuclear field candidates. Waiver requests must include documentation of successful completion of treatment and aftercare.

(b) Medically disqualifying for nonsubmarine nuclear weapons personnel. Waiver requests must include documentation of successful completion of treatment and a plan for aftercare.

(c) Submarine nuclear weapons personnel and all nuclear propulsion program personnel with substance abuse or dependence will be managed administratively per OPNAVINST 5355.3 series and do not require medical disqualification unless a medically disqualifying diagnosis is present in addition to substance abuse or dependence.

(d) Illicit drug use, historical or current, is to be managed administratively per OPNAVINST 5355.3 series, SECNAVINST 5300.28 series, and any other applicable directives.

(8) History of other mental disorders not listed above, which, in the opinion of the UMO or RAM, will interfere with or prevent satisfactory performance of nuclear field duty is disqualifying.

(9) Any use of psychopharmaceuticals for any indication within the preceding year is disqualifying. Waivers will be considered after a 60day interval off medication if the individual has been examined and cleared by a doctoral level mental health provider. The mental health provider shall specifically comment on the presence or absence of any withdrawal, discontinuation, rebound, or other such symptoms attributable to the episode of psychopharmaceutical use. Individuals who experience any of these symptoms must be symptom free for 60 days before a waiver will be considered.

(a) For the purpose of this directive, "psychopharmaceutical" is defined as a prescription medication with primary activity in the central nervous system. This includes, but is not limited to, all antidepressants, antipsychotics, antiepileptics, sedative/hypnotics, stimulants, anxiolytics; smoking cessation agents other than nicotine, Drug Enforcement Agency (DEA) scheduled medications, and bipolar agents. Isotretinoin (Accutane) is considered a psychopharmaceutical and the provisions of this section apply.

(b) *Exceptions.* Zolpidem (Ambien) prescribed for jet lag, medications prescribed or administered for facilitation of a medical or dental procedure, medications prescribed for analgesia for up to 1 week, anti-emetics for acute nausea, and muscle relaxants (such as cyclobenzaprine or diazepam) for acute musculoskeletal pain are not disqualifying.

(c) Use of any DEA Schedule I drug for any reason, including religious sacraments, is disqualifying.

#### (e) Miscellaneous

(1) A history of chronic pain (e.g., abdominal pain, chest pain, and headache) which is recurrent or incapacitating such that it prevents completion of daily duty assignments or compromises reliability is disqualifying.

(2) Recurrent syncope is disqualifying. Waiver will be considered only after demonstration of a definitive diagnosis and effective prophylactic treatment.

(5) *Waivers.* Requests for waiver of physical standards will be sent from the member's commanding officer to the appropriate Bureau of Naval Personnel code via Bureau of Medicine and Surgery (BUMED) Undersea Medicine and Radiation Health (BUMED-M3/5OM2), and any applicable immediate superior in command (ISIC)

and/or type commander (TYCOM). Interim dispositions may be granted by BUMED via deidentified or encrypted email. In these cases, BUMED must receive the formal waiver package within 6 months after the interim disposition is given. BUMED's final recommendation shall be based on the member's status at the time the formal package is considered, and may differ from an interim recommendation if there has been a change in the member's condition or if information present in the formal package dictates a change in recommendation. Individuals with conditions which are also disqualifying for occupational exposure to ionizing radiation require consideration by the Radiation Effects Advisory Board per MANMED article 15-104 and NAVMED P-5055.

### 15-104 Occupational Exposure to Ionizing Radiation

(1) *General.* NAVMED P-5055, Radiation Health Protection Manual, is the governing document for the Navy's Radiation Health Protection Program. To ensure that the requirements of NAVMED P-5055 are met and to eliminate any potential for conflicting guidance, the specific standards and examination procedures for occupational exposure to ionizing radiation are found only in NAVMED P-5055, Chapter 2. The current version of NAVMED P-5055 can be found at the BUMED web site: http:// www.med.navy.mil/directives/Pub/5055.pdf.

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## 15-105 Warf

#### 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.

(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.

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.

<sup>(</sup>a) SEAL.

<sup>(</sup>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 evaculation (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

 $\underbrace{(1)}{\text{Corrected visual acuity worse than } 20/}$  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 coccidiomycosis 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 waiverable 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 neuropsychological 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 radiaologic 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.



