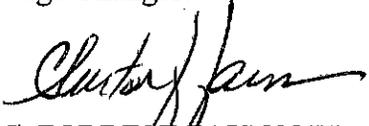


Change 152
Manual of the Medical Department
U.S. Navy
NAVMED P-117

28 Oct 2015

To: Holders of the Manual of the Medical Department (MANMED)

1. **This change** revises MANMED Chapter 15, Section IV, articles 15-36 and 15-109.
2. **Summary of Changes.** The following changes involve articles in the MANMED that provide guidance for color vision testing for commissioning, programs leading to a commission, Explosive Handlers and Landing Craft Air Cushion Operators. In addition to changes in color vision testing standards, the allowable spherical error for entrants to a program leading to a commission will be aligned with the allowable error for commissioning and the Department of Defense Medical Examination Review Board.
 - a. Article 15-36, paragraph (1)(d)(1), the minimum score for passing the Pseudo-Isochromatic Plates (PIP) was lowered from 12/14 to 10/14.
 - b. Article 15-36, paragraph (1)(d)(2), the use of the Farnsworth Lantern (FALANT) will be phased out after 2016, except for those already entered by using the FALANT.
 - c. Article 15-36, paragraph (2)(b), the allowable spherical refractive error was changed from -6.00 or +6.00 diopters to -8.00 or +8.00. This requested change aligns the spherical error standard for programs leading to a commission with the commissioning standard and the DoD Instruction 6130.03 standard of -8.00 or +8.00.
 - d. Article 15-109, paragraph (1)(b)(12), 10 or greater/14 on the PIP replaces the FALANT.
3. **Action**
 - a. Remove pages 15-28 and 15-29 and replace with like-numbered pages.
 - b. Remove page 15-99 and replace with like-numbered page.
 - c. Record this Change 152 in the Record of Page Changes.


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Chief, Bureau of
Medicine and Surgery
Acting

(8) Miscellaneous Defects and Diseases

(a) Current or history of abnormal visual fields due to diseases of the eye or central nervous system (368.4), or trauma (368.9) is disqualifying.

(b) Absence of an eye, clinical anophthalmos, (unspecified congenital (743.00) or acquired) or current or history of other disorders of globe (360.8) is disqualifying.

(c) Current asthenopia (368.13) is disqualifying.

(d) Current unilateral or bilateral non-familial exophthalmos (376) is disqualifying.

(e) Current or history of glaucoma (365), including but not limited to primary, secondary, preglaucoma as evidenced by intraocular pressure above 21 mmHg, or changes in the optic disc or visual field loss associated with glaucoma is disqualifying.

(f) Current loss of normal pupillary reflex, reactions to accommodation (367.5) or light (379.4), including Adie's Syndrome is disqualifying.

(g) Current night blindness (368.60) is disqualifying.

(h) Current or history of retained intraocular foreign body (360) is disqualifying.

(i) Current or history of any organic disease of the eye (360) or adnexa (376), not specified in article 15-31(1) through 15-31(8)(a) through 15-31(8)(h) above, which threatens vision or visual function is disqualifying.

15-35**Vision-Enlistment**

The standards for enlistment, commission, and entry into a program leading to a commission are different; refer to the appropriate section.

(1) For Enlistment

(a) Current distant visual acuity of any degree that does not correct with spectacle lenses to at least one of the following (367) is disqualifying:

(1) 20/40 in one eye and 20/70 in the other eye.

(2) 20/30 in one eye and 20/100 in the other eye.

(3) 20/20 in one eye and 20/400 in the other eye.

(b) Current near visual acuity of any degree that does not correct to 20/40 in the better eye (367) is disqualifying.

(c) Current refractive error [hyperopia (367.0), myopia (367.1), astigmatism (367.2)] or history of refractive error prior to any refractive surgery manifest by any refractive error in spherical equivalent of worse than -8.00 or +8.00 diopters is disqualifying.

