

## Enclosure (3): VISION AND HEARING STANDARDS

1. VISION REQUIREMENTS.
  - a. **VISION REQUIREMENTS FOR CREDENTIALLED DECK PERSONNEL**
    - 1) Applicants for any deck officer credential or qualified deck rating should demonstrate that they have correctable vision to at least 20/40 in one eye and uncorrected vision of at least 20/200 in the same eye. Applicants for STCW endorsements should meet the same standards.
    - 2) In all cases, the horizontal field of vision should be not less than 100 degrees in each eye.
    - 3) Applicants with vision that is between 20/40 and 20/200 and whose vision is correctable to at least 20/40 do not require a waiver but will receive a limitation on their medical certificate indicating the mariner may not serve under the authority of the endorsement unless corrective lenses are worn and spare lenses are carried onboard a vessel.
    - 4) Waivers are not normally granted to an applicant whose corrected vision in the better eye is not at least 20/40. Any applicant whose uncorrected vision does not meet the 20/200 standard and is correctable to listed standards above may be granted a medical waiver. If a vision waiver is granted, a limitation will be placed on his or her medical certificate indicating the mariner may not serve under the authority of the endorsement unless corrective lenses are worn and spare lenses are carried onboard a vessel. Additional waiver information is contained in section (d) below. *See* 46 CFR 10.305(c) and (d)
    - 5) These applicants must demonstrate that they have a normal color sense when tested by the Pseudoisochromatic Plates (Dvorine, 2nd Edition; AOC; revised edition or AOC-HRR; Ishihara 14-plate, 24-plate, or 38-plate editions); Farnsworth Lantern; Titmus Vision Tester/OPTEC 2000; Optec 900; Richmond Test, 2nd and 4th edition; or an alternative test approved by the NMC. The use of color sensing lenses to assist these applicants with passing the color vision test is prohibited by 46 CFR 10.305(a). Any questions about acceptable color sense testing methodologies should be directed to the NMC. *See* 46 CFR 10.305(a).
  - b. **VISION REQUIREMENTS FOR CREDENTIALLED ENGINEERING PERSONNEL, TANKERMEN, OFFSHORE INSTALLATION MANAGERS, BARGE SUPERVISORS, BALLAST CONTROL OFFICERS, AND RADIO OFFICERS**

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- 1) Applicants for any engineering officer credential, qualified engineering rating, offshore installation manager, barge supervisor, ballast control officer, radio officer, or tankerman endorsement should demonstrate that they have correctable vision to at least 20/50 in one eye and uncorrected vision of at least 20/200 in the same eye. Applicants for STCW endorsements such as RFPEW, or for any STCW engineering officer endorsement, should meet the same standards.
- 2) The horizontal field of vision should be not less than 100 degrees in each eye. Applicants with vision that is between 20/50 and 20/200 and whose vision is correctable to at least 20/50 do not require a waiver, but they will receive a limitation on their medical certificate indicating the mariner may not serve under the authority of the endorsement unless he or she wears corrective lenses and carries spare lenses on board a vessel.
- 3) Waivers are not normally granted to an applicant whose corrected vision in the better eye is not at least 20/50. Any applicant whose uncorrected vision does not meet the 20/200 standard and is correctable to listed standards above may be granted a medical waiver. If a vision waiver is granted, a limitation will be placed on his or her MMC indicating the mariner may not serve under the authority of the endorsement unless corrective lenses are worn and spare lenses are carried onboard a vessel. Additional waiver information is contained in Paragraph 1.d.4 of this enclosure. *See also* 46 CFR 10.305(c) and (d).
- 4) These applicants are required to demonstrate that they can distinguish between the colors red, blue, green, and yellow. They may do so by passing any of the color vision tests listed for deck applicants in Paragraph 1.a.5 of this enclosure, by passing the Farnsworth D-15 Hue Test, or by passing an alternative test approved by the NMC. Acceptable alternative tests include Farnsworth Lantern and OPTEC 900. Any questions about acceptable color-sense testing methodologies should be directed to the NMC. *See* 46 CFR 10.305(b). If a renewal applicant fails color vision testing, the USCG may offer operational color vision testing on color vision critical tasks (Duties / Responsibilities / Jobs) on board the vessel the mariner is sailing. If the applicant passes the test, the applicant may be limited to the vessel tested.

#### c. GREAT LAKES PILOTS VISION STANDARDS

- 1) The vision standards for an applicant for original registration and for registered pilots appear in 46 CFR 402.210(c).

