

Change 128
Manual of the Medical Department
U.S. Navy
NAVMED P-117

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To: Holders of the Manual of the Medical Department

1. **This Change** Revises Chapter 15, Article 84, Disqualifying Conditions for all Aviation Duty, and Chapter 15, Article 85, Class I: Personnel Standards.

2. **Summary of Changes**. This change represents a return to physical standards for visual acuity in force prior to 12 August 2005. The possibility of a waiver of the physical standards for student naval aviator (SNA) applicants who do not meet the physical standards for uncorrected distant visual acuity (DVA) without the use of contact lenses is eliminated. The distinction between service groups within Class I based on uncorrected distant visual acuity is reinstated.

3. **Action**
 - a. Remove pages 15-61 through 15-64 and replace with like-numbered pages.
 - b. Record Change 128 in the Record of Page Changes.



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(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 in all classes and for Class II and Class III applicants.

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

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

(1) Chorioretinitis or history thereof.

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

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

(4) Optic neuritis or history thereof.

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

(6) Severe lacrimal deficiency (dry eye).

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

(8) Intraocular lens implants.

(9) 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.** For Service Group 1 - 20/100 or better each eye uncorrected, corrected to 20/20 or better each eye. For Service Group 2 - 20/200 or better each eye uncorrected, corrected to 20/20 or better each eye. For Service Group 3 - 20/400 or better each eye uncorrected, corrected to 20/20 or better each eye. The first time distant visual acuity of less than 20/20 is noted, a manifest refraction (not cycloplegic) 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.