(d) Current complicated cases requiring contact lenses for adequate correction of vision, such as corneal scars (371) and irregular astigmatism (367.2) are disqualifying.

15-36**Vision-Commission
and Programs
Leading to a Commission**

The standards for enlistment, commission, and entry into a program leading to a commission are different; refer to the appropriate section.

(1) *For commission in the Navy Unrestricted Line* and/or commission of officers with intended designators of 611x, 612x, 616x, 621x, 622x, 626x, 648x, 711x, 712x, 717x, 721x, 722x, 727x, 748x:

(a) Current distant or near visual acuity of any degree that does not correct with spectacle lenses to 20/20 in each eye is disqualifying.

(b) Current refractive error [hyperopia (367.0), myopia (367.1), astigmatism (367.2)] or history of refractive error prior to any refractive surgery manifest by any refractive error in spherical equivalent of worse than -8.00 or +8.00 diopters is disqualifying.

(c) Current complicated cases requiring contact lenses for adequate correction of vision, such as corneal scars (371) and irregular astigmatism (367.2) are disqualifying.

(d) Lack of adequate color vision is disqualifying. Adequate color vision is demonstrated by:

(1) Correctly identifying at least 10 out of 14 Pseudo-isochromatic Plates (PIP).

(2) The Farnsworth Lantern (FALANT) or OPTEC 900 will be authorized for commissioning qualification through 31 December 2016. Starting 1 January 2017, the FALANT/OPTEC 900 will only be authorized for commissioning candidates who were previously accepted into a program leading to a commission utilizing the FALANT/OPTEC 900 to demonstrate adequate color vision. A passing FALANT/OPTEC 900 score is obtained by correctly identifying 9 out of 9 presentations on the first test series. If any incorrect identifications are made, a second consecutive series of 18 presentations is administered. On the second series, a passing score is obtained by correctly identifying 16, 17, or 18 presentations.

(2) For Entry into a Program Leading to a Commission in the Navy Unrestricted Line

(a) Current distant and near visual acuity of any degree that does not correct with spectacle lenses to 20/20 in each eye is disqualifying.

(b) Current spherical refractive error [hyperopia (367.0), myopia (367.1)] or history of spherical refractive error prior to any refractive surgery of worse than -8.00 or +8.00 diopters is disqualifying.

(c) Current cylinder refractive error [astigmatism (367.2)] or history of cylinder refractive error, prior to any refractive surgery, of worse than -3.00 or +3.00 diopters is disqualifying.

(d) Current complicated cases requiring contact lenses for adequate correction of vision, such as corneal scars (371) and irregular astigmatism (367.2) are disqualifying.

(e) Lack of adequate Color Vision is disqualifying. Adequate color vision is demonstrated by:

(1) Correctly identifying at least 10 out of 14 Pseudo-Isochromatic Plates (PIP). Applicants failing the PIP prior to 31 December 2016 will be tested via the FALANT or OPTEC 900 as described below.

(2) Passing the FALANT/OPTEC 900 test. A passing score on the FALANT/OPTEC 900 is obtained by correctly identifying 9 out of 9 presentations on the first test series. If any incorrect identifications are made, a second consecutive series of 18 presentations is administered. On the second series, a passing score is obtained by correctly identifying 16, 17, or 18 presentations. The FALANT and OPTEC 900 will not be authorized for demonstrating adequate color vision starting 1 January 2017.

(3) For Commission in the Navy Restricted Line, Staff Corps, and designators not included in article 15-37(3) above.

(a) Current distant or near visual acuity of any degree that does not correct with spectacle lenses to 20/20 in each eye is disqualifying.

(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.* After 31 December 2016, all applicants for LCAC duty involving actual control or navigational observation duties must achieve at least 10 out of 14 on the Pseudo-Isochromatic Plates (PIP). Personnel who were selected for actual control or navigational observation duties before the end of 2016 can continue to demonstrate adequate color vision by scoring 9/9 on the FALANT.

(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.* Schiötz, 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.