#### **Submarine Duty**

(1) *Characteristics.* Submarine duty is characterized by isolation, medical austerity, need for reliability, prolonged subsistence in enclosed spaces, exposure to atmosphere contaminants, and psychological stress. The purpose of the submarine duty standards is to maximize mission capability by ensuring the mental and physical readiness of the Submarine Force.

(2) *Applicability.* Current and prospective submariners and UMO. Non-submariner personnel embarked on submarines ("riders") will comply with OPNAVINST 6420.1 series.

#### (3) Examinations

(a) *Periodicity*. For candidates, no more than 1 year before reporting for initial submarine training. Periodicity between examinations will not exceed 5 years up to age 50. After age 50, periodicity will not exceed 2 years, e.g., an individual examined at age 46 would be re-examined at age 51, an individual examined at age 47, 48, 49 or 50 would be reexamined at age 52. Beginning at age 60, the examination is required annually. Submarine duty examinations must be performed no later than 1 month following the anniversary date (month and year) of the previous physical examination date. For example, for an exam performed on a 20-year old on the 15th of February 2010, the next examination must be completed by 31 March 2015. A complete physical examination is also required prior to returning to submarine duty after a period of disqualification.

(b) *Scope.* The examiner will pay special attention to the mental status, psychiatric, and neurologic components of the examination, and will review the entire health record for evidence of past impairment. Specifically, the individual will be questioned about difficulty getting along with other personnel, history of suicidal or homicidal ideation, and anxiety related to tight or closed spaces, nuclear power, or nuclear weapons. The examination shall be recorded on the DD Form 2807-1 and DD Form 2808. For female examinees, the NAVMED 6420/2

(Health and Reproductive Risk Counseling for Female Submariners and Submarine Candidates) is also required. If within required periodicity, portions of the examination typically performed in conjunction with the annual women's health exam (e.g., breast, genitalia, pelvic, anus and rectum) may be transcribed with proper attribution rather than repeated, and need not be performed by the examiner performing the submarine duty exam. The following studies are required within 3 months prior to the exam unless otherwise specified:

(1) PA and lateral x-rays of the chest (for candidates only).

(2) Latent tuberculosis infection skin testing within preceding 6 months.

(3) Audiogram.

(4) Visual acuity.

(5) Color vision (as determined by MANMED article 15-36(1)(d)).

(6) Dental exam.

(7) Pap smear within preceding 12 months (female only).

(8) Mammogram within preceding 12 months (female starting at age 40 or earlier if at high risk per current guidelines).

(c) *Examiners.* Submarine duty physical examinations may be performed by any physician, physician assistant, or nurse practitioner with appropriate clinical privileges. Examinations not performed by a UMO shall be reviewed and cosigned by a UMO. All reviewing authority signatures must be accompanied by the "UMO" designation. A UMO is defined as a medical officer who has successfully completed the entire UMO Course conducted by the Naval Undersea Medical Institute.

(4) *Standards*. The standards delineated in this chapter define the conditions which are considered disqualifying for submarine duty. The standards delineated in Chapter 15, Section III (General Standards) are universally applicable to all submarine duty candidates. Certain of the General Standards are applicable to continued qualification for submarine duty whereas others are not. UMOs, based on their specialty training and subject matter

expertise, are charged with applying the General Standards to qualified submarine personnel when appropriate to ensure physical and mental readiness to perform their duties without limitation. Standards in this article take precedence over General Standards where conflicts exist. Submariners who work in the nuclear propulsion or nuclear weapons programs must also meet the physical standards for nuclear field duty and occupational exposure to ionizing radiation (MANMED articles 15-103 and 104 respectively). Ship's company divers must also meet the diving duty and occupational exposure to ionizing radiation standards (MANMED articles 15-102 and 104, respectively).

(a) *General.* Any condition or combination of conditions which may be exacerbated by submarine duty or increase potential for medical evacuation (MEDEVAC) is disqualifying. Also, any condition, combination of conditions, or treatment which may impair the ability of one to safely and effectively work and live in the submarine environment is disqualifying. Submariners returning to duty following an absence of greater than 7 days due to illness or injury, hospitalization for any reason, or after being reported on by a medical board must have a documented UMO evaluation to determine fitness for continued submarine duty.

(b) Ears

(1) A history of chronic inability to equalize pressure is disqualifying. Mild eustachian tube dysfunction that can be controlled with medication is not disqualifying.

(2) Diminished unamplified auditory acuity impairing communication and performance of duties is disqualifying. For qualified personnel, the general duty hearing standards (MANMED article 15-38) do not apply.

(c) Dental

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

(2) Dental classification, as determined by a dental officer, of other than Department of Defense (DoD) Class 1 or 2 is disqualifying for candidates. (3) Dental conditions requiring followup which significantly interferes with a member's performance of duty, including going to sea, are disqualifying.

(d) Eyes

(1) Visual acuity that cannot be corrected to 20/25 in at least one eye is disqualifying.

(2) Defective color vision is disqualifying except for enlisted rates CS, HM, LS, and YN. For submarine designated personnel, waiver requests must include a statement from the member's supervisor stating that the member is able to perform his or her job accurately and without difficulty. For candidates, the examiner must include evidence that primary and secondary colors can be discerned.

(3) All forms of corneal surgery are disqualifying except for PRK, LASEK, and LASIK. Waivers are not required for members who have had successful surgery if stable postoperative vision meets the criteria of MANMED article 106(4)(d)(1) above and the following are met:

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

(b) For qualified submariners

 $\underline{1}$ . Prior authorization for surgery is required from the member's commanding officer.

<u>2</u>. Members must be on shore duty or in a shipyard maintenance period of at least 3 months and have at least 30 days remaining after surgery before any scheduled submarine operations.

<u>3</u>. A UMO interview and medical record entry is required after completion of surgery before the member can return to submarine duty.

(4) Keratoconus is disqualifying.

(5) Recurrent corneal abrasions associated with ocular infection are disqualifying.

(6) A history of iritis is disqualifying.

(7) Glaucoma is disqualifying. Preglaucoma requiring follow up intervals of 1 year or more and no treatment is not disqualifying. (8) Intraocular lens implants and depth perception deficits are not disqualifying.

(e) *Pulmonary.* Any chronic or recurring condition including but not limited to chronic obstructive pulmonary disease, sarcoidosis, pneumoconiosis, or chronic infection is disqualifying.

(1) Asthma or reactive airway disease (these terms are to be considered synonymous) after the 13th birthday is disqualifying. Waivers will be considered only for non-smokers with intermittent (vice persistent) asthma. All waiver requests shall include the following:

(a) Report from a residency trained primary care physician or pulmonologist characterizing the asthma as intermittent or persistent and, if persistent, as mild, moderate, or severe.

(b) Spirometry results.

(c) Medication requirements.

 $\underline{(d)}$  Where applicable, recommendations for control of precipitants and smoking cessation.

(2) Obstructive sleep apnea which does not respond to standard therapeutic interventions such as positive airway pressure, surgery, or weight loss is disqualifying.

(3) History of pneumothorax is disqualifying. Waiver may be considered for traumatic or surgical pneumothorax if chest CT and pulmonology consultation support a waiver request. Waiver will not be considered for spontaneous pneumothorax.

(4) Isoniazid (INH) use for latent tuberculosis infection is not disqualifying after it has been taken for 8 weeks without adverse effects. Rifampin is an acceptable alternative treatment and is not disqualifying.

(f) Cardiovascular. Any condition that chronically, intermittently, or potentially impairs exercise capacity or causes debilitating symptoms is disqualifying. Specific disqualifying conditions include, but are not limited to: (1) Cardiac dysrhythmia (single episode, recurrent, or chronic) other than 1st degree heart block.

(2) Atherosclerotic heart disease.

(3) Pericarditis, chronic or recurrent.

(4) Myocardial injury or hypertrophy of any cause.

(5) Chronic anticoagulant use.

(6) Intermittent claudication or other peripheral vascular disease.

(7) History of deep venous thrombosis is disqualifying. Waivers may be considered for uncomplicated cases after completion of anticoagulation therapy and 6 months without recurrence off medication. Cases complicated by pulmo-nary embolism or predisposing coagulation disorder (Protein S or Protein C deficiency, Factor V Leiden, etc.) will not be considered for waiver.

(8) Hypertension requiring three or more medications or associated with any changes in any organ system. Each active ingredient of a combination preparation shall be considered a separate medication.

(9) History of cardiac surgery other than closure of patent ductus arteriosus in infancy.

(10) History of ventricular pre-excitation conditions, to include, but not limited to Wolf-Parkinson-White and Lown-Ganong-Levine syndromes. Waiver may be considered for personnel who have undergone successful ablation of accessory pathway(s) and are recommended for return to submarine duty by a cardiologist and the attending UMO. Waivers will also be considered for personnel with a ventricular pre-excitation electrocardiogram (ECG) pattern who:

(a) Have never had a documented dysrhythmia.

(b) Have never had a symptomatic episode consistent with a paroxysmal dysrhythmia (e.g., palpitations, dizziness, chest pain, dyspnea, loss of consciousness).

(c) Have been found to be at extremely low risk for a future event as determined by a cardiologist, in conjunction with electrophysiologic study if indicated.

# (g) 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) History of gastrointestinal bleeding, including positive occult blood testing, if the cause has not been corrected. Minor rectal bleeding from an obvious source (e.g., anal fissure or external hemorrhoid) does not require immediate disqualification, but must be evaluated and treated by a physician as soon as practicable.

(b) Any history of organ perforation.

(c) History of chronic or recurrent diarrhea, abdominal pain, or vomiting.

(2) Asplenia is disqualifying. Waiver may be considered 2 years after splenectomy if the member has received the appropriate immunizations and has had no serious infections.

(3) History of bariatric surgery is disqualifying and waiver will not be considered.

(4) History of diverticulitis is disqualifying. Personnel with diverticulosis require counseling regarding preventive measures and monitoring for development of diverticulitis.

(5) History of small bowel obstruction is disqualifying.

(6) Presence of gallstones, whether or not they are symptomatic, is disqualifying until the member is stone-free.

(7) History of gastric or duodenal ulcer is disqualifying.

(8) History of pancreatitis is disqualifying.

(9) Chronic hepatitis is disqualifying.

(10) History of abdominal surgery is not disqualifying, provided there are no sequelae including, but not limited to, adhesions.

(11) Gastroesophageal reflux disease that is adequately controlled and under appropriate follow up is not disqualifying.

#### (h) *Genitourinary*

#### (1) History of Urolithiasis

(a) Is disqualifying for candidates.

(b) A first episode of uncomplicated urolithiasis is not disqualifying for submarine designated personnel provided that there is no predisposing metabolic or anatomic abnormality and there are no retained stones. The attending UMO may return the member to full duty after a thorough evaluation to include urology consultation.

(c) A first episode of urolithiasis associated with a metabolic or anatomic abnormality is disqualifying. Waiver may be considered based upon evidence of correction of the associated abnormality.

(d) Recurrent urolithiasis, regardless of cause, is disqualifying with no possibility of waiver.

(e) Randall's plaques are not disqualifying.

#### (2) Female Reproductive System

(a) Recurrent or chronic pelvic pain of sufficient severity that it interferes with performance of duties or poses a MEDEVAC risk is disqualifying.

(b) Abnormal vaginal bleeding of sufficient severity that it interferes with performance of duties, causes symptomatic anemia, or poses a MEDEVAC risk is disqualifying.

(c) Endometriosis is disqualifying.

(d) Uterine fibroids are disqualifying if symptomatic.

(e) Cervical dysplasia or neoplasia requiring frequent follow up (more often than every 6 months) is disqualifying.

(f) Pregnancy is not disqualifying, but the pregnant submariner may not get underway on a submarine for the duration of the pregnancy. After a pregnancy, the submariner may not get underway on a submarine until cleared by her maternity care provider and a UMO.

(i) *Endocrine and Metabolic*. Any condition requiring chronic medication or dietary modification is disqualifying for candidates but may be waiverable for qualified submariners. Addi-tionally:

(1) Diabetes mellitus is disqualifying

(a) Diabetes mellitus requiring insulin shall not be considered for a waiver.

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

(2) Prediabetic conditions requiring treatment with medication are disqualifying.

(3) Gout that does not respond to treatment is disqualifying.

(4) Symptomatic hypoglycemia is disqualifying.

(5) Chronic use of corticosteroids is disqualifying.

#### (j) Musculoskeletal

(1) Conditions resulting in decreased strength, decreased range of motion, or pain sufficient 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.

(3) Any disorder that precludes quick movement in confined spaces or inability to stand or sit for prolonged periods is disqualifying.

(k) *Psychological and cognitive*. Psychological fitness for submarine duty must be carefully and continuously evaluated in all submarine personnel. It is imperative that individuals working in this program have a very high degree of reliability, alertness, and good judgment. Disorders italicized below refer to diagnoses or categories described in the DSM-IV-TR.

(1) Delirium, dementia, amnestic and other cognitive disorders, mental disorders due to a general medical condition, schizophrenia and other psychotic disorders, mood disorders, anxiety disorders, somatoform disorders, factitious disorders, dissociative disorders, eating disorders, and impulsecontrol disorders not elsewhere classified are disqualifying.

(2) Disorders usually first diagnosed in infancy, childhood, or adolescence, sleep disorders, and sexual and gender identity disorders are disqualifying if they interfere with safety and reliability or foster a perception of impairment.

(a) Current ADHD is disqualifying, but a history of ADHD greater than 1 year prior to military service is not disqualifying.

(b) Communication disorders, including but not limited to any speech impediment which significantly interferes with production of speech, repeating of commands, or allowing clear verbal communications, are disqualifying.

(3) Personality disorders are disqualifying for entry into submarine duty. For submarine designated personnel, personality disorders may be administratively disqualifying if they are of significant severity as to preclude safe and successful performance of duties. In these cases, administrative processing should be pursued per the MILPERSMAN. The term "environmental unadaptability" is not a medical diagnosis and should not be used in medical assessments. A command may use "environmental unadaptability" as justification for administrative disqualification from submarine duty, particularly in those individuals whose maladaptive behavior precludes acceptable performance of their duties or fosters the perception of impairment or unreliability.

(4) Adjustment disorders and brief situational emotional distress such as acute stress reactions or bereavement are not normally disqualifying for submarine duty. Individuals with these conditions shall be evaluated by the attending UMO, in conjunction with formal psychiatric evaluation. In cases which resolve completely within 30 days, individuals may be found fit for submarine duty by the attending UMO. Conditions lasting longer than 30 days are disqualifying. Waiver may be considered after complete resolution. (5) History of suicidal ideation, gesture, or attempt is disqualifying. These situations must be taken very seriously and require formal evaluation by a mental health specialist. Waivers will be considered based on the underlying condition as determined by the attending UMO and mental health professional. Any consideration for return to duty must address whether the service member, in the written opinions of the attending UMO and the member's commanding officer, can return successfully to the specific stresses and environment of submarine duty.

(6) History of self-mutilation, including but not limited to cutting, burning, and other selfinflicted wounds, is disqualifying whether occurring in conjunction with suicidality or as an abnormal coping mechanism.

#### (7) Substance Abuse and Dependence

(a) Medically disqualifying for all submarine candidates. Waiver requests must include documentation of successful completion of treatment and aftercare.

(b) Designated submarine personnel with substance abuse or dependence will be managed administratively per OPNAVINST 5355.3 series and do not require medical disqualification unless a medically disqualifying diagnosis is present in addition to substance abuse or dependence.

(c) Illicit drug use, historical or current, is to be managed administratively per OPNAVINST 5355.3 series, SECNAVINST 5300.28 series, and any other applicable directives.

(8) History of other mental disorders not listed above, which, in the opinion of the UMO, will interfere with or prevent satisfactory performance of submarine duty is disqualifying.

(9) Any use of psychopharmaceuticals for any indication within the preceding year is disqualifying. Waivers will be considered after a 60day interval off medication if the individual has been examined and cleared by a doctoral level mental health provider. The mental health provider shall specifically comment on the presence or absence of any withdrawal, discontinuation, rebound, or other such symptoms attributable to the episode of psychopharmaceutical use. Individuals who experience any of these symptoms must be symptom free for 60 days before a waiver will be considered. (a) For the purpose of this directive, "psychopharmaceutical" is defined as a prescription medication with primary activity in the central nervous system. This includes, but is not limited to, all antidepressants, antipsychotics, antiepileptics, sedative/hypnotics, stimulants, anxiolytics; smoking cessation agents other than nicotine, DEA scheduled medications, and bipolar agents. Isotretinoin (Accutane) is considered a psychopharmaceutical and the provisions of this section apply.

(b) *Exceptions.* Zolpidem (Ambien) prescribed for jet lag, medications prescribed or administered for facilitation of a medical or dental procedure, medications prescribed for analgesia for up to 1 week, anti-emetics for acute nausea, and muscle relaxants (such as cyclobenzaprine or diazepam) for acute musculoskeletal pain are not disqualifying.

(c) Use of any DEA Schedule I drug for any reason, including religious sacraments, is disqualifying.

(1) *Neurologic.* Any chronic or recurrent condition resulting in abnormal motor, sensory, or autonomic function or in abnormalities in mental status is disqualifying.

(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) Current seizure disorder or history of a seizure after the  $6^{th}$  birthday is disqualifying. Waiver requests shall include mitigating circumstances if any, complete seizure and environment description, pertinent family history, and neurological evaluation. Member must be at least 2 years seizure free without medication before waiver will be considered. Waiver may be considered earlier for isolated seizures of known cause (e.g., toxic, infectious, post-traumatic).

(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 are disqualifying.

(5) Any history of surgery involving the central nervous system is disqualifying.

(6) Cerebrovascular disease including stroke, transient ischemic attack, and vascular malformation is disqualifying.

(m) *Skin* 

(1) Any skin disease, including pilonidal cysts, which may be aggravated by the submarine environment or interfere with the performance of duties is disqualifying until resolved.

(2) Acne vulgaris, nodulocystic or severe, is disqualifying, but may be waived with successful treatment. For the purposes of this directive, isotretinoin (Accutane) is considered a psychopharmaceutical and the provisions of MANMED Chapter 15, article 15-106, paragraph 4(j)(9) in this article apply.

(3) Psoriasis, eczema, recurrent rashes, or atopic dermatitis that may be worsened by the submarine environment to the extent that function is impaired or unacceptable risk of secondary infection is incurred are disqualifying.

(4) History of malignant melanoma or squamous cell carcinoma is disqualifying. Waiver may be considered after definitive treatment is completed. Other types of skin cancer are not disqualifying provided they are adequately treated and the member is considered fit for submarine duty by a dermatologist and the attending UMO.

#### (n) *Miscellaneous*

(1) Chronic viral illnesses, except those limited to skin, which pose any risk of contagion are disqualifying.

(2) Cancer treatment (except skin cancer, per MANMED Chapter 15, article 15-106, paragraph (4)(i)(4)) within the preceding year is disqualifying.

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

(4) Allergic or atopic conditions which require allergy immunotherapy are disqualifying unless the period of desensitization can be accomplished during a period of shore or limited duty.

(5) History of severe allergic reaction or anaphylaxis to environmental substances or any foods is disqualifying. Any allergy with life threatening manifestations is disqualifying.

(6) Chronic or recurrent pain syndromes that may mimic serious disease (e.g., abdominal pain, chest pain) or interfere with work performance or mobility are disqualifying.

(7) Recurrent syncope is disqualifying. Waiver will be considered only after demonstration of a definitive diagnosis and effective prophylactic treatment.

(8) Use of any medication that may pose a significant risk of mentally or physically impairing side effects is disqualifying. Any requirement for a medication that necessitates close monitoring, regular tests, refrigeration, or parenteral administration on a biweekly or more frequent basis is disqualifying.

(5) Standards for Pressurized Submarine *Escape Training (PSET)*. This section provides guidance on the medical screening to be completed within 72 hours prior to undergoing PSET. These standards and procedures are intended to identify those trainees at increased risk of gas embolism and barotrauma and to exclude them from PSET. Any condition that may be worsened by the hyperbaric environment is considered disqualifying for PSET.

(a) None of the physical standards for PSET are waiverable. Failure to meet the physical standards for PSET does not medically disqualify a service member from submarine duty.

(b) After successful medical screening, candidates will complete a recompression chamber dive. Personnel experiencing any difficulties will be excluded from PSET.

(c) Candidates for PSET must meet submarine duty physical standards and have a valid submarine duty physical on record. In addition, the following standards and procedures apply:

#### (1) Ear, Nose, and Throat

(a) The sinuses, dentition, dental fillings, and tympanic membranes must be examined, and the tympanic membranes must be mobile to valsalva.

(b) Current or recent upper respiratory infection, upper airway allergies, middle or inner ear disease, or sinus disease is disqualifying. Trainees may be reconsidered for PSET no less then 1 week after resolution of all symptoms.

#### (2) Pulmonary

(a) Auscultation of the lungs and inspection of the chest wall for abnormalities of movement, symmetry, and development must be performed.

(b) Current or recent lower respiratory infection is disqualifying. Trainees may be reconsidered for PSET no less than 3 weeks after completion of treatment. Chest radiographs must confirm resolution of disease.

(c) The presence of an unexplained cough is disqualifying.

(d) All chronic restrictive and obstructive pulmonary conditions are disqualifying.

(e) A history of exercise- or coldinduced bronchospasm, open-chest surgery, spontaneous pneumothorax, or pulmonary barotrauma is disqualifying.

(f) Chest radiographs must be performed within 2 years prior to PSET. Abnormalities, including cysts, blebs, and nodules are disqualifying.

(g) Spirometry without bronchodilator must be performed within 14 days prior to PSET and must show FVC and FEV1/FVC within standards set by the Third National Health and Nutrition Examination Survey (NHANES III).

#### (3) Cardiovascular

(a) On-site screening shall include a cardiovascular examination.

(b) Any cardiovascular abnormality other than first degree heart block that has not been corrected or waived for submarine duty is disqualifying.

#### (4) **Psychiatric**

(a) Submersion-related anxiety is disqualifying.

(b) Alcohol use within 12 hours prior to PSET is disqualifying.

#### (5) Neurological

(a) On-site screening shall include a complete neurological examination per the U.S. Navy Diving Manual.

(b) A history of intracranial surgery, disorders of sleep and wakefulness, and cognitive barriers to learning is disqualifying.

(c) A history of migraine or other recurrent headache syndromes is disqualifying unless mild and not associated with focal neurological symptoms.

#### (6) Genitourinary

(a) Current pregnancy is disqualifying.

(b) All female candidates shall undergo urine pregnancy testing at the time of medical screening.

(c) Pregnancy within the preceding 6 weeks is disqualifying unless cleared for PSET by the attending women's health provider and UMO.

(6) Waivers. Requests for waiver of physical standards will be sent from the member's commanding officer to the appropriate Bureau of Naval Personnel code via Undersea Medicine and Radiation Health (BUMED-M3/5OM2) and any applicable ISIC and/or TYCOM. Interim dispositions may be granted by BUMED via de-identified or encrypted email. In these cases, BUMED must receive the formal waiver package within 6 months after the interim disposition is given. BUMED's final recommendation shall be based on the member's status at the time the formal package is considered, and may differ from an interim recommendation if there has been a change in the member's condition or if information presented in the formal package dictates a change in recommendation.



Explosives Motor Vehicle Operator and Explosives Handler Examinations and Standards

(1) **Background.** Military personnel were previously exempt from the requirements of the Commercial Motor Vehicle Safety Act of 1986, and, in particular, from the requirements of 49 CFR Part 383 regarding physical examination requirements to obtain a commercial drivers license. However, due to recent changes in the scope of the periodic examinations for military members, military personnel are no longer considered exempt based on periodic physical examination requirements. Civilian and military explosive motor vehicle operators are now required to meet physical qualifications as listed in 49 CFR 391, Federal Motor Carrier Safety Administration (FMCSA) regulations.

(2) Scope. These special duty certification examinations are required for active duty and civilian personnel assigned as explosive motor vehicle operators and explosive handlers. The applicant must have a current physical examination per 49 CFR 391, FMCSA regulations. Certain military personnel are exempt from this standard based upon mission and/ or command requirements. Administrative mission and/or command requirement exemptions from this standard required review via the waiver process established by Naval Ordnance Safety and Security Activity. It is important to note the separation of the two qualifications as explosive motor vehicle operator and explosive handler. Those qualified under the explosive motor vehicle operator are automatically also qualified as explosive handlers. Explosive handler qualification does not imply qualification for explosive motor vehicle operator.

(3) *Periodicity.* The Explosives Motor Vehicle Operator (720) examination for civilian workers is required every 2 years (or as directed by 49 CFR 391 based upon medical factors) to age 60, then annually thereafter. Active duty members with a comprehensive history and physical examination will follow a 5-year periodicity as provided by 49 CFR 383.3. Examiners using another comprehensive