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- 2) An applicant for original registration must have a visual acuity either with or without glasses of at least 20/20 vision in one eye and at least 20/40 in the other. An applicant who wears glasses or contact lenses must also pass a test without glasses or lens of at least 20/40 in one eye and at least 20/70 in the other.
- 3) Registered Pilots, however, must have either with or without glasses or lens visual acuity of at least 20/50 in one eye and at least 20/50 in the other. A Registered Pilot who wears glasses or lens must also pass a test without glasses or lens of at least 20/50 in one eye and at least 20/100 in the other.
- 4) The color sense of original applicants and Registered Pilots shall be tested by a pseudoisochromatic plate test. Passage of the Williams lantern test or its equivalent is an acceptable substitute for a pseudoisochromatic plate test. *See* 46 CFR 402.210(c).

#### d. WAIVERS OF VISION REQUIREMENTS

- 1) Applicants for any credential (original, renewal, or raise in grade) with compensated monocular vision may be granted a waiver by the NMC provided the vision in the applicant's remaining eye is correctable to the applicable standards in either Paragraph 1.a or 1.b of this enclosure. An applicant for an original credential should also provide evidence of the ability to compensate for the lack of stereo vision through a report from an ophthalmologist and attestations of the applicant's ability from employers or co-workers.
- 2) Generally, waivers for monocular vision are not granted until the applicant has been subject to monocular vision for at least 180 days.
- 3) Applicants with vision that does not meet the above standards and whose vision is correctable do not require a waiver but will receive a limitation on their medical certificate indicating the mariner may not serve under the authority of the endorsement unless corrective lenses are worn and spare lenses are carried onboard a vessel.
- 4) Applicants with uncorrected vision of up to 20/800 may be granted a waiver by the Coast Guard provided that the corrected vision meets the applicable standards set forth in Paragraph 1.a or 1.b of this enclosure. The waiver endorsement should include a requirement that the applicant carry spare corrective lenses and wear the corrective lenses when acting

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under the authority of the credential.

- 5) Applicants for an AB endorsement who cannot demonstrate normal color vision by passing the 14-plate, 24-plate, or 38-plate Ishihara pseudoisochromatic plates tests, the Farnsworth lantern test, or an alternative test approved by the NMC, but who are otherwise qualified for an AB endorsement in all respects, may be issued a MMC endorsed as boatswain. The term “boatswain” is defined in 46 CFR 10.107. It is a non-watchstanding, non-navigating position.
- 6) Applicants for deck officer credentials who cannot pass the color vision tests may be considered for a waiver by the NMC, for the issuance of a medical certificate limited to daylight hours only. This will be indicated by a “No Night-time Watchkeeping” limitation.
- 7) Waivers are not normally granted for conditions that accelerate the normal decline in vision from aging.

### 2. HEARING REQUIREMENTS.

- a. Applicants for a medical certificate should have adequate hearing.
- b. If the medical examiner has concerns regarding the applicant’s ability to adequately hear, the medical examiner should refer the applicant to an audiologist or other hearing specialist to conduct an audiometer test and/or a speech discrimination test. Applicants should advise medical practitioners of any auditory concerns that they are aware of at the time of the medical examination, and they may submit the results of hearing tests conducted prior to the medical examination as long as the test results will be no more than 12 months old on the date of credential application. The applicant should supply documented test results to the examining medical practitioner for review, and should attach them to the completed application.
- c. The audiometer test should include testing at the following thresholds: 500 hertz (Hz); 1,000 Hz; 2,000 Hz; and 3,000 Hz. The frequency responses for each ear are averaged to determine the measure of an applicant’s hearing ability. Applicants should demonstrate an unaided threshold of 50 decibels (db) or less in their best ear. If the applicant only has hearing in one ear, the unaided threshold should be 50 db or less in that ear.
- d. The functional speech discrimination test may be performed if an applicant’s hearing is abnormal and should be performed if audiometer testing reveals an unaided average of 50 db or more in the better ear. It should be carried out at

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a level of 65 db. For issuance of an original credential, qualification, or certificate, the applicant should demonstrate functional speech discrimination of at least 90%, either aided or unaided. For renewal or raise in grade of any credential, the applicant should demonstrate functional speech discrimination of at least 80%, either aided or unaided. An applicant who is unable to meet the standards of the audiometer test, but who can pass the functional speech discrimination test, may be eligible for a waiver.

- e. A hearing aid may be used by applicants for an original, renewal, or upgrade of any credential. When a hearing aid is used, the aided threshold should be at least 50 db in each ear and functional speech discrimination should be as outlined in Paragraph 2.d of this enclosure. An applicant who requires the use of a hearing aid to meet the hearing standards will have a notation of that fact on his or her certificate along with a requirement that spare batteries are to be available, and that the applicant must use the hearing aid in an operational mode while acting under the authority of the